Road Maintenance

Goal

- Ensure fast and efficient transport of fresh fruit bunches to the mill;
- Ensure good access to the plantations for farmers and labourers;
- Reduce damage to trucks.

Standard

- Road surface is flat, compacted and without holes;
- Road is passable 365 days per year;
- Drainage ditches are free from weeds and rubbish.

Timing

- Before the peak production season;
- Before and after the rainy season.

Frequency

- Small repairs undertaken as needed;
- Large check/repairs completed yearly.

Labour time required

- Depends on the activities and equipment available;
- Local construction workers can be asked for help.

Equipment and materials

- Depends on the repairs required and on available machinery and materials.
- Standard maintenance requires:
  - Gravel or oil palm kernel shells;
  - Excavator (if available).

Who

- A special department in the co-operative;
- Selected co-operative members;
- If necessary, hired construction workers.
Figure 1: This road is in very poor condition and needs to be improved!

Figure 2: This road is in excellent condition.
How

If roads are in bad condition, transport of the fresh fruit bunches will be slower and therefore more expensive. Regular maintenance of roads also prevents damage from becoming too large to repair.

Road maintenance can be the responsibility of (local) governments or plantation companies. If no-one else takes responsibility, then road maintenance should be arranged by the co-operative.

Routine maintenance of roads should include:

- Graveling of roads;
- Filling in potholes;
- Cleaning weeds from roadsides and ditches.

Roads should be checked regularly, especially for potholes and for collapse of the road surface at the sides of the road:

- Inform the co-operative immediately if the road needs repair work.
- If the damage is too large, consider hiring local construction workers to carry out the repairs.

Data recording

Every road maintenance activity should be recorded in a log book as shown in the example below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Activity</th>
<th>Input type</th>
<th>Input amount</th>
<th>Input costs</th>
<th>Labour input</th>
<th>Labour costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>16/01/13</td>
<td>Whole day</td>
<td>Repair village road</td>
<td>Gravel</td>
<td>5 trucks</td>
<td>6</td>
<td>8</td>
<td>400000</td>
<td></td>
</tr>
<tr>
<td>16/01/13</td>
<td>Whole day</td>
<td>Repair village road</td>
<td>Truck rent</td>
<td>1 truck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>