MeaDRI ~ the Strategy for a sustainable food system ~

Measures for achievement of Decarbonization and Resilience with Innovation (MeaDRI)

~ Innovation will enhance productivity potentials and ensure sustainability in a compatible manner~

"MeaDRI," the medium-long term strategy will pave the way for the future.

- Enhancing engagement of stakeholders at each stage of food supply chains
- Promoting innovation to reduce environmental load

Challenges

- Depopulation and aging of producers
- Stagnant rural communities
- Climate change and increasing natural disasters
- Disrupted supply chains due to the COVID-19
- Achievement of SDGs

By 2050, MAFF aims to achieve;

- → Zero CO2 emission from the agriculture, forestry and fisheries sectors
- → 50% reduction in risk-weighted use of chemical pesticides by dissemination of the Integrated Pest Management and newly-developed alternatives
- → 30% reduction in chemical fertilizer use
- → Increase in organic farming to 1Mha (equivalent to 25% of farmland)
- → At least 30% enhancement in productivity of food manufacturers (by 2030)
- → Sustainable sourcing for import materials (by2030)
- → 90% and more superior varieties and F1 plus trees in forestry seedling
- → 100% of artificial seedling rates in aquaculture of Japanese eel, Pacific bluefin tuna, etc.

which will be enabled through:

- development and dissemination of innovative technologies
- greening of MAFF's policy tools

MAFF endeavors to accomplish the triple win of;

Economic sustainability



Ensure robust and resilient food industry

Social sustainability



Improve livelihood, promote balanced diet

Environmental sustainability



Save global environment for the future generation

Zero-emission

Sustainable Development

2050

Dissemination of

Innovative

2030

2040

Innovations

2020

Dissemination of

technologies-

development

currently under

to be developed

technologies

MeaDRI's Conceptual Approach

Following viewpoints are required to transform our food systems. Awareness, efforts and behavioral changes of stakeholders as well as promising technologies are the keys to success.

Inputs

Reduce environmental load

- 1 Sustainable sourcing of materials/energy
- 2 Effective use of local and/or unused materials
- 3 R&Ds for reuse/recycle of resources

Production

Innovation makes them happen

- 1 Sustainable production with high productivity
- 2 Greener production materials/machineries
 - ② Development of "Super" plant varieties with less environmental impact
 - 4 Long-term, massive carbon sequestration into farmlands, forests and oceans
 - **5** Safer working environment, more new entrants
 - 6 Responsible fisheries resource management

Consumption

Education can be an effective channel

- Sustainable consumption with less food loss and waste
- 2 Bridging consumers and producers
- 3 Japanese diet as a balanced model
- 4 "Woodening" the life
- **6** Sustainable marine products and their dissemination

· Smart food value chains

- Human development · R&Ds
- Rural generated innovation

For more

- Improved livelihood

Processing and distribution

Cut-off unreasonable and inefficient practices

- Switching to sustainable import materials, encourage private initiatives
- 2 Efficiency based on data science and Al
- 3 Packaging materials for longer haul/long-term preservation
- 4 Competitive food industry with decarbonized, environmentally friendly, health conscious products



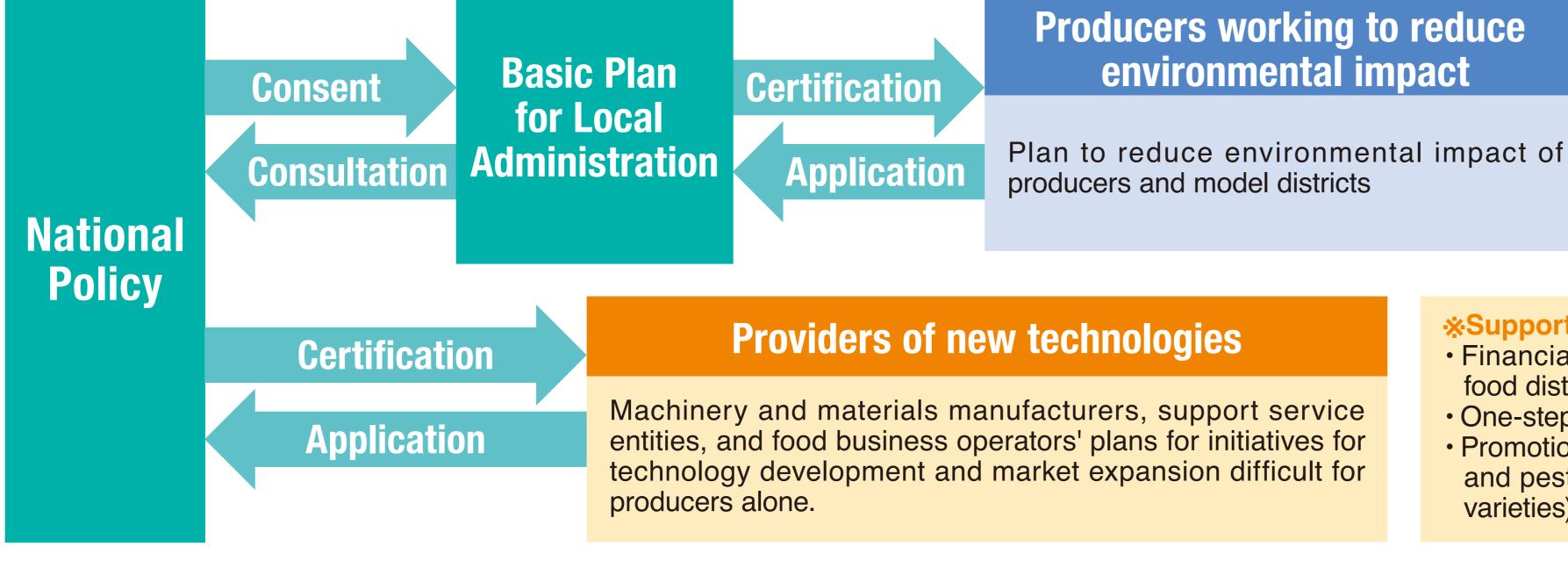
What the MeaDRI is about?

The MeaDRI related law

The "MeaDRI related law" was enacted in order to share the basic principles with all stakeholders in the food system and to promote efforts to reduce environmental impacts through the united efforts of all stakeholders.

The law was enacted on April 22, 2022, promulgated on May 2, and came into effect on July 1.

Sustainable development of agriculture, forestry, Implementation of MeaDRI. Purpose fisheries, and food industry, ensuring stable food supply Cooperation among producers, businesses, Development and use of technology **Basic Principles** Ensuring Food Distribution systems consumers etc **Clarify roles** Responsibilities of National and Local Governments Efforts by producers, businesses, and consumers of stakeholders (policy development and implementation) Promoting understanding among stakeholders environmental impact Measures to be taken • Promote procurement, production, distribution, and Technology development and promotion by the government consumption that contribute to reducing Visualization of environmental impact reduction etc Financing support(Extension of return



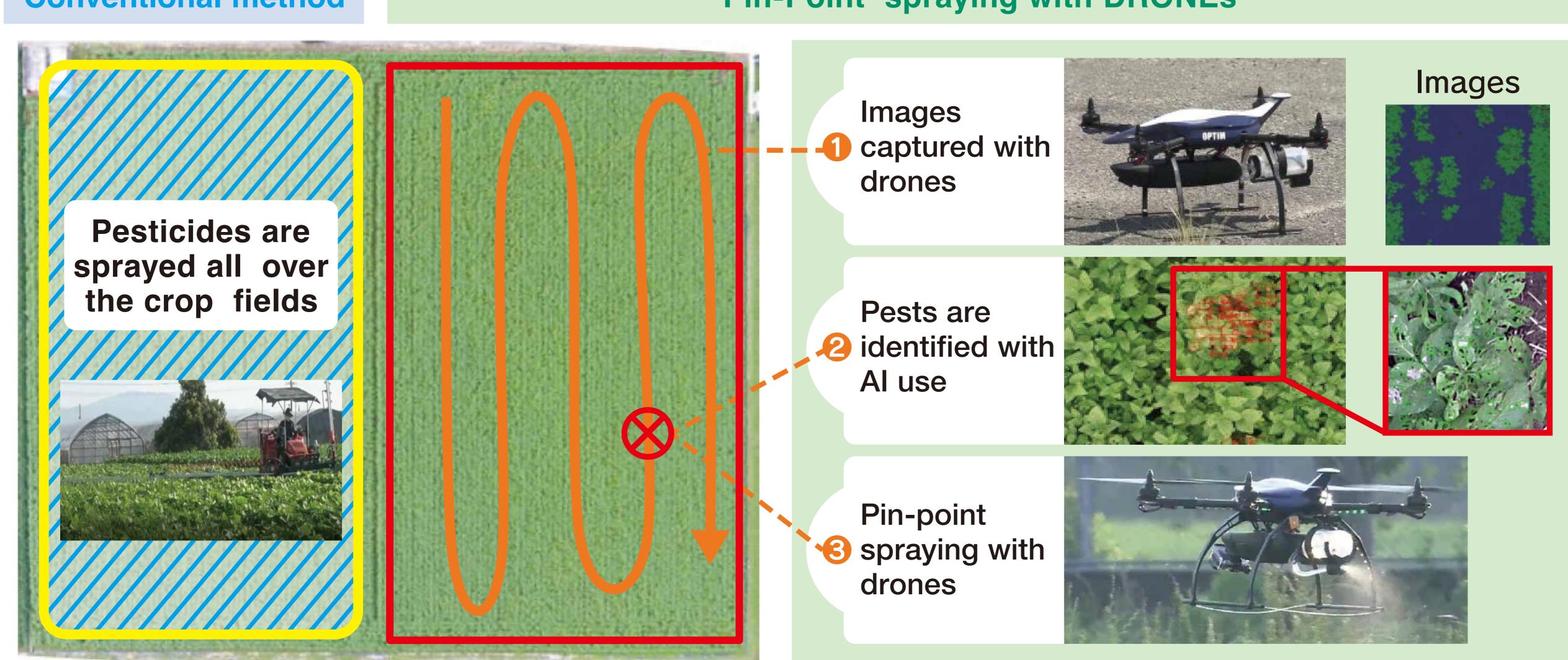
- period for agricultural improvement funds)
 - One-step administrative procedure* (agricultural land conversion permission procedures)
- Promote regional arrangements for organic farming management*
- ***Support measures**
- Financial support (special exception for funds to improve food distribution)
- One-step administrative procedure
- Promotion of development of varieties with superior disease and pest resistance (exemption of application fees for new varieties)
- In addition to the planning system, a new tax incentive for investment in necessary machinery and facilities, and a new JFC fund for machinery and materials.
- Inclusion of initiatives under the Sustainable Agriculture Law (the Law will be repealed and transitional measures will be taken to phase in the new system).

Example of innovation

Pest diagnosis and pin-point spraying can also reduce pesticide use.



Pin-Point spraying with DRONEs



Reduce pesticide use (90% reduction)

