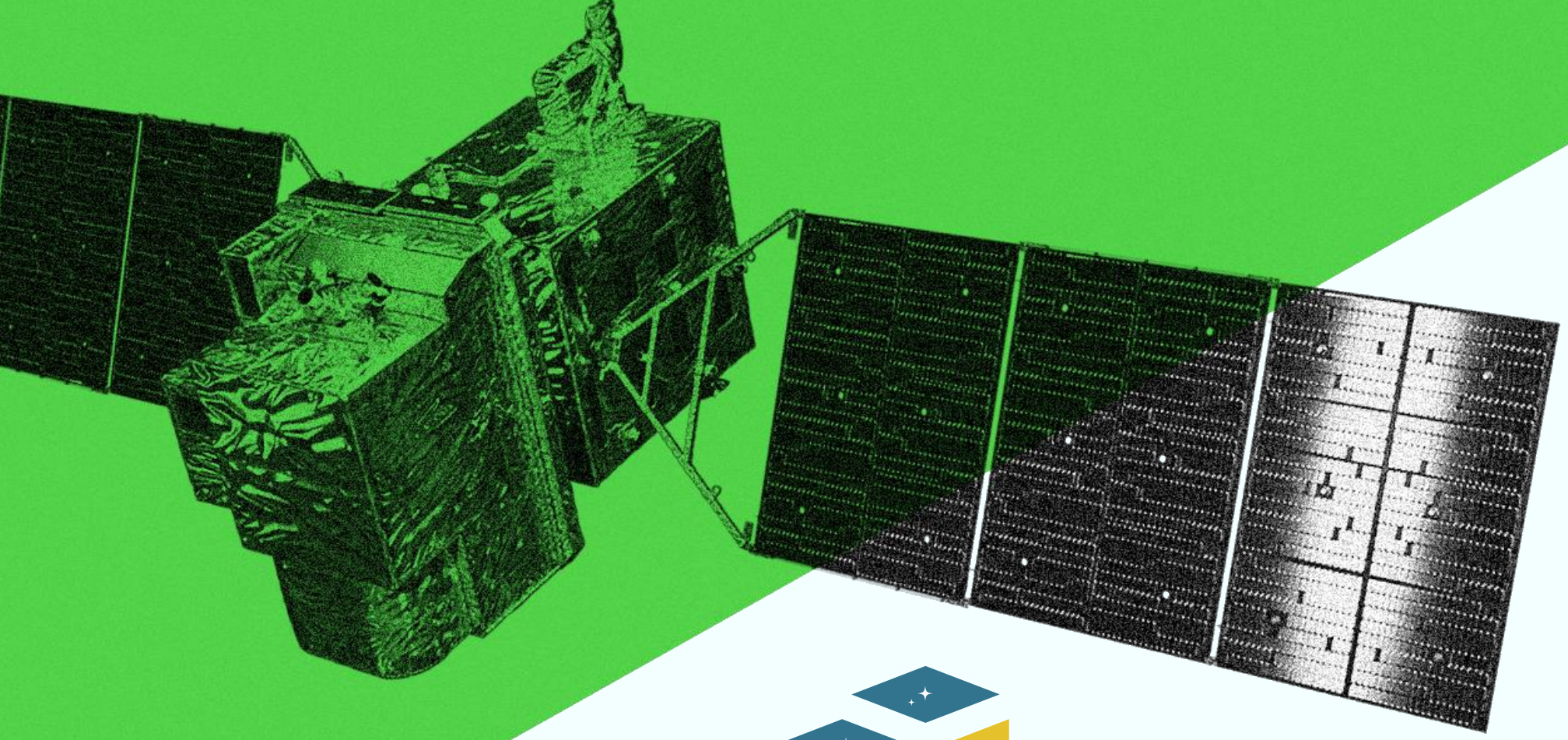

J-Startup
Impact

Sagri

Agenda

1. Self Introduction: Satoshi Nagata
2. Introduction of Sagri
3. Benefits of Satellite data analysis for farmers

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Introduction

Satoshi Nagata

Head of the emerging markets, Sagri Co., Ltd
Area of responsibility: new business development in South Asia, Africa and Latin America

Resident in India: 7 years
Practice: sales, business development, government negotiations, Project management

Countries of business experience: India, Kenya, Tanzania, Peru, Brazil, Vietnam, Thailand, Azerbaijan

Contact: nagata-satoshi@sagri.co.jp

岐阜大学
GIFU UNIVERSITY

Agri/Climate Tech from Gifu University

Sagri

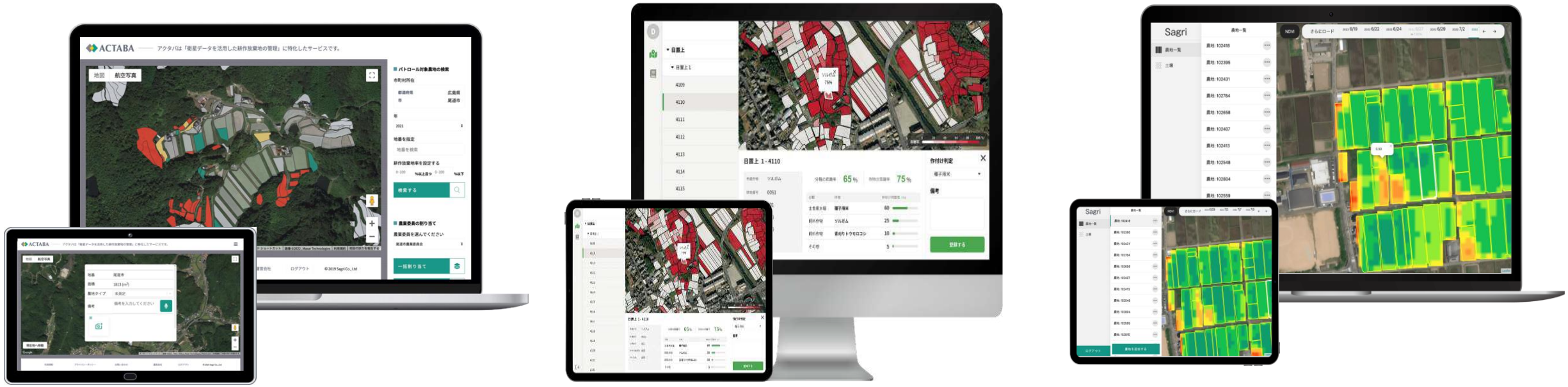
Sagri has been working with central/local government of Japan

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

NORINCHUKIN
農林中央金庫

Kobe City

J-Startup



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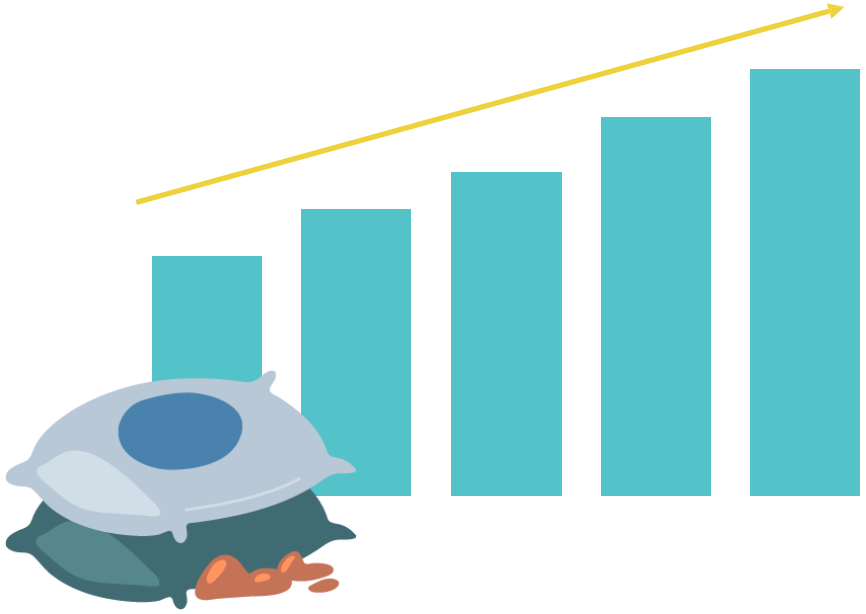
Challenges –Expensive fertilizer and manual soil sample–

Fertilizer price increase due to unstable supply chain due to Russia/Ukraine war

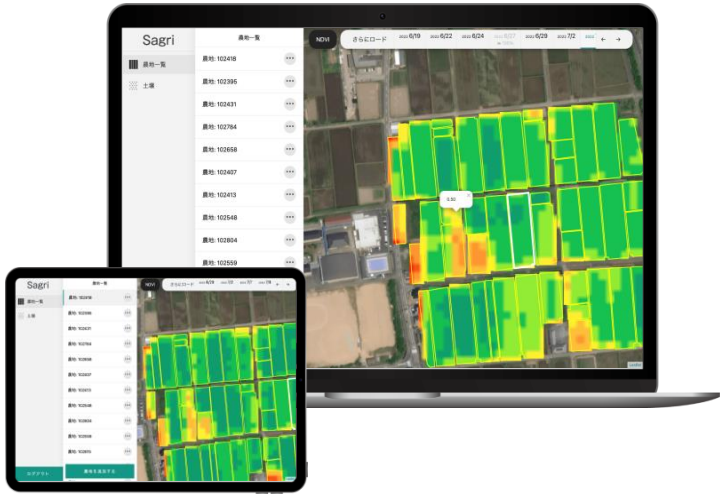


Expensive and time-consuming (longer than one month) soil analysis

Soil sampling
(> 20 USD per ha)

Test at laboratory

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



- **Cost 10x cheaper**
- **Time 10x faster**

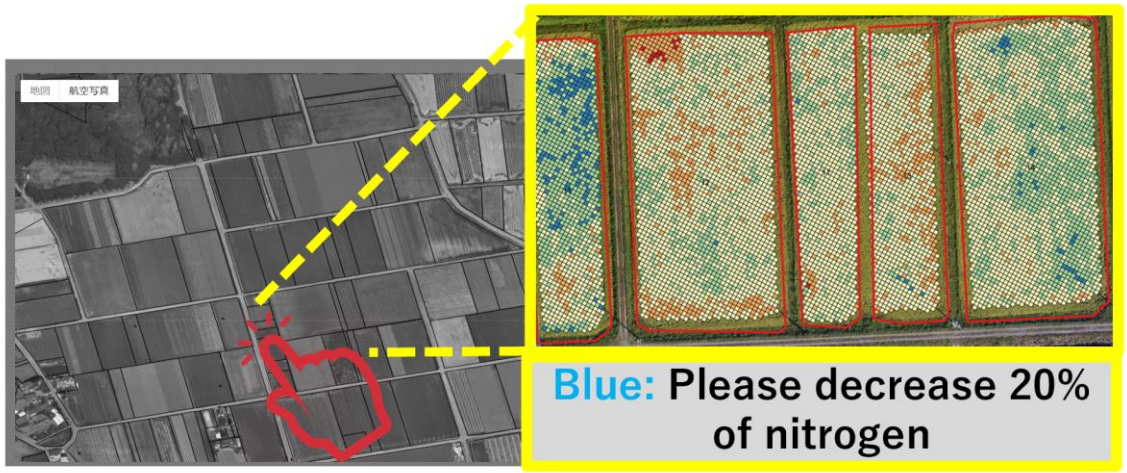
CTO Mr. Tanaka/ Professor at Gifu University

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

Detect index

NPK
Total Carbon
Avail Nitrogen
Ph、CEC



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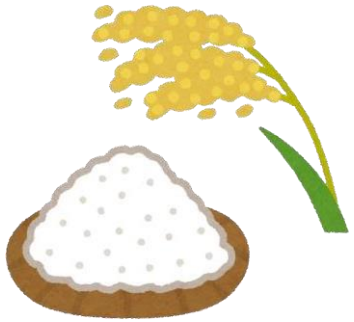
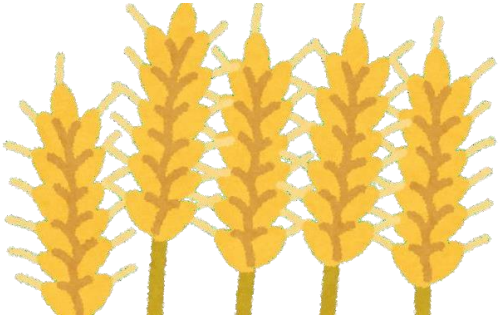
Our target crops

–Grains and Horticulture crops–

Paddy

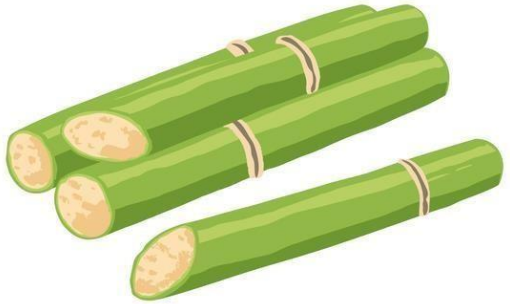


Wheat

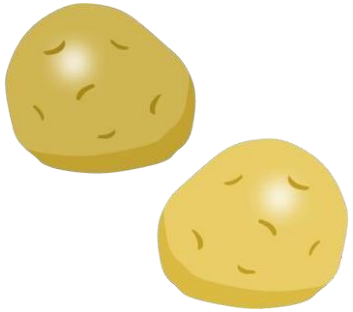


Soy Beans

Sugarcane



Potato



Corn

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GHG reduction via fertilizer optimization

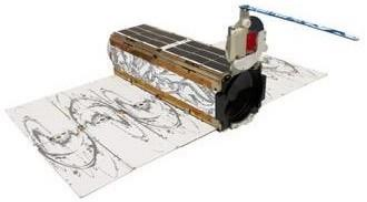
Sagri

Total Carbon(TC)
Total Nitrogen(TN)

OC,CEC

Crop situation

Data



N2O
(
Terrible GHG)

How to improve

Farmers

How to Increase

Quality and Yield improve

Fertilizer design
Nitrogen and Biochar

Carbon Bank

Confidential

Sagri

Soil Analysis via Satellite

Reduce Fertilizer

Cost reduction/Green house gas emission

Happy for farmers and earth

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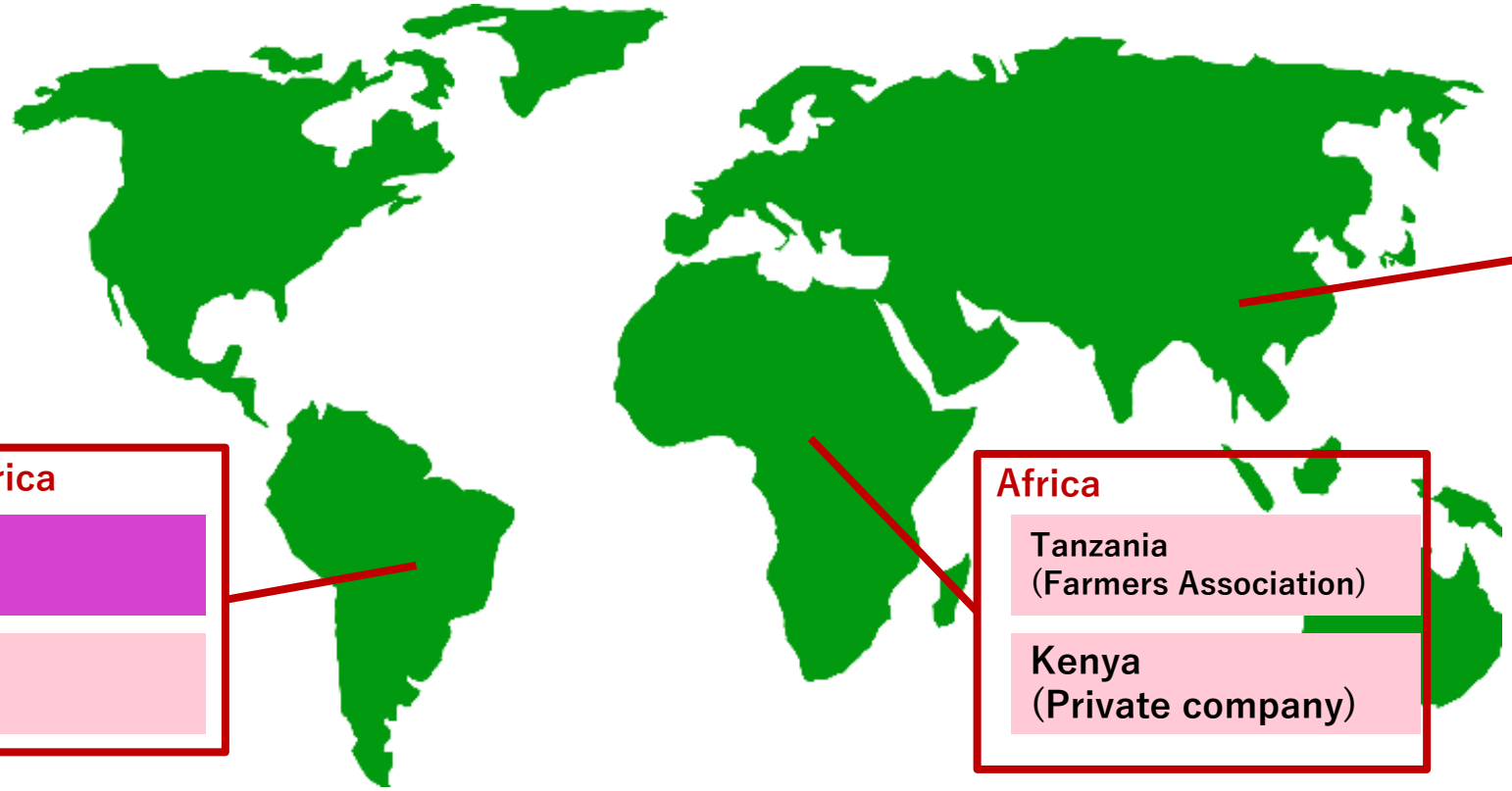
Sagri goes Global beyond Japan to save more farmers and planet!

：Project Ongoing area

：Project under preparation/PoC



South America

- Peru (NGO)
- Brazil (Farmers)

Africa

- Tanzania (Farmers Association)
- Kenya (Private company)

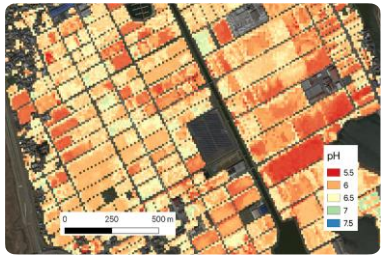
Asia

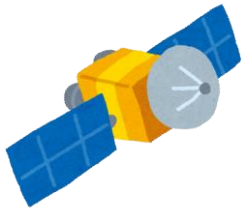
- Vietnam (Local Govenment)
- Thailand (Private Company)
- India (JICA Project)
- India (Agri-company)
- Cambodia (Agri-tech Start-up)

Ideas: Smart farming and Carbon farming approach

1

Calculate and Recommend the fertilizer via satellite images and AI





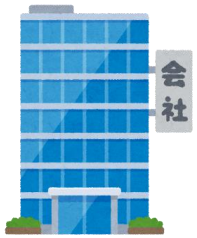
2

Optimize the fertilizer by individual farmer

3

Reductions in greenhouse gas emissions*1 are registered as carbon credits and sold to companies.

JCM



Gold Standard

Jークレジット制度

*1 Reduced greenhouse gas emissions due to reduced N2O emissions and increased carbon sequestration through increased use of organic fertilisers and compost, compared to the case without optimisation.

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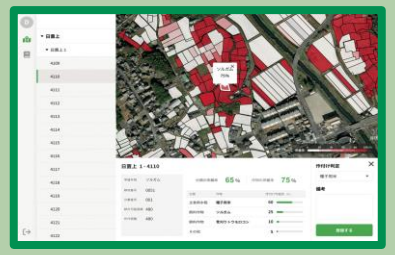
Sagri solutions: Satellite data X AI/ML

Soil test via satellite

NPK, TC, ph, CEC detection via satellite data

Crop identification



Identify crop and cultivate situation via satellite images

Water identification

Identify the water in the paddy field via satellite

AI-based analysis of satellite data images and wavelengths to carry out various types of analysis

Farmland Auto Mapping (AI Polygon)

High-resolution satellite imagery is used to inexpensively plot farmland as 'AI polygons' through AI-based image processing.

Automatic determination of field plots.

Farmland survey (Japan)

Agri advisory (Overseas)

Create the carbon credit (Overseas)

Thanks for listening!

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WhatsApp contact

Email

nagata-satoshi@sagri.co.jp

The head oh the emerging market(India, LATAM, Africa and the other rigions)