

Reaching that goal is made even harder by the fact that, by 2050, Holistic Change in Food Supply there will be two billion more mouths to feed (http://dev.partners.wsjcs-(https://www.un.org/development/desa/en/news/population/worlddev.com/mitsui/business-innovation/holisticpopulation-prospects-2017 http:// than today. The situation is most acute in Africa, whose population is expected to double

(https://news.un.org/en/story/2019/06/1040621). Sub-Saharan Africa is the region with the highest hunger rate, around 23%. And unfortunately, it has been rising. Meanwhile, yields are low, with African's cereal yield 59%

(https://www.afdb.org/sites/default/files/2019/07/05/high_5_feed_africa.pdf) Encouraging Development lower than the international average. (http://dev.partners.wsjcs-

dev.com/mitsui/businessinnovation/encouraging-development/)



Yuichi Narita Senior Project Manager, ETG Business Team, Nutrition & Agriculture Business Unit

"In Africa, where more than half of labor resources are engaged in agriculture, improving agricultural productivity is also important for economic growth," says Yuichi Narita, Senior Project Manager, ETG Business Team, Nutrition & Agricultural Business Unit of Mitsui & Co. "As food demand has increased due to the rapid population growth since the 1960s, the self-sufficiency rate of the staple food grain is low, and it has become a problem in many African countries that it cannot support population growth."

Smallholder farms, which lack modern equipment and produce low yields, provide up to 80% of the food consumed in much of the developing world. Their challenges, according to Fenton Beed, senior agricultural officer at the Food and Agriculture Organization (FAO) of the United Nations, include: getting good seeds that will germinate and produce vigorous plants adapted to local conditions; knowing the market demand for different crops; having money at the beginning of the growing season in order to buy seeds, fertilizer and other inputs; getting information about how to protect and replenish the soil such as crop rotation and cover crops; having access to day labor to ensure planting when conditions are optimal; having access to distribution networks to get crops to market; and having access to technology and mechanization. "Africans are full of innovation. They are not frightened by change or new approaches," Mr. Beed says. He points to the example of M-Pesa, the Kenyan electronic wallet on a mobile phone, which quickly gained much wider use than similar fintech apps in any developed country. "The idea that Africa is resistant to change is invalid."

Farmers might want to invest in new technologies but they aren't sold locally or the farmers lack money. "In Africa, there are farmers who can't buy agricultural materials even if they want to buy them, and it is necessary for small farmers to select and cultivate crops that are suitable for their land with their own knowledge. In other words, we think it's important to firmly support farmers' agriculture in terms of finance and technology, and to improve their income," Mr. Narita says.



Even successful farmers face problems getting their production to market, due to lack of roads and other infrastructure and an overall lack of distribution channels, he adds. As much as 40% of fruits and vegetables, 30% of dairy and fish and 20% of cereals are lost to spoilage between the farm and the point of sale, the FAO says (http://www.fao.org/news/story/en/item/1141224/icode/). The wasted food could feed about 48 million people in sub-Saharan Africa. Besides poor roads, farmers need technology to connect them with distributors and transportation; better storage, including silos and refrigeration; and better packaging, such as crates to reduce bruising during transport.

ETG staff giving instruction on how to cultivate tomatoes

As a sogo shosha that trades in a wide variety of products and services, Mitsui supports the sales and processing of harvests around the world using its worldwide network, Mr. Narita says. It also contributes to building up Africa's nations through investments in infrastructure, from supplying seeds, fertilizers and pesticides to providing access to water and irrigation—as well as plans to develop distributed power generation facilities on the horizon.

In 2018, Mitsui acquired a stake in ETG Group, which has a network of more than two million farms in East Africa and the north Indian Ocean. ETG is active in agricultural products and supplies, and operates more than 400 farm gates—sales and collection bases that play a cooperative role in purchasing beans and other harvested products in rural areas as well as selling fertilizer.

Last year, Mitsui and ETG teamed up with the Japan International Cooperation Agency (JICA) to help farmers in Africa. More than 80% of Kenyan farmers are smallholders with less than a hectare of land. These smallholders account for more than 60% of the horticulture sector—high-value vegetables and fruits.

JICA's program promotes farming as a business, telling farmers to "grow to sell," rather than "grow and sell," reframing farming as business rather than subsistence. It promotes information-sharing among market actors and farmers in order to adapt quickly to demand and to improve efficiency.

ETG Group operates farm gates

Mechanization could vastly improve efficiency. The FAO is working with the African Union to reduce reliance on manual labor by improving the use of digital and mechanical technology. Mechanization in Asia, whose smallholders are of a similar size to those in Africa, has helped boost yields.

"Ultimately, our aim," says Mr. Narita, "is to improve the quality of life of local residents by contributing to the stable supply of agricultural materials, the construction of value chains for agricultural products and infrastructure development, such as our investment in distributed energy sources." Taken together, Mitsui's work in Africa is contributing to growth across the continent.



(https://www.mitsui.com/jp/en/index.html)

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