

Special Feature 1 Dialogue



Participants:
Kubota Corporation

Masatoshi Kimata
Chairman and
Representative Director

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President and
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Masato Yoshikawa
Director and Executive
Vice President

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Director and Senior
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Director and Senior
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*Correct as of October 2020

DIALOGUE

Contributing to the realization of a sustainable society with our long-term vision GMB2030

Since its establishment in 1890, the Kubota Group has contributed to the world in the fields of food, water and the environment for 130 years. 2020 was a year in which the spread of the new coronavirus disease (COVID-19) deepened our awareness of our enterprise as an “essential business that supports society.”

Against this backdrop, we invited Ms. Hiroko Kuniya, a journalist who has been engaged in reporting on and raising awareness of the SDGs, to talk with our management team about our long-term vision GMB2030, and about the future of the Kubota Group post-COVID-19.

Kuniya: Can we share our thoughts about the realization of a sustainable society? As symbolized by the SDGs, this was a year in which society as a whole woke up to the importance of comprehensively resolving the issues of the environment, economy, and society, rather than partial optimization. The long-term vision GMB2030 that Kubota has formulated incorporates global trends, and I feel that the company is aware of how it can provide solutions to these trends as part of its business.

Kimata: First and foremost, Kubota’s ultimate goal is to realize Global Major Brand (GMB) Kubota, a goal that has remained unchanged since I was President of the company. Kubota is “a company that can make the greatest contribution to society by earning the trust of the greatest number of customers,” which is the spirit of our founder and continues to be our corporate mission.

Kitao: Based on this premise, I have taken the lead in formulating a long-term vision that spans the next 10 years in order to share the direction Kubota should take with the entire Group and accelerate the realization of GMB.

Kuniya: Nowadays, investors are also being asked to take


Hiroko Kuniya

Facilitator

Project Professor, Graduate School of Media and Governance, Keio University. Formerly a newscaster/journalist, Kuniya is currently a member of the Board of Trustees of the Tokyo University of the Arts (special assignment for the president), holds the post of Director at the Natural Energy Foundation, and is also a Goodwill Ambassador for the Food and Agriculture Organization of the United Nations (UNFAO).



sustainable society

responsibility for global sustainability. In addition, as the world grapples with the new coronavirus pandemic, the concept of Build Back Better*1 (BBB) has become more important, which is how to deal with risks and how to build a more resilient society.

Kitao: Even if we have a vision, I think it is important to look backwards from that vision and consider what we should do now as well as the sense of urgency required. From now until 2030, Kubota is determined to make technological innovations to further enhance customer value from the perspective of the entire supply chain.

Kuniya: I feel that Kubota is putting a considerable amount of effort into environmental management. You have established clearly organized policies such as setting environmental materiality, identifying opportunities and risks, and then formulating specific measures, but what are the challenges in implementing these policies?

Kitao: At the same time as the long-term vision, we have formulated an environmental vision and new medium- and long-term goals for environmental conservation. In terms of CO₂ reduction, Kubota has set a target of achieving a 30% reduction

in CO₂ emissions in 2030 (compared to the 2014 level of domestic emissions) and virtually zero CO₂ emissions in 2050, thus contributing to the realization of a carbon-neutral society.

Kuniya: I understand that there always has to be a balance between “cost” and “profit”—can you tell us what the management stance is on this?

Yoshikawa: In deciding where to invest in our business activities, the balance between “profit” and “cost” is an important issue. As the world becomes increasingly concerned about environmental issues, including CO₂, Kubota must conduct research and development toward resolving these issues. We also need to make significant upfront investments in technologies that do not impose environmental loads, technologies that reduce environmental loads, and solution technologies to solve issues centered on the SDGs. We will expand our business and increase customer value in a way that allows us to secure sufficient management resources and at the same time does not lower our bottom line, and we will increase our upfront investment more than ever while generating those resources. We are making significant investments in Europe, Thailand and North America,

*1 Build Back Better: The phrase used by the United Nations to call for a more sustainable, resilient and inclusive society as we embark on our post-COVID-19 recovery.



including a new R&D Center in Sakai, Osaka, and we are also planning to expand the functions of the Innovation Center, which will create new added value, globally.

Kurosawa: As an example of “resource recovery solutions,” one of the priority measures set forth in GMB2030, many local governments have already adopted initiatives to recover digestion gas—another name for methane gas—generated from sewage, and to use this gas to generate electricity and supply it to surrounding areas. Kubota would like to provide recycling-oriented solutions that recover energy resources such as methane gas and phosphorus from sewage and waste treatment processes and utilize them to generate electricity and in fertilizers.

Kuniya: I think it is very important to recover resources from waste and recycle them. At the same time as efforts to decarbonize society, such circular solutions are accelerating worldwide. In what areas do you plan to demonstrate Kubota’s strength in terms of circular solutions?

Kurosawa: With regard to facilities related to social infrastructure, such as water supply, sewage and waste treatment, which was mentioned earlier, we are starting to see implementation of public-private partnerships such as PFI/PPP^{*2}. We would like to be actively involved in these partnerships and make full use of Kubota’s technologies. We can contribute to the realization of a “zero landfill society” by proposing social systems for recycling, including the field of agricultural production, which is where we have an advantage, with the aim of creating a circular economy.

Kuniya: Globally, it is said that four system changes are important: energy, food, cities and the circular economy. Of those four, Kubota is trying to work on the entire system change in food,



which is a very progressive approach. How do you plan to collaborate with various stakeholders, from production to consumption, in implementing this initiative?

Kitao: I think we need a system that connects the demand side and the production side with IT; in other words, a system that can connect and share data across various companies, local governments and other organizations. This means that we need to understand where problems are occurring and what is going on, analyze them, and solve them throughout the supply chain. Our strength lies in the fact that we are connected to many producers as we have developed our business with farming at the core. In order to realize this challenge, we would like to collaborate more than ever with those who are doing business on the output side, such as distributors.

Kuniya: I hope that you will lead the way as a change leader in the food system, and make it possible to eliminate food loss through IT. In the future—with “resource recycling society” becoming a megatrend—the amount of resource input will become a KPI and one of the ways in which the company can strengthen competitiveness, as stated in the long-term vision. In the midst of this circular movement, what are your thoughts on R&D, innovation, and sales strategies for “resource minimization”?

Kitao: We are already working on improving the transmission efficiency of our machinery, making it lighter and more compact in the R&D stage, but in the future, we will go one step further and review at the design and development stage by adopting biomass-derived resins, and we will also start recovering valuable metals from urban mines, which has become a social issue. In addition, we will need to consider entering the used construction equipment business and recycling at the time of disposal, which are areas where we have not been so involved thus far.

Kuniya: It is an important issue. Furthermore, it is also important to have a business model that allows the product to be used repeatedly for a longer period of time, including maintenance, inspection, and after-sales service.

Kitao: There is a concept called “life cycle cost”—for example, tractors and combine harvesters are generally used for longer than 10 years, and the question of how to ensure that they can be used without failure or waste can also be considered an area of business. If the product breaks down, it is a waste of resources, so we need to make a preliminary diagnosis and replace service parts so that our customers can use their product for a long time. In order to do this, we propose improving efficiency through collecting information digitally. In addition, we are paying attention

^{*2} PFI/PPP: A scheme in which the public and private sectors work together to provide public services is called a Public Private Partnership (PPP), and a Private Finance Initiative (PFI) is a method of PPP that utilizes the private sector’s financial, managerial and technical capabilities to construct, maintain and operate public facilities.



to hydrogen as an energy source. In particular, I would like to work on engine development in collaboration with other companies.

Kuniya: Is there a possibility of making hydrogen from water, as is the case in Europe?

Sasaki: Regarding hydrogen production, the general method is to use electricity that cannot easily be stored from solar or wind power generation for electrolysis and to store this energy as hydrogen, and then use that hydrogen in FT synthesis*3 to make liquid fuel. In the future, for example, this fuel could be used in construction and industrial machinery. We are also looking at this as a carbon-free fuel, and I think this is a possible option.

Kuniya: Japan has a wide range of technologies, and I hope that Kubota, as an essential innovator in the environmental business, will show leadership in connecting these technologies. You also mentioned next-gen crop production as one of the new solutions in GMB2030. What do you intend to do in this regard?

Kitao: We are working with a start-up company to commercialize this. Rather than a conventional plant factory, this will be an “artificial light-type plant factory” that can stably produce nutritious, safe and secure food in a space-saving manner without being affected by abnormal weather or other external conditions. From a long-term perspective, this kind of initiative will lead to solutions to food shortages and environmental problems, and I believe it has great potential as a business.

Kuniya: In Europe and elsewhere, it is said that it is important to promote agriculture as regenerative*4—as something that can contribute to global environmental regeneration. As shown in examples from other companies, it will become commonplace for people to absorb more than they emit, so is there any possibility that Kubota can expand the nature of agriculture to become a carbon sink*5?

Watanabe: Kubota has long been involved in the agricultural machinery business, mainly in Asia. In the past 10 years, the development of Asian countries has led to accelerated mechanization, which has freed them from labor and increased productivity, but it has also caused air pollution problems due to the burning of large amounts of agricultural waste. As a manufacturer of agricultural machinery, we are thinking of contributing to environmental issues by proposing ways to recover agricultural waste instead of burning it, to use it effectively for other purposes, and even to return it to the soil.

Sasaki: From a research and technology standpoint, there is data

showing that the amount of phosphorus and nitrogen remaining in Japanese farmland is many times higher than the average of OECD countries, and I wonder if we can find a way to approach this problem. Japanese farmers have always tended to apply fertilizer to their fields at a certain time of the season, based on past experience. In the future, we will not only rely on empirical data but also use soil sensing technology to visualize where and how much fertilizer should be applied to each field in real time. I would like to contribute to the realization of agriculture that is friendly to both farmland and the planet.

Kuniya: Last but not least, water issues are becoming an important theme for humanity to confront. How does Kubota intend to address this issue?

Kurosawa: There is a limit to how much water sources can be secured depending on the country and land, and there is also the issue of cost in terms of water quality. In particular, large amounts of water are used for agricultural production, so it can be said that our food problems are really a water problem. From water intake to water discharge, I would like to further refine the pipeline and water transmission facility construction and water operation management technologies that we have cultivated over the years, in addition to contributing to securing precious water resources in the agricultural sector.

Kuniya: In order to promote change in the agricultural sector, what challenges do we face at the global and local levels with regard to agriculture and water? I feel that it is necessary for people to know what kind of technologies and techniques are available to solve these problems. It is said that the next five years are very important. I think we need to hurry up and make changes.

Kitao: In the fields of agriculture and water, which are indispensable for life, can we create added value by leveraging Kubota's strengths, and can we establish this as a business model? We are beginning discussions and examinations to that end with more determination than ever before. In order to achieve speedy solutions to specific issues in the business domains of food, water and the environment, Kubota will shift to business operations with a greater focus on ESG management than ever before, and will make concerted efforts by the 40,000 employees of the Group. Please look forward to Kubota's initiatives for the future.



*3 FT synthesis: A catalytic reaction that synthesizes basic chemicals such as light oil and other petroleum substitute fuels, alcohols, and olefins from syngas (a mixture of carbon monoxide and hydrogen).

*4 Regenerative: The concept of not only pursuing sustainability of the global environment, but also allowing the entire ecosystem to flourish while regenerating the global environment.

*5 Carbon sink: Addition to forests and oceans, the ability of soil to absorb and fix carbon dioxide is attracting attention.