OVERVIEW OF KENYA’S
ROADS 2000 MAINTENANCE
PROGRAMME

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OUTLINE

- Socio-economic profile of Kenya
- Roads 2000 Programme?
- Objectives
- Major Features
- Roll out of the Programme
- Coordination
- Achievements so far
- R & D
- Challenges
- Conclusion
Kenya is located in East Africa & covers an area of 582,646 km²
Population estimated at 38.6m
Youth constitute 60% of the total population
Agriculture dominates the country’s economy accounting 28% GDP & 70% export earnings and employs 67% working population
S-E PROFILE (CONT’D)

- Roads sub sector dominates the transport sector.
- Moves 85% of the domestic freight and passenger traffic.
- Kenya has one of the largest road network in the region.
- The total road network in Kenya is approximately 160,886 km.
- Big maintenance backlog.
- 11%, 33% and 56% of Kenyan roads are in good, fair and poor conditions according to RCS 2009.
## KENYA’S ROAD NETWORK

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Paved</th>
<th>Unpaved</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Trunk Roads (A)</td>
<td>2,772</td>
<td>816</td>
<td>3,588</td>
</tr>
<tr>
<td>National Trunk Roads (B)</td>
<td>1,489</td>
<td>1,156</td>
<td>2,645</td>
</tr>
<tr>
<td>Primary Roads (C)</td>
<td>2,693</td>
<td>5,164</td>
<td>7,857</td>
</tr>
<tr>
<td>Secondary Roads (D)</td>
<td>1,238</td>
<td>9,483</td>
<td>10,721</td>
</tr>
<tr>
<td>Minor Roads (E)</td>
<td>577</td>
<td>26,071</td>
<td>26,648</td>
</tr>
<tr>
<td>Special Purpose Roads (SPR)</td>
<td>110</td>
<td>10,376</td>
<td>10,486</td>
</tr>
<tr>
<td>Un-classified Network (U)</td>
<td>2,318</td>
<td>96,623</td>
<td>98,941</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,197</strong></td>
<td><strong>149,689</strong></td>
<td><strong>160,886</strong></td>
</tr>
</tbody>
</table>
ROAD NETWORK CLASS A, B & C
Kenya has seen sustained economic growth in recent years.

Development backed by expansion in construction; agriculture; tourism & Service; manufacturing.

Achieved GDP growth at an average rate of 6% annually since 2002, reaching 7% in 2007.

This created wealth and opportunities for many. The middle class showed upward movement.

Kenya also experienced marked improvements in social well-being of the population.
S-E PROFILE (CONT’D)

- Paradoxically this growth did not have significant social impact contrary to economic theory
- The economic remained dependent on export of raw materials no value addition in the country
- not able to create enough jobs and poverty still persists. “Jobless growth”
- 46.6% of population live under $1.0/day and 62.3% live on less than $2/day (not adjusted for PPP)
- Unemployment: 25% (broad UE) and 10% are strictly UE nationally
S-E PROFILE (CONT’D)

- Unemployment among the youth (15-24 age group) is estimated at 24%. (KNBS)
- 64% of unemployed persons in Kenya are youth
- About 92% youth have no vocational or professional skills
- Huge backlog in the provision of basic facilities (physical, social and administrative facilities)
- The disparity of the rich and the poor is widening
Poverty, unemployment and social imbalances are the most pervasive problems that the country is facing.

GoK initiated several short, medium and long-term programmes and policy initiatives.

Two-pronged approach was adopted:
1) create favourable policy frame to stimulate growth in the mainstream economy
2) implementing interim social protection initiatives
GOK INITIATIVES (CONT’D)

- One of these interim measures is the use of public work programmes to create jobs.
- The choice of public works to drive employment is premised mainly on the following facts:
  - *public works consumes huge investment which can be used to boost employment*
  - *Relatively easy to organize and yields immediate and visible result.*
  - *Unemployment & Poverty threatens peace & stability a country*
  - *Socio-ecological equilibrium is prerequisite for sustainable development,* and
  - *Government is last resort employer*
ROADS 2000 PROGRAMME

- R2000 programmes is one of the interim interventions in the infrastructure sector pioneered by MoR Kenya.
- The R2000 method is a mode of maintenance that uses a combination of optimum labour force and equipment when ever technical and economically feasible.
- The concept developed in early 1990’s and extensively piloted in different parts of Kenya.
- The concept draws on the experiences of the Previous LB programmes (RARP & MRP).
The main objectives of the R2000 programme are to:

- improve rural accessibility through the use of EIC methods
- Provide productive employment and marketable skills to the rural and urban poor, and
- contribute towards the national goal of alleviating unemployment and poverty
Use of optimum mix of labour and equipment
Increased use of local resources,
Adoption of network approach
Promotion of Public Private Partnership in infrastructure delivery (particularly rural roads)
Provide an employment-based social protection for the poor albeit in the short to medium term
Systematic or smart use of scarce maintenance funds
ROLL OUT OF R2000 METHOD

R2000 Programme is rolled out through:

- Implementing EI Road construction and maintenance works involving;
  - Routine Maintenance
  - Spot Improvement
  - Partial Rehabilitation
  - Rehabilitation
- Provision Technical and managerial skills training
- Mainstreaming of cross-cutting issues
COORDINATION OF THE PROGRAMME

- KeERRA is responsible for the coordination of Programme implementation Nationwide
- National Steering Committee (NSC) policy and programme oversight
- National Coordination Committee (NCC) technical arm of the NSC. Monitors the activities of various R2000 projects in the country and develops technical and managerial tools
- National Working Group (NWG)
- Project steering committee & Community liaison officers at project levels
- The ILO providing TA
A five year National R2000 Strategic Plan, 2005 - 2010, developed in 2004 with specific targets

Several Roads 2000 projects were implemented nationwide since then with encouraging success stories:

- Improved more than 7,000 km of rural roads and put them under maintenance
- Generated about 4.4 million person-days of employment which is equivalent to about 20,000 full time jobs
- Injected more than Ksh1.0 billion (US$13 million) to the rural Kenya as payment of wages
About 25% and 40% of the direct beneficiaries of the programme were women and youth respectively.

Trained 476 construction and maintenance contractors, 435 site supervisors and 235 implementing agency staff.

Opened up development opportunities for emerging small scale entrepreneurs.

Practically Demonstrated how to handle rights issues in the road sector including observance of workers’ rights, gender equality, HIV/AIDS protection and prevention, etc.

Promoted R&D aimed at improving low volume roads.

Developed several technical & managerial tools.
R&D has always been a part of the R2000 programme
Was aimed at improving method of delivery and quality of end product.
R&D driven by the following concerns
- The average traffic on the roads drastically increased
- Local economic development demands durable roads
- Road investment must yield adequate return as determined by the quality and durability of roads,
- Construction materials depleted
- Pressure from road users and the general public who considers the dust from roads as potential health hazards.
R&D (CONT’D)

- Ministry of Roads has been undertaking studies related to roads pavement since 1970s, e.g. Otta seal
- Currently two low-cost surfacing trials are being undertaken to come up with cheaper and safer road paving options
- Sub-base/base:
  - Consolid Stabilized Gravel, Neat Gravel, Cement Stabilized Gravel, ETB and Hand Packed stone
- Surfacing: Cold Asphalt & Modified Otta (penet. seal)
- AFCAP is providing technical assistance
Low level of awareness and buy-in among engineers and policy makers about R2K
Lack of technical and managerial capacity at district /regional levels.
Inadequate quality control on projects
Lack of maintenance on completed projects
Lack of long-term contractor development plan & focus on limited BDS with no exit strategy
CHALLENGES (CONT’D)

- Delays in payment of certified works and disregard contractual provisions
- Unfavorable working condition on Road projects, e.g. OHS, unfair task rates, delayed payment of wages, etc.
- Environmental issues not adequately covered
- Employment created per unit of investment still low
CONCLUSION

- The Roads 2000 programme is bearing fruit in spite of the many challenges faced.
- Few other sectoral interventions has covered more areas, created so much employment and injected so much income into the rural economy as R2K programme.
- The Roads 2000 programme will continue to be the main instrument for:
  - delivering road improvement and maintenance works, and
  - providing employment-based social protection for the rural poor.
FLYOVER AT MUTHAIGA
Trenching
Camber Formation
Ditch Lining
On time, at Required Standard and Cost
During
After
Scarce wearing course material, requires innovative approaches to reducing the maintenance cost of Gravel roads.

Alternative cost effective low-cost sealing options using LIC method.

LB spraying
Spotting and Spreading of aggregate
Marking the section

Tack coat – diluted binder
Mixing the agg. & binder

Transporting the Mix
Screeding Mix in Place

Finished Surface
THANK YOU

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