# Capacity Building of the Road Administration Through Institutional Cooperation: The Case of Tanzania

By

Eng. Hagai K.S. Bishanga, Manager Tanzania Transportation Technology Transfer

Presented at the PIARC International Seminar on Institutional Capacity Building, Cotonou, Benin 20<sup>th</sup> – 23<sup>rd</sup> March, 2007



#### Introduction

- Financial allocations to the road sector in Tanzania decreased significantly from the 1970s.
- In the mid 1980s, allocations for maintenance of trunk and regional roads were about ¼ and 1/5 respectively compared to the estimated requirements.
- The financial situation caused a severe deterioration of the road network throughout the whole country.
- To arrest the situation, the Integrated Roads Project (IRP) was launched in 1990, initially with a time span of 10 years, aiming at:
  - Rehabilitating and maintaining priority trunk and rural roads
  - Achieving sustainable maintenance of the road network through institutional reforms
- The IRP Strategy comprised a comprehensive approach that entails implementation of key road investments and major policy and institutional reforms.



#### Introduction

- Research had established that the root cause of the problem hinged more on inadequate institutional and financial arrangements, than on technical deficiencies.
- Inadequate funding of road maintenance, poor working environment and bureaucratic procurement procedures were some of the contributory factors to the nonperformance.
- Institutional reform was therefore seen as the only remedy to the problem.
- The reform process sought to address four basic issues of ownership, financing, responsibility and management.

#### The Road Sector Programme (RSP)

- The Government of the Kingdom of Norway through NORAD has been assisting Tanzania in implementing the "Road Sector Programme (RSP)" since early 1990s.
- The programme has been focusing on institutional strengthening and cooperation within the road sector and forms part of the Integrated Roads Programme (IRP) commenced in 1990.
- Implementation of the "Road Sector Programme" has been through the then Ministry of Works (MoW) responsible for management of the trunk and regional roads entering into institutional cooperation agreement with the Norwegian Public Roads Administration (NPRA).
- The process towards the Agreement on the RSP was guided by a set of principles, among them being activities to be carried out by MoW staff assisted by local consultants and NPRA.

#### The Road Sector Programme (RSP)

- The purpose of the RSP is to increase the competence and efficiency in road administration in Tanzania
- The initial road sector agreement (TAN 080) was implemented during the period 1993 to 1998. This was followed by the Road Sector Programme (TAN 045) implemented during the period 1998 to 2002
- At the end of each agreement period, an independent review of the programme was carried out:-
  - To assess achievements of the programme compared to objectives and assess sustainability of the program activities.
  - To provide recommendations as to future Norwegian support to the road sector in line with Tanzanian transport sector policies and the Integrated Roads Programme.
- This presentation is focusing on TAN 045 Road Sector Programme



#### Programme Objectives

- Improve organisational structure and administrative/management procedures
- Improve managerial and technical skills for staff
- Improve skills of local consultants
- Improve accountability of funds in the road sector
- Improve the maintenance standards of roads and bridges
- Reduce the number of accidents on the roads
- Improve the durability of road works
- Reduce the cost for road works
- Increase employment possibilities in the road sector
- Reduce time and effort spent on transport in rural areas



# Road Sector Programme Components

- Management and Organisational Development
- Financial Management System
- Maintenance Management
- Road Safety and Vehicle Axle Load Control Programme
- Bridge Management
- Central Materials Laboratory
- Equipment Management
- Appropriate Technology Advisory & Training Project
- Miscellaneous Support
- Programme Administration
- The majority of the components were on-going components under the previous TAN 080 Agreement.



- NPRA provided technical advisers who worked with MoW staff on short-term assignments.
- After identifying the gaps/needs, MoW technical staff responsible for implementation of the programme component, submitted to NPRA clearly defined TOR requesting for the required expertise.
- It took a shorter time for NPRA experts to be made available as compared to conventional recruitment of the consultant; and their availability was flexible.
- The relationship between the NPRA advisers and MoW staff was amicable and beneficial to both parties.



#### Programme Implementation

- MoW staff found it easier to deal with NPRA advisers than in dealing with a consultant, because:
  - they were able to relate to the same individual all the time, which ensured better continuity for the project.
  - the advisers are made available only when they are needed.
- NORAD Contribution to the programme was NOK 35 million as per the budget.
- The government of Tanzania allocated Tshs. 4,856 million against a budget of Tshs. 7,000 million.
- During implementation of the programme other key reforms relevant to the road sector took place which was not financed under this programme:
  - Establishment of the Road Fund and Road Fund Board in 1998
  - Putting in place the Public Procurement Act in year 2000



# Programme Achievements, Effectiveness and Impacts

- Organisational and Management Development
  - A road agency TANROADS was established in July 2000 and by 2002 was fully operational and rapidly growing. NPRA Technical Adviser participated in preparatory work leading to the establishment of TANROADS.
  - NPRA Technical Adviser also contributed to the smooth cooperation between the MoW and the NPRA.
- Financial Management
  - Platinum Financial Management System was put in place funded by other sources, and it is functioning well. The system is sustainable. Objective achieved without RSP funding.
- Maintenance Management
  - TANROADS has developed a Road Mentor road maintenance management system through funding from other sources. The system is working well and is sustainable. Objective achieved without RSP funding.

# Programme Achievements, Effectiveness and Impacts

- Road Safety and Axle Load Control Programme
  - Road safety objectives have not been met. The number of road fatalities and injuries is increasing again.
  - Objective to establish a "road safety organisation capable of managing a multi-sectoral integrated approach to the road safety problem with long and short term plans" has not been met.
  - New Axle Load Control Regulations was legislated in year 2000 based on administrative penalty system instead of the fine system.
  - The axle load control objective have started to take effect. The number of vehicles controlled has increased
  - The percentage of overloaded trucks reduced from 27% to 20% between first quarters of 2001 and 2002 respectively. In year 2006 < 5% of overloaded trucks.</p>



# Programme Achievements, Effectiveness and Impacts

- Bridge Management
  - Three Volumes of Handbooks, guidelines, etc. of the bridge management system were produced as planned and are being used by staff.
  - A computerised bridge management system (TANBRIDGEMAN) has been set up that involves systematic collection of bridge data and condition appraisal (done in-house by MoW + NPRA staff).
  - Such data are used to asses, plan and schedule bridge maintenance in the most economical, efficient and effective way using available resources.
  - Data retrieval and updating of information have been greatly simplified.
  - Training on the inventory system, given to bridge engineers and technicians by NPRA advisers.



#### Programme Achievements, Effectiveness and Impacts

- Central Materials Laboratory (CML)
  - CML has become more professional and is offering a high level of service to clients.
  - Knowledge of staff has improved
  - CML has produced good quality reports, notably:
    - the Pavement and Materials Design Manual (1999),
    - Pavement Monitoring for Newly Constructed Trunk Roads (January 2001),
    - Standard Specifications for Road Works 2000, etc.



- Equipment Management
  - The project component has been successful in meeting the objectives set. RWMS document (6<sup>th</sup> edition issued)
  - The workshops are financially sustainable and are considered able to continue operation after the termination of the donor support.
  - Full effectiveness achieved for this component.
- Appropriate Technology Advisory and Training Project
  - The labour-based technology has so far been only partially applied in road construction and maintenance.
  - Effectiveness partially achieved in relation to initial objective.
  - Technology not yet institutionalised in the road sector.

# Conclusion on Overall Programme Effectiveness

- The purpose of the programme, which was to increase the competency and efficiency in road administration in Tanzania, has therefore largely been achieved, although some additional support is required to secure full achievement.
- The difference between the objectives set and the achievements appears rather to be due to an unrealistically high level of ambition at the outset than to the approach and processes applied during the programme.
- The approach applied to institutional strengthening has been quite successful in achieving the purpose of the programme.

## Conclusion on Overall Programme Effectiveness

- The institutional cooperation between MoW and NPRA was useful in building up the capacity of the ministry in road safety and axle load control, bridge management, the Central Materials Laboratory, and equipment management.
- Exchange of knowledge, experiences and best practices took place among MoW and NPRA staff during implementation of the programme resulting in strengthening the professional, organisational and management capacities of the cooperating parties.
- Due to its success, it was agreed to continue with the programme with the reform process being re-focused, on one hand, to secure the gains made and further strengthen TANROADS and, on the other hand, to address the problem related to rural roads.