

NTT DATA 「「あい作」を活用した産地における脱炭素農業の支援」字幕原稿

Aisaku Utilization to Support Carbon-Free Agriculture

(NA1)

The year 2050.

Will we be able to safeguard the food on our dining tables that has become our norm?

“Agriculture” is at a major turning point now.

(NA2)

GHG - greenhouse gas emissions around the world.

In fact, about a quarter is produced by the “agricultural sector.” Did you know how big of an impact it has on global warming?

The effects of climate change have already dealt a blow to agriculture nationwide. From “extreme heat” and “torrential downpours and flooding” to the “proliferation of pests and diseases,” various factors are increasingly causing a decline in quality and yields. Changes in arable land are also significantly affecting sustainable production across regions. The “norm” of farm products is starting to teeter.

(NA3)

What’s more, the number of agricultural workers continues to shrink every year. The farming population is also continuing to gray, with the average age increasing and 70 percent of all workers aged 65 years old and above. Left unaddressed, agriculture will face a labor shortage and struggle to pass on farming techniques, which may make productivity itself unsustainable.

What changes are necessary to protect the future of agriculture and realize a carbon-free society?

(NA4)

One solution is NTT DATA’s “Aisaku®.”

Based on “Aisaku,” NTT DATA is partnering with producers, JA, regions across Japan, and related companies to realize sustainable agriculture.

(NA5)

“Aisaku” has been expanding its scope to address various challenges in regions and farming communities nationwide.

One growing initiative is the establishment of sustainable agriculture to realize a carbon-free society.

(NA6)

The first measure is reducing GHG emissions by prolonging mid-season drainage of rice paddies.

Utilizing “Aisaku” allows production regions to more easily manage information on each local farm to calculate GHG emission reductions from prolonging mid-season drainage of rice paddies.

The primary data collected can be valorized into carbon credits through coordination with NTT DOCOMO BUSINESS. In fiscal 2024, which was the first year of the initiative in production regions, a reduction of “approximately 2,000 tons” was achieved. From the carbon credit sales revenue, local producers received proceeds of “approximately 5.5 million yen.” The aim is to reach a reduction of “approximately 100,000 tons” in the future.

A new value cycle is emerging that realizes both “higher incomes” and “decarbonization” for producers.

(NA7)

Another measure is reducing Scope 3 emissions through the “visualization of land-use GHG emissions of the food and beverage industry.”

Collaborating with the food and beverage industry, primary data acquired from “Aisaku” is utilized. This makes it possible to generate detailed emission calculations that were difficult at the farmland level.

The GHG emission reduction efforts at agricultural production sites can be reflected as carbon insetting of companies, contributing to reductions across the entire value chain of food and

beverage providers.

(NA8)

Since the launch of the project in 2019, “Aisaku” has been adopted by more than 100 production regions nationwide.

The implementation of “Aisaku” is not the end goal. We believe it marks a new start for success in production regions.

Even after starting the service, our dedicated support system (Customer Success) provides comprehensive assistance to production regions, from successful implementation to further utilization.

(Interview1)

I feel the best aspect of Aisaku is not only the information I receive, but also being able to share that with section managers. For example, planting or disinfection dates. Based on the data provided by Aisaku, I believe I’ll be better able to make decisions.

(Interview2)

Being able to see the data in real time allows us to understand what issues farmers are facing and the seed varieties they’re using and watering. So, in terms of industry-wide information sharing, we believe it will help others enhance the quality of their products.

(NA9)

Focusing on sustainability and regional co-creation, NTT DATA will work together with farmers to design the future of agriculture.