Research for Community Access Partnership (ReCAP) - Programme Overview

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Road Pavements Forum, 7-8 November 2016, Pretoria, South Africa

CAPSA '15 Resolution

ReCAP
Research for Community Access Partnership

CASPA 2015 RESOLUTIONS	RPF	WAY AHEAD
CAPSA and RPF should establish regular contact with AFCAP to exchange road technologies pertinent to the needs of the African continent	🙂	**CAPSA will continue the engagement.** **RPF to invite AFCAP's participation at regular RPF events.**
CAPSA 15 to engage with RPF in order to gain wider exposure to the macro-economic message provided by keynote speaker Martyn Davies, and its implications on the roads industry	🙂	**Related to Nazir message and message related to road funding – Sabita and members of industry currently engaging. Presentation at next RPF.**

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Background

- ReCAP 2014 to 2020
- Following the success of:
  - South East Asia Community Access Project (SEACAP) 2004-2009,
  - Africa Community Access Programme (AfCAP 1) 2008-2014,
- DFID initiated a second phase under ReCAP:
  - AfCAP, Africa Community Access Partnership
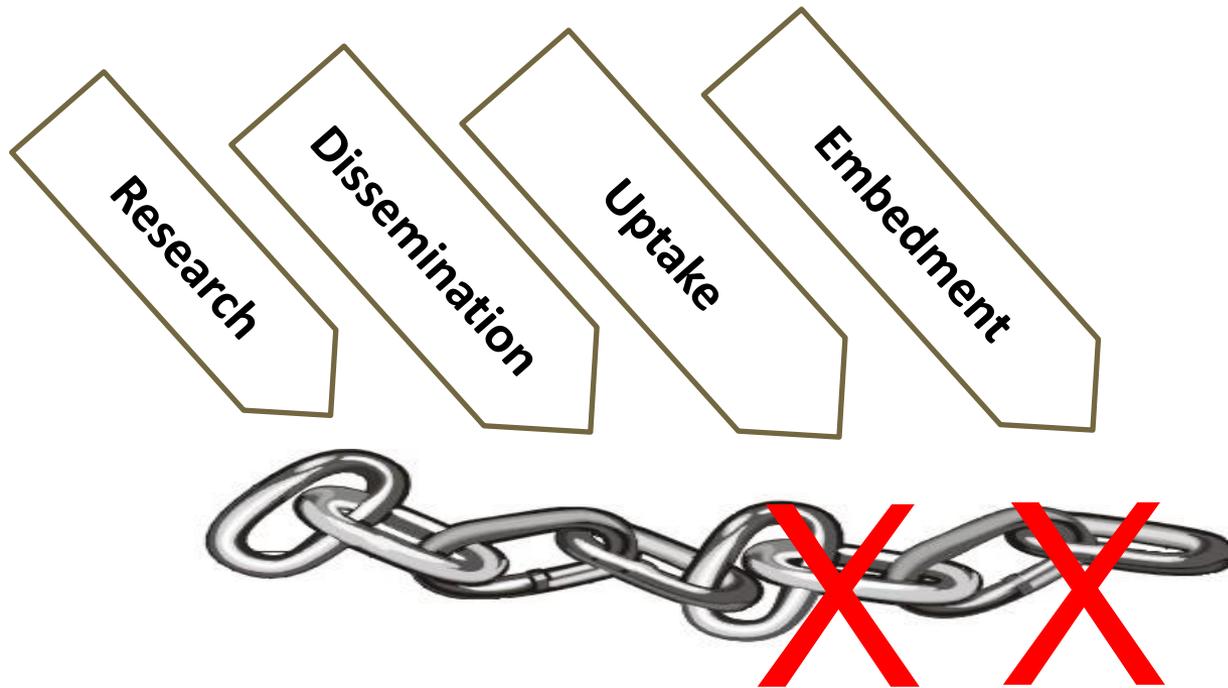 - AsCAP, Asia Community Access Partnership

Aims and Outcomes

- The aim of ReCAP, is to build on the programme of high quality research established under SEACAP and AfCAP phase 1 and take this forward to a sustainable future in which the results of the research influence policy and are incorporated into practice.
- The overall outcome defined as "Evidence-based, cost effective and reliable low volume rural roads and transport services that are strengthened, promoted and influencing policy and practice in Africa and Asia".
- Focus on the uptake of research for practical application and embedment of the results of research into norms and standards
- Capacity Building integral to all projects
- Fundamental underpinning principle that whilst ReCAP may facilitate, support and advise on the research projects, the initial ideas and concepts must originate from, and be owned by, the partner countries

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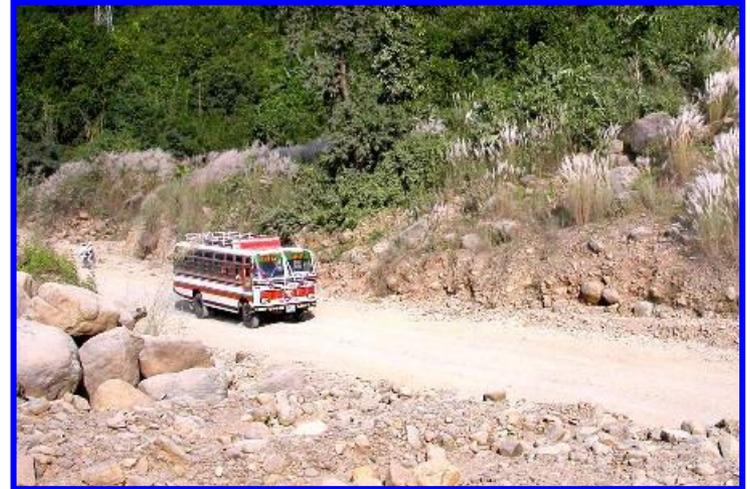# Lessons from AfCAP 1 & SEACAP

Research → **Dissemination** → **Uptake** → **Embedment**

- Home for the research in each partner country - focal point for sustainable knowledge management and transfer.

- Undertaking and disseminating research is not enough; uptake and embedment essential.

- Research, capacity building and knowledge transfer not as separate activities

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Budget

- Total budget over six years is £24.2 million
  - Pre Brexit = R550 million
  - Today = R410 million
- £17.4 million for AfCAP (12 countries)
- £6.8 million for AsCAP (5 countries)
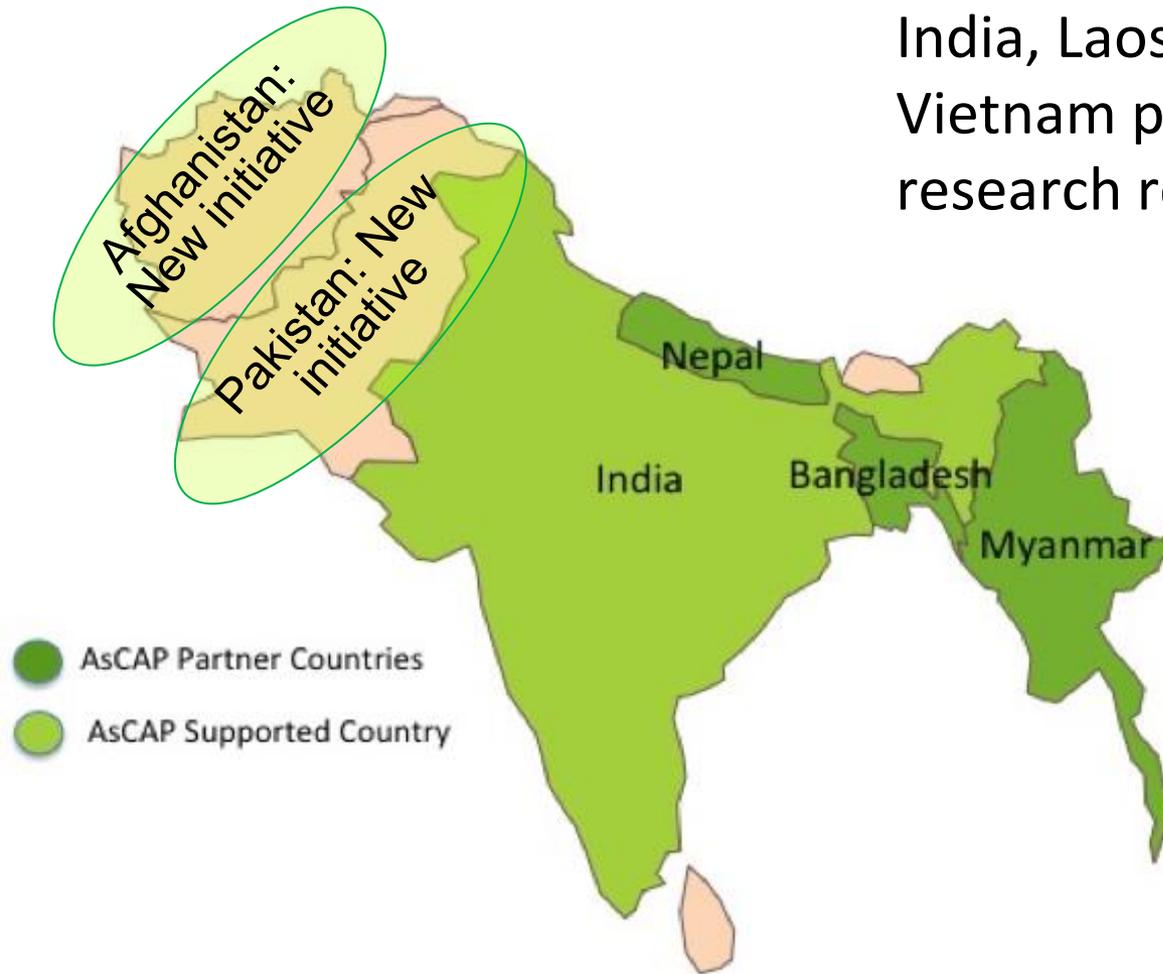- Similar percentage split (70/30) between infrastructure and other theme areas

AfCAP

South Africa and Nigeria provide research resources

AfCAP Partner Countries

AfCAP Supported Countries

AsCAP

India, Laos and Vietnam provide research resources

Afghanistan: New initiative

Pakistan: New initiative

AsCAP Partner Countries

AsCAP Supported Country

ReCAP PMU

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Current Project Portfolio

Area	Programme	Number of Projects
National Projects	AfCAP	65
	AsCAP	15
Regional Projects	AfCAP	17
	AsCAP	3
Cross cutting (eg gender mainstreaming, safety, knowledge management)		20
Other (smaller projects eg conference support, Meetings etc)		54

AfCAP Projects Relevant to the RPF

Road Pavements Forum, 7-8 November 2016, Pretoria, South Africa

Economic Growth through Effective Road Asset Management (GEM)

AsCAP Steering Committee, 14 September 2016, Manila

Purpose and Objectives of the Project

Purpose
To achieve economic and social benefits for local communities as a result of <u>improved performance</u> in rural road asset management.

Objectives

1. Review literature on existing and recent road management and maintenance programmes; identify 'what works' and 'what doesn't work'.

2. Develop a framework to measure road asset management <u>performance</u> and apply it in the project areas.

3. Develop simple tools for monitoring road condition and apply them in the project areas.

4. Develop simple indicators of economic and social impact of rural roads and monitor them in the project areas.

5. Achieve incremental improvements to road asset management <u>performance</u> in the project areas.

Approach and Methodology

- Intended to foster self-reliance in the responsible authorities for rural road and encourage greater accountability to road users and other sector stakeholders.

- It provides flexibility and space for the participating road agencies and their stakeholders to determine their own destinies.

- The approach focuses more on improved performance in road asset management than on any specific or pre-conceived road asset management systems or institutional, management and funding arrangements.

- Project Implementation Team (PIT)

Project Overview

- Project started 25 November 2015
- 3 Phases
  - Phase 1 - Formulation (5 mths)
  - *Evaluation of suggested methodology for Implementation (1 mnth)*
  - Phase 2 - Implementation (24 mths)
  - Phase 3 - Dissemination (3 mths)
- Formulation phase completed in April 2016
  - Approach and Methodology for implementation
  - Country selection process
    - Proposals from members
    - Weighted selection procedure
  - Final report reviewed and approved
  - Options for implementation presented including increased scope and budget
  - Feedback from S Com
- Implementation phase started August 2016

AsCAP Steering Committee, 14 September 2016, Manila

Current Status

- Lead countries identified
  - Sierra Leone – Tonkolili District
  - Uganda – Kamuli District
  - Zambia – Chongwe District
- Implementation phase underway
- W Cape being used an example of best practice and control (Caledon area)
  - Relevance to SA
- Country self-assessments completed
- Baseline studies underway
- PIT meeting 15-17 November 2016
  - All AfCAP countries participating
- Roll-out and implications
- Sustainability through ARMFA

Climate Adaptation:
Risk Management and Resilience Optimisation for Vulnerable Road access in Africa

AsCAP Steering Committee, 14 September 2016, Manila

Climate Adaptation: Overview

- Start date: April 2016, Phase 1 of 2-year project
- Consortium of CSIR, Paige-Green Consulting (Pty) Ltd and St Helens Consulting Ltd
- *Climate change constitutes a major threat to Africa's development* (African Union)
- *Impacts on existing network: 60% to 160% increase in maintenance cost* (World Bank)
- Clear evidence that climate change effects have already adversely affected rural access
- Ethiopia, Kenya, Mozambique, Tanzania, Uganda and Zambia particularly vulnerable; however, most African countries are affected.
- Objectives:
    a) Develop adaptation procedures to strengthen long-term resilience of rural access
    b) To build capacity and disseminate knowledge.
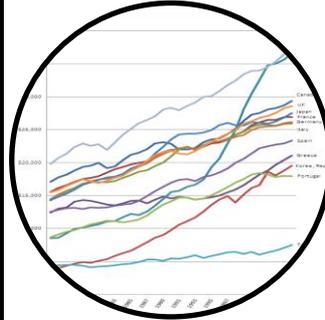
![ReCAP - Research for Community Access Partnership logo]

Partner Country Selection

Projected climate change

- Increase in frequency & intensity of rainfall

Rural accessibility

- Road density
- Quality of road infrastructure
- Rural access index

Infrastructure investment potential

- CPIA
- Fixed investment
- Development assistance

Historical climate related impacts

- Disaster frequency
- Affected population

Rural population exposure

- Rural population density

Quantitative Selection criteria used

Ethiopia, Ghana and Mozambique selected as lead countries

Review and Progress

- Review:
  - Robust relevant guidelines absent and weak technical knowledge/capacity
  - High interest in participation from all AFCAP countries affected
  - Strong contribution to logical framework targets
- Progress
  - Inception Report Submitted
  - Country selection complete (subject to agreed criteria, regional representation, National location/programmes/staffing/ budgets)
  - Briefing Note submitted and development of Guidelines initiated
  - Climate Threat report completed
  - Climate Adaptation report completed
  - Country visits in progress
  - Country workshop and recommendation report for phase 2 in early 2017
- Priorities
  - Overlap with Asset Management/mapping projects for collaboration
  - Inclusion in PIT meeting
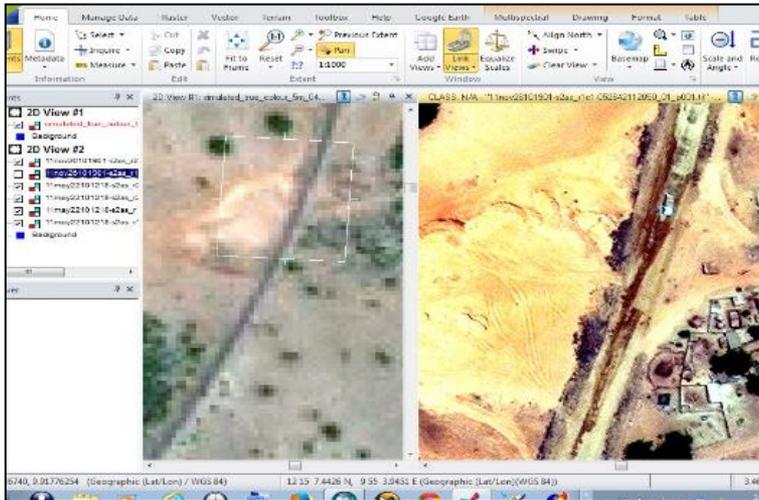 - How to deal with numerous country assistance requests

AsCAP Steering Committee, 14 September 2016, Manila

The use of appropriate high-tech solutions for Road Network and Condition Analysis, with a focus on Satellite Imagery

AsCAP Steering Committee, 14 September 2016, Manila

Overview

- **Start Date:** 25th April 2016
- **Duration:** 1 year
- **End date:** 12th May 2017
- **Service provider:** TRL
- To provide cost-effective and reliable high-tech solutions for the capture of maintenance management data related to the inventory and condition of a country's rural road network.
- Focus on satellite imagery, for road condition assessment particularly
- All potential innovative solutions will be explored.
- Options for pilot research to be proposed, with PMU approval following desk study.

Progress to date

Progress:

- Launch Meeting held, inception period complete
- Lead countries selected – Kenya, Ghana, Uganda and Zambia
- Countries visits in progress

Deliverables:

- Inception report submitted
- Desk study report completed and independently peer reviewed

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Development of Guidelines and Specifications for Low Volume Sealed Roads through Back Analysis

AsCAP Steering Committee, 14 September 2016, Manila

Project Overview

- Purpose:
  - To carry out research on the performance of LVSRs in Sub-Saharan Africa and use the results for the development of Standards and Specifications.

- Objectives:
  - To collect historical performance data.
  - To create a database for LVSRs.
  - To carry out further investigations in selected countries.
  - To analysis data and develop standards and spec. limits for LVSRs.

Project Status

- **Research Consultancy:**
  - Project was awarded to TRL through open tender.

- **Progress:**
  - Project started on the 18th of April 2016.
  - Leading LVSR specialists secured for the Pool of Experts who will assist in the delivery of the project.
    - Meeting at CSIR - September '16.
  - The Inception and Desk Study Report has been finalised.
  - Database being developed
    - Due for Beta testing - December '16
  - Hoopstad sections

Leadership Development Programme (LDP)

Current Status

- Project awarded for scoping phase
- Project awarded to a consortium of Mott MacDonald and University of Cape Town.
- Issues:
  - Original proposal only focusses on southern African members of ASANRA (ie Tanzania. Malawi, Mozambique and Zambia)
  - Needs to focus on all roads and transport disciplines for all roads (ie not just rural infrastructure and transport service)
  - Project planned for 1 year development of the course and 3 years to run the course effectively.
  - Potential project partners?
    - Initial discussions with DFID HVR project

- Demonstration sections of the value of surfacing unpaved roads and incorporating EODs in six countries
  - Accelerated performance data (traffic v environment)
- DCP designs for LVRs now generally accepted
  - CSIR and TRL methods consolidated and incorporate in the AfCAP DCP design software based on WIN DCP.
  - Training ongoing
  - Train-the trainers in Ghana
- Integrated Pavement Design Systems
- Proficiency scheme in Mozambique
  - Pilot for a regional project
  - Based on SA experience
- First Mile Kenya and Tanzania
  - Effect on quality of produce
- Nepal dust suppression
- Benefit Analysis System
  - Extension to scoping project

The Exit Strategy

- Based around the development and support of sustainable national research capacity

- Programmes like AfCAP not sustainable.

- Regional organisations have to take responsibility (eg ARMFA, ASANRA)

- For research coordination in Africa, ARTReF has an important role
  - Supported by AfCAP to start-up the Forum since September 2014
  - 4th General Assembly – 17 November in Caledon
  - Business plan for sustainable finance and management being developed

Thank you for your attention

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