1. Outline of the Project

Country: United Republic of Tanzania
Project title: The Project for Capacity Strengthening on Labour-Based Technology Training at ATTI

Issue/Sector: Road Sector
Cooperation scheme: Technical Cooperation Project

Division in charge: JICA Tanzania Office
Total cost: Approximately 409 million yen

Period of Cooperation
May 2006-February 2011
R/D signed on March 1, 2006
Amendment of R/D signed on January 14, 2010

Partner Country’s Implementing Organization:
Appropriate Technology Training Institute

Supporting Organization in Japan:

Related Cooperation:

I. Background of the Project

It is reported that there exists in Tanzania, a road network of 91,049 km, of which no more than 6,662 km (7.3%) are paved. Further, it is also said that 58,037 km of the road network is under local government. Condition of only 10% of the roads under the direct management of local government authorities is good/fair. Within this situation, in local roads that do not enjoy a required maintenance control due principally to a substantial lack of financial resources, it is well pointed out that the only rescue measure is the availability of a continuous road development and control service based on “Labor Based Technology” (LBT) programs.

Since MoID announced the principal application of LBT in 1996, international development partners such as World Bank, NORAD and DANIDA have applied LBT in their projects and realized its suitability. However, the LBT knowledge gained through the project was not collected for use as a common technology; LBT was not widely adopted in Tanzania and ended when a project was over.

Under such circumstances, MoID has decided to apply the following policy to make the use of LBT.

1. Preparation of Basic Policy of LBT
2. Establishment of information center of LBT
3. Establishment of core center of LBT training organization

In this background, the Government of Tanzania has requested the Government of Japan to support ATTI to enhance the ability to carry out trainings, and JICA commenced Technical Cooperation Project for Capacity Strengthening on Labor Based Technology (LBT) Training at ATTI, based on the Record of Discussions, signed on 1st March, 2006.

Through its cooperation, JICA has been provided technical support to ATTI. From 29th September to 13th October, 2009, JICA dispatched a Terminal Evaluation Team to Tanzania and jointly evaluated the Project with the Tanzanian Team. In the Joint Evaluation Report, one (1) year extension of the Project duration was recommended and presented on the occasion of Joint Coordination Committee (JCC) meeting. The necessity of one (1) year extension of the Project period was confirmed in the JCC meeting, and the project period was extended to 28th February, 2011 on the Amendment Record of Discussions, signed on 14th January, 2010.
### 2 Project Overview

1. **The Project Purpose:** ATTI has an appropriate capacity for training provision and overall coordination as a national training institute for LBT in Tanzania.

2. **The Overall Goal:** LBT trainees (e.g., LGA, Contractors, Consultants, TANROADS, Community Groups, etc) are able to plan, design and implement infrastructure works using LBT.

3. **The Outputs**
   1. **Output 1:** The function of executing qualified LBT training is ready at ATTI and the practical training implements regularly.
   2. **Output 2:** ATTI takes a leading role to promote LBT awareness and become a focal point of related partners in Tanzania.

4. **Inputs:**
   1. **Tanzanian Side:**
      - Project staff: Management staff: 2 persons
      - Technical staff: 10 persons
      - Local cost: n/a
   2. **Japanese side:**
      - Experts: 8 persons in total
      - Equipment: ¥ 54.9 million
      - Project staff trained in Japan: 6 persons in total
      - Local Cost: ¥ 60.7 million (as of 22nd July 2010)

### II. Evaluation Team

- **Members of Team Leader:** Masahiko SUZUKI, Senior Advisor, JICA
- **Cooperation Planning:** Shin MARUO, Representative, JICA Tanzania Office
- **Evaluation Analysis:** Yasuyo HIROUCHI, International Development Associates Ltd.

- **Period of Evaluation:** 11/8 / 2010 - 3/ 9 / 2010
- **Type of Evaluation:** Terminal Evaluation

### III. Results of Evaluation

#### 1 Accomplishment of the Project

1-1 Accomplishment of the Project Purpose

<table>
<thead>
<tr>
<th>Achievement level of the Indicators</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Already achieved:</strong></td>
<td>The number of courses and participants trained by ATTI was increased from 2 courses (24 participants) in TFY 2005/06 to 3 courses (143 participants) in TFY 2009/10. The Evaluation Team notes that the increase is attributable to increase of demand-driven tailored training courses, including a large-scale PMO-RALG training for the local governments and private contractors in TFY 2008/09 and 2009/10: Regular Training Courses of ATTI, developed by the Project, have not been conducted as planned and their enrollment has decreased.</td>
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<tr>
<td><strong>Already achieved:</strong></td>
<td>The number of the visitors to the Principal’s Office of ATTI increased from 87 people in 2006 to 162 people in 2009. As for 2010, the number has already amounted to 110.</td>
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<td><strong>The relevant data is not available.</strong></td>
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2. Summary of Evaluation

2-1 Relevance
The Overall Goal and the Project Purpose are still relevant with the needs of Tanzania and Target Groups (i.e. ATTI, trainees from LGAs, contractors, community leaders, etc.) They are still consistent with the national development plan of Tanzania as well as Official Development Assistance (ODA) policies of Japan. Japanese technical advantage has been confirmed. Overall, the Project is considered to be highly relevant.

2-2 Effectiveness
Judging from the degree of achievement of the Indicators, the Project Purpose has been mostly achieved. It is not likely to be fully achieved by the end of the Project because of overall delay of achievement of Output 1 (i.e. Training Component) caused by insufficient achievement regarding Regular Training Courses of ATTI as well as establishment of Monitoring & Evaluation system. On the other hand, steady progress has been made on the achievement of Output 2 (i.e. Promotion Component), which is expected to be achieved by the end of the Project. Both Output 1 and Output 2 are confirmed to have contributed to the achievement of the Project Purpose. Taken together, the Project is considered to be mostly effective.

2-3 Efficiency
In general, the Inputs from both sides have been appropriate in producing the Outputs in terms of timing, quality and quantity. Overall, the Inputs are considered to have contributed to production of the Outputs except for those related to Monitoring & Evaluation due to insufficient information sharing among the personnel concerned. This has led to insufficient production of the Output 1 as mentioned in 3.2.2. Overall, the Project is considered to be mostly efficient.

2-4 Impacts
Impacts at the Overall Goal level: It is likely that LBT trainees, including LGAs, contractors, community groups, etc. would be able to plan, design and implement infrastructure works using LBT in three years after completion of the Project on condition that the budget for roadworks using LBT is available at the concerned LGAs and that LBT equipment is made available for the
contractors.

Other impacts: Various positive impacts have been observed already. For example, ATTI has obtained training contracts with PMO-RALG and ILO. More than 400 LGA officials, contractors, and community leaders have been trained in the training courses developed by the Project. A General Agreement of Cooperation has been signed among ATTI, Mt Elgon Labor –based Training Centre in Uganda, and Kissi Training Center in Kenya. Negative impacts have not been observed. They are not foreseen, either.

2-5 Sustainability
Institutional and organizational aspects: Policy support for LBT promotion is likely to continue though explicit message from policy level as well as clear-cut instructions from the relevant authorities is needed for further promotion. The Strategic Plan of ATTI has been developed through the Project, which would be updated by the Project end. All of the Tanzanian project staff members are permanent employees of ATTI, whose employment for the post-project period is ensured. They are expected to be assigned to the relevant posts so that they could utilize the techniques/experiences obtained through the Project continuously. The coordination with the relevant organizations, which has been developed through the Project, is likely to develop further.

Financial aspects: So far, the Government of Tanzania has allocated necessary budget for the activities of ATTI.

Technical aspects: Technical capacity of the Tanzanian project staff has been enhanced sufficiently. The skills and knowledge transferred through the Project as well as the deliverables are relevant with the local needs and levels. In particular, those related to training on gravel road have been utilized fully and have been disseminated widely. For the others, in order to ensure utilization and dissemination for the post-project period, the strategy for training implementation is needed. The equipment provided by the Project would be fully utilized after the end of the Project if the problems regarding some equipment are rectified.

From a comprehensive viewpoint, sustainability of the Project would be mostly ensured.

3 Factors that promoted realization of effects
3-1 Factors concerning to Planning
Nothing special

3-2 Factors concerning to Implementation
In general, communication within the Project is sufficient for smooth implementation. Cooperative relations between Tanzanian and Japanese sides have been built up. The Project has been implemented in coordination/cooperation with various organizations, including MoID, PMO-RALG, some of the District Governments, Constructor’s Registration Board, and National Contractors Council. Initiative and commitment of the Principal of ATTI, motivation and diligence of the Project Personnel as well as cooperation of the Japan Overseas Cooperation Volunteers assigned to ATTI have been identified as the factors that have facilitated the implementation process.
4 Factors that impeded realization of effects

4-1 Factors concerning to Planning

The initial and current PDM has some shortfalls. Description of some of the PDM components is vague. Most of the Objectively Verifiable Indicators are not objectively verifiable. In many cases, criteria to assess the achievement level are not clear. Definition of some Indicators is insufficient. These shortfalls have made it difficult for all those concerned to have clear and common understanding of the expected and actual achievement level of the Outputs and the Project Purpose.

4-2 Factors concerning to Implementation

A Plan of Operations (PO), which specifies information necessary for planning and monitoring of the Project, such as “expected result(s)”, “schedule”, “person in charge”, “implementers”, “major inputs” etc. for each Activity or Sub-Activity of the PDM, as well as an annual PO (APO), has not been developed. The achievement of the Indicators and the progress of the Activities of the PDM have not been monitored, either. It is noted that the activities have been implemented based on the Work Plan of the Japanese Experts Team as well as the Strategic Plan of ATTI and have been reported periodically, but these plans do not necessarily coincide with the PDM. These shortfalls have made it difficult for all those concerned to have clear and common understanding of the overall implementation process and progress of the Project based on the PDM. (For reference, the Project is developing a PO/ APO for the Extended Period. The PO/APO is expected to be finalized through a series of discussion among all those concerned).

5 Conclusion

Through the close communication between ATTI staff and Japanese experts, and through confirmation on annual Project progress and discussion on annual Project planning among ATTI staff, Japanese experts and JICA, the Project was effectively and efficiently implemented for the accomplishment of the Project purpose.

It should be pointed out that the implementation of many demand-driven tailored training courses, which had not been expected at the initial stage of the Project, positively gave a profound impact on strengthening capacity of ATTI training implementation. Through conducting tailor-made training courses entrusted by PMO-RALG, more than 270 engineers/technicians of LGAs and contractors from 5 regions have been trained, and staff from LGAs and contractors from more regions are expected to be trained in a few years time.

For the sustainability of the Project, some more efforts by both Tanzanian and Japanese sides are requested as shown in the clause of “Recommendations” below by the end of the Project period. Further, for the achievement of the Overall Goal and the Super Goal, commitment at policy level, monitoring and guidance from central government, as well as much more practical capacity development at the ground are indispensable.

As is mentioned above, more than 270 staff in LGAs and contractors have been trained and are expected to be trained through participation to ATTI training. According to the information provided through PMO-RALG, the guideline for local road development planning which incorporates
use of local resources and emphasizing LBT utilization is to be distributed to each LGA through Regional Administrative Secretary.

It is expected that through continuous effort on awareness raising of decision makers, these positive progress on LBT promotion would contribute to the LBT application for local road maintenance and rehabilitation.

In this Project, as a Plan of Operation (PO) has not been prepared before the commencement of and throughout the Project period, it is difficult to confirm the appropriateness of the timing of inputs based on the original Project implementation plan. Besides, due to some illogicality and inappropriateness of Project Design Matrix (PDM), there were some difficulties on measuring the Project accomplishment level objectively. In this sense, it could be said that there were some difficulties on the management of this Project.

6 Recommendations

6-1 By the end of the Project

The following recommendations were presented by Joint Evaluation Team to ATTI and the Project experts. Each recommendation is presented on the occasion of JCC and all the members understood and agreed. Besides, as a results of the detailed explanation by the Team, the items recommended by the Team would be reflected to the Project activities for the remaining period.

(1) Regular training courses to be core courses
From the view point of sustainability on training implementation of ATTI, it is recommended to make a strategic plan of training course implementation, in which more emphasis should be put on regular training courses rather than request basis training courses. In the remaining Project period, it is recommended to review the Strategic Plan of ATTI to insert mid-term plan on regular training course implementation based on the expected demand from LGAs, contractors and other concerned parties. Further, it is recommended to make schedule of regular course implementation and advertisement considering timing of budget disbursement from central government to LGAs.

(2) Monitoring and evaluation
For continuous improvement of training courses, monitoring and evaluation (M&E) of trainings and feedback for the training curriculum and materials are indispensable. In this sense, proper implementation of M&E for each training course is necessary. Information on training demand, which is expected to be collected through post-training monitoring, is considerably important for planning of annual and mid-term training implementation. In the remaining Project period, it is recommended to prepare simple monitoring sheet and to implement on-going training monitoring by using the prepared sheet.

(3) Promotion and awareness
For the effective promotion and awareness, collaboration between promotion unit and training unit in ATTI is very important. In the remaining Project period, it is recommended to have opportunity to hold meeting(s) on planning of promotion and awareness activities considering the training implementation plan.
(4) Training for trainers (TOT)
For keeping the quality of ATTI training, continuous effort for training of trainers is important. Dissemination seminar within ATTI, on-the-job training and sending of trainers to TOT courses are important.
In the remaining Project period, it is recommended to review Strategic Plan to incorporate in it plans on in-house training and to conduct those on trial.

(5) Function of technical support
As a training institute for LBT, ATTI is requested to provide technical support service on LBT works.
In the remaining Project period, it is recommended to appoint ATTI staff in charge of technical support service, to prepare manual on technical support and inform the ex-trainees and on-going training participants on the service.

(6) Effective use of equipment provided through the Project
Some pieces of equipment are not used because of the deficit of attachment and lack of parts. For full utilization of the provided equipment for the training in ATTI, these deficits and their shortcomings should be rectified in the remaining Project period.
It is further strongly recommended to procure attachment for towed-graders and parts for asphalt cutters.

(7) Finalization of Annual Plan of Operation (APO)
Contents of tentative Annual Plan of Operation (APO) were discussed and confirmed on the occasion of JCC meeting. It is recommended to finalize the APO by the end of September, 2010 after mutual consultation among concerned personnel in the Project. It is further recommended that the APO be fully utilized for the Project management in the remaining period.

6-2 After the end of the Project
The following recommendations were presented by the Joint Evaluation Team in JCC meeting for the sustainable utilization of the Project outputs. All the members in JCC understood and agreed to the recommendations.

(1) Policy support on LBT promotion
For the promotion of LBT application in local road works, clearer commitment from policy level and tangible/concrete instruction from certain governmental organization is recommended. Besides, LBT promotion shouldn’t be done only through ATTI, but also through other governmental organizations, contractors/consultant associations and so on.

(2) Monitoring of LGTP
On LGTP document, some issues and program implementation procedures related to LBT works are mentioned. For full utilization of the program document, monitoring and reviewing of the LGTP is important. It is expected that the guideline for local road
development planning, which has already been prepared by PMO-RALG and to be distributed to LGAs, will be utilized for drawing up of Council Transport Infrastructure Master Plan, 3 year Maintenance and Development Program and other planning related to road maintenance/rehabilitation.

(3) Capacity strengthening of Regional Administrative Secretary (RAS) Engineers
For the promotion of LBT at grounds, policy enforcement is important. In this sense, it is recommended to strengthen the capacity of Regional Administrative Secretariats (RAS) engineers on policy enforcement and monitoring of projects conducted in LGAs. Besides, it is expected that RAS engineers play important role for dissemination of experience and knowledge on LBT works at ground to LGAs within the Region.

(4) Capacity strengthening of LGAs and local contractors
Though capacity of some engineers/technicians of LGAs on planning/supervising of LBT works and that of some contractors on LBT works are strengthened through participating in trainings by ATTI, the capacity at the ground is still not enough. In this regard, continuous support for LGAs and contractors on LBT road works is recommended.

(5) Light equipment for LBT road works
For securing provision of light equipment for LBT works, it is recommended to consider measures on the provision of equipment, i.e. establishment of equipment lease system, soft-loan provision, encouragement of private equipment leasing firms and so forth.

(6) Collaboration with other institutions related to LBT
Collaboration with LBT related institutions, such as University of Dar es Salaam, Dar es Salaam Institute of Technology (DIT) and National Construction Council (NCC), etc. are required to be continued and enhanced. Such collaboration is important not only for the promotion of LBT, but also for raising human resources on LBT works, such as district engineers/technicians, LBT contractors, LBT consultants, trainers for LBT and so on.

7 Lessons learned
(1) Importance of common understanding of Project Design
As is addressed in the clause of “Conclusion”, lacking of Plan of Operation, which is a necessary document for project management, caused uncoordinated flow of some activities and miscommunications among Project related personnel. At the initial stage of a project implementation, it is important to share the whole view of the project implementation plan among concerned personnel for the development of common understanding.

Further, for the effective project management, Project Design Matrix (PDM) together with PO should be utilized for the confirmation of annual progress and achievement of a project, planning of annual project implementation and making annual Plan of Operation (APO).

(2) Close communication among concerned personnel in a project
For the effective utilization of input for a project, close communication among concerned personnel is considerably important. Project activities should not be too much concentrated on documents production, such as manuals, materials and so forth, but on the process of producing deliverables and their practical application at the ground through close communication each other.

(3) Importance of M&E in a project for training capacity enhancement
For dissemination of knowledge and skills in certain field, an approach to enhance the training implementation capacity is effective. In a project, for strengthening of training implementation, M&E system should be incorporated in project activities. Without M&E activities, training could not be updated, upgraded and sustained.

(4) Collaboration between Technical Assistance and Financial Cooperation
In this Project, by utilizing both the enhanced capacity on training implementation in ATTI and the fund from LGTP, the outputs of the Project was widely spread. Collaboration between technical assistance and financial cooperation could make projects much efficient and effective. In this sense, it is important at the stage of project designing to confirm availability of concerned funding project/program to be collaborated and consider the concrete way of making collaboration from the initial stage.

7 Follow-up situation
The Evaluation Team had discussions on the necessity of continuous support for local road development. Considering the request made by the Government of Tanzania, discussions should be continued among concerned parties on the necessity and contents of further support.