COUNTRY REPORT
CASE STUDY ON NDF OF AGAR WOOD AND PLANTATION IN INDONESIA

Presented by
Research Center for Biology, Indonesian Institute of Sciences
(Scientific Authority of Indonesia)
Directorate General of Forest Protection and Nature Conservation Ministry of Forestry
(Management Authority of Indonesia)
Forestry Research and Development Agency
Ministry of Forestry

Agarwood producing species in Indonesia

<table>
<thead>
<tr>
<th>Species</th>
<th>Ecotopy (m asl)</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. malaccensis</td>
<td>Up to 270</td>
<td>common in primary forest Sumatra, Borneo/Kalimantan &amp; its surrounding small islands</td>
</tr>
<tr>
<td>A. microcarpa</td>
<td>Up to 200</td>
<td>primary forest Sumatra, Borneo/Kalimantan &amp; other neighboring small islands</td>
</tr>
<tr>
<td>A. hirta</td>
<td>Up to 300</td>
<td>lowland forest Riau, South Sumatera, Banjarmasin, Surabaya &amp; other neighboring small islands</td>
</tr>
<tr>
<td>A. cumingiana</td>
<td>Medium altitude</td>
<td>in primary forest South Borneo, Moluccas (Morodoki &amp; Halmahera), West New Guinea (Sorong &amp; Riou)</td>
</tr>
<tr>
<td>A. fillaria</td>
<td>Up to 130</td>
<td>open swamp forest Celebes, Moluccas (Bintan &amp; Batam)</td>
</tr>
<tr>
<td>A. beccariana</td>
<td>Up to 825</td>
<td>primary forest Sumatra, Borneo/Kalimantan, common</td>
</tr>
<tr>
<td>G. decipiens</td>
<td>At 100</td>
<td>primary forest Central Celebes</td>
</tr>
<tr>
<td>G. ladermanii</td>
<td>0 – 200</td>
<td>virgin forest – slope area, dense New Guinea (Mt. Prince Laderman)</td>
</tr>
<tr>
<td>G. moluccana</td>
<td>+ 100</td>
<td>Moluccas (Halmahera &amp; Buru)</td>
</tr>
<tr>
<td>G. podocarpus</td>
<td>Up to 750</td>
<td>in primary forest West Papua (Sorong, Monep)</td>
</tr>
<tr>
<td>G. salicifolia</td>
<td>At 300</td>
<td>in fringing rain forest Western New Guinea (Bukit, Solovay, Flores, Sumbawa &amp; West New Guinea)</td>
</tr>
<tr>
<td>G. versitigious</td>
<td>Up to 1400</td>
<td>N.E. Celebes, Lesser Sundas Islands (Lombok, Sumbawa, Flores, Sumba) &amp; West New Guinea</td>
</tr>
</tbody>
</table>


Sources of data for quota setting:
- Field sampling by specialist group of agarwood in main producing areas
- Additional information of agarwood from exporters, forestry district offices, association, local traders, farmers
- Report data on target and realization of annual export

Cultivated agarwood tree species

1. Aquilaria malaccensis
2. A. microcarpa
3. A. beccariana
4. A. hirta
5. A. cumingiana
6. A. filaria
7. A. crassna
8. Gyrinops versteegii
Source of seedlings

- Seed from cultivated (75%)
  - germination rate (>90%)
- Wild seedling (20%)
  - survival rate (50%)
- Naturally seedling (5%)
  - community garden
  - depend on mother tree

Plantation

- Private (99%)
  - mix plantation
  - individual or group
- Government (1%)
  - research purposes
  - Industrial plantation
    (for communities forest)

PROCEDURE FOR DETERMINING QUOTA OF AGAR WOOD BASED ON NON DETRIMENT FINDING

1. Field survey by Specialist professional researcher group (Coordinated by LIPI)
2. Scientific Authority (Indonesian Institute of Sciences/LIPI)
3. Local Management Authority (Forestry Authority)
4. Collectors (field harvested areas)
5. Certified exporter company (45 exporters)

Proposed Registration of Plantation

- Local community scales  →  BKSDA  →  DG of PHKA
- Company scales  →  BKSDA  →  DG of PHKA

THANK YOU