

## Consultative Meeting of Road Research Centre Managers'

*10 - 12 September 2014, TRL Ltd, Crowthorne, UK*

### Meeting Report

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**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, this UK government (DFID) funded programme 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 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.

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## Executive Summary

This report presents the outcomes of an AFCAP meeting held at TRL UK Ltd, from 10 to 12 September 2014. The purpose of the meeting was to provide inputs into the strategic direction of AFCAP 2 as part of the inception phase to be completed at the end of November 2014. The meeting was attended by a cross-section of RRC (Road Research Centre) managers from current AFCAP-member countries; a representative from a potentially new AFCAP-member country; and a representative cross-section of established international road and transport research organisations.

The following areas were covered related to rural road and transport research during the discussions:

- The current status, plans, priorities and needs of invited African research centres;
- Capacity building needs and priorities;
- The supporting role that could be played by established international road and transport research organisations;
- Consolidated Research and Knowledge Management strategies and plans.

The identified research needs shown in Table 1 and Appendix 6 of the report was linked to the impact, outcome and output indicators of the logical framework for AFCAP 2.

From the discussions and outcomes of the meeting, the following is highlighted:

- All African research centres represented at the meeting felt that capacity building, mainly through technical assistance and ongoing mentorship, was critical and fundamental to the successful and sustainable development of national research centres.
- National road and transport research centres would provide the basic institutional framework for research and knowledge management throughout the African region.
- Staff retention was critical to the sustainability of national research centres, and donor programmes such as AFCAP should look at innovative interventions to support the retention of local research capacity.
- Knowledge management for rural roads and transport at a national level should be driven and coordinated through the RRCs with appropriate capacity building.
- The internationally recognised and established road and transport research centres can have an important long-term mentoring and supporting role to play in developing research and knowledge management in the sector.
- Rural transport research, including safety aspects, was important to all countries and scoping exercises were required to identify programmes and projects in those countries not specifically focussing in this area.
- Rural transport services projects in Tanzania should continue as a matter of urgency with the outcomes disseminated throughout the AFCAP-member countries and beyond.
- Ultimately for sustainability, all RRCs would incorporate rural transport and safety into their research portfolios and would cover all roads, not just rural low volume roads. The experience of established roads and transport research centres in facilitating this development and transition process would be of great benefit.
- All countries agreed that a forum of African road and transport research centres (similar to the Forum of European National Research Laboratories (FEHRL) model), and driven by the African RRCs, is essential to optimise and share research and knowledge development throughout Sub-Saharan Africa. The development of regional research collaborative hubs for cooperation in southern, eastern and western Africa could be considered as part of the forum structure. This should be further facilitated through AFCAP 2.

The meeting concluded by agreeing a recommended list of priority programmes and projects for urgent implementation during AFCAP to sustain the momentum in partner countries. A detailed spreadsheet covering national and other related projects is shown in Appendix 6 of the report.

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## List of Terms and Acronyms

AFCAP	Africa Community Access Programme
ARRB	ARRB Group (formerly the Australian Road Research Board)
ASAUk	African Studies Association of the United Kingdom
ASCAP	Asia Community Access Programme
BRRl	Building and Road Research Institute
CSIR	Council for Scientific and Industrial Research
DFID	Department for International Development, UK
ERA	Ethiopian Roads Authority
FEHRL	Forum of European National Research Laboratories
LVR	Low Volume Roads
LVRr	Low Volume Rural Roads
LVSr	Low Volume Sealed Roads
MTRD	Materials testing and Research Department
PMO-RALG	Prime Minister's Office Regional Administration Local Government
PMU	Programme Management Unit
RRCs	Road Research Centres
TRL	Transport Research Laboratory
UK	United Kingdom

## 1. Introduction

This report presents the outcomes of a meeting held at TRL UK Ltd from 10 to 12 September 2014 to discuss strategic inputs into the support required for the ongoing development of sustainable Road Research Centres (RRCs) in Sub-Saharan Africa. The meeting was represented by a cross-section of African national research centres from Ethiopia, Ghana, Kenya, Mozambique and Tanzania supported by three established internationally recognised organisations; TRL from the UK, CSIR from South Africa and ARRB from Australia.

The meeting was organised as part of the Africa Community Access Programme (AFCAP) Phase 2 to provide strategic inputs and direction for the Inception Report to be submitted in November 2014.

In terms of the logical framework for AFCAP (and ASCAP) the outcomes of the meeting will have a direct influence on Output 2, “The enhancement of African and Asian research capacity on low volume rural roads” and the output indicators 2.1, 2.2, 2.3 and 2.4. The meeting also provided inputs to Output 1 and Output 3 of the logical framework.

### 1.1 Meeting attendees

The meeting was attended by representatives of the following countries and organisations:

- Department of International Development (DFID);
- AFCAP Programme Management Unit (PMU);
- African RRC managers from:
  - Ethiopia;
  - Ghana;
  - Kenya
  - Mozambique;
  - Tanzania.
- Internationally recognised road and transport research organisations:
  - TRL, UK;
  - Built Environment Unit of the CSIR, South Africa;
  - Australian Road Research Board.

The meeting was organized and facilitated by Les Sampson and Pat Bosman on behalf of the AFCAP PMU.

The full list of participants is shown in Appendix 1.

### 1.2 Workshop Structure and Programme

The workshop programme was structured as follows:

- Day 1: African Road Research Centre Plans and Priorities
  - A DFID perspective of AFCAP 2/ASCAP;
  - Overview of AFCAP and its vision for the future;
  - Status, plans and priorities of the attending African Road Research Centre Managers;
  - Facilitated session of needs analysis and consolidation of the needs.
- Day 2: Capacity Building Needs and Priorities
  - Challenges to sustainable research in Africa;
  - Capacity and capabilities of three established international roads and transport research organisations that could support the African RRCs;
  - Working Group session to develop strategies for Capacity Building;

- Tour of TRL facilities.
- Day 3: Consolidated Research and Knowledge Management Strategies and Plans
  - Facilitated discussion on identified national research programmes;
  - Knowledge management in AFCAP ;
  - Opportunities for regional cooperation;
  - Consolidation of strategies and plans.

The detailed programme for the meeting is shown in Appendix 2.

### 1.3 Meeting Objectives

The background and objectives of the meeting were set out in the introductory presentations on day 1. The following objectives were identified:

- To provide inputs into the strategic direction of AFCAP that will be outlined by the PMU as part of the inception report to be submitted at the end of November 2014. Particular attention was given to research and knowledge management needs, capacity building and regional cooperation.
- Where appropriate, to provide linkage of the outcomes of the meeting to the logical framework for the programme.

### 1.4 Background Presentations

The following background and information-sharing presentations were given by the participants of the meeting and can be found on the AFCAP web site ([www.afcap.org](http://www.afcap.org))

- DFID Overview – Liz Jones
- AFCAP overview – Gary Taylor
- Ethiopian Road Research Centre – Ato Alemayehu Ayele
- Kenya Vision for 2030 and the Government Manifesto for Transforming Kenya (2013 – 2017) – Eng Stephen Kogi
- Mozambique Research Centre Status Plans and Priorities – Eng Luis Fernandes
- Tanzania presentation on status, vision, strategic plan and summary of progress to date – Eng Dr Fikiri Magafu
- Ghana Road Research Centre status, plans and project priorities – Francis Afukaar
- Challenges to Sustainable Research in Africa – Adam Andreski
- CSIR, Built Environment: Snapshot Overview of the Organisation and Transport-Related Projects & Activities – Benoit Verhaeghe
- TRL overview – Bob Collis
- ARRB capacity and capabilities – Christina Chin
- Research Strategies and Knowledge Management – Mike Head
- Knowledge Management Strategies – Caroline Visser
- Feedback from ASUK and Transport Services research – Paul Starkey

## 2. Outcomes of the Meeting

The outcomes from the meeting were obtained from the facilitated sessions; structured group discussions; and discussions captured during and after the presentations shown in Section 1.4.

### 2.1 Needs Analysis

The complete list of research needs identified by the group is shown in Appendix 3.

As part of the facilitated session, the identified needs were categorised under broader headings which are shown in Table 1 along with the impact, outcome and/or output that is addressed as part of the logical framework.

<b>Table 1: Research Needs related to the Logical Framework</b>	
<b>Research Needs</b>	<b>Relationship to Logical Framework</b>
Policy legislation and general research management	Output 1 Output Indicator 2.4
Updating and support of implementation of existing research findings and documentation	Outcome Indicator 1 Output Indicator 1.1
Funding for technical assistance and projects	Outcome Indicator 3 Output Indicators 2.2, 2.4
Economic analysis related to impact assessment	Impact Indicators 2 & 3 Outcome Indicator 4 Outcome Indicator 5
Capacity building	Output 2
Rural transport research (including road safety and gender)	Impact Indicators 1 & 2 Outcome Indicator 2 & 4 Output Indicator 3.2 & 3.3
Testing standards	Outcome Indicator 1
Knowledge management and management systems	Output 3 Output Indicator 3.1 & 3.2
Rural infrastructure research	Impact Indicators 1, 2 & 3 Outcome Indicator 1 & 4 Output Indicator 1.1 Output Indicator 3.2
Climate and natural disaster resilience	Outcome Indicator 1 Output Indicator 1.2
Urban congestion	Important but not a core activity of AFCAP/ASCAP

## 2.2 Capacity Building

The group discussions on Capacity Building were directly related to Output 2 of the logical framework and structured to provide answers to the following four questions:

1. What are the capacity building requirements of the new and emerging RRCs?
2. How can the established international research centres support the emerging RRCs?
3. What interventions need to be in place for staff retention?
4. What mentorship structures and procedures need to be in place to develop the next generation of researchers and research managers?

The detailed consolidation of the outcomes from the group discussion is shown in Appendix 4 for use by the PMU in developing appropriate strategies for capacity building. The following comments are made based on the outcomes:

- All African research centres represented at the meeting felt that capacity building, mainly through technical assistance and ongoing mentorship, was critical and fundamental to the successful and sustainable development of national research centres.

- Capacity building was required in “how to undertake research projects” and “how to manage research organisations”.
- National research centres would provide the sustainable institutional framework for research and knowledge management.
- Staff retention was critically important and programmes such as AFCAP should look at innovative interventions to support local researchers working on projects funded by specific donor programmes.

### 2.3 Knowledge Management

The proposed knowledge management strategies for AFCAP presented by Caroline Visser of the PMU were generally accepted by the meeting. The following was noted:

- Knowledge management should be driven through the RRCs;
- There was an urgent need for capacity building and training related to knowledge management within RRCs;
- Improved access to rural roads and transport knowledge was essential and needs urgent attention;
- The established research centres with their well-developed libraries and knowledge management capabilities had an important role to play in this area.

### 2.4 Rural Transport Research

The following was noted based on comments during and after the presentation of Paul Starkey:

- Rural transport research was important to all countries represented.
- The five rural transport projects identified as a follow-on to current initiatives in Tanzania need to be undertaken as a matter of urgency with the outcomes disseminated generally throughout the AFCAP member countries;
- Scoping exercises for transport services were needed in all member countries to determine specific country needs and projects.
- Those countries currently focussed on rural infrastructure research agreed that this was an interim arrangement to establish the national RRC. Ultimately the RRCs would incorporate rural transport and safety, and would cover all roads, not just rural low volume roads.

### 2.5 Regional Cooperation

The consolidated outcomes from the group session on regional cooperation are shown in Appendix 5. The following was noted:

- All countries agreed that a forum of African roads and transport research centres (similar to the FEHRL model) and driven by the African RRCs is essential to optimise and share research and knowledge development throughout Sub-Saharan Africa.
- Programmes such as AFCAP could be used to facilitate the development of the forum but ultimately the forum needs to be self-supporting.
- The development of a regional research hub for cooperation in southern, eastern and western Africa could be considered as part of the cooperative structure.
- It was agreed that members represented at the meeting should meet on a regular basis to take this initiative further with the inclusion of other AFCAP member countries, as and when they are identified.

- An option for consideration was that the CSIR (as an African-based centre of excellence) should be invited to act as Secretariat for establishment of the Forum. Some countries requested time to consider this proposal and would report back to the PMU by the AFCAP Steering Committee meeting scheduled for mid-October 2014.

## 2.6 Research Strategies and Consolidation of Research Programmes/Projects

Mike Head outlined the strategic relationship between the following drivers:

- National economic targets
- Government Policy implementation
- DFID Objectives
- Logical Framework and indicators
- Research Strategies to achieve above
- Research programmes to achieve above
- Priority projects

On behalf of the PMU, a draft spreadsheet of country-specific projects was presented that had been identified as a continuation of AFCAP 1 and through consultation with member country representatives. During the discussions and following on from the needs analysis on day 1, the spreadsheet was updated for future planning by the PMU. The spreadsheet of country projects is shown in Appendix 6 and has been categorised into **urgent**, **important** and **desirable**.

From the discussions the following was noted:

- Short- and long-term technical assistance and mentorship support was urgently needed.
- The approval and procurement of services for urgent projects was essential to maintain momentum for the development of the RRCs.

## 3. The Way Forward

It was agreed that:

- The PMU will include the outcomes of the meeting into the strategies to be presented in the Inception Report and submitted to DFID by the end of November 2014.
- The outputs of the meeting will be reported at the Steering Committee meeting in October 2014 for information and approval.
- The PMU will seek to initiate the urgent projects identified as soon as is practical to sustain the momentum of RRC development from AFCAP 1.
- The provision of Technical and Managerial Assistance (including mentorship) should be given urgent attention.
- The attendees wished to initiate a number of urgent activities which are above the £25k threshold for sole-source procurement and requested accelerated contract letting procedures to be considered.
- This meeting should act as a forerunner to the development of an African Road and Transport Research Centre Forum for the consolidation and optimisation of research capacity and knowledge management, including better access to and exchange of information. A further meeting to facilitate this should be organised by AFCAP.
- RRCs will report back to the PMU on the proposals for establishing a Forum and the Secretariat arrangements to coordinate meetings for the forum by the AFCAP Steering Committee meeting scheduled for mid-October 2014.

**Appendix 1**  
**List of Participants**

Research Centre Consultative Meeting 10-12 September 2014 at TRL - Attendance Register

Delegate Information

	Title	Name	Position Held	Organisation	E-mail	Telephone
1	Mr	Les Sampson	Owner/Director Consultant	Sampson Consulting AFCAP	<a href="mailto:lsampson@iafrica.com">lsampson@iafrica.com</a>	+27 82 447 6241
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**Appendix 2**  
**Meeting Programme**

**Consultation Meeting of Road Research Centre Managers  
10 -12 September 2014  
TRL, UK  
Programme**

<b>Day 1: Wednesday, 10 September 2014 Road Research Centre Plans and Priorities</b>		
09:00 – 09:15	Introduction and Purpose of the Meeting	Les Sampson
09.15 – 09.45	AFCAP 2: A DFID Perspective	Liz Jones
09:45 – 10:15	Overview of AFCAP 2 and its Vision for the future	Gary Taylor
10.15 – 10.45	Presentation of RRC Status, Plans and Project Priorities – Ethiopia	Alemayehu Ayele
10.45 – 11:15	<i>Tea/Coffee Break</i>	
11:15 – 11:45	Presentation of RRC Status, Plans and Project Priorities - Kenya	Stephen Kogi
11:45 – 12:15	Presentation of RRC Status, Plans and Project Priorities - Mozambique	Louis Fernandes/ Hilario Tayob
12:15 – 12:45	Presentation of RRC Status, Plans and Project Priorities - Tanzania	Fikiri Magafu
12:45 – 13:45	<i>Lunch Break</i>	
13.45 – 14.15	Presentation of RRC Status, Plans and Project Priorities - Ghana	Francis Afukaar
14:15 – 15:00	Facilitated discussion on RRC needs and consolidation of needs	Les Sampson
15:00 – 15:30	<i>Tea/Coffee Break</i>	
15.30 – 17.00	Consolidation of RRC needs continued	Les Sampson

<b>Day 2: Thursday, 11 September 2014</b> <b>Capacity Building Needs and Strategies</b>		
09:00 – 09:30	Challenges to Sustainable Research in Africa	Adam Andreski
09.30 – 10:00	Capacity and Capabilities of CSIR	Benoit Verhaeghe
10:00 – 10:30	Capacity and Capabilities of TRL	Bob Collis
10.30 – 11.00	<i>Tea/Coffee Break</i>	
11:00 – 11:30	Capacity and Capabilities of ARRB	Christina Chin
11:30 – 12:45	Working Group Session: Strategy Development for Capacity Building <ul style="list-style-type: none"> <li>• Existing Emerging RRCs</li> <li>• New RRCs</li> <li>• Role of established Research Centres</li> <li>• Staff Retention</li> <li>• Age of Specialist Research Capacity</li> <li>• Provision for Research on Safety and Transport Services</li> </ul>	Working Groups
12:45 – 13:45	<i>Lunch Break</i>	
13.45 – 15.00	Working Group Session feedback	Working Groups/ Les Sampson
15:00 – 15:30	<i>Tea/Coffee Break</i>	
15.30 – 17.00	Tour of TRL facilities	TRL

<b>Day 3: Friday, 12 September 2014</b> <b>Consolidated Research and Knowledge Management Strategies and Plans</b>		
09.00 – 10:00	Presentation and facilitated discussion on Identified Research Programmes	Mike Head
10:00 – 10:30	Knowledge Management in AFCAP 2	Caroline Visser
10.30 – 11.00	<i>Tea/Coffee Break</i>	
11:00 – 11:30	Feedback from ASAU Panel Discussion on Building a Research Community for the rural transport sector in Africa	Paul Starkey
11.30 – 12.45	Opportunities for Regional Cooperation <ul style="list-style-type: none"> <li>• Joint research projects</li> <li>• Regional Capacity Building &amp; Training interventions</li> <li>• Knowledge management</li> </ul>	Working Groups
12:45 – 13:45	<i>Lunch Break</i>	
13.45 – 15.00	Consolidation of strategies and plans for sustainable Research, Knowledge Management and Capacity Building	Les Sampson
15:00 – 15:30	<i>Tea/Coffee Break</i>	

15.30 – 16.30	Summary of Strategies and action	Les Sampson
16:30 – 17:00	Closure of meeting	Gary Taylor

**Appendix 3**  
**Needs Analysis**

**Day 1: Wednesday, 10 September 2014**

**Road Research Centre Plans and Priorities**

**RRC Needs and Consolidation of Needs**

**1. What are the research needs and priorities for road infrastructure, safety and transport services under AFCAP 2?**

- Policy, Legislation & General Research Management:
  - Stakeholder Definition and Engagement
  - Proper Institutional Structures for Research Centres (Mozambique)
  - Completion of Strategic plans and policies (including funding policies and legislation) for the research centre, including programmes and priorities (Kenya)
  - Promotion of implementable research outputs and stakeholder buy-in to research
  - Formal linkages between research centres
  - Performance indicators
    - Poverty alleviation
    - Socio-economic benefits
    - RAI
    - Transport, price and frequency
  - National and international commitment to rural transport provision and advocacy to it
  - Inclusion of cross cutting sectors with rural transport needs
- Updating and support of implementation of existing research findings and documentation
- Funding:
  - Funding for technical assistance and international collaboration (Mozambique, Ghana)
  - Balanced and sustainable funding from alternative sources (basket of funding from public and private sector)
- Economic Analysis:
  - Cost/benefit tools
  - Life cycle costing
  - Data collection of management
  - Performance indicators
  - Impact assessment
- Capacity Building:
  - Capacity Building and Skills development plan (Mozambique, Ethiopia)
  - Logistics support (Ghana)
  - Specialist research equipment (Ghana)
  - More innovative ways of providing technical support to member countries
    - Approach to providing Technical Assistance needs to be reviewed
  - Train the trainer
- Rural Transport Research:
  - Integrated framework for rural transport research (Ghana)
  - Safety and pedestrian road fatalities
  - Rural transport indicators for prioritisation
  - Awareness of safe systems
  - Crash data
  - Vulnerable users

- Motor cycle taxis
  - Community road safety
- Urban congestion (Tanzania)
  - *Important, but not a core activity for AFCAP*
- Testing Standards:
  - Regional harmonisation of standards for materials testing and performance monitoring
  - Consistency and reliability of test methods and test results
- Knowledge Management & Management Systems:
  - Communication strategy
  - Knowledge and information management (Ethiopia)
  - Database for road asset management (Tanzania)
    - Traffic surveys
    - Condition surveys
    - Road inventory
  - Materials inventory (Tanzania)
  - Accessibility to knowledge resources
  - Dependable and robust ICT
  - Knowledge and technology transfer and sharing of information between countries
  - Consistent performance monitoring guidelines and data capture (Kenya)
  - Mapping (database) of all materials for potential use in road pavements (Mozambique)
  - Improved dissemination of information
  - Interpersonal networks
  - Access to alternative knowledge sources for transport, eg military, forestry, agriculture, national parks
- Rural Infrastructure Research:
  - Guidelines for maintenance of access of very low volume roads (less than 20 vpd without all-weather access)
  - Standard classification for rural transport infrastructure
  - Research into locally available materials, including classification
  - Sustainability of low volume roads (earth, gravel & surfaced)
  - Cost of upgrading to a surfaced standard
  - Safety standards in design
  - Rational design methods for low volume roads (pavement and geometric)
- Climate and natural disaster resilience (all countries)
  - Disaster management
  - Risk assessment and management

**Appendix 4**  
**Capacity Building**

**Day 2: Thursday, 11 September 2014**

**Capacity Building Needs and Strategies**

**Strategy Development for Capacity Building**

**1. What are the capacity building requirements of new and emerging RRCs?**

- Dependent on stage of organisational maturity
  - Early
    - Capacity building, organisational structures
    - Outcomes
    - Financial support
    - Management procedures
    - Technical quality
    - Recruitment of suitable personnel
    - Training and coaching
  - Intermediate
    - Review of management goals and objectives against strategic plans
    - Building regional capacity within the country
    - Broadening the scope of research, including identification of entry barriers
    - Upgrading and upskilling equipment and infrastructure
- Specialised and sophisticated testing and monitoring facilities and equipment, including ongoing support

**2. How can the established international research centres support the emerging RRCs?**

- Placements in established research centres, and secondments from RCs
- Provide guidance
  - Establishing RRCs
  - Development of research agenda
  - Physical establishment
  - Guidance on the production of research outputs and outcomes
- Sharing of lessons learned between RRCs
  - Investigation of failures
  - Expert networking
- In-country training programmes that could be expanded to regional initiatives
  - Prospectus of different subjects for selection, e.g.:
    - Asset management
    - Data collection and analysis
    - Report writing
    - Statistical methodology being robust
    - Project management
    - Materials testing, lab management, quality assurance
- Peer review of R & D outputs
- Linkage to career path and projects
- Licensing and subscription support (multiple license attainment)
- Establishment of regional cooperative support structures

**3. What interventions need to be in place for staff retention?**

- Properly defined career path
  - Performance-based appraisal and time-related progression up the career path
- Competitive, comparable and equitable (regional) salary levels

- Systems to promote gender balance
- Incentives
  - Overseas conferences and courses
  - Opportunities to enhance academic qualifications
  - Scholarships
  - Awards and prizes
  - Professional membership
  - CPD record
  - Finders' fee for new resources
- Possibility of bonuses for achievement
- Locked-in, extension contracts and bonding linked incentives
- Work placements and rotation within the organisational structure
- Establish good ethos and good work environment
- Broader competence base
- Opportunities for participation in commercially-linked projects to enhance salaries (AFCAP to facilitate with national government structures)
- Creating a sense of contribution to society
- Standing in the profession

**4. What mentorship structures and procedures need to be in place to develop the next generation of researchers and research managers?**

- Linked to staff retention
- Researchers linked to established research centres to undertake a nationally-prioritised project
- Linking projects to career development and improved professional qualification
- Assign mentors to new appointees from the onset, and establish a formal mentorship programme (with KRA's for the mentor)
- Reciprocal technical assistance (home and away)
- PhD supervision from established research organisations
- Provision of technical and moral support
- Attendance of international events
- Co-authoring journals and technical papers
- Strategy for procurement and payment for the mentorship

Database of experts/mentors to achieve AFCAP objectives

**Appendix 5**  
**Regional Cooperation**

**Day 3: Friday, 12 September 2014**

## **Consolidated Research and Knowledge Management Strategies and Plans**

### **Opportunities for Regional Cooperation**

- Joint research projects
- Regional Capacity Building & Training Interventions
- Knowledge Management

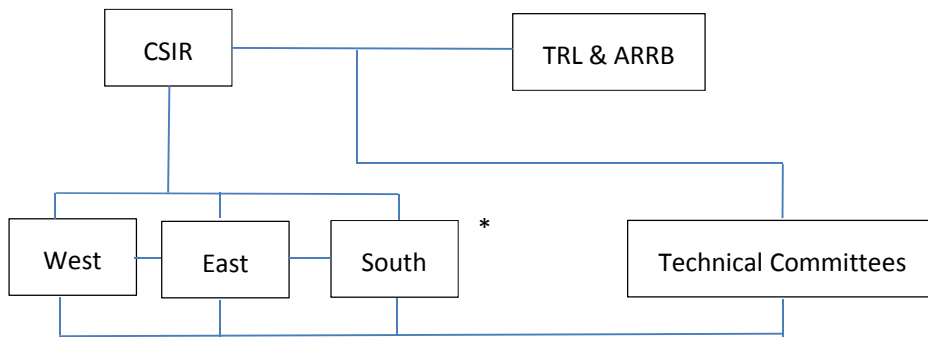
#### **1. What structures need to be in place to facilitate regional cooperation?**

- African forum for roads and transport research centres, similar to the concept of FERHL, driven by the RRCs with AFCAP/donor support to kick-start it
  - Interface and linkage with the promoters of research, e.g. NEPAD, donors, ARMFA
- Regional centre of excellence in Africa, with satellite centres (possibly CSIR)
  - Reference point
  - Links to regional hubs
  - Build on existing collaborative agreements
  - Organisation of events
  - Standardisation of regional specs
- Make optimal use of existing regional structures, e.g. SATCC, ASANRA, ECOWAS, IFRTD
- Engagement of private sector sponsors
- Opportunities for sharing of specialised equipment and possible joint contracts
- Regional cooperative hubs
- Improved levels of communication between regional hubs

#### **2. What regional intervention should be considered for:**

- Capacity building
  - Joint capacity development on common themes, where there is a technical shortfall
  - Optimal sharing of research infrastructure
  - Specific to each country with a common regional thread. Sharing experiences with other countries
  - Lessons learned being passed on to the development of new RRCs
  - Creating awareness of available regional information, competences, through study tours and other events and interactions
  - Appropriate peer review structures
  - Collaborative projects and research test methods
  
- Training
  - Regional secondments for knowledge generation or capacity problems
  - Sharing of training facilities and facilitation of regional training courses
  - Identification of common regional training needs
  - Common training materials
  - Consolidation of available material
  - Partnering with other organisations, e.g. PIARC, FERHL, IRF
  - Regional case studies
  - Regional databases of relevant research information
  - Economies of scale for shared training interventions
  - Study tours
  - PhD and Masters supervision
  - e-Learning
  - Utilisation of experienced trainers

- Improved IT facilities for training
- Knowledge Management
  - One database with multiple nodes for uploading relevant information
  - Huddles
  - Identification of suitable ICT platforms for Africa
  - Sustainability of any systems developed
  - Linking in to other appropriate websites
  - Search engine parameters
  - System should not be limited to AFCAP documentation, but should link in to all relevant documentations
  - Live and recorded webinars
  - Improving the effectiveness of libraries (e-libraries) within the hubs
  - Disc or paper distribution, where appropriate
  - Possible structure of a Centre of Excellence:



\*Rotating secretariat

**Appendix 6**  
**Research Programmes and Priorities**

Country	Potential Programmes	Needs Addressed
Kenya	<b>Road Research Centre Priorities</b>	
	TA Support - strategic management	Capacity Building
	TA Support - technical	Capacity Building
	Monitoring & Accelerated Testing completed sections	Rural Infrastructure research
	LVR pavement design manual	Updating & support of implementation of research findings
	Benchmarking cost for upgrading & rehabilitation	Economic analysis
	Optimisation of Periodic maintenance	Economic analysis
	Rural transport scoping study	Rural transport research
Mozambique	<b>Road Research Centre Priorities</b>	
	Support to RC capacity building	Capacity Building
	RRC Implementation Programme	Policy, Legislation & general RM
	Implementation of quick-win projects	Updating & support of implementation of research findings
	Scoping study for transport services	Rural transport research
	Finalisation of Planning & Design manual for LVRd	Updating & support of implementation of research findings
Tanzania	<b>DRRC Priorities</b>	
	TA for DRRC (short-term)	Capacity Building
	Additional lab equipment for Dodoma	Capacity Building
	Rural Transport study (5 projects)	Rural Transport research
	Scoping of 4 priority programmes	Policy, Legislation & general RM
	capacity building for DRRC	Capacity Building
	Road trials, demo projects and monitoring	Rural Infrastructure research
	Road asset inventory condition and data	Knowledge management & management systems
	Materials inventory	Knowledge management & management systems
	Climate resilience	Policy, Legislation & general RM

Ethiopia	<b>RRC Priority Activities</b>	
	TA for RRC	Capacity Building
	Guide to Specifications	Updating & support of implementation of research findings
	Materials testing manual	Updating & support of implementation of research findings
	Finalisation of the LVR manual	Updating & support of implementation of research findings
	Use of cinder gravels in roads	Rural Road research
	Monitoring & Accelerated Testing completed sections	Rural Road research
	Construction material database	Rural Road research
	Sustainability framework for LVRs (unpaved)	Updating & support of implementation of research findings
	Rural transport scoping study for transport services	Rural Transport research
Ghana	<b>RRC Priority Activities</b>	
	Engagement of institutional stakeholders	
	Scoping of research strategy	
	Transport services scoping study	
	Applicability of AFCAP 1 outputs	
General Projects	Generic DCP manual/ORN	Updating & support of implementation of research findings
	Development of DCP software	Capacity Building
	Global DCP Training of Trainer Program	Capacity Building
	Training on new manuals	Capacity Building
	Train the trainer capacity building	Capacity Building
	RRC HR retention and development	Staff Retention
	Mentoring programme	Capacity Building
	General guidelines for transport services	Rural Transport research

Regional Projects	Prepare succinct Sand Guide	Updating & support of implementation of research findings
	Climate resilience	Rural Infrastructure and Transport research
	Accelerated Pavement testing	Rural Infrastructure research
	Laterites Project	Updating & support of implementation of research findings
	Motorcycle taxis review	Rural Transport research
	Regional materials database	Road Research
	Laboratory testing software tracking	Updating & support of implementation of research findings
	Library database	Knowledge management
	EDMS	Knowledge management
	Librarian training	Knowledge management
	Scoping of safety requirements for LVRs	Transport Research
	Review of guideline documents for updating	Road Research
CBA	Back Analysis of LVR performance	Economic analysis
	(follow-on to Moz 001G project)	
	CBA and WLC Seals vs gravels	Economic analysis
	Economic appraisal modelling	Economic analysis

Key

1	Urgent
2	Important
3	Desirable