**Third Party Evaluator's Opinion on**
**Educational Facilities Expansion Project (2)(3)**

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**Relevance**

As reported, goal of the loan project is twofold: 1) to expand educational facilities and experimental/training equipments to flexibly respond to the growing higher educational demands, and 2) to contribute to the interest of youngsters on the significance of science and technology through the construction of Celestial Hall with installation of a planetarium.

The overall relevance of the project at appraisal time is possibly justified when reviewing the report as well as 5th and 6th national development plans (1982-1991). However, the relevance at evaluation time needs to be more critically discussed from the perspective of recent changes in the government's science and technology policies as well as in socio-economic environments.

According to Mid-/Long-term Plan for National Science and Technology (1999) and National Comprehensive Plan for Science and Technology (2002-2006), it has been attempted to strengthen technology innovation capacities in the strategic sectors and an innovation system of science and technology for the realization of knowledge-based society. For the purpose, the critical propelling tasks, including (i) investment expansion of fundamental researches, (ii) of science and technology training/education, and (iii) support of local universities, were suggested. In this vein, "Brain Korea-21 Plan" and selection of strategic sectors such as IT, BT, NT are emphasized as vehicles for achieving the tasks.

Nonetheless, the results of these ambitious plans are not seemed to be satisfactory enough due to the following socio-economic factors, which, in turn, presumably lower-down long-term efficiency and effectiveness of the loan project. Since the financial crisis in 1997, the milieu of demand-side domestic labor market in the private sectors has been aggravated along with industrial restructurings and massive relocation of manufacturing factories to Asian developing countries such as China and Vietnam. "Death of domestic manufacturing sector", primarily due to the skyrocketing of labor cost, has resulted in the shrinking of employment market for university/college graduates studied science and technology majors. In particular, those majored basic sciences have encountered more difficulties in getting proper jobs after graduation.

The mismatch between demand and supply is further worsened by excessive labor supply of university graduates. As of 2003, total number of graduates majored science and technology fields was 67,000 (remarkably more than that of Germany, 39,400 pers.) and only 50% of them were employed. Another interrelated factor is so called "evasion of science- and technology-associated fields" among university/college applicants. The phenomenon is seen as the result of the interplay between the scaling-down of employment opportunities and decrease of total number of high school graduates.

Under the socio-economic circumstances, at least two prerequisites should to be tackled in order to maintain the long-term efficiency and effectiveness of the loan project: (i) size(i.e. total number) of science/technology-associated fields in universities/colleges should be more flexibly controlled and responded to the fluctuation of demand-side markets; and (ii) science and technology education/training system including curricula should be restructured and updated to reflect rapidly changing industrial as well as labor structures.