The Africa Community Access Programme (AFCAP)

Overview of AFCAP and Vision for the Future

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Presentation Content

• What is AFCAP?

• Examples of Key Projects

• Highlights of Projects

• Outcomes of AFCAP 1

• Vision for the Future
• Knowledge and research programme for the rural transport sector in Africa.

• June 2008 to 2020.

• DFID budget £32 million (low cost high impact).

• Management contract:
  • Crown Agents for Phase 1
  • Cardno/ITT for Phase 2.

• 15 African countries directly benefitting.
Value of Participating in Conference

• Technology transfer and sharing of ideas
• Provide additional platform to CoP to interact and exchange experiences
• Provide opportunity to network with decision-makers and key players in the Africa economy
• Broaden and expand CoP membership
• Establish synergies, consolidate approaches and update on new knowledge
Examples of AFCAP projects in core countries

**Engineering**
- Research on innovative design methodologies, application of unconventional locally-available materials in pavements, and for surfacing
- Back-Analysis of old LVSRs
- Design, Construction and Monitoring of Demonstration Sites
- Study on Improved Maintenance Systems
- Establishment of Road Research Centres, procurement of lab equipment
- Preparation of Design Manuals for LVR
- Capacity Building

**Transport Services (including Road Safety)**
- Study on Causes of Rural Motorcycle Accidents on LVR
- Study on Rural Transport Indicators
- Study on Rural Transport Services for Older People
Definition of Low Volume Road

AFCAP has promoted broader definition of a “low volume road” which includes:

- “Relaxation” of geometric design standards including lower and variable design speeds
- Alignments that may not be fully “engineered” but are fit for purpose
- Specifications for materials in upper pavement layers that facilitate the use of materials available in the vicinity of the road
- Recognition that the natural environment may play a more significant role in road deterioration than the traffic
- Adoption of the Environmentally-Optimised Design and Construction (EOD&C) approach
- Construction by small and medium enterprises
- Justification of investments on the basis of social upliftment rather than purely on direct economic benefits.
Project Conception & Implementation – Key Principles

- Host Institution in-country
- In-built local ownership and buy-in
- Funding of capital works

- AFCAP National Steering Committee
  - Membership: (Road Fund, Roads Agencies, MoW, others)
  - Identification and prioritisation of projects
  - Approval of ToR
  - Oversight of implementation of projects

- AFCAP Support
  - Development of ToR for prioritised projects
  - Procurement of required expertise based on approved ToR
  - 100% funding for technical assistance, training, equipment
  - Oversight during implementation of projects
Research-Generating Ideas

1. Use of non-standard materials in upper pavement layers (LVSRs)
   - Calcrete
   - Sand
   - Laterite

2. Alternative surfacings
   - Cold mix asphalt
   - Otta Seals (fine quartz gravels, calcrete, weathered basalt, cinder gravel).

Through:
   - Desk studies
   - Laboratory testing
   - Back-analysis of existing pavements
   - Construction of experimental sections.
Research - Generating Knowledge

How transport services operate in rural areas:

• For the aged
• For people needing emergency medical care
• Small farmers
• Using motorcycle taxis.
Uptake of Knowledge

New ideas must be brought into practice by updating design manuals, standard specifications etc.
Demonstration of Ideas

Unstabilised laterite road bases

Thin cold mix asphalt

Concrete slabs and block paving
• Builds on pioneering work done in RSA (and Australia)
• Calibrated DCP-DN catalogue for Malawi conditions
• Reduced reliance on conventional testing
• Supports an existing design approach
• Also for design of LVSRs in Kenya, Tanzania and DRC.
• Training conducted in Kenya, Tanzania and Malawi.
Research Centres

AFCAP supporting development of research centres for roads transport in:

• Ethiopia
• Mozambique
• Kenya
• South Sudan
• Tanzania
Outcomes of AFCAP

- Contributed to the attainment of new knowledge

- Bridging the knowledge gap between countries

- Enabled the uptake of knowledge (new and existing) with benefits for local communities

- Demonstrated the value of research

- Created awareness of the need for more in-country research.
Key Future AFCAP Activities

Research & Uptake
- Continue with research activities, consolidation and search for new knowledge, systematic monitoring of trial sections
- Embed research knowledge into national standards, manuals and specifications

Strengthen Capacity Building
- Provide support to centres of research excellence
- Develop and implement structured programme of training and mentoring of African researchers

Knowledge Management
- Develop sustainable and easily accessible knowledge portals linked to rural road and transport services research
- Disseminate and mainstream best practice and evidence in rural LVR and transport services
The AFCAP Vision

A Vibrant research community for the rural transport sector in Africa

www.afcap.org
Thank you