The Africa Community Access Programme (AFCAP)

Overview of AFCAP
...and a Vision for the Future

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Low Volume Roads Symposium

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What is AFCAP?

- Knowledge and research programme for the rural transport sector in Africa.
- June 2008 to 2014
- Core countries: Mozambique, Ethiopia, Malawi, Tanzania, Kenya, South Sudan, DRC.
- Also projects in SA, Zambia, Ghana, Nigeria and SADC.
- Crown Agents management contract.
- DFID budget £14.4 million (low cost high impact).
- AFCAP 2 under preparation and also ASCAP.
AFCAP Activities
1. Use of non-standard materials in upper pavement layers (LVSRs)
   • Unstabilised sands
   • Calcrete

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

Through:
• Back-analysis of existing pavements
• Construction of experimental sections
Hoopstad-Bultfontein Experimental Section (1962):
Neat sand base
Potential Saving: >$50,000 per km (cement) for countries like Mozambique
Otta Seal Research Ethiopia

Kombelte Village - finished road

Nearest crusher > 150km
How transport services operate in rural areas:

- For the aged
- For people needing emergency medical care
- Small farmers
- Using motorcycle taxis.
Demonstration of Best Practice

Unstabilised laterite road bases

Thin cold mix asphalt

Environmentally Optimised Design
Uptake of Knowledge

New knowledge must be brought into practice by updating design manuals, Standard Specifications etc.
• Builds on pioneering work done in RSA (and Australia)
• Calibrated DCP catalogue for Malawi conditions
• Reduced reliance on conventional testing
• Supports an existing design approach
• Malawi plans to construct 100km LVSRs annually
• Also for design of LVSRs in Kenya and DRC.
LVR Design Manuals - Ethiopia

- Published in 2011 for Universal Rural Roads Access Programme
- 70,000km gravel roads over 5 years
- Includes design catalogue for low volume sealed roads from 1990s research.
Independent review findings:

• About 7,000 individuals in 2,000 organisations using manual.
• 3,600 professionals trained in LVR design using the Manual
• 28,000km upgraded to gravel all weather standard.
• 170km sealed roads designed through 15 villages.
Research Centres

AFCAP supporting development of research centres for rural transport in:

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

• Contributed to the attainment of new knowledge
• 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.

Vision

“Vibrant research community for the rural transport sector in Africa”

www.afcap.org
Thank you