

Ingenuity of demonstration fields <Part 4>

Demonstration field with a story

I feel that an exhibition in a museum springs from a certain hypothesis and its ingenuity lies in the way it elaborates upon and reveals its story. In its way the demonstration field can be seen in similar terms - it is an exhibition and the entire village in which it stands is the museum. It is interesting to think three-dimensionally about the connection and development of technology, in holistic terms just like my hypothetical picture.

It seems that there is some debate about how to effectively display thinking and concepts in a demonstration field. I have been thinking for many years about how it can be displayed as a continuous exhibition with an interesting story following a constantly developing line, as opposed to just a technical display caught in one moment. Here, I would like to introduce an exhibition connected by a line, using a trial in a JICA technical cooperation project being implemented in the state of River Nile, Sudan (hereinafter referred to as the "RN project").

The state of River Nile is located about 250 km north of Khartoum, the capital. It belongs to a typical desert climate zone and has an average annual rainfall of 100 mm or less, making it extremely difficult to establish dry farming. This said, it is a "Gift of the Nile" and irrigated agriculture is actively carried out along the river. However, the heat of the summer (May-August) here is severe, and the air temperature during the day is well above 45 degrees Celsius. In such an environment, the cropping system has to be centered on winter crops, which thrive in the relatively mild temperatures from November to February, and we have not actively worked on summer cropping. The dormant period of such crops is locally called the Dead Season, and it can be said that it is harsh.

The RN project was aimed at introduction and promotion of highly cashable summer crops using irrigated agriculture. Rice, maize for feedstuff, pigeon pea and strawberry were examined as candidate crops, but finally oil yielding crops such as

sesame, peanut and sunflower, which had yielded research results in Agricultural Research Cooperation (ARC), were selected as the items to be introduced.

As an introduction of new crops, the exhibition of cultivation techniques such as plowing, sowing, fertilization, and pesticide spraying, squeezing of oil crops, and the process of selling in the village market were exhibited. I tried to convey a series of flows from upstream to downstream as a market-oriented message. Specifically, following the demonstration field of oil crops, all work processes such as the use of agricultural machinery, small-scale processing plants for peeling and oil extraction, food preparation by women's groups, storage, and buying and selling in the market are continuously exhibited.

In the above-mentioned "Connected Exhibitions", we devised an exhibition order that naturally raises curiosity according to the changes in the interests of farmers. Farmers were particularly intrigued by the so-called market-in, which is how to sell what they make. From this launch pad the exhibition introduces methods with new technologies, ideas. It has been well received by farmers who praise it for being easy to understand. One farmer told the exhibition story and his happy conclusion as he reached the end of the story line was, "The season of death is over."

The introduction of cashable summer crops not only increased the acreage of oil crops, but also led to the construction of new small-scale processing facilities by farmer's groups. I think that the exhibition equipment, which emphasizes the flow of composition, connection and line was a dynamic and interesting attempt, and carries with it a sense of expandability and anticipation.



Harvesting oil crops



Oil extraction



Oil extracted products from groundnuts