Overview of Agricultural Technology Learning Support System
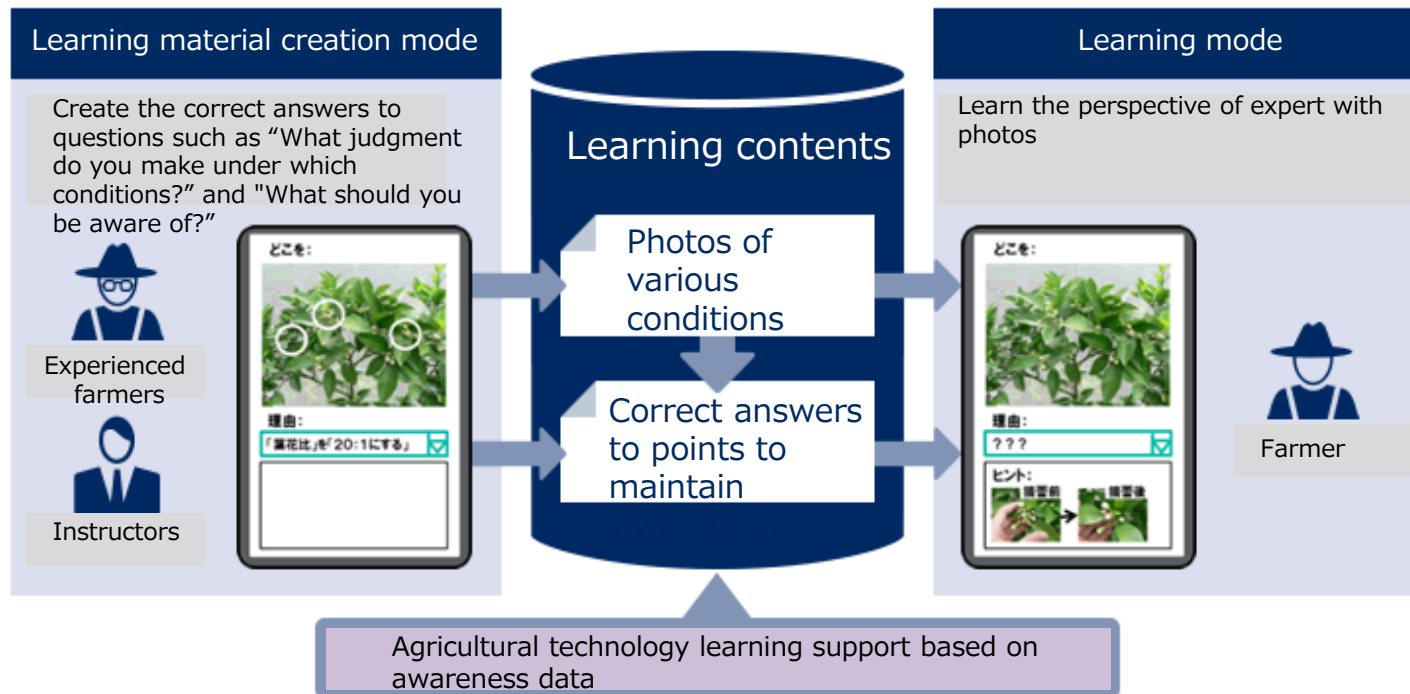
I. This system "Visualize" the agricultural techniques of experts by using ICT, for which manual creation is difficult. The resulting data can then be used to assist young and new farmers acquire these techniques.
As a measure to cope with the declining agricultural population, the conversion of the techniques and know-how of experienced farmers into data, and this data available for referring and learning on tablet. Using this system, new farmers acquire advanced cultivation techniques of experienced farmers in a short time. This makes it possible to secure agricultural workers, maintain production area, and quickly get farmers to earn a living.

II. By adding know-how on temperature rise and response to drought to the content offered by this system, effective measures can be spread to farmers. This will enable **farmers to cope with global warming and drought**.

Learning material creation mode

Create the correct answers to questions such as "What judgment do you make under which conditions?" and "What should you be aware of?"

Experienced farmers

Instructors

Learning contents

Photos of various conditions

Correct answers to points to maintain

Learning mode

Learn the perspective of expert with photos

Farmer

Agricultural technology learning support based on awareness data

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Environmental Benefits of Agricultural Technology Learning Support System

Among the eight risks of climate change indicated by the United Nations' Intergovernmental Panel on Climate Change (IPCC), the risks that can be mitigated by this solution are the following. (See "The eight risks of climate change" on the following page)

(The numbering of the items below corresponds to the numbering of "the eight risks of climate change" on the following page.)

5. Threat to food security caused by rising temperatures and drought

By adding know-how on temperature rise and response to drought to the content offered by this system, effective measures can be spread to more farmers. This will enable **farmers to cope with global warming and drought, and respond to food security threats**.

6. Loss of livelihood and income in rural areas due to insufficient water resources and reduced agricultural productivity

New farmers and unskilled farmers will be able to acquire skills for effective and efficient farm work through preliminary learning, and this will make it possible to maintain and expand productivity. Further, as a way to cope with the declining agricultural population, the system helps new farmers acquire agricultural skills in a short time **making it possible to secure agricultural workers, maintain producing districts, and quickly allow new farmers to earn a living, thereby helping solve the issues of aging and the lack of successors faced by rural areas, and helping such areas effectively respond to threats to livelihood and income loss**.

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The Eight Risks of Climate Change

Source: 5th Assessment Report of IPCC (2014)

1. Damage caused by rising sea levels and storm surge in coastal areas

2. Damage caused by flooding in urban areas

3. Breakdown of infrastructure and other societal functions due to extreme weather events

4. Death and ill health caused by heat waves which particularly affect vulnerable groups in urban areas

5. Threat to food security caused by rising temperatures and drought

6. Loss of livelihood and income in rural areas due to insufficient water resources and reduced agricultural productivity

7. Loss of marine ecosystems that are vital to coastal water areas

8. Loss of services provided by terrestrial and inland water ecosystems

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