

The Hashemite Kingdom of Jordan

Ex-Post Evaluation of Japanese Technical Cooperation Project

“The Project for Strengthening the Capacity of

Training Management of Vocational Training Corporation”

External Evaluator: Tomoko Tamura, Kaihatsu Management Consulting, Inc.

0. Summary

This project was implemented with the aim of the Vocational Training Corporation (VTC) of Jordan establishing a “VTC operating model”, so that VTC would be able to conduct training programmes in line with the needs of industry.

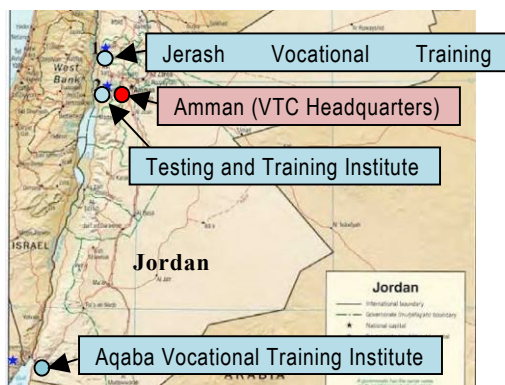
Relevance of the project is high, as the objective of the project is consistent with the national development policy and development strategy of Jordan and ODA policy of Japan.

The project purpose, “An efficient VTC operating model will be established to ensure that a training programme is in tune with the needs of industry” had been largely achieved on completion of the project. After completion of the project, measures for improving management of the training programmes were disseminated to training programmes and training centers which had not been targeted in the project. Training is conducted in line with the needs of industry in these training programmes, as aimed at by the project. The employment situation of graduates of the pilot training programmes that the project provided with assistance was satisfactory, and the reputation of graduates with the companies they were working for was favorable. The expected impact of the project has been created by implementing measures for improving management of the training programmes. Therefore, effectiveness/impact of the project is high.

Although the project period was within the plan, the project cost exceeded the plan slightly. Therefore, efficiency of the project is fair. At the time of the ex-post evaluation, activities for disseminating the VTC operating model had been resumed, and the effect of the project is expected to expand further. Sustainability in terms of institutional and technical aspects is ensured. However some problems have been observed in terms of the financial aspects; therefore, sustainability of the effect of the project is fair.

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

1. Project Description



Project Location



Training programme on aluminum fabrication in Jerash Vocational Training Institute

operating model (see Figure 1) to the vocational training centers under the purview of VTC, with the objective of implementing a training programme which meets the needs of industry. To achieve this objective, the project implemented improvement in the management of both the training programmes and training centers. These two components of the VTC operating model were implemented as six pilot training programmes at three model training centers as shown in Table 1. It was expected that VTC Headquarters and Regional Directorates would promote and monitor these efforts of improvement, and establish a system for dissemination of the VTC operating model after the project.

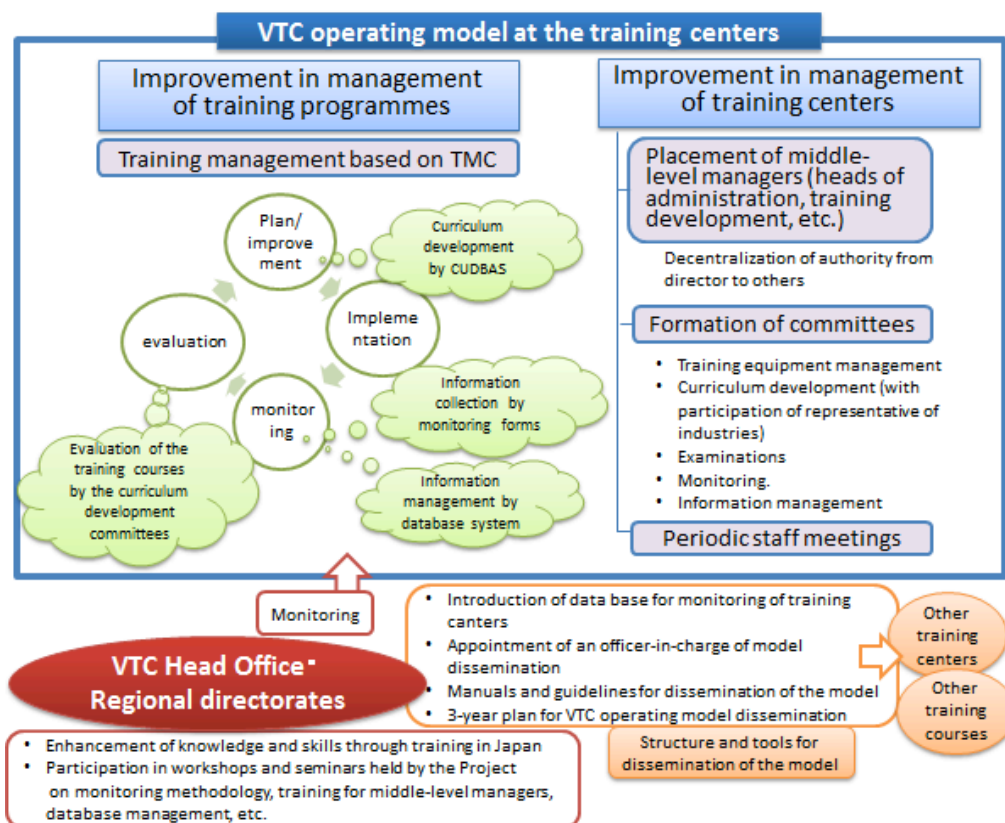


Figure 1 VTC Operating Model Introduced by the Project

Table 1 Model Training Centers and Pilot Training Programme

Regional Directorates	Model Training Centers	Pilot Training Programmes
Middle	Testing and Training Institute	House wiring
		Carpentry
North	Jerash Vocational Training Institute	Aluminum fabrication
		Plumbing
South	Aqaba Vocational Training Institute	Welding
		Air conditioning and refrigeration

Curriculum Development Committees, which have representatives from local industry among their members, were formed to improve management of the training programmes. The committees analyzed the training needs by using the CUDBAS method¹, and improved the contents of the training programmes to meet the needs of industry. After that, according to the Training Management Cycle (TMC), a training plan was developed, and monitoring, evaluation and further improvement were conducted periodically. Posts for middle managers were introduced, various committees were formed and periodic staff meetings were conducted to improve management of the training centers.

It was planned that after the project, VTC Headquarters and Regional Directorates would disseminate the VTC operating model to training programmes and training centers other than the pilot training programmes and model training centers.

1.1 Background

VTC is an institution undertaking the development of the workforce in Jordan. It has its headquarters in Amman, the capital city of the country, and is operating forty-four training centers. At the time of project planning, it was identified that VTC had several problems with management and operation with regard to: identification of the needs of local industry; improvement of management capacity of the training programmes at the training centers; and enhancement of quality and motivation of the instructors. It was especially pointed out as a problem that the training programmes of VTC did not meet the needs of industry. By taking these problems into consideration, the Japan International Cooperation Agency (JICA) accepted a request made by VTC, and a technical cooperation project was commenced with the aim of improving management of the training programmes and the training centers for conducting vocational training programmes which meet the needs of industry.

1.2 Project Outline

Overall Goal		VTC and training centers are managed and operated based on the VTC operating model.
Project Purpose		An efficient VTC operating model will be established to ensure that the training programme is in tune with the needs of industry.
Outputs	Output 1	A support system is developed at VTC Headquarters to spread the VTC operating model to training programmes and training centers other than the pilot training programmes and model training centers.
	Output 2	The model training centers can plan and implement training that reflects the needs of local industry.

¹ Curriculum Developing Based on Vocational Ability Structure (CUDBAS): A methodology to develop education and training curriculums. In CUDBAS, a training programme is developed by (a) detailed analysis of the skills and qualifications to be gained by training, (b) setting standard and objectives of the training, (c) documentation of training schedule and (d) preparation of training plan.

	Output 3	The model training centers accumulate knowledge on training management.
	Output 4	VTC Headquarters and Regional Directorates can control and monitor the model training centers.
Inputs		<p>Japanese Side:</p> <ol style="list-style-type: none"> 1. Experts: four long-term 2. Twenty-seven trainees received for counterpart training in Japan 3. Eleven trainees for Third-Country Training Programme 4. Equipment : 12 million yen 5. Local cost : 10 million yen at the time of the terminal evaluation <p>Jordanian Side:</p> <ol style="list-style-type: none"> 1. Twenty-eight counterparts 2. Land and facilities: Classrooms in the model training centers and project office
Total cost		357 million yen
Period of Cooperation		November, 2006 – November, 2010 (4 years)
Implementing Agency		Vocational Training Corporation (VTC)
Cooperation Agencies in Japan		<p>Ministry of Health, Labour and Welfare</p> <p>Employment and Human Resources Development of Japan</p> <p>UNICO International Corporation</p>
Related Projects		<ul style="list-style-type: none"> - JICA volunteers for the model training centers (eighteen volunteers were dispatched in total during the project period) - Human Resource Development and Social Infrastructure Improvement Project (ODA loan project commenced in 2012. Project activities include improvement of educational and healthcare infrastructure including that of VTC)

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement of Project Purpose at the time of the Terminal Evaluation

It was evaluated that the project purpose would be achieved by the end of the project, as the level of achievement of the outputs and progress of project activities were satisfactory and the status of the indicators for project purpose were improving, although some of the six indicators had not been achieved.

1.3.2 Achievement of Overall Goal at the time of the Terminal Evaluation

It was evaluated that the prospect of achieving the overall goal was high, mainly due to

the following reasons: the staff at VTC had a good understanding and appreciation of the VTC operating model, and the system for curriculum development to meet the needs of industry and the database system for monitoring and control of the training centers had already been disseminated to several training centers, which had not been targeted by the project originally.² It was expected that employment opportunities for graduates of the training programme would be expanded, and the level of satisfaction of private companies where the graduates were working would also be improved. However, it was mentioned that introduction of the posts of middle-level manager should be conducted on the grounds that the training centers needed to be adaptable, as there were no such posts in the public administration system in the country.

1.3.3 Recommendations at the time of the Terminal Evaluation

Recommendations included: Preparation and implementation of a dissemination plan for the VTC operating model; continued monitoring of activities at the model training centers by VTC Headquarters; a study on employment status of the graduates of the training programmes; effective utilization of the database; acceleration of efforts to restructure VTC to enhance its autonomy; further skill development of the instructors; and continuation of the Skills Competition.

2. Outline of the Evaluation Study

2.1 External Evaluator

Tomoko Tamura, Kaihatsu Management Consulting, Inc.

2.2 Duration of Evaluation Study

Duration of the Study: September, 2013 - October, 2014

Duration of the Field Study: January 4 - 21, 2014 and March 22 – April 1, 2014

3. Results of the Evaluation (Overall Rating: B³)

3.1 Relevance (Rating: ③⁴)

3.1.1 Relevance to the Development Plan of Jordan

Eradication of unemployment and improvement of the skills of the labour force by expanding employment support and vocational training is an important policy in the *National Agenda (2006 - 2015)*, the national development policy for the country both at the time of planning and completion of the project. One of the important strategies to realize this policy is to restructure the institutional framework for employment support and vocational training. To implement the strategy, the Ministry of Labour formulated *Employment - Technical Vocation and Education Training Sector Reform (2007 - 2012)*,

² Dissemination of the system was not planned originally in the project, however it was implemented as the VTC staff proposed this and the project understood its importance.

³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁴ ③: High, ② Fair, ① Low

and planned several programmes to enhance the capacity of VTC, including establishing its autonomy and transferring authority to the training centers.⁵

In this manner, enhancement of vocational training was an important task in the development policy of the country. Therefore, the objective of the project, which aims to improve management of vocational training, was consistent with the development policy and programme of the country.

3.1.2 Relevance to the Development Needs of Jordan

The high unemployment rate, especially the high ratio of the youth among the unemployed, was a serious problem in Jordan at the time of project planning.⁶ The unemployment rate had improved at the time of project completion; however, the ratio of the youth among the unemployed was still high.⁷ In addition to such problems, a lot of foreigners were employed in the country in various job categories. Therefore, the government identified a need for domestic human resource development.

VTC was undertaking vocational training for the youth both at the time of planning and completion of the project, and was expected to play a significant role in solving the issue of unemployment. However, it was pointed out in the development policy and in studies conducted prior to project commencement that the training programmes conducted by VTC had not produced the labour force with skills required by private companies.

As seen from the above, the purpose of the project, which is to improve the management of the training programme of VTC and to make the training programme in line with the needs of industry, was relevant to the development needs of the country at the time of planning and completion of the project.

3.1.3 Relevance to Japan's ODA Policy

Infrastructure development to realize autonomous and sustainable economic development was one of the priority tasks in the *Country Assistance Strategy of JICA (August 2006)*, which was Japan's ODA policy to the country at the time of project planning. In order to implement the strategy, it stated the need to implement programmes to assist the development of the workforce and creation of employment, and to facilitate the development of high quality human resources that meet the needs of the domestic labour market. Therefore, the purpose of the project, which is to develop human resources to meet the needs of the labour market, had relevance with Japan's ODA policy.

This project has been highly relevant to Jordan's development policy and development needs, as well as Japan's ODA policy. Therefore, its relevance is high.

⁵ The programme of the Ministry of Labor was planned to be implemented from 2007 to 2012; however, the programme for capacity enhancement of VTC was continued by the time of the ex-post evaluation.

⁶ The unemployment rate was 14.8 per cent and the ratio of the youth (15 - 24 years old) among the unemployed was 51.3 per cent in 2005.

⁷ The unemployment rate was 12.5 per cent and the ratio of the youth (15 - 24 years old) among the unemployed was 51.1 per cent in 2010.

3.2 Effectiveness and Impact⁸ (Rating:③)

3.2.1 Effectiveness

3.2.1.1 Project Output

1) Output 1

Output 1 is “The support system of VTC Headquarters is developed to spread the operating model to training programmes and training centers other than the pilot training programmes and the model training centers”.⁹ It was planned that the measures for improvement of management of training programmes and training centers which had been introduced by the project would be disseminated to the non-targeted training centers after the project. This output was set as it was considered important to develop a system for this dissemination during the project.

At the completion of the project, three indicators for Output 1 had been realized: nomination of staff at VTC Headquarters for dissemination of the VTC operating model; increase in level of understanding among staff at VTC Headquarters on the VTC operating model; and development of a plan for dissemination of the VTC operating model. In this manner, a support system for the dissemination of the VTC operating model had been developed, and Output 1 had been achieved.

2) Output 2

Output 2 was “The model training centers can plan and implement training that reflects the needs of local industry”. Before the project, the training centers of VTC had conducted training programmes according to the standard curriculum developed by VTC Headquarters. However, there were several problems in the training programmes - for example, the curriculum of the programmes was old and did not reflect needs of industry.

Under Output 2, measures for improving the training programmes were introduced to overcome this problem. The measures included establishing Curriculum Development Committees, with representatives from local industry as members, for every pilot training programme. The committees analyzed training needs using CUDBAS. As a result, a new curriculum and training plan were developed. Consequently, training, monitoring, evaluation and improvement were conducted according to the TMC. Some examples of improvements to the curriculum and the way it meets the needs of local industry, are described in **Box 1** for reference.

⁸ Sub-rating for Effectiveness is to be put with consideration of Impact.

⁹ Output 1 at the time of project planning was “Authority of the model training centers will be strengthened”. This output was set because transfer of authority from VTC Headquarters to the training centers was included in the VTC restructuring programme, which it had been planned to implement according to the national policy of the country. The VTC restructuring programme was supposed to be implemented by obtaining assistance from the World Bank. However, implementation was delayed, and as a result after commencement of the project there was no progress in the transfer of authority. Output 1 was revised as transfer of authority was not considered essential for achieving the project purpose, although it would have facilitated the introduction and implementation of the VTC operating model, and also because the project needed to be implemented in line with the actual situation.

The schedule for industry training was also modified following requests from local industry.¹⁰ The instructors observed that after these modifications the level of satisfaction of the private companies that accept trainees increased, and that trainees were more confident in participating in the training.

Box 1:

Examples of improvement of training to meet the needs of local industry¹¹

Training programme for air conditioning and refrigeration

- English names for the parts were introduced in the training after getting a suggestion that English is used for these in the workplace, while only Arabic names were taught in the training. English names for the parts were also added in the hand-out for the training.
- The duration of practical training for welding of pipes attached to refrigerators was increased from 20 hours to 80 hours, as it was suggested that the trainees were not skilled enough at that work.
- A module to learn to plan and cross-section drawings was introduced in the training, as it was pointed out that the trainees faced difficulties in the workplace as they could not understand the drawings.

Training programme for plumbing

- The plumbing of polyethylene pipes was added to the training as it was suggested that these pipes had started to be used for water supply facilities. Only plumbing of zinc-coated pipes was taught earlier.
- The practice of excavation to lay plumbed-in pipes was added to the training following a suggestion it was important in the workplace.



Training programme for air conditioning and refrigeration

Indicator 1 for Output 2 was “Levels of understanding of the instructors and other staff at the model training centers on TMC is increased”. According to the questionnaire survey conducted by the project, the level of understanding of the instructors and other staff of the model training centers on TMC had increased significantly on completion of the project compared to the commencement of the project. This was because they had obtained knowledge about TMC by participating in training programmes on the subject, conducted by the JICA expert team, and also because they had gained practical

¹⁰ Before the project, trainees were trained at the training center for the first three months; thereafter they had industry training every other week, while continuing the training at the center for around nine to eleven months until they completed the programme. This system was changed for the pilot training programme so that they are trained at the training center for the first six to nine months, and thereafter obtain practical experience in industry for three to six months, because local industry requested the training centers to send the trainees after they gained more skills.

¹¹ The Curriculum Development Committees of VTC accept suggestions from local industry after studying their relevance in accordance with Jordanian job descriptions and the occupational classification of Arab countries, and also confirming that the suggestions can be accommodated in the given hours of training.

experience in management of the training programmes according to TMC not only once, but two or three times during the project period.

Indicator 2 is “Achievement of the pilot training programmes is more than 90 per cent according to the designed training plan”. The word “achievement” in the indicator means implementation of the training programme according to the training plan. Indicator 2 was attained as the training was implemented according to the training plan which had been developed based on the new curriculum in all six pilot training programmes.

Indicator 3 is “Frequency of inspection and times of follow-up of training evaluation”. This indicator was also attained as the Curriculum Development Committees monitored and reviewed the training programmes, firstly once a month during the introduction of the new curriculums, and later at least once a year in all pilot training programmes.

As mentioned above, all the indicators of Output 2 were attained and the management of the training programmes was improved appropriately. The level of attainment of Output 2 was more than planned because, with leadership from staff at VTC, during the project period the curriculum development by CUDBAS and training course delivery based on TMC were introduced to fifteen training programmes in addition to the pilot training programmes, which had not been planned originally.

3) Output 3

Output 3 is “The model training centers will accumulate knowledge on training management”. At the time of project planning, there were issues with regard to the management of the training centers: for example, the directors of the centers had to make most of the decisions on management, and as a result management tasks of the centers were not handled efficiently and the directors could not find time to take a leadership role in studying the needs of manpower and training. To solve the above-mentioned issues, the project introduced the posts of middle managers, such as unit heads for administration and training; various committees, such as for maintenance of equipment and monitoring the training programmes; and periodic staff meetings.

Indicator 1 of Output 3 is “Level of understanding of the directors and other staff of the model training centers on operational management increases”. According to results from interviews at the terminal evaluation, it was confirmed that the level of understanding of staff at the model training centers on management of the centers was significantly improved compared to that at the time of commencement of the project, especially on the meaning and importance of middle managers. This was a result of their participation in the seminars on management of the centers which were held by the project, and implementation of the above-mentioned activities.

Indicator 2 is “Availability of training seminars/workshops for staff members on training management”. Seminars and workshops were held for the staff and instructors of the model training centers so that they would realize the need to improve the management of the centers and gain knowledge about activities needed for this improvement. There were 243 participants in total.

Indicator 3 is “Use of manuals for improvement of the training center operation”. For management of the training centers, the project developed manuals for the introduction of middle managers, TMC, and guidelines for CUDBAS and for instructors. Of these, the TMC manual and the guidelines for CUDBAS were utilized especially well at the time of the training programme on improvement of the management of the training programme.

Indicator 4 was “the number of private companies which participate in training management increases from ten to twenty-five”. At the completion of the project, eighteen representatives from local industry were participating actively in curriculum development and monitoring the pilot training programmes. In addition to that, around twenty private companies provided financial and technical assistance (such as being judges) for the Skills Competition, which was introduced by the project to improve skills and increase motivation of trainees and instructors. Therefore around thirty-eight private companies participated in the training management.

As explained above, all four indicators for Output 3 were attained. The staff of the model training centers also expressed their view in interviews conducted by the evaluation team that, as a result of the activities for improving management of the centers, management tasks of the centers were handled efficiently, communication in the centers was rationalized and monitoring progress of the training went on smoothly. Participation of private companies in the management of the training was also realized. Output 3 was achieved in this manner.

4) Output 4

Output 4 is “VTC Headquarters and Regional Directorate can control and monitor the model training centers”.

At the time of commencement of the project, there were problems with the control and monitoring of the training centers: for example, the volume of information was small, information management was not unified, and making a summary of information took a long time as information was exchanged in paper format. As a result, it was difficult to identify and analyze the information which was needed for decision-making. The project developed a database system which contains basic information on the training programmes, such as number of trainees registered, status of attendance and results of the examinations, as well as basic information on instructors, such as past experience and participation in the training programmes, and installed this in VTC Headquarters and the model training centers to overcome the above-mentioned problems.

Indicator 1 for Output 4 is “Availability and use of the monitoring guidelines by VTC Headquarters”. Firstly, there was a discussion about the items to be included in the database system for control and monitoring of the training centers, and it was decided to collect information about the number of trainees enrolled, under training and graduated, results of examinations, personal information on the trainees and instructors, past experience of the instructors on training, and others. Secondly, monitoring formats (same as monitoring guidelines) were developed for use in the training centers. The training

centers started collection of the necessary information according to the formats. A self-monitoring system was also introduced for trainees to keep a daily record of what they had learned about and whether they understood it, which could be referred to by the instructors subsequently. Indicator 1 was attained in this manner.

Indicator 2 is “Satisfaction level of staff of model training centers regarding monitoring and evaluation system”. Most of the staff of the model training centers and VTC Headquarters mentioned in the interviews conducted in the terminal evaluation that, as a result of the introduction of the database system, monitoring and evaluation of the training centers became convenient and management of the training center became efficient, and their level of satisfaction with the monitoring and evaluation system had increased compared to what it was at the time of project planning.

Indicator 3 is “Availability and use of the database for management and monitoring of the model training centers”. Equipment and software for the database system were installed, and training on operation of the system was conducted. The model training centers were inputting the above-mentioned basic information on the computers in their office. The VTC Headquarters and Regional Directorates became able to refer to the information and utilize it for their records and analysis.

It is clear from the above-mentioned factors on attainment of the indicators that the introduction and utilization of the database system was satisfactorily conducted. Meanwhile, the status of control and monitoring of the training centers by VTC Headquarters and the Regional Directorates, not only by using the database system but also “in general”, was studied in the ex-post evaluation, as it can be understood that Output 4 was aiming at the latter.¹²

It was confirmed that VTC Headquarters visit training centers frequently and conduct monitoring and evaluation of the training programme appropriately according to the monitoring items in the various formats, and that the training centers submit reports periodically to VTC Headquarters and the Regional Directorates on the progress and issues about the training programme. It was evaluated that Output 4 had been achieved not only because of the introduction and utilization of the database system, but also as control and monitoring of the training centers by VTC Headquarters and the Regional Directorates in general were satisfactory.

¹² It is mentioned in the progress reports of the project that VTC had been expecting assistance from JICA on the monitoring and evaluation system for the instructors’ skills as a part of Output 4, although JICA had understood that Output 4 only related to the control and monitoring of the training centers by using the database system until the terminal evaluation. It seems that the two parties had a different understanding of Output 4, which was rather broad. After discussion at the terminal evaluation, JICA had taken the above-mentioned expectation of VTC into consideration and tried to provide assistance; however, this was not realized as the JICA expert team found that such a system was not available in Japan for reference and there was little time to make further effort. This ex-post evaluation had taken the above-mentioned factor also into consideration and evaluated that Output 4 had been achieved, because monitoring and evaluation of the instructors’ teaching skills is only one of the detailed items in the system of control and monitoring of the training centers; therefore, there should be only an insignificant impact on the level of achievement of Output 4 due to the fact that these activities were not realized; and also because it is more significant that the monitoring and evaluation had been conducted appropriately with proper operation of the database system.

3.2.1.2 Achievement of Project Purpose

Project Purpose is “An efficient VTC operating model will be established to ensure that the training programme is in tune with the needs of industry”. The following is the result of the evaluation on the level of achievement of the project purpose in accordance with the indicators for the same. Indicator 6, the dropout rate, was found to be less meaningful in the evaluation of the level of achievement of the project purpose; therefore the evaluation was conducted in accordance to the first five indicators rather than Indicator 6 in this ex-post evaluation, as mentioned later.

Indicator 1 is “Development and use of the manual of TMC”. The TMC manual and guidelines for CUDBAS were developed and used by the staff of VTC and Regional Directorates in the workshops for introduction and dissemination of TMC; therefore, this indicator had been attained.

Indicator 2 is “Development of new organization chart of VTC Headquarters and training centers”. The middle-level managers were appointed in the model training centers and the new organizational structure was functioning; therefore, this indicator had been attained.

Indicator 3 is “Satisfaction level of the trainees of the pilot training programmes at the beginning and end of the pilot training programmes”. A study had been conducted with regard to the level of satisfaction of the trainees with the aspects of textbooks, equipment, training methods and instructors. The levels of satisfaction on average were 80.5 per cent, 81.5 per cent, 81.5 per cent and 78.0 per cent in 2006, 2007, 2008 and 2009 respectively. There was a tendency of improvement in the level of satisfaction with regard to equipment, training methods and instructors, although there was no significant change with regard to textbooks. The level of satisfaction on average was decreasing as a result of the level of satisfaction for textbooks decreasing in 2009. However, there was no possible reason to decrease the level of satisfaction for textbooks, as the textbooks had been improved. Therefore, to review the level of satisfaction of the trainees, the external evaluator studied the opinion of the graduates of the training programme at the time of the beneficiary survey in the ex-post evaluation.¹³ As a result, it was found that 67 per cent of the graduates who were employed at the time of the survey stated that the training programme was “very useful” in their workplace; this went up to 87 per cent when including those who stated it as “useful”, as Figure 3 shows. This figure is better than the one at the time of commencement of the project. From these factors, it is considered that this indicator was largely attained.

Indicator 4 is “Increase of employment offers to the pilot training programmes”. There is no system for private companies to send job postings to the training centers in the country. The graduates often obtain employment at the companies where they had undergone industry training, or where they had been introduced by acquaintances,

¹³ The beneficiary survey was conducted in January 2014 with the graduates of the pilot training programmes. The number of samples was 128.

relatives or instructors of the training centers, so VTC did not have information on the number of job offers. Therefore, it is unknown if the number of job offers had increased when comparing before and after implementation of the project. Meanwhile, the external evaluator studied job offers and opportunities of the graduates of the pilot training programmes in the ex-post evaluation. The private companies above a certain size, which had employed the graduates and were visited by the external evaluator, mentioned that they liked to employ graduates of VTC as much as possible whenever they were available. The directors and instructors of the training centers believe from their experience that there were an adequate number of job offers from local industry to graduates of the pilot training programmes. Figure 2 shows the average employment rate of the graduates is 73 per cent. As Figure 4 shows, 86 per cent of them had obtained employment within six months after graduation. From these factors, it can be understood that the graduates are having adequate job offers; and, therefore, it is evaluated that this indicator has been attained to some extent.

Indicator 5 is “The number of graduates of the pilot training programmes who can obtain a job in the field related to their specialization.” As Figure 5 shows, 69 per cent of the graduates who were employed stated that their first employment was “very much related” to the training programme. It is 77 per cent if those who stated “related” or “related a little” are added. The rate of the graduates who obtained employment related to the training programme is high; therefore, this indicator has been attained.

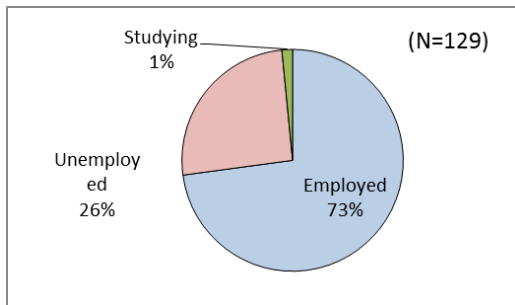


Figure 2 Are you employed now?

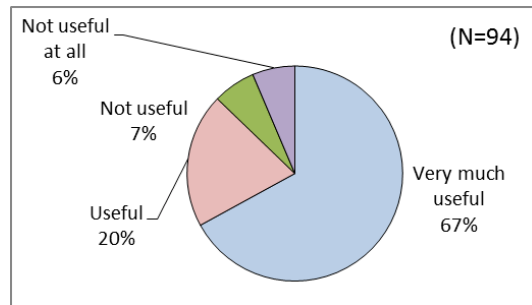


Figure 3 Is the training useful in your workplace?

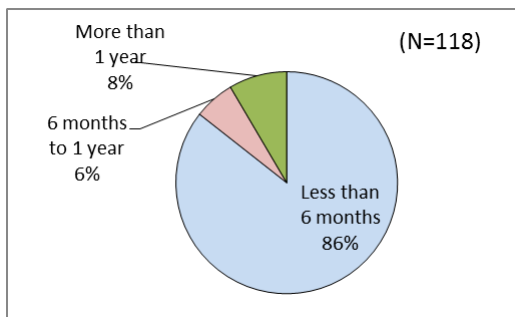


Figure 4 How long did it take for you to obtain a job?

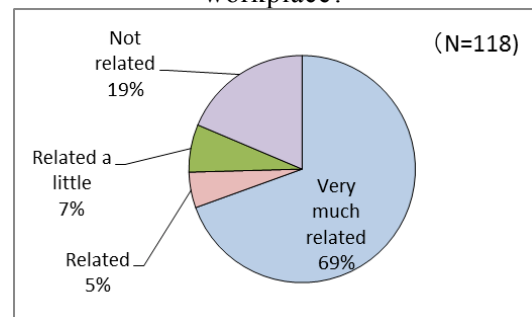


Figure 5 Was the first employment related to the training course?

Source: Beneficiary Survey

Indicator 6 is “Dropout rate is reduced from 30 per cent in 2006 to 15 per cent in 2010”. There was no adequate data with regard to the dropout rate of the trainees at the time of the terminal evaluation; however, the dropout rate of the trainees, including that of the pilot training programmes was available at the time of the ex-post evaluation as a result of utilization of the database system which had been introduced by the project. According to the information, the average dropout rate was 30 per cent at the time of completion of the project in 2010; however there had been ups and downs depending on the programmes and years. The rate did not reach the target of the project, i.e. 15 per cent.

The external evaluator analyzed a survey of the dropouts of all training programmes, including the pilot training programmes, conducted by VTC in 2010 to study the reasons and background of the dropouts. It was found that 70 per cent of the dropouts quit the training programme after giving the training center a reason for withdrawal.¹⁴ The most common reasons for withdrawal were “obtained a well-paid job (26 per cent)”, “went back to school for further study (14 per cent)”, “financial difficulties of the family (12 per cent)”, and “being employed by the police or army (10 per cent)”. There were other reasons, such as health, marriage and distance from home to the training center. No one mentioned the quality of the training programmes as a reason for withdrawal. At the time of the project, there was a vague expectation that the dropout rate would reduce when the management of the training programme improved; and therefore, the reduction of the dropout rate was identified as an indicator for the project purpose. However, as the above-mentioned survey shows, the main reasons for the dropout are personal matters and financial situation, and thus the dropout rate does not have much relationship to the operation and content of the training programme. Therefore, it is not meaningful to consider this indicator for the evaluation of level of achievement of the improvement in management of the training programme. Information about VTC’s role as a safety net for children from low-income families is explained in Box 2 for reference information with regard to the dropout rate.

Box 2: VTC is functioning as a safety net for youths

Eligibility for enrollment to the training programme of VTC is 16 years old or above, can read and write, and to be in good health. It doesn’t require any educational qualification. Therefore, the majority of youths who enrolled in VTC are those who did not proceed to secondary education after completing primary education for ten years, who could not performed well at *Tawjihi*, the general examination conducted on completion of secondary education, and were not qualified to proceed to higher study in universities and community colleges. There are a number of youths from low-income families, as training programmes

¹⁴ 30 per cent of the dropouts were absent from the training programme without giving a reason to the training centers, and were dismissed after the days of absence exceeded the limit. The reason for these trainees dropping out was not known.

in VTC are almost free of charge, and some of them even provide them with an allowance. VTC's primary role is provision of vocational training. However, it is also functioning as a safety net for youths who could not go on to secondary and higher education and who are in low-income families, by offering them a place on the training programme.

As just explained, four outputs had been achieved and the important indicators for project purpose were also largely attained. Provision of the training programme in tune with the needs of industry, which is the project purpose, had been realized, as a result of the curriculum of the training programme being improved to reflect the needs of industry through the Curriculum Development Committees, which have representatives of local industry as members; and the employment situation of the graduates and their reputation with private companies were satisfactory. Therefore, the project purpose had been largely achieved.

3.2.2 Impact

3.2.2.1. Achievement of Overall Goal

The overall goal of the project is "VTC and training centers are managed and operated based on the VTC operating model". There were four indicators to measure the level of achievement of the overall goal. Indicators 1 and 2 are to measure the status of dissemination of the VTC operating model, and Indicators 3 and 4 are to measure the employment situation of graduates from the pilot training programme and their reputation with the companies where they are working. Altogether, it should be confirmed whether the training programmes are conducted reflecting the needs of industry in accordance with the VTC operating model introduced by the project. VTC Headquarters was scheduled to introduce measures to improve the management of the training programme and training centers to all the programme under the purview of VTC, according to the *Three year expansion plan for VTC operating model* which was documented by the end of the project. The plan was not used as an indicator of the overall goal in this ex-post evaluation because it was set as a non-binding target, with an aim of enhancing sustainability of the effect of the project.

(1) Indicator 1

Indicator 1 is "The outputs of the project are spread to training programmes other than the pilot training programmes in the three model training centers". This indicator targets expansion of the outputs of the project to other training programmes, in addition to the pilot training programmes within the model training centers. The outputs of the project include measures to improve the management of both the training programmes and the

training centers, and monitoring of the training using the database system, which are the primary elements of the VTC operation model as illustrated in Figure 1, and were undertaken in Outputs 1, 2 and 3. It is understood that Indicator 1 aimed at expansion of the measures for improving management of the training programme, because measures to improve management of the training centers and monitoring using the database system had already been introduced in the model training centers during the project period.

By the end of the project, the measures for improving management of the training programme had been introduced to nine training programmes in addition to the six pilot training programmes at the model training centers. After completion of the project, staff at the VTC Headquarters conducted training workshops on TMC and CUDBAS to disseminate the measures for improving management of the training programmes. As a result, the measures were introduced and implemented in twenty-six training programmes in the model training centers (see Table 2). This means that the measures were introduced to all the training programmes conducted in the model training centers, except for the tourism courses which had been conducted as special programmes. As planned, Curriculum Development Committees were formed for these training programmes. The committees reviewed the existing curriculum by using CUDBAS. Thereafter, committee meetings were held at least once a year and the curriculums were revised when necessary. Decisions in the meetings were adopted in the next training course according to the TMC. When there was a need to improve the teaching skills of instructors as a result of a revision of the curriculum, training programmes were conducted for them with cooperation of local industry.¹⁵ In this way, the measures for improving management of the training programme introduced to the model training centers have been functioning well.

Indicator 1 had been attained, as the measures for improving management of the training programme had been disseminated to almost all the training programmes in the model training centers and had been functioning well, as mentioned above.

Table 2 Number of training programmes in the model training centers, which introduced the measures for improving management of the training programme

Model training centers	Plan (Pilot training programme)	At the time of project completion	At the time of the ex-post evaluation
TTI	2	6	12
Jerash VTI	2	7	8
Aqaba VTI	2	2	6
Total	6	15	26

Source: VTC

¹⁵ See “3.4.3 Technical Aspects of the Implementing Agency” in the section on Sustainability for examples of the training for instructors held with cooperation of industry.

(2) Indicator 2

Indicator 2 is “The outputs of the project are spread to other training centers than the model training centers”. This indicator targets expansion of the outputs of the project to other training centers in addition to the three model training centers. As mentioned in Indicator 1, the outputs of the project include measures for improving management of both the training programmes and training centers, and monitoring of the training centers by VTC Headquarters and the Regional Directorates. The following are activities conducted by VTC after the project with regard to the above-mentioned expansion of the outputs and achievements at the time of the ex-post evaluation. There are no quantitative targets of dissemination for this indicator.

Measures for improving management of the training programmes

As mentioned in Output 2, the measures for improving management of the training programmes were disseminated to six training programmes in six training centers, in addition to the model training centers, by the end of the project. At the time of the ex-post evaluation, it was further disseminated and implemented in thirty-one training programmes in the six training centers (Table 3). If the dissemination in the model training centers shown in Table 2 are included, in total fifty-seven training programmes in the nine training centers implemented the measures for improving management of the training programmes at the time of the ex-post evaluation,

Table 3 Number of training programmes, other than the model training centers, which introduced measures for improving management of the training programme

Name of the training center	At the time of the project completion	At the time of the ex-post evaluation
Irbed	1	3
Al Masharee	1	13
Ayn Al Bash	1	4
Zarqa	1	4
Tafila	1	3
Princess Tagreed	1	4
Total	6	31

Source: VTC

At the time of the ex-post evaluation, the external evaluator studied the status of curriculum improvement at the training centers where measures for improving management of the training programmes were disseminated after the programme, and found various examples. These included training for maintenance of hybrid vehicles being added to the automobile training programme, and training on hair-dye and skincare being added to the male hair-cutting and beauty training programme, which originally

provided training only on hair-cutting and shaving. VTC staff stated that the curriculum of these training programmes would never have been updated if the project had not been implemented. It is appreciated that, as an impact of the project, VTC became able to implement training programmes that reflect the needs of industry.

Measures for improving management of the training centers

As mentioned in Output 4, the project introduced positions of middle managers and various committees as measures for improving management of the training centers. To solve problems of the centers at that time, for example, directors of the centers had to make most of the decisions on management and, as a result, management tasks of the centers were not handled efficiently and the directors could not find time to take a leadership role in studying the needs for manpower and training. After completion of the project, VTC was preparing dissemination of the measures for improving management of the training centers to the training centers other than the model training centers, by selecting target centers and developing new organizational structures for them. However, in the middle of 2012, this activity was interrupted as the senior management of VTC decided to slow down expansion of the VTC operating model,¹⁶ because a project which aimed at holistic restructuring of VTC, assisted by the World Bank, had become fully operational. Therefore, dissemination of the measures for improving management of the training centers had not been realized by the time of the ex-post evaluation. To understand the impact of this, the external evaluator studied if there were still problems with management of the centers, especially lack of time for needs identification for manpower and training, in the nine training centers where the measures for improving management of the training programmes had been introduced. As a result, it was found that needs of manpower and training were collected and analyzed by the Curriculum Development Committees, which have representatives of local industry among their members, and that as a result, the needs were recorded in the minutes of meetings of the committee and reflected in the next training programmes. The instructors and directors of the training centers explained about this that, “We had felt that the curriculum was outdated and had not met the needs of industry for a long time. However, the training centers did not have authority to modify the curriculum. As a result of the project, Curriculum Development Committees have been provided with authority to collect and analyze the needs of industry and to review the curriculum. Therefore it has become possible to adjust the curriculum according to the needs of local industry. Meetings of the Curriculum Development Committee were held at least once a year. There was no

¹⁶ The VTC Headquarters had to form a task force for documentation of a proposal for adoption of new and/or amended by-laws in human resource, finance, administration and procurement. A senior staff member of VTC, who was in charge of dissemination of the VTC operating model, was appointed as a leader of the task force as his experience and achievement were appreciated. VTC decided to suspend the activities for dissemination temporarily, as it was difficult for VTC to appoint a replacement for the post of staff member in charge for these activities as VTC did not have a sufficient number of staff.

occasion that the meeting was not held for lack of time.” In this way, not by an introduction of the post of the middle managers and various committees, but by the introduction and implementation of the Curriculum Development Committee, the improvement of management of training centers was realized partly by the introduction; and through these, a time for collecting needs of manpower and training was ensured. This improvement was realized not by the form of introduction of the post of middle managers and various committees.

Meanwhile, VTC is planning to disseminate measures for improving management of the training centers by introducing posts of middle managers and various committees, as it believes that management of the training centers would be further improved if the above-mentioned measures were introduced and work of the training centers were handled more efficiently. It was decided by the VTC Policy Committee in April 2014 to re-start activities for expanding the VTC operating model with a plan for three years, as the work for the restructuring project had been almost completed. A new expansion plan has been approved, and a staff member in charge of the expansion has been appointed in VTC Headquarters.¹⁷ VTC plans to disseminate measures for improving management of training centers to six more centers, and measures for improving management of training programmes to nine more programmes, and is conducting preparation, including selection of the training centers and training programmes for dissemination.¹⁸

Monitoring of the training centers by the VTC Headquarters and Regional Directorates

The database system for monitoring and evaluation of the training centers introduced by the project had been installed in all the training centers of VTC after the project. The data input by the training center is utilized continuously by VTC Headquarters and the Regional Directorates for administration and monitoring of the training centers. VTC added functions of on-line registration for enrollment and job-matching to the system. The VTC Headquarters and the Regional Directorates appropriately conduct administration and monitoring of the training centers under VTC, including the model training centers, as mentioned in Output 4. They also assist the training centers with continuous implementation of measures for improving management of the training programmes, by identifying issues at the training centers and taking measures to overcome the issues.

As mentioned, measures for improving management of training programmes had been disseminated to thirty-one training programmes in six training centers, in addition to the model training centers; measures for improving management of the training centers had been realized partly; the database system had been introduced to all the training centers under VTC; and monitoring of the training centers had been conducted continuously by

¹⁷ Reference: Minutes of the meeting of the VTC Policy Committee dated April 28, 2014.

¹⁸ Progress as of May 6, 2014.

VTC and the Regional Directorate. Therefore, it is evaluated that Indicator 2 had been largely attained.

(3) Indicator 3

Indicator 3 is “The graduates of the pilot training programmes are employed in training-related fields”. According to the beneficiary survey of the graduates, 73 per cent of graduates were employed, and 76 per cent of the employed were engaged in work related to their training. Eighty-seven per cent of those employed were utilizing skills gained by the training at their workplace (see Figures 2, 3 and 5 for totals from the six programmes). The employment situation of the graduates was satisfactory and Indicator 3 had been attained, as not only the ratio of those who are working in fields related to their training but also ratios of employment and utilization of the training, were found to be more than 70 per cent, although this indicator did not have a specific quantitative target.

(4) Indicator 4

Indicator 4 is “70 per cent of the private companies which employed graduates of the pilot training programmes are satisfied with the graduates”. The instructors and the staff of the pilot training programmes believe that graduates have a good reputation with industry in general. During the visit in the ex-post evaluation to seven private companies where graduates were working, six companies, more than 70 per cent of the total number visited, were highly satisfied with the graduates.¹⁹ Examples of comments from these companies are: the graduates do not readily quit work compared to those without training; they have a sincere attitude and manner to their work; and the knowledge and skills of the graduates were improving. There were hardly any negative opinions from them. They also appreciated that the opinions of industry had been adopted at the time of reviewing the training programmes, and commented that it is important to continue such a partnership.

As mentioned above, the four indicators for overall goal were largely achieved. It was also found that for the three main elements of the VTC operating model: (a) “improvement in management of training programme” had been disseminated to fifty-seven programmes in nine centers; (b) “improvement in management of training centers” had been realized partly; and (c) “the system for monitoring the training centers by VTC Headquarters and the Regional Directorates” had been introduced to all the training centers and was functioning continuously. It was also clear that, as a result of introduction of the VTC operating model, the training of VTC is meeting the needs of industry, from the fact that the employment situation and reputation of the graduates of

¹⁹ The owner of a micro-enterprise of aluminum fabrication mentioned that the graduates should have had more practical training. The owner probably had this opinion because he was expecting graduates to engage in production as soon as they were employed, and he did not have time to improve their skills as the size of his business is small.

the pilot training programmes with the companies where they were working was satisfactory. Therefore, the overall goal has been largely achieved.

3.2.2.3 Other Impacts

No impact was observed on the natural environment as a result of implementation of the project. There was no involuntary resettlement or land acquisition by the project.

A total of eighteen JICA volunteers were dispatched to the model training centers during the project period. JICA Jordan Office conducted programme coordination meetings periodically, and provided opportunities for the project team and JICA volunteers to share information. The volunteers cooperated with the project by offering information at the meetings and assisting project activities at the training centers, so that the project was implemented as planned.

This project has largely achieved the project purpose of “An efficient VTC operating model will be established to ensure that a training programme is in tune with the needs of industry”. As for the overall goal, too, the planned impact was created: for example, the measures for improvement in management of the training programmes was disseminated; the number of training programmes offering training in line with the needs of industry had been increased; and the employment status of the graduates and evaluation of graduates by private companies were satisfactory. Therefore, effectiveness/impact of this project is high.

3.3 Efficiency (Rating: ②)

3.3.1 Inputs

Table 4 shows planned and actual inputs of the project. The dispatch of JICA experts, implementation of training programmes for counterpart officers, and provision of equipment was conducted without a delay.

Table 4 Planned and Actual Inputs of the Project

Inputs	Plan	Actual
(1) Experts	<ul style="list-style-type: none"> ● For Long-term: Four experts (chief advisor/institutional management, training planning, training center management and database establishment), for around 60 man-months ● For Short-term: none 	<ul style="list-style-type: none"> ● For Long-term: Expertise of the experts was as planned. Dispatched 84 man-months in total. ● For Short-term: none (as planned)

(2) Trainees received	Fields of training: Vocational training administration, vocational training management, and others.	Fields of training: 27 in total. The fields of the training were as planned.
(3) Third-country Training Programmes	Not planned	11 in total
(4) Equipment	Basic equipment for training, servers and computers for the database system	As planned
Total Project Cost	350 million yen	357 million yen
Total Local Cost	Amount not specified	Not available

3.3.1.1 Elements of Inputs

Four long-term JICA experts were dispatched for the planned four fields. The period of dispatch was planned as sixty man-months and was actually eighty-four man-months, which exceeded twenty-four man-months. The planned period seems to have been changed during the time between the ex-ante evaluation and the commencement of the project, although exactly when is unknown, as the actual period of dispatch was almost the same as what had been estimated at the time of commencement of the project. The third-country training in Malaysia was implemented in addition to counterpart training in Japan. Equipment was provided as planned.

3.3.1.2 Project Cost

Inputs of the project cost from Japan were planned as 350 million Japanese yen and was actually 357 million Japanese yen, which was higher than planned (102 per cent). It is considered that the project cost was exceeded mainly because the duration of the dispatch of the experts was exceeded.

3.3.1.3 Period of Cooperation

The period of cooperation was planned as four years from October 2005 to October 2009 and was actually four years as planned (100 per cent).

Although the project period was within the plan, the project cost exceeded the plan. Therefore, efficiency of the project is fair.

3.4 Sustainability (Rating: ②)

3.4.1 Related Policy towards the Project

The national development policy of the country at the time of the ex-post evaluation is *National Agenda (2006-2015)*, which is the same as the one at the time of project planning. One of the important tasks in the policy is the development of the workforce and expansion of vocational training. According to the *E-TVET sector reform* of the Ministry of Labour, establishment of autonomy of VTC and transfer of authority to the training centers are one of the programmes to be implemented. These policy and strategy documents support sustainability of the effect of the project.

VTC realizes the necessity of restructuring, including establishment of autonomy of the organization and transfer of authority to the training centers. It formed a task force with assistance from the World Bank, and documented and submitted a proposal for adoption of new and/or amended by-laws of human resource, finance, administration and procurement to the Ministry of Labour in January 2014. As of April 2014, the proposal was under consideration by the higher authorities of VTC. The senior management of VTC was negotiating with them to facilitate early adoption of the proposal. Promotion of restructuring like this is a positive move for ensuring sustainability of the effect of the project.

Activities for dissemination of the VTC operating model were temporary suspended in 2012 and 2013, as mentioned in the section on Impact of this report. In April 2014, the senior management of VTC decided to resume the activities for dissemination, and adopted a new plan for the dissemination. According to the plan, in 2014 measures for improving management of the training programmes would be introduced to nine programmes and measures for improving management of the training centers would be introduced to six centers. The resumption of activities for expansion will help to expand the impact of the project further.

3.4.2 Institutional Aspects of the Implementing Agency

Activities for dissemination of the VTC operating model were implemented in 2011 by a VTC staff member who was in charge of the dissemination. After some time, the activities were temporary suspended as the post of staff member in charge of dissemination became vacant when the preparation work for the restructuring was being conducted at full scale, and VTC could not find a replacement due to chronic shortage of staff.²⁰ However, the monitoring and follow-up for the fifty-seven training programmes

²⁰ Jordan has been affected by the Palestinian issues and conflict in the surrounding countries, such as Iraq and Syria. The budget deficit of the government of the country has been increasing due to interruption in imports of the primary energy sources, acceptance of a lot of refugees, and other reasons. The VTC Headquarters and JICA Jordan Office explained that, as a result, not only VTC but also many other government institutions of the country were facing problems of budget shortage and delay in disbursement.

in the nine training centers were conducted without a problem by the Assistant Director General for training and the Quality Control Directorate of the VTC Headquarters and directors of the Regional Directorates.²¹ VTC decided to resume the dissemination activities in April 2014. VTC was planning to implement the activities for dissemination with leadership from a staff member at VTC Headquarters, who had been appointed as the person in charge for these activities.

There is a system in the fifty-seven training programmes in the nine training centers for holding a meeting of the Curriculum Development Committee at least once a year, and this has been held continuously since it was introduced; the next training programme is updated once the committee accepts the modification of the training contents proposed by representatives of industry as a result of the review of the training contents. Staff from VTC Headquarters sometimes could not attend the meetings of the Curriculum Development Committees held at the training centers due to a shortage of staff. However, according to the explanation given by the Regional Directorate, the director and instructors of the training centers had become able to handle the meetings of the committees without a problem even on such occasions by utilizing their past experience and achievements.

In this way, the sustainability of the effect of the project with regard to the institutional aspects is ensured as: a staff member in charge of the new dissemination plan has been appointed; and a sustainable system has been established for holding meetings of Curriculum Development Committees.

3.4.3 Technical Aspects of the Implementing Agency

The counterpart officers of the project of the VTC Headquarters and the Regional Directorates have rich knowledge and experience about TMC and CUDBAS. This is apparent from the fact that they have conducted training workshops on TMC and CUDBAS without the help of JICA experts during the project; and also the fact that they have conducted training courses of TMC and CUDBAS for the staff and instructors who are working on the training programmes by using the manuals which were targeted for dissemination after completion of the project. The VTC Headquarters and Regional Directorates also conducted monitoring and follow-up of the training centers and training programmes by utilizing the knowledge and experience they have gained so far, as mentioned earlier. The directors and instructors of the fifty-seven training programmes where TMC had been introduced became able to hold meetings of the Curriculum Development Committees and review the content of the training autonomously. In this manner, there is no technical problem with the dissemination activities. Most of the

²¹ During the period, two follow-up meetings were conducted to review progress with improvement in management of the 57 training programmes in the 9 training centers. Training programmes for instructors were conducted with cooperation of private companies, as a result of the need to improve teaching skills of the instructors being identified in the meetings.

manuals and guidelines developed by the project are utilized.²²

VTC is giving greater importance to improvement of technical skills and knowledge of the staff and the instructors, and has made at least forty hours of training per year a provision for promotion. The staff and instructors of VTC participate in training which is organized and implemented by the training unit of VTC, as well as technical training conducted in Arab countries. The training history of the staff is recorded in the database.

VTC also identified the needs for improving training skills of instructors which will be required once the curriculum is reviewed, and actively organized and implemented training programmes for the instructors by obtaining cooperation from local industry. For example, during the time of dissemination of the effect of the project, a training programme on maintenance of hybrid vehicles was conducted for instructors of three training centers by getting cooperation from Japanese automobile companies at the time training on the subject was introduced to the automobile training programme. VTC also obtained cooperation from the supplier of computer numerical control (CNC) machines at the time of the training for instructors to improve their training skills for the same in the carpentry training programme. Instructors of electric and electronic training programmes were sent to the factories of LED screens to improve their knowledge. Training programmes for instructors of the auto-mechanic and the auto-electric training programmes of Aqaba training center were conducted by getting assistance from the neighboring Special Economic Zone.

In this manner, there is no particular concern about the technical aspects, as the counterpart officers of the project possess the necessary technical capacity to sustain and expand the effect of the project and measures for improving the skills of the instructors have been taken.

3.4.4 Financial Aspects of the Implementing Agency

The budget of VTC was reduced in 2010, stayed almost same in 2011, and was again reduced in 2012 compared with the previous year, due to the influence of the financial difficulties of the country. Disbursement of the budget is sometimes delayed for the same reason, which made it difficult for VTC to spend according to the plan. However, training and practicals were conducted without a delay as the staff and instructors of the training centers somehow managed to purchase consumables and materials and maintain

²² Manuals on TMC and guidelines and formats of CUDBAS, developed by the project, were used by the staff of VTC during and after the project at the time of the relevant training workshops. The manual for introduction of middle-level managers has not been used at the time of the ex-post evaluation, because the dissemination of the post of middle-level managers had been delayed. Manuals for monitoring and evaluation of the training programme were also developed and distributed by the project. However, VTC is using its own format for monitoring and evaluation which had been used beforehand, and the one developed by the project was only used as a reference. This is mainly because the methodology of monitoring and evaluation explained in the manual was only used by the JICA experts once during the project as a trial, and was not introduced to VTC for real; and also because some parts of the manual are difficult to understand as the translation in Arabic was not done appropriately.

machinery for the training. Meetings of the Curriculum Development Committees, which were introduced by the project, and purchasing of necessary materials for the training programmes and maintenance of equipment, should be continued in future in spite of the financial difficulties, as the staff of VTC Headquarters consider the above-mentioned activities as a priority in order to meet the needs of industry.

In this manner, development of the workforce and enhancement of vocational training are important tasks in the policy of the country, and the effect of the project is expected to be expanded further with the resumption of activities for the dissemination of the VTC operating model. There is no concern about sustainability in terms of institutional aspects, as a system was established to hold meetings of Curriculum Development Committees periodically, and a person was appointed to be in charge of the new dissemination plan of VTC operating model. Sustainability is ensured in terms of technical aspects, as the technical capacity of the counterpart officers of the project is high and VTC has a system for improving skills of the instructors. There is a prospect that the financial arrangements to sustain the effect of the project would be made. However, some problems have been observed in terms of financial aspects of the implementing agency, as there is a tendency for a shortfall and disbursement delays for the budget of VTC in general. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was implemented with the aim for of VTC establishing the VTC operating model, so that VTC would be able to conduct training programmes in line with the needs of industry.

Relevance of the project is high, as the objective of the project is consistent with the national development policy and development strategy of Jordan and ODA policy of Japan.

The project purpose, “An efficient VTC operating model will be established to ensure that a training programme is in tune with the needs of industry” had been largely achieved at the completion of the project. After completion of the project, measures for improving management of the training programmes were disseminated to training programmes and the training centers which were not targeted in the project. Training is conducted in line with the needs of industry in these training programmes, just as the project intended. The employment situation of graduates of the pilot training programmes for which the project provided assistance was satisfactory, and the reputation of the graduates with the companies where they were working was favorable. The expected impact of the project has been created by implementing measures for improving management of the training programmes. Therefore, effectiveness/impact of the project is high.

Although the project period was within the plan slightly, the project cost exceeded the

plan. Therefore, efficiency of the project is fair. At the time of the ex-post evaluation, activities for disseminating the VTC operating model had been resumed and the effect of the project is expected expand further. Sustainability in terms of institutional and technical aspects is ensured. However some problems have been observed in terms of the financial aspects; therefore, sustainability of the effect of the project is fair.

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

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

It was confirmed in the ex-post evaluation that the employment status of graduates of the pilot training programmes, for which the measures for improving the management of the training programme was introduced by the project, was satisfactory at the time of the evaluation. However, it was not possible to study whether the employment situation had improved as a result of the introduction of the measures, because a similar kind of survey on employment status of the graduates of the training courses had not been conducted before the introduction of the project and during the project. It is recommended that VTC, at the time of introducing measures to improve the management of the training programmes, conduct a baseline survey on employment status and the reputation of the trainees of the training programmes with local industries prior to their introduction, and conduct a similar survey periodically after their introduction, so that the effect of the measures could be identified or verified.

4.2.2 Recommendations to JICA

None.

4.3. Lessons Learned

Adequate experience and achievement is crucial for establishment and dissemination of the training management cycle

The staff of VTC took a leadership role in operating the training management cycle consisting of “planning, implementation, monitoring and evaluation” several times during the project at the model training centers. They also introduced the cycle to other training centers before the project was completed. As a result, the cycle had been operated in the model training centers and also further disseminated to other centers at the time of the ex-post evaluation. In order to ensure sustainability of the effect of the project, which aims to establish and disseminate the training management cycle to enhance the function of vocational training centers, it is important that the counterpart officers of the project gain adequate knowledge and experience of the operation of the cycle during the project period, and also obtain experience in dissemination of the cycle by being involved in the

activities for dissemination before the completion of the project.

BOX 3 : Suggestions and lessons learned from a comparative study of four technical cooperation projects of vocational training

While conducting this ex-post evaluation, a comparative study of technical cooperation projects was conducted to find their features and effects, by taking examples from four projects: “The Project for Instructors Training for Vocational and Training” in Uganda, “The Project on Strengthening the Programme of Expanding Automation Technologies Department (SPREAD)” in the Republic of Turkey, “Project for Establishment of Japan Sri Lanka College of Technology to Strengthen Technical Education and Training” in Sri Lanka and this project. The following suggestions and lessons were learned from the analysis of the main components of the four projects: (1) development and implementation of policies and systems of vocational training; and (2) strengthening of functions of vocational training centers.

1. Development and implementation of policies and systems of vocational training

When a project is implemented along with the development of new policies and systems for vocational training, a delay in the development or change in the systems can be a risk factor for the project to achieve its purpose or create the expected effects. With the project in Uganda, a qualification system was established as planned partly because the project activities included the activities to contribute to the establishment of the system; and the established system had facilitated the creation and continuation of the expected effect of the project. A change in the conditions of qualification of the instructors with the project in Turkey, a delay in the restructuring of Vocational Training Corporation assisted by the World Bank with the project in Jordan, and a delay in establishing a new vocational qualification system assisted by the Asian Development Bank with the project in Sri Lanka, gave a negative influence for the creation and continuation of the project effects. These examples suggest the importance of adequate study of the implementation capacity of the government institutions which are responsible for the development of the policies and systems, and the importance of collecting information on the contents and progress of the policies and the systems to be developed.

2. Strengthening of functions of vocational training centers

(1) Assistance with establishment of training management cycle

It is essential to assist the counterpart officers until they are able to operate the training management cycle independently in projects to assist the establishment of a cycle, which includes planning, implementation, monitoring, evaluation and improvement of training courses. With the project in Jordan, the training management cycle was further disseminated after the project, as a result of the staff of VTC operating the cycle two to three times independently and also experiencing dissemination of the cycle to other training centers than the model training centers. As for the projects of Turkey and Sri Lanka, the counterpart officers could not gain adequate knowledge and experience of the cycle during the projects;

therefore, they were not able to gain the necessary technical skills to operate the cycle on their own.

(2) Reflection of the needs of industry in the training courses

For introduction of measures to reflect the needs of industry in the training courses, it is important to establish a system that incorporates advice from industry representatives into the training courses immediately, not just to receive advice from them. With the project in Jordan, Curriculum Development Committees, which included industry representatives, were provided with authority to add training items, review the hours of practical lessons, etc. The project also introduced a system for decisions of the committees to be incorporated in the next training courses. This system was functioning at the time of the ex-post evaluation. Technical committees formed in the project of Sri Lanka, on the other hand, did not have authority to decide on revisions and improvement of the training courses; therefore, the suggestions of the committees were not incorporated into the revision and improvement of the training courses immediately. As a result, the industry representatives of the committees gradually lost interest in participating in the committees, and the committees became non-operational.

(3) Capacity building of the instructors

It is important for projects aiming at capacity building of instructors to adequately identify the gaps between the existing capacity of the instructors and what is required to conduct the training courses; and to establish a system for the implementing agencies to improve capacity of the instructors continuously by using resources available in the countries, in addition to the training sessions in Japan and technical transfer from JICA experts. With the project in Jordan, VTC had planned and conducted in-plant training for the instructors during the project and has been continuing such trainings even after project completion. With the project in Uganda, no new master trainers, who conduct training for the instructors and managers, had been trained after completion of the project; this was a result of master trainers only being trained in Japan, and, therefore, the implementing agency had not learned how to carry out the training. With the project in Sri Lanka, capacity building of the instructors of the model training courses was mainly conducted in the training in Japan, and a system for the relevant ministry and department to plan and conduct measures for capacity building of instructors had not been introduced by the project. As a result, some of the instructors having insufficient teaching skills, was still a problem at the time of the ex-post evaluation.