

Connecting people, agriculture and the environment through appropriate technologies

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My First Trip to Sindh

AAI has been engaged in JICA feasibility studies and technical cooperation projects in the agricultural sector of Pakistan for more than 30 years. In recent years, AAI implemented a JICA technical cooperation project in Balochistan province from 2019 to 2023. This time, AAI has been given the opportunity to join the JICA Project, the Smallholder Horticulture Farmer Empowerment Project targeting Sindh province started in 2024.

Sindh province, which includes Pakistan's largetst city, Karachi, is about four times the size of Kyushu, Japan and lies in the Indus River basin. The Indus River often evokes Mohenjo-daro, the ancient city ruins of the Indus Civilization, recognized as one of the world's four great civilizations. The province lies within a desert climate, with an average annual rainfall of only about 150 mm, indispensable making irrigation for agricultural production. In the Indus plains, farmers have relied on the waters of the Indus River and mountain catchment areas for over 5,000 years through flood-based systems known as Sailaba irrigation. Under British rule in the 1930s, the construction of a barrage on the Indus River near Sukkur established a modern irrigation network, transforming the arid and barren land into a vast agricultural zone. Today, the province's agricultural output is still dominated by staple grains such as wheat and rice, alongside cash crops like sugarcane and cotton, making the province a vital breadbasket that contributes around 11 percent of Pakistan's GDP.

Sindh province has two main cropping seasons: the Kharif season (From April to September), which coincides with the rainy season, and the Rabi season (From September to March), which is the dry



Well-maintained irrigation canal

season. Sugarcane and wheat are cultivated throughout the

province, while cotton and rice are widely grown in both the northern and southern regions. The province is also a major producer of fruits and vegetables, including tomatoes and mangoes. In fact, the province is one of the world's leading mango-producing regions, with significant exports to international markets.

The core objective of this project is to introduce and promote market-oriented agriculture suited to the conditions of Sindh province, with the aim of improving the livelihoods of smallholder horticulture farmers. As specialists in horticulture and ICT/monitoring, AAI contributes by providing technical support in horticultural cultivation, designing an ICT-based monitroing system, and supporting for monitoring activities.

In my earlier work for the project in Balochistan, I was unable to visit Balochistan due to security restrictions. Through this project, I was finally able to observe fisthand issues such as waterlogging and salinity. I also observed landlords and tenant farmers conversing as equals, which contrasted with the impression I had gained from secondhand reports. This experience reminded me of the importance of gaining firsthand insights directly from the field.

One of the highlights was being able to see and reconnect with Pakistani colleagues from earlier projects. While challenges are expected, I hope to



Furrow-irrigated tomato field

make full use of the lessons learned and experiece from other provinces and contribute to this new opportunity with the support of our trusted Pakistani colleagues.

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