2C BUILDING MATERIALS: PROPERTIES & AVAILABILITY

Photography: NLÉ

MAKOKO FLOATING SCHOOL — AFRICAN WATER CITIES PROJECT
HARVESTING WOOD

The total forest area of Nigeria is estimated at over 13 million hectares. This area is divided into forest reserves, with over 3 million hectares designated as production forest. Of the 70 million cubic meters of roundwood production each year, almost ninety percent is used as fuelwood.

Harvesting is done by mill operators or independent loggers. After harvesting, a network of creeks and rivers allow for efficient transportation of the logs to the Lagos Lagoon and Makoko.

The timber industry is an important part of the economy of Makoko. Wood is the most important building material, and the sawmills also produce timber for the rest of Lagos.

Source:
Status of Tropical Forest Management, 2005
### LOCAL TIMBER PROPERTIES

<table>
<thead>
<tr>
<th>Material</th>
<th>Local Availability</th>
<th>Durability</th>
<th>Workability</th>
<th>Strength</th>
<th>Weight</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKI</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>950 - 1100 kg/m³</td>
<td>VULNERABLE</td>
</tr>
<tr>
<td>lophira alata</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AKUN</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>550 - 600 kg/m³</td>
<td>N/A</td>
</tr>
<tr>
<td>uapaca heudelotii</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>BAMBOO</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>300 - 400 kg/m³</td>
<td>NOT THREATENED</td>
</tr>
<tr>
<td>Bambusa vulgaris</td>
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</tbody>
</table>

- **Local availability**: ✓ Available, X Not available
- **Durability**: ✓ Strong, ✓ Weak
- **Workability**: ✓ Easy to work, ✓ Difficult to work
- **Strength**: ✓ High, ✓ Medium, ✓ Low
- **Weight**: kg/m³
- **Conservation status**: VULNERABLE, N/A, NOT THREATENED
WOOD INNOVATION

Corrugated wood

“Ready for Use” Advanced Wood

Steel wire net filled with wood leftovers from sawmill

Steel reinforcement as foundation for bamboo structures