

**SEMINAR: SUSTAINABLE ACCESS
AND LOCAL RESOURCE SOLUTIONS****Date : 28 – 30 November 2005****TITLE: The African Community Access Programme (AFCAP)****AUTHORS: P O'Neill (DFID), P A K Greening (TRL) and P R Fouracre (TRL)****Outline**

1. The populations of most African countries are still predominantly rural-based. Transport is self-evidently key to enabling community access to all kinds of opportunities and services: health-care, education, employment, markets, and social and political networks. And hence, inadequate access presents a significant disadvantage to these communities to participate in economic and social development. Rural transport infrastructure and services are particularly poor in many African countries, and thus access is neither sustainable nor affordable in a reliable way. Current construction initiatives to improve access have been piecemeal in approach, uncoordinated, lacking in sustainability, and poorly promoted. There is increasing concern that the regional network of roads, 80 per cent of which is unpaved, cannot be sustained using current maintenance technologies and practices.

2. The regional and sub-regional African bodies (NEPAD, UNECA, ECOWAS and others) are largely looking to improvements in transport to foster improved economic and trade activity. But there is also recognition (in their policy statements) that transport has a role to play in supporting agricultural development as well as providing other opportunities for the rural poor. This need for attention to rural accessibility is also reflected in many country Poverty Reduction Strategy Papers (PRSPs) as well as in the Commission for Africa report. It is in this context that the African Community Access Programme (AFCAP) is being developed.

3. AFCAP is a DFID poverty-targeted transport initiative which uses research evidence to develop sustainable, low-cost, maintainable and locally-owned access for poor rural communities. Initially it will be based around a small portfolio of research projects which are trans-national (covering several African countries) in relevance and whose outcomes feed directly into the host governments policies and standards, and into the conditionalities of development bank loans. AFCAP will emulate the highly successful South East Asian Community Access Programme (SEACAP), which has received strong support from development banks intent on promoting appropriate standards.

4. AFCAP will add value to the process of rural infrastructure development by providing strong research evidence that feeds directly into both the decision-taking and capacity building processes. AFCAP can only be of value if it is integral to these processes and to its 'client' base; it effectively will be an embryo research facility embedded within a host ministry or road agency. This mechanism will 'close the loop' between research and application, a gap that has eluded so much of earlier infrastructure research.

5. This paper reviews the background and genesis of AFCAP, its scope and approach, and its current operational status.

Background

6. Most countries see an efficient transport system as an essential precondition for economic development. The DFID Issues Paper 'Making Connections: Infrastructure and Poverty Reduction' (DFID 2002) quotes an example where a 15 per cent reduction in trade and transport costs, arising from investment in infrastructure, led to a five per cent increase in national income. The same publication stresses the link between adequate infrastructure and achievement of the Millennium Development Goals, including poverty reduction. Transport is a key infrastructure component, and represents one of the largest national investments for many countries. For example, the asset value of the road networks in Africa is estimated at more than US\$500 billion, with an annual requirement for operation and maintenance of over US\$12 billion. Transport services incur costs some ten or twenty times greater. Saving even one per cent of annual expenditure requirements on transport in developing and transition countries would save hundreds of millions of dollars. Thus, a small improvement in performance, applying experience and knowledge, would yield large benefits in the sector.

7. In the SADC region of Africa alone, the total classified road network length is some 930,000km, of which just 20 per cent is paved. There is also 430,000km of rural road network (undesignated), which consists mainly of 2-lane, all-weather gravel roads and seasonal earth tracks. Most of these roads were constructed in early post-independence years, and represent one of the region's biggest assets with a current replacement cost of US\$ 50 billion.

8. The whole issue of maintaining gravel roads is causing national road authorities increasing concern. Not only is gravel becoming a depleted and scarce resource, but other considerations (see Table 1) point strongly to the need for developing alternative and more sustainable approaches to the management of rural roads provision. In the medium to long term, continuous gravelling or regravelling of these roads is unsustainable.

Table 1 - Gravel road sustainability issues

Issue	Sustainability factor
Financial & economic	Typically 30-150mm of surface thickness of gravel road is 'lost' each year Regular regravelling incurs significant recurrent costs
Institutional & management	Unpaved roads make up 70-90% of road network, generating cycle of deterioration and backlog maintenance which authorities are ill-equipped to handle
Standards & technology	Wastage of finite resources (selective regravelling is often impractical) Expensive mechanised approaches required for regravelling, placing further burden on inadequate resources of road authority
Social	Land take and rehabilitation of borrow pits impact on local communities Dust pollution and health hazard
Environmental	Depletion of a limited occurrence, non-renewable resource Increasing haul lengths as resources are worked out Haul route damage by overloaded trucks Siltation of watercourses by surface runoff

Source: SADC Guideline on low volume sealed roads

9. Developing new approaches to rural road management requires a 'sea change' in road standards and their application. Standards must reflect new understanding of the performance of available materials, technologies and techniques. Application must be built around the training and institutional development of those responsible for managing rural roads. Both standards and application must also accommodate stakeholder ownership and sustainability.

10. A major contribution to the start of this process has been established through the publication of the SADC Guideline: Low-Volume Sealed Roads (GLVSR). SADC with the support of DFID, NORAD and SIDA have produced a synthesis of best regional and international practice in all aspects of low-volume sealed roads. The motivation for this work was that:

- Many aspects of low-volume sealed roads (LVSR) have stemmed from technology and research in Europe and the USA in environments very different from those prevailing in the SADC region
- Much of the basic philosophy, norms and standards concerning LVSR provision has remained unchanged for many years
- Much recent research on LVSR (covering planning, appraisal, design, construction methods and finance for maintenance) has been undertaken within the region, which where applied has demonstrated highly beneficial and cost-effective outcomes
- There is still, however, a tendency to use old, conventional approaches which ignore the research findings.

11. The SADC Guideline needs to be broadened in scope and 'geographical reach'. Activities to achieve this include:

- General technical assistance in the approach to adopting the guide
- Technical assistance for staff training
- Changes to country standards, design manuals and specifications
- Monitoring of acceptance, adoption, refinement and satisfaction amongst users of the broadened guide

Scope and approach of AFCAP

12. AFCAP aims to emulate the South East Asian Community Access Programme (SEACAP) in all important respects. It will focus on rural access issues, initially in a small group of non-francophone African countries. As an aid to swift mobilisation, AFCAP will benefit from working with and alongside existing rural transport programmes that can accommodate small additions and modifications that realise the AFCAP purpose.

13. The nature of AFCAP is a research and demonstration based programme that identifies good practice which is easily scaled-up and mainstreamed into policy and investment. Capacity building is an integral part of the mainstreaming process.

14. The programme is built around the general concept of broadening the scope and geographical reach of the GLVSR, and then (as a separate exercise) specifically customising it for individual country conditions. At present, GLVSR is generic to a regional group of countries. To facilitate its full implementation, both within SADC and more widely throughout Africa, it needs to be re-cast for specific country conditions, which take account of local environments, resource availability, institutional capacity, local ownership and funding issues, etc.

15. Each AFCAP project will be targeted at a specific country, though clearly there will be value and scope for cross-country comparative work. What is vital is that each project has

outcomes that are mainstreamed within country. It is envisaged that each project will contribute to one or more of the following general themes:

Research & demonstration

- Identification of sustainable innovative approaches

Mainstreaming

- Training in support of capacity building and adoption of new techniques
- Support in the process of ownership of new approaches
- Improvements in the procurement process for implementing new approaches
- Development of sustainable funding models for implementing new approaches

16. The identification of innovative approaches concerns the development and use of new road materials and techniques, leading towards appropriate country-specific standards and guidelines to reflect current research findings. It will be based on research and/or demonstrations and trials.

17. Mainstreaming the new approaches will always be planned in conjunction with the research and demonstration work. As has been demonstrated in SEACAP, ownership (by the key stakeholders) of the research is critical to its implementation. The mainstreaming theme will be developed through various institutional strengthening and capacity building strategies. Institutional processes may need to be developed to encourage ownership, and there will be a need for training, not only to explain the nature of new approaches, but also to manage the process of change. Different procurement and funding models may need to be introduced to support adoption of new techniques.

18. Where possible, AFCAP will work with existing projects that are already funded, and which have synergies with the AFCAP scope. Figure 1 illustrates how AFCAP can add value to an ongoing project.

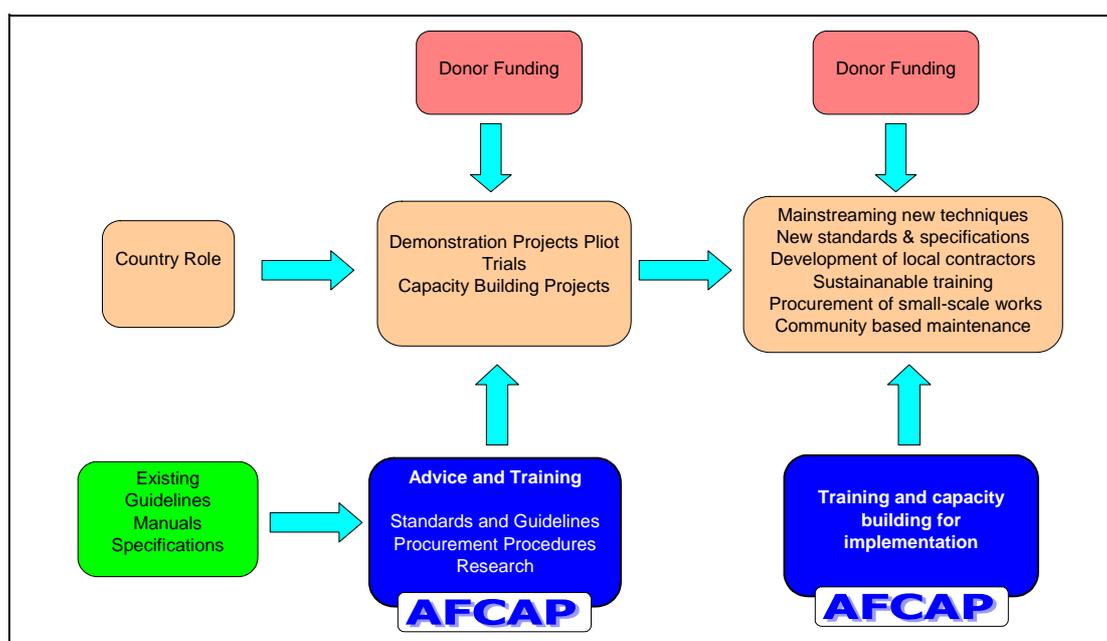


Figure 1 - Generic example of AFCAP role in mainstreaming new approaches

The added value of AFCAP

19. There are a number of examples from the transport sector where research has identified huge potential benefits that remain illusory because the research has not been applied. For example, research has demonstrated that haulage costs in some African countries are five times higher than in Pakistan. There are identifiable measures that could be applied to reduce this imbalance, but the messages are not reaching the right audience, and/or the mechanisms for applying the knowledge are not in place.

20. Another example, specific to the roads sub-sector, concerns road maintenance and rehabilitation. In the developing world, main road expenditure amounts to around US\$ 19 billion per year. There are good reasons to believe that at least a ten per cent savings in maintenance and rehabilitation costs could be achieved routinely through application of modern road management processes. The potential saving of US\$1.9 billion per year compares with the estimated costs of the research and development invested in developing these techniques, over a 30-year period, of around US\$40 million.

21. It is expected that AFCAP will demonstrate similar economic returns within a rural setting. It will particularly address the prospect of diminishing supplies of traditional road-building materials. As well as these quantifiable economic benefits, there are the non-quantifiable benefits of maintaining access to social and economic opportunities that are needed to help sustain rural communities. The value of AFCAP to its principle stakeholders is summarised in Table 2 (following page).

Current status of AFCAP

An inaugural meeting of potential AFCAP partners and stakeholders was convened in Harare in early October 2005. There are seven countries which have expressed an interest in committing to the AFCAP concept, namely Ethiopia, Ghana, Kenya, Malawi, Mozambique, Tanzania and Zimbabwe. Each has opportunities for undertaking projects that can be used to address the AFCAP objectives of demonstrating and mainstreaming appropriate standards and practices in the development and maintenance of rural access. Currently an AFCAP package of projects, and supporting technical and administrative systems are being confirmed and specified for project activities to commence in April 2006.

References

DFID 2002. Making connections. Infrastructure for poverty reduction. Department for International Development, London.

SADC 2003. Guideline. Low-volume sealed roads. Southern Africa Development Commission, Botswana.

Table 2 - The value of AFCAP

Stakeholder	Value added by AFCAP
DFID	AFCAP addresses issues that have been identified by both the White Paper on international development and by the Commission for Africa. AFCAP provides a mechanism for ensuring direct uptake of research findings as a means to improve the access of the rural poor to economic, health, education and other opportunities.
All donors	AFCAP provides a platform for harmonising efforts to improve rural access in Africa. It will be a point of information exchange and a process for collaboration in the design, implementation and analysis of rural access research. AFCAP will also inform and promote measures that can be adopted by stakeholders – both countries (for developing standards, guidelines, policy, etc.) and donors (for funding investment programmes that build on and use the research findings).
NEPAD and sub-regional economic groups	AFCAP provides a source of information about rural access issues, as well as evidence of good practice and the impacts of measures taken to improve access.
Countries	Those that participate in AFCAP will benefit from having an 'in-house' research facility which directly addresses local issues and needs. The AFCAP process will influence their standards, guidelines, policy and investment decisions towards rural access. Non-participating African countries can also benefit through knowledge exchange that AFCAP will promote.
Research institutions	Local research institutions will benefit from the capacity-building that AFCAP will offer as part of the research process. AFCAP may also be able to broker a stronger role for these organisations within the decision making process.
Rural communities	Rural communities must be the primary beneficiaries and focus of the AFCAP process, through improving access to outside opportunities. AFCAP will help develop the process of ownership of rural access issues and approaches, such that rural communities can develop their own advocacy.
SSATP	As a research programme, AFCAP provides a primary source of information on rural access issues which SSATP can use in its policy advocacy programmes.
ILO-Asist	AFCAP covers more than labour-based road building techniques; but it can support the advocacy work of ILO-Asist by providing primary research information on relevant issues. ILO-Asist is also likely to be a sub-contractor in the role of managing projects and organising training courses.
Networks (gTKP, IFG, IFRTD, TTCs)	AFCAP can support all of these networks by providing primary research evidence on sustainable rural access. Networks could also be supported by AFCAP to disseminate information and to organise training courses.