

Terminal Evaluation

Asia

I. Outline of the Project

- Country: Singapore
- Project title: Products Protection Engineering in Logistics
- Issues/Sector: Business and Trade
- Cooperation scheme: Third-country Training Program
- Division in charge: Regional One Department South-East Division
- Total cost:22,565,639Yen
- Cost per participant: 480,119Yen
- Share of Japan' contribution: 50%
- Period of Cooperation Fiscal Year 2000 - 2002
- Partner Country's Implementing Organization:Productivity and Standards Board (PSB) Corporation
- Supporting Organization in Japan:Japan International Cooperation Agency
- Related Cooperation: "APEC-PFP Management Consultancy for Small and Medium Enterprises"
" Productivity Management for African Countries

1. Background of the Project

The Governments of Japan and Singapore have assisted developing countries under the Japan-Singapore Partnership Program (JSPP) since 1994. In 1997 both Governments started the Japan-Singapore Partnership Program for the 21st Century (JSPP21) based on equal partnership. This cooperation program comprises of training courses and seminars conducted in Singapore and Japan and the dispatching of experts to recipient countries.

2. Project Overview

The training course in Products Protection Engineering in Logistics is one such course conducted under the TCTP. The course has been conducted for a total of 3 runs from the year 2000 to 2002.

(1) Outputs of the Training Program

- a. Outputs of the Training Program
 - (i) The objective of the course is to provide participants from countries in Asia and the Pacific with an opportunity to improve their knowledge in the field of products protection engineering in logistics.
- b. At the end of the course, the participants are expected to have:
 - (i) Acquired the essential knowledge on logistics
 - (ii) Acquired the ability to apply the basic technology of transportation packaging design for product protection
 - (iii) Understood the basic elements of supply chain
 - (iv) Acquired the ability to apply techniques of supply chain modeling in improving the efficiency in transportation and logistics

(2) Inputs

Japanese side:

Training Expense	: 5,495,656Yen
Others	: 5,787,160Yen
Total	: 11,282,126Yen

Singapore's side:

Training Expense	: 81,088s\$ (5,495,656Yen)
Others	: 85,811s\$ (5,787,160Yen)
	: 166,900s\$ (11,282,126Yen)

II. Evaluation team

Members of Evaluation Team

- Tay Eng Wah (Researcher / Supervisor)
- Steven Yeong (Researcher)
- Michael Lai (Researcher)
- Ronnie Kow (Assistant Researcher)

Period of Evaluation

23 December 2003 to 31 March 2004.

Type of Evaluation:

Terminal Evaluation

III. Results of Evaluation

III-1. Achievement of the Training Program

1. The number of participants produced by the 3 runs of the training program is appended in Table below

Country	1 st run	2 nd run	3 rd run	Total
Bangladesh	1	2	2	5
Bhutan	1	1	2	4
Cambodia	1	2	2	5
China	2	-	2	4
Fiji	1	2	1	4
Indonesia	-	3	2	5
Lao PDR	-	1	2	3
Mongolia	1	-	-	1
Myanmar	2	2	2	6
Nepal	-	-	1	1
Papua New Guinea	1	-	1	2
Solomon Islands	-	-	-	-
Sri Lanka	1	-	1	2
Vietnam	1	2	2	5
Total	12	15	20	47

2. The course has met its objectives of improving the knowledge of participants from countries in Asia and the Pacific in the field of products protection engineering in logistics.

III-2. Evaluation Results

(1) Analysis on the Achievement in terms of Outputs

From the evidence gathered, it is concluded by the evaluation team that the course has achieved its 4 outputs of enabling the participants to:

- (i) Acquire the essential knowledge on logistics.
- (ii) Acquire the ability to apply the basic technology of transportation packaging design for product protection.
- (iii) Understand the basic elements of supply chain.
- (iv) Acquire the ability to apply techniques of supply chain modeling in improving the efficiency in transportation and logistics.

(2) Relevance

(i) The training program is evaluated to have been necessary for the development needs and policies of the countries which have been invited to participate in this course. This is because most of these countries are developing countries which have poor communications network. A course on products protection engineering in logistics would facilitate the better transshipment of goods from rural areas to urban centers, and vice versa. It would also allow goods that are produced in the country to be suitably protected so that they may be exported to other countries.

(ii) This is further supported by evidence from the questionnaire survey conducted at this terminal evaluation. A majority of the ex-participants who responded (more than 50%) indicated that between 51% and 100% of the knowledge or skills learnt have been applied to the development needs and policies in their countries.

2. Factors promoting sustainability and impact

(1) Factors concerning to Planning

- (i) The outputs and objectives of the course were set clearly by JICA and MFA Singapore.
- (ii) The curriculum of the course was set appropriately for the achievement of the outputs.
- (iii) The appropriate selection of the companies and organizations to visit as part of the field trips.

(2) Factors concerning to the Implementation Process

- (i) There was a willingness and enthusiasm by the participants to participate in the course.
- (ii) PSB Corporation's trainers were appropriately trained and were the correct subject experts to conduct the course.

3. Factors inhibiting sustainability and impact

There were no major inhibiting factors which prevented the successful achievement of the outputs. However, the course organizers should consider implementing several factors which could further enhance the greater achievement of the outputs. Factors relating to the planning of the training program include:

- (i) Extending the duration of the course.
- (ii) Providing more practical training in the course.
- (iii) Providing more field visits to external companies and organizations in the course.
- (iv) Conducting theory and practical tests for the participants to examine the level of knowledge or skills they have learnt from the course.

4. Conclusion

It was concluded by the evaluation team that the course has successfully achieved its outputs / objectives. This is due to 5 major promoting factors which promoted the effects of the course. JICA should also examine implementing measures to address the 4 minor inhibiting factors to enhance the effects of future training program.

5. Recommendations

- a. It is recommended that JICA conducts a detailed study of the development status of countries it intends to invite for the course, prior to extending an invitation to these countries.
- b. JICA should also conduct a study to examine the latest technological developments in the field of products protection engineering in logistics, and evaluate if these are appropriate for the developing countries.

- c. JICA should examine, in consultation with MFA Singapore, if both parties have the budget and resources to implement measures which would further enhance the effects of the training program. These include extending the duration of the training program, including more practical training, and conducting more field visits to external companies / organizations. tion and logistics management technologies, and another focusing on national logistics management and trade policies.
- d. JICA should review the requirements for screening applicants and selecting participants. JICA should consider reviewing the requirement that participants must be government officials. This is because by limiting the participation in the course to only government officials, it may not benefit potential participants from the private sector.
- e. JICA should also examine whether it needs to formulate two separate training programs - one focusing on products protection and logistics management technologies, and another focusing on national logistics management and trade policies.

6. Lessons Learned

- a. It is learnt that it may be inappropriate to stipulate in the application requirements that applicants / participants must be government officials. This is because participants from the private sector potentially may also benefit from the course.
- b. Alternatively, JICA should consider whether it needs to formulate two separate training programs - one focusing on products protection and logistics management technologies, and another focusing on national logistics management and trade policies.
- c. The formulation of the training program, together with its scope, objective and resources, were undertaken appropriately by JICA and MFA Singapore.
- d. The conduct of the course has been efficiently and effectively organized by PSB Corporation.
- e. Aspects on the organization of the training program, the selection of the agency to implement the training and the design of the course curriculum should be determined at least 3 months ahead of the actual start of the course so that there would be sufficient time to send out the invitations to potential course participants.
- f. To facilitate the conduct of future evaluation studies, evaluation reports produced at the end of each run of the course and submitted by the implementing agency to JICA and MFA Singapore should be properly archived.

7. Follow-up Situation

- a. It is recommended that JICA adopts the above recommendations and conducts the necessary studies to examine the development needs of the recipient countries it intends to invite for any upcoming courses.
- b. Specifically, JICA should conduct studies to examine the development status of countries it intends to invite for the course, examine the latest technological developments in the field of products protection engineering in logistics, examine if both JICA and MFA Singapore have the budget and resources to implement measures which would further enhance the effects of the training program, review the requirement that participants must be government officials, and evaluate the need to formulate two separate training programs.