

Driving force for creation of new values

Open Innovation



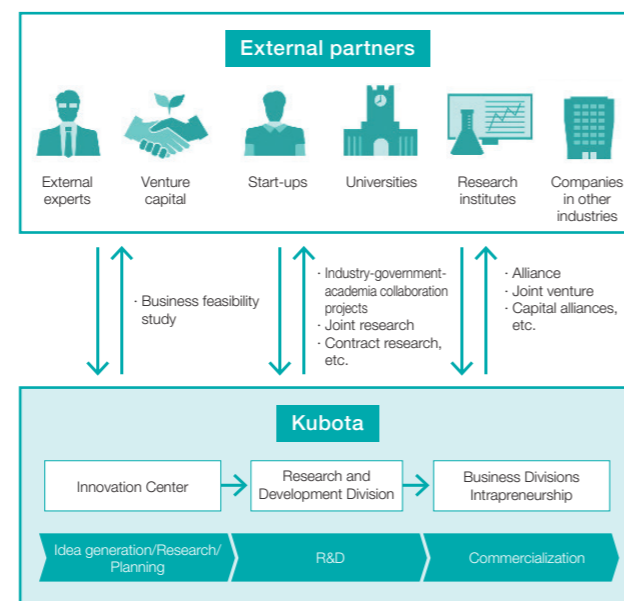
■ The Kubota Group's intangible assets

Global social challenges are becoming increasingly complicated and diversified as the population increases and global warming intensifies. Addressing these growing challenges, meanwhile, involves continuous efforts to create

entirely new values at an unprecedented pace. With its focus on food, water and the environment businesses, Kubota is committed to providing solutions through open innovation, and considers its business partners to be valuable intangible assets.

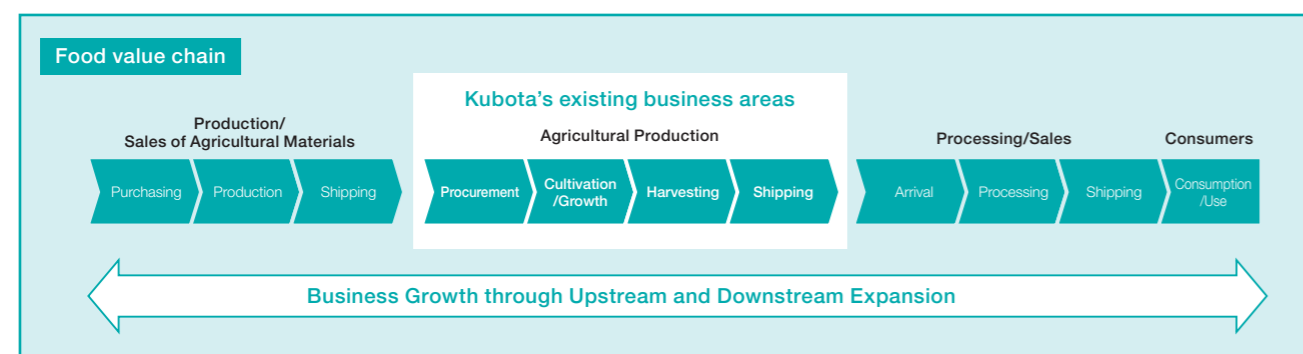
■ Kubota's concept of open innovation

Kubota is pushing ahead with open innovation that strengthens partnerships with external parties such as start-ups, universities and research institutions. As quite a few partners boast advanced technologies that can have a significant impact on society, we will incorporate them into our experience and expertise to develop solutions and new businesses, forecasting challenges that may emerge in the future.



■ Kubota's ideal open innovation

Kubota is creating new values by leveraging advanced technologies such as ICT and AI. The food business, for example, aims to provide total solutions for food value chains that encompass the entire process of agricultural production, from purchasing to processing, distribution and consumption, which involves promoting smart crop production and the upstream and downstream expansion of food value chains through open innovation. We will also act as a liaison between all partners to develop an agri-platform.



■ Open innovation initiatives

Demonstrating the feasibility of autonomous orchard and vineyard farming system using drones and IoT

Kubota and Aurea Imaging, a Dutch start-up announced a strategic partnership, under demonstration of the feasibility of autonomous orchard and vineyard farming systems that combine Kubota's machine technology with Aurea's crop intelligence technology. Aurea Imaging provides services such as fruit yield forecasting and soil map preparation, leveraging AI to analyze data collected through drones and IoT sensors. Its advanced sensing technology, coupled with Kubota's proprietary machines, is expected to provide total solutions for fruit growing.



Investing in an agri-tech company developing artificial lighting for plant cultivation designed for plant factories

Plant factories using artificial lighting ensure stable, high-yield crop production regardless of external environmental factors such as abnormal weather. Kubota has a stake in PLANTX, which is developing artificial lighting systems for plant cultivation, leveraging its advanced technology.

The partnership with PLANTX will be enhanced for business cooperation in an effort to streamline and stabilize food production.



Testing agricultural machinery sharing services

Agricultural machinery with improved performance and automated functions is expected to accelerate the recent trend, particularly among those who are entering the agriculture industry for the first time, to switch from "ownership" to "use."

To this end, Kubota is trialing agricultural machinery sharing services in some areas in Japan to propose new ways to use agricultural machinery while efforts are underway to identify and review challenges prior to the provision of full-scale services.



■ Activities supporting open innovation

As a strong network with external partners is key to promoting open innovation, Kubota takes part in partnership programs with start-ups from Europe and America while engaging in activities led by international agricultural organizations, with the ultimate intention of taking the lead in incorporating advanced technologies.

