Crop Post Harvest Programme (CPHP)

Rural Transport Services Project for Kenya

Labor based community managed infrastructure interventions: Outline of KENDAT/ILO collaborative work

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For

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1.0 Background:

RTS: Interventions Proposals to fill existing information and development gaps in Phase II of the Project
(Relevant Abstract in Annex 1)

Recap of Problems/Issues

- Poor maintenance services for IMTs and RTS infrastructure
- Labour based Technologies for feeder roads not widely applied
- Community organization for RTS construction and maintenance not adequately developed

2.0 Context

Summary of Problem:

- Poor infrastructure, imparting negatively on operation of IMTS (manifests in high maintenance costs, fatalities, demotivation)

This problem existing alongside strengths:

- Robust economic activity, requiring mobility of goods and services;
- Fairly Liberalised market
- Substantial capital formation;
- Skilled labour availability;
- Elaborate social organization and networks

3.0 Specific Infrastructure Problem Aspects

- Main movement Corridor- NRB-Meru Road
  - Conflict between different modes - vehicular /cyclists/animal drawn IMTS/ pedestrian
  - Major conflicts likely to be at main nodes- makutano, mutithi, wanguru, kimbimbi
  - Current interventions are limited traffic calming measures at the nodes

- Secondary (interior) movement corridors
  - Unattractive to motorised traffic - IMTs main means
  - IMTS Inhibited by poor condition especially in wet conditions

4.0 Current Interventions/investments

- Main road (class B) represents major investment (asset value in range of Ksh. 15 million per km).
  - Localised needs not considered (investment in local travel negligible)

5.0 Possible future interventions/investments

Main road- improvement of road shoulder by RD

Structural planning of traffic movement along main corridor to:

- Reduce conflicts;
- Ease flow and improve efficiency
- Ease maintenance

Process: This can be done on a long-term incremental process, with following components:

(i) Repair Shoulders
(ii) Planning for other users along main corridor, e.g. a 2.5 m wide "hoofway" for animal drawn IMTs and 1 m wide "cycleway" for human propelled IMTS;
(iii) Plan for crossings and calming measures and diversions;
(iv) Plan for improvement of interior corridors, using network approach, spot-improvement priority basis
### Summary of potential Interventions

<table>
<thead>
<tr>
<th>Component</th>
<th>Action</th>
<th>Activities</th>
<th>Responsibility</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Corridor</td>
<td>Repair shoulders</td>
<td>Re-establish right-of way limits and secure for traffic use &quot;*1&quot;</td>
<td>RD</td>
<td>Negligible cost &quot;*2&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repair Shoulders, install curbs (priority driven sequence)</td>
<td>RD</td>
<td>Investment can be justified by reduced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>periodic maintenance cost</td>
</tr>
<tr>
<td>Construct</td>
<td>Pathways &amp; asso. Infra.</td>
<td>• Paths build-up and paving</td>
<td>DRC/users</td>
<td>Can be done on incremental basis, pace</td>
</tr>
<tr>
<td>Pathways</td>
<td></td>
<td>• IMT parks ?</td>
<td>Users</td>
<td>driven by available funding; &quot;*3&quot;</td>
</tr>
<tr>
<td></td>
<td>Improvement</td>
<td>• Spot improvements on network approach.</td>
<td>CRC/users</td>
<td>Requires feasibility assessment of cost</td>
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<tr>
<td>Interior corridors</td>
<td></td>
<td></td>
<td></td>
<td>covering user-charge</td>
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<td></td>
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<td>Current funding substantial if spread over</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>spot improvements</td>
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</tbody>
</table>

#### Abbreviations:
- RD: Roads Department, Ministry of Roads & Public Works
- DRC: District Roads Committee
- CRC: Constituency Roads Committee

#### Notes:
*1: Current road encroachment compounds conflict. (Consider appropriate control/sanctions against encroachment in stakeholder (self) regulations).
*2: As matter of responsibility, bush clearing is a routine RD maintenance task.
*3: Investment in construction of a 2 wide walkway would cost the equivalent about 6% of main road asset value per unit length.
Annex 1: Background

Rural Transport Services Project-Kenya:

<Abstract>
Interventions Proposals to fill existing information and development gaps in Phase II of the Project

<table>
<thead>
<tr>
<th>Problem/Issue</th>
<th>Intervention</th>
<th>R&amp;D</th>
<th>Priority</th>
<th>Status</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>II) Infrastructure provision</strong></td>
<td></td>
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</tr>
<tr>
<td>8. Poor maintenance services for IMTs and RTS infrastructure</td>
<td>Develop a workable system for IMTs/road transport infrastructure maintenance services</td>
<td>R&amp;D</td>
<td>L</td>
<td>New</td>
<td>KENDAT MORPW ILO-ASIST</td>
</tr>
</tbody>
</table>
| 9. Labour based Technologies for feeder roads not widely applied             | -Investigate and propose appropriate policy on labour-based RTS infrastructure development technologies  
-Train target groups in labour-based infrastructure technologies | R     | L        | New     | KENDAT ILO-ASIST |
|                                                                              |                                                                 | D     | Partially carried out |         |               |
| **III) Community organization**                                             |                                                                              |       |          |         |               |
| 13. Community organization for RTS construction and maintenance not adequately developed | -Design test models on community organization for road construction and maintenance, document experiences and sensitise stakeholders. | D     | H        | New     | KRB KENDAT ILO-ASIST |