The volume of a balsa log sold is measured based on its length and diameter like the

<table>
<thead>
<tr>
<th>Diameter (cm)</th>
<th>1.3</th>
<th>1.4</th>
<th>1.5</th>
<th>1.6</th>
<th>1.7</th>
<th>1.8</th>
<th>1.9</th>
<th>2.0</th>
<th>2.1</th>
<th>2.2</th>
<th>2.3</th>
<th>2.4</th>
<th>2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(m)</td>
<td>0.255</td>
<td>0.275</td>
<td>0.295</td>
<td>0.314</td>
<td>0.334</td>
<td>0.354</td>
<td>0.373</td>
<td>0.393</td>
<td>0.413</td>
<td>0.432</td>
<td>0.452</td>
<td>0.471</td>
<td>0.491</td>
</tr>
</tbody>
</table>

For example, if you sell 10 trees producing 24 cubic meters of balsa logs for K7 per cubic meter

For example, if you sell 6 trees producing 0.226 cubic meters of balsa logs for K4 per cubic meter.

A farmer can estimate the gross returns from growing balsa based on:

**Estimated Returns (K)**

For example, if you sell 6 trees producing 0.283 cubic meters of balsa logs for K4 per cubic meter.

Introduction

Returns from balsa

ACIAR Balsa Project Fact Sheet #6:
Measuring a balsa log

**Log length (metres)**

Step 1 - log length: Use a measuring tape to measure the length of the balsa log in metres.

**Log diameter (centimetres)**

Step 2 – log diameter: Use a measuring tape to measure the width of the cross sections at both ends of the balsa log in centimetres.

Step 3 – average log diameter: Add the two cross section widths together and then divide by 2 to give the average balsa log diameter.

Step 4 – volume table: Look up the balsa log length and average log diameter - the log volume in the intersecting cell.

For example:

- A balsa log is 2.2 m long.
- The balsa log has end section diameters of 29 cm and 31 cm - the average diameter is 30 cm.
- The balsa log has a log volume of 0.156 m³.

**Loading and haulage:** All logs are carried from the site by the harvest team (left) and loaded onto a log truck (right). A log truck (right) must be able to access the site to carry the logs to the processor.

**Balsa log price and payments**

The price paid for balsa logs can vary and a farmer should ensure the following:

- **Linked to a processor:** Farmers should approach local processors to buy their logs.
- **Need to find a processor:** With a forward sale agreement, a farmer can buy from their processor.

Farmers should approach local sawmills to buy their logs.

Farmers must agree with a processor on a price per cubic meter of logs before harvest (see log price table on the right).

- **Before harvest:** A processor must agree with a farmer on a price per cubic meter of logs.
- **Volume in the intersecting cell:** The log volume is calculated based on the processor's log volume table.
- **Height and diameter log diameter:** The log height and diameter are recorded for each truck load.

For more information:

See: www.pip.com.pg for copies of the fact sheets.

Contact: The ACIAR Project Officer, Mr Jaupo Minimulu on 7251 2787 or the Integrated Agriculture Training Program, The Papua New Guinea University of Natural Resources and Environment on 983 9736.