ACCESS AND HARVESTING PATHS

Goal

- Create good access into the plantation for all management activities
- Enable fast and easy harvesting

Standard

- Paths are between 50–75 cm wide
- Paths are completely free of weeds
- One path is present every other palm row
- Plantations are easy to access (e.g. footbridges over ditches and swamps, no steep slopes, etc.)
- Harvesters with heavy wheelbarrows can move around the plantation easily

Timing

- At the beginning and end of the dry period, and;
- Shortly before the peak season (so harvesting can be done more efficiently)
- Not when rain is expected that day (otherwise the herbicide is washed away)
- Usually done together with circle weeding

Frequency

- Once every 3–4 months, or
- whenever the weeds on the path are above ankle height
Labour time required

- Manual weeding: 2 days per hectare
- Chemical weeding: together with circle weeding, 1 day per 2 hectares
- Bridges, ramps, etc.: depending on the condition of the plantation

Equipment and materials

- Manual weeding:
  - Chisel/spade
  - Bush knife
- Chemical weeding:
  - Knapsack sprayer
  - Protective clothing
  - Measuring cup (50–200 ml)
  - Clean water (50–100 L/ha)
  - Herbicide (0.5–2 L/ha)

Who

- Farmers and their families or hired labourers

How

Manual weeding of paths

To manually weed paths:

- Cut down all weeds on the path to ground level with a bush knife or scrape away all weeds using a spade
- If possible, pull out woody weeds with large roots. If they cannot be pulled out, dig out the stumps with a chisel or spade

Chemical weeding of paths

For tall weeds (more than 50 cm) start with one round of manual weeding and then spray the young re-growing weeds after one month or when the weeds are at ankle height using the following procedure:

**Step 1.** Make sure the sprayer is calibrated and working properly.
**Step 2.** Prepare the herbicide according to the instructions on the package
**Step 3.** Select a nozzle that gives a spray of about half a meter wide
**Step 4.** Spray the path using the following technique:
  - Walk at a regular speed over the path and keep the nozzle steady and low above the ground
  - Do not swing the nozzle left and right
  - Never spray on palm leaves, otherwise the palm will be damaged
Per hectare, expect to spray 50 to 100 L of solution (0.5 to 2 L of herbicide), depending on the number of weeds and the instructions on the label.

Installing foot bridges and ramps

- All harvesting paths should lead to a main path (or: 'collection road') which is accessible for a car, truck or heavily loaded motorbike
- If there are ditches or canals that need to be crossed install foot-bridges which are:
  - Strong and solid (will not collapse when a harvester with a full wheelbarrow walks over it)
  - At least 20 cm wide (best to use a wide plank or several planks attached together)
  - Well attached on both sides and not moving or wobbling
- If there are steep slopes:
  - Dig out a ramp where a harvester with a heavy wheelbarrow can pass easily
  - Put a wooden plank over the ramp to prevent it from getting too slippery
Every weeding or 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>
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<td></td>
<td>Field 3</td>
<td>Path and circle weeding</td>
<td>Round-Up</td>
<td>1 L</td>
<td>75000</td>
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<td>8</td>
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