

Summary of Terminal Evaluation

1. Outline of the Project	
Country: The Republic of Ghana	Project title: Technical and Vocational Education and Training Support (TVETS) project
Issue/Sector: Technical and Vocational Education and Training	Cooperation scheme: Project-type Technical Cooperation
Division in charge: JICA Ghana Office	Total cost: 488 million JPY [approximately 5.9 million USD]
Period of Cooperation: From April 2007 to March 2011	Partner Country's Implementing Organization : Council for Technical and Vocational Education and Training (COTVET) , three pilot institutions (ATTC, NVTI, A-Poly)
Related Cooperation: -Development Study: The Study for Development of a Master Plan to Strengthen Technical Education in the Republic of Ghana	
1-1. Background	
<p>Since the JICA supported development of the master plan to strengthen technical education in the republic of Ghana 2001, the Technical and Vocational Education and Training (TVET) sub-sector has been under reform. The reforms have aimed to strengthen TVET delivery to be demand driven and practical through the adoption of the competency-based training (CBT) method. These efforts culminated in the establishment of the Council for Technical and Vocational Education and Training (COTVET); to co-ordinate and oversee technical and vocational education and training in the country and to provide for related matters. COTVET Act 2006 (Act 718), assented by the president of the Republic of Ghana in August 2006.</p> <p>As part of efforts to reform, the Technical and Vocational Education and Training Support (TVETS) project was requested by the Ghana government. The project's aim being to strengthen the implementation capacity of the COTVET and its related institutions for introducing CBT in TVET delivery in Ghana; by strengthening the organizational capacity of TVET implementing institutions for formulating necessary operational guidelines on TVET through human resource development, and by piloting CBT on mechanical engineering at TVET training institutions, leading to the formation of a National TVET Qualifications Framework and Qualification Accreditation System under COTVET. For these project purpose and outputs, the Project selected three TVET institutions, namely, Accra Technical Training Center (ATTC), National Vocational Training Institute (NVTI) and Accra Polytechnic (A-Poly), to conduct pilot activities in order to reflect the lessons learned onto formulation of effective institutionalization.</p> <p>The Record of Discussions of the project was signed by both governments on 2nd April 2007 for a period of 4 years. Responding to the Discussions, the Project commenced in April 2007 and will be</p>	

terminated in March 2011.

1-2. Project Overview

(1) Overall Goal:

1. Increased number of TVET Training Institutions with CBT.
2. Qualification Accreditation System is operational.

(2) Project Purpose: To strengthen implementation capacity of COTVET and its related institutions for introducing CBT at TVET training institutions in and out of Accra, leading to forming a National TVET Qualifications Framework and Qualification Accreditation System under COTVET

(3) Outputs:

Output 1:

COTVET is established and related structures acquire improved institutional and implementing capacity to deliver TVET under COTVET

Output 2:

Improved operational mechanism over TVET delivery through lessons learned from piloting CBT on mechanical engineering

(4) Inputs (As of Terminal Evaluation)

Japanese side:

a) Personnel

Long-term Expert: 84.55 MM

Technical officer: 143.4 MM

b) Training in Japan:

:10 (3 training courses)

: 3 (3 training courses as group training)

Training in the third country:

: 6 (South Africa and Botswana)

c) Equipment: JPY 57,470 thousand

d) Local cost: JPY 100,050 thousand

Ghanaian Side:

a) Personnel

Counterpart:

Central level (COTVET Director, CBT coordinator, Manager at Secretary's office)

Pilot institutions (17 facilitators)

b) Office space and expenses for daily activities including electricity and water use, etc

c) Expenses for workshop (transportation costs for participants, copy of hand outs, etc)

2. Evaluation Team

Members of Evaluation Team:

- 1 Mr. Koichi KITO (Leader of Mission), Senior Representative, JICA Ghana Office
- 2 Mr. Raimei NAKANO (Technical and Vocational Education and Training), Technical Advisor, Overseas Cooperation Section, Overseas Vocational Training Association(OVTA)
- 3 Mr. Jun TOTSUKAWA (Evaluation Analysis), Senior Consultant, Sano Planning Co., Ltd
- 4 Ms. Mama OWUSU (TVET Policy), Education Advisor, JICA Ghana Office
- 5 Mr. Ichiro FUKUHARA (Cooperation Planning), Representative, JICA Ghana Office
- 6 Mr. Kosuke NAGINO, (Evaluation support), Local Consultant (Monitoring & Evaluation)

Period of Evaluation Study: November 18, 2010 to December 10, 2010

Type of Evaluation: Terminal Evaluation

3. Results of Evaluation

3-1. Relevance

(1) Policy priority

The country's Education Strategic Plan (ESP) 2003-2015 and the recently revised ESP II (2010 to 2020) have TVET as one of the four focus areas in the education sector. They reiterate the importance of TVET through the capture of the TVET policy, which aims to improve the training quality and relevance.

(2) Cooperation Priority

The Japan's Country Assistance Program for Republic of Ghana sets two major pillars to support agendas, which are 1) Accelerating rural development; and 2) Promoting industrial development. The Project is matched with the strategic objective as the latter, human resource development needed for promoting industrial development from the TVET sector's approach.

(3) Selection of Target Group

Needs of COTVET

Development of organizational as well as individual capacity of COTVET was the most prioritized issue to be tackled for the newly established organization COTVET. It is obvious that the Project has met with the needs of COTVET in the launching stage as the focal TVET coordinating organization.

Needs of TVET in general

The gap existing between industries' expectation and graduates' technical level led to difficulties for TVET graduates to find jobs. The TVET institutions, therefore, had recognized the necessity to improve the education system to fill the gap.

Since the CBT approach can ensure to upgrade students' technical level more than the traditional TVET approach, the Project has met with the needs of the TVET institutions.

Appropriateness of the selection of pilot institutions

The targeted three pilot institutions are evaluated as being of reasonable selection.

The project developed the criteria to select the institutions such as physical environment to enable the conduct of the CBT approach. In addition, the trades targeted at the institutions were also selected from the viewpoints such as that the trades that Japan has the technical experience and knowledge, and can avoid duplication with other Development Partner's activities.

(4) Advantage of Japanese technologies

The technical instruction at the pilot institutions fully utilized Japanese technical advantage and experiences. The concepts such as 5Ss and Kaizen have been effectively introduced in their instruction.

Although there is a difference in the name of training approach as the CBT between Japan and other countries, the Japanese training system has a lot of similarity with the CBT approach. Therefore, the Project did not receive any negative influences in the sense of "advantage of Japanese technologies".

3-2. Effectiveness

(1) Achievement status of Project Purpose and Outputs

Project Purpose

The level of the achievement of the project purpose is evaluated as "almost high".

Considering the key word on which the project purpose focused; "to strengthen" capacity of COTVET and related institutions, it is evaluated that the project successfully strengthened the capacity of these newly established organizations. However, if these organizations had been established with the reasonable required number of staff as originally planned, the level of implementation capacity would have been higher. In this line, the evaluation of the achievement level is lower than "high".

Output 1

The achievement level of output 1 is evaluated as "moderate".

COTVET and the standing committees have developed their implementing capacity with institutional setting to deliver the CBT approach. Owing to the effort, the institutional setting with the necessary formats and documentation has significantly progressed. The forward steps taken for the past year is noteworthy, but again, due to the lack of manpower of COTVET, it has not been able to fully function as stakeholders expected. In this line, the achievement level is slightly lower.

Output 2

The achievement level of Output 2 is evaluated as "high".

With intensive work at each pilot institution, the operational mechanism of the CBT approach was developed, enabling its application to other TVET institutions as a CBT model.

(2) Contributing Factors of the Project implementation

a) Devoted works by facilitators at pilot institutions

Facilitators at the pilot institutions made sincere efforts to produce learning materials for the CBT approach, requiring them hard work in addition to their ordinary tasks.

b) Performance of the project's staff

Manpower inputs that have skills and knowledge on the CBT approach successfully contributed to establishing the Ghanaian CBT model. Some facilitators to the project as coordinators of the project from the pilot institutions also enhanced the smooth implementation of the project activities.

c) Cooperation from industries

Owing to the cooperation of the companies, workplace experience which is a core part of the CBT approach was successfully completed.

(3) Constraining Factors

The lingering delay in the organizational set-up of COTVET with reasonable number of staff until now has impacted on the level of achievement as well as on the sustainability of technical aspect because of insufficient time the project had for technical transfer.

3-3. Efficiency

(1) Input (Japanese manpower input)

The Project drastically changed the manpower inputs from the assignment of two experts to an expert team composed of nine experts in response to the recommendations of the mid-term review mission, and the change successfully contributed to the progress of the project's achievement.

Experts at each technical field also enhanced the quality of CBT approach from the aspect of trainers' training.

(2) Input (Ghanaian manpower input)

Insufficient number of COTVET staffs has led to multiple workloads for the respective staffs, resulted in the counterparts facing serious challenges in sharing their time with the project activities.

It led to fewer chances to provide technical transfer to COTVET, creating another feature of the project as a consultancy service in parallel with the basic concept of technical cooperation project.

The pilot institutions, on the other hand, provided sufficient manpower to carry out the project.

(3) Input (equipment)

The variety of equipment provided to the three institutions is evaluated appropriate, but the arrival of some equipment was delayed and affected the training schedule in the pilot institutions.

(4) Input (Budget)

The budget amount and the timing to disburse did not cause any inefficiency to the Project implementation.

(5) Input (training in Japan and the third countries)

The Project provided training opportunities in Japan and third countries. Training trips to South Africa and Botswana gave the participants essential ideas possibly to apply to Ghana. Realization of the effect of the training is expected in the near future (the training was very recently carried out in October 2010).

(6) Duplicated activities

Owing to the harmonized process by the technical committee on the harmonization of CBT, the Project did not encounter serious duplication with other projects.

3-4. Impact

(1) Prospects of Achievement of Overall Goal

It is difficult to foresee the achievement of the overall goal as of now since the CBT approach requires an increase in budget allocation and human resource development; facilitators on the CBT approach. The increase in the budget has to depend on external funding sources. Since this possibility is affected significantly by external conditions, it is difficult to predict the achievement of the overall goal.

As to the qualification accreditation system, it is still under discussion with stakeholders. It is also difficult to forecast the achievement possibility at this moment.

(2) Ripple effect

- Communication opportunities with the TVET sector and industries have increased through frequent meetings at the standing committees, forums, workshops, etc. It is expected that the TVET institutions would be able to find coupling of trainees and companies for the workplace experience.
- Judging from the companies' evaluation of the trainees at workplace experience, it is highly possible for graduates to find jobs more than the national job-finding ratio.
- Recognition of the CBT approach was extended through various opportunities such as TVET forum and the workshops, which is expectedly leading to extension within not only in Ghana but also neighboring countries.
- There are no negative impacts.

3-5. Sustainability

(1) Policy aspect

Due to the adoption of the COTVET Act, followed by official establishment of COTVET, as well as the adoption of the CBT policy as a national policy by the draft TVET policy 2004 and the Education Reforms of 2007, it is highly likely that the policy framework will remain sustainable.

(2) Organizational aspect

(COTVET)

COTVET would be able to strengthen the sustainability of its organizational aspect if the requested increase in staff is realized in accordance with the employment plan. In other words, the current situation indicates that the sustainability of the organizational aspect is lower, which is one of the most serious challenging issues for COTVET as long as the situation remains with limited number of staff.

(Pilot institutions)

Under the assumption that the pilot institutions continue the CBT approach at the same trades with the same grade of the pilot project; the three institutions would have enough sustainability in terms of the organization structure with the number of facilitators. However, if a consideration is given to extend the CBT approach to other trades and grades, then the sufficiency of facilitators will be raised as a challenging issue because the CBT approach requires more facilitators compared with the traditional.

(3) Financial aspect

(COTVET~ for extension to other institutions nationwide)

The CBT approach requires much more budget compared with the traditional. Judging from the budget forecasts of the government, to secure sufficient budget for dissemination of the CBT approach is a seriously challenging issue.

Positive signs exist from some internal/external funding sources. One of them is the SDF (Skills Development Fund), which is now about to go fully operation. It requires more time to measure its availability and possibility for TVET institutions to apply.

(Pilot institutions)

The three pilot institutions have financial challenges to constraints cover all the necessary cost for the CBT approach, even if including their income generation effort.

(4) Technical aspect

(COTVET)

From the start up stage towards the full operations stage, the belated reinforcement of manpower at COTVET appear as the challenging issue with regards to technical sustainability because of the fewer chances to transfer skills and experiences from the project.

(Pilot institutions)

The facilitators in charge of the CBT approach have gained enough technical capacity to continue the activities. If the institutions seek extension to other grades and/or trades, training to un-experienced facilitators would be indispensable.

(Others)

One of the challenges for the technical aspect is to secure trainers who can train facilitators on the CBT approach. It is required to develop a system to supply trainers in a stable manner to correspond to requests from TVET institutions.

(5) Social aspect

As the industries which received trainees from the pilot institutions for workplace experience were pleased with trainees and their technical skills, the receptivity of industries on the CBT approach is evaluated high.

In order to continue workplace experience after the project, an effective system needs to be established to promote matching trainees with industries through the use of trade associations, etc towards mutual benefits.

3-4. Conclusions

The Project showed the significant progress particularly after the mid-term review was conducted, then it is concluded that the project purpose and outputs will be achieved at almost satisfied levels.

The organizational capacity of COTVET has developed for the past one year in particular, although the pace is still in gradual manner along with reinforcing the number of staff. In addition to the COTVET secretariat, the standing committees are already functioning, and have determined the necessary procedures for the CBT approach with a series of necessary documentation. Several issues including coordination with other stakeholders and legal approval remain, but the institutionalization in general is evaluated to have progressed well.

On the other hand, challenges remain in sustainability. A gap is still observed between the workload of COVTET and the number of staff at this moment, which would affect the sustainability of COTVET from an organizational viewpoint. In addition, financial

sustainability is also a serious challenge in order to disseminate CBT approach nationwide because the approach requires more budget than the traditional. The utilization of internal and external fund is a possible device to extend CBT approach, but it is difficult to ensure sustainability as long as the necessary budget has to rely on special funding sources.

3-5. Recommendations

(1) Access to funds for TVET institutions

The Skills Development Fund, SDF, can be one of the solutions for financial constraints that many of TVET institutions face, but the current framework of the SDF focuses more on private sector development than training students in TVET institutions. It is necessary to develop a mechanism for TVET institutions to access to the fund for the CBT program.

(2) Staff allocation of COTVET

The number of COTVET staff is not enough to accelerate the TVET reform. Therefore, the Ministry of Education and other related organizations should make necessary arrangements to realize the recruitment plan of COTVET without delay.

(3) Institutionalization of CBT

To maximize the utilization of the products made by the Project for the CBT approach, it is necessary to accelerate the legal approval for these in order to promote TVET delivery. In addition, building consensus with other stakeholders is also indispensable to make these products on institutionalized system/processes function smoothly.

(4) Harmonization of CBT

The Ghanaian side should continuously follow the harmonized CBT, whose mechanism has been agreed among stakeholders through the CBT Harmonization Report.

(5) Workplace Experience

It is needed to strengthen the mechanism for workplace experience with industries such as strong partnership with trade associations. Mutual benefits for both TVET institutions and industries should be concerned in developing the mechanism.

(6) CBT Training Package Development

- **Flowchart for Development**

It is necessary to develop flowcharts showing the progress and the procedures for the CBT system. It will be a useful guideline to organize the CBT for other training institutes, and to demonstrate the right direction to develop the system.

- **Developing system of the Training Package**

The system to develop training package including arrangements for honorarium for the technical teams should be considered by initiative of the COTVET beforehand, if new training packages are to be developed.

(7) Maintenance for Equipments

It is necessary to make maintenance plan for the equipment in order to ensure long running usage. In addition, the plan should include the aspect of running cost for the equipments.

3-6. Lessons Learned

(1) Local manpower as effective inputs

The Project successfully involved many local experts and staffs in the activities. The involvement significantly contributed to the Project's outputs as well as enhanced the technical sustainability from the macro-viewpoint.

In addition, if projects aim at formulating unique models to targeted countries, local manpower becomes a suitable input for the purpose of making their own models.

(2) Assurance of quality on detailed planning survey

The Project has faced many inhibition factors for smooth implementation during the Project period. Although many of these were unpredictable, some were partly caused by insufficient and/or improper project's design at the detailed planning stage. In order to avoid inefficiency in project's activities, the quality of detailed planning survey has to be fully secured.