For Earth, For Life



Kubota Business Report Interim Period of 135th Term

2024.1.1-2024.6.30

Special Feature

Kubota's Solutions Paving Our Future



KUBOTA Corporation



To be a truly global company, we will strive to embody the "One Kubota" concept and achieve sustainable growth.

I would like to express my sincere gratitude to our shareholders for their exceptional support.

I am happy on the release of Kubota Business Report of the 135th interim period.

Consolidated financial results for the first half of the current fiscal year (January 1, 2024 to June 30, 2024) are as follows.

We decided to pay ¥25 per common share as the interim dividend of this fiscal year.

We expect our shareholders for their continuous support.

Yuichi Kitao

President and Representative Director of Kubota Corporation



Business Overview



profits

2

KUBOTA TOPICS 135th

We would like to introduce the Company's activities for the fiscal year ending December 31, 2024. For details on each topic, please access the URL or scan the 2D code below.

Machinery Announcement of New Products Aimed at Smart Agriculture

Kubota Group Showcases New Agri Concept at CES[®] 2024

Click for details https://www.kubota.com/news/2024/20240119.html

The Company unveiled its New Agri Concept vehicle at CES[®] 2024, the world's largest tech event, held in Las Vegas, Nevada, in January 2024. The vehicle is fully electric and capable of automated operation without requiring visual supervision. It can autonomously handle a variety of tasks, such as tilling and transporting, using cameras and sensors. It is also equipped with a rapid charging

feature, capable of recharging the battery from 10% to 80% within 6 minutes. The vehicle has been designed for a wide range of applications in the agricultural field, including vineyards for wine production.

Release of hydrogen fuel cell tractors under development

Click for details https://www.kubota.co.jp/news/2024/management-20240328.html

Aiming to achieve carbon neutrality by 2050, we are conducting comprehensive R&D in various areas, including electrification using batteries or hydrogen fuel cells, and engines that utilize hydrogen, biofuels, and synthetic fuels. The FC tractor, which we are developing as one of the technologies to provide suitable output for each of our diverse series of agricultural and construction

FC tractor prototype

machines, emits only water and no CO₂ during operation, demonstrating excellent environmental friendliness. We are currently conducting demonstration tests on farms in Japan.

Water & Environment

Kubota Construction Received an Order from the Kingdom of Cambodia for "The Project for Expansion of Water Supply System in Svay Rieng"

Click for details https://www.kubota.com/news/2024/20240111.html

Kubota Construction Co., Ltd., a member of the Kubota Group, has received an order from the Kingdom of Cambodia to expand the water supply in Svay Rieng City, the capital of Svay Rieng Province in southern Cambodia. This project aims to increase the water supply coverage ratio in the urban area of Svay Rieng City

to about 86.7% (currently about 49%) by constructing a water intake facility, conveyance pipes, a water treatment plant, and a water transmission and distribution piping network in Svay Rieng City. The Kubota Group will work on this project while making the best use of their accumulated technology and expertise in construction of water supply facilities in Cambodia, in order to contribute to the stable supply of safe and secure water and the improvement of the living environment of residents.

Received Order from Osaka City Waterworks Bureau for Seismic Retrofit PFI Project on Main Water Pipelines

Click for details https://www.kubota.co.jp/news/2024/management-20240417.html

Water Partner Osaka Pipeline Corporation, a special purpose company (SPC) established by a corporate group including Kubota, has entered into a contract with the Osaka City Waterworks Bureau for PFI Project to Seismically Retrofit Osaka City's Main Water Supply Pipelines (contract value: approximately 52.5 billion yen) and has commenced the project. This project involves the renewal of the main pipelines connecting purification and water distribution facilities within the city, and Kubota is responsible for a series of operations from planning, design, and construction of the renewal of the main pipelines.

Relocating Kubota's Head Office to the GRAND GREEN OSAKA

Click for details https://www.kubota.com/news/2024/20240522.html

In 2026, Kubota has decided to relocate its head office to the GRAND GREEN OSAKA Park Tower, part of the Umekita 2nd Project located northwest of Osaka Station. In the new office, we will create a space where diverse employees, regardless of nationality or department, can gather and interact. We will also strive to transform work styles by utilizing advanced ICT such as generative AI.



Planned final design of GRAND GREEN OSAKA Park Tower (Source: GRAND GREEN OSAKA Developer)





Project on Main Water Pip



Special Feature

Kubota has been contributing to solving social issues in each era by delivering various essential products that are indispensable to people's lives. However, as time progresses, new challenges continuously emerge, and the Kubota Group is now required to transform from a provider of products to a provider of solutions. In this feature, we focus on the "water management" solutions provided to address labor shortages in agriculture and municipalities, and we bring you the real voices of those who have been closely working to solve these issues.





1 ZeRo.agri Product Introduction Video

More Information https://www.youtube.com/watch?v=8-8seA1KOow

②Irrigation and Drainage Automation System "KiDAS"

https://agriculture.kubota.co.jp/product/movie_redirect/water0001/

1 ZeRo.agri (AI-Powered Drip Fertigation System)

Our subsidiary, Routrek Networks Inc., offers an Al-Powered Drip Fertigation System called ZeRo.agri. This solution uses AI to determine the optimal "amount of water and fertilizer" and "timing of irrigation and fertilization" based on cultivation environment data from the fields, and it executes these actions automatically. This time, we spoke with Associate Manager Nishimura from the Business Incubation Department of Kubota Corporation and Farm Manager Takeuchi from the New Business Department of Kanto Koshin Kubota Corporation, who are involved in the demonstration of ZeRo.agri at the open innovation demonstration field "Kubota Incubation Farm," to hear their perspectives from the field and their outlook for the future.



Kubota Incubation Farm

ZeRo.agri

Features and benefits of ZeRo.agri

Mr. Takeuchi-

Water management is one of the most important tasks in farming. However, as the saying "three years to master irrigation" suggests, optimal water management requires years of experience. For example, during the summer, temperatures can change drastically within just 30 minutes, requiring constant attention to the fields to prevent crops from wilting. However, since we started using ZeRo. agri, we have been freed from this concern, as ZeRo.agri automatically provides optimal control in response to changes in soil moisture, fertilizer concentration, sunlight, and other factors.

Mr. Nishimura-

Expert farmers with over 40 years of experience who have adopted ZeRo.agri highly appreciate the ability to make crop condition assessments, which they previously relied on intuition for, now based on various data visualized by it. The web application used to check this data also allows for remote adjustments to ZeRo.agri settings. While some may worry that issues like sensor errors could go unnoticed without regular inspections, alerts can be received via LINE, enabling immediate response to any abnormalities.

Mr. Takeuchi-

By introducing Zero.agri, we were able to allocate the time previously spent on water management to other tasks. In fact, Kanto Koshin Kubota operates six greenhouses with about three people. Other farmers are often surprised and ask how we manage to do it.

Mr. Nishimura-

By utilizing the surplus capacity generated through labor-saving measures, it is possible to aim for further expansion of the business scale.

Mr. Takeuchi-

It also has a positive effect on improving quality. For example, in tomato cultivation, improper water management can lead to issues such as fruit cracking. However, by using ZeRo.agri to perform appropriate irrigation and fertilization, such problems are reduced, resulting in a higher proportion of marketable produce and an increased rate of high-quality products.

Mr. Nishimura-

We have also received feedback that the AI's appropriate determination of fertilization amounts has enabled for a reduction in fertilizer usage. This not only has a cost-cutting effect but also helps prevent the over-application of fertilizers, thereby reducing environmental impact.

Future prospects

Mr. Takeuchi-

Regarding our efforts in our own fields, we aim to improve productivity, brand our crops, and further enhance profitability. We intend to use this initiative at Kanto Koshin Kubota as a management model case and extend it to producers to provide support.

Mr. Nishimura-

To make facility horticulture sustainable, it is necessary to address farmers' challenges one by one, such as "reducing high dependency on manual labor" and "acquiring cultivation skills for various tasks." We will continue to create solutions for these challenges by advancing joint demonstrations with external partners at Kubota Incubation Farm.

NEWS The lineup was expanded on July 16!

We have started offering the entry-level model of the irrigation and fertilization system, "ZeRo.agri Lite," and the integrated environmental control system for greenhouses, "ZeRo.agri Plus," to better meet the needs of more agricultural producers.



Kubota's Solutions Paving Our Future



Irrigation and Drainage Automation System "KiDAS"

Kubota has introduced the "Field Water Management System 'WATARAS'" for automatic field water level control and the "Field Irrigation Control System 'KiDAS' (Irrigation and Drainage Automation System)," which integrates fields with water facilities such as pumps and gates, to the Shonai Akagawa Land Improvement District in the southern region of the Shonai Plain in Yamagata Prefecture.

The Yunosawa district, where this system has been introduced, has many farmers who cultivate rice and the specialty crop edamame. When the edamame harvesting period overlaps with the water management period for rice paddies, it becomes a significant challenge due to the substantial labor required.

Mr. Oi from the Shonai Akagawa Land Improvement District, who decided to introduce KiDAS as part of the National ICT Model Project, shared many positive opinions, saying, "We no longer need to manually open and close the water valves, and there is no need to rush to the fields at night or on rainy days." He also mentioned, "Even the younger generation can easily manage and check water levels using smartphones, which has led to an increase in young people taking up farming." Additionally, by coordinating with the pumping station that draws water from the irrigation canal, it has become possible to efficiently supply the necessary amount of water, resulting in annual water savings of 90,000 cubic meters and a reduction in electricity costs.

In recent years, due to the decline in the farming population and rising electricity costs, we have received many requests for visits from those interested in this project. Mr. Oi stated confidently, 'I believe that smart agriculture will continue to expand in the future. Since rice farming is the mainstay of this region, a decline in rice farming would lower the overall vitality of the area. Through initiatives like this, we hope to protect farmland and contribute to the development of local





Field Water Management System "WATARAS"

Shonai Akagawa Land Improvement District Engineering Department First Division (left) Masahide Sasaki, Division Manager (right) Daiki Oi, enginee

3 The comprehensive facility operation and management platform "BLUE FRONT"

Starting from August 2023, Kubota has introduced and begun operation of the "KSIS BLUE FRONT" system at the Ota City Central No.2 Sewage Treatment Facility, which is managed by its subsidiary, Kubota Environmental Engineering Co., Ltd. (KKE). This system is a comprehensive platform for facility management that digitizes and centrally manages various data related to operation and maintenance tasks, thereby improving facility management efficiency.

Currently, local governments are facing significant challenges due to financial difficulties caused by population decline and a shortage of personnel to manage facilities. Mr. Kishida, who is promoting collaborative projects with local governments, says, KSIS BLUE FRONT can be a decisive solution to issues such as the inheritance of know-how due to the retirement of technicians and the shortage of personnel.'

In addition to realizing labor savings, it also helps improve the working environment for on-site personnel. Mr. Watanabe, the manager of this treatment facility, says,

"In the past, we had to go to the site to check the situation even at night if there was a disaster such as heavy rain or an earthquake, but now we can check the damage status from the office or home and prioritize our response accordingly."

Additionally, we have started a demonstration experiment for automated patrol inspections using quadruped robot. Mr. Mori, the Director of the Operation and Maintenance Department at KKE, expresses his expectations, saying, "By utilizing the data obtained from the cameras on the quadruped robot through KSIS BLUE FRONT, we can achieve further efficiency and labor savings in our operations.

The Kubota Group will actively combine the expertise it has cultivated in maintenance and operational tasks with cuttingedge ICT and DX technologies, contributing to the construction of sustainable social infrastructure that ensures efficient and optimal business operations



Inspection of water purification plants



Information sharing among staff using BLUE FRONT (data has been digitized, enhancing accuracy)

Social Media guide

The Company actively disseminates information through various social media channels. Please take a look at following channels.



YouTube

https://www.youtube.com/ @KubotaBrandChannel





Facebook https://www.facebook.com/ KubotaGlobal/





LinkedIn

https://www.linkedin.com/ company/kubota/



You can also view the Company's social media policies below. https://www.kubota.com/socialmedia.html