

添付資料1

Japan-India Model Farm Project in UP

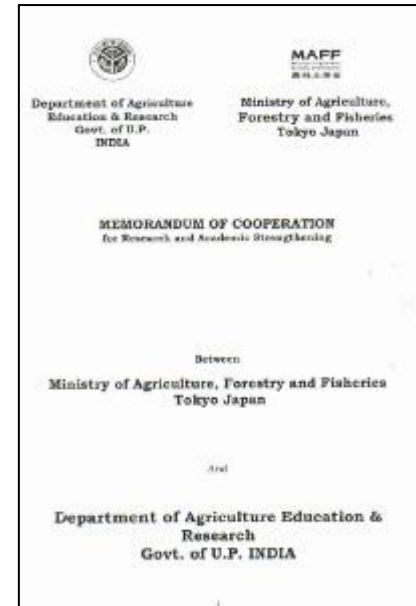
29 September 2023

Ministry of Agriculture, Forestry and Fisheries

MAFF JAPAN

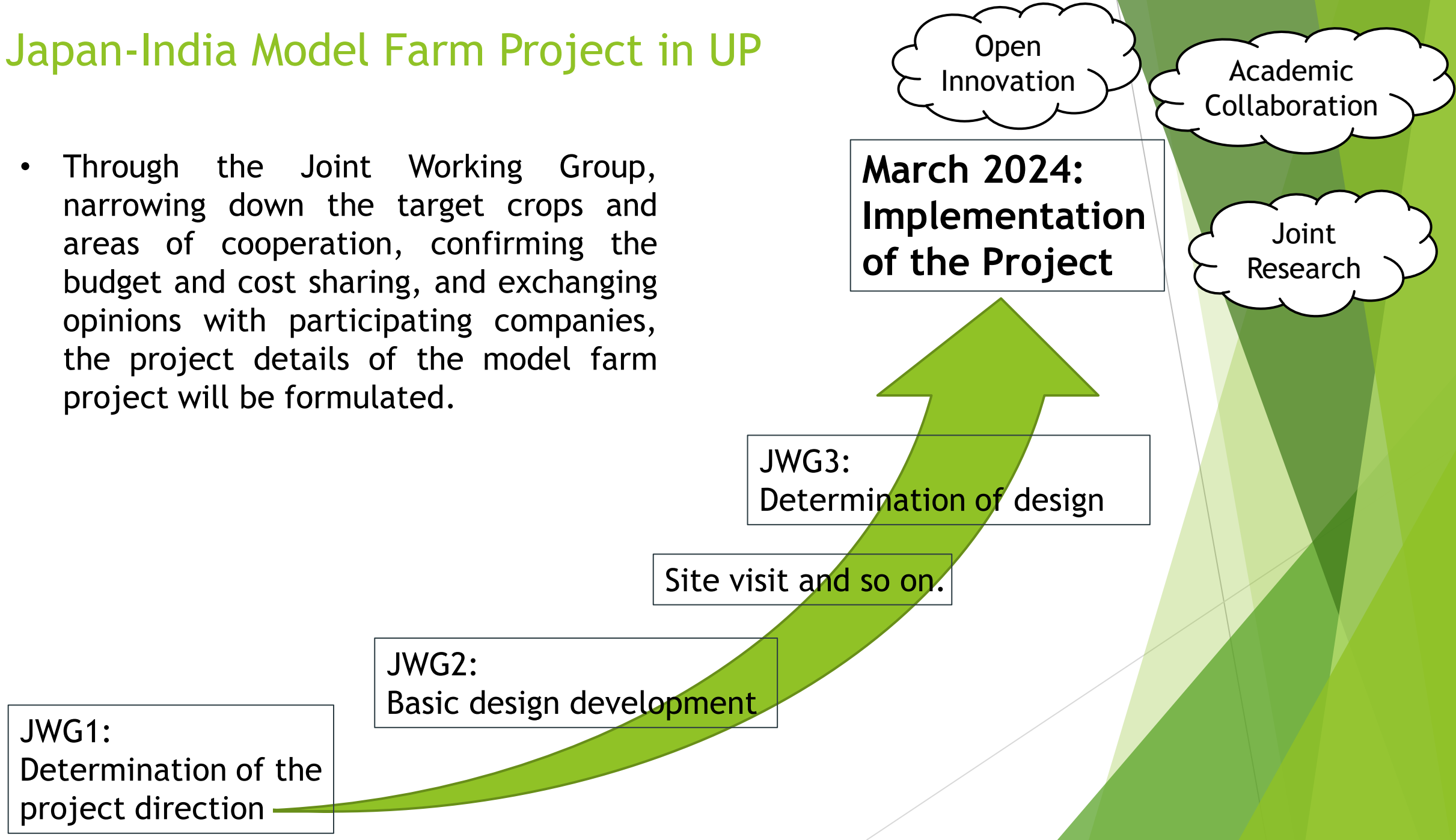
Background

- In 2021, Memorandum of Cooperation was signed at the request of the UP gov in 2020.
- The CSAU demonstration field was intended to have a model farm set up, but the study was suspended immediately after the COVID-19 infection outbreak became serious.
- In 2023, MAFF Japan, UP Gov and CSAU officials were consulted and agreed to set up a joint working Group to establish a Japan model farm.

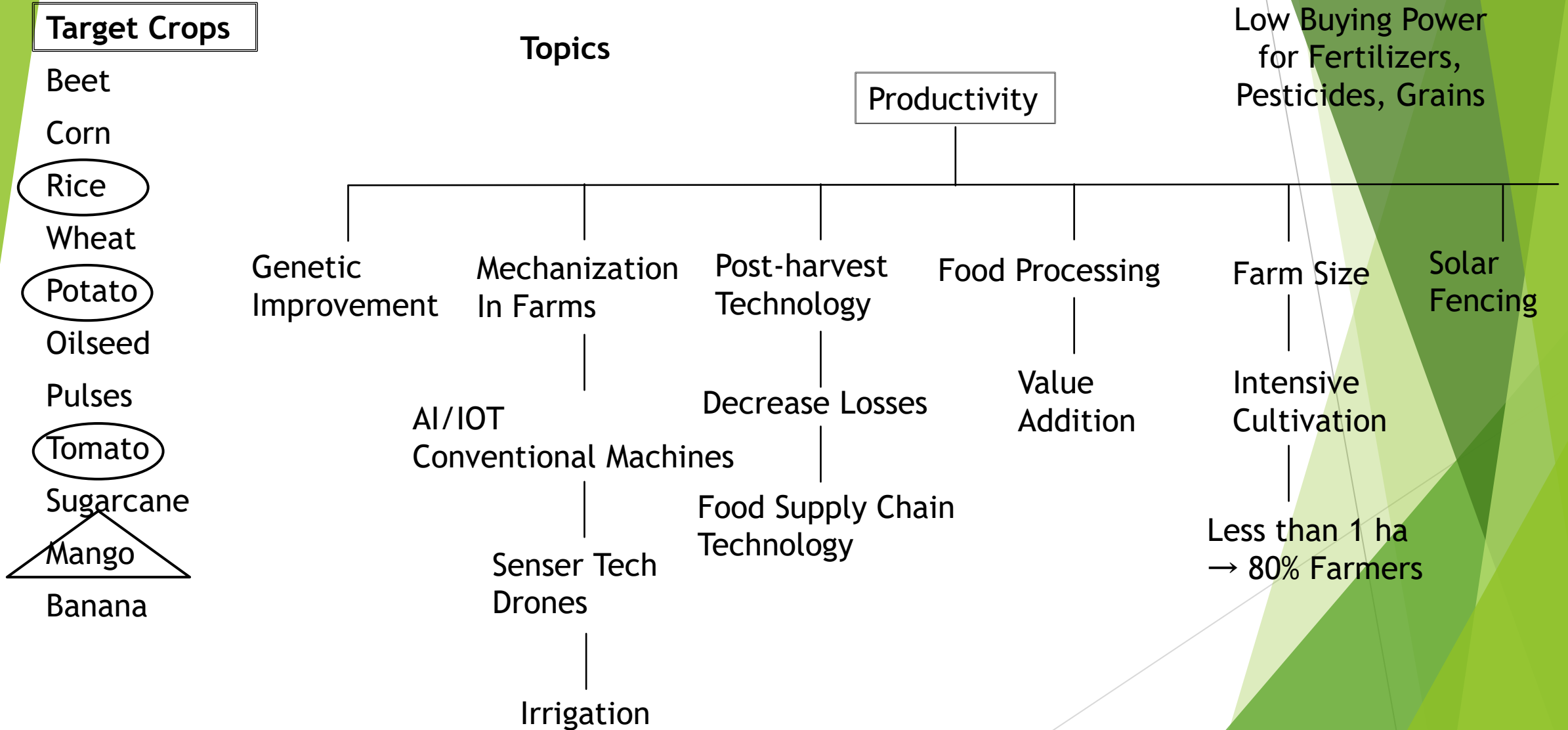


Japan-India Model Farm Project in UP

- Through the Joint Working Group, narrowing down the target crops and areas of cooperation, confirming the budget and cost sharing, and exchanging opinions with participating companies, the project details of the model farm project will be formulated.



Narrowing Down the Target Crops and Areas of Cooperation



Headquarters: Tokyo, Japan

Office in India : 18/4, Sector 15 Rd, Sector 15A, Faridabad, Haryana 121007

Brief introduction of company business: Indian multinational conglomerate that operates in the sectors of agricultural machinery, construction machinery, material handling, and railway equipment.

Name of Product/Technology:

Main: Farming Advice
If needed: Tractor and Other machinery

Category: Farming

Advice
Agricultural Material and Machinery / Equipment

Target crop:

N/A

Introduction of Product/Technology:

Under "Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021", 2% or more of net income for the most recent three fiscal years must be spent on CSR-related activities. Escorts Kubota Limited is seeking CSR activities and discussion with Chandra Shekhar Azad University of Agriculture and Technology (CSAU). Basically, Escorts Kubota plans to provide farming advice to CSAU. Escorts Kubota already has similar activity in Haryana.

Model farm plan:

Farming Advice to CSAU as CSR activity.

Also, if needed, they can consider to provide their tractor and other machinery, and they welcome to collaborate with other Japanese companies.



Headquarters: Kochi, Japan

Office in India :Neemrana Industrial Park,
Rajasthan

Brief introduction of company business:

Manufacture and sale of rotovator blades and blade shafts

Name of Product/Technology:

Taiyo Rotovator Blade

Category:

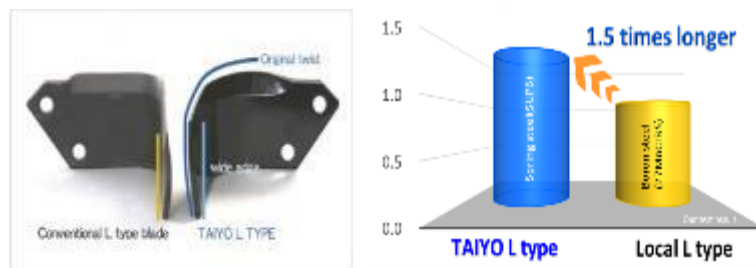
Agricultural Material and
Machinery / Equipment

Target crop:

Preferable to cultivate
harvested sugarcane or
rice field

Introduction of Product/Technology:

The Taiyo L Type blade is made with an extremely tough steel spring steel (SUP6) and has Taiyo's original twist. This product has an average useful life that is 50% longer than the useful life of common blades.



Model farm plan:

Demonstration of the Rotovator Blade attached with Indian / Japanese tractors. It is preferable to cultivate harvested sugarcane or rice field to demonstrate the cultivation capability.

Also, comparison with Indian blade at the site is expected.



Company Name: TOKYO KEIKI INC.



Headquarters: Tokyo, Japan

Office in India : N/A

Brief introduction of company business:

Development, manufacture, sales and repair of ship and port equipment, hydraulic and pneumatic equipment, fluid equipment, defense and communication equipment

Name of Product/Technology:

Straight-line automatic steering assist AG-GEAR3

Category:

Agricultural Material and Machinery / Equipment

Target crop:

N/A

Introduction of Product/Technology:

AG-GEAR3 straight-line automatic steering assist is a product that automatically controls the handle of the tractor and enables accurate straight-line driving without the operator touching it. For some agricultural product, the tractor must be driven straight with an error of several cm. With equipment attached to the rear of the such as plowing, pesticide spraying, harvesting, etc., it will be more difficult. This product helps in that cases.

Model farm plan:

Demonstration of the AG-GEAR3 attached with Indian / Japanese tractors.



Headquarters: Kyoto, Japan

Office in India (if any): Bengaluru

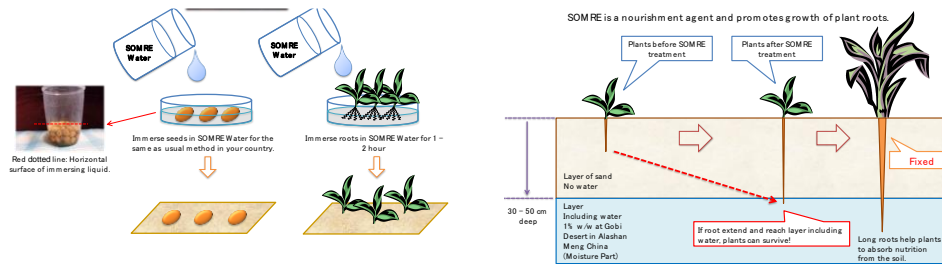
Brief introduction of company business:
Marketing of Japanese products

Name of Product/Technology:
SOMRE

Category:
Bio stimulant

Target crop:
cauliflower, watermelon,
melon, tomato etc

Introduction of Product/Technology:
SOMRE is a bio stimulant that is soaked before planting seeds to promote growth. Also, we would like to demonstrate its effectiveness as a foliar spray.



Model farm plan:

- Already have good result with rice, tomato, beans, egg plants.
- The more data we have, the better, so we would like to demonstrate as many items as possible.
- Demonstration with annual plants is helpful, but if it is possible to continue, we would like to demonstrate with perennial plants as well.



Headquarters: Kyoto, Japan

Office in India : N/A

Brief introduction of company business:
 Design, manufacture, and installation of steel, stainless steel, and aluminum products
 manufacture and sales of Freshmama freshness film

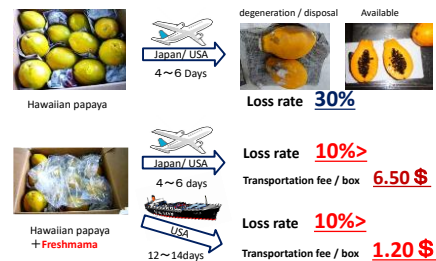
Name of Product/Technology:
 Freshmama, Freshness preservation sheet

Category:
 Post harvest treatment

Target crop:
 Mango, Tomato, Eggplant

Introduction of Product/Technology:

- The Freshmama sheet decompose Ethylene gas which make the fruits and vegetable rotten
- The Freshmama sheet inhibit the growth of microorganisms.
- It is possible to change mode of the transportation from air to ship.



Model farm plan:

- Put about 1 kg each of fruits/vegetables in Freshmama bags and tested without closing the bags
- Test locally grown Mangoes and eggplants should be tested in the same way
- Refrigeration facilities are needed.



Headquarters: Gifu, Japan

Office in India : N/A

Brief introduction of company business:
Plumbing, Applied technology development

Name of Product/Technology:
Solar sharing system
Zero Water

Category:
Sustainable agriculture

Target crop:
Rice, Eggplant, Grape,
Cabbage etc

Introduction of Product/Technology:

(1) Solar power generation equipment that can be installed like a roof over farmland. The energy generated can be used as energy to run various agricultural machinery, and absorb solar radiation energy (sunlight), which can be harmful if it exceeds the light saturation point (LSP).

(2) Liquid agricultural materials called "zero water" that contribute to improved productivity and quality of crops.

Model farm plan:

- Demonstration of the solar sharing in an area of 30-50 m².
- The space between the poles will be about 5 to 6 m. Agricultural machinery can be used.
- Bring in solar panels made in India.



Headquarters: Osaka, Japan

Office in India : N/A

Brief introduction of company business:

1. Frit (multi-component inorganic glass) products,
2. Composite oxide products
3. Unsaturated polyester and other resin-based products
4. Trace element fertilizers

Name of Product/Technology:

Trace Element Fertilizer
"F.T.E"

Category:

Fertilizer

Target crop:

Mango, Beans, Tomato
(High additional value products)

Introduction of Product/Technology:

F.T. E. supports healthy growth of plants. By adding F.T.E to the usual NPK fertilizers, increased yield and improved quality have been observed. F.T.E allows optimization of fertilizer type and amount based on soil analysis results (minimization of chemical fertilizers). Also, it provide good effect for organic fertilizers by adding what is lacking in organic fertilizers.

Model farm plan:

- Propose optimal fertilizer type based on soil analysis using our FTE
- Evaluation of crop yield and quality improvement (taste, color, quality retention period, size, etc.).
- Growth survey at least once a month
- For mangoes, 10 plants at a time, 5 with F.T.E and 5 without F.T.E
- For tomatoes, cultivate same amount of tomatoes with and without F.T.E in 500m²
- Use locally used seeds

Headquarters: Kanagawa, Japan

Office in India : N/A

Brief introduction of company business:

Development, production and marketing of IMEC system and other agriculture materials

Name of Product/Technology:

Imec system, cultivation system utilizing hydrogel technology

Category:

High technology agriculture

Target crop:

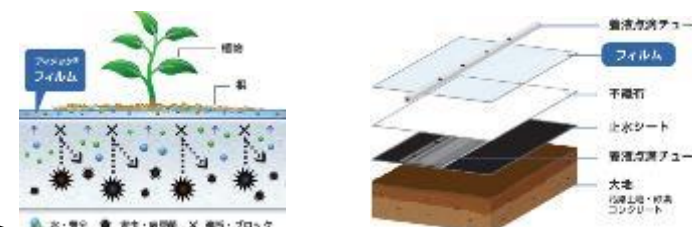
Tomatoes

Introduction of Product/Technology:

- IMEC film absorbs only water and nutrients. Tomatoes can be grown by placing nursery on the film. No soil is required.
- The high polymer mesh film absorbs water and nutrients, but does not allow bacteria or viruses to penetrate, making it safe for growing tomatoes.
- Compared to other hydroponic systems only the necessary amount of water and nutrients can be supplied, making cultivation efficient. No solution circulation is required.

Model farm plan:

- Conduct a demonstration with tomatoes. – Results can be obtained in about 5 months,
- It is required about 1,000 m² of land to obtain sufficient data for demonstration.
- Tomato cultivation system for the demonstration will be brought from Japan



Headquarters: Fukuoka, Japan

Office in India : N/A

Brief introduction of company business:

Development, manufacture, sale, and maintenance of telecommunications equipment, electrical equipment, sanitary facilities, and measuring equipment

Name of Product/Technology:
MIHARAS, IT sensor for agriculture

Category:
Smart Agriculture

Target crop:
TBC

Introduction of Product/Technology:

- The agricultural sensor system that can collect physical data that is required for agriculture control.
- Lower cost, long distant communication, and easy to install.



Model farm plan:

- Target crops is depends on the crops grown at the site.
- One or two sensors per field.
- Can be demonstrate in combination with other companies.
- It is necessary to discuss how to demonstrate in the site.

Headquarters: Yamaguchi, Japan

Office in India : N/A

Brief introduction of company business:

Civil engineering, construction, and environmental business

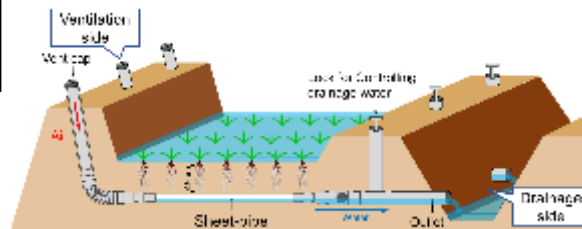
Name of Product/Technology:
Sheet Pipe System (SPS)

Category:
Infrastructure

Target crop:
Eggplant, Tomato

Introduction of Product/Technology:

Improving drainage management of farmlands by laying a special drainage pipe (Sheet-pipe) directly underground without excavating the soil using a dedicated heavy machine (MOLE DRAINER).



Model farm plan:

- Bring smaller equipment for demonstration
- Can be demonstrate with other company.
- It would be good if it is possible to collect necessary data from the academic viewpoint
- Some equipment for soil analysis and environment analysis. Parameters to take need to be discussed.
- About 500m² of land is preferable for demonstration.

Headquarters: Tokyo, Japan

Office in India: N/A

Brief introduction of company business:

Research, development, production and sales of bio-stimulant with resistance to drought, high temperature and salt damage

Name of Product/Technology:

Skeepon

Category:

Bio stimulant

Target crop:

Any kind crop except for gourd family

Introduction of Product/Technology:

- Skeepon is a bio-stimulant which make the plants strong against heat, draught and salinity.
- Skeepon can save water
- Can be used for almost all kind of plants.
- Skeepon is friendly for plants, human, animals and the environment, because harmless, non-toxic, non-persistence and safe materials are used.



Model farm plan:

- Can be demonstrated with any kind of products. Preferable to demonstrate with the higher value products.
- Demonstrate with the 30 plant in one lot and 3-4 lot with and without Skeepon.
- It is better to use in the dried land or do the water saving test.
- Can be used both nursery and planted plants.

Reaffference

Japan-India
Model Farm Project
in GJ

Overview

- The Japan-India Model Farm project in GJ has been implemented since 2019.
- The project sets up Japanese agriculture's model rooms to demonstrate Japan's agricultural technologies as a package in Anand district.



Project site: Anand district of Gujarat, India

Planted area: 40a

Cultivated variety: Tomato, Cucumber, Cabbage, Okra, Red Pepper, Eggplant...

Counterpart organization: SEWA: Self Employed Women's Association

Participant companies: 18 companies, include Water saving technology, Seeds, Pesticides, It and so on.

Starting Up Process



- 23 May 2019: Orientation Meeting
- 1-2 July 2019: Field Study
- 27 August 2019: Promotion Meeting (Kickoff)
- 11 October 2019: Project Design Meeting
- 27 November 2019: Inauguration Ceremony

Installed Species of Vegetable



Cabbage



Locals with priceless smile

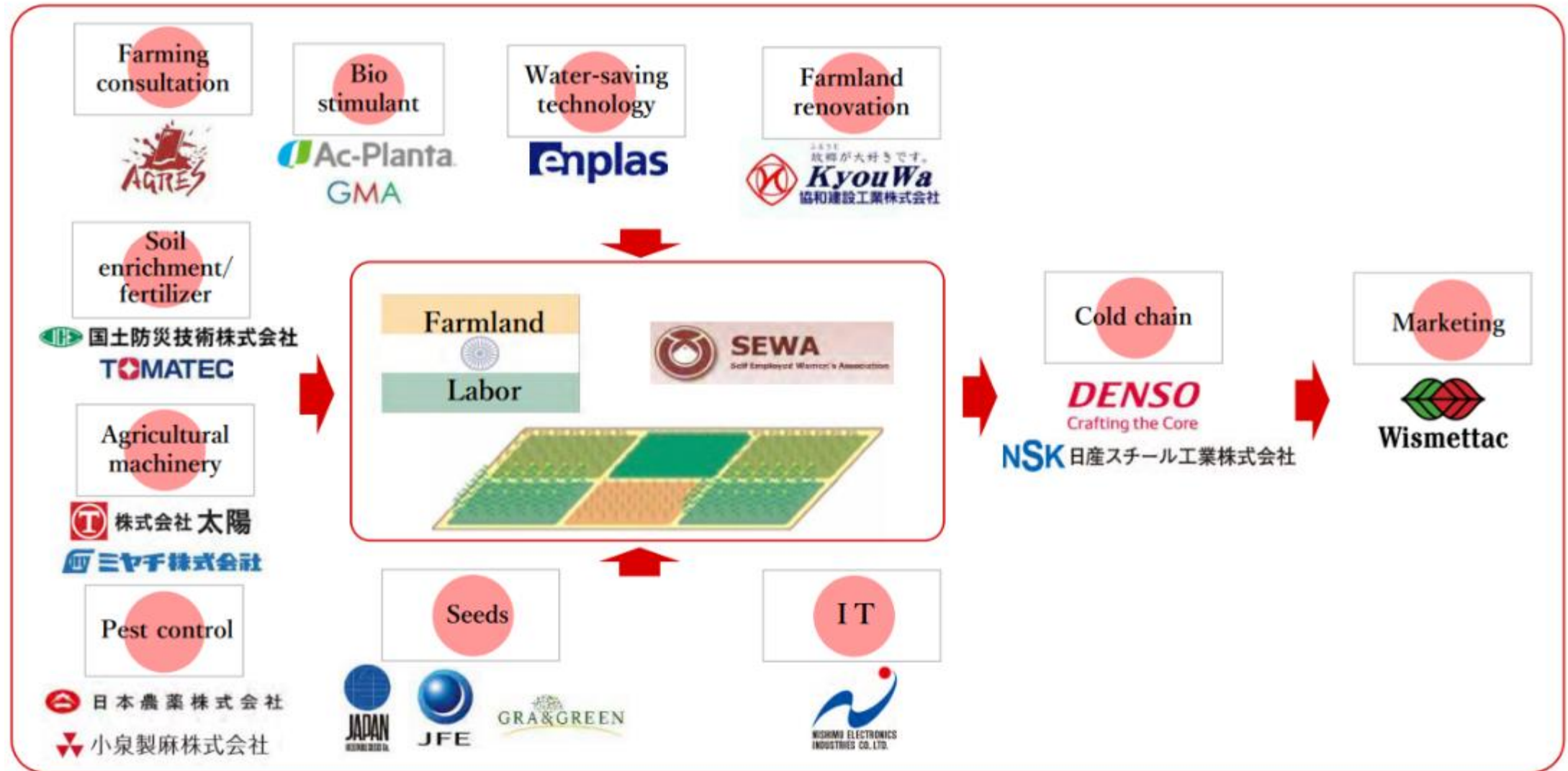


Juicy and flavorful cucumbers

- 2019: Tomato, Cucumber, Cabbage
- 2020: Tomato, Mini-Tomato, Cucumber, Cabbage
- 2021: Mini-Tomato, Cucumber, Cabbage, Okura, Red Pepper, Eggplant
- 2022: Mini-Tomato, Pumpkin, Cauliflower, Redish, Watermelon

Participant Companies

Water saving technology, Seeds, Pesticides, IT and Cold-Chain etc._ 18 companies



Business

Photo

Product Technology



Enplus Corporation

Drip Irrigation Tubing



Drip irrigation tubing with pressure compensation with water-saving function



JFE Steel Corporation

Coated iron powder for direct seeding of paddy rice



Coated iron powder for direct seeding of paddy rice
"Konabijin"

NSK 日産スチール工業株式会社

Nissan Steel Industry Co.

Freshness-keeping sheet



Freshmama" Freshness Retention Sheets for Fruits and Vegetables

Business

Photo

Product Technology

Various pesticides



Various pesticides such as "Katana," which shows high insecticidal activity against butterflies and other insects



Nichino India Private Limited

Insect Flap Net

Insect Flap Sheet



Insect Flap Sheet", "Insect Flap Net" and "Cool Breeze" to repel pests



Koizumi Hemp Corporation

Cold transport system



Cold transport systems (cooler boxes with refrigeration and temperature control)

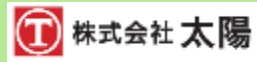


Denso Corporation

Business

Photo

Product Technology



TAIYO INDIA PVT.LTD.

Tillage claw



Blue claw" tillage claw with high leveling performance, high durability, and horsepower saving



Nissim Electronics Industry Co.

Remote Confirmation System for Field Data



MIHARAS: Remote Confirmation System for Field Data Using IT Sensors



Grand Green Corporation

Grafting Cassettes



Grafting cassettes for mass production of stable seedlings

Business	Photo	Product Technology
 <p>Miyachi Corporation</p>	<p>Solar Spray</p>  	<p>Solar power generation systems and solar sprayers (Solar Spray)</p>
 <p>Kyowa Construction Industry Co.</p>	<p>Seat pipe system</p> 	<p>"Sheet pipe method" to bury water-absorbing pipes in shallow layers and generalize the use of agricultural land such as rice paddies</p>
 <p>TOMATEC Corporation</p>	<p>Comprehensive Trace Element Fertilizer F.T.E.</p>  	<p>Manufactures and sells F.T.E., a slow-release, total trace element fertilizer. FTE contains a good balance of micronutrients and supports crop growth</p>
  <p>National Land Disaster Prevention Technology Co. Global Marketing Association, Inc. Acplanta Corporation</p>	<p>Plant-activating agent</p>  	<p>FUJIMIN" plant activator made from highly concentrated fulvic acid SOMRE", an organic compound plant growth agent created from indole SKYPON" biostimulant for fruit and leafy vegetables</p>

Thank you for your Attention.

ASANO Daisuke

Counsellor

Emerging Regions Division

Export and International Affairs Bureau

Ministry of Agriculture, Forestry and Fisheries

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