I. Outline of the Project

<table>
<thead>
<tr>
<th>Country</th>
<th>Project title: The Project for “Capacity Strengthening on Labour-Based Technology (LBT) at ATTI”</th>
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<tbody>
<tr>
<td>Issue/Sector</td>
<td>Cooperation scheme : Technical Cooperation Project</td>
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<tr>
<td>Division in charge</td>
<td>Total cost : Approximately 290 million yen</td>
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<tr>
<td>Period of Cooperation</td>
<td>Partner Country’s Implementing Organization : Appropriate Technology Training Institute (ATTI)</td>
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<td>(R/D): March 1, 2006</td>
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<td>(Extension):</td>
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<td>(F/U) :</td>
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<tr>
<td>(E/N) (Grant Aid)</td>
<td>Supporting Organization in Japan :</td>
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Related Cooperation:

1 Background of the Project

It is reported that there exists in Tanzania, a road network of 86,472 km, of which no more than 6,501.8 km (7.5%) are paved. Further, it is also said that out of the 56,625 km of the road network is under local government; roads under the direct management of local government authority, the traffic situation is only positive in a zone covering just 10% of the previous figure. Within this situation, in local road 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 measures is the availability of a continuous road development and control service based on “Labor Based Technology” (LBT) programs.

In order to manage actually as a national training center the Appropriate Technology Training Institute (ATTI), a training institution under the legal umbrella of Tanzanian Ministry of Infrastructure Development (MOID), this project deals with issues such as the strengthening of organizations and personnel, as well as the reinforcement of training planning set up ability, and training practical capability, among other capacity development initiatives. For the diffusion of LBT initiatives in the region, available natural resources and work force are applied as required capacity to the upgrading and maintenance of public facilities. The target is thus to meet ATTI requirements.

Since MOID announced the principal application of LBT in 1996, international development partners such as World Bank, NORAD, 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, regarding (3) above, 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.
Project Overview

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

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

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

4. **Inputs**
   **Japanese side**:
   - **Long-term Expert**: 0 experts
   - **Short-term Expert**: 5 experts
   - **Trainees received**: 4 trainees
   - **Equipment**: US$396,787 + Tsh.159,631,396 + Euro€31,030
   - **Local cost**: 46,434,000 Yen

   **Tanzanian Side**:
   - **Counterpart**: 11 officials

   **Total Cost**: 290 million yen

**II. Evaluation Team**

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<tr>
<td>Period of Evaluation</td>
<td>From September 27, 2009 to October 15, 2009</td>
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III. Results of Evaluation

1 Summary of Evaluation Results

(1) Relevance

The Project is mostly relevant from the following perspectives.

Constructing and maintaining road networks has been prioritized in national development plans of Tanzania including National Strategy for Growth and Reduction of Poverty (NSGRP) and the Tanzania Development Vision 2025. In particular, the Tanzanian Government has promoted the use of LBT, which has been emphasized in Taking the Use of LBT to Scale (TULS), a policy document of the Ministry of Infrastructure Development and the Local Government Transportation Programme (LGTP) of Prime Minister’s Office, Regional Administration and Local Government (PMO-RALG).

Target group’s interests in LBT have been developing since the beginning of the Project. In particular, local governments including district governments have got more interested in the use of LBT than ever, as shown in a large-scale LBT training for local government authorities.

Building and maintaining road networks have been considered important in Japanese’s Foreign Ministry’s Country Assistance Plan for Tanzania.

The Team needs to point out that the Japanese technology of building and maintaining road network is less relevant to LBT, since LBT has not been used in Japan for many years. However, the Team finds that the Japanese technical supports such as skills of planning, preparing, organizing and managing training or road construction works still can contribute to the promotion of the use of LBT in some ways or other.

(2) Effectiveness

The Project is considered sufficiently effective but it could be more effective if certain measures are to be taken. This is because the Project Purpose has been only partially fulfilled until now, although outputs have been mostly accomplished. Output 1 has been mostly accomplished until now because six target indicators for Output 1 have been fulfilled until now although only one indicator for Output 1 has been yet to be achieved. Output 2 also has been mostly accomplished until now because all the four target indicators for Output 2 either have been fulfilled until now or have been progressing well.

The Project is not likely to fully achieve its Project Purpose by the end of the project period, although its outputs have been mostly fulfilled until now. This is partly because the monitoring and evaluation (M&E) system has not been operationalized, and partly because some important activities for accomplishing the Project Purpose and indicators for the Project Purpose have been missing.

(3) Efficiency

The Project has been sufficiently efficient because of the following reasons:

Equipment, which was provided by JICA, is basically appropriate in terms of quantity and quality. The equipment generally has enhanced the capacity of ATTI. Also, the Tanzanian side mentioned that it would be helpful if the Japanese side could speed up the process of procuring equipment.

Counterpart personnel assigned by the Tanzanian side have been appropriate. They are very cooperative, motivated, and hardworking. The Team notably finds that cooperative relations between the Tanzanian and Japanese sides are a key for implementing Project Activities smoothly and generating outputs effectively. Also, the Team notes that high motivation of ATTI staff has contributed to completing many of Activities in the Project.

Counterpart personnel training in Japan is considered helpful and important by the Tanzanian side, because it gives a strong incentive and motivation for ATTI staffs to implement the Project Activities and generate the Project outputs in particular. However, the Team points out that other measures such as third country training in neighboring countries than a counterpart personnel training in Japan might be better, when considering and comparing the cost and effect of the two assistance measures. Also, some counterpart personnel training courses in Japan were not relevant to the work of participants from ATTI.

The Team appreciates ATTI’s financial contribution to a roll out seminar, because it shows the high level of ATTI’s ownership. Also, the Team notes that JICA’s technical cooperation project
approach is especially valuable because other donors tend to concentrate on financial assistance to the road sector.

4) Impact

The impact of the Project remains yet to be seen in the future although it has generated a positive unintended consequence. The progress of the Overall Goal remains yet to be seen despite the fact that there are some positive signs of good progress on the indicator 1 of the Overall Goal, since evidence on the progress are still sporadic and also the Team has not been able to acquire the data on the indicator 2. The Team would like to emphasize the importance of implementing the monitoring and evaluation system in this context since the Project has not been able to pick up data on indicators of the Overall Goal, though this mission some cases, in which ATTI graduates has made differences by using LBT.

The Team discovers that the Project has generated a positive unintended consequence, because the ATTI's agreement with PMO-RALG on holding a large-scale training for local government engineers was a positive surprise to ATTI. The Team has not found any unintended negative consequence of the Project until now.

5) Sustainability

Effects of the Project are expected to be sustainable in institutional, technical and financial terms, while the policy sustainability of the Project’s effects is unknown. Equally importantly, more road construction and/or maintenance projects using LBT should be implemented and contracted out in the near future so that demands for LBT and training at ATTI could increase.

The policy sustainability of the Project’s effects are yet to be known because it has not been explicitly stated yet whether or not the Tanzanian government will continue committing itself strongly to LBT after the TULS completes in 2010 and LGTP ends in 2011. Effects of the Project are likely to be sustainable institutionally, because ATTI’s human resources and organizational capacity has sufficiently improved until now. The number of ATTI trainers, for instance, increased from 6 at the beginning of the Project to 14 now. Also, Promotion and Information Section and Equipment and Procurement Management Units were established during the project period. This existing level of the institutional capacity of ATTI is sufficient to sustain results of the Project.

ATTI trainer has sufficient technical capacity to continue and improve training at ATTI, because they have acquired new knowledge and skills through three TOTs on teaching methodology, contract management and bituminous surfacing.

ATTI’s total budget has been steadily increasing since the inception of the Project until now while the recurrent budget of ATTI has been steadily diminishing. Therefore, the Team concludes that effects of the Project are expected to be sustainable in terms of ATTI’s total budget.

The Team realizes that it is crucial to stimulate demands for LBT and training at ATTI in order for effects of the Project to be sustainable. Consequently, it is extremely important that more road construction and/or maintenance projects using LBT should be implemented and contracted out in the near future so that demands for LBT and training at ATTI could increase.

2. Factors that promoted realization of effects

(1) Factors concerning to Planning

The Project adopts a technical cooperation approach with many assignments of short-term Japanese experts instead of dispatching several long-term Japanese experts. The Teams finds that this approach contributes to minimizing the cost of the Project and increasing the efficiency of the Project.

(2) Factors concerning to the Implementation Process

The Team also notes that cooperative relations between the Tanzanian and Japanese sides, the high level of ownership on the Tanzanian side has especially contributed to achieving outputs of the Project.
3. **Factors that impeded realization of effects**

(1) **Factors concerning to Planning**

The above-mentioned technical cooperation approach with many assignments of short-term Japanese experts sometimes caused the lack of communications between the Tanzanian and Japanese sides during the absence of the experts.

(2) **Factors concerning to the Implementation Process**

The Team did not observe any factor concerning to the Implementation Process, which potentially impeded realization of effects.

4. **Conclusion**

The Project is mostly relevant due to its consistency with the Tanzanian development policy and plan, the Japanese ODA policy and program, and needs of the target group such as local governments, although the advantage of Japanese technology on LBT itself would be less relevant to the Project. However, the Team finds that the Japanese technical supports such as skills of planning, preparing, organizing and managing training or road construction works still can contribute to the promotion of the use of LBT in some ways or other.

The Project is considered sufficiently effective but it could be more effective if certain measures are to be taken.

The Project is sufficiently efficient due to the appropriateness of equipment provision, the high level of motivation on the Tanzanian side, and the strength of JICA’s technical cooperation project approach. Yet, the Team suggests that other measures such as third country training in neighboring countries than a counterpart personnel training in Japan might be better, when considering and comparing the cost and effect of the two assistance measures. Also, note that procuring JICA equipment took unnecessarily long in the Project.

The impact of the Project remains yet to be seen in the future although it has generated a positively surprising result of holding a large-scale LBT training for local government engineers.

Effects of the Project are expected to be sustainable in institutional, technical and financial terms, while the policy sustainability of the Project’s effects is unknown. Also, more road construction and/or maintenance projects using LBT should be implemented and contracted out in the near future so that demands for LBT and training at ATTI could increase.
5. Recommendations

(1) Strengthening of Monitoring and Evaluation

- Through the implementation of the Project, the capacity for LBT training implementation of ATTI has rapidly progressed. On the other hand, monitoring and evaluation system in ATTI has still not practically functioned yet. For making ATTI a self-reliance and sustainable institute for training, continuous updating of training curriculum, syllabus and training materials is indispensable. In this regards, strengthen of implementation capacity of monitoring and evaluation (M&E) system in ATTI is important for making feedback system works well.

- For making ATTI to have appropriate capacity for “overall coordination as a national training institute for LBT in Tanzania” as is addressed on the Project Purpose, certain interface between training in ATTI and actual LBT road construction works in each region should be prepared in ATTI.

(2) Revision of Project Design Matrix (PDM)

For making the above mentioned recommendations to be clearly address in the project framework, revision of the Project Design Matrix (PDM) is recommended. Draft revised PDM will be presented on the occasion of JCC for the authorization by the concerned parties. Proposed changes on PDM are specifically indicated as follows;

1) Indicators for the Project Purpose
   - The following two indicators for the Project Purpose should be added:
     - Implementation of M&E analysis on trainees’ performances both during training courses and in the post-training
     - Developed function for provision of technical support on LBT

2) Activities
   - The following activities should be amended or added
     - To develop an M&E system, which includes feedback from actual field of LBT road construction works, and made the system well functioned for updating the training programme.
     - To develop a function in M&E system to provide technical support to the stakeholders of LBT for the practical utilization of the knowledge and skills acquired in the training in ATTI.

(3) Extension of Project Period

For fulfillment of the recommendations addressed above (1), 1 year extension of the project period is recommended. It’s not considered to be realistic to expect the completion of the existing and additional activities in the revised PDM by March 2010, the original expiration period of the Project.

(4) Strengthen of Capacity for LBT road works in the field of each region

For fully utilizing the fruits from training in ATTI, practical capacity of the LBT road construction works should be strengthening in each region, especially, for road engineers and technicians in each local government, and local LBT contractor. In this regards, further effort of concerned ministries and local governments are indispensable.

(5) Political Commitment on LBT

For the promotion of LBT, the Government of Tanzania established a program namely “Taking the Use of LBT to Scale (TULS)” in 2004 and this was contributed to promote LBT road works in Tanzania. After the expiration of TULS program in 2010, establishment of further program is indispensable for clearly declaring the Government policy on LBT promotion. Political commitment of LBT is expected to encourage key stakeholders, such as local governments, LBT contractors and so forth, and contribute to the expansion of LBT road works in all over in Tanzania.
6. Lessons Learned

(1) Administrative matters

The Team finds that a technical cooperation project with many short-term assignments of Japanese experts can be improved in general. As mentioned above, assigning Japanese experts to specific tasks for specific short periods contributes to minimizing the cost of the Project, while assigning experts to specific tasks for short periods sometimes poses difficulties such as lack of communications during their absence and Japanese experts' occasional but excessive concentration on paper works at the expense of close direct contacts with their counterparts. Measures, such as periodical communication from Japanese experts for following-up to counterparts during the absence of experts, can be taken. Also, flexibility can be given to changes in assignments of Japanese experts, which are usually predetermined.

(2) Technical matters

The Team finds that JICA's technical cooperation is valuable given the fact that other donors tend to concentrate on financial assistance to the road sector. Technical cooperation is particularly effective for capacity building of a counterpart by working together in a face-to-face and shoulder-to-shoulder manner with careful and close attention to needs of counterparts.