1. BACKGROUND AND INTRODUCTION

1.1 Background

The Uganda Government through the Ministry of Local Government (MOLG) and the financial support of the African Development Bank (ADB) has embarked on the Rural Feeder Roads Maintenance Project (RFRMP) since its inception in the 1994/95 financial year. The project is being implemented in 24 districts of the country at an estimated cost of US$ 24 million. The aims and objectives of the project are:

a.) To preserve the standard of rehabilitated rural feeder roads and improve access on priority roads in the Eastern and Western Regions of Uganda in which the 24 target districts are located,

b.) To develop a sustainable capacity in the Ministry of Local Government and the district administration to manage rural feeder roads maintenance.

The programme is scheduled to run for a period of 5 years between 1994/95 to 1998/99 financial year.

In terms of strategy and outputs, the following are the anticipated end results:

1.) Maintenance of the feeder roads using petty contractor system,

2.) Rehabilitation of the feeder roads using petty contractors,

3.) Re-grading of district roads using the motorised grader,

4.) Spot improvement of the above roads including the un-blocking of culverts, minor repair work on structures, etc.

1.2 ILO Mission

The ILO undertook a mission in January 1997 to monitor the progress of the Feeder Roads Component of the Uganda Transport Rehabilitation Project (UTRP) on behalf of the Nordic Development Fund (NDF). However, the opportunity was also taken to introduce other ministries and interested parties to the contractor training and labour-based techniques being developed by the project.

This was accomplished by holding a labour-based contracting workshop at the project's training centre in Mt. Elgon Technical College, Mbale on the 15th and 16th January 1997. Participants included project officials from MOLG, MOWTC and representatives from DANIDA, KIW, ADB, Irish Aid, ODA, BADEA and Finnida.

Following up from this workshop and subsequent discussions, the ADB MOLG project requested the ILO to make a follow-up visit to their project to discuss the possibility for adjusting some of their current maintenance and training procedures towards a more labour-based approach, and consequently also to explore the possibility of linking the above training changes to bring them in harmony with the Feeder Roads Component of the IDA programme for the 4 districts of Mbale, Kapchorwa, Tororo and Palisa as a first step towards developing a common approach to labour-based training in Uganda.

On the basis of the above request the ILO mission arrived in Uganda to review the current project situation and to formulate a potential strategy in March 1997. This mission is coming in the middle of the project period and is thus supplementary to the already ongoing training programme in the project.

This report outlines a potential principle strategy to effectively introduce labour-based maintenance into the ongoing project.
1.3 Introduction

The ADB RFRMP prepared a "Training Needs Assessment Report" in early 1996. This report included an analysis of the staffing situation in the 24 districts; a training needs identification and consequently a training strategy with a programme.

This training programme intents to provide the identified training population with the necessary awareness, knowledge and skills which are required to effectively carry out road maintenance in the districts. This is planned to be achieved through formal training at acknowledged institutions for the higher cadres of staff, through a series of workshops and seminars for specific project issues and on-the-job training carried out by the team engineers of the project consultant for the lower staff cadres in the 24 districts as well as for the approximately 600 petty contractors for routine maintenance. The training for the contractors consists of an introduction to the contract documentation and a demonstration of maintenance work through a training session of 1 to 3 days, followed by on-the-job training.

1.4 Mission Proceedings

The mission was asked to investigate a potential strategy to introduce labour-based (l.b.) methods through a training programme (terms of reference see Annex I). As the mission took place in the middle of the ongoing project, the proposed labour-based training has to be slotted into the already established project and training framework. For this reason it was necessary to also review, to some extend, the current situation in the districts with regard to the overall project status and specifically the formulation and status of the training programme.

The ILO Consultant (Training Specialist A. Beusch) and the Project’s Training Co-ordinator (J. Clarke) jointly carried out this review. The two experts visited the following districts: Mbarara, Bushenyi, Hoima, Soroti and Kumi. In these districts discussions were held with project staff, district administrators and some local political leaders as well as petty contractors. A number of roads were visited in all districts to gain a first hand impression of the road network under maintenance. The Programme Co-ordinator joined the mission for the visit to Soroti and Kumi districts.

In Mbale the ILO Consultant B. G. Ariga (Head of the MOPWH Training Department, Kenya), joined the mission. A small workshop was organised at the UTRP Training Centre to discuss training related issues with 15 District Engineers, who attended a one-week l.b. Orientation course (list of participants see Annex II, results of workshop discussions see Annex III).

In conclusion to this discussions a working session was held to present the l.b. Training strategy and to discuss the forthcoming required activities to launch such a programme (see section 4). The session was attended by the Programme Director, Programme Co-ordinator and the Training Co-ordinator of the ADB RFRMP; UTRP Project Leader and UTRP Training Engineers; the Resident Instructor of the Kisii Training Centre (KTC); and the ILO Consultants.

After a brief review of the mission's objectives and a short analysis of the training status in the visited districts, the ILO consultants presented a proposed strategy for the introduction of labour based methods in selected districts. The following sections in this report cover a training proposal on the basis of the discussed training strategy and agreed "Next Steps".

2. GENERAL ANALYSIS OF PRESENT SITUATION

The visited districts differ considerably in terms of topography, soil and climatic conditions. With regard to road maintenance the differences are even more prominent. Some districts have dedicated administration staff realising the importance of roads and their importance as a catalyst for essential services and development programmes, while others appear not yet to have this degree of awareness. This results in very divergent priorities with respect to road maintenance. A common feature is the lack of funds for routine maintenance, which have to be made available by the districts. Some districts seem to be able to allocate already substantial amounts of money to maintenance (e.g. Bushenyi, Soroti), while other districts spend very limited funds (e.g. Mbarara, Hoima, Kumi). Consequently the progress of implementation of maintenance work is also very different. Some districts have managed to put under routine maintenance 50% to 60% of their road network while others have not even yet managed 10%. Concentration still seems to be on road improvement and "waiting for the graders to come", than ensuring routine maintenance and effectively utilising the resources available in the districts.
The question of introducing more l.b. Methods for road maintenance caused considerable confusion in most districts. The perception of what is meant by labour based road work methods is very different, vague and dominated by preconceived impressions and ideas, not only among administrators and political leaders, but also by project engineers including the consultant's staff.

So far the training programme has managed to train a number of staff by sending them to various national and international courses. Petty contractors have been given rudimentary introduction to routine maintenance and contract documents through the Area Office Staff (Consultant's Team Engineers) and to some extent the District Engineers. Workshops have been held with District Administrators to raise awareness and with Project Staff for the introduction of various project issues, e.g. the new road maintenance management system ROMAPS. However, the mission felt that this approach is not really suitable to address the very specific district related problems and to tackle the district work oriented processes.

3. TRAINING REQUIREMENTS FOR LABOUR BASED METHODS

The need to enhance local resource based roadwork methods is obvious. The cost, economic and technical effectiveness of labour based methods is established and acknowledged in many developing countries in a similar situation like Uganda and requires therefore no further explanation in this report. This has also been realised by the MOLG Management and the Ministry is therefore keen in introducing these methods effectively.

Such an introduction however, means a change in the current operations and management of maintenance works. To bring about changes to methods and habits which have been in place since many years is not a simple undertaking. At the same time any training input to assist in ensuring that these changes happen, should ideally supplement the ongoing training programme due to practical and organisational reasons rather then replacing it. The introduction of a new method needs to be done carefully by proving first it's viability and acceptance. Also the current financial resources are limited for a full-scale programme. It was therefore envisaged by the MOLG to start with a number of pilot schemes,

i.) To gain experience,
ii.) To demonstrate the method, and
iii.) To actually train maintenance personnel to be capable of carrying out effective labour based Road maintenance.

Training for effective labour based Maintenance cannot be carried out in isolation from the ongoing work process in the districts and needs therefore to be fully integrated. Such training can also not be detached from maintenance management procedures, work organisation and management by the district authorities.

Labour-based methods will be applied for both routine maintenance and periodic maintenance operations. Based on the above requirements the principal training needs for the main personnel can be summarised as follows:

**A.) District Maintenance Staff (Engineers, Supervisors, Inspectors)**

- To be capable of carrying out all overall programme planning, control and monitoring activities
- To ensure efficient management support
- To be capable of issuing and supervising labour-based routine maintenance contracts
- To be capable of issuing and supervising minor labour based periodic maintenance contracts

**B.) Petty Contractors;**

- To be capable of organising and carrying out labour based routine maintenance work
- To be capable of organising and carrying out minor labour based periodic maintenance work
- To be capable of establishing unit prices and to control costs
- To be capable of managing successfully contracts and the company’s business and to organise and control all required resources
4. PROPOSED TRAINING PROGRAMME

4.1 General Approach, Training Strategy and Management Requirements

It is the intention of the MOLG to start the introduction process of labour-based roadwork methods through a number of pilot schemes in selected districts. This training proposal suggests starting initially with 3 core districts. Adjacent districts will be invited to some of the training events and will be able to profit from the training exercise to some extent with the hope that there will be a replication effect. The area/district trainers who will be instructed in labour based and training skills are expected to continue the training process in the area after the mobile training team has left.

The proposed training strategy is based on the requirements described above and in section 3. The diagram on page 5 outlines the principle approach. Awareness creation training events \( \partial \) and \( \Sigma \) as well as the course \( \Pi \) for Area/District Trainers are meant to provide specific acknowledge and skills which need to be provided through specialised individual courses.

The main trust of the training is provided through integrated work team training. The training is linked to the direct implementation of routine maintenance and minor periodic maintenance work at district level. This means that training is not only meant to increase knowledge and skills but also to assist in the production process. The effectiveness of the training can therefore be measured by the degree of successful maintenance implementation, provided the necessary management requirements are met. These are:

- Pilot districts identified and selected
- Periodic maintenance sites identified
- Simplified contract documentation for minor periodic maintenance work established
- Unit rates for periodic maintenance established and authority to use fixed rates for trial contracts given
- Funding for periodic pilot sites secured and deposited in special district accounts
- Periodic maintenance site manager appointed
- Managerial and organisational support for pilot sites secured and made operational (from both the areas as well as from district level)
- Petty contractors for routine maintenance training selected
- Petty contractors for minor periodic maintenance selected
### PROPOSED TRAINING STRATEGY
(for 3 pilot districts)

<table>
<thead>
<tr>
<th>who?</th>
<th>what?</th>
<th>how?</th>
<th>approach</th>
<th>duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District Administrators</strong>&lt;br&gt;(CAO, DE, etc.)</td>
<td>- awareness i.b. road work methods&lt;br&gt;- district transport planning&lt;br&gt;- maintenance management&lt;br&gt;- costing principles&lt;br&gt;- maintenance funding</td>
<td>- work shop in Mbale with demonstration of i.b. methods and study tour to Kisii (Kenya)&lt;br&gt;- optional visit to Masai Mara&lt;br&gt;- work shop in Mbale with demonstration of i.b. methods</td>
<td>4 -5 days</td>
<td></td>
</tr>
<tr>
<td><strong>Political Leaders</strong></td>
<td></td>
<td></td>
<td>1 - 2 days</td>
<td></td>
</tr>
<tr>
<td><strong>District Supervisory Staff</strong>&lt;br&gt;(Engineers, Supervisors, Inspectors, Administrators, etc.)</td>
<td>- i.b. routine + periodic mainten.&lt;br&gt;- maintenance management&lt;br&gt;- contract management</td>
<td>- integrated and work process oriented training on district basis</td>
<td>9 weeks (incl. follow-up)</td>
<td></td>
</tr>
<tr>
<td><strong>Area / District Trainers</strong></td>
<td>- i.b. methods&lt;br&gt;- training skills&lt;br&gt;- i.b. routine + periodic mainten.&lt;br&gt;- maintenance management&lt;br&gt;- contract management</td>
<td>- tailor made course at Kisii (KTC) with attachment to mobile training team&lt;br&gt;- integrated and work process oriented training on district basis&lt;br&gt;- practical training skills</td>
<td>4 weeks&lt;br&gt;4 weeks (incl. follow-up)</td>
<td></td>
</tr>
<tr>
<td><strong>Contractors</strong>&lt;br&gt;(Petty Contractors, Small Scale Contractors)</td>
<td>- i.b. maintenance technology&lt;br&gt;- operational management&lt;br&gt;- contract management&lt;br&gt;- business management</td>
<td>- integrated and work process oriented training on district basis</td>
<td>9 weeks (incl. follow-up)</td>
<td></td>
</tr>
<tr>
<td><strong>Public</strong></td>
<td>- awareness creation&lt;br&gt;- public participation&lt;br&gt;- by-laws (roads)</td>
<td>- public relation activities</td>
<td>(integrated above)</td>
<td></td>
</tr>
</tbody>
</table>

specialised individual courses to gain specific knowledge / skills
integrated work process oriented training (work team training)

#### 4.2 Contracts

The contract document to be used for routine maintenance will be the already developed ROMAPS contract, which envisages using petty contractors for road sections of 10 to 20km.

For periodic maintenance it will be necessary to establish contract item packages which can be handled by petty contractors, e.g. labour-only activities to reshape the road formation and open the drainage system, spot improvement using labour and hauling equipment for gravel, etc.

The details of such likely packages need to be carefully identified during the preparation phase of the project.

#### 4.3 Phasing

The proposed strategy foresees an initial training and establishment phase for each district of 6 weeks. A follow-up phase of 3 weeks per district will take place after some 3 months of operation to assist in solving problems that may accrue and to provide further problem oriented training as required (also see the proposed programme in section 5).

#### 4.3 Training Delivery

The training delivery is proposed to be carried out as in the 3 selected districts and will include:

March 1997
**District Administrators:**
- workshop in Mbale = MOLG Trg. Coord, ILO, UTRP Centre
- Study tour in Kenya = Kisii Training School, including an optional visit to Masai Mara National Park (2 extra days)

**Political Leaders:**
- workshop in Mbale = MOLG Trg. Coord, ILO, UTRP Centre

**District Supervisors:**
- integrated work process training by Mobile Training Unit

**Area/District Trainers:**
- labour based and training skill package by KTC in Kisii
- Integrated work process training by Mobile Training Unit

**Contractors:**
- integrated work process training by Mobile Training Unit

**Public:**
- awareness creation by Mobile Training Unit

Although the target training population will mainly be the above-mentioned groups of people in the 3 core districts, other adjacent districts will also have the opportunity to participate to some extent in the training programme. The details and extent of such participation need to be worked out during the preparation phase.

The arrangement for the training delivery of the integrated training is shown in the diagram on page 7. It is suggested that the Senior Trainer for the Mobile Unit be procured from KTC, while the 2 Assistant Trainers would be seconded from the UTRP Training Centre Mbale. The Senior Trainer would closely work together with the Training Co-ordinator of the RFRMP and the ILO Training Specialist in the preparation of the training programme.

The ILO Training Specialist will take the lead role for the preparation and monitoring activities (see section 4.4 below).

### 4.4 Support

It is proposed that ILO ASIST will provide support to the above training through four interventions:

1.) **Preparation:**
- to assist in identifying the pilot project districts and in the preparation of the training programme, together with the Training Co-ordinator ADB RFRMP and KTC.

2.) **Launching**
- to assist in the setting-up of the training programme in the 1st district.

3.) **Backstopping**
- to follow-up and monitor the progress and to support the ongoing training programme where necessary.

4.) **Evaluation:**
- to carry out the final evaluation through visits to the districts and conduct an evaluation workshop. Assist in the preparation of the final training report.
The mobile training unit will consist of expert trainers in the field of L.B. maintenance and process oriented training. The unit will move from one selected district to the next to carry out initial training. A follow-up will be carried out later.

The selected training supervisors will be attached to the mobile unit after they have undergone the tailor made training package at KTC. They will be trained on-the-job by the expert trainers in their respective area/district and will remain there to carry out any further training and coaching after the mobile unit has left.

Potential Source for Training Experts
- Mt. Elgon Training Centre
- Kisii Training Centre, Kenya

Principal Resources
- 1 Senior Trainer (KTC)
- 2 Trainers (UTRP Mbale)
- Transport incl. Driver
- Training Aids
- Training Material
- 1-3 Supervisor Trainers (from the district staff)
- 1 pilot project manager for each pilot project (from the district staff)
- Administration Support
- Funds to run one pilot site
- Transport

External Support
ILO ASIST

Management and Support Services
Area Offices and selected District Staff

Co-ordination
MOLG ADB Training Coordinator
5. **PROPOSED PROGRAMME**

The programme consists of 3 main phases:

**PHASE I, PREPARATION**
- Identification of pilot districts including roads for training
- Identification of detailed training needs
- Assisting in establishing contractor selection criteria for minor roadwork contracts
- Assisting in establishing the required management capacity in the district to run the pilot sites
- Assisting in developing district work plans for the training programme
- Preparation of a detailed training programme
- Design of training courses
- Development of training management procedures
- Development of a training monitoring and evaluation system
- Preparation of training material
- Preparation of training aids

**PHASE II, IMPLEMENTATION**
- Workshop and study tour for administrators
- Workshop for political leaders
- Training of trainers
- Start-up of integrated training in districts
- Assisting the district management teams to establish labour based maintenance.
- On-the-job training of area/district trainers
- Work process monitoring and reporting
- Follow-up visit to districts

**PHASE III, EVALUATION**
- Evaluation of training programme through a visit to all districts and a final evaluation workshop

(The bar chart on the next page presents a suggested programme)

6. **ROUGH COST ESTIMATES**

(Cost estimates for the above training programme is provided on the pages following the programme bar chart.)

7. **Next Steps**

The participants of the working sessions endorsed the following next activities:

<table>
<thead>
<tr>
<th>What?</th>
<th>Who?</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Forward to ADB and ADB approval</td>
<td>MOLG Programme Director + Co-ordinator</td>
<td>Mid April 1997</td>
</tr>
<tr>
<td>3. Identify potential &quot;Residential Training Team&quot;</td>
<td>MOLG Programme Director + Co-ordinator + Training Co-ordinator + Reg. Offices</td>
<td>End March 1997</td>
</tr>
<tr>
<td>4. Identify ILO ASIST inputs</td>
<td>ILO Consultant + ILO ASIST</td>
<td>End March 1997</td>
</tr>
<tr>
<td>Initial training for contract management for some supervisory staff commences</td>
<td>Training Centre Mbale</td>
<td>Mid March 1997</td>
</tr>
</tbody>
</table>
ANNEX TO ILO CONSULTANT ANDREAS BEUSCH MISSION REPORT TO MOLG/ADB UGANDA FEEDER ROADS MAINTENANCE PROJECT

POTENTIAL ROLE OF THE KISII TRAINING CENTRE IN OFFERING LABOUR BASED TRAINING TO THE ABOVE PROJECT.

REPORT BY ENG. B. G. ARIGA

External Collaborator
March 1997
KENYA INSTITUTE OF HIGHWAYS AND BUILDING TECHNOLOGY

POTENTIAL ROLE OF KISII TRAINING CENTRE
IN
OFFERING LABOUR BASED TRAINING TO REGIONAL CLIENTELE

March 1997
1. BRIEF HISTORICAL BACKGROUND

Labour Based methods of road construction and maintenance in Kenya began in 1974 in four selected districts of this diverse country. The districts were selected to provide sites representative of all regions being considered for inclusion in a larger programme. They were representative in respect of topographical, climatic and socio-economic factors.

During the period 1974 to 1976 the "Pilot Projects" in these districts worked independently. Labour Based roadwork was seen as a second class form of engineering, still having an aura of relief work. This left the way open for project Engineers from divergent donor countries to run the pilot units with a very free hand. The controlling Ministry, Roads Department realised that work methods, techniques, and procedures in the various districts needed to be standardised, if the programme was to be put into effect on a National scale. The results so far had been very encouraging and a National programme of Labour based road construction and improvement was foreseen. This national Programme became known as the Rural Access Roads Programme (RARP).

The objective of standardising the works led to the formation of a training site in one of the initial districts. The Standard methods and procedures were agreed upon and put into practice.

Out of these beginnings, the Labour Based Training unit was born. It was quickly realised that one essential feature for national success of this programme was to involve local engineers in the implementation process. As the Programme grew all new engineers coming into the programme were attached to the training unit before being appointed to implementing units in other districts.

As the programme expanded the training unit was moved to Kisii district. A small purpose built temporary facility was constructed at Suneka with the help of Swiss funding and more formalised training for the programme began. The original objective for standardising the working methods and procedures remained top priority.

The Rural Access Roads Programme (RARP) was so successful, both in terms of its own objectives, and in terms of national political enthusiasm that Labour Based methods were brought onto the classified road network in 1985 with the creation of the Minor Roads Programme (MRP). To cope with the training for MRP a more permanent training centre was built at Kisii. This complex is the present day Kisii Training Centre (KTC), where all labour based roads training for Kenya is carried out and the ILO/ASIST international courses have been conducted.

2. CURRENT STATUS

The Kisii Training Centre (KTC) has been supported by the Swiss Agency for Development and Co-operation (SDC) in various forms since 1978. It has developed during that period from a small Kenyan road foreman’s training school to its present form. It is now the largest international training centre for the promotion of Labour Based methods of road construction and maintenance in Africa. This project complements and works closely with the ILO/ASIST (Africa) project.

March 1997
KTC continues to promote the Appropriate Technology of Labour Based methods through intensive training programmes. These programmes train persons in the roads authorities of the Kenya government, linking with the World Bank's "Road Maintenance Initiative", and through the international courses and Study Tours trains Managers, Engineers, Technicians and Trainers from Anglo-phone African countries in the Sub Saharan Africa region.

The Key points in the training through the centre are that the training covers all aspects of Road construction and Maintenance, from planning and budgeting to how to excavate ditches. The operations are designed to maximise the use of Labour based methods for appropriate cost benefit, saving of Foreign exchange and transfer of Technology to the local Rural Community. The training is practically based and all courses spend a portion of course time on site. The centre using labour-based technologies and local labour for all roadworks also manages these sites. This in turn implies that a high proportion of project funding goes directly to the Rural poor in the form of cash wages for road construction.

3. CONTRACTOR TRAINING DEVELOPMENT

Although KTC runs very successfully international and national courses on labour based methods of construction and maintenance at the moment, the need to develop innovative and market oriented courses and other services have been realised. KTC is currently geared towards usage of the force account system of execution of works, its clients however, are involving more and more the private sector in their execution of labour based programmes. To meet this changing client requirement, KTC is undertaking the review and re-examination of its capacity in terms of lecturing staff and curriculum content to address this deficiency.

An element of contractor training has been carried out at the centre for the SIDA supported contractor development programme. However, a great deal needs to be done on contractor training in order to bring it to the same level as that currently in place using the force account system. These changes are currently being undertaken.

Another aspect which is currently under review includes the development of the training modules for the Environmental impact assessment of roadworks activities and the promotion of Gender sensitivity in the process and procedures of employment for Labour based technology

4. TECHNOLOGY DEVELOPMENT

The training unit has always been the centre for trials of new methods and procedures within the Labour Based programmes in Kenya. This has meant that discoveries are immediately incorporated into the training syllabi. Over the years the unit has been closely involved with developments in the methods for dealing with steep gradients, roads with existing camber, sunken sections, alternative surfaces, compaction (or rather non-compaction) and continuous trials are still going on in this subject.

Among the notable successes for the Training unit in the area of technology development is the development of the "Full Road Template" for use in areas of existing camber. This development has given an average saving of 250 mandays per Km for the task of reshaping on a Minor road cross-section (5.4m carriageway), and a 400 Mandays saving for full construction of a similar road.
5. ROADS PROGRAMME ACHIEVEMENTS

The Rural access Roads and Minor Roads Programmes have achieved wide success and fame within Kenya. Together these programmes have constructed and improved a total of 12,000 Km of access and feeder roads in the most agriculturally productive regions of the country. At their peak they were providing 20,000 man-years of employment per year to the rural population in areas of high population, and under employment. Land use patterns in these areas has been affected, and a change from subsistence to cash crops noted.

Kenya through the Ministry of Public Works and Housing has managed to run a huge programme of Labour Based roadworks covering the majority of the country for the last twenty years. The programme has built up a cadre of experienced Engineers. Labour Based work in Kenya is no longer considered as a sub-standard form of engineering, but is recognised by all Engineers in the Ministry as the way to the top. Road building skills utilising Labour methods have been transferred to the local communities at grass roots level. Many other local roads ("Harambee roads") have been constructed by the communities on self help basis using the same technology. Productivity within the programme has been maintained, not only throughout the country but also throughout the many years of the programme.

The other key success of these programmes has been the increase of political awareness among the country's leaders, of the potential of Labour Based methods, not only to build roads and provide jobs but also to win votes.

The beneficiaries from the training for these programmes have been both direct and indirect. Directly, the programmes and trained individuals have been able to carry out their jobs to a high level of success. Indirectly, the local, rural communities have benefited from access to markets for cash crops, jobs, and increased services. Other Ministries have benefited from easier access to the communities (Health, education etc.). The communities served have undergone a general increase in economic activity over the period of the two programmes.

6. KTC UNIQUE EXPERTISE

What has made the training for the Labour-Based programmes at KTC a success?
We consider that there are various factors that contribute to the success of the unique training that is offered at KTC.

- Firstly the emphasis of all the courses at KTC is practical. The curricula developed for the international courses stresses the practical issues involved in running a labour based site, and project. It covers all aspects of the real job. This practical curriculum together with the availability of training sites under KTC control ensures the practical nature of the course. The course curricula and content also ensures proper engineering standards of design, material specifications, cost efficiency and high productivity are emphasised during the course. Choice of technology and criteria for that choice are essential tools for the Engineer in this region. The course content also emphasises these points.

- A pool of some 25 lecturers experienced in Labour Based management are available for KTC to draw upon for each course. These lecturers are draw from ILO, KTC, MRP, and Kenyan private and public sectors. These individuals have also received further training in participatory training.
techniques, which increases their versatility. A more experienced team of training staff for this subject would be difficult to find anywhere.

- The fact that the courses are encouraged and fully supported by the Kenya government and the Ministry of Public Works in particular has eased the administration procedures. This fact has also opened a wealth of practical sites, all over Kenya, to course participants.

- ILO support and input to the training process and to the administrative function has been crucial. Not only have ILO personnel been part of the lecturing team, but the direct links to regional projects both for marketing and content variations has been equally important.

- The back up of the formal training courses with study tours has added an important dimension to the training. Study tours have helped senior managers perceive the possibilities of Labour based works in their own countries. Study Tours have also made managers more amenable to suggestions of training courses for their staff within the same programme.

- The main benefits from this programme of international training have been the Labour Based Projects and programmes in the region. The benefits are two. For new projects there is a shorter learning curve. A Project can be up to peak efficiency in a much shorter time than if they had to learn the hard way. An ongoing project benefits from the broadening of their staff and the cross fertilisation of technology. Not everybody needs to re-invent the wheel. The Zimbabwe Project for instance already started using the full road profile, developed at KTC, from the beginning, saving many mandays. The Kenya MRP contractor project has used the principles developed in the Ghana Feeder Roads Programme. The sharing of ideas and experiences through the training courses and other interactions benefits all projects in the region.

- The Kisii Training Centre (KTC) of the Kenya Institute of Highways and Building Technology (KIHABT) has been responsible for the training of all staff for the Kenyan labour-based programmes for the last twenty years. These programmes are undoubtedly some of the largest in the continent. This means that everybody involved in the programme from the Headquarters’ Engineer, to the tractor driver on site has been trained by KTC. This gives the trainers a full and clear picture of what is going on within the programme and where adjustments to the syllabus need to be made.

- The training needs of the individuals within the programme and of the organisation do not remain static. There has been continual revision of the training content as new problems arose or new solutions were discovered.

- The field trials of most of the technology research for the roads programmes were carried out at the training centre and under the authority of the training unit. This has meant that the link between training and technology development was strong and immediate. New items could be incorporated into training straight away. Enabling the training to react to change, and keep trainers at the forefront of the technology. For purposes of teaching theory KTC has fully fledged classroom facilities in the modern training centre built with the financial and technical assistance support of the Swiss agency for development and co-operation (SDC).

- The lecturers and instructors at KTC are experienced labour-based practitioners with several years of practice. ILO/ASIST adds further international experience and assures the quality of the courses. KTC plays a bridge role for practitioners of labour-based technology in the sub-Saharan region and beyond. A visit to KTC has become a pilgrimage obligation to Senior Managers, Engineers, Senior Technicians and Trainers from the region.
7. POTENTIAL SUPPORT OF KTC TO THE MOLG/ADB UGANDA FEEDER ROADS MAINTENANCE PROJECT

From the above short description of the growth and potential of programmes run at KTC, it can be seen that it can offer a lot of future support to the above project. This support includes: -

1. Organisation of study tours for project Engineers, Technician and District Administrators from the above project to KTC. (See item 1 on proposed strategy). The training centre at Mbale in Uganda is less than a half a days’ driving to KTC.

2. Exchange of lecturers and instructors between the Mbale training centre and KTC through attachment arrangements.

3. Attachment of KTC instructors to the MOLG/ADB feeder roads project.

4. Exchange of technical briefs including joint curriculum development between KTC and Mt. Elgon training unit Mbale.

5. Regular site visits to facilitate exchange of technology including study tours for the petty contractors.

6. Kenya has over 12000 kilometres of roads built and maintained using labour based methods. KTC is also able to organised further visits to our neighbouring countries of Uganda and Tanzania. This is possible due the cordial relationships with our fellow Eastern African neighbours and the unique proximity of KTC to both Uganda and Tanzania both being less than 3 hours drive by road.

7. Tailor made courses at KTC with option of attachment to the proposed Mobile Training Unit of Mbale.