Ex-ante Evaluation

1. Name of the Project

Country: Malaysia
Project: Higher Education Loan Fund Project (HELP) (III)
(Loan Agreement: March 31, 2006; Loan Amount: 7,644 million yen; Borrower: Malaysia)

2. Necessity and Relevance of JBIC's Assistance

Malaysia has been promoting education at higher level since the latter half of the 1990s, and as a result, student enrolment at the tertiary level in public institutions climbed from 150,000 in 1995 to 430,000 in 2003. The population of university-level students, however, remained only 250,000. In addition, as for the proportion of students enrolled in the field of science and technology, which the government was committed to raising to 60% in its Third Outline Perspective Plan (2001-2010), undergraduate enrolment in these fields was hovering at 52% in 2000. The number of students enrolled in government-funded programs of foreign study has fallen since the Asian currency crisis of 1997, but the government is resolved to be proactive in dispatching students of science and technology-related disciplines and of specialized fields not available in domestic higher educational institutes to study overseas.

Meanwhile, efforts to strengthen research, design and development so as to shift Malaysia's manufacturing industry away from traditional labor-intensive assembly and processing industries to high value-added industries are being thwarted by the dearth of domestic engineers. In order to increase added value and strengthen the competitiveness of the manufacturing industry, the development of human resources especially in science and technology is a top priority. Malaysia's industrial competitiveness can be further strengthened through the production of highly-skilled engineers who have acquired technical literacy and work ethics through studies at Japanese universities.

One of the goals of Vision 2020, the national development plan presented by the government in 1991, is to achieve developed nation status by 2020, and the development of human resources to support the development of a knowledge-based economy and to improve productivity and competitiveness is identified as a key policy objective in both the Third Outline Perspective Plan (2001-2010) and the Eighth Malaysia Plan (2001-2005). Particular emphasis has been placed on the fields of science and technology and, with the aim of increasing the pool of highly-skilled individuals, the government is working to expand and improve domestic educational facilities and is actively promoting a twinning program that links foreign and local institutes of higher education.

Japan's "Country Assistance Program for Malaysia" (November 2004) identified the development of highly-knowledgeable, and highly-skilled personnel that will play a role in Malaysia's future as a priority area for support. Moreover, in JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), support for human resource development is a priority area.

Accordingly, the necessity and relevance of JBIC assistance for this project are considered to be considerable.

3. Project Objectives

The objective of this project is to develop engineers furnished with the advanced technical knowledge and work ethics required to undertake research and development by offering Malaysian students the opportunity to receive a Japanese science and engineering education via a twinning program that links local education with undergraduate education in Japan (three years of study in Malaysia and two years of study in Japan (transferring in the third year)) and study at Japanese graduate schools. The human resource development supported by this project aims to strengthen industrial competitiveness so as to facilitate economic development thereby contributing to friendly relationship between Malaysia and Japan.

4. Project Description

(1) Target Area

(Local education) Selangor State, (overseas study destination) Japan

(2) Project Outline

The following components will be conducted to achieve the aforementioned goals:

(a) Scholarships
  (i) Undergraduate Program (twinning program ("3+2"): 3 years in Malaysia + 2 years in Japan): 400 students
  (ii) Master's Program (in Japan): 66 students
  (iii) Doctorate Program (in Japan): 25 students
(b) Education service
(c) Provision of educational equipment
(d) Training for local educators; program improvement / surveys
(e) Consulting services (assistance for local education, twinning program execution, and instructor dispatch; monitoring of students, etc.)

(3) Total Project Cost/Loan Amount

12,782 million yen (Yen Loan Amount: 7,644 million yen)

(4) Schedule

April 2005-March 2015 (120 months)

(5) Implementation Structure

(a) Borrower: Malaysia
(b) Executing Agency: Yayasan Pelajaran MARA (YPM)
(c) Operation and Maintenance System: YPM

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resident Relocation
  (i) Category: C
  (ii) Reason for Categorization
  This project is classified as Category C since it involves a sector (human resource development) that is not predicted to have a significant environmental impact and does not

correspond to the sensitive characteristics or sensitive area (i.e. as being liable to cause adverse environmental impact) listings in the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established April 2002).

(b) Promotion of Poverty Reduction

None

(c) Promotion of Social Development (e.g. Gender Perspective)

This project contributes to increasing access to higher tertiary education in Malaysia by assisting in the construction of an efficient system for foreign study that involves improving education within Malaysia and twinning with foreign universities. From a gender perspective, consideration is given to ensuring equal opportunities to both male and female students in the selection process.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicators)

Indicator	Target (2015, year of completion)
Degree acquisition rate (undergraduates)	At least 95%
Degree acquisition rate (masters)	At least 95%
Degree acquisition rate (doctorates)	At least 85%
Percentage of graduates gaining employment in corporations / research institutes in the field of science and technology	At least 95%
Percentage of graduates gaining employment in R&D fields (research, design, development)	At least 30%

6. External Risk Factors

None

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

Ex-post evaluations of earlier projects have demonstrated the effectiveness of incorporating consulting services that support the establishment of systems for cooperation and liaison between the executing agency and the universities that accept students and a detailed response. The consulting services for this project are designed to facilitate the construction of a system of liaison between YPM and the Japanese universities that are extending their cooperation and to support the Malaysian education programs and Malaysian students studying in Japan.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Degree acquisition rates (undergraduates, masters, doctorates) (%)

(b) Percentage of graduates gaining employment in corporations / research institutes in the field of science and technology (%)

(c) Percentage of graduates gaining employment in R&D fields (research, design, development) (%)

(2) Timing of Next Evaluation After project completion