## Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Keiko Watanabe Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	Human Resource Development in Information Technology through Capacity Building of the University of Colombo School of Computing (USCS)	

### I Project Outline

Country Name	Democratic Socialist Republic of Sri Lanka		
Project Period	1 June 2002-31 May 2005 (3 years)		
Executing Agency	The University of Colombo School of Computing (UCSC)		
Cooperation Agency in Japan	JICA, and Information Policy Division and Information and Communication Electronics Division of Commerce and Information Policy Bureau, Ministry of Economy, Trade and Industry		
Total Cost	365 million yen		
Related Projects (if any)	None		
Overall Goal	Both quality and quantity of IT related human resources in Sri Lankan industries are improved.		
Project Objective(s)	UCSC increases its capacity in conducting IT trainings that match the needs of Sri Lankan industries in a more effective and efficient manner for IT related staff in universities, IT training institutes and industries.		
Output[s]	<ol> <li>Organization/functions of UCSC are strengthened.</li> <li>C/Ps acquire necessary IT skills and technologies for implementation of WBT.</li> <li>UCSC provides IT training courses on WBT.</li> <li>UCSC provides WBT courses.</li> <li>R&amp;D capabilities relating to WBT are strengthened in the UCSC.</li> </ol>		
		Inputs (Sri Lanka Side)	
Experts	2 long-term experts and 24 short-term experts	Staff allocated	21 staff
Equipments	156.15 million yen	Equipments	N.A.
Local Cost	10.43 million yen	Local Cost	72.628 million LKR
Trainees Received	15 C/Ps	Land etc provided	Existing facilities
Others	N.A.	Others	N.A.

### **II** Result of the Evaluation

#### Summary of the evaluation

This Project was in line with the Sri Lankan government policies to enhance the capacity for various industries and government administration to use Information Technology (IT). Its purpose was to build the capacity of the University of Colombo School of Computing (UCSC) to improve IT human resources in the country's industries. This Project improved organizational and human resources capacity of UCSC, including upgrading the capacities of IT trainers, curriculum and educational materials development, and R&D related to Web Based Training (WBT). The Project also established an alliance mechanism to match industry needs and UCSC training through development of a "University-Industry Forum". The participants of IT training courses of UCSC were highly appreciated by industries and universities. UCSC has become the national core to raise IT human resources and is making a substantial contribution to expanding IT human resources, such as by training WBT lecturers at other universities and IT training institutes. Furthermore, this evaluation confirmed that "continuation of IT training that meets the needs, and development and induction of a WBT module" are currently implemented as suggested by the final evaluation of the Project. R&D capacity was enhanced, and the alliance with industries is being maintained and promoted. Thus, it is concluded that the Project has achieved the intended objectives, and the Project effects are expanding.

In light of the above, this project is evaluated to be highly satisfactory.

#### 1 Relevance

(1) Relevance with the Development Policy of the Democratic Socialist Republic of Sri Lanka

The Government of Sri Lanka designated 1998 as "Year of Information Technology," and emphasized promoting IT development in its national development plan. In particular, the lack of human resources in IT is serious, and "e-Sri Lanka", the government's basic policy on IT, emphasizes human resource development as one of the main strategic pillars.

(2) Relevance with the Development Needs of the Democratic Socialist Republic of Sri Lanka

The result of "the National Human Resource Survey for IT" administered by Sri Lanka ICT association indicated that although the demand for IT engineers in the industries remained high, the supply of IT engineers with Bachelor's degrees or higher only met half of the industry demand in 2005. IT training courses on WBT implemented by UCSC are highly appreciated and much requested by IT training institutes and private corporations.

#### (3) Relevance with Japan's ODA Policy

Japan's Country Assistance Program for Sri Lanka in 2004 listed "assistance to promote IT" as one of the important areas to promote IT for expanding its economy and improving competitiveness. JICA's program in 2004 also recognized that one of the most important areas to assist was IT promotion, by extending multi-dimension programs in light of the Sri Lankan national development plan of IT.

From the above, this project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy; therefore, its relevance is high.

#### 2 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective(s)

The Project produced the following outputs and this evaluation concluded that the training capacity of UCSC in the field of IT was strengthened.

- ① UCSC established the "University-Industry Forum" with industries and organized meetings twice on average during the Project period. These meetings and other Project activities built a cooperative system to implement effective training that matched industry needs.
- ② Trainers in IT technologies and techniques for implementing WBT were developed as indicated by the substantial improvement of the ex-post test from the pre test of the participants in the pertinent training programs.
- ③ WBT contents/IT training materials (6 types) were developed and revised to meet the needs of industries. 13 training programs in total were implemented with 240 trainees (target 200) from universities, IT training institutes, and industries.
- ④ 8 WBT modules were developed as planned and were actually used in classes.
- ⑤ With the cooperation from Toyohashi University of Technology, R&D on WBT module development was implemented, and 10 research papers were presented in international academic conferences during the Project period.

The production of outputs 1-5 made training courses more relevant to industry needs and upgraded the capability of trainers and contents development.

# (2) Achievement of Overall Goal, Intended and Unintended Impacts

Based on the training courses (6 types) implemented by the Project, UCSC has started an additional 15 courses to meet industry needs. For three years in 2006 to 2009 after the termination of the Project, UCSC implemented these new courses 81 times with 1,021 participants in total. WBT modules newly designed by UCSC are in high demanded by industries and other universities, and this indicates the high quality of the training contents of UCSC. Therefore, it is concluded that UCSC has been making a substantial contribution to improving IT human resources in industry in terms of quality and quantity. Furthermore, UCSC is training WBT trainers at 12 universities and making efforts to expand IT human resources. Since 2006, UCSC has also implemented the third country training programs in cooperation with JICA and contributed to IT human resources development in Asia and Africa. UCSC won the first prize for "national e-contents" and is highly appreciated in its efforts in R&D of IT. In July 2009, UCSC broadcasted the very first Web TV program in Sri Lanka for educational purposes, using the advanced digital media technology center (ADMTC) established by the Project. These are the impacts on technological and organizational enhancement of the Project.

From the above, this project has largely achieved its objectives; therefore, its effectiveness is high.

## 3 Efficiency

#### (1) Outputs

As stated in (1) of "effectiveness and impact", the Project produced the outputs as planned.

# (2) Elements of Inputs

The Project implementation had some delays because of delayed arrival of some of the equipment for R&D and voice recognition, and resignation of 2 out of 6 core C/Ps. However, all the training of all 21 C/Ps were sufficiently done so that knowledge of resigned C/Ps was sufficiently shared by other C/Ps, and planned outputs were produced during the Project period as stated above. Quality, quantity and timing of other inputs were evaluated as appropriate, and it can be concluded that the delays did not have any effect on producing the outputs.

## (3) Project Cost, Period of Cooperation

The Project implementation period was as planned: the planned period was 36 months and actual period was 36 months (equal to 100% of planned period). Project cost was lower than planned: The budget was 375 million yen and the actual expenditure was 356 million yen (equal to 95% of the planned cost).

From the above, the inputs are appropriate for producing outputs and achieving the project objective; therefore, efficiency of the project is high.

### 4 Sustainability

## (1) Related Policy towards the Project

IT human resources development is the priority area in "e-Sri Lanka" and "Mahinda Chinthana" (2006-2016) (the vision of President Mahinda), the country's long term development strategy. The government also announced its policies to introduce IT in health, education and judiciary areas.

### (2) Institutional and Operational Aspects of the Executive Agency

UCSC has no change in organization or personnel in IT training, WBT module development, R&D, or management, and all project C/Ps remain assigned as they were at the time of the project period. Although the alliance with industries is not by "Forum" established by the Project, UCSC promotes the alliance with them by sending students to industries as interns and inviting lecturers from industries.

## (3) Technical Aspects of the Executive Agency

Software and manuals introduced by the Project are revised as necessary and are currently used. UCSC by themselves designed 26 modules and technical problems are not observed.

#### (4) Financial Aspects of the Executive Agency

UCSC is financially sound as it increases its budget year by year, and has sufficient budget to implement its activities. As ADMTC is an associated organization independent of UCSC, it has steadily increased income by implementing training programs that use the ADMTC laboratory and rental revenue of the ADMTC studio, and has come to adopt an independent accounting system. The budget is allocated for maintaining the equipment provided by the Project. In sum, there is no financial problem.

# (5) Continuity of Effectiveness and Impact

UCSC has become the national core for enhancing IT human resources. It is contributing to expanding IT human resources development as it currently implements 15 training courses that meet industry needs, and provides technical assistance to other universities. UCSC continues to expand the effects of project achievements as project C/Ps continue to work for UCSC, using techniques and know-how they have acquired during the project, developing new WBT modules, and implementing training courses that meet new needs. From the above, no major problems have been observed in the policy background, or the structural, technical, and financial aspects of the executing agency; therefore, sustainability of the project effects is high.