International Communication

Academic Exchange with the Korean Society of Agricultural Engineering

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Recently I had an opportunity to make a keynote address at the 1999 Korean Society of Agricultural Engineering Convention held in Taegu, Korea and tour the Saemanguen reclamation site as well as a Korea RDC Institute. The following report is based on my observation.

On January 30, 1997, an agreement was concluded between the Korean Society of Agricultural Engineering and the Japanese Society of Irrigation, Drainage and Reclamation Engineering to cooperatively promote agricultural civil engineering technology through various activities; such as mutual participation in academic events, exchange of each other’s published books. Under this agreement, the Japanese Society of Irrigation, Drainage and Reclamation Engineering invited Professor Soon Hyuk Lee, Chairman of the Korean Society of Agricultural Engineering, to the keynote lecture conducted as part of its 70th anniversary memorial event in 1999. In return, the Korean Society requested for experts on water utilization systems and village drainage to lecture at their 1999 convention in Taegu. The Japanese Society responded by sending Professor Kuroda, professor emeritus of Kyushu University, to lecture on the subject water utilization systems, and sending me to lecture on the subject of village drainage.

The convention took place on October 16 at the lecture hall of Kwungpook National University in Taegu, about 60 km north of Pusan. Following greetings by Chairman Lee of the Korean Society and welcoming address by the dean of the university, the secretary general of the Society gave the annual summary report. Professor Kuroda’s lecture titled “Control System for Irrigation Facilities,” then mine titled “Japan’s Conservation of Water Quality Environment,” followed. My report focused on the significance and technological results of village drainage activities. Professor Cai of Northwest Agricultural University of China also participated with a report on his research titled “Regulated Deficit Irrigation.” In the afternoon session, 132 general reports were given, covering subjects on irrigation and drainage, farmland development, structures and materials, restructuring of farming and fishing villages, agricultural facilities, water technology, geotechnology, and rural environments. Convention attendance was estimated to be about 200, less than usual, due to its location of being about 300 km away from Seoul. Though, considering the fact that the Korean Society members about 1,800, the attendance were not insignificant.

Following the conference, Professor Kuroda and I toured the Saemanguen Tideland Reclamation site, which is under construction by the Rural Development Corporation (RDC). Dr. Koo, who is in charge of this development project, guided us to an impressive exhibition hall built in response to a deep environmental concerns expressed and to facilitate public relations, stressing the importance of keeping the community fully informed. There, we were informed that the reclamation site was one of Korea’s top three projects, the other two being the new Seoul airport and the Seoul-Taegu rapid train system. A picture of the then Korean President at the site is even displayed in its informational pamphlets.

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The project is located off the Konan plains, an area that extends over the western part of Chonju in the southwestern section of the country, and is watered by three rivers, including the Toshin River. The project covers 40,100 ha, twice as large as Japan’s largest reclaimed area, Hachirogata. Of this area 28,300-ha area has already been drained and the rest is scheduled to remain untouched as a fresh-water conservation area. An extensive flood-prevention reservoir was employed at the river mouth for the reclamation process instead of the double-dike system used in the reclamation of Hachirogata Bay and Isahaya Bay. Though there was not sufficient time to fully inspect the site, taking a boat to the actual dike construction site, we could see in the distance one end of the planned dike, which is to run for 33 km stretch. Started in 1991, construction is almost half finished and is slated for completion in 2011.

On October 18, we toured an RDC institute in a Seoul suburb. There, a hydraulic model test for the Saemanguen project was under way in a huge building. Also, as the institute was built on reclaimed land, the still remaining swamps are being utilized in a natural environment research. In answer to criticism towards reclamation projects from environmental protection groups, this research is being done, and reportedly, with the close cooperation from Japan’s Isahaya reclamation office. RDC has also been engaged in large-scale reclamation development, with a total development area of 270,000 ha. It has, to date, completed 14 projects, covering a total area of 140,000 ha. Currently, eight sites covering 130,000 ha are currently under construction, including Saemanguen. As the majority of these projects involve tideland reclamation, the Korean government has been appropriating a large portion of its budget each year to further their construction. With keen interest and great expectation of success, Japan will continue to pay attention to view how such projects are furthered in balance with natural environment.