Kashima Oil era when I learned teamwork and small group activities

I chose a course in the mechanical department of technical high school because I thought that agriculture was hard work and not profitable. In 1972, I joined Kashima Oil Co., Ltd. (KOC), which was the core of Kashima Development's oil complex and was promoted under the slogans of both agriculture and industry. I engaged in the operation of heavy oil desulfurization equipment, and experienced busy but fulfilling days in

which 4 teams of 12 to 13 people in 1 group established the operation of the equipment in 3 shifts. It was an invaluable experience that could only be experienced during the startup period.



Author during regular repair

However, around the 8th year after joining the company, when I thought that I could not get a real feeling of actually making anything by just operating the equipment, a new business development department for business diversification was established in the company. New business related to agriculture and vegetable cultivation was considered as one of the projects closely related to the location of the refinery. When I was investigating a production system that utilizes the sandy soil in the area between the Tone River and Kashima Nada, I met Sumitomo Electric Co., Ltd., which started the practical use of a vegetable cultivation system (sandponics) which is one form of hydroponics. I heard that a project aiming precision agriculture development for the at industrialization of agriculture would start. I raised my hand to be engaged in the project. Along with the use of domestic technology, a test farm "Kashima Abu Dhabi Farm (KAF)", was established in 1981 with the support of a JICA loan in the United Arab Emirates (UAE), an oilproducing country, to expand sandponics. The KAF project was concluded in 1989 and I returned to Japan. After that, I engaged in research on the commercialization of agriculture and 'greening' and retired in 1999.

In 2000, I became involved in training work for a vegetable cultivation course in JICA Tsukuba as an instructor at JICE, and I started this work at AAI from the following year. The main reason for this was that I met Mr. Onuma, the founder of AAI, in UAE during the KAF

project. I was able to jump into the training work which was rather an unexpected landing field! This was made possible because throughout the KOC era, I had accumulated experience on various greenhouse vegetable cultivation projects; knowledge that can be utilized for the operation and management in training.

Simply stated, KOC imports crude oil from oil-producing countries, processes the oil at refineries, and supplies various products. To achieve these regular repairs for safe operation are obligatory for refineries. Equipment is inspected, repaired, and operated through repeated tests to see if airtightness is maintained. A manual that defines the procedure is important to ensure that these operations are properly carried out. To create a work manual, I had had to spend enough time to experience and grasp the realities of a site, before conveying the appropriate methods to the workers, and using it as a material that could be employed for subsequent improvement. Such experience became the basis for my later work. In regular repairs, work is done by a team organized in terms of equipment and work type. From the experience of process management that accomplishes goals smoothly in a team with a partner company that organizes many external contractors and craftsmen, I learned to achieve the mission while aiming for a common understanding with the contributing members. Experience also taught me how to work in a team environment creating a workplace where reports, contacts, and consultations can be easily made within the team and team efficiency and spirit can be enhanced I learned the importance of awareness and behavior to cooperate based on noticing weak points. From small group improvement activities conducted during night shifts, etc., where equipment operation is the main activity, I learned "QC circle activities" for high-quality and stable production, activities to find defects and proposing costeffective improvement plans, the KJ method to grasp issues and how to improve operations through the PDCA cycle. These experiences were useful for management and improvement of training work at JICA Tsukuba, such as teaching methods to improve the skill acquisition of trainees by grasping the degree of cultivation skills they possess, and improvement of practical training work procedures. In addition, teaching experience in OJT was very useful in thinking about coaching skill acquisition of trainees with different skills and knowledge.