

**Initiatives for
the Sustainable Agricultural Mechanization
beyond COVID-19**

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- Impact of the COVID-19 pandemic on the agri-sector in Japan
- Initiatives for the Sustainable Agricultural Mechanization beyond COVID-19 (Fujimori's private suggestion)

◆ Agriculture is an essential industry to supply food to the people even amid the pandemic.

- In Japan, thanks to the collaboration among the authorities and stakeholders, the supply and retail systems for the **staple article of food are steady as usual.**
- On the other hand, having **emerging issues** like;
 - Expensive **“Wagyu beef” producers** are facing difficulties due to the decrease of demand from high-end restaurants.
 - **Flower producers** are affected by the decrease of demand from parties and/or funerals.
 - **Lack of labor force in field workers** due to the entry ban of foreigners.
 - Some supporting movement arose from hotel industries, airline companies and so on.

◆ **Shipment value** of all agri-machines **decreased by 15%** from same period of previous year.

- Tractors -22% in value, -19% in unit
- Rice Transplanters -5% in value, -12% in unit
- Combine Harvesters -10% in value, -17% in unit
- Dryers -9% in value, -10% in unit

(Source : JAMMA's statistics Jan.-Oct., 2020)

◆ COVID-19 pandemic itself **doesn't directly affect the activities of agricultural production**. Furthermore, there is no case of infection through the food.

On the other hand, the activities of agricultural production is extremely **vulnerable** due to its characteristics (to handle/get along with “**natural environment**”, “**climate change**”, “**various creatures big & small**”, etc.).

- ◆ It would be indispensable to **make** the activities of agricultural production “**Resilient**” through various approaches **from the expertise of Agricultural Machinery**.

That will certainly **contribute** on our activities for “**Building Back Better**” beyond COVID-19.

- ◆ Thus, **I suggest** you, Agricultural Engineers, **some initiatives toward addressing sustainable Agricultural Mechanization beyond COVID-19** shown below.

(These idea might be effective not only in Japan but other East Asian economies where mechanized farming has mostly achieved.)

Informal 3 Initiatives/Recommendations (Fujimori's private suggestion)

- I) **Make "Smart Agriculture"** (already in implementation stage in Japan) **much more expandable and sophisticate.**
 - Achieve the acceleration of the **labor hour minimizing** and the **ultimately precise operation** with developing "Data-driven Intelligent" machines.

- II) **Come true some far-term (future conceptual) technologies** (beyond "Smart Agriculture", by "destructive innovation").
 - Totally unmanned farm operation
 - Hyper weatherproof machine
 - Perfect food value chain (no missing link and no loss)

III) **Accident-free farm work.** We still have about 300 farm work fatalities per year in Japan. Ensuring the safety of farm work is a very big policy issue.

→ Strengthen the survey and analysis activities, and build a safety-securing system targeting “zero accident” through the use of AI (Artificial Intelligence).

Your comments would be highly welcomed!

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Thank you for your attention!