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Alternative Approaches to District Road Maintenance

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The Issue

- Previously district roads under funded and maintenance typically ad-hoc
- Road Funds have established more adequate and reliable funding
- Need to ensure effective use of funds

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• BUT: Which systems of maintenance are appropriate for district roads?

Constraints

- Most district roads are unpaved
- Many are earth surfaced

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- Few have been built to a fully engineered standard
- Very low traffic little justification to invest in full improvement
- Weak capacity for planning and supervision



Photos of typical district roads



Challenge

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- How to devise systems of maintenance that work effectively on these roads within these constraints?
- Ongoing AFCAP study into district road maintenance systems in three districts in Tanzania

Four Systems to be Considered

- Area Based Long Term Framework Contracts
- 2. Area Based Long Term Performance Contracts (PMMR)
- 3. Petty (Small Scale) Contractors on Long Term Framework Contracts
- 4. Community Contracting 2 options



Area Based Long Term Framework Contracts

- Works to be done throughout a year are estimated based on condition of roads (spot improvements, periodic and routine maintenance)
- An area equal to half or one third of district to be covered under one contract
- Open tendering (limited to certain class of contractors?)
- Works orders to be issued by DE periodically on needs basis
- Payments to be done on measurement basis after inspection by DE

Area Based Long Term Performance Contracts (PMMR)

- An area equal to half or one third of district to be covered under one contract
- Necessary spot improvements or periodic maintenance works are estimated and a BoQ prepared for these works. These works are paid for on measurement basis
- The service/performance levels of the road network under contract are set (openness of drains/culverts, vegetation/bush control, comfortable road speeds, etc.). The contractor is paid on monthly basis after inspection by DE.
- Open tendering (limited to certain class of contractors?)

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Use of Petty (Small Scale) Contractors on Long Term Framework Contracts

- Works (routine and minor spot improvements) to be done throughout the year are estimated based on condition of roads
- Contracts be awarded on competitive basis (quotations)
- Contractors who have received training on LBT be included
- Lengths of between 30-40 kms of roads be assigned for a period of one year
- Works orders to be issued by DE periodically on needs basis
- Payments to be done after inspection by DF



Community Contracting 1st Option

- Communities/villagers to be mobilised to form CBOs (registered at district level)
- Basic training on essentials of good roads to be offered to the CBOs
- Pre-established rates to be used to pay the CBOs
- Sections of between 10 to 20kms be assigned for periods of one year
- Payments to be on monthly basis after the DE has inspected the works



Community Contracting 2nd Option

- The work contracts shall be between the DE and the village governments
- The villagers will receive basic training on routine maintenance of roads
- Pre-established rates to be used to pay the villagers
- Sections of between 10 to 20kms be assigned for periods of one year
- Payments to be on monthly basis after the DE has inspected the works

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Testing the 4 Systems

- Three districts in one region in Tanzania have been chosen for testing the systems
- The Area Based Long Term Framework contracts will be tested in 1st district. Roads earmarked for maintenance have been grouped in three lots (approx 120km of roads each) and each lot will be under one contract
- The PMMR will be tested in the 2nd district. Roads totaling 145km have been set aside for one PMMR contract
- The Small Scale Long Term Framework contracts (app 75km each) and community based contracts (4 roads of between 15 to 25km) will be tested in the 3rd district.

Testing the 4 Systems (cont)

- Tender documents for the different systems have been prepared and are being used in the 3 districts
- The unit rates to be applied to community contracts have been established
- The model of contract to be concluded between the District Engineer and the CBO has been prepared.

Expected Results

- Systems will be tested (and refined) over at least 2 years
- Monitoring of effectiveness, strengths and weaknesses of each system:
 - Cost

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- Increased time passable during rains
- Ease of supervision, ease of procurement, etc.
- Maintenance Systems Manual for District Roads (2012)



END Thank You Ahsante