# Kagome and NEC establish a joint venture in Portugal to provide farming support for processed tomatoes using Al

- Promoting Environmentally Friendly and Profitable Agriculture and Contributing to Sustainable Agriculture -

**Tokyo and Aichi, Japan – June 15, 2022** — Kagome Co., Ltd. (Kagome, Head Office: Aichi, Japan; President: Satoshi Yamaguchi) and NEC Corporation (NEC, Head Office: Tokyo, Japan; President and CEO: Takayuki Morita) will establish DXAS Agricultural Technology, a joint venture in Portugal to provide farming support for processed tomatoes using Al. Establishment is scheduled for July of this year.

The new company will contribute to sustainable agriculture in countries around the world by promoting environmentally friendly and profitable farming through the integration of Kagome's agronomies and NEC's technologies.

## **■**Background

The production of processed tomatoes is expected to continue expanding in line with population growth and economic growth, particularly in emerging countries. However, for sustainable tomato cultivation, we need to address a variety of issues, such as responding to a decline in producers and reducing environmental impact.

In 2015, Kagome and NEC began technological development and business verification of farming advice using AI (\*1) with the aim of realizing environmentally friendly and highly profitable farming. Since then, the companies have begun conducting demonstration tests in Portugal, Spain, Australia, the United States, and are currently expanding business in 7 additional countries.

In April 2020, we signed a strategic partnership agreement (\*2). With the Smart Agri Division, an organization newly established within Kagome under the direct control of top management, the two companies used NEC's Al-enabled agricultural ICT platform, CropScope, to further improve the functions and quality of farming advice, as well as to study the marketing and future potential of farming support businesses.

We recently decided to expand business with the launch of a new company, aiming to further accelerate technological development and strengthen sales activities in the farming support business.

By further combining Kagome's knowledge of tomato farming with NEC's AI-based analytical and forecasting technologies, we will accelerate farming support mainly in the processed tomato markets of Europe, the Americas, and Australia.

■Overview of the New Company \*As of June 2022

Location	Lisbon, Portugal	
Name	DXAS Agricultural Technology	
Start of business	July 2022 (planned)	
CEO	Kengo Nakata (Currently: General Manager, Smart Agri Division,	
	Kagome)	
Business	Sale of farming management recommendation services and field visualization services utilizing AI, marketing, promotion, customer development, and service planning	
Capital and	Euro worth approximately 300 million yen	
shareholders' equity	Kagome: 66.6%, NEC: 33.4%	
ratio		

#### ■ Vision

"Innovate global agriculture with DX solutions"

By delivering optimal solutions created by incorporating skilled farming technologies into AI, we will enter an age in which everyone can conduct agriculture accurately and efficiently.

We aim to establish new agriculture that is adaptable to climate change, sustainable, low input, high output and more productive.

# Accelerating technological development

We will accelerate the creation of new value and the enhancement of services from the AI technologies that we have accumulated.

In terms of future initiatives, we will further improve the efficiency of farming operations through collaboration between AI and irrigation facilities, and contribute to reducing the burden on tomato processing companies and producers.

Furthermore, we aim to provide environmentally friendly and profitable farming support services by improving comprehensive cultivation methods (from soil preparation to harvesting) from Kagome's agricultural research results, which is important for crop growth.

### Strengthening the Service Provision System

We will strengthen service provision systems through the new company and develop a global system in which personnel with agronomic knowledge and experience understand each user's farm site and support the proposal of optimal services and the application of technology. We will also strengthen partnerships in the agricultural industry to further accelerate business development.

■Introduction to the Core Service "CropScope"

	Farming management recommendation services	Visualization services
Farmers (Tomato growers)	Al which has acquired the know-how of skilled workers enables environmentally friendly and profitable farming. It also facilitates technology succession and helps to increase the number of new farmers.	It is possible to quickly notice irregularities and to reduce the cultivation risk through visualizing the situation of a large field.
Farming instructors	The use of formalized agricultural support know-how can reduce the time required to guide producers and train farming instructors.	Even if a field is large, it is possible to accurately identify the areas where irregularities are occurring and provide guidance based on accurate data.
Tomato processing companies	Stable procurement and lower procurement costs can be achieved by reducing procurement risk and minimizing input.	Productivity can be improved through optimal total harvest adjustments based on objective data.

CropScope Functions and Value Delivered



Ability to report field conditions, such as the growth of crops and the water content of soil



Farming instructors use devices to check field conditions

"We believe that our business, through CropScope, will help realize both environmental sustainability and profitable farming while fulfilling the promise of farmers, like us at Kagome, to contribute toward people's health through the nutritional value and delicious taste of tomatoes," said Yoshihide Watanabe, Director & Senior Managing Executive Officer, Kagome. "This Business will help realize environmentally conscious and profitable tomato farming, along with the social value of supporting our customers' food and health, leading to growth of our new company and Kagome."

"In the face of a challenging global environment characterized by global warming, climate change, soil pollution, and soaring prices for water and fertilizers, we have continued to develop solutions with Kagome, aiming to provide value to production sites and food safety by utilizing AI and other advanced technologies," said Osamu Fujikawa, Executive Vice President and CFO, NEC Corporation. "Going forward, NEC will work with the new company and Kagome to provide direct value to society through NEC technologies that contribute to food production and agriculture worldwide."

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(\*1) NEC reinforces agricultural ICT for global markets <a href="https://www.nec.com/en/press/201511/global-20151111-03.html">https://www.nec.com/en/press/201511/global-20151111-03.html</a>

(\*2) NEC and Kagome to provide AI-enabled services that improve tomato yields <a href="https://www.nec.com/en/press/202003/global-20200331-01.html">https://www.nec.com/en/press/202003/global-20200331-01.html</a>