Development of a Road Research Strategy for Mozambique

Inception Report

RPN 2402

November 2012
This project was funded by the Africa Community Access Programme (AFCAP) which promotes safe and sustainable access to markets, healthcare, education, employment and social and political networks for rural communities in Africa.

Launched in June 2008 and managed by Crown Agents, the five year-long, UK government (DFID) funded project, supports research and knowledge sharing between participating countries to enhance the uptake of low cost, proven solutions for rural access that maximise the use of local resources.

The programme is currently active in Ethiopia, Kenya, Ghana, Malawi, Mozambique, Tanzania, Zambia, South Africa, Democratic Republic of Congo and South Sudan and is developing relationships with a number of other countries and regional organisations across Africa.

This material has been funded by UKaid from the Department for International Development, however the views expressed do not necessarily reflect the department’s or the managing agent’s official policies.

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1 Introduction

The project is part of the Africa Community Access Programme (AFCAP) which is a research programme supported by the Department for International Development (DFID) of the Government of the UK.

AFCAP was approached by the Mozambique National Road Administration (ANE) to support a consultancy for developing indigenous capacity for carrying out research in the transport sector in Mozambique. This led to the project to ‘Develop a Road Research Strategy for Mozambique’, for which TRL has been appointed as consultant. The evidence available clearly demonstrates the link between research and development. Many countries worldwide that were considered under-developed just a relatively few decades ago are rapidly becoming economic giants. It is no coincidence that investment in research and development is a common factor in the economic development of these countries.

Mozambique in common with many low and middle-income countries has yet to develop an indigenous capacity to undertake research, including in the transport sector. Consequently, as is stated in the TOR, most countries in Africa still rely on International experts to carry out many research activities on their behalf, albeit in close collaboration with partner countries. This situation also applies to the road sector in Mozambique where expatriate experts from TRL are conducting research in partnership with ANE.

ANE has carried out a limited programme of research for a number of years in collaboration with international partners. However, without a dedicated ‘home’ for the research, the personnel attached to these programmes invariably get re-assigned to routine assignments within the organisation with the eventual diminishing or even loss of research expertise as time progresses.

It is gratifying that there is an acknowledgement within ANE of the need for research and an awareness of the potential economic and social benefits that accrue from investment in research. Whilst there were few indigenous engineers and other professionals available to undertake the many tasks required of them in the period following independence, more graduates with the necessary professional experience to undertake research are now available in the country. Consequently, the time is now ripe to embark on the development of a research capacity. This includes the transport sector, where a well-maintained road network and an efficient transport systems have significant impacts on the country’s economy.

Whilst the majority of research knowledge in Africa has been generated internationally or at least through international organisations, there is a general move for African countries to identify, manage and disseminate their own research. Such generation and dissemination of research knowledge is essentially an international activity, and one that TRL practices on a regular basis and is ideally placed to advise on.

2 Project Objective

The main objective of this project is to provide a basis for enhancing the capacity of Mozambique to undertake high quality and relevant research in the road sector. This process will be started by initiating the development of an outline strategy for carrying out research in the road sector in Mozambique.
3  Key Issues

The Key issues are likely to be:

○  The status of research in Mozambique, whether it is valued and whether there is a political will to fully embrace indigenous research in the road sector

○  How research can be taken forward in the roads sector in a sustainable way

○  The scope of a potential Road Research Centre and how/where it would be located institutionally

○  How sustainable funding for research can be secured in the long-term, and what the involvement of the private sector could be

○  How a Road Research Centre would be staffed and whether the local capacity exists to staff the centre

4  Methodology

The methodology and activities are substantially as set out in the TRL proposal and contract document. The main change proposed is in the overall timing for the project as discussed in section 4 of this report.

This is a challenging project with a relatively short time frame. However, TRL’s long experience in undertaking research in many countries around the world and its recent experience in establishing a research facility in Ethiopia will help the team tailor this experience to the prevailing needs and local environment in Mozambique. TRL is aware that this is an opportunity to set the foundations of an organisation that is fit for purpose and has a sustainable and useful future.

The approach to achieve this will include considering the following:

○  Identifying the benefits and value of research

○  Identifying potential sustainable courses for funding for research

○  Devising an appropriate institutional structure to undertake research

○  Developing a Road Research Strategy for Mozambique

4.1  Stakeholders and Institutions

TRL has noted that options for the institutional arrangements for the Road Research Centre (RRC) should be determined and the different institutions who are potential stakeholders in the research process are key to this process. The TRL team is also aware of the emphasis placed in involving stakeholders in the consultation process. It is proposed that the TRL/ANE team will meet as many of potential stakeholders as possible and these consultations will form the core of the activities that will be undertaken in Mozambique.

Therefore, the main activity to be carried out in Mozambique will be meetings with key stakeholders in ANE and other organisations which have links with the road sector and/or research, in order to understand the overall framework under which the facility to carry out research can be established.
4.2 Components of a Research Centre

The main components of a sustainable and successful research facility are:

- Political support
- Secure and sustainable long-term funding
- A building that can accommodate the essential facilities required to enable research to be carried out in the expected range of research projects
- A facility with an environment conducive to mentoring and knowledge sharing
- A facility staffed by personnel with an interest and commitment to research
- A well-defined career path for researchers
- Competitive remuneration
- A portfolio of applied research projects with well-defined outputs
- Links with local and international research institutions
- Government and private sector involvement

The interviews with stakeholders will be structured with the aim of providing the TRL team with information to assess the potential for the research facility to conform with the above overall framework.

An essential component of the methodology will be the direct involvement of a representative from ANE on the team. At the start-up meeting held with the Director and other senior staff in the Maintenance Division of ANE, the Director (DIMAN) assigned Eng Luis Fernandes and Eng Joana Guiuele as the ANE counterparts in the project. These team members are central to the success of the project. The counterpart staff will play an important role in the development of the project, and will, in effect, become the means of transferring ‘project ownership’ from the consultants to ANE.

It was also agreed at the meeting that key personnel in the organisations listed below, together with any others that are considered to be helpful, will be identified and appointments made for the team to meet them between the 10th and 14th December 2012.

The organisations identified for initial consultation are:

- National Roads Administration
- Road Fund Board
- Urban Councils and Municipalities
- District Administrations
- Central Materials Laboratories
4.3 Start-up Meeting

A start–up meeting for the project was held at the Maintenance Department at ANE.

The meeting was attended by:
Eng. Nkululeko Leta (AFCAP Technical Manager (Roads))
Director (ANE - DIMAN) Eng Miguel Conai
Eng Luis Fernandes (ANE)
Eng Joana Guiuele (ANE)
Tony Greening (TRL)

The main points discussed/agreed were:

- Tony Greening explained the keen interest by the TRL team in helping develop a strategy for building indigenous road research capacity in Mozambique.
- The methodology to be adopted was explained.
- The Director (DIMAN) confirmed ANE’s interest in having the RRC based within the organisation.
- Tony Greening to provide ANE with a provisional list of organisations to be contacted.
- ANE to make appointments on behalf of the TRL team with the appropriate personnel in the organisations listed.
- Eng Luis Fernandes and Eng Joana Guiiele appointed as ANE counterparts on the team.

These team members are central to the success of the project. The counterpart staff will play an important role in the development of the project, and will, in effect, become the means of transferring ‘project ownership’ from the consultants to ANE.

It was also agreed at the meeting that key personnel in the organisations listed below, together with any others that are considered to be helpful, will be identified and appointments made for the team to meet them in December.

The organisations provisionally identified for initial consultation are:

- Provincial Materials Laboratories
- ISuTeC
- University of Eduardo Mondlane
- Chimoio Roads training Centre
- Machava Training Centre
National Roads Administration
- Road Fund Board
- Urban Councils and Municipalities
- District Administrations
- Central Materials Laboratories
- Provincial Materials Laboratories
- ISuTeC
- University of Eduardo Mondlane
- Chimoio Roads training Centre
- Machava Training Centre
- Ministry of Public Works and Housing
- Ministry of Finance

4.4 Activities

The main activities will involve interviews and subsequent correspondence with stakeholders in Mozambique.

Other activities will include:

Initial start-up meeting with ANE (completed)

Appointment of ANE liaison officer(s) (completed)

Desk study of relevant documents covering the sector and identify constraints facing the road sector (ongoing)

During the interviews additional information is expected on the following topics:

- Gain more information on the proposal to establish a Road Research Centre and the potential roles that ANE and LEM could play.
- Current research activities in the Road (and Transport) sectors
- Potential impacts of road research on other sectors
- Research needs in the road/transport sectors
identify the most relevant collaborative programmes of research in the transport sector

domestic and international funding options

options for involvement of the private sector

roles of other institutions

potential training/study tours

Preparation of preliminary report

Workshop

Preparation of Draft Final Report

Preparation of Final Report, including the preparation of a Road Research Strategy

4.5 Project Output

The main expected outcomes:

- A justification of the benefits of research to the road sector in Mozambique and how research could be funded.

- An appropriate institutional structure to undertake road research in Mozambique.

- A report with a clear ‘brief’ on a Road Research Strategy for Mozambique, with comments on the establishment of a Road Research Centre and the role of a potential Road Research Centre in Mozambique

- Recommendations for the Key next steps

5 Proposed change from TOR

The overall timescale for the project in the TOR is 3 months to completion. It is currently scheduled to be completed by the end of January 2013. However, the project duration includes the period over Christmas and the New Year. Although government departments do not close for a long period for this holiday in Mozambique, it is the main summer holiday period and many people take an extended holiday from mid-December to mid-January either in Mozambique or in neighbouring countries. This will undoubtedly have a constraining impact on project activities as previously explained in correspondence with the TRL Project Manager.

Furthermore, the timing of the workshop (Week N + 8) as currently planned is due to take place at a time when the participants are likely to be on holiday Therefore we suggest that the timing for the project should be extended by 4 weeks to allow for this disruption of activities, with a target date of end February 2013 for completion.
A suggested revised timing of activities and for the workshop and milestones is shown in the work programme.

### 6 Work Programme

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<td>List of institutions to be visited</td>
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<td>Preliminary Report</td>
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<td>Workshop</td>
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<td>External Team</td>
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<td>Team Leader - Tony Greening</td>
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<td>Research Centre Specialist - Robin Workman</td>
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<td>Engineer Luis Fernandes</td>
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<td>Engineer Joana Guiele</td>
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#### Schedule
- **Schedule to end of year**
- **Proposed schedule after holiday period**
- **Intermittent activity by external team (5 weeks each in total)**
- **Intermittent support activity by ANE support team**