岐阜大学
GIFU UNIVERSITY

Agri/Climate Tech from Gifu University

Sagri

Self introduction

Daniel Gunawan

Business Development Manager, Tokyo Office, Sagri

- Specializing in business analytics, operation, and business development
- 8 years in Japan and 3 years in Malaysia
- Worked in Accenture Malaysia until March 2022
- Graduated from Waseda MBA in September 2023
- Passion in learning and exercises

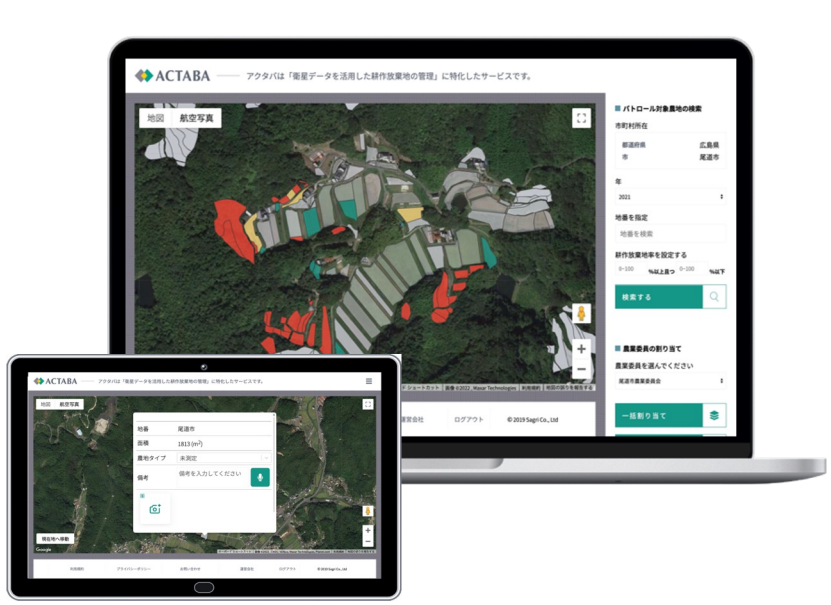
NAKANO accenture 関西学院 WASEDA University

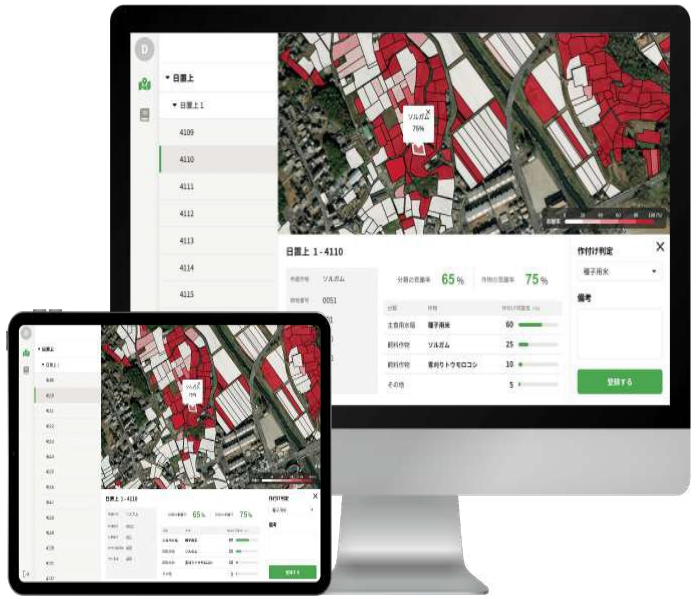
Sagri has been working with central/local government of Japan

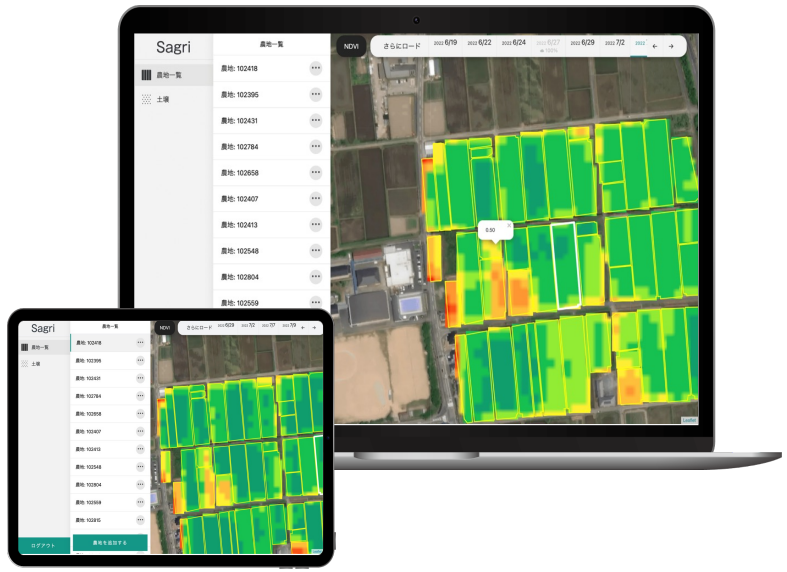
MAFF
Ministry of Agriculture, Forestry and Fisheries
農林水産省

JICA

J-Startup



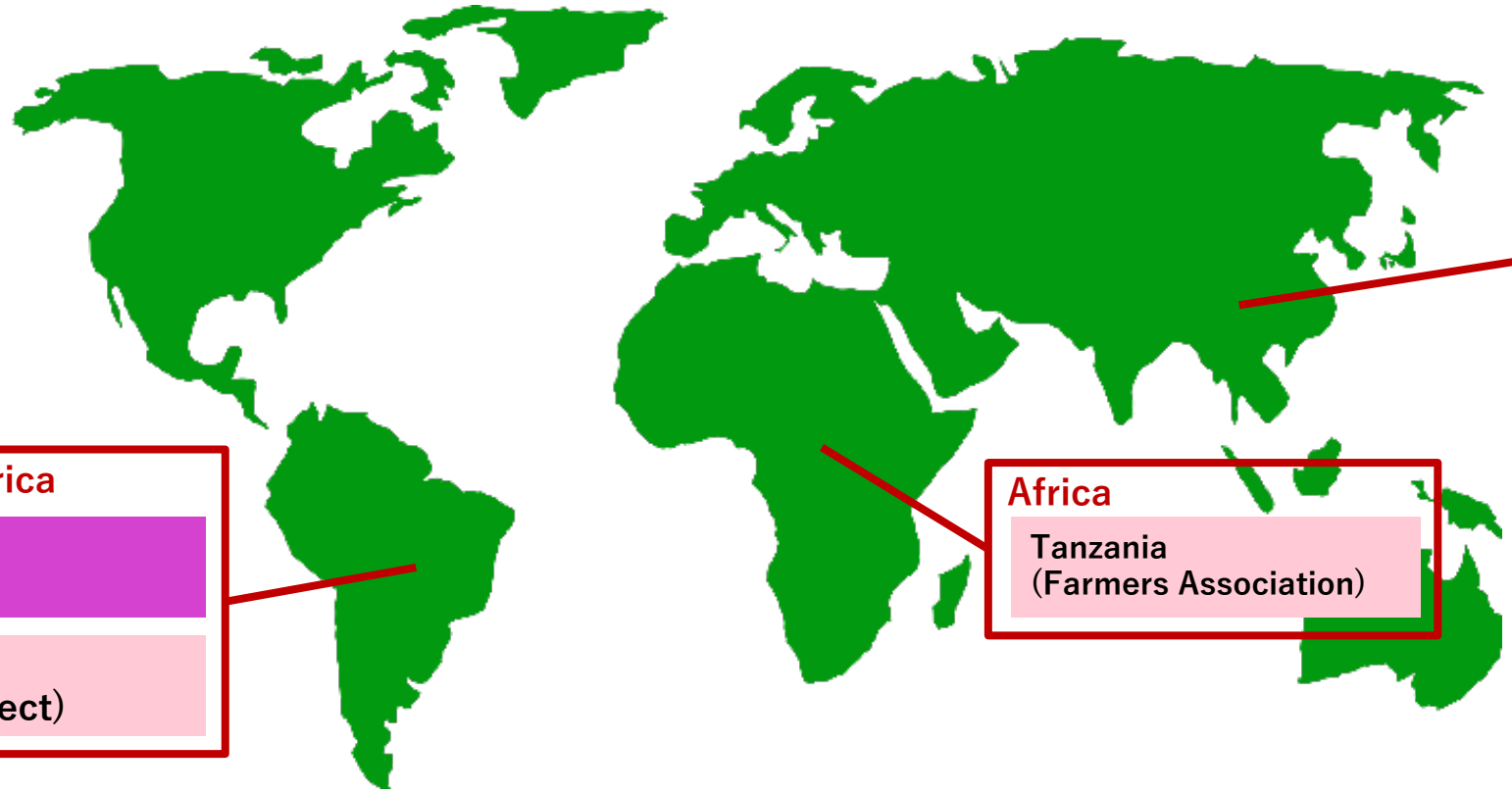




Sagri goes Global beyond ASEAN to save more farmers and planet!

：Project Ongoing area

：Project under preparation/PoC



South America

- Peru (NGO)
- Brazil (JICA-Project)

Africa

- Tanzania (Farmers Association)

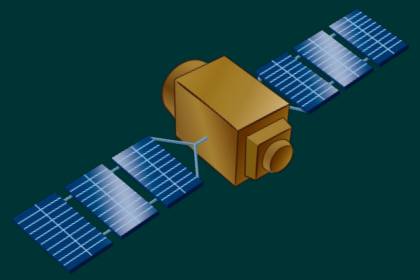
Asia

- Vietnam (Local Govenment)
- Thailand (Private Company)
- India (JICA Project)
- India (Agri-company)
- Cambodia (Agri-tech Start-up)

Strong back-up from Government of Japan

- In Dec 10th, Sagri presented our track record in ASEAN in COP28 in Dubai

Sagri



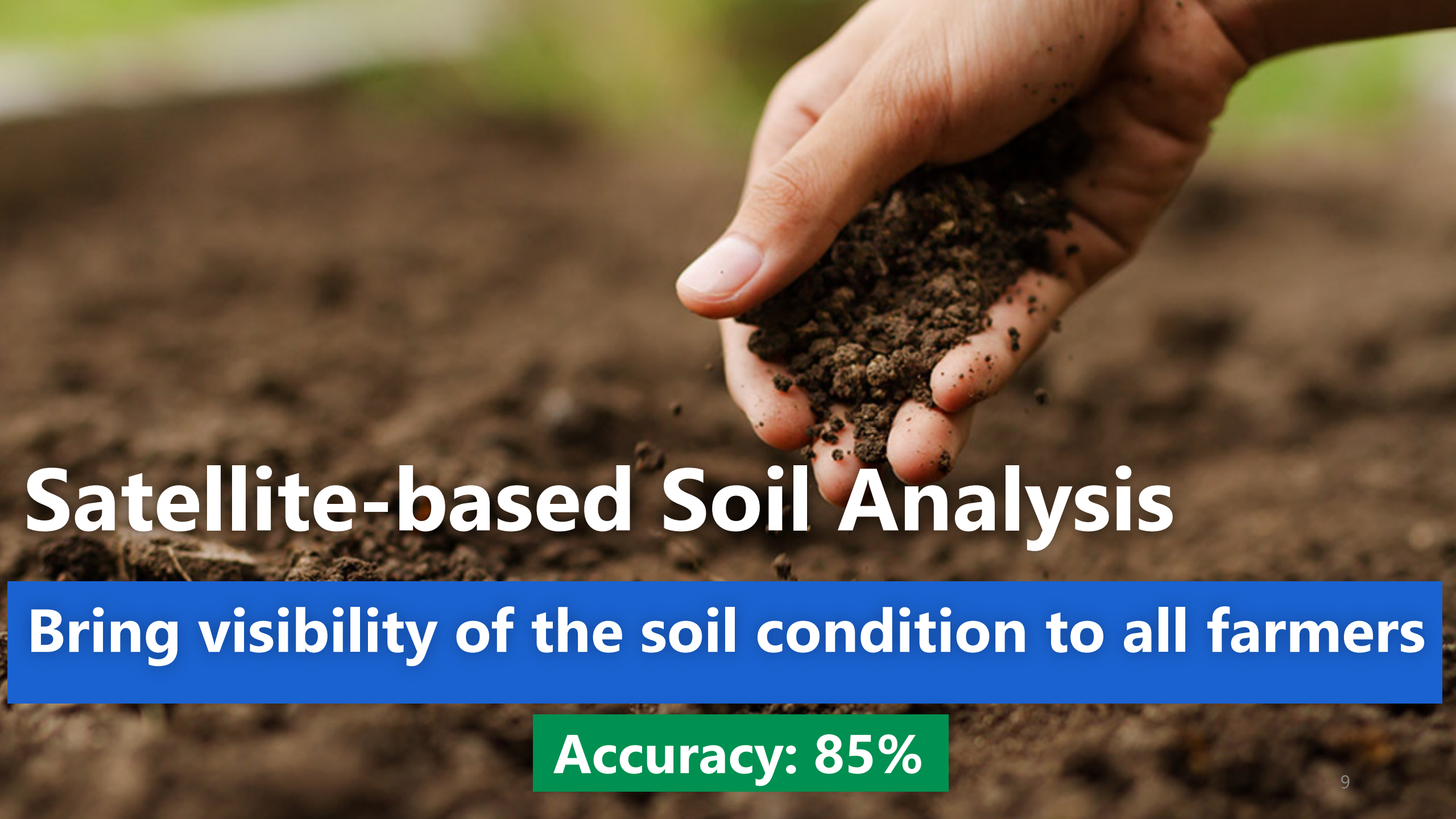
Carbon Credit Generation from farmland upon satellite data analysis + AI


Sagri
植生
土壌
選択した圃場一覧
圃場が選択されていません。
キャンセル
ログアウト

AI polygon

Automatically detect farmland boundary

Patented

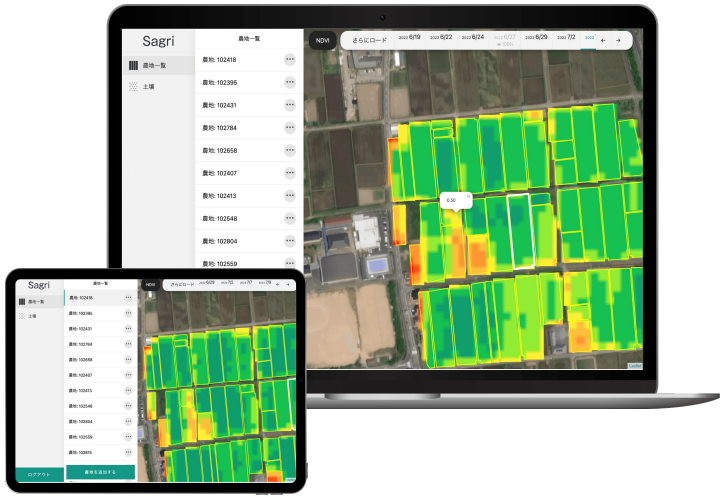


Satellite-based Soil Analysis

Bring visibility of the soil condition to all farmers

Accuracy: 85%

Sagri can provide cheaper and faster fertilizer optimization recommendation based on soil analysis



- Cost 10x cheaper
- Time 10x faster

Serial No: OOT-22-0451
Farmer Name: Sagunthala
Soil Test Card No: OOT-22-0451

Village: Pykara
Mobile: 7904043034

Credit Ref. #
NBFC Name

Vegetation Indices

NDVI: 0.2949
Status: Crop Growing

Cost of Cultivation

Crop
Seed in kg/ acre

Sowing Date
Expected Harvest Date

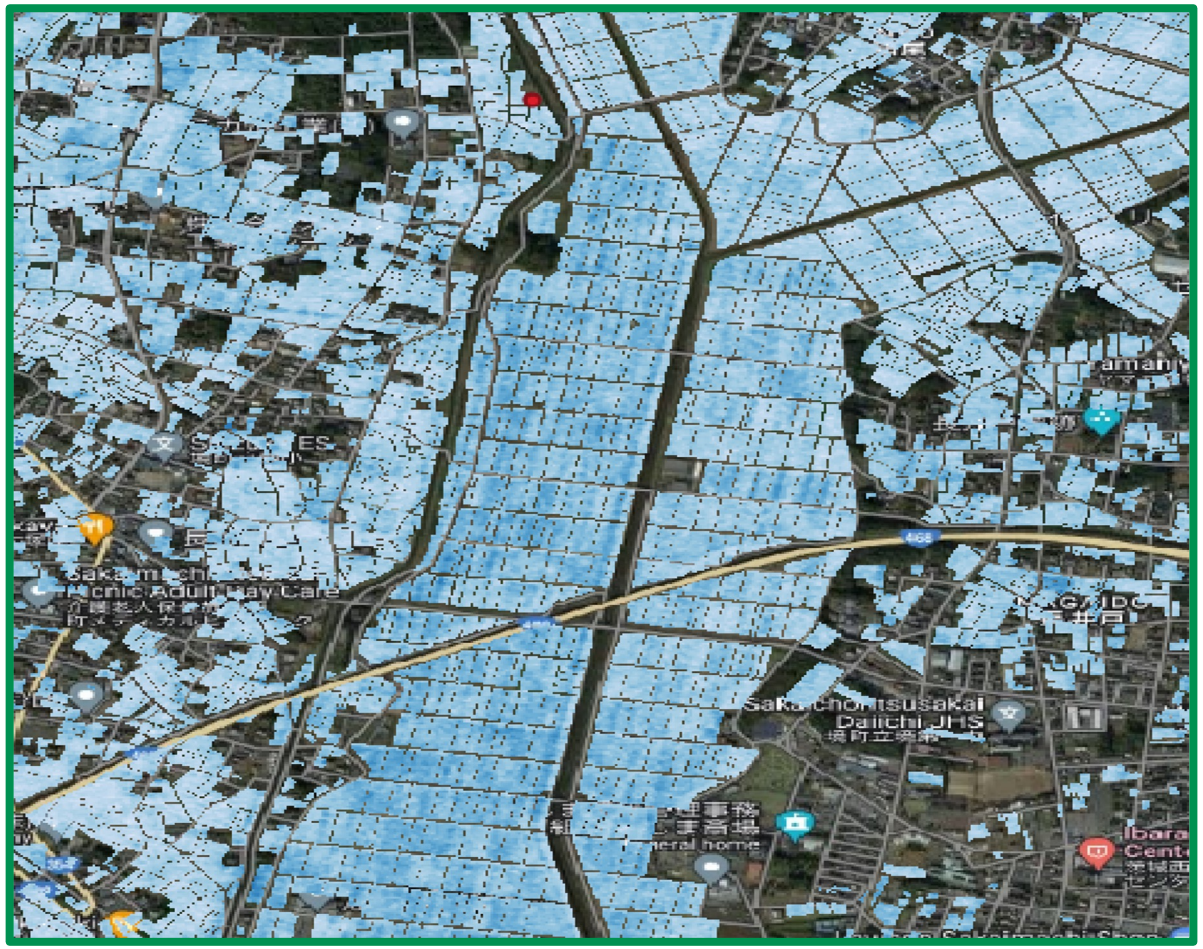
Yield / Acre
Total Cost

SOIL TEST RESULTS

Sno	Parameter	Value	Rating
1	pH	7.09	medium
2	EC (mS/cm)	0.4463	low
3	Organic Carbon - OC (%)	0.428	medium
4	Nitrogen - N (Kg/ha)	382	medium
5	Phosporous - P (Kg/ha)	9.51	low
6	Potassium - K (Kg/ha)	127.3	medium
7	Sulphur - S (Mg/kg)	12.9	medium
8	Zinc - Zn (Mg/kg)	1.31	medium
9	Boron - B (Mg/kg)	1.214	high
10	Iron - Fe (Mg/kg)	3.08	low
11	Manganese - Mn (Mg/kg)	0.286	low
12	Copper - Cu (Mg/kg)	0.218	medium

CTO Mr. Tanaka/ Professor at Gifu University

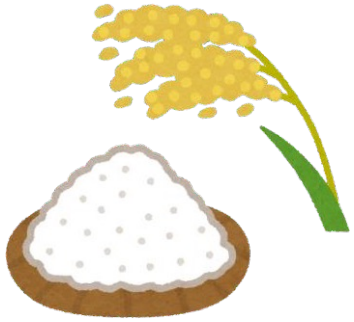
Water Detection from satellite



Under technical verification with support from JAXA (Japan Aerospace Exploration Agency)

Crop type : Sagri can analyze Grains and open-air vegetables

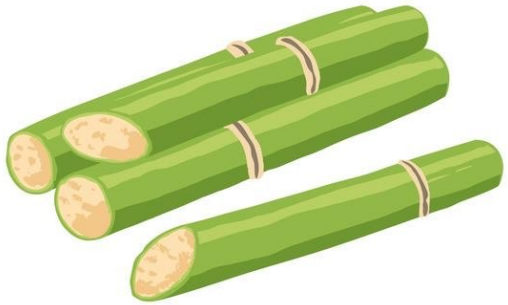
Rice



Cassava

Soy Beans

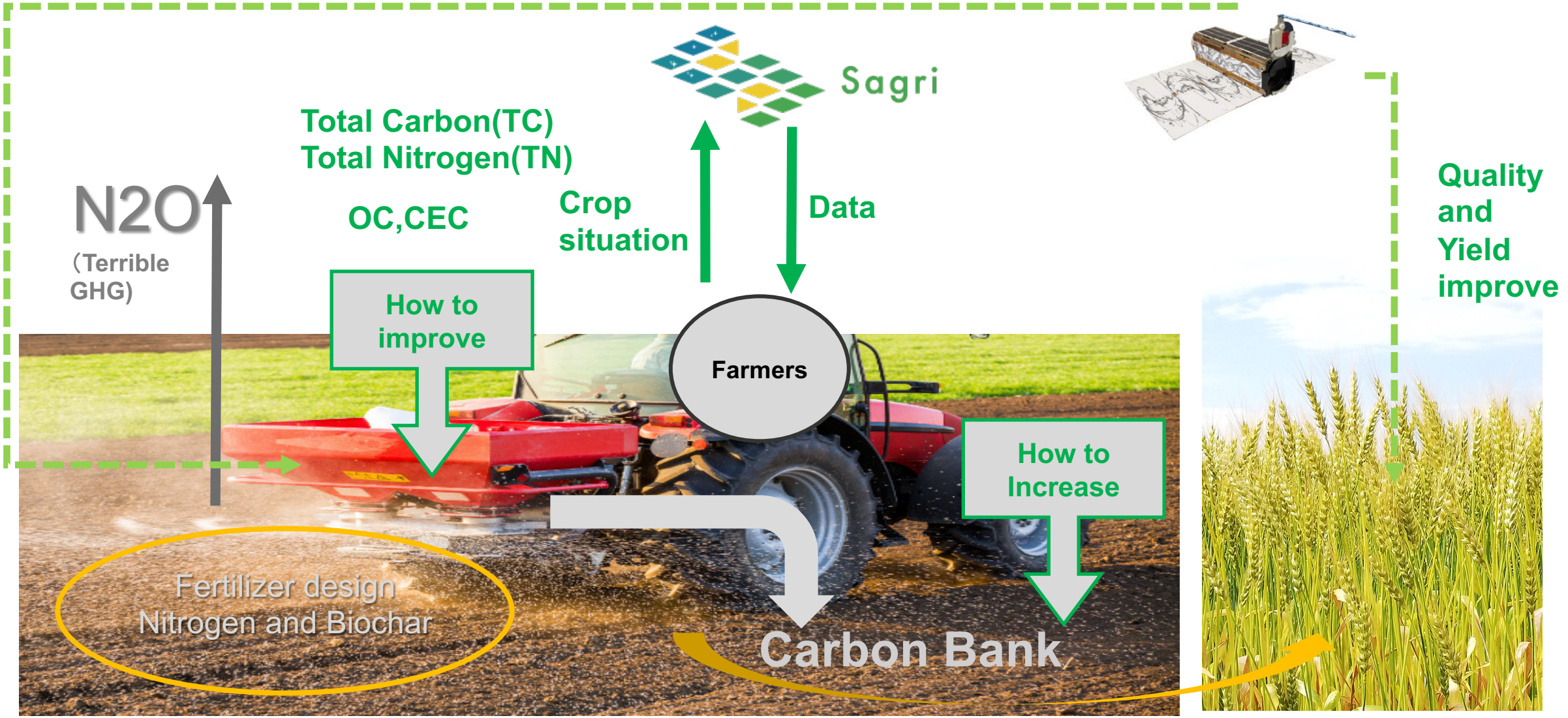
Sugarcane



Potato

Corn

Fertilizer optimization can reduce GHG (greenhouse gas) emission

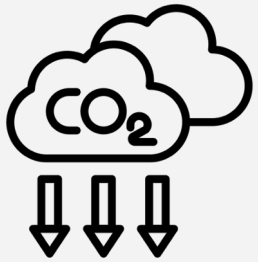


Leverage Carbon Credit to convert GHG reduction into cash

Carbon credits are certified and tradable amount of GHG emission reductions achieved by a project. Companies can offset their emissions by purchasing carbon credits.

GHG Reduction Project

Greenhouse Gas Reductions



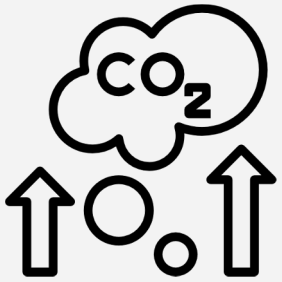
Carbon Credit

VERRA

Gold Standard

Companies

Greenhouse Gas Emissions



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Quicker and cheaper soil
Analysis via Satellite

Chemical Fertilizer/Water optimization

Cost reduction/GHG emission reduction

VERRA Gold Standard JCM THE JOINT CREDITING MECHANISM

Carbon Credit Generation
(Additional income for farmers)

Business Model #1 Soil Analysis & Crop Monitoring

- **Fee: 5-7 USD per ha per crop season**
  - Can detect soil condition from 12 parameters, useful to decide fertilizer amount
  - Can detect progress of planting, giving indication for uneven growth

SOIL TEST RESULTS

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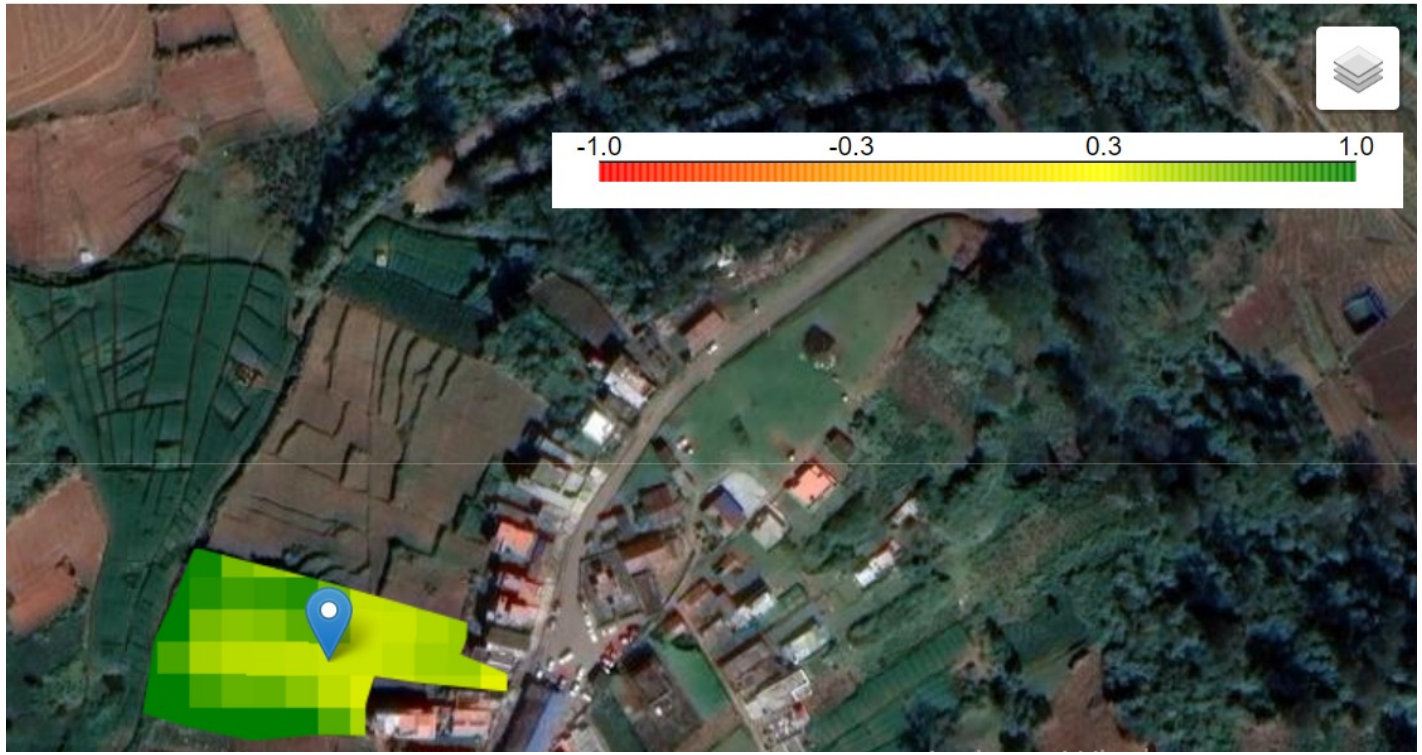
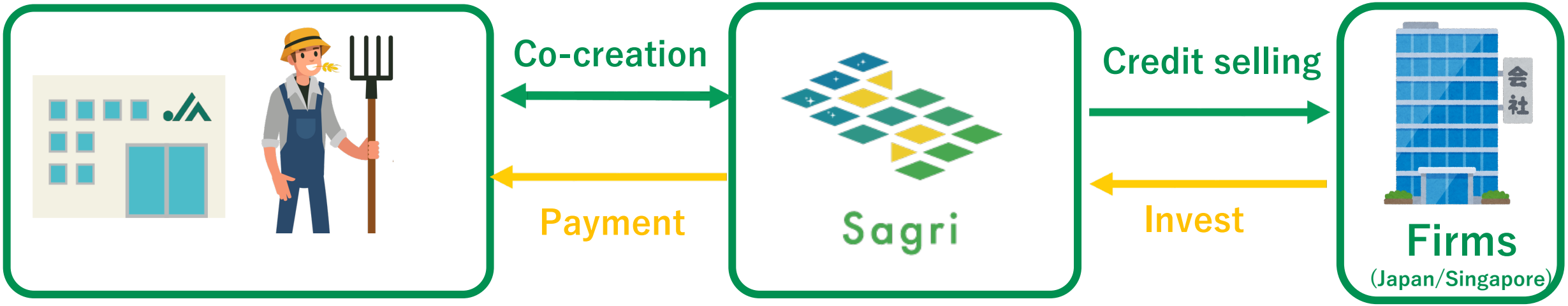


Business Model #2 Co-create Carbon Credit

No initial fee incurredd, revenue share (50%/50%) with local partners

- Agricultural/Food companies
- Agricultural Organization/ Ministry of Agriculture
- Agricultural insurance companies
- NGO, International Organization

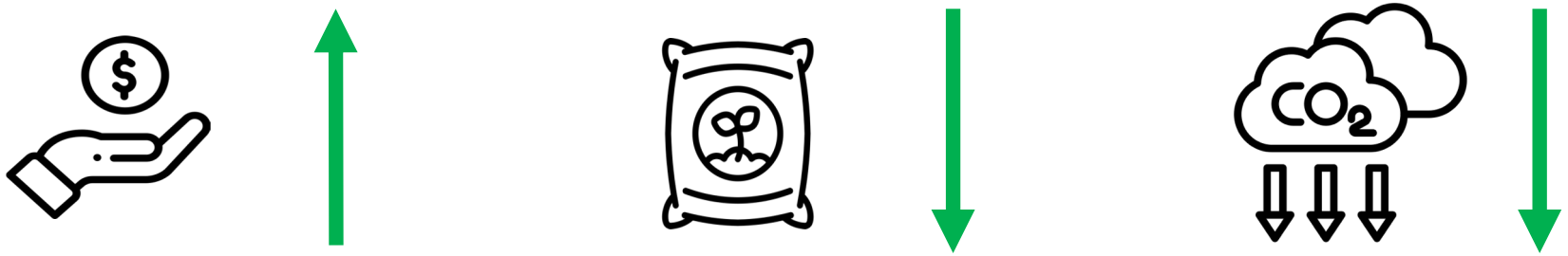


Case Studies in Thailand

- Project site
  - Lam Luk Ka District, Pathum Thani

- Activities
  - AI Polygon & Soil analysis
  - Fertilizer optimization
  - Impact to yield
  - Impact to climate change, carbon credit

- Result



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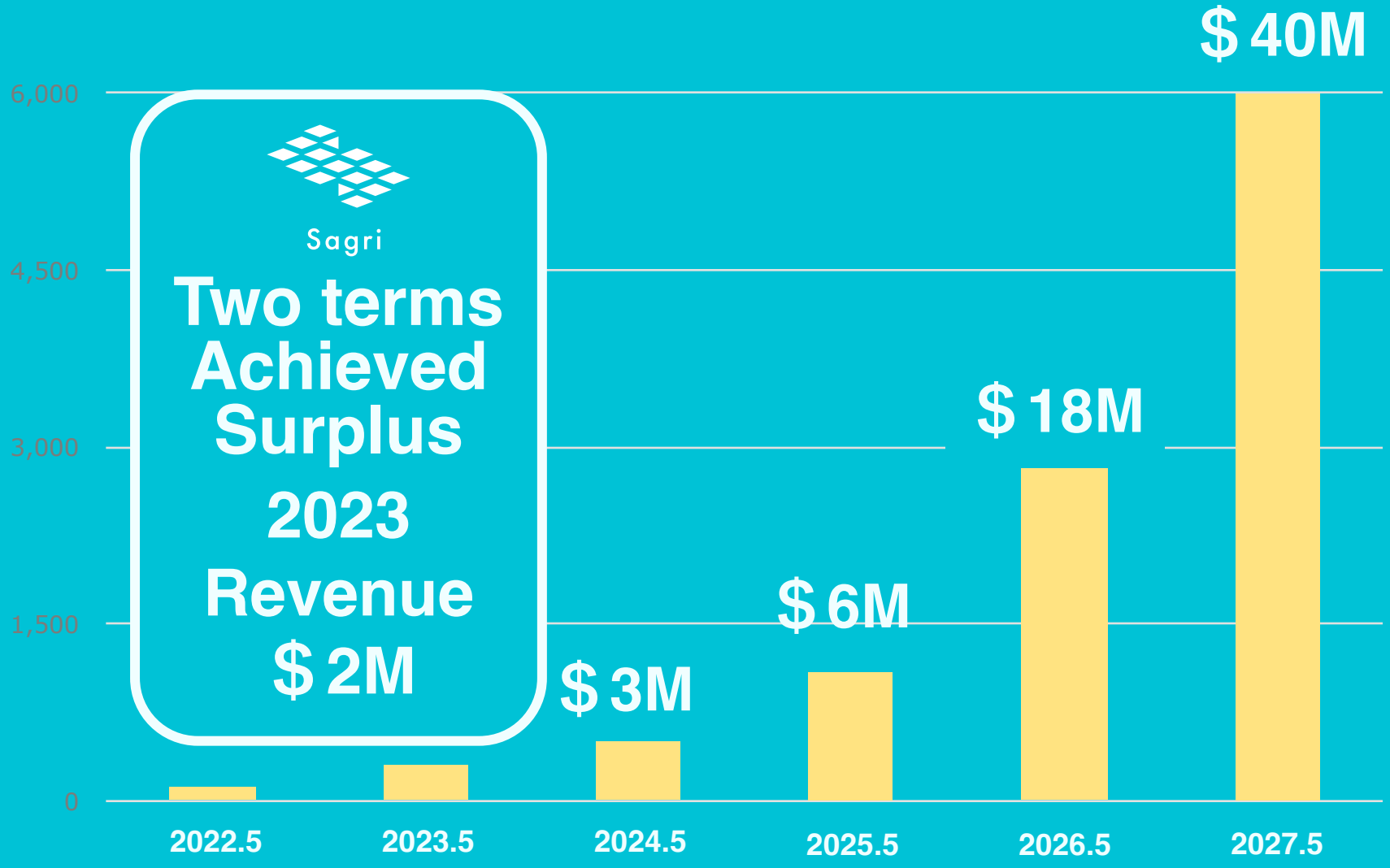
Business will grow even faster with decarbonization!



Satellite + AI
To achieve
Carbon Neutral in
Agriculture in ASEAN

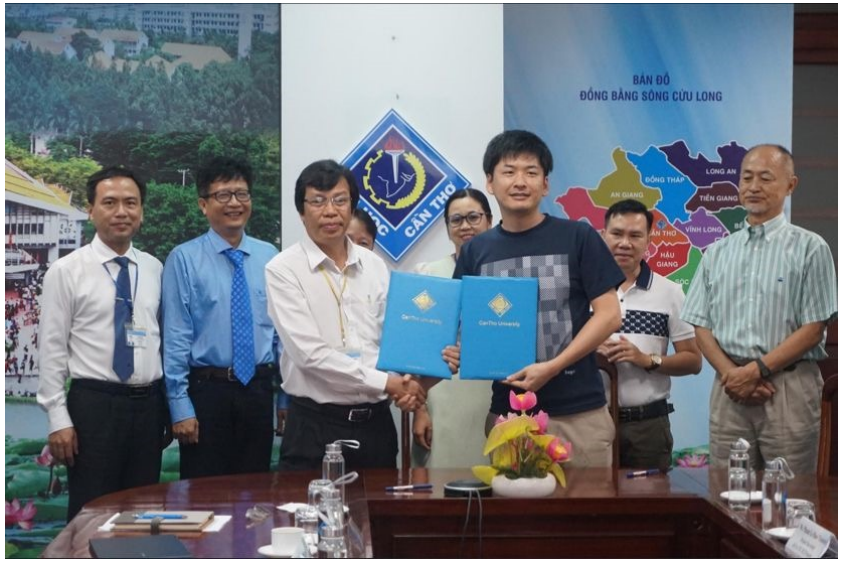
Appendix:
Track Record in ASEAN

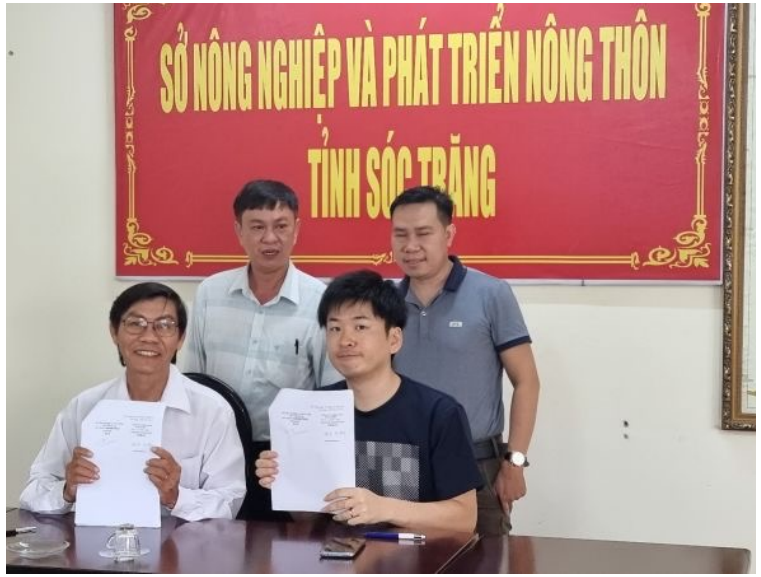
Track Record in ASEAN (Thailand)

- Partnership with Kasetsart University and conducted trial for carbon credit
- Newly announced coming PoC with CP Group in early November
- Previously worked with MOAC for AI Polygon development (JETRO Project)
- Selected by Japan MAFF for smart agriculture project

Track Record in ASEAN (Vietnam)

- Partnership with Can Tho University for joint research
- Signed MOU with local government (Soc Trang) and started the project
- Plan to expand to other Vietnam local government via MARD to achieve Sustainable development of 1 million hectares of high-quality rice in the Mekong Delta





Track Record in ASEAN (Indonesia)

- Agreed partnership with agri-tech under Telkomsel (Agree)
- Signed MoU with IPB
- In discussion with Ministry of Agriculture for AI Polygon Development

Track Record in ASEAN (Philippine)

- In discussion with DA- BAR (Research Division of Ministry of Agriculture)
- MoU with UPLB (University of Philippine in Los Banos) to be signed
- Singed MoU with local start-up
- Selected by Japan MAFF for smart agriculture project

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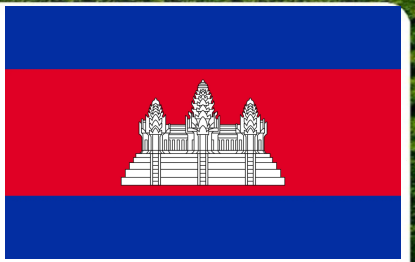
BUREAU OF AGRICULTURAL RESEARCH

UNIVERSITY OF THE PHILIPPINES
1908
LOS BAÑOS

Track Record in ASEAN (Cambodia)



- In discussion with Cambodia MAFF GDA for pilot project
- Signed partnership with local agri-tech company
- Singed MoU with insurance company
- In discussion with USAID for carbon credit project
- Selected by Tokyo Metropolitan government fund