
AFCAP

The Africa Community Access Programme (AFCAP)



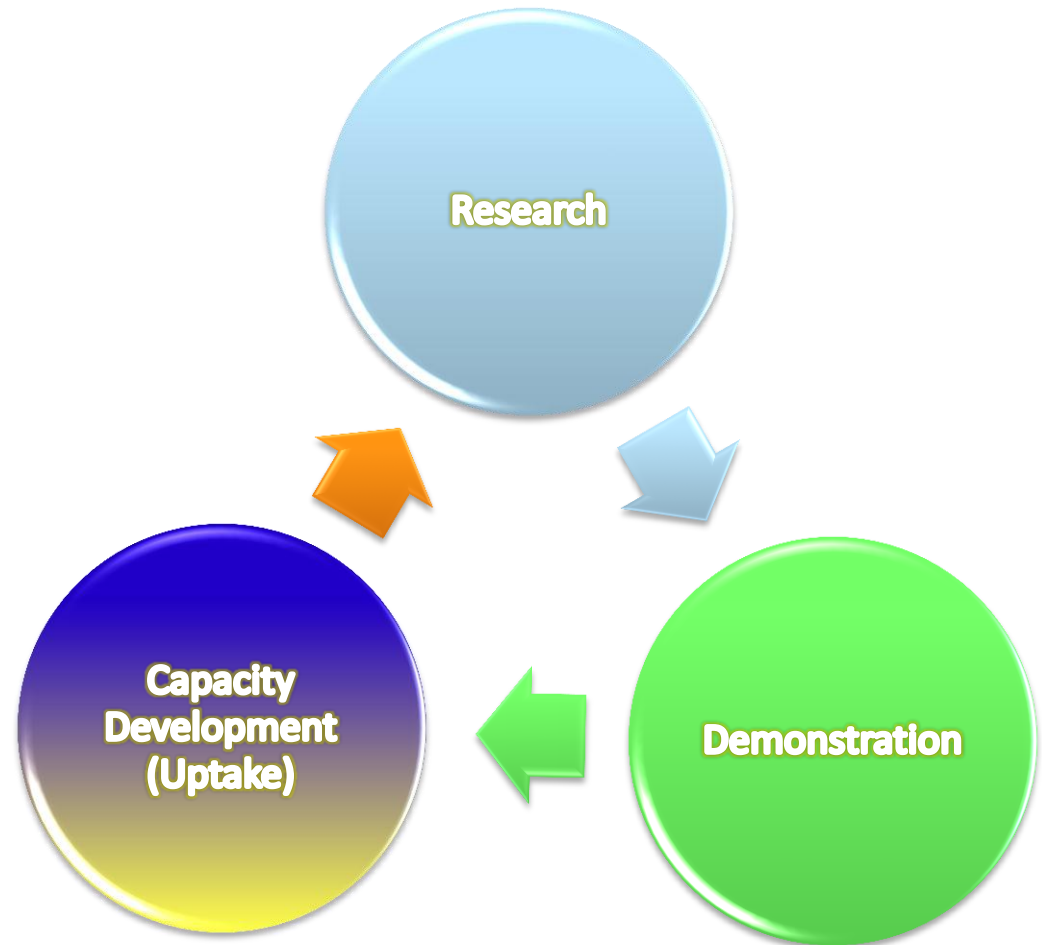
Overview of Activities

South Africa Road Pavements Forum

5th November 2013

What is AFCAP?

- Knowledge and research programme for the rural transport sector in Africa.
- June 2008 to 2014 but AFCAP 2 under preparation.
- 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 Activities



Research- Knowledge Generated

- 1. Use of unstabilised sand in upper pavement layers (LVSRs)**
 - Extensive testing of sands from region
 - Back-analysis of existing pavements
 - Method of classifying sands and Specifications
- 2. Use of natural gravels in Otta Seals**
 - Weathered basalt, cinder gravels, fine quartz gravels
- 3. How transport services operate in rural areas:**
 - For the aged
 - For people needing emergency medical care
 - Using motorcycle taxis.



Use of Sand in Road Construction



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



Demonstration of Best Practice



Unstabilised laterite road bases

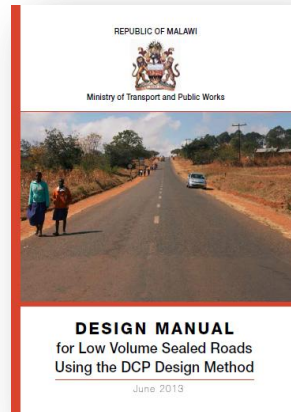
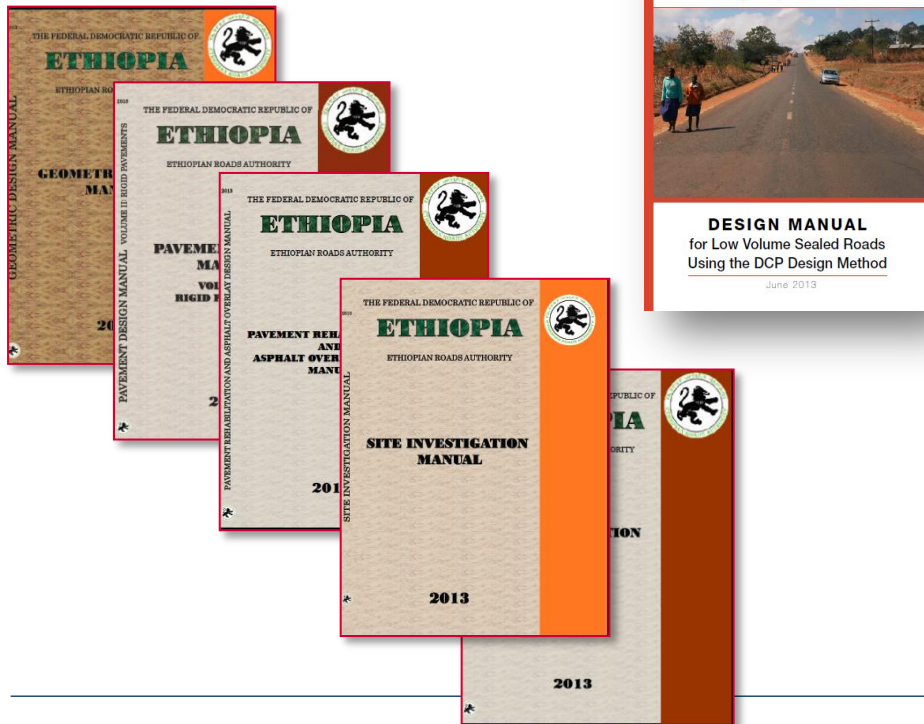
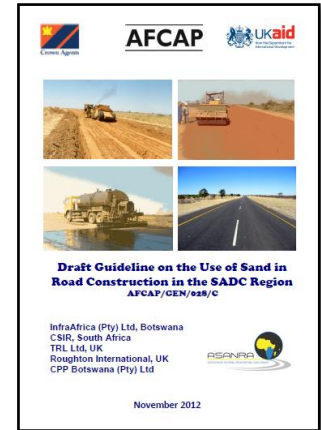
Thin cold mix asphalt

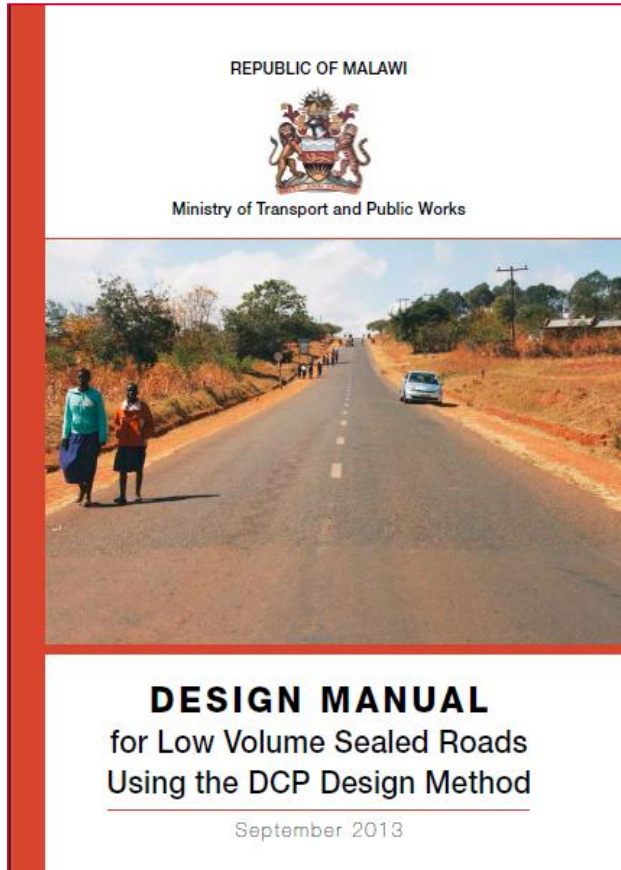


Environmentally Optimised Design

Uptake of Knowledge

New knowledge must be brought into practice by updating design manuals, Standard Specifications etc.



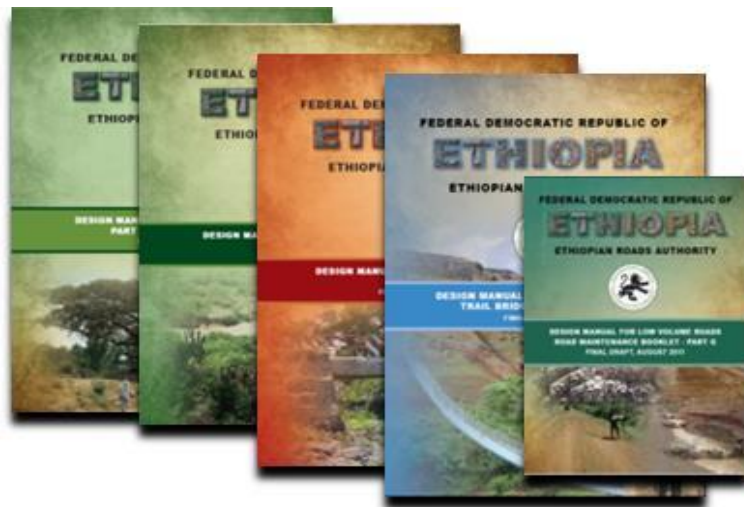




- Builds on pioneering work done in RSA
- Calibrated DCP catalogue for Malawi conditions
- Reduced reliance on conventional testing
- Supports an existing design approach
- Malawi plans to construct 100km LVSRs annually.


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.




Department For International Development

COLLABORATIVE RESEARCH PROGRAMME ON HIGHWAY ENGINEERING MATERIALS IN THE SADC REGION



Volume 1

Performance of Low Volume Sealed Roads: Results and Recommendations from Studies in Southern Africa



Transport Research Laboratory, Crowthorne, Berkshire, United Kingdom

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.
- 200km sealed roads designed through villages



- **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”

Thank you

AFCAP

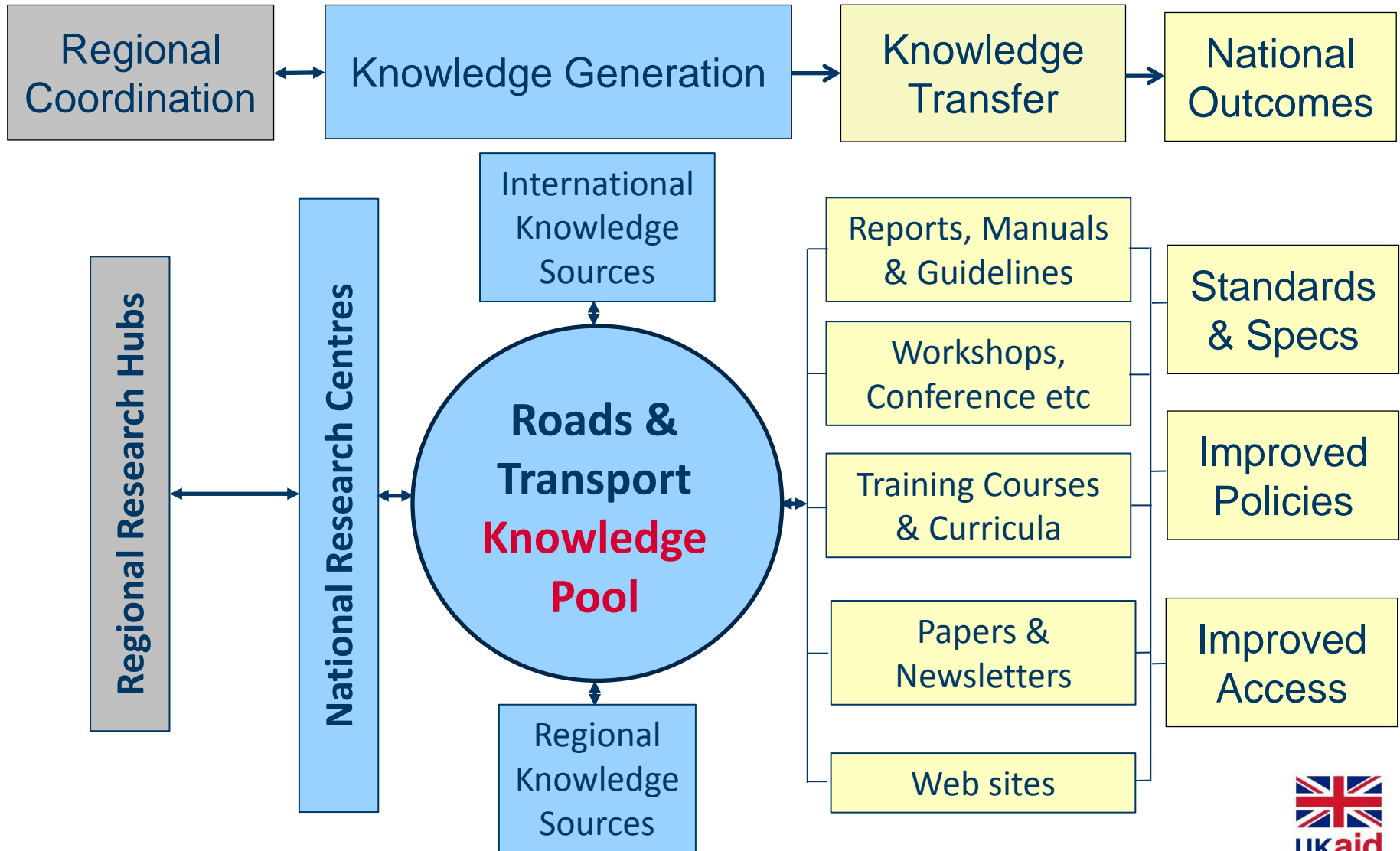
Observations from AFCAP on the Consolidation of Africa-Specific Knowledge



Roads Pavement Forum

5 November 2013

Development Approach



- Africa-specific knowledge fragmented
- SA documentation major resource
- SA documents used and referenced extensively in other countries
 - TRHs and TMHs
 - Sabita manuals
 - TG manuals
 - TMH 1/SANS test methods
 - COLTO Specs (SATCC specs)
- Other resources
 - TRL Overseas Road Notes
 - SADC LVR Guideline
 - SEACAP
 - National knowledge sources
 - Donors
- AFCAP



- Access to documentation
 - Availability of soft copy
 - Web site security
 - Payment for manuals
 - Copyright
- Outdated knowledge sources
 - Updating opportunities through AFCAP?
 - Inclusion of latest AFCAP research
- Variability in Design manuals, Guidelines and Specifications
 - eg TRH3 v ORN 3
 - Implications
 - Impact on Course & Training
- Inclusion of draft information and guidelines in Specifications (eg TG 1)
- Coordination and consolidation of best Practice
- DFID open access to information policy
- SAPEM





- How do we consolidate best practice and increase the knowledge pool for access by all?
- What role can the new SAPEM manual play in Africa?
- Is an APEM a possible way forward?
- AFCAP/ASCAP 2 is going to be a major programme in Africa and Asia in the next 10 years. How do we ensure better coordination with SA initiatives to coordinate knowledge generation and awareness? (including regular updates)
- RPF & CAPSA a good start

Thank you