

British Expertise

Entry Form: Outstanding International Collaboration

Project title

Africa Community Access Programme (AFCAP)

Project end date (actual/projected)

June 2013

Summary of Project (500 words)

Access to services is vital to local communities in Africa - especially those living in remote rural locations excluded from mainstream development. It is also essential for achieving economic growth and sustaining the livelihoods of some of the poorest people in Africa.

The Africa Community Access Programme (AFCAP) is helping to provide safe, reliable and sustainable all-season access to markets, healthcare and education for rural communities across Africa, through strengthening and promoting research to influence policy and practice in Africa for the construction and maintenance of rural roads.

AFCAP aspires to the improved provision and maintenance of over 200,000km of rural roads in Africa by 2020. The programme, launched in 2008 by the Department for International Development (DFID) and managed by Crown Agents, is particularly timely for the rural transport sector in Africa. Investments by many African governments in rural road infrastructure now exceed their spending on health and education as road infrastructure is a priority sector due to its contribution to economic growth.

Collaboration and high level government support is critical to AFCAP's success and has been an intrinsic part of the programme strategy from the outset. The programme works closely with national governments and other bilateral and multilateral donors to build on investments in road construction and maintenance. It also works with private sector contractors, academia and local and global transport and engineering networks to provide research, knowledge-sharing and capacity building, especially in the use of local resources. We value the involvement of all stakeholders from governments to local communities to individual road users to ensure our projects are always collaborative and country-led. An additional benefit of this strategy has been the Community of Practice created by AFCAP which now has a membership of 700, all with the same aim of developing best practice and the retention of research.

To further our collaborative approach AFCAP supports knowledge-sharing workshops and international study tours for road authority representatives to compare approaches. Ethiopians have visited authorities in Australia, South Africa and Botswana. Malawians have visited Mozambique and Zambia and Mozambicans have visited Burkina Faso to learn how road crossing structures can retain water for use by communities in arid areas.

The programme recognises the interdependence between engineering and transport services – without a good road there are limited transport services and without transport services a good road will not provide adequate access. Our focus countries are Ethiopia, Mozambique, Tanzania, Kenya, Malawi, South Sudan and DRC, but we are also implementing projects in Nigeria, Zambia and South Africa.

Some project examples include:

- Developing guidelines to use sand more effectively in road construction to benefit all 13 South African Development Community member states.
- In Ethiopia, we worked with the government to produce design manuals and standards, and update approaches to manage local terrain, climate, materials and traffic loads for a rural road network of 70,000km.
- Roads in Tanzania and Kenya are being used to demonstrate a range of construction techniques for road surfaces, using locally available materials.

Team work (125 words)

Collaboration between Crown Agents' team - comprising procurement, finance, academic and administrative support in the UK and technical expertise in Africa – DFID and African governments and authorities is essential for the programme's success. A key focus is strengthening linkages between programmes to promote the uptake of research by government agencies. We have established a Community of Practice (COP) comprising nearly 700 practitioners with shared objectives in their fields of interest to encourage best-practice and the retention of research. We have convened two international conferences that bring together COP members to discuss outcomes of their research activities and how they can influence policy and practise in participating countries, pulling together engineers and social scientists in research collaborations for technical and transport service projects.

Successful project

DFID awarded AFCAP an A++ score - 'outputs substantially exceeded expectation' as part of its annual review. DFID's senior infrastructure adviser Liz Jones attributed success to the "time, intellectual energy and hard work of the AFCAP team and its partners". The report states:

- AFCAP's research reduces the whole life cost of rural, low volume roads...to give all-year, all-weather access to markets and services to millions of people living in isolated communities throughout Africa.
- AFCAP's generation of evidence to construct low maintenance rural low volume roads has been very strong and has already influenced Ethiopia's policies and practices.
- Already the manuals exist to influence the construction and maintenance of 70,000 km of road in Ethiopia by 2020 and manuals for other focus countries will influence 194,500km.

Sustainable result

AFCAP's participatory approach enhances sustainability by embedding best practice in governments and practitioners. In Malawi, we have developed a pavement design manual in collaboration with the Malawi Road Authority. The manual, which complements existing standards and supports the use of local materials, is estimated to save 50% in construction costs, enabling the government to build more roads and reach more people. We undertook a detailed analysis of rural roads built by the road authority to new standards but without documentation. Governments' adoption of AFCAP-led best practice manuals is helping to ensure the sustainability of AFCAP outcomes. New standards have been developed under AFCAP in Ethiopia, Mozambique, Kenya and South Sudan. We have also ensured sustainability by building capacity for 700 people on practical maintenance techniques.

Challenging

AFCAP embraces the challenge of connecting countries in Africa to share its research and generate and maintain interest in seeking new and innovative ways to improve rural access. By taking a country by country approach we are harnessing the benefits of AFCAP research while respecting cultural diversity. We are ensuring a collaborative approach by involving senior staff in ministries and road authorities to identify, design and implement most effective and efficient projects. We find practical solutions and we engage with local communities to ensure our projects make a difference now and in the longer-term. We have also provided training for more than 700 people to strengthen the local construction industry and encourage local experts in government agencies to promote and help drive the research projects.

Innovative

Research trials are aiding the development of innovative durable road surfaces using local resources, contractors and community labour. We support road research strategies, capacity building and the introduction of research centres for sustainable development. AFCAP research is centred on finding innovative approaches to projects and we invest in local 'champions' in their respective fields of interest. Research in Tanzania has found that current standards for major roads can be substituted for simpler, low-cost materials and methods. Marly Limestone, a sedimentary rock abundant along the coast, is effective during the rainy season due to its hard surface and traction. 'Dynamic Cone Penetrometer' equipment has revealed that fewer pavement layers are needed than recommended by national standards, saving US\$17,500 per kilometre of road.

Strong local impact

The ultimate beneficiaries of AFCAP projects are the rural communities in Africa who are experiencing increased mobility, reduced transport costs, easier access to health facilities and education, markets and employment opportunities. In Nigeria and Zambia we are contributing to the development of more effective ambulance services; in Tanzania we are studying the particular constraints that older people in rural communities face in accessing transport. Research in Mozambique on using road crossing structures to retain water will enable communities in arid areas to better cope with the increasingly harsh conditions expected due to climate change. Training provided by AFCAP to local contractors in Mozambique and Ethiopia will contribute to important efficiency gains and improved workmanship in the local construction industry.

Meeting technical and cultural challenges

We have engaged preeminent international and regional experts complemented by experienced engineers with strong local knowledge to identify and solve technical challenges such as finding cost-effective techniques and locally-sourced materials for governments to improve rural access and ensure sustainability. AFCAP promotes solutions that are compatible with local conditions and cultures. In particular, our research projects are helping to assess transport services from user, operator and regulator perspectives. We observed high numbers of 60-seater buses in Tanzania; rural estate cars in Kenya; 'Chapas' (open trucks carrying an overflow of passengers) in Mozambique and motorcycle taxis in Tanzania. Understanding preferences for modes of transport can help inform policy development. In all countries, rural transport services are impacted by the rainy season, markets, harvests, cultural festivals and holidays.

What other information is relevant

- AFCAP seeks to reduce poverty and ensure gender equality. We are evaluating the impact of a 10 year old road project in Mozambique on local communities, including improvements in

employment for women in road projects and wage increases, to inform current and future projects.

- A testament to the impact of AFCAP is illustrated by Asha Furaha, a food vendor in Tanzania who travels along the 24km of road, constructed following AFCAP research, from Bagamoyo to her village in Lidiga: “Our journey used to take three to four hours, now it only takes an hour by motorbike.”