

Republic of Uganda

Ex-Post Evaluation of Japanese Technical Cooperation Project

“The Project for Instructors Training for Vocational Education and Training”

External Evaluator: Naoki Take, Kaihatsu Management Consulting, Inc.

0. Summary

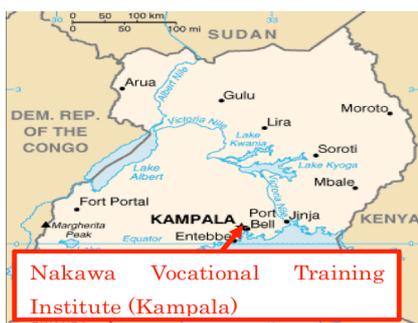
The Project for Instructors Training for Vocational Education and Training in the Republic of Uganda (the Project) aimed to improve the quality of Business, Technical and Vocational Education and Training (BTJET) through the establishment of a system of training qualified instructors and managers in BTJET institutions in Nakawa Vocational Training Institute (NVTI) based on the Uganda Vocational Qualification Framework (UVQF).¹ The Project was aligned with the Education Sector Strategic Plan (ESSP), which prioritises BTJET, and the establishment of a system of training in accordance with UVQF met the development needs of Uganda. As the Project was also in line with Japan’s ODA policy, it is highly relevant. The project purpose was achieved within the period of cooperation as the percentage of those passing the final assessment and authorisation of the training system by the Ministry of Education and Sports (MoES). As for the overall goal, while it is difficult to achieve the target number of those qualified with the Certificate of Vocational Training Instruction (CVTI)² by the end of June 2015, it is likely that the target numbers for the Diploma of Vocational Training Instruction (DVTI) and Diploma in Training Institution Management (DTIM) will be achieved. As the Project has realised some effects, its effectiveness and impact are fair. Since the project cost and period were as planned, the efficiency is high. As some problems were observed in terms of technical aspects of MoES on training of master trainers in Uganda, and of financial aspects of training newly-recruited staff, the sustainability of project effects is fair.

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

¹ UVQF is a framework for vocational qualifications for various occupations in Uganda, comprising Occupational Profiles, Modular Curriculum and Assessment Instrument.

² CVTI is a qualification for instructors in BTJET institutions, DVTI is for instructors for CVTI training and DTIM is for managers of the institutions.

1. Project Description



Project Location



Lecture at the Electricity Department

1.1 Background

Since the introduction of Universal Primary Education (UPE) in Uganda in 1997, the number of students that advanced to post-primary education including BTVET institutions was estimated to increase. However, as most instructors and managers at the institutions did not have enough skills, they needed to upgrade their knowledge and techniques to enable them to carry out instruction and management in accordance with UVQF.

NVTI, which is located in Kampala, the capital of Uganda, has played a leading role for other vocational training institutions in and outside the country through a grant aid project and long-time technical cooperation from Japan. The government of Uganda requested the government of Japan to implement a technical cooperation project to enable training of instructors and managers utilising NVTI.

1.2 Project Outline

Overall Goal		BTVET institutions in Uganda have higher quality instructors and managers in terms of their own skills and knowledge.
Project Purpose		The base of training system on instructors and managers is established at Nakawa Vocational Training Institute.
Outputs	Output 1	Concept of the new qualification for instructors and managers is established.
	Output 2	Training cycle for instructors is established.
	Output 3	Training cycle for managers is established.
Inputs		<p>[Japanese Side]</p> <ol style="list-style-type: none"> 1. Experts: 3 long-term, 12 short-term 2. 17 trainees received 3. Equipment: 44.8 million yen 4. Local cost: 34.9 million yen

	[Ugandan Side] 1. 41 counterparts 2. Land and facilities, project office, utilities
Total cost	251 million yen
Period of Cooperation	June 2007 – August 2010
Implementing Agency	Ministry of Education and Sports Nakawa Vocational Training Institute
Cooperation Agency in Japan	Ministry of Health, Labor and Welfare Employment and Human Resource Development Organization of Japan
Related Projects	[Japan] <ul style="list-style-type: none"> ● Grant aid: Project for Improvement of Nakawa Vocational Training Institute (1997-98) ● Technical cooperation: Nakawa Vocational Training Institute Project (1997-2004) ● Technical cooperation: Project on the Instructors Training for Vocational Education and Training (2004-06) [Other development partners] <ul style="list-style-type: none"> ● Germany: Programme of Employment-oriented Vocational Training (1999-2011) ● African Development Bank: Education III (2006-11) ● World Bank: Support for formulation of BTVET strategy (2009-10)

1.3 Outline of the Terminal Evaluation

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

The training of instructors and managers developed by the Project was in general carried out as scheduled apart from a little delay, and a system of training under UVQF was being established. More than 80% of the instructors who enrolled passed the final assessment at the CVTI course which was completed within the period of cooperation, and they were satisfied with the training.³ Therefore, it was concluded that quality instructors training was provided, and that the project purpose was most likely to be achieved.

³ As the final assessments of DVTI and DTIM were to be conducted after the terminal evaluation study, the percentage pass rate for the assessment of CVTI and results of satisfaction survey for CVTI training were used for the evaluation. The terminal evaluation report also noted that the final assessments of DVTI and DTIM would be conducted after the cooperation period, but actually they were done within the period.

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

It was evaluated that the overall goal of the Project would probably be achieved if the Jinja Vocational Training Institute (JVTI), which was under rehabilitation and expansion with support from African Development Bank, commenced CVTI training in and after 2012 as expected, in addition to NVTI.

1.3.3 Recommendations at the time of the Terminal Evaluation

1) The quality of training should be continuously improved through repeating the cycle. In particular, the experience of preceding CVTI training should be utilised for DVTI and DTIM training.

2) To reduce the burden on NVTI with conducting instructors and managers training in addition to the training of trainees, the organisational capacity should be developed and human resources, facilities and equipment should be properly allocated.

3) The counterparts of the Project should help the trained instructors and managers upgrade their capacity through collaboration with the Ugandan industrial sector after completion of the Project. In particular, Master Trainer 2 (MT2),⁴ instructors for DVTI, is required to have a high level of skills including the latest technology.

4) The CVTI, DVTI and DTIM training should be clearly aligned with UVQF, and certificates should be issued for the second CVTI training.

5) The MoES should allocate adequate budget to implement the instructors and managers training, and to maintain and upgrade the facilities and equipment after the completion of the Project.

2. Outline of the Evaluation Study

2.1 External Evaluator

Naoki Take, Kaihatsu Management Consulting, Inc.

2.2 Duration of Evaluation Study

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

Duration of the Field Study: 10th November, 2013 - 30th November, 2013

11th February, 2014 - 19th February 2014

⁴ There are two types of master trainers: for instructors and for managers. The master trainers for instructors are divided into two categories: Master Trainer 1 for CVTI training; and Master Trainer 2 as instructors for DVTI. The master trainers for managers are simply called "Master Trainer" and there is no further classification as with master trainers for instructors.

3. Results of the Evaluation (Overall Rating: B⁵)

3.1 Relevance (Rating: ③⁶)

3.1.1 Relevance to the Development Plan of Uganda

At the time of project formulation, the national development plan in the Ugandan education sector was the ESSP 2004-2015; at the time of its completion it was Revised ESSP 2007-2015. Both plans emphasise the importance of the BTVET sub-sector, since the demand for further studies and training opportunities are increasing as a result of the introduction of UPE in 1997.⁷ Acquisition of sufficient knowledge and skills by students in the BTVET sub-sector is a priority in the Ugandan education sector. To achieve this objective, the MoES intends to improve the curriculum, methods of instruction and assessment, and to reform the sub-sector in accordance with UVQF.⁸

The Business, Technical, Vocational Education and Training Act 2008 (New BTVET Act) provides the legal basis for supporting the promotion of the BTVET sub-sector. It clearly sets out the objectives and providers of BTVET, roles and functions of the Directorate of Industrial Training (DIT) of MoES and the UVQF. Article 9 and 20 of the Act describes the instructors and managers training established by the Project, the master trainers that implement the training, and recognition of certificates under UVQF.

The Project aimed to enable BTVET institutions in Uganda to carry out the instruction required by UVQF through upgrading the capacity of instructors and managers and establishing their qualifications. Therefore, it was aligned with the development plan in Uganda both at the time of project formulation and completion.

3.1.2 Relevance to the Development Needs of Uganda

According to the real GDP growth and percentage distribution of the working population by industry in Uganda from the time of project formulation (fiscal year (FY) 2006/07) to its completion (FY 2009/10) in *the Statistical Abstract* compiled by Uganda Bureau of Statistics, the industrial and service sectors achieved particularly high growth and accounted for 75% of GDP. The percentage distribution of working population by education level showed that the proportion of those that completed BTVET and higher education grew from the time of project formulation, especially in the industries of sale, maintenance and repair of vehicles, manufacturing and communications.⁹ Therefore, the industrial and service sectors that lead the economy in Uganda demand a labour force with high skills and knowledge.

⁵ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁶ ③: High, ②Fair, ①Low

⁷ Ministry of Education and Sports (2008), *Revised Education Sector Strategic Plan 2007-2015*, p18

⁸ *Ibid*, p22

⁹ Uganda Bureau of Statistics, *Statistical Abstract 2010 and 2013*

The competence level required by the industrial sector in Uganda is provided by UVQF. To enable BTVET institutions to conduct training in accordance with the framework, the institutions need to have competent instructors who can provide quality training, and managers who can properly plan and manage the training. However, as around half of the instructors did not have teaching qualifications at the time of project formulation when development of UVQF had been on-going,¹⁰ it was necessary to strengthen the capacity of BTVET institutions. Given the current situation of the Ugandan economy, it is important to increase the capacity of instructors and managers in line with UVQF. Therefore, it was relevant for the Project to support the establishment of the training system for instructors and managers of BTVET institutions in Uganda from the view of Uganda's development needs.

3.1.3 Relevance to Japan's ODA Policy

The ODA Databook 2008, which describes Japan's assistance to Uganda, prioritises: (1) human resource development (education, BTVET, etc.); (2) support of basic needs; (3) agricultural development; and (4) infrastructure development (roads, electricity, etc.).¹¹ The Project was in (1) human resource development.

According to documents provided by JICA, the programme to improve BTVET is aligned with human development, a priority area of Japan's assistance to Uganda, contributing to the development of human resources that can meet the needs of the industrial sector through improving the quality of instructors and BTVET institutions based on the long experience of NVTI.

Therefore, the Project was aligned with Japan's ODA policy.

The Project intended to enable BTVET institutions in Uganda to provide the education and training required by UVQF through upgrading the capacity of instructors and managers, and supporting the establishment of their qualifications. It was also in line with Japan's ODA policy. As the Project has been highly relevant to the country's development plan and development needs, as well as Japan's ODA policy, its relevance is high.

¹⁰ These are the Certificate for Technical Teacher Education (CTTE) and Diploma for Technical Teacher Education (DTTE). The final assessment for these was conducted by Kyambogo University.

¹¹ Ministry of Foreign Affairs, *ODA Databook 2008*, p413

3.2 Effectiveness and Impact¹² (Rating: ②)

3.2.1 Effectiveness

3.2.1.1 Project Outputs

1) Output 1

Output 1 aimed at the establishment of new concepts of qualification of instructors and managers of BTVET institutions, i.e. realisation of official appraisal of the concepts proposed by the Project.

A document provided by MoES stated that the proposal submitted by the Project in February 2009 had been appraised in March 2009 and the instructors and managers were qualified based on the concepts officially appraised and approved by MoES.

[Level of Achievement of Output 1]

Output 1 was achieved within the period of cooperation.

2) Output 2

Output 2 intended to establish the training cycle for instructors.¹³ The targets were that at least 80% of the persons concerned in BTVET institutions were satisfied with the training, and 58 instructors qualified within the cooperation period.

[Indicator 1: More than 80% of the persons concerned in BTVET institutions¹⁴ are satisfied with the training system for instructors.]

According to the survey of the Project in December 2009, 98.5% of those completed training were satisfied with CVTI training. The survey in May 2010 also showed that all those completed DVTI training expressed their satisfaction.¹⁵ Both exceeded the target 80%.

[Indicator 2: Sufficient number of master trainers¹⁶ is trained for CVTI training.]

The Project trained two MT2 in Japan for each Department of Electronics, Electricity, Motor Vehicle and Metal Fabrication as required for conducting CVTI training.

Two MT2 were trained for each department as planned by the end of the Project.

[Indicator 3: 58 instructors complete CVTI training.]

Initially the target number for those completing CVTI was 85, seemingly based on the

¹² Sub-rating for Effectiveness is to be put with consideration of Impact.

¹³ The training cycle is a sequence of plan (development of modules, curricula, schedule and teaching materials), implementation, evaluation and feedback to the next training programme.

¹⁴ They are participants of CVTI and DVTI training.

¹⁵ Documents provided by the Japan International Cooperation Agency (JICA).

¹⁶ This “master trainers” means MT2, who can conduct training for both CVTI and DVTI.

needs of the BTVET sub-sector in Uganda and the initial design of training schedules and the numbers enrolled by the Project. However, the numbers that represent such needs are not shown in any documents, and the schedules and enrolments were not finalised.

Actually as a result of discussion with MoES, the duration of the CVTI qualification became longer; three months were added for performance assessment of participants, following the six-month training initially designed by the Project. Consequently the period of the CVTI qualification got longer and frequency of production of qualified instructors was reduced. Consequently, the target was modified at the time of mid-term review of the Project. Given the number of enrolments, 33 for the first CVTI training (called CVTI-1 by Ugandan side) and 40 for the second training (CVTI-2), and 80% as the percentage of passing the final assessment, the target was recalculated to 58.¹⁷ To ensure quality of training of CVTI, NVTI fixes the annual enrolment to a maximum of 10 for each Department of Electronics, Electricity, Motor Vehicle and Metal Fabrication, and actually around 40 enrol every year. It seems the target of 80% passing the final assessment is to ensure the quality of training at NVTI.

CVTI training was conducted twice within the period of cooperation. The number who qualified was 61 (out of 73 enrolments);¹⁸ this is below the initial target of 85, but higher than the target modified at the mid-term review.

[Level of Achievement of Output 2]

Output 2 was achieved within the period of cooperation.

3) Output 3

Output 3 was to establish the training cycle for managers. The targets were that at least 80% of the relevant persons in BTVET institutions were satisfied with the training, a sufficient number of master trainers were trained for implementation of DTIM training, and 12 managers qualified within the cooperation period.

[Indicator 1: More than 80% of the persons concerned in BTVET institutions¹⁹ were satisfied with the training system for managers.]

According to a survey of the Project in May 2010, 99% of those who completed DTIM training expressed their satisfaction;²⁰ this exceeded the target of 80%.

¹⁷ $(33 + 40) \times 0.8 = 57.6$ Therefore the target was 58.

¹⁸ Documents provided by NVTI. See Table-2 for details.

¹⁹ They are participants of DTIM training.

²⁰ Documents provided by JICA

[Indicator 2: Sufficient number of master trainers is trained for DTIM training.]

The Project trained two master trainers (MT) in Japan from September to November 2008 as a requirement for conducting DTIM training, but the training could not cover one major subject due to difficulty in coordination. Therefore, the Project provided training in Japan in 2009 for a further two MT. As a result, the number of MT trained was four within the period of cooperation.

[Indicator 3: 12 managers complete DTIM training.]

The initial target for completing DTIM training was 20, based on initial assumption before finalisation of the training schedule and the number of enrolments, as with Indicator 3 of Output 2. As with CVTI, the duration of the DTIM qualification became longer after adding seven months for performance assessment of participants following the two-month training. As a result, the target was modified to 12 at the time of mid-term review of the Project.

However, there was a mistake in data used for the modification. The terminal evaluation report of the Project showed the target was calculated based on 15 annual enrolments and 80% as the percentage of passing the final assessment.²¹ But actually 24 enrolled for DTIM-1. According to MT for DTIM training, NVTI set the annual enrolment at 25 even at the time of DTIM-1. Given this number of enrolments, and with an 80% pass rate for the final assessment, the target should have been 20.

DTIM training was conducted once within the period of cooperation. 21 out of 24 enrolments qualified,²² more than the original or modified target (12 or 20).

[Level of Achievement of Output 3]

Output 3 was achieved within the period of cooperation.

3.2.1.2 Achievement of Project Purpose

The project purpose was to establish a system of training instructors and managers at NVTI. To measure the level of achievement, three indicators were set. However, Indicator 1, “more than 80% of the persons concerned in BTVET institutions were satisfied with the system established” is not used here, as the same one is used for Outputs.

- 1) Indicator 2: More than 80% of trainees pass the final assessment of training courses

²¹ JICA (2010), *Terminal Evaluation Report, the Project for Instructors Training for Vocational Education and Training in Uganda*, p13

²² Documents provided by NVTI. See Table-2 for details.

Training was conducted twice for CVTI, and once for DVTI and DTIM, within the period of cooperation.²³ As shown in Table-1, the percentage passing the final assessment (= qualifiers/enrolments) exceeded the targets.

Table 1: Number of Instructors and Managers Enrolled and Qualified by the End of Cooperation Period

Type	Cycle	1			2			Total		
		Enrolled	Qualified	%	Enrolled	Qualified	%	Enrolled	Qualified	%
CVTI		33	29	87.9%	40	32	80.0%	73	61	83.6%
DVTI		30	24	80.0%	-	-	-	30	24	80.0%
DTIM		24	24	100.0%	-	-	-	24	24	100.0%

Source: NVTI

2) Indicator 3: Training system at NVTI is authorised by MoES

According to MoES, qualifications of CVTI, DVTI and DTIM were officially authorised under UVQF in 2010.²⁴ Clause 2 of Article 9 in the 2008 New BTVET Act provides for the implementation of instructors and managers training to obtain these qualifications. According to the actual process from participation in training to the qualification, certificates were to be awarded by DIT based on its performance assessment following the training at NVTI and the results of examination and practice at NVTI. It can be evaluated that MoES authorised the training at NVTI within the period of cooperation, as the qualification is based on the concept proposed by the Project, training of instructors and managers was planned to be conducted at the other BTVET institutions, as well as the state of qualification compiled in Table-1.

In light of the above, the three outputs of the Project were achieved, the percentage passing the final assessment exceeded the target, and the training system at NVTI was authorised by MoES. Therefore, the project purpose has been achieved.

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

The indicator of the overall goal is the number of instructors and managers who were qualified. In Uganda, the qualification system of CVTI, DVTI and DTIM, which included requirements for qualifications in UVQF,²⁵ and the final assessment conducted by NVTI²⁶ and certificates awarded by DIT under the provision of the New BTVET Act,

²³ The terminal evaluation report noted that training of DVTI and DTIM would be completed after the cooperation. But the ex-post evaluation confirmed they were actually completed in March and July 2010 respectively and that certificates were awarded on 24th August 2010, within the period of cooperation.

²⁴ An example is MoES (2011), *Handbook on Teacher/Tutor, Instructor Education and Training Policies*.

²⁵ This is indicated in documents of MoES such as *Assessment and Certification Regulations by the Industrial Training Council with Approval of the Minister under the Business Technical Vocational Education and Training Act 2008*.

²⁶ From 2014, Kyambogo University, which conducted the assessment for qualification of CTTE and DTTE,

were developed. As previously described, these qualifications were nationally authorised, and the quality of training of instructors and managers is ensured by MoES. Therefore, the number of those who are qualified at national level means the same as the description of the overall goal, “BTVET institutions in Uganda have higher-quality instructors and managers”.

The targets of indicators to measure the overall goal were modified at the mid-term review. As described in Output 2 and 3 above, the modification was due to the initial calculation based on the assumptions before finalisation of the training schedule and the number of enrolments and the longer duration of qualifications. The targets were recalculated based on an 80% pass rate for the final assessment, but it is not appropriate for DVTI and DTIM as the number of annual enrolments used for calculation were different from the actual ones.

Given the annual enrolments of 35 for DVTI and 25 for DTIM assumed based on the actual ones, an 80% pass rate for the final assessment and six batches of those who are qualified from 2010 to the end of June 2015, the targets should be 168 for DVTI ($= 35 \times 0.8 \times 6$) and 120 for DTIM ($= 25 \times 0.8 \times 6$). For CVTI, those who had been expected to be qualified from the enrolments of other BTVET institutions like JVTI were excluded from the target at the terminal evaluation as the institutions which had anticipated commencing CVTI training within the period of cooperation had not actually done so. On the other hand, the terminal evaluation concluded that the overall goal of the Project was likely to have been achieved if JVTI had conducted CVTI training. This means that commencement of the training at JVTI was recognised as a requisite for achievement of the overall goal. Therefore, the ex-post evaluation used the targets modified at the mid-term review, before exclusion of CVTI qualifiers trained at JVTI.

At the mid-term review, the number targeted to be qualified by 2015 was reduced to 58 for DVTI (Indicator 1), 346 for CVTI (Indicator 2) and 72 for DTIM (Indicator 3). The ex-post evaluation assessed the prospects of achieving the overall goal by estimating the number who would have qualified at the end of June 2015, as the fiscal year ends in June in Uganda.

Based on the current schedule of training at NVTI, by the end of fiscal year 2014/15 (the end of June 2015) CVTI training will have been conducted seven times, DVTI six times, and DTIM five times. Given the percentage of passing the final assessment in 2010-12 (2009-2011 for CVTI), i.e. 87.6% for CVTI, 85.1% for DVTI and 98.6% for DTIM (See the next item on the percentage each year), the estimates of those who should be qualified by the end of June 2015 are compiled in Table-2. DVTI and DTIM are likely

will also be involved in the final assessments of CVTI, DVTI and DTIM, as the curriculum, assessment and qualification for technical teachers and instructors are to be integrated into the Diploma in Instructor and Technical Teacher Education Programme (DITTE Programme).

to exceed the targets modified at the mid-term review (168 and 120 respectively).

Table 2: Prospects of Instructors and Managers Qualified in Each Training Course by the End of June 2015

Training Type/Cycle	Year of Completion	Enrolled	Qualified	Target
CVTI-1	2009	33	29	
CVTI-2	2009	40	32	
CVTI-3	2010	40	35	
CVTI-4	2011	40	38	
CVTI-5	2012	46	<i>40</i>	
CVTI-6	2013	48	<i>42</i>	
CVTI-7	2014	<i>40</i>	<i>35</i>	
CVTI Total		<i>287</i>	<i>251</i>	346
DVTI-1	2010	30	24	
DVTI-2	2011	33	28	
DVTI-3	2012	38	34	
DVTI-4	2013	34	<i>29</i>	
DVTI-5	2014	38	<i>32</i>	
DVTI-6	2015	<i>35</i>	<i>30</i>	
DVTI Total		<i>208</i>	<i>177</i>	168
DTIM-1	2010	24	24	
DTIM-2	2011	25	24	
DTIM-3	2012	25	25	
DTIM-4	2013	24	<i>23</i>	
DTIM-5	2014	32	<i>31</i>	
DTIM Total		130	<i>127</i>	120

Source: Estimation by the external evaluator based on the data of NVTI

Note: Estimates by the external evaluator are in italic.

JVTI at the end of 2015, as the training for pre-service takes two years.²⁸ Therefore, they cannot be included in Table-2.

3.2.2.2 Contribution of the Project Outputs to the Project Purpose and Overall Goal

1) Output 1

The target of Output 1 was to appraise officially the concept of the new qualification proposed by the Project. To contribute to the achievement of the overall goal, it is necessary for MoES to approve the proposed qualification as a result of the appraisal.

According to documents provided by DIT, the level of qualification is classified from “elementary and entry level” to the highest “level 5”. CVTI is categorised into Level 3, DVTI is Level 4 and DTIM is Level 5.²⁹ *The Handbook on Teacher/Tutor, Instructor*

²⁷ JICA (2010), *op. cit.*

²⁸ The other institutions implementing the DITTE Programme also provide pre-service training, apart from NVTI.

²⁹ Documents provided by DIT including Uganda Vocational Qualification Framework (UVQF) Summary of Generic Level Descriptors, UVQF System, Skills, Certification, Job Opportunities and Career Pathways in BTVET Sub-sector, etc.

However, the target of CVTI (346) cannot be achieved. This included those expected to be qualified from JVTI, which was expected to commence training from 2012.²⁷ But due to a delay with a project of construction and equipment provision supported by the African Development Bank, the institution did not conduct the training until it commenced the Diploma in Instructor and Technical Teacher Education Programme (DITTE Programme) in November 2013. Moreover, the first batch will be qualified from

Education and Training Policies of MoES also describes CVTI and DVTI.³⁰ Most of contents in these documents were contributed by the proposal of the Project.³¹

Therefore, the qualifications of instructors and managers of BTVET institutions were approved in line with UVQF.

2) Output 2

For Output 2, the continuity of CVTI and DVTI training and the emergence of BTVET institutions that conduct CVTI training apart from NVTI were assessed.

NVTI continues to conduct the training for both CVTI and DVTI after completion of the Project, but no other institution did until JVTI commenced the DITTE Programme in November 2013. Therefore, NVTI was the only institution implementing training of instructors at the end of October 2013.

The implementation status of the training of instructors is summarised in Table-3. Also, a survey of the ex-post evaluation showed 49 out of 50 respondents who completed CVTI

and all 46 respondents of DVTI were “very satisfied” or “satisfied” with the training, and that all respondents could utilise the knowledge and skills “fully” or “partially”.

The number of MT2 for the training of instructors is eight, unchanged from the time of project completion. However, as two had been transferred into the other BTVET institution and an organisation, they could not conduct the training at NVTI. As the Project depended on training in Japan for training MT2 due to time constraints, MoES and NVTI are not able to establish a system to develop new MT2 in Uganda, or to ensure a budget for this.

Table 3: Training of Instructors and Managers Conducted in NVTI

Training Type/Cycle	Year of Completion	Enrolled	Qualified	%
CVTI-1	2009	33	29	87.9%
CVTI-2	2009	40	32	80.0%
CVTI-3	2010	40	35	87.5%
CVTI-4	2011	40	38	95.0%
CVTI-5	2012 ^a	46	n.a.	-
CVTI-6	2013 ^b	48	n.a.	-
CVTI Total (2009-2011)		153	134	87.6%
DVTI-1	2010	30	24	80.0%
DVTI-2	2011	33	28	84.8%
DVTI-3	2012	38	34	89.5%
DVTI-4	2013 ^a	34	n.a.	-
DVTI-5	2014 ^b	38	n.a.	-
DVTI Total (2010-2012)		101	86	85.1%
DTIM-1	2010	24	24	100.0%
DTIM-2	2011	25	24	96.0%
DTIM-3	2012	25	25	100.0%
DTIM-4	2013 ^a	24	n.a.	-
DTIM-5	2014 ^c	32	n.a.	-
DTIM Total (2010-2012)		74	73	98.6%

Source: NVTI

Note: a. Results of final assessment yet to come as at Oct 2013

b. Training in progress as at Oct 2013

c. Training commenced from Jan 2014

³⁰ MoES (2011), *Handbook on Teacher/Tutor, Instructor Education and Training Policies*, pp30-31

³¹ According to the documents provided by JICA, a proposal from Germany was also reflected in pedagogy for qualification.

3) Output 3

Regarding Output 3, the status of implementation at NVTI and the other BTVET institutions after the completion of the Project was evaluated.

At present, NVTI is still an implementer of DTIM training,³² and the status of implementation is reported in Table-3. The survey of the ex-post evaluation revealed that all 40 respondents of DTIM completers were “very satisfied” or “satisfied” with the training and that more than 80% could utilise the knowledge and skills “fully” or “partially”. Meanwhile, a few participants who were middle-level managers, like heads of department, could not use them due to difficulty with getting support from top management.

The number of MT for the training of managers is four, unchanged from the time of project completion. However, as one had been transferred into the other BTVET institution, he could not conduct the training at NVTI. As the Project depended on training in Japan for MT due to time constraints like that for MT2 for the instructors training, MoES and NVTI cannot establish a system to develop new MT in Uganda or to ensure the budget for this.

4) Project Purpose

As described in Table-3, 80% of the participants passed the final assessments and the training system for instructors and managers functions well at the time of ex-post evaluation.

Output 1, support for establishing the concepts of the qualifications as fundamentals of the training system contributed tremendously to achievement of the overall goal. The Project aimed to establish a training system for instructors and managers at NVTI (Project Purpose) through establishing the concept of new qualification system (Output 1) and the training cycle for instructors and managers (Outputs 2 and 3). Output 1 especially directly contributes to the overall goal, an increased number of quality instructors and managers, rather than to the establishment of the training system in BTVET institutions. Outputs 2 and 3 would be enough if the Project were to achieve the establishment of a training system. However, addition of the establishment of the concept of new qualifications through Output 1 made the qualifications through the training system of instructors and managers established under Outputs 2 and 3 nationally authorised by DIT. That means that the government assures the quality of knowledge and skills obtained by the training, and leads to higher motivation from the participants for career development. It also contributed to continuity of the project effects after completion.

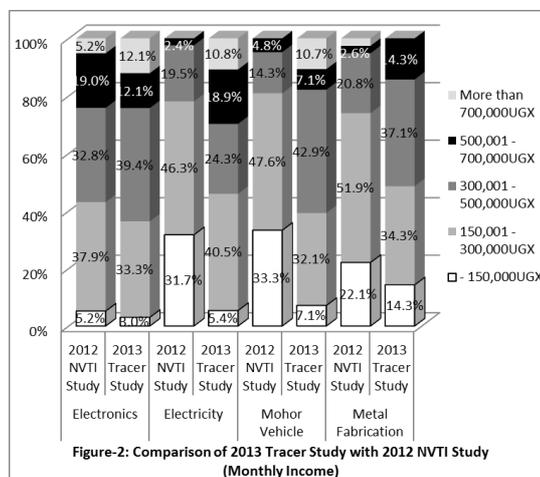
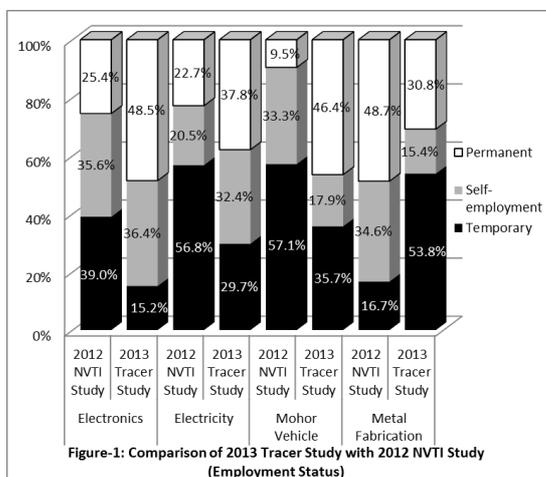
³² MoES is also willing to commence DTIM training at the other BTVET institutions if they are ready.

3.2.2.3 Other Impacts

1) Impact on the Employment Status of the Graduates from Vocational Training Institutions

Based on the database of graduates for 2009-12 from the Departments of Electronics, Electricity, Motor Vehicle and Metal Fabrication at NVTI targeted by the Project, a tracer study was conducted in 2013 (at the time of ex-post evaluation) to ascertain the status of employment. 200 graduates were randomly sampled from 813 for which there were telephone numbers with 10% error margin. Items of the study included the status of employment, type and size of the company, monthly income, time taken to get employed or self-employed, relation of the knowledge and skills acquired at the institution with the current job, support provided by the BTVET institution for finding employment or self-employment, etc. All 200 graduates sampled responded to the study.

Meanwhile, NVTI had conducted the similar tracer study in 2012.³³ It is difficult to simply compare these two studies because of the difference in sampling method,³⁴ but that of the ex-post evaluation revealed an increase in the proportion of permanent employment status (Figure-1) and the level of monthly income (Figure-2). Impact from the labour market was not clear due to the absence of statistics of employment at the time of the ex-post evaluation, but the impact of the Project on the employment of graduates may come to be seen.



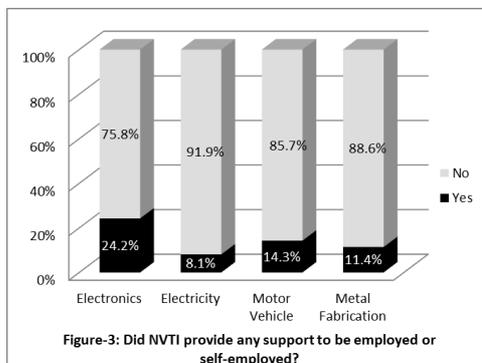
On the other hand, 31 out of 47 graduates who were not employed or did not advance to higher education gave the reason “lack of connections/useful contacts”.

NVTI has the opportunity to collaborate with the industrial sector in Uganda such as through (1) on-the-job training for students, (2) technical training of employees of

³³ Nakawa Vocational Training Institute (2012), *Overall Tracer Study Report on the Employment Outcomes of the Vocational Training Graduates from 2009-11*

³⁴ For example, for NVTI study the population is the graduates in every year in 2009-11, while for the study of ex-post evaluation it is graduates as a whole in the period 2009-12.

enterprises, (3) design, manufacture and repair ordered by the enterprises or local people and (4) the annual Industrial Committee which has participation of around 20 small and medium enterprises. The Board of Governors of NVTI has members from major enterprises in Uganda, giving a further opportunity to grasp their needs.³⁵



However, as indicated in Figure-3, most graduates from NVTI do not think they received support in finding employment. That means that collaboration with the industrial sector has contributed to incorporating the needs of the industrial sector into the curricula, but not sufficiently in providing support for enhancement of employment. Few graduates received a

reference letter from NVTI.

2) Other Impacts

NVTI has continued to provide resources to third-country training programmes of JICA technical cooperation projects after completion of the Project. In March and April 2011, it trained 20 instructors of two vocational training centres supported by the Project for Improvement of Basic Skills and Vocational Training in the Republic of South Sudan (Phase II) in development of basic skills on curriculum and teaching materials. According to the report of this project, the skills acquired were helpful in improving the current training for participants that did not know BTVET in the other countries.³⁶

No negative impacts of the Project were identified on natural environment, and no involuntary resettlement occurred due to land acquisition.

The project purpose and outputs, which were achieved within the period of cooperation, are still in good status at the ex-post evaluation. For the overall goal, the target for DVTI and DTIM can be achieved by the end of June 2015, but it is difficult to do that for CVTI because of late commencement of the training at JVTI. Meanwhile, most participants of the training expressed satisfaction with the training, and can utilise the knowledge and skills acquired. The percentage of passing the final assessment is still high. As for employment of graduates from NVTI, the impact has begun to be seen in terms of employment status and level of monthly income.

³⁵ Documents provided by JICA and NVTI.

³⁶ JICA (2013) *Project Completion Report, the Project for Improvement of Basic Skills and Vocational Training in the Republic of South Sudan, Phase II*, p59

In light of the above, as the effect of the Project was identified to some extent, effectiveness and impact of the project are fair. The project purpose has been achieved within the cooperation period. As for the overall goal, while it is difficult to achieve the target number of those qualified with CVTI by the end of June 2015, it is likely that the target numbers for DVTI and DTIM will be achieved.

3.3 Efficiency (Rating: ③)

3.3.1 Inputs

Comparison of actual inputs of the Project with those planned is compiled in Table-4.

Table-4: Inputs of the Project

Inputs	Plan	Actual
(1) Experts	1 long-term 4 short-term annually	3 long-term 12 short-term
(2) Trainees received	14: development of master trainers (8 for instructors; 2 for managers), training management (4)	17: development of master trainers (8 for instructors; 4 for managers), human resource development administration (3), training management (2)
(3) Third-Country Training Programs	None	None
(4) Equipment	Equipment for instructors training of motor vehicle, electronics/electricity and metal fabrication and for material development and training management	Equipment for instructors training of motor vehicle, electronics, electricity and metal fabrication and for material development and training management
Total Project Cost	290 million yen	251 million yen
Inputs of Ugandan side	<ul style="list-style-type: none"> ● Counterparts ● Land and facilities ● Local cost ● Tax exemption ● Maintenance of equipment provided ● Training cost 	<ul style="list-style-type: none"> ● Counterparts: 41 ● Land and facilities: NVTI ● Local cost: utilities of NVTI ● Tax exemption ● Maintenance of equipment provided ● Training cost

3.3.1.1 Elements of Inputs

One long-term expert was initially planned to be stationed for project management and coordination, but actually three were allocated (two for project management and coordination, one for vocational training advice). As the procurement of training equipment was delayed and more time was spent on coordination of MT2 development in Japan, the Project had to station additional experts to deal with the concentration of instructors and managers training at NVTI in the latter period of the Project.

As listed above, the number of trainees actually received in Japan for MT was four, an increase from the planned two. This measure was taken by the Project to supplement a subject that could not be covered by training in Japan to the initial two trainees for MT2 from September to November 2008. In addition, the current principal of NVTI, who was inaugurated in October 2008 and was the leader of project implementing agency, participated in the training of human resource development administration to contribute to the realisation of project effects through increased understanding of administration and to make effective suggestions to MoES. As a result, the number of trainees for human resource development administration was increased from two to three.

3.3.1.2 Project Cost

In spite of additional inputs mentioned above, the total cost of the Project was 251 million Japanese yen, lower than planned. It is attributed to containment of the cost for instructors and managers training at NVTI.

3.3.1.3 Period of Cooperation

The period of cooperation was three years and three months as planned, from June 2007 to August 2010.

Both the project cost and project period were as planned. Therefore, efficiency of the project is high.

3.4 Sustainability (Rating:②)

3.4.1 Related Policy towards the Project

Apart from Revised ESSP 2007-2015, the related policy and programme towards the Project after project completion are the BTVET Strategic Plan (called *Skilling Uganda*) and DITTE Programme.

3.4.1.1 *Skilling Uganda*

Skilling Uganda is a 10-year strategic plan covering 2010-2020 for the BTVET

sub-sector in Uganda to acquire the skills to enable people and enterprises to raise their productivity and income. Objective 1 in the plan, “make BTVET relevant to productivity development and economic growth”, contains the implementation of UVQF-based BTVET as a strategy. In Objective 2, “increase the quality of skills provision”, the strategies are strengthening the capacities of BTVET institutions and better quality assurance of the training. Therefore, *Skilling Uganda* clearly aligns with the establishment of the training system under UVQF and the development of instructors and managers, which the Project aimed at.

3.4.1.2 DITTE Programme

The DITTE Programme is a hybrid of qualifications and curriculum of CTTE and DTTE, which existed before the Project, and CVTI and DVTI newly established by the Project, to maximise the advantages³⁷ and minimise the disadvantages³⁸. Participants of the Programme are supposed to receive the teaching principles and practice of DTTE level and the practice of DVTI level that are practically recognised as higher qualifications than CVTI. As of November 2013, the Programme was commenced at JVTI; NVTI, Abilonino Polytechnic Instructors College and Kyambogo University will also conduct it.

As CVTI is in a lower level of qualification than DVTI under UVQF, CVTI qualifiers cannot automatically receive DITTE. Therefore, the MoES intends to impose them a one-year DITTE Programme, which contains the lecture of DTTE level and the practice of DVTI level, and to award the certificate (DITTE) to those who pass the final assessment; MoES intends to unify the qualifications and phase out CVTI.

However, NVTI, only an implementer of the in-service DITTE Programme, is going to continue CVTI training with the budget currently allocated from MoES because of the increase in applicants for the training year by year,³⁹ and recognition of the need for CVTI to improve the capacity of instruction at the other BTVET institutions.⁴⁰ NVTI is going to provide the DITTE Programme on the same scale as DVTI training (around 40 participants).

Meanwhile, DTIM training continues as it is, since it will not be integrated into the DITTE Programme.

³⁷ CTTE and DTTE widely cover the theoretical aspects, while CVTI and DVTI focus on practice useful in the field.

³⁸ CTTE and DTTE have practical disadvantages, and CVTI and DVTI have a problem with career development for the instructors.

³⁹ According to the data of NVTI, the number of applicants for CVTI training soared from 42 in CVTI-1 (2008) to more than 100 in CVTI-6.

⁴⁰ According to the interview at the ex-post evaluation, the same ideas are in DIT of MoES.

3.4.2 Institutional Aspects of the Implementing Agency

3.4.2.1 MoES

DIT and the Department of Teacher and Instructor Education and Training (TIET) of the Directorate of Higher, Technical and Vocational Education and Training are responsible for training of the instructors and managers in BTVET institutions in MoES. DIT prescribes the competence level for instructors and managers in line with UVQF, and awards certificates based on the results of assessment of the knowledge and skills acquired, while TIET supervises the implementation of training. DIT and TIET complement one another in the MoES's administration of BTVET.

TIET is divided into three Divisions: Pre-primary and Primary Teacher Education, Secondary Teacher Education and Instructor/Tutor Education. The Division of Instructor/Tutor Education has six posts. Since it was established with one staff member in 2008, two staff members have been added but three posts have still not been filled.

These vacancies are not a big problem, as currently only four BTVET institutions implement DITTE programmes. However, the Division of Instructor/Tutor Education will face an increase in the burden of routine in the future, such as supervision of the instructors training, with more institutions commencing the DITTE Programme. It will be difficult to fill the vacancies immediately given the situation in other ministries in Uganda.⁴¹

In the Department of Assessment and Certification of DIT, seven staff members are currently allocated, and six of them were newly recruited. Positions are filled in this department.

3.4.2.2 NVTI

NVTI established the department of instructors and managers training recommended by the terminal evaluation of the Project. It consists of five instructors, including four MT2, and enables NVTI to carry out the training every year without too much of an increased burden.

Given the current number of students, NVTI does not face a lack of human resources. It supplements the staff members with its own budget,⁴² as well as the allocation from MoES. NVTI is about to conduct the DITTE Programme with the current scale of DVTI training, and it does not have a problem with conducting the Programme and continuing DTIM training.

As for the equipment partially from the Project, NVTI organises a maintenance team

⁴¹ For example, the Ministry of Health carried out mass recruitment of health workers in 2013. However when it comes to their allocation, priority was given to the health facilities.

⁴² The sources are tuition fees from students and income from enterprises and local people from orders for design, manufacture and repair.

led by a Deputy Principal. Members of the team are workshop technicians in each department, and they conduct a regular check after the end of every term. When they identify a problem, the technician takes photos of the equipment, attaches them to the prescribed form and informs the Deputy Principal. The budget for repair is also ensured by tuition fees from students, and income from local enterprises and people from orders for design, manufacture and repair. NVTI also practices 5S activities to prevent troubles. Generally it can maintain the equipment with the above organizational structure.

3.4.3 Technical Aspects of the Implementing Agency

3.4.3.1 MoES

As mentioned in the item “Institutional Aspects of the Implementing Agency”, MoES faces difficulties with vacancies for posts and orientation and training of newly-recruited staff members although it can deal with its duties under the current staffing level. For example, DIT, with six new staff members, cannot ensure the budget for orientation and training in assessment of the level of competence of instructors and managers that participate in the training. Therefore, it is difficult for MoES to upgrade the capacity of its staff members for BTVET by itself.

In addition, MoES cannot develop new MT2 as the Project did not establish a system of the development. This problem was indicated at the mid-term review of the Project with recommendations to MoES and NVTI.⁴³ Although MoES is responsible for development of MT2, it cannot deal with the problem.

3.4.3.2 NVTI

Instructors of NVTI try to update their competence level through materials developed by the Project, textbooks and reading materials donated by project experts, collection of relevant information through the internet and participation in seminars. They have enough skill to operate the equipment in NVTI. Given the current level of equipment, workshop technicians in each department do not have a problem with maintenance.

3.4.4 Financial Aspects of the Implementing Agency

3.4.4.1 MoES

The budget of MoES for BTVET is allocated to “Skills Development” and “Quality and Standards”, and its projection is the highest amount in FY 2014/15 (Table-5). Allocation for training of instructors and managers is included in the output “Training and Capacity Building of BTVET Institutions”, and it was UGX 2 billion in FY 2012/13.

⁴³ JICA (2009) *Mid-term Review Report, the Project for Instructors Training for Vocational Education and Training in Uganda*, p24

Table-5: Budget of MoES (Unit: million UGX)

Fiscal Year	2010/11	2011/12			2012/13	2013/14	2014/15
	Outturn	Approved Budget	Releases (July 12-May 13)	%	Budget Projections		
Pre-primary and Primary Education	32,599	39,515	39,211	99.2%	46,757	50,627	54,464
Secondary Education	118,585	190,721	110,230	57.8%	178,880	148,953	79,453
Special Needs Education, Guidance and Counselling	1,549	2,113	2,066	97.8%	2,114	3,114	2,783
Higher Education	8,041	12,106	12,067	99.7%	70,716	21,460	21,583
Skills Development	36,426	86,810	63,422	73.1%	53,767	97,429	102,208
Quality and Standards	20,097	25,840	21,051	81.5%	29,725	45,200	54,272
Physical Education and Sports	2,617	4,260	3,593	84.3%	5,203	6,060	5,096
Policy, Planning and Support Services	7,793	9,355	8,921	95.4%	9,936	9,483	9,960
Total	227,707	370,720	260,561	70.3%	397,098	382,326	329,819

Source: Ministry of Education and Sports (2012), *Ministerial Policy Statement FY 2012/13*, p85

However, it is difficult for MoES to ensure sufficient budget for orientation and training of new staff members. For example, DIT formulates its strategic plan to include the training of staff, but actually the budget cannot be allocated.

3.4.4.2 NVTI

Table-6: Budget of NVTI for Instructors and Managers Training (Unit: UGX)

Items	Amounts
Allowances to lecturers	9,600,000
Advertisements and PR	8,544,000
Training delivery and management	109,753,000
Recreation and welfare	18,600,000
Stationary	61,200,000
Telecommunication	11,200,000
Utility	36,000,000
Infrastructure maintenance	18,000,000
Transport	12,500,000
Foodstuffs to participants	120,825,000
Total	406,222,000

Source: NVTI

NVTI can manage to carry out the training of instructors and managers every year even after the completion of the Project. It budgets UGX 406,222,000 for the training every year (Table-6), and UGX 300,000,000 is actually allocated and utilised.

Given the fact that NVTI has actually conducted the training of instructors and managers with the budget allocation every year, and that MoES has firmly allocated the budget to the programmes with constant performance, NVTI can sustain training for the current number of participants.

With the training of instructors and managers, some problems have been observed in terms of the technical (system to develop MT2) and financial (budget for orientation/training of new staff of DIT) aspects of the MoES. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The Project aimed to improve the quality of BTVET through the establishment of a system of training qualified instructors and managers in BTVET institutions in NVTI based on the UVQF. The Project was aligned with ESSP, which prioritises BTVET, and

the establishment of a system of training in accordance with UVQF met the development needs of Uganda. As the Project was also in line with Japan's ODA policy, it is highly relevant. The project purpose was achieved within the period of cooperation as the percentage of those passing the final assessment and authorisation of the training system by the MoES. As for the overall goal, while it is difficult to achieve the target number of those qualified with CVTI by the end of June 2015, it is likely that the target numbers for DVTI and DTIM will be achieved. As the Project has realised some effects, its effectiveness and impact are fair. Since the project cost and period were as planned, the efficiency is high. As some problems were observed in terms of technical aspects of MoES on training of master trainers in Uganda, and of financial aspects of training newly-recruited staff, the sustainability of project effects 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

4.2.1.1 MoES

- A department of DIT in charge of assessment and certification is responsible for awarding qualifications to those who complete the training for instructors and managers of BTVET institutions. It recently recruited six staff members, but cannot ensure the budget to train them to assess the competence of the instructors and managers. Their competence is needed to assure the quality of training for instructors and managers. Therefore, DIT is recommended to definitely conduct the training for the newly-recruited staff.
- The Project developed MT2 for instructors and MT for managers through the training in Japan due to the limited cooperation period. As a consequence, the Ugandan side could not establish a system to develop them by itself. Therefore, MoES is recommended to develop a training system within the country and allocate budget in collaboration with NVTI, which was supported by the Project, and other education development partners if necessary.

4.2.1.2 NVTI

- The tracer study clarified that NVTI collaborated with the industrial sector in Uganda for on-the-job training for students and workers of enterprises, but not enough for helping graduates find jobs. Therefore, NVTI is recommended to work more closely with the industrial sector and to improve the level of support for them to get a job.

4.2.2 Recommendations to JICA

None.

4.3 Lessons Learned

(1) Planning of Activities and Outputs Contributing to Establishment of Qualification System

When a project develops and implements training programmes under a newly introduced qualification system, the impact can be enhanced and sustained by incorporation of activities to establish and conceptualise the qualification system. The Project intended to establish the concept of new qualifications (Output 1) and the training system for instructors and managers of BTVET institutions (Outputs 2 and 3) in order to establish a system of training at NVTI (project purpose). The activities under Output 1 were to accelerate approval of the qualification system with which the training system should be in line, rather than to contribute to the project purpose. With the establishment of the new qualification concept under Output 1, qualifications by DIT through the training for instructors and managers under Outputs 2 and 3 became nationally accredited. That enabled the government to ensure the quality of knowledge and skills through the training, and the participants to raise their motivation for career development. Therefore, activities under Output 1 played an important role in realising the sustainability of the project effects and achievement of the overall goal.

(2) Proper Understanding of Steps to Realise Effects and Evidence-based Target Setting

The Project had a problem with setting indicators and properly expressing their logic. For example, it was not proper to use indicators such as the level of satisfaction with the training system established by the Project, the percentage of passing final assessment and the number of those who qualified for both outputs and project purpose. The Project should have set indicators after careful consideration of the description of outputs and project purpose, and the steps from outputs to the purpose. It could be said that the steps to establish the system of training were: (1) needs assessment, (2) development of training modules, curricula and materials and provision of equipment, (3) development of MT, (4) enrolment of training participants, (5) implementation of the training, (6) evaluation of the training, (7) completion of the training, (8) final assessment of those who completed training, and (9) awarding of certificates. These steps could be divided into two parts: one is a sequence from (1) to (5) for indicators of the outputs; and another from (6) to (9) for the project purpose. For example, development of materials and curricula, the number of MT developed, and the number of training cycles implemented could be used as indicators of outputs; and the percentage of final assessment, the number

of qualified instructors and managers, and the level of satisfaction with the training could be used for measuring project purpose. This way of formulating indicators enables the logic to be expressed properly, so that the project purpose can be achieved as a result of obtaining the outputs.

The Project also used the wrong evidence for setting some targets. It is necessary to set targets using the correct evidence.

BOX : 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 on Strengthening the Programme of Expanding Automation Technologies Department (SPREAD)” in the Republic of Turkey, “The Project for Strengthening the Capacity of Training Management of Vocational Training Corporation” in Jordan, “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 centres.

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 centres

(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 Vocational Training Corporation operating the cycle two to three times independently and also experiencing dissemination of the cycle to other training centres than the model training centres. 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, Vocational Training Corporation 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 were still a problem at the time of the ex-post evaluation.