Plantation

The Issue – Parties wanting to code Agarwood from plantations or other cultivated sources as artificially propagated.

Three Approaches

- 1. **Use the definition of 'plantation' in the CITES Resolution dealing with timber species.**
- **2. Use the definition of 'artificial propagation' in the CITES Resolution dealing with trade in plants.**
- **3. Accept that coding the source as wild is not an issue**

Plantations

Res. Conf. 10.13 (Rev. CoP15) Implementation of the Convention for timber species

- **The initial approach was to look at the definition of plantations under this Resolution.**
- **Parties agreed at CoP15 to change the wording such that non-timber products such as Agarwood were definitely included under the Resolution.**
- **It continued to be applied only to monospecific plantations.**
- **Attempts to delete the word 'monospecific' failed.**

Artificial Propagation

Res. Conf. 11.11 (Rev. CoP15)
Regulation of trade in plants

There are two parts to the definition:

a) Grown under controlled conditions

- **Meaning grown in a non-natural environment that is intensively manipulated by human intervention for the purposes of plant production.**
- **May include tillage, fertilization, weed and pest control, irrigation etc.**

Second part of definition

- **b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that are either:**
  exempt from the provisions of the Convention,

OR

  have been derived from cultivated parental stock

To deal with this part of the definition – need to know the origin of the plantation material. Was it seed or some other vegetative material?

It would seem a reasonable argument that Agarwood plantations and other areas managed as gardens would qualify as 'grown under controlled conditions'.

(Decission 15.94 : artificial propagation do not apply to mixed species plantation containing Agarwood)

Working Group (Kuwait Agarwood Workshop)

- **Parties considered => artificial plantation / propagated of Agarwood included:**

1. **Gardens (home and community)**
2. **Production Plantation Forest (State, private & community) established on previous cleared land.**
3. **All planting originating from seed.**

Established from vegetative sources

There are two scenarios that need to be considered for the plantation scheme:

i) The vegetative material is sourced from cultivated parental stock.
ii) The vegetative material is collected from the wild.

PLANTATING MATERIALS

❑Seed collection
-nursery development
-mostly developed
-high survival rate (>90%)

❑Wild seedling collection
-acclimatitation in nursery
-medium survival rate (50%)

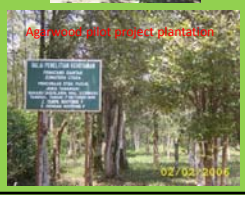
❑Naturally seedling selection
-community garden
-depend on mother tree

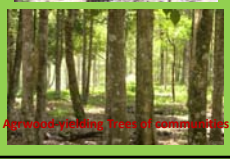
Research and Development

- To support the success of Agarwood plantations
  - R & D on technique inoculation and planting system
  - Field inoculation trial in several sites by several agencies

Plantations of Agarwood

– Privates including individual and/or groups
– Government (national and/or local)





Multi crop Agarwood and Patchouli in North India

Agarwood plantations as a shade tree in tea estate North India

Plantations of Agarwood in Indonesia

- Member of ASGARIN : at least 2 ha per company
- reported covering about 10,000 ha (ASGARIN, 2010)

About 96 locations (total 2000 ha) of gaharu plantation,
Sumatra: Riau: PT Budi Daya Perkasa (15 ha), CV. Megah Aroma Utomo (3 ha), CV. Subur Raya (3.5 ha); Jambi:Pulao Aro (30 ha); Lampung (10 ha); Mentawai (2 ha); Palembang Gerhan (300 ha)
Kalimantan: East: PT Sumber Alam Jaya (3 ha), CV Kuda Mas (2 ha), Local governments Pasir (50 ha), Kutai (26 ha), Samboja (20 ha); Central: (2 ha); West: Mandor (40 ha)
Java: Bogor (2 ha), Banten (19 Ha); Surabaya (2 ha)
L. S. Islands: Bali (4 ha); Lombok (300 ha)
Celebes: CV Wana Gubal (1 ha), Sinjai (5 ha), Toraja (2 ha)

Data Recapitulation on Agarwood Plantations in some areas of Indonesia (Siran, 2011)

No	Provinces	Ages/Years	No of Trees	Areas (ha)
1.	West Java	3-15 years	3,830	2.5
2.	Banten	2 years	43,000	43.0
3.	Central Java	2-7 years	22,163	22.0
4.	Yogyakarta	7 years	4,000	4.0
5.	East Java	4 years	37,000	35.5
6.	Aceh	10 years	17,000	17.0
7.	North Sumatera	Various age	125,000	125.0
8.	West Sumatera	2001–2004	4,500	4.0
9.	Riau	10 years	5,000	5.0
10.	Riau Islands	2001–2004	11,000	10.0
11.	Jambi	1–5 years	150,000	150.0
12.	Bengkulu	---	20,000	19.0
13.	Bangka Belitung	2008–2009	602,854	600.0
14.	Lampung	2004–2009	175,000	175.0
15.	South Sumatera	---	20,000	10.0
16.	East Kalimantan	2006–2007	750,000	750.0
17.	West Kalimantan	2005–2006	172,800	15.0
18.	Central Kalimantan	---	12,600	10.0
19.	South Kalimantan	2005–2009	40,000	40.0
20.	North Sulawesi	2005	2,000	2.0
21.	Gorontalo	2006	5,000	5.0
22.	Bali	---	4,000	3.0
23.	West Nusa Tenggara	---	25,000	20.0
24.	East Nusa Tenggara	---	3,000	3.0
25.	Maluku	---	1,500	1.5
	Total		2,218,949	

Agarwood Plantation

Registration of the plants as at July 2011

- **Total Registered Plantation – 17 companies.**
- **Total Coverage Area – 352.7 hectares.**
- **Estimated Standing Plants – 163,635 trees.**
- **Major species planted :-**
  i) **Aqualaria malacensis**
  ii) **Aqualaria sub-integra**
- **Average age of trees between 3 – 4 years.**
- **Type of plantation – Intercrops with rubber trees, palm oil and agricultural crops.**



Souce: **WORKSHOP ON IMPLEMENTATION OF CITES FOR AGARWOOD-PRODUCING SPECIES 03 – 06 OCTOBER 2011, KUWAIT**