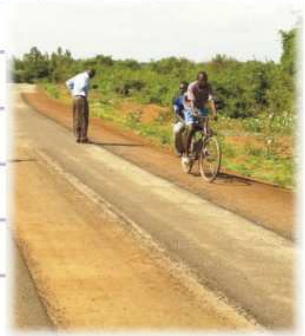
Project review of ILO technical assistance to Roads 2000

mid-term independent evaluation

KEN/08/02M/SID



Final report

Nairobi, July 2011

prepared by

Bjørn Johannessen
Engineering Consultant

KENYA RURAL ROADS AUTHORITY
KeRRA
Opening up Rural Kenya

ILO

Sida

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Project Title: Capacity building for the implementation of Roads 2000 programme and the enhancement of the quality and delivery of employment intensive technology training

Total project budget: US$ 3,726,418

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Administrative Unit: ILO Dar es Salaam

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Acronyms and Abbreviations

ADB	African Development Bank
AFCAP	Africa Community Access Programme
AFD	Agence Française de Développement, French Development Agency
Danida	Danish International Development Agency
DWCP	Decent Work Country Programme
DWK	Decent Work Country Programme for Kenya
EIIP	Employment Intensive Investment Programme (ILO)
EU	European Union
GoK	Government of Kenya
GDP	Gross Domestic Product
GTP	General Training Plan
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ILO	International Labour Organization
IRF	International Road Federation
KeRRA	Kenya Rural Roads Authority
KeNHA	Kenya National Highways Authority
KfW	Kreditanstalt für Wiederaufbau, German Development Bank
KIHBT	Kenya Institute of Highways and Building Technology
KKV	Kazi Kwa Vijana (jobs for youth)
KURA	Kenya Urban Roads Authority
KRB	Kenya Roads Board
KSh	Kenyan Shilling
KTC	Kisii Training Centre
KWS	Kenya Wildlife Service
MoL	Ministry of Labour
MRP	Minor Roads Programme
NCC	National Coordination Committee
NSC	National Steering Committee
PALWECO	Programme for Agriculture and Livelihoods in Western Communities
RARP	Rural Access Road Programme
RMLF	Road Maintenance Levy Fund
SIDA	Swedish International Development Cooperation Agency
TA	Technical Assistance
ToR	Terms of Reference
US$	United States Dollars
WB	World Bank

Current exchange rate: 1 US$ = 87 KSh

1 Executive summary

Background and context

This independent mid-term evaluation has been conducted in line with the ILO's evaluation framework, for the benefit of the ILO, project counterparts and the Swedish International Development Cooperation Agency (SIDA). The purpose of the evaluation is to provide an independent assessment of the ILO technical assistance to the implementation of the Roads 2000 programme, assess the appropriateness of its design as it relates to strategic and policy frameworks and to give directions for effective utilisation of ILO's inputs in the remaining project period. The evaluation covers project activities since its commencement in April 2009 until the time of this assignment.

Information has been drawn from two main sources, a desk based review of project related documentation and interviews with ILO staff and key personnel from government agencies to which the project provides support and related projects. During the assignment, field visits were carried out to selected road works sites to obtain an impression of the quality of works and the effects of training and technical support provided by the project.

The overall objective of the ILO project is to upscale the implementation of the Roads 2000 programme in all roads authorities as originally envisaged in the Strategic Plan for the Roads 2000 Programme. To achieve this, three main activity interventions have been identified:

(i) improve training of stakeholders (small scale contractors, road authority technical staff, etc.) to undertake small-scale road works,
(ii) improve exchange of information and experience between projects and initiatives leading to more cost effective and efficient use of resources, and
(iii) improve the performance and visibility of the Roads 2000 Strategy with respect to employment generation and other social benefits.

Main findings and conclusions

Relevance and strategic fit

The ILO project provides support to a road works programme that has been in operation for more than 10 years. The relevance of the ILO TA is therefore closely linked to the objectives and strategy of the Roads 2000 programme. Roads 2000 remains a sound approach for improving and maintaining the road network in Kenya. Current government commitment to infrastructure development is strong and Roads 2000 figures as a central implementation strategy. The emphasis on the use of labour-based road works technology results in added benefits through the significant employment generated. In addition, the programme has with support from the ILO TA incorporated several crosscutting issues into its implementation strategy, including community participation, environmental concerns, labour rights, occupational safety and health, HIV/AIDS, and persons with disabilities.

With the recent restructuring in the road sector, ILO technical assistance is both relevant and timely. The TA has been designed to provide support to a nationwide programme and not only an individual project. As such, it contributes to the government's goals of building sound and capable institutions in charge of the road sector. In addition, the TA, due to this design, also has an impact on other donor funded projects as the capacity development activities of the TA address nationwide demands.

Although not specifically mentioned in the current Decent Work Country Programme for Kenya, the project fits strategically with the DWCP and the framework of the ILO's Employment-intensive Investment Programme.

The outputs of the project remain relevant. A detailed review of project activities and outputs achieved so far against the original logical framework in the project agreement indicates very good work progress and that the team is in a good position to complete all activities by the end of the project.

Validity of design and efficiency of resource use

The project was designed to address specific challenges facing the Roads 2000 programme. These challenges were identified through detailed discussions between government and development partners and clearly spelt out in the project document. The outputs and activities identified to address these challenges are logical and seem to have had the desired effect in terms of strengthening the programme. The identified outputs are also logical in relation to the objective of the project TA. This is partly due to the fact that the objectives are practical and not over-ambitious.

Aspects of sustainability of outputs permeate the project. The main emphasis is on strengthening institutions involved in the implementation of the Roads 2000 programme. Outputs are centred around the development of sound management procedures within these institutions, producing policies and related guidelines owned by the same institutions and integrating these into existing training programmes and finally strengthening the training provided as part of the programme.

Project effectiveness

In terms of reaching its overall objective of scaling up the implementation of Roads 2000, the project seems to be achieving its expected impact. There is still a large potential for improvements, and with the current emphasis of project activities, further improvements are expected.

The project has been successful in mobilising key technical personnel and expertise within and outside government when embarking on new initiatives, thereby securing good ownership as well as expert manpower resources beyond those available from the project. The ILO TA has also made strategic use of collaboration with other ILO programmes within and outside Kenya.

The strong ownership of project outputs from the government side, has led to an active involvement of key stakeholders in partaking and reviewing the improvements made to various implementation and training tools. This has had a positive effect on the quality and relevance of project outputs with the result that the guidelines and tools produced are adopted as government documents, forming part of the management system within KeRRA and the other road agencies.

New training programmes in the use of the newly developed Roads 2000 tools are being incorporated in the General Training Plan of KTC, while also taking into account new training needs arising from upcoming Roads 2000 projects. There is still a strong demand for training and support to works activities within KeRRA that are not supported by any of the development partners. Furthermore, the ILO TA has focused on strengthening Roads 2000 activities within KeRRA and to a lesser extent in KenHA, KURA and KWS where there are similar capacity development potentials.

Employment generation

With support from the ILO TA, the employment generation is monitored in all on-going Roads 2000 projects. To date, a total of 4,9 million workdays have been generated through the road works. This is equivalent to some 20,000 work years. There are wide variations in employment generated in the various projects, indicating a significant potential for increasing the use of labour-based work methods and thus increasing the number of jobs created. There

is also further potential for increasing employment in government funded works in all four road works agencies.

Pavement trials

The ILO TA has supported field trials on the use of stabilised base courses and emulsion based surface seals in Muranga in Central Province and Bondo District in Nyanza. In addition, the use of stone pavement was tried out on a short road section in Bondo. The new technical solutions are expected to (i) reduce initial costs of upgrading roads to bitumen surface standard and (ii) reduce total life-cycle costs of roads with higher traffic volumes. The new pavement technology is an important asset to the Roads 2000 programme as it demonstrates how higher construction standards can be achieved while still applying labour-based work methods.

Lessons learned

There is a huge potential for employment generation in the existing public works programmes. With their established mandate to provide public infrastructure, these programmes already have secured budgets, some of which can be used for creating additional jobs if careful attention is given to how works are actually implemented. By applying labour-based work methods, additional jobs can be created while still maintaining established quality standards and cost-effectiveness. In other words, additional employment opportunities for youth and other disenfranchised groups can be created at no additional cost. Equally important, is that these jobs are not of temporary nature. Employment will be available on a long-term basis as the need for improving and maintaining roads and other public infrastructure is a continuous process.

The ILO TA has in essence functioned as a capacity and development unit strategically placed and well integrated into the management structure of a large-scale public works programme. The resources available to the unit as such are limited, but because it has partnered up with key institutions in the Roads 2000 programme, it has also been able to draw on the human resources of its partner institutions. With this approach it has achieved a significant impact in terms of strengthening the programme.

Recommendations

The following recommendations are targeted towards the government, the ILO TA and the ILO's overall support to Kenya:

(i) Analyse potential for job creation and set targets for employment in each of the Roads 2000 projects as well as within each of the four road works agencies;
(ii) Formulate new capacity development demands in order to further mainstream the application of the Roads 2000 Strategy;
(iii) Establish core units within the road agencies to deal with capacity development needs in support of increasing the application of the Roads 2000 Strategy;
(iv) Assess TA requirements in the proposed capacity development units in order to reach reasonable targets and involve development partners;
(v) Prepare for the new county administrations and identify capacity development needs;
(vi) Include Roads 2000 and similar employment generation programmes in the next DWCP for Kenya;
(vii) Document work methods and technical specifications applied in the surface trials in order to facilitate a structured increase of its use;
(viii) Secure a process for future monitoring of the pavement trials with a view to establish clear guidelines for the application of the new standards;
(ix) Resuscitate international training courses at KTC/KIHBT, thereby regaining the reputation as a centre of excellence by marketing the existing training capacity in country and overseas;
(x) Continue ILO involvement in strengthening Roads 2000.

2 Programme background

2.1 Country context

Situated in the eastern region of the African continent, Kenya covers a total area of 582,646 km^2. In 2009, the total population of Kenya was estimated at 39.8 million with an annual growth rate of 2.6 percent. Nearly 80 percent of the population live in rural areas and are dependent on agriculture and livestock production. Agriculture dominates the economy, accounting for 22.6 percent of GDP in 2009, employing about 67 percent of the labour force and accounting for 70 percent of export earnings.

Although Kenya has the largest economy in the sub-region, its poverty levels are significantly higher than its closest neighbours. It is estimated that 47 percent of the population are poor, compared to 35 percent in Tanzania and 31 percent in Uganda. It is estimated that more than 60 percent of the population live on less than two dollars a day. More than 25 percent of the working population (some studies suggest up to 40%) is unemployed which is growing on average by 2.9% per annum. Underemployment is significantly higher contributing to the existence of a class of Kenyans who are the working poor.

Roughly half the population still has inadequate access to potable water, basic sanitation, health services, schools as well as communication and transport services. Women, AIDS orphans, street children, subsistence farmers, the landless, urban slum dwellers, unemployed youth and people with disabilities are the most affected and make up a major portion of the poor.

Kenya's road network is estimated at 160,886 km, consisting of a highly diversified network ranging from dry-weather earth roads to bitumen-surfaced highways.[1] The classified network is estimated at about 51,500 kilometres, of which 8,770 are paved. The remaining unclassified roads consist of rural access roads, agricultural and forest roads, roads in the game reserves and other local streets and roads. According to the Road Inventory and Condition Survey 2009, 11%, 33% and 56% of the roads are in good, fair and poor condition respectively.[2]

The road network is however not uniform across the country. The heaviest concentration is along the transport corridor extending from the port of Mombasa in the east, through Nairobi and continuing to the Western region and the Uganda border, while the sparsely populated areas in the east and north have limited road development.

Lack of transport services for the movement of goods and people is frequently identified as an important constraint to agricultural and rural development. Beyond the trunk road network, accessibility falls off. Only 30 percent of Kenya's population lives within two kilometres of an all-weather road - which is above the benchmark for low-income countries, but only half the level found in middle-income countries.

2.2 Programme history and rationale

Since independence, substantial investments have been made in Kenya to upgrade and extend the road network. Initial efforts concentrated on upgrading the main trunk roads to bitumen surface standards and constructing special purpose roads in support of smallholder tea development and sugar cane production. In the 1970s, the Rural Access Road Programme (RARP) commenced, leading to a significant expansion of the road network. By 1984, some 8,000 km of rural roads had been built using low cost appropriate technology and labour-

[1] Source: Kenya Roads Board, www.krb.go.ke
[2] Source: Road Sector Investment Programme & Strategy 2010 – 2024, Ministry of Roads, 2011

based work methods. The RARP was the first attempt in Africa to apply labour-based work methods in a large-scale rural roads programme. The construction methods were to be as "labour-intensive as is commensurate with technical and economic efficiency". The primary purpose was to build rural access roads while at the same time to the extent possible boost employment opportunities.

At the end of the RARP, it was recognised that there was an urgent need to improve Class D and E roads providing the link between the rural access roads and major roads As a result, the Government embarked on the Minor Roads Programme. Due to the success of the RARP, the Government decided to continue applying the same technology for upgrading the minor roads. By 1992, the MRP covered 39 out of the, then, 47 districts, involving nine donors and covering some 10,000 km of the total unpaved network.

When the MRP first started, it was seen more in terms of extending the successful aspects of the RARP - employment creation, saving foreign exchange and effectively construct rural roads. While donors stressed the importance of maintenance, the bulk of their funding support was for road improvement leaving maintenance as a separate government responsibility.

The Roads 2000 strategy was conceived in 1990 with the purpose of introducing more effective provision of maintenance to address the rapid deterioration of the classified road network. The RARP and MRP demonstrated that labour-based approaches to road improvement and maintenance were technically viable and less costly than equipment-based work methods. Three operational components were identified for Roads 2000, (i) rehabilitate roads to a minimum maintainable standard, (ii) install labour-based routine maintenance on maintainable roads and (iii) carry out spot improvement of roads to maintainable standards. The operational approach was supported by a range of other measures, including strengthening management, manpower rationalisation, training, improved equipment specifications, increased funding and private sector involvement.

The Roads 2000 as well as the earlier programmes have received extensive technical and financial support from the donor community. Part of this supported the establishment of the Kisii Training Centre (KTC), initially to train government staff involved in the MRP. In the second half of the 1990s, local private contractors were involved in carrying out the road works. As a result, KTC is now also providing training for small-scale domestic contractors who wish to be certified for rural road works using labour-based works technology.

The ILO has been involved in the rural roads programmes since the start. It provided technical assistance to the RARP and later on supported training and capacity development for the MRP. It also assisted KTC in establishing international courses in labour-based rural road works technology.[3]

In recent years, the road sector has undergone extensive reforms aimed at realigning the sector activities with the objectives of Vision 2030 and enhancing the institutional, managerial and operational capabilities of public bodies involved in the road sector in line with the Road Sector Policy Paper of 2006.

The Roads Act of 2007 was a major milestone in the process of road sector reform, providing a legal basis for the formation of three authorities namely the Kenya National Highways Authority (KeNHA), Kenya Rural Roads Authority (KeRRA) and Kenya Urban Roads Authority (KURA) to manage the national, rural and urban roads. The Ministry of Roads remains as a policy and regulatory body to oversee the mandates and actions of the authorities

[3] Ref: International course for engineers and managers of labour-based road construction and maintenance programmes, Beusch and de Veen, ILO Geneva 1991

through the management of the respective Management Boards including that of the Kenya Roads Board.

The Roads 2000 Maintenance Strategy remains the principal sector intervention for low volume roads in Kenya. The five-year National Strategic Plan for Roads 2000, covering 2005-2010 and recently extended to 2012, outlines the principles and methodologies for the programme and sets clear targets on road works outputs and employment generation.

2.3 Objectives

The objective of the Roads 2000 programme was originally formulated as "maintenance of the classified road network to an economic level of serviceability using local-resources and labour-based methods wherever these are cost effective". As such, Roads 2000 is a major policy shift from the previous RARP and MRP, as it adopts a road network approach with a strong emphasis on maintenance. The Roads 2000 Strategy is supported by all donors involved in the rural road subsector. This in turn has secured the adoption of a standard implementation approach in all project interventions. Conceived in the 1990s, Roads 2000 remains a valid strategy and approach to maintaining road access in rural areas.

The overall objective of the ILO TA is to upscale the implementation of the Roads 2000 programme in all road authorities as originally envisaged in the Strategic Plan for the Roads 2000 Programme: July 2005-June 2010. The immediate objectives of the TA are to:

- improve training of stakeholders (small scale contractors, road authority technical staff, etc.) to undertake small-scale road works,
- improve exchange of information and experience between projects and initiatives leading to more cost effective and efficient use of resources, and
- improve the performance of and visibility of Roads 2000 Strategy with respect to employment generation and other social benefits. Implementation of this strategy.

2.4 Funding arrangements

Current support to Roads 2000

Roads 2000 is supported by a number of development partners, some of which have been involved since 1997. SIDA has supported various road projects in Kenya since the early 1980s and since 1997 to Roads 2000, at first in Nyeri and Kirinyaga and in Nyanza Province from 2004 to June 2011. The European Commission has supported Roads 2000 in Meru, Embu and Machakos in Eastern Province since 1998. KfW from Germany supported Roads 2000 activities in Nakuru, Nandi, Kericho, Bomet, Bureti and Nyamira from 2006 to 2008. Danida has supported rural road works in Kenya since the early days of the RARP. From 1999 to 2000, they were involved in Roads 2000 in Kilifi, Malindi, Kwale, Taita Taveta, Mombasa, Lamu and Tana River in Coast Province. A road improvement component of a Danida funded agricultural support project was implemented in Machakos, Makueni, Mwingi, Kilifi and Taita Taveta from 2006 to 2010. The African Development Bank joined Roads 2000 in 2004 in Kajiado, Trans Nzoia, Uasin Gishu, West Pokot, Keiyo Marakwet and Narok. AFD (France) has supported Roads 2000 since 2006 in Muranga and Nyandarua.

Pipeline Roads 2000 projects

Some of the above donors intend to continue their support to Roads 2000. These include the EC providing support in Meru, Embu and Machakos in Eastern Province from 2011 to 2015, KfW in Western Province under an agricultural support programme from 2011 to 2015, and AFD with a new phase proposed for Nyandarua, Muranga, Nyeri, Kiambu, Kirinyaga and Laikipia from 2011 to 2014. In addition, the Government of Finland will join the programme through its Programme for Agriculture and Livelihoods in Western Communities (PALWECO) in Busia County in Western Province this year.

The Government of Kenya allocates domestic resources to Roads 2000 through its development budget and through the Road Maintenance Fuel Levy. The Kenya Roads Board (KRB) manages the disbursement and accounting of money coming from the Road Maintenance Fuel Levy. This fund came into effect in 1993. It consists of a fuel levy and transit toll collection. Currently, the levy is collecting over KSh 20 billion per year (USD$ 230 million) of which 32 percent is currently allocated to maintaining the rural road network.[4]

2.5 Project partners and stakeholders

Under the new structures KeRRA is responsible for the coordination of the Roads 2000 programme. This is done through a unit recently upgraded to a Department for Planning and Roads 2000 Coordination. The Department is headed by seven engineers in the capacity of managers, of which four are in place. The ILO provides assistance to the Department while also providing overall technical and managerial support to KeRRA.

The Kisii Training Centre was established in 1984 to cater for the training needs of the MRP. Over the years, KTC developed a wide range of training products related to labour-based infrastructure works. KTC now also caters for the training needs of small-scale contractors involved in Roads 2000. A Roads 2000 General Training Plan aims to standardise training to ensure that all training support are focused and that quality training is guaranteed. The GTP is the key document that describes and regulates all training related issues in the Roads 2000 programme. A significant part of the ILO technical assistance consists of support to KTC and to achieve the outputs of the GTP.

The Roads 2000 management now insists on a coordinated and standardised approach for all implementation issues. Training is seen as one of the main vehicles to develop a uniform management and implementation capacity ranging from agency staff to private sector practitioners and from agency headquarters to regional levels. The various Roads 2000 projects are therefore regarded as important stakeholders for the programme.

The project also works with the other road works agencies. The development of guidelines on various crosscutting issues is meant for the road sector as a whole. Equally, the monitoring system for Roads 2000 is being introduced in all four road works agencies. Finally, the ILO TA has also partnered up with the Materials Branch of the Ministry of Roads for the on-going road pavement trials.

2.6 Project implementation activities

The overall objective of the project is to support the Government in its efforts to upscale the implementation of the Roads 2000 Programme. The total project budget amounts to US$3,7 million, financed by the Swedish International Development Cooperation Agency (SIDA). The project has been in operation since April 2009. Initially, it was to run up to June 2010 but was later extended by two years to June 2012 at the request of KeRRA.

The provision of road infrastructure and employment creation in rural Kenya has a far-reaching impact on the livelihoods of local communities and the national economy at large. The Roads 2000 programme achieves both and hence the desire to scale up its implementation. The ILO TA is supporting initiatives in establishing effective coordination capacity, improving operational mechanisms as well as planning and monitoring systems within KeRRA to efficiently coordinate and ensure nationwide application of the Roads 2000 Strategy. The ILO project has three key result areas, deriving from the immediate objectives:

[4] Source: Kenya Roads Board website, www.krb.go.ke

Key Result Area 1: Improving training capacity at KIHBT and KTC

This result area involves (i) the review and updating of training curriculum and delivery modalities, (ii) producing supplementary training material and (iii) training of trainers in order to beef up the capacity of the two institutions. It also involves the training of road authorities staff (particularly KeRRA) as part of the capacity building exercise for the improved delivery of Roads 2000 programme.

Key Result Area 2: Project management and technical support

The second component involves the provision of technical support to road authorities, mainly KeRRA, in the coordination of Roads 2000 project activities, in harmonizing planning, implementation and monitoring systems, as well as assisting in undertaking research and development activities related to the use of improved road construction and maintenance techniques as well as local materials.

Key Result Area 3: Monitoring and dissemination of information

The third area involves gathering, storing, processing and dissemination of information and assisting in the monitoring of Roads 2000 programmes nationwide with emphasis on social and other cross cutting issues. This also involves the review of on-going Roads 2000 projects in various part of the country, particularly Nyanza, capture lessons learnt and disseminate as necessary.

The ILO technical assistance team consists of two experts an engineer and team leader, Asfaw Kidanu, and a development economist, John Mukoza. The team is located in the offices of the Kenya Rural Roads Authority (KeRRA) at Blue Shield Towers, Upper Hill, Hospital Road in Nairobi.

3 Purpose and scope of evaluation

3.1 Purpose of evaluation

The main purpose of this assignment is to provide an independent assessment of the technical assistance provided by the ILO to the implementation of the Roads 2000 programme, assess the appropriateness of design as it relates to strategic and policy frameworks and to give directions for effective utilization of ILO's inputs in the remaining project period.

In order to accurately and adequately measure the full impact of the technical assistance, it has been deemed important to carry out a detailed evaluation and review of activities, outputs and outcomes of the programme based on the agreed performance indicators. The findings of this evaluation will be used to improve future delivery of TA and to inform similar projects within and outside the country. The specific objectives of the evaluation are to:

(i) Assess whether the objectives of the technical assistance to the Roads 2000 Programme are being achieved;
(ii) Assess the role and effectiveness of the ILO TA in relation to the requirements of the Roads 2000 Programme;
(iii) Review the project design including the project logical framework and make recommendations on how to enhance project delivery in order to realize the set objectives in the remaining period;
(iv) Assess the effectiveness of the TA team and make recommendations for the necessary realignment of TA activities based on the review of the project design and logical framework;

(v) Make recommendations on future direction, viability, and necessity of similar TA activities in the country based on availability of local capacity and expertise related to employment intensive technology; and
(vi) Ascertain to what extent the Roads 2000 Programme links to the Decent Work Country Programme and explore the implications of the programme for the wider national development agenda.

3.2 Scope of Work

The evaluation covers all project activities undertaken since the start in April 2009 vis-à-vis the requirement of the bilateral (ILO/SIDA) collaboration agreement and project document. The evaluation further examines the effectiveness and efficiency of the project and the contribution made so far by the TA team. In carrying out these activities the assignment included:

(i) a desk study of relevant project documents and memoranda of understanding, Roads 2000 operational and contract manuals, KeRRA strategic plans, technical manuals, progress reports, minutes of the National Steering and Coordination Committees, etc.
(ii) interviews and discussions with project stakeholders and partners,
(iii) field visits to Central and Nyanza provinces to observe on-going road works,
(iv) the compilation of an inception report during the first week of the assignment, and finally,
(v) the preparation of an evaluation report.

3.3 Clients for the evaluation

The clients of the evaluation include the ILO, government counterpart agencies and the Swedish Government through its embassy in Nairobi. The main clients within government are the Ministry of Roads and KeRRA. As regards to the ILO, there are four parties, (i) the project itself, (ii) the Dar es Salaam Office, (iii) the specialist in charge of technical backstopping in Pretoria and (iv) the technical unit in Headquarters (EMP/INVEST).

This evaluation is managed by the ILO Office in Dar es Salaam. The final report of the evaluation is also submitted to the Regional Office in Addis Ababa and the Evaluation Unit in Geneva for comment and final approval.

Female participation in road works in Muranga

4 Methodology

This review has been carried out in accordance with the prescribed procedures and guidelines of the ILO for monitoring and evaluation of its technical cooperation programme, in which an independent mid-term evaluation is required for projects of this size and duration.[5] The applied methodology consists of both quantitative and qualitative approaches. Information has been collected from project related documents and verified through information from field visits and interviews with project staff, programme implementing partners and beneficiaries.

The assignment commenced on 21 May 2011 when an external collaboration contract was secured between the ILO and the consultant. Prior to arrival in Nairobi, the evaluator carried out an extensive review of programme documentation, progress reports, work plans, mission reports, workshop reports, country data, etc. Equally, the consultant carried out an extensive search on the Internet for key socio-economic indicators on Kenya as well information in regards to recent road sector development initiatives.

A number of project outputs are in the form of guidelines and manuals. These were reviewed in order to gain a proper understanding of quantity and quality of TA activities. Minutes of meetings with counterpart agencies have been reviewed to obtain a full understanding of development constraints and challenges.

The evaluator held discussions with ILO staff involved in the management and implementation of the project, ILO headquarters in Geneva and technical and administrative backstopping staff in Pretoria and Dar es Salaam. Within the various road works agencies, the evaluator met with key management staff in MoR, KIBHT, KTC, KeRRA and KRB and the technical staff in Muranga and Bondo. A meeting was also arranged with Ministry of Labour. The evaluator met with the Swedish Embassy on the return from the field trips. Finally, discussions were also held with AFD and the consultants of some of the Roads 2000 projects. The key staff for these discussions had been identified in the ToR. Appendix 1 provides a detailed schedule of activities and list of persons met during the evaluation.

The consultant organised a discussion via Skype with ILO staff in Geneva relating to the effectiveness of the project implementation. A full set of questions was already prepared and included in the ToR. These have been used as guidance during the interviews and discussions with the various project stakeholders.

The majority of the mission took place in Nairobi, with brief field visits to Muranga and Nyanza Province. Field trips to Central and Nyanza Provinces were arranged at an early stage of the assignment, thus enabling the consultant to obtain a good impression of the road works being carried out as part of the Roads 2000 programme. A tentative schedule was prepared before arrival in Nairobi and subsequently modified during discussions with the project team and availability of persons to be interviewed. In addition a briefing meeting was arranged with the ILO office in Dar es Salaam.

The preliminary findings and recommendations were presented to the ILO, Swedish Embassy, MoR and KeRRA on 22 June 2011. A draft report for comments was distributed thereafter to all development partners before delivering the final report.

[5] Ref: ILO Guidelines to Results-Based Evaluation Principles, Rationale, Planning and Managing for Evaluations, Version 1 - January 2010, Evaluation Unit (EVAL)

5 Findings

5.1 Relevance and strategic fit

The design of Roads 2000 is based on the experience from the RARP and MRP. The implementation modalities inherited from the earlier programmes are well tested and remains viable in the current context. Roads 2000 addresses key challenges commonly found in relation to the management of rural road networks in developing countries including key issues such as maintenance, management capacity, private sector involvement, technology choice and skills development. In addition, the Roads 2000 Strategy includes an important social dimension, in effect adopting the ILO's Decent Work agenda, by incorporating the creation of new job opportunities through the use of labour-based works technology. Finally, Roads 2000 is a long term sector based approach adopted by the government as well as all involved development partners.

The government has introduced a number of policy reforms and development programmes under its Vision 2030 aimed at employment creation, poverty reduction and accelerating economic growth. Government bodies and programmes in all segments of the economy, including the road sector, are expected to contribute towards the success of the Vision by implementing projects and programmes in line with the overall national development objectives and priorities. One of the initiatives in the transport sector is the Roads 2000 Programme.

The ILO TA aims to strengthen the institutional capacity to implement Roads 2000. Considering the major restructuring currently taking place in the road sector, it is evident that external assistance in building the new institutions is both relevant and timely. It is also important to note that the TA has been designed to provide support to a nationwide programme and not only an individual project. This in itself increases the relevance of the TA activities as it aims to strengthen existing government institutions instead of only focussing on project level activities. As such, it contributes to the government's goals of building sound and capable institutions in charge of the road sector. In addition, the TA, due to its inherent design, supports other donor funded projects as the capacity development activities of the TA addresses nationwide demands.

5.2 Decent Work country agenda

A Decent Work Country Programme[6] for Kenya (DWK) was prepared in August 2007 for the period 2007 to 2011, in which three selected priority areas were proposed, (i) youth empowerment, youth employment and elimination of child labour, particularly in its worst form, (ii) expanding and strengthening of the principle of inclusion for enhanced influence of tripartite partners in the national and international framework, and (iii) expansion of social protection and fight against HIV/AIDS at the work place. The overall development objective of Kenya's DWCP is "*poverty reduction through decent work for women and men*".

There is no specific reference to this particular project in the DWK. Surprisingly, there is also no reference in the DWK to the Government's efforts to generate additional employment opportunities through the use of labour-based works technology in the Roads 2000 programme. Equally, there are no reference to the DWK in the project document forming part of the agreement between the ILO and SIDA.

[6] The Decent Work Country Programmes (DWCP) are programming tools of the ILO in which a limited number of priorities are identified for a defined period in order to increase the impact of the ILO's work in member countries and to be more visible and transparent.

Still, there is good convergence between the DWK and this ILO technical assistance project. The project covers several of the priority areas of the DWK, including youth empowerment and employment, social protection and HIV/AIDS in the workplace. Some of these are specifically identified in the project document. Other concerns have been included as part of the general capacity support to KeRRA and the Ministry of Roads (MoR). This includes the project's involvement in the on-going initiative of KIHBT/KTC to commence life skill training for unemployed youth and KeRRA's efforts to provide job opportunities through labour-based road works as a partner to the Kazi Kwa Vijana (jobs for youth) programme.

The objective of the ILO TA is *"to improve and expand the implementation of the Roads 2000 Strategy"*. Through the monitoring of impact in Roads 2000, it is evident that the programme is contributing to poverty reduction and the creation of decent work, in line with the development objective of the DWK.[7] Furthermore, it should also be acknowledged that the Employment Intensive Investment Programme (EIIP) of the ILO, which this project forms part of, is guided by the core principles of the ILO's Decent Work Agenda and in particular one of its four strategic objectives, *"creating greater opportunities for women and men to secure decent employment and income"*. The project provides support to Roads 2000 in which employment generation and a number of cross-cutting issues forms part of the implementation strategy which is a practical approach to promoting decent work for women and men in the road sector of Kenya.

This project and similar ILO activities in the past has provided the ILO with the opportunity to maintain such support in Kenya for a period of more than 30 years. This has resulted in a significant amount of job creation in the rural areas. It has also resulted in a sound strategy to promote decent work within the road sector in Kenya. Equally, due to the scale and duration of Roads 2000, it has contributed greatly to building up ILO's expertise in relation to promoting its decent work agenda in rural infrastructure development programmes in third world countries.

5.3 Validity of design and efficiency of resource use

The ILO project was designed to address specific challenges facing the Roads 2000 programme. These challenges were identified through detailed discussions between government and development partners and are clearly spelt out in the project document. The outputs and activities identified to address these challenges are logical and seem to have had a positive effect on the strength of the programme. These outputs are also logical in relation to the objective of the project TA. This is also partly due to the fact that the objectives are practical and not over-ambitious.

The TA assistance in the original project design consisted of two long-term advisers, one technical adviser with an engineering background and one adviser to deal with all crosscutting issues. The TA inputs were later revised to (i) allow for more time to carry out capacity development activities, and (ii) supplemented with more short-term specialist inputs. This has clearly improved the quality of the TA. It also makes more sense. Capacity building is a time-consuming exercise. Considering all the stages required in a typical capacity building process from policy formulation, preparation of guidelines and ensuing training requirements, it is obvious that the original project duration was too short. Secondly, the recruitment of an expert adviser for all the crosscutting issues does not make sense. The subjects are two diverse so it is better to rely on short-term specialist inputs for this purpose and let the long-term staff secure and manage such inputs, ensure that they are applied in the specific context of the programme and facilitate the practical implementation of the developed guidelines.

[7] Ref: Social indicators presented in the project progress reports

The project document envisaged the recruitment of 14 trainers initially as part of the ILO TA team as an immediate means of boosting training capacity at KTC. Instead of the ILO recruiting the trainers, it was agreed that the government would employ these professionals from the very beginning. This is good as it avoids a potentially complicated transfer of staff from the ILO to the government.

The duration of the project was extended and more resources were allocated for short-term specialist inputs. With these re-arrangements, it seems as if the project can deliver on all outputs and activities as envisaged in the original project agreement. As part of the general management support provided by the ILO TA to Roads 2000, the project has also been involved in several additional activities, which were not foreseen in the original design. On this basis, it is therefore possible to conclude that the impact of the TA has exceeded its original expectations.

An unforeseen effect of the project was the crucial role it played during the early stages when KeRRA was established. The reorganisation of the road works agencies was not envisaged when the project document was prepared. In retrospect, it is generally acknowledged by most partners to Roads 2000 that the ILO support was a timely and valuable input during the creation of KeRRA. The restructuring of the road sector agencies was also a limiting factor at the start of the project as KeRRA was then yet to be established as an operational organisation. Still, this also created opportunities in terms of influencing the structure of the new agency. It should also be acknowledged that the project also works closely with other agencies within the road sector such as the MoR Materials Branch and the training institutions KTC and KIHBT which were not seriously affected by the restructuring.

Aspects of sustainability of project outputs permeate the entire project document. Focus was given on strengthening existing key institutions involved in the implementation of the Roads 2000 programme. Outputs centred around development of sound management procedures within these institutions, producing policies and related guidelines owned by the same institutions and integrating these into existing training programmes and finally strengthening the training provided as part of the programme.

5.4 Project effectiveness

In terms of reaching its overall objective of scaling up the implementation of Roads 2000, it is clear that the project is achieving its intended impact. The development objective has clear indicators that relate to the increase of the use of labour-based technology. There is still a large potential for improvements, and with the current emphasis of project activities, further improvements are expected. These indicators need to be closely monitored, not only in terms of reaching the goals set in the ILO project but for the programme as a whole.[8] Equally, such targets should be set in all KeRRA regions and in all the road agencies.

The impact of the ILO TA is more evident when considering the immediate objectives of (i) improving training, (ii) increasing exchange of information and experience between projects leading to more efficient use of resources and (iii) improving the visibility of the Roads 2000 strategy. Training capacity is currently being improved both in terms of training tools and outputs of training. The exchange of information and visibility of Roads 2000 have been considerably strengthened – to a large extent as a result of the creation of KeRRA. With its 47 regional offices, there is now a designated rural road works agency that can give the Roads 2000 strategy sufficient focus and attention on the portion of the road network in which the strategy has its highest impact potential.

[8] See also the section of this report dealing specifically with employment generation.

Details of the achievements of the ILO TA are given in Appendix 3, providing a status of all project outputs and activities as defined in the original project document. The overall impression resulting from this detailed analysis is that some 80 percent of outputs have already been achieved and that remaining challenges are more related to further training and mainstreaming of improved implementation tools.

Due to the strong ownership of project outputs from the government side, there has been an active involvement of all key stakeholders in partaking and reviewing the improvements made to various implementation and training tools. This has had a positive effect on the quality and relevance of project outputs with the result that the guidelines and tools produced are adopted as government documents, forming part of the management system within KeRRA and the other road agencies.

Through the work carried out by the project on crosscutting issues, important concerns such as gender mainstreaming, labour rights, occupational safety and health, HIV/AIDS, youth employment and persons with disabilities have been safeguarded.

Being a project tasked with capacity development and institutional strengthening for the entire Roads 2000 programme, the focus is therefore the entire country. The development of guidelines and strengthening of training have an impact on the entire programme. The greatest effect seems however to have been in the regions where SIDA is also providing financial support and technical assistance to the implementation of Roads 2000 works activities since the SIDA project also emphasises many of the same development challenges. A recent decision to roll out the use of the improved technology from the pavement trials in the next phase of the AfD funded Roads 2000 project is expected to lead to a significant increase in impact of the ILO TA and further boost the use of labour-based technology and employment generation.

New training programmes in the use of the newly developed Roads 2000 tools are being incorporated in the General Training Plan of KTC, which also takes into account the training needs for upcoming Roads 2000 projects. Still, there is a strong demand to provide further training and support to works activities under KeRRA which are not supported by any of the development partners. Furthermore, the ILO TA focus is on strengthening Roads 2000 activities within KeRRA and to a lesser extent in KenHA, KURA and KWS where at present there are similar capacity development potentials.

Both the Government and the ILO TA recognise that these parts of the programme need further attention. During the remaining period of the project, emphasis is being given to mainstreaming Roads 2000 across the entire programme of KeRRA and to some extent also in the other agencies. It is however acknowledged that similar capacity development in the other agencies requires additional TA resources in order to meet the current demands.

5.5 Management arrangements

The ILO technical assistance team is housed by KeRRA and a significant part of the ILO TA consists of providing general management support to KeRRA. The daily conduct of project activities is regularly discussed with KeRRA counterpart staff. The closest counterpart to the ILO TA is the General Manager of KeRRA. KeRRA provides the ILO TA team with adequate office facilities including office space and office equipment located within the premises of its headquarters.

Project activities seem to be well appreciated by KeRRA management. The functions and tasks of the two ILO advisers seem to be well understood by KeRRA counterparts as well as other key staff in the Ministry of Roads and Kenya Roads Board. The engagement of short-term consultants for specialist inputs has been carried out after detailed discussions with

counterpart agencies and their activities in country have been conducted in close collaboration with the partner agencies. Equally, the training development activities have been conducted in close collaboration with the main training institutions for the road sector, KTC and KIHBT. The objectives and intended outputs of project activities are therefore well understood and considered relevant to the Ministry and their agencies and departments.

In respect of collaboration and facilitation of the project TA activities, it is important to note that the ILO TA is providing capacity strengthening to already existing government policies and strategies, essentially packaged into the Roads 2000 strategy. Therefore, there is already strong ownership of the policies and strategies that form the basis for the ILO TA interventions. The purpose of the TA is to strengthen these policies and mainstream their use in the programme. This support is generally appreciated by management as a valuable resource input to Roads 2000.

The close working relationship between the ILO team and the Government has been further strengthened by the fact the TA arrived at the time when KeRRA was in the process of being established. The management support to KeRRA therefore commenced at a crucial time when very limited personnel resources were available. As a result, the ILO TA has to a large extent been integrated into KeRRA and continues to play a key function in its management (i.e. its involvement in the coordination and steering committees for Roads 2000).

From the field visits, it is evident that the project has been successful in mobilising key technical personnel and expertise within and outside government when embarking on new initiatives thereby securing both ownership as well as expert manpower resources beyond those available from the project.

The project has also made strategic use of collaboration with other ILO programmes within and outside Kenya. Within the country, the project has drawn upon specialist services from other ILO technical cooperation on HIV/AIDS, enterprise development, youth employment and child labour. In addition it has benefitted from the ILO specialist team based in Pretoria, in particular in relation to occupational safety and health and labour rights. It has also been involved in the formulation of the next decent work country agenda.

5.6 Backstopping arrangements

Administratively the project reports to the ILO Area Office in Dar es Salaam under the direct supervision of the Director of the ILO Office there. The office in Dar es Salaam also provides accounting and other financial services as part of their administrative backstopping services. Technical backstopping was originally provided through the ILO ASIST programme in Harare. At the termination of this programme, the technical backstopping responsibility was transferred to the Sub-regional Office of the ILO in Addis Ababa in Ethiopia. The technical backstopping arrangements of the ILO was reorganised in 2010 and as a consequence this responsibility now lies with the team of specialists housed in the ILO office in Pretoria in South Africa.

The project forms part of the Employment Intensive Investment Programme of the ILO and therefore comes under the overall management of the technical unit EMP/INVEST at ILO headquarters in Geneva. Other units at ILO headquarters takes care of overall coordination in relation to donor collaboration, project monitoring and evaluation as well as dealing project agreements, extensions and budget revisions.

The fact that the ILO does not have a permanent office in Kenya, poses some delays in terms of processing some administrative duties for the simple reason that these need to be carried out via correspondence. This is a challenge for all ILO projects in Kenya. Equally, the project team does not have direct access to project accounts, as the ILO financial management

systems are only available to the office in Dar es Salaam. Instead, the ILO team relies on an imprest account to cater for daily financial transactions.

The changes in the backstopping arrangements did provide some confusion in the early stages of the project. However, with the arrival of the project team leader, these were resolved. Furthermore, the transfer of technical backstopping from the office in Addis Ababa to Pretoria did not have any impact on the project as it did not involve any staff changes.

5.7 Monitoring and evaluation

Progress of project activities is regularly reported in comprehensive reports, which are distributed among all development partners. The reports document progress made, completed outputs and on-going activities. Remaining work is presented in detailed work schedules.

At the start of the project, its logical framework was carefully reviewed and key performance indicators were quantified, as most of these were not indicated in the original project document. Progress of activities and outputs has been well documented and discussed in various stakeholder forums.

Data on progress is presented and analysed in regular progress reports covering both ILO TA activities as well as progress in the Roads 2000 programme as a whole. The monitoring system is standardised and cover all Roads 2000 projects. At the moment this monitoring is being mainstreamed in all four road works agencies. Data cover physical works, crosscutting issues and impact. The data collected and collated is also disaggregated by gender, for the purpose of increasing the female participation in the road works activities. Furthermore, youth employment is now also being monitored.

5.8 Impact and sustainability

Impact

Roads 2000, being a government strategy for sustainable road management, in which an employment generation policy has been incorporated, approaches poverty alleviation and livelihoods improvement from two angles. Firstly, the road maintenance strategy secures reliable road transport, thereby providing access to social services and economic activities in the rural areas in Kenya. Secondly, with the preferred use of labour-based work methods, the programme is also a significant source of employment. With labour costs constituting a significant portion of the total construction costs (ref. Section 5.10), there is a substantial cash injection into rural economies resulting in immediate livelihood improvements.

The ILO TA is targeted towards the Roads 2000 programme as a whole as well as towards the individual Roads 2000 projects being implemented in the various parts of the country. It therefore also influences the way donors are providing support to Roads 2000. Furthermore, it should be noted that most of the crosscutting issues addressed by the ILO TA are being developed into appropriate guidelines to be used in the road sector as a whole.

The crosscutting issues introduced with the support of the ILO TA have a direct impact on the large number of people involved in the programme, ranging from casual workers, contractors, consultants, technical and administrative staff in the regions to key decision makers and management at the centre.

Being a support TA to an existing government programme the issue of ownership of the project outputs in terms of policies and guideline development is secured through its close collaboration with the relevant government agencies. Equally, all training development initiatives are carried out in collaboration with KTC and KIHBT. The training itself is conducted by these training institutions.

Sustainability

The Government has identified transport infrastructure development as one of the priority focus areas for medium term action to attain the objectives of Vision 2030. Equally, the Roads 2000 forms a central part of the implementation strategy in the recently published road sector investment plan for the period from 2010 to 2024.

The Government of Kenya has an established Road Maintenance Levy Fund (RMLF) which generates steady and reliable funding earmarked for road maintenance. The RMLF - the biggest road fund in sub-Saharan Africa - has increased annually on the average by 18% to 22.65 billion (USD 283 million) in 2009/10. The increase in the fuel levy shows the commitment of the government to the sustainability of the road sector. The Fund allocates 40% of its collection to KeNHA, 32% to KeRRA, 15% to KURA), 1% to KWS, 2% to KRB and 10% to development projects of road agencies.

An analysis carried out in the Road Sector Investment Programme shows that sufficient funds are available from the road fuel levy tax to cover routine maintenance of the road network in good and fair condition. This does not include the backlog maintenance. This backlog is currently being addressed by the financial support from the development partners and the GoK development budget.[9] In the medium to long term, the government is also considering widening the road user charging system by incorporating infrastructure bonds, public private partnerships, and upward revision of road maintenance levy fund charges.

Current government policies and funding therefore indicate that Roads 2000 will continue as a major programme in the foreseeable future. The challenge is not relating to securing adequate funding but more in terms of protecting and further strengthening the Roads 2000 implementation capacity. This is further discussed in the remaining part of this Chapter.

5.9 Labour-based technology

The position of the government in terms of applying labour-based works technology is firmly entrenched in the Roads 2000 strategy and also confirmed in other government policy documents. With the current unemployment figures in Kenya, the government clearly acknowledges the need to create more jobs. This is also makes the Roads 2000 strategy more relevant than ever.

Labour-based works technology is well known in Kenya, although not necessarily to all partners in the programme. In a large programme such as Roads 2000 there are continuous staff changes with new entrants who do not possess the same experience as the veterans who have been involved since the early days of the RARP. Equally, some donors are new to Roads 2000 while others have been involved in rural road works in Kenya for the past 10 to 20 years. The institutions in charge of the rural roads programme have also endured several structural changes, as well as major changes to the implementation arrangements. Another challenge has been the transfer from force account to the use of contractors for works execution. This implies that a major portion of staff in charge of the actual works has been replaced.

Variations in the use of labour versus relying on machines for carrying out the works are reflected in the employment generation numbers and percentage labour costs of the projects. The data collected clearly shows significant variations in the use of labour versus machines. This in turn indicates that there is still a potential to increase the labour component in the programme.

[9] The current development budget of KeRRA is approximately KSh 800 million.

Newly recruited staff who have not been exposed to labour-based works technology are often hesitant to the use of labour instead of machines. This is normally due to lack of knowledge that the works can actually be carried out to the same quality and standards at competitive cost. This can be addressed with further training and technical guidance. In addition, there are outside forces, be it local politicians or contractors who claim that the technology is slower, sub-standard or less cost efficient. Again, this can be addressed with more training and information dissemination.

Being a long-term programme and not merely an isolated time-bound project, there is a continuous flow of new entrants of programme stakeholders consisting of technical staff, contractors, local politicians, donors, consultants, etc. who need training and briefing on the inherent advantages of the programme. This requires a well-designed national training programme which is up-to-date with recent developments and which has sufficient capacity to deal with the continuous training and information dissemination demands. This challenge not only applies in relation to the use of labour-based work methods but all the facets of managing and implementing the programme, including the recently introduced crosscutting issues.

Technology development

The technology applied in rural road works in Kenya has undergone significant changes since the early days of the RARP. The RARP focused on building rural access roads with very limited traffic volumes, essentially providing basic access to rural communities. This allowed for lower technical standards and a higher reliance on manual construction methods. When labour-based works methods were introduced for the rehabilitation and maintenance of Class D and E roads in the Minor Roads Programme, work outputs needed to conform to higher technical standards.

During the period since the start of the Roads 2000 programme, there have been further demands to increase technical standards due to higher traffic volumes. This increase in technical standards has warranted more use of equipment, particularly for haulage of materials and compaction. The improvement of construction standards is a continuing trend, clearly demonstrated through the new pavement technology introduced the recent trial works in Bondo and Muranga.

The improved standards have also led to more regular quality testing of materials and works. Still, with the new standards, it has been possible to maintain an appropriate mix of labour-based work methods supplemented by a limited use of heavy equipment.

There is also the dedicated youth employment programme, KKV, which has adopted labour-based work methods as a means of creating jobs. All public works agencies are expected to contribute in creating jobs for this programme. KeRRA, KURA and KenHA are also involved in this programme, mainly through job creation through routine maintenance works.

The long history of labour-based works technology in Kenya has resulted in a cadre of very competent local engineers and technicians who can be and are used for technical assistance and support to on-going and future Roads 2000 projects. Equally, the training institutions within the road sector are well versed in the technology and possess a solid training capacity. The capacity improvements facilitated by the ILO TA have been carried out with the full involvement of the relevant road sector agencies, thus securing that the new knowledge and experience remains in the country when the ILO project ends.

Due to this the Roads 2000 programme has a good chance of surviving. There is a continued demand for rural road improvement and maintenance as well as employment and the Roads 2000 is a sound strategy for addressing such needs. It does however require a continuous vigilance from the programme management to ensure that these outputs continue to be achieved. It also implies that the programme has adequate mechanisms that can deal with new challenges relating to technology development and mainstreaming new innovations.

The ILO TA has to a large extent been a catalyst in terms of improving work standards and boosting capacity among the staff in charge of works implementation and supervision. The experience from this project clearly shows that a small unit dedicated to these capacity development issues, working in close collaboration with management and existing in-house

quality assurance and training units, can have a significant impact in terms of updating technology and procedures and addressing new challenges facing the programme. Although well integrated into the management structure, the ILO TA is however, time bound, due for completion in a year from now. It is therefore appropriate to start considering how this catalyst function currently performed by the ILO can be sustained through more permanent management arrangements within the road agencies involved in Roads 2000.

5.10 Employment generation

The project provides support to the monitoring of key physical outputs of the various Roads 2000 projects. In addition to work outputs, the resulting employment generation is monitored. The latest figures for employment generation are presented in the table below, disaggregated on the basis of funding source. For the projects monitored, a total of 4,9 million workdays have been generated through the road works. This is equivalent to some 20,000 work years.

As can be seen, there are significant variations in terms of employment generated in each of the projects, with the SIDA supported works activities showing the highest employment figures. The employment generation obviously varies depending on the type of works being carried out. Some activities require more inputs of equipment and material and thereby reduce the cost component of labour.[10]

When carrying out labour-based road works, the cost of labour, equipment and materials are often equally divided with a labour component of 30 to 40 percent. In the SIDA funded project, the labour component is around 49 percent of the total costs. This is a good indication that labour-based technology is being used to a high extent and that the principles of the Roads 2000 strategy are adhered to.[11] The SIDA project also shows reasonable results on gender mainstreaming with 34 percent of the jobs given to women.

Project	Province	Expenditure (mill. KSh)	Employment workdays	Labour cost	Est. potential employment
ADB	North Rift	1,077.3	703,820	15%	2,295,000
ADB	South Rift	807.8	295,895	8%	1,721,000
AfD	Central	1,901.0	1,118,085	15%	4,050,000
Danida	Eastern & Coast	462.0	401,739	20%	984,200
EU	Eastern	703.1	381,545	12%	1,497,900
KfW	Nyanza	460.8	169,657	8%	980,000
SIDA	Nyanza	855.0	1,838,343	49%	1,838,343
Total		6,267.0	4,909,064	18%	13,366,400

When studying the resulting employment generation in some of the other projects, it seems as if labour-based works technology is not as widely used. When applying the labour cost component achieved by the SIDA project to the total costs of the other projects and converting this into workdays, it is evident that there is a considerable potential for increasing the use of labour-based work methods and thus increasing the number of jobs created. The table above shows that there is a potential for doubling the number of jobs through a more consistent use of labour-based work methods.

[10] Source: Project Bi-annual Report No 4, December 2010.

[11] The labour cost component in labour-based road works depends on several factors, including the prevailing wage rate levels, need for equipment (mainly used for gravel haulage and compaction works) and costs of culverts and bridge works (which have a high materials costs). A wage cost portion of roughly 50 percent seems reasonable, considering the fact that the works in the Roads 2000 programme predominantly consist of rehabilitation and spot improvement, requiring less works on structures.

The above analysis only covers the rural road works supported by the donors. In addition, there is a further employment potential in the routine maintenance works financed from road levy funds as well as improvement works funded out of the government development budget. It would be useful if the monitoring also covers such funds.

Roads 2000 also relates to highways and other roads in the country. Efforts are currently on-going to include these roads into the Roads 2000 monitoring. When available, it would be useful to carry out an analysis of these figures with a view to establish specific target values in terms of employment generation.

The Roads 2000 monitoring clearly shows that a substantial amount of employment is being generated through the use of labour-based work methods. Considering the differences in employment generation being achieved in the various projects, there is still a great potential to increase the use of this technology and thus increase the number of jobs created. This poses a continuous challenge to the management in the various road agencies. By continuing this monitoring process and being clear on what can be achieved and on this basis agreeing on specific targets may contribute to increasing the number of jobs created in the programme.

5.11 Pavement Trials

The ILO TA has provided technical support to field trials using stabilised base courses and emulsion based surface seals in Muranga in Central Province and Bondo District in Nyanza. In addition, the use of stone pavement has been tried out on a short road section in Bondo.

Surfacing works in Bondo

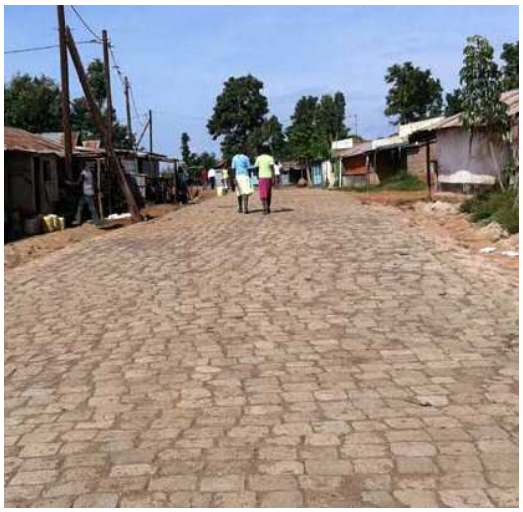
The trial work is organised under the management of the KeRRA Regional offices in Bondo and Muranga. Additional technical staff has been mobilised to supervise the works. Collaboration has been secured from the Materials Branch of the MoR for soils testing and quality assurance. The progress of the trials is good, demonstrating good quality works and work organisation. The trial sections in Bondo are close to completion while in Muranga they have completed roughly 50 percent of the works.

The trial works in Bondo were carried out through the involvement of local small-scale contractors while the works in Muranga is organised through force account. The work itself is carried out relying on an appropriate mix of labour and machine based methods. With this approach, a high degree of employment generation is secured while at the same time providing construction solutions at higher design standards, essentially producing a bitumen surfaced road as opposed to the prevailing gravel road standard applied to most rural roads. The Muranga site will also be used for training more contractors this year with a view to expand the use of these pavement solutions in the Roads 2000 programme.

The ILO TA organised the secondment of supervisors from the ILO rural road works project in Limpopo in South Africa to provide on-the-job training in appropriate work methods for the construction of these low-cost seals. The ILO TA still closely monitors the trial works. Collaboration has also been secured with the Africa Community Access Programme

(AFCAP) for technical support and monitoring.[12] AFCAP has carried out three missions providing technical support to the on-going trials in Bondo and Muranga.

With increasing traffic volumes, these trials provide a valuable improvement of technical standards for rural roads in Kenya. The new technical solutions are expected to (i) reduce initial costs of upgrading roads to bitumen surface standard and (ii) reduce total life-cycle costs of roads with higher traffic volumes. The chosen technical solutions have been tested in several places outside Kenya and as such the trials are more a matter of validating that the methods are also appropriate for local conditions. The trial sites are also important for training purposes, acting as launching pads for the wider use of this technology.



Stone pavement in Bondo

Although the surface trials have so far yielded positive results, it is important to bear in mind that the performance of these new pavement designs needs to be monitored over time. It is only when the completed roads have been subject to traffic that the full advantages of the new designs can be determined. With close monitoring over time, it is possible to establish sound guidelines for when these designs should be applied. The planned increased application of these standards to a larger portion of the network will add to the experience base required for the optimal use of the new standards.

Appropriate mechanisms need to be put in place for the continued monitoring of the performance of these roads in order to prepare sound guidelines for when the new technical standards should be applied. When and where to use different road construction standards depends on several factors including traffic volume, availability of materials and climate conditions. Some rural roads still have limited traffic levels where previous gravel standards are adequate. The new standards introduced through the trials have higher initial investment costs and it is therefore important to provide clear guidance on when they should be applied.

Field trials in Muranga

[12] AFCAP is a research programme funded by the British Government. AFCAP supports knowledge sharing between participating countries in order to enhance the uptake of low cost, proven solutions for rural access that maximise the use of local resources.

5.12 Crosscutting issues

The crosscutting issues cover a wide range of topics including community participation, environmental guidelines, soil conservation, gender mainstreaming, HIV/AIDS, labour rights, occupational safety and health and the involvement of persons with disabilities. Introducing such strategy elements into the programme is a time consuming process. It involves a number of preparatory steps during which the strategies are developed before they are eventually mainstreamed into the programme.

Some of the crosscutting issues where developed and tested before the project commenced. In these cases, the ILO TA has concentrated on mainstreaming the new implementation procedures by organising training and preparing guidelines and training materials. In other cases, the whole process has started from scratch also requiring policy development, agreeing on appropriate of procedures and finally mainstreaming their integration into the programme.

During the preparatory phase, the CCIs were formulated into policy and goals and in turn transformed into implementation procedures which secure the specific objectives and goals relating to these concerns. This process is on-going and the project is currently in the process of finalising a comprehensive set of guidelines. With a full strategy agreed with detailed implementation arrangements, trainers need to be trained in its application before it can be rolled out to all corners of the programme.

The general impression is that the crosscutting issues addressed by the ILO TA are well received by Roads 2000 staff, and that there is very little resistance to their introduction. The real challenge is more in terms of how to ensure that they are incorporated into the daily implementation of the programme and ensuring their application. This is a mainstreaming challenge relating to securing adequate training of all staff members in a nationwide programme and thereafter, installing adequate measures for monitoring and adherence.

Considering the above, it is evident that the duration of the project as proposed in the original design was too short. In agreement with GoK and SIDA the project period was increased in order to cater for the time necessary to complete these processes as well as allocate more time for training. Training has already commenced and training of trainers has also been carried out in most of the crosscutting issues. Current updating of the General Training Plan of KTC will ensure that further training covers the needs of the entire programme.

5.13 Need for further TA

Considering the limited size of the TA compared to the size of the programme, it seems as if the project was well designed in terms of identifying priority areas and also in terms of how the project is implemented.

By taking a networking approach and seeking the full participation of the various key actors in the sector, it has been able to mobilise resources, both funding and human resources, in addition to those available within the project. In addition, by seeking advice and expertise from other agencies outside the confines of the road sector, the TA team has been successful in improving the quality of policies, strategies and training material.

The project commenced at a time when the road works institutions were being restructured. This in itself posed both challenges and opportunities. Working with new organisations has the advantage that it allows for new thinking and the introduction of new implementation arrangements, procedures, guidelines, etc. In that respect, the ILO TA is acknowledged as a valuable input when KeRRA was established. The job is however not complete. There is still

a number of development challenges facing the sector with more training and institutional capacity development required.

The experience from the ILO TA has shown that a small team of advisers supplemented with short-term specialist inputs can act as an efficient catalyst in terms of introducing new aspects and further strengthen existing policies and strategies and thus improve capacity. It is acknowledged that the focus of the project has benefitted KeRRA in particular as the TA team has been based in this organisation. In terms of strengthening Roads 2000 and mainstreaming its strategies there are equal demands for such inputs in KURA, KenHA and KWS.

Benefits of the TA

The benefits of the TA can be summarised as follows:

(i) it has been a valuable catalyst in terms of introducing and developing new and improved procedures relating to contracts management, works procedures and technical standards,
(ii) provided management support during the establishment of a new rural road works agency,
(iii) it has improved the monitoring of outputs in the various Roads 2000 projects in KeRRA and also across the road sector,
(iv) introduced new crosscutting issues and integrated these into the works implementation arrangements, addressing concerns such as environment, community involvement, gender, HIV/AIDS, labour rights, persons with disabilities and many more.
(v) improved training capacity within the road sector training institutions, and
(vi) organised training of technical staff from government and the private sector, and trainers.

The involvement of an international organisation such as the ILO has allowed for a wider networking outside the confines of Kenya and also facilitated the exchange of good practices with other countries in Africa and to some extent also Asia.

The Roads 2000 is a sound strategy for road network management, which can have further benefits when implemented at full scale across the entire sector. When mainstreamed, it has the potential to provide many times the employment opportunities it currently achieves, while at the same time providing sound management of road infrastructure assets.

Being a comprehensive strategy covering a wide number of issues relevant to a large audience, it is evident that the project has only managed to address some of the capacity development demand in the road sector. Significantly more training and information dissemination is required in order to mainstream all the principles and strategies of Roads 2000 into the daily operations of the four agencies in charge of the road network in Kenya.

Establishing a unit within each of the agencies with a mandate related to capacity development and mainstreaming Roads 2000 strategies, could be a possible avenue for continuing some of the processes initiated by the ILO TA, as well as addressing new challenges. Technical assistance support from key development partners could be an efficient means of securing their ownership of the development process undertaken by these units. Finally, it should also be noted that Roads 2000 is essentially a road network maintenance management strategy, and therefore, it is important to link these activities to the Kenya Roads Board.

Funding is currently available in the programme for training, which should be mobilised for further mainstreaming of the Roads 2000 strategies. It is also possible to secure local funding for research and development activities. TA for this type of activities should also prove attractive to donors considering the great impact such limited investments can have at institutional level and also at downstream level in terms of improved road network management and employment generation.

It would be useful to initiate discussions on further TA to Roads 2000 now thereby having a clear exit strategy when the ILO project ends in June next year. This process is best

approached by identifying core activities and challenges that would benefit from this type of support. At the same time it would be useful to have the capacity development units established during the period between now and the end of the ILO project.

5.14 Future county administrations

Next year, new local government bodies will be established through the election of representatives at county level. The new constitution of Kenya already assigns duties and mandates for the new county governments, which includes the upkeep of "county roads". The county roads are generally viewed as the roads currently under the responsibility of KeRRA and to some extent KURA. This means a further restructuring of the management and supervision arrangements for the rural road sector.

The establishment of county administrations will have a direct impact on the future role, structure and organisation of KeRRA and KURA. At the moment, it is not clear how KeRRA and KURA will relate to the new county administrations in terms of delineation of mandates, authority and responsibilities. It is however evident that many responsibilities currently vested with the two agencies are bound to be transferred to the new county bodies. This implies that a number of the recently established management arrangements in KeRRA, some developed with the assistance of the ILO TA, may eventually be disbanded in favour of a stronger role of the local government bodies.

This poses a certain a risk factor in relation to the sustainability of the systems and procedures established within KeRRA. At this stage it is difficult to assess which part of the development results are at risk as the development of the new county government bodies is yet to commence. All the same, it is expected that the future county administrations will take charge of rural road works implementation and this implies that financial, administrative and technical capacity needs to be established within these bodies. With these responsibilities vested with local government, KeRRA may at best remain with regulatory, coordination and technical responsibilities.

It will take time before these institutions are established as fully operational service providers. In the meantime, the existing road agencies need to continue providing their services as currently mandated. Roads 2000 projects with timeframes beyond next year also need to take into account the formation of the county government organisations.

Despite the uncertainty relating to the future management structure for rural roads, it is believed that the continued development of the Roads 2000 Strategy with sound and effective implementation arrangements and training staff in their use is not a waste. These policies, guidelines and procedures are valuable tools, which will remain relevant also in the new scenario with county-based government bodies.

When the process of building the new local government structures commence, there will be new demands for capacity building and development assistance. In order for the new county administrations to take on the role of the client for future rural road works contracts they will need capacity and skills in procurement, contracts management, financial management, accounting, auditing, quality control, materials testing, etc. Experience from other countries clearly shows that when rural road works programmes are vested with local government bodies, their effective implementation depends on extensive capacity building within the local administrations.

The Roads 2000 programme survived the recent restructuring of the road sector. With its firm basis on sound implementation strategies, well defined in manuals, training tools and guidelines, it has a reasonable chance of surviving the imminent restructuring. Still, for this change to take place in a structured manner, it requires a concerted effort in terms of

allocating sufficient technical and managerial resources that can be used first to define the new structures and secondly assist in building the required capacity. The future setup involves 47 independent county-based organisations each with a mandate to plan, supervise and manage rural road works. The creation of these institutions needs to follow a common strategy - which is yet to be defined.

6 Lessons learned

6.1 General features of the TA

This form of development cooperation and its design is a good lesson on how technical assistance can be provided in an efficient and cost-effective manner. The experience from this project is worthwhile replicating and scaling up both in Kenya as well as elsewhere. The ILO TA has in essence functioned as a capacity and development unit strategically placed and well integrated into the management structure of a large-scale public works programme. The resources available to the unit as such are limited, but due to its partnership arrangements, it has also been able to draw on the human resources of its counterpart institutions. For this reason, it has very much functioned as a catalyst for and facilitator of important development initiatives in Roads 2000, thereby ensuring that the programme addresses emerging challenges facing the sector. With the close collaboration secured with key stakeholders, strong ownership has been created within the government institutions for which the support is intended. This capacity development approach can also be institutionalised in the management structure of the Roads 2000 programme and efforts should be made to do so during the remaining period of the ILO TA.

6.2 Employment generation through public works programmes

The need for employment generation is a growing political concern also in Kenya. Youth employment programmes are being created in a number of developing countries where government is facing political dissent, at times leading to civil unrest, often voiced through its unemployed youth living in urban areas. In Kenya, dissent and civil unrest for the same reasons have at times also taken place in the rural areas.

The government recognises these challenges and has initiated several programmes to address unemployment. The Kazi Kwa Vijana (jobs for youth) programme is already on-going with the involvement of a number of government agencies where there is potential to create additional jobs. The road sector agencies also partners with this programme.

The ILO acknowledges the demand for concerted efforts in relation to youth employment. It promotes youth employment through a number of technical cooperation initiatives – also in Kenya. The current Decent Works Programme for Kenya identifies youth employment as a priority.

A large number of these employment initiatives are driven by current political challenges, while demand for employment has been a challenge in several developing countries including Kenya for the past 20 – 30 years. An important lesson that can be drawn from the Roads 2000 programme is that there is a large potential for employment generation in the existing public works programmes. Moreover, such programmes, with their established mandate to provide public infrastructure, already have secured budgets, some of which can be used for creating additional jobs if careful attention is given to how works are actually implemented. By applying labour-based work methods, additional jobs can be created while still maintaining established quality standards and cost-effectiveness. In other words, additional employment opportunities can be created at no additional cost for youth and other

disenfranchised groups. Equally important, is that these jobs are not of temporary nature. Employment will be available on a long-term basis as the need for improving and maintaining roads and other public infrastructure is a continuous process.

6.3 Dedicated employment generation programmes

Dedicated youth employment programmes such as the Kazi Kwa Vijana can add value to existing programmes in which job creation is already an established policy. The funding provided through the KKV can be effectively utilised in public works programmes to carry out work activities that can be done relying on labour-based work methods. The road works agencies in Kenya have actively participated in KKV and engaged youth for such work.

Training and skills development for specific activities required in public works programmes can be an effective approach to engage youth in constructive work which not only serves the purpose of "keeping them off the streets" but also leads them into productive work and filling a demand for services required by the public. Initiatives to develop micro enterprises comprising of trained youth (or other job-seekers) can be directed towards local authorities or public works agencies and eventually operate as valuable service providers.

The lesson to be learnt in this context is the importance and advantage of linking the skills development to existing programmes in which there is a demand for workers with certain skills. Public works programmes are already equipped with financial resources that can be used for engaging trained youth in carrying out works for which these agencies are mandated. This way, it is possible to engage the trainees immediately after successful completion of training and avoiding a situation in which they return to being unemployed.

6.4 Effective use of technical assistance

The project was designed to address specific capacity development challenges facing the Roads 2000 programme at the time when the ILO TA was conceived. When the project commenced, these challenges were further discussed with government counterparts and appropriate implementation arrangements for the identified activities were agreed. During the course of the project, a number of other development issues were identified and added to the project activities.

The lesson learnt here is twofold. First of all, when specific development constraints are identified in a large-scale programme such as Roads 2000, these can be effectively addressed through a well-designed TA input, which does not necessarily require extensive amount of resources. Its success however rely on securing TA personnel and specialists with the right skills and experience, and that the host organisation makes full use of the human resources made available for this purpose. The ILO TA project demonstrates that well-defined capacity gaps can be effectively dealt with using such an approach.

The second important aspect is the ability of the TA to engage and build partnerships with the counterpart agencies and also mobilise their human resources to participate in the capacity building process. This project has successfully established such relationships with KTC, KIHBT, Materials Branch, Roads 2000 projects as well as institutions and programmes outside the road sector (such as drawing in specialist expertise for the crosscutting issues). This not only builds ownership in the development process but also reduces the need for external support, thus limiting the TA to (i) acting as a catalyst to start new development initiatives, (ii) facilitate the development process and training, and (iii) mobilise specialist inputs not available locally.

6.5 Capacity development is a continuous process

The above approach demonstrates how a small TA support project has effectively dealt with the challenges identified some 3 to 4 years ago. Most of these has been addressed or are in the process of being dealt with. In the meantime new challenges emerge which need similar attention and allocation of technical expertise. Equally, the newly introduced innovations and improvements require time and resources to be mainstreamed across the entire programme.

This means that there is a demand for a continuous facility addressing capacity development challenges. It does not necessarily require a continuous TA funded by external resources but a dedicated unit within the management structure dealing with capacity development and new innovations. Using the same partnership and networking approach, this unit can be kept small, however, it still need to be equipped with sufficient resources to mobilise specialist inputs as and when required.

6.6 Training

The project activities and resulting outputs demonstrate that capacity is being improved. Still the training of new trainers and improving training courses are just two steps in a long process of building capacity. During the training needs assessments and curricula development activities of the ILO TA, it is clear that a number of institutional challenges at KTC still need to be addressed. The process of addressing these are on-going but their full effect will only be clear after a period of time beyond the envisaged completion of the ILO project.

The effects of the improved training delivery need to be monitored over time. Ultimately, it is expected to result in improved works at the road works sites and better performance of the programme as a whole. This will take time to verify. At this stage the focus has been on improving training tools and training of trainers. These trainers now need to deliver the necessary training required for staff in charge of management and works implementation. There is a large training audience and the effects of the capacity building can only be verified at the stage when government staff and contractors put the resulting skills development into practice.

6.7 ILO involvement

The surface trials in Muranga and Bondo is a good example of how the project has successfully imported technology from other ILO projects and extended the networking arrangements with institutions in other countries. This is a two-way process. The experience from past ILO involvement in the rural road works programmes in Kenya has also benefited a large number of programmes in other countries. The international courses at KTC have also been an important conduit for exporting the Kenyan experience in rural road works across the world.

Completed road section in Bondo

7 Recommendations

The resulting employment generation from labour-based works in the Roads 2000 programme is a significant contribution to the unemployment challenges facing the government. It also serves as a good example of what can be done in terms of creating jobs within existing government programmes without incurring additional costs. There is still a potential for a further increase of employment opportunities in Roads 2000. More jobs can be created if the same employment strategies are adopted in other sectors and public works programmes. KKV is already exploring this potential together with various government agencies. However, for this to take place on a larger scale, there is a demand for clear policy guidance and appropriate management arrangements to ensure its effective implementation. The potential for this development exists in Kenya since the technical know-how and specialist personnel is available to implement employment-intensive public works.

The following set of recommendations is targeted towards the government, the ILO TA and the ILO's overall support to Kenya. Some of these actions can be facilitated by support from the ILO TA team as part of the general management support to Roads 2000, while still securing the already agreed project outputs.

(i) Analyse potential for job creation and set targets for employment

The monitoring of employment is a valuable management tool for the Roads 2000 programme. The results being reported by the various projects clearly shows that there are considerable variations in the employment outputs. As an immediate measure, the Roads 2000 works activities in KeRRA not supported by any donor should be included in the current monitoring.

The data from the monitoring needs to be carefully analysed with a view to explore how employment generation can be increased in the projects that achieve lower employment outputs. With a further analysis, it may be possible to identify improved implementation arrangements and also set specific targets for employment in each of the Roads 2000 projects. This not only applies to the works managed by KeRRA. A similar approach can also be carried out on Roads 2000 activities under the supervision of KenHA, KURA and KWS.

(ii) Formulate new and remaining capacity development demands

The ILO project was designed to deal with specific capacity development demands at the time when it was prepared. The ILO TA currently addresses these needs. However, more ambitious targets can be set in Roads 2000 in terms of adhering to its implementation strategy and thereby increasing the employment generated. A careful analysis of the programme as described above can also uncover some of the necessary capacity improvements. Furthermore, additional development challenges are arising from the imminent establishment of county administrations.

(iii) Establish core units within the road agencies to deal with capacity development needs

The ILO project has to a large extent operated as a capacity development unit in KeRRA. This is good as it demonstrates effective integration and ownership of the TA. As the project comes to an end next year, it is important that the current tasks and functions are transferred to an appropriate unit in KeRRA. The experience of the ILO TA shows that a small coordinating unit dealing with training and capacity development can have a strong impact if good partnering arrangements are secured with other key units. In order to strengthen the position of Roads 2000 across the road sector, it is recommended that similar arrangements

are sought in the other road agencies as well. The capacity development analysis proposed above will identify a series of challenges which these units could take charge of.

(iv) Assess TA requirements to reach reasonable targets and involve development partners

The capacity development and mainstreaming process described above involves Roads 2000 works funded by government as well as donors. It is therefore useful to involve development partners in the formulation process as well as with TA into the proposed development units to secure good ownership from all parties.

(v) Prepare for the new county administrations

Include the capacity development demands arising from the imminent establishment of county administrations in the process described above. It is likely that the responsibility for rural road works will be transferred to the new government bodies. This raises a full range of development challenges. The local administrations need to be built up from scratch requiring financial, administrative and technical capacity to function in an effective manner. While technical capacity can be sourced from KeRRA, this development process is to a large extent a good governance challenge. The transfer of this mandate needs to be carried out in a prepared manner in order to avoid loosing any momentum in the Roads 2000 programme. KeRRA can play a key role in initiating discussions with relevant authorities about the future role of the counties and on this basis commence the preparation of necessary capacity development measures.

(vi) Include Roads 2000 in the next DWCP for Kenya

Considering the huge potential for job creation in public works, it is well worth considering incorporating support to Roads 2000 in the next DWCP for Kenya. The government has demonstrated a strong commitment to Roads 2000 in recent policy documents. The commitment to the KKV programme is further evidence that the government recognises employment as a major development challenge. Finally, as shown through the crosscutting activities of the ILO TA, involvement in this type of programmes also provides an excellent opportunity for mainstreaming other decent work issues such as conditions of work and occupational safety and health into a sector that employs a substantial labour force.

(vii) Document work methods and technical specifications applied in the surface trials

The introduction of new pavement technology is an important asset to the Roads 2000 programme as it shows how high construction standards can be achieved while still applying labour-based work methods. These work methods are also highly compatible to the capacity of local small-scale contractors. The work methods and specifications and appropriate quality assurance procedures now need to be properly documented in manuals and training material before the technology is applied on a large scale.

(viii) Secure a process for future monitoring of the pavement trials

KeRRA together with the Materials Branch needs to establish a mechanism for continued monitoring of the performance of the improved road pavement standards with a view to establishing clear guidelines for their application. The technical assistance currently available for this initiative will terminate before this process is completed. It is therefore important that a monitoring arrangement is put in place for the entire period envisaged, in which manpower resources are secured and activities and outputs are clearly defined.

(ix) Resuscitate international training courses at KTC/KIHBT, thereby regaining the reputation as a centre of excellence by marketing the existing training capacity in country and overseas

KTC and KIHBT possess a solid training capacity in the field of labour-based road works technology. In many countries, KTC has been regarded as the centre of excellence for this technology, where training was conducted relying on both practical on-the-job training as well as conventional classroom lectures. This training capacity still exists in KTC/KIHBT and has recently been strengthened. Today, these institutions have a wide variety of training products for different cadres of staff, covering subjects including rural road maintenance, contracts management, low-cost surfacing, soil erosion and many more. There is a great demand for such training so it is important that this training capacity is properly marketed, thereby boosting the use of its services in country and overseas.

(x) Continue ILO involvement in strengthening Roads 2000

The ILO TA has demonstrated how the use of international advisers and specialists can be effectively utilised to facilitate capacity development and impart experience from elsewhere. The ILO remains a world leader in building capacity for rural road works applying labour-based work methods. Past and current ILO TA in Kenya has confirmed that its involvement has a visible impact. Its participation in rural road works programmes in Kenya has also built capacity within the ILO in this particular field. It is therefore in the interest of both the ILO and GoK to continue this form of collaboration.