## Republic of Korea 29 Education Facilities Expansion Project (2)(3)

A B C D The objective was to help improve the quality of education by providing education facilities such as universities with necessary equipment, and enhance the understanding and interest of the general public towards science and technology by constructing Celestial Hall, and thereby contribute to the development of human resources in South Korea.

Loan Amount/Disbursed Amount: 18,831 million yen / 17,844 million yen Loan Agreement: August 1987, June 1988 Terms and Conditions: Interest rate, 4.25%; Repayment period, 25 years (grace period, 7 years); General untied Final Disbursement Date: August 1992, August 1993 External Evaluator: Takeshi Yamashita (KRI International Corp.) Field Survey: August 2003



## **Evaluation Result**

In this project, provision of equipment to educational facilities such as universities, and construction of Celestial Hall were implemented almost as planned except for some adjustments to the types and quantity of equipment in response to technological innovations. Although the project period took much longer than planned due to delays in procedures of changing the list of equipment to be procured, as well as contracting and procurement procedures, the project cost was almost as planned. The equipment adequacy rate (total units of equipment owned by each university is divided by the standard for the number of units of experimental and training equipment set by the government and multiply 100), which was as low as 43.9% at appraisal time (1985), increased to 59.6% when Phase 2 completed (1993), and to 65.0% when Phase 3 completed (1994). Thus, the equipment provided under the project contributed to the improvement of educational quality by being used for experiment and training. The Celestial Hall constructed under the project opens 300 days a year on average and attracts approximately 120,000 visitors\*, which is more than expected. The Hall helps to enhance understanding of and interest in science and technology, especially among young people who make up 75% of the accumulated total visitors as of July 2003. Also, as a result of

**Use of Procured Equipment for Experiment and Training** The X-ray machine procured for Singu College is still working in good condition today, and is used 4 days a week for the training of all grades (1-3) of students. The precision optical microscope procured for Korea University is presently used for the study of silicon-based Random Access Memory.



X-ray machine



Precision optical microscope

transferring technology for developing software for things such as planetariums, a total of 6 software programs were developed by the Korean side on its own. The numbers of researchers and medical professionals per 1,000 people increased 1.5 fold from 1992 to 1999, indicating that the project played a certain role in supplying personnel in the field of science and technology, and the medical field. There is no problem with the technical capacity, operation and maintenance system of each university and Celestial Hall, and they are all in favorable financial condition.

\*The number of annual visitors to the planetarium of Osaka Science Museum is approximately 170,000.

## **Third-Party Evaluator's Opinion**

The project contributes to develop human resource in science and technology-associated fields. By reviewing size and curriculum of science and technology-associated fields in universities and colleges, it will be expected to maintain the long-term efficiency and effectiveness.

Third-Party Evaluator: Mr. Taeho Kwon

Obtained a doctorate in urban planning from Asian Institute of Technology. Presently holds the post of Associate Professor, School of Construction Engineering, SeMyung University. Specializes in overall urban planning and urban & regional development in Southeast Asia.

**Celestial Hall Constructed in Phase 2 of the Project** In addition to regular planetarium shows and movies, Celestial Hall holds special events 3-4 times a month, such as the lectures on how to find constellations. These events are so popular that they become fully booked in 2-3 days.



Celestial Hall