

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of *Gonystylus* spp. in Appendix II, with annotation #1:

Designates all parts and derivatives, except:

- a) seeds, spores and pollen (including pollinia);
- b) seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers; and
- c) cut flowers of artificially propagated plants.

in accordance with Resolution Conf. 9.24 (Rev. CoP12), Annex 2 a, paragraphs A and B i), and Annex 2 b, paragraph B.

B. Proponent

Indonesia.

C. Supporting statement1. Taxonomy

- 1.1 Class: Magnoliopsida
- 1.2 Order: Myrtales
- 1.3 Family: Thymelaeaceae
- 1.4 Species: *Gonystylus* spp.
- 1.5 Scientific synonyms: None
- 1.6 Common names:

| | |
|-------------|--|
| English: | ramin |
| French: | ramin |
| Spanish: | ramin |
| Indonesian: | gaharu buaya (Sumatra, Kalimantan), medang keladi (Kalimantan) |
| Malaysian: | melawis (Peninsular), gaharu buaya (Sarawak) |
| Philippine: | lanutan-bagyo, anauan |
- 1.7 Code numbers: ---

2. Biological parameters

2.1 Distribution

The genus *Gonystylus* which consists of about 30 species are distributed almost throughout the Malesian area with the exception of Central and East Java and the Lesser Sunda Islands (Soerianegara and Lemmens, 1994). Eastward, the distribution area extends towards the Solomon Islands, Nicobar and Fiji. The vast majority of species is found on Borneo (27 species), especially in Sarawak. Peninsular Malaysia and Sumatra come second with 7 species each, and the Philippines possess 2 species. All other areas are occupied by a single species. The most widespread one is *G. macrophyllus*. Table 1 shows the distribution of each species (Airy Shaw, 1954; CITES, 1994; Soerianegara and Lemmens, 1994).

Table 1. Geographic Distribution of ramin species

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|--|
| <p><i>G. acuminatus</i> Airy Shaw: Borneo*), Sumatra, Malaysia Peninsula</p> <p><i>G. affinis</i> Radlk. = <i>G. beccarianus</i> v. Tieghem (1893): Malaysia Peninsula, Borneo</p> <p><i>G. areolatus</i> Domke ex Airy Shaw: Borneo</p> <p><i>G. augescens</i> Ridl. <i>G. augescens</i> Ridl.: Borneo</p> <p><i>G. bancanus</i> (Miq.) Kurz: Malaysia Peninsula, Sumatra, Bangka, Borneo</p> <p><i>G. borneensis</i> (Tiegh.) Gil: Borneo</p> <p><i>G. brunnescens</i> Airy Shaw: Malaysia Peninsula, Sabah and Sarawak</p> <p><i>G. calophylloides</i> Airy Shaw: Borneo</p> <p><i>G. calophyllus</i> Gilg: Borneo</p> <p><i>G. confusus</i> Airy Shaw: Malaysia Peninsula, Sumatra</p> <p><i>G. consanguineus</i> Airy Shaw: Borneo</p> <p><i>G. costalis</i> Airy Shaw: Borneo Borneo</p> <p><i>G. decipiens</i> Airy Shaw: Borneo</p> <p><i>G. eximius</i> Airy Shaw: Borneo</p> <p><i>G. forbesii</i> Gilg = <i>G. warburgianus</i> Gilg ex Domke (1932): Borneo</p> <p><i>G. glaucescens</i> Airy Shaw: Borneo</p> <p><i>G. keithii</i> Airy Shaw: Borneo</p> <p><i>G. lucidulus</i> Airy Shaw: Borneo (Sarawak and Brunei)</p> <p><i>G. macrophyllus</i> (Miq.) Airy Shaw: Throughout the Malesian region and reaching the Solomon Islands, except for Central and East Java and the Lesser Sunda Islands, and on the Nicobar islands Throughout the Malesian region and reaching the Solomon Islands, except for Central and East Java and the Lesser Sunda Islands, and on the Nicobar islands</p> <p><i>G. macrocarpus</i> C.T. White: Solomon Islands</p> <p><i>G. maingayi</i> Hook f.: Malaysia Peninsula, Sumatra, Northern Borneo</p> <p><i>G. micranthus</i> Airy Shaw: Borneo</p> <p><i>G. pendulus</i> Airy Shaw: Borneo</p> <p><i>G. punctatus</i> A.C. Smith: Fiji</p> <p><i>G. reticulatus</i> (Elm.) Merr.: Philippines (Mindanao)</p> <p><i>G. spectabilis</i> Airy Shaw: Borneo</p> <p><i>G. stenosepalus</i> Airy Shaw: Borneo, Sarawak</p> <p><i>G. velutinus</i> Airy Shaw: Sumatra, Bangka, Belitung</p> <p><i>G. xylocarpus</i> Airy Shaw: Western Borneo (Sarawak and West Kalimantan)</p> |
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Note: *) Borneo: Sabah, Sarawak (Malaysia), Brunei Darussalam and Kalimantan (Indonesia)

Of the above-mentioned species, six species are currently known to be commercially valuable (CITES, 2002). These commercial species include: *G. affinis*, *G. bancanus*, *G. forbesii*, *G. macrophyllus*, *G. maingayi* and *G. velutinus*, and *G. bancanus* is the most commonly found in trade (Soerianegara *et al.* 1994). However, ramin products are used not only for the timber or wood products, but also in some cases for the agarwood used as incense like those of *Aquilaria* spp. However this trade does not appear to be significant in comparison to timber trade.

2.2 Habitat availability

The species of ramin are typically found in primary, non-inundated rain forest at low and medium elevations, reaching 1200 m altitude in Sumatra and 1500 m in Borneo and the Philippines (Soerianegara and Lemmens, 1994). The ecology of the most important commercial species *G. bancanus* differs, however, from most of the others. In Sarawak, Sumatra and Brunei it is an important, often gregarious component of the mainly coastal peat-swamp forest, where it occurs in both the peripheral mixed of swamp forest and also in alan (*Shorea albida* Sym.)

forest and 'padang-paya' forest (pole-sized peat-swamp forest). It is also found in heath forest. In mixed swamp forest *G. bancanus* is often the most abundant large tree with up to 20 trees/ha with a diameter above 50 cm and is locally the single dominant species.

From the figure presented by the Directorate of Forestry Planning, Indonesia (1983) the total area of ramin-potential peat-swamp forest was detected to be about 13 million hectare (see Table 2 for detail), with the largest to be in Central Kalimantan (5.5 million ha), West Kalimantan (3.7 million ha), and Riau (2.2 million ha).

The total area of swamp vegetation in Peninsular Malaysia is over 460,000 ha (Said and Zakaria, 1992 in CITES, 1994). Swamp forest in Sarawak accounts for 1,240,000 ha. These forests comprise 14.7% of the total forest cover, occurring in a coastal belt at its broadest near the Baram river and the Rejang delta. (Chang, 1991 in CITES, 1994). The area of peat swamp forest reserved as Permanent Forest Estate is 761,704 ha, of which 357,169 is classified as Forest Reserves, 401,283 ha as Protected Forests and 3,252 ha as Communal Forests. Sabah has 190,000 ha of swamp forest (Blockus, *et al.* 1992 in CITES, 1994). The only extensive area of peat swamp with *Gonystylus* in Sabah is located in the Southwest region of the State (Fox, 1978 in CITES, 1994), but currently about half of the area has been cleared. Brunei's peat swamp forests probably are less disturbed than those elsewhere in the region (WWF, 2001).

2.3 Population status

Many ramin species in the genus *Gonystylus* have been categorized as vulnerable according to the 2000 IUCN Red List of Threatened Species (IUCN, 2000). The species are categorized as vulnerable because of the heavy logging and habitat destruction (Soerianegara and Lemmens, 1994). The most heavily traded species *G. bancanus* has been listed by FAO as over-exploited and vulnerable (Mathew, 1994).

In Indonesia, timber cruising started at early 1970s and was used as the basis for granting concessions for forest logging. Revised data of ramin standing stock and the forested areas at provincial basis from the Directorate of Planning, Directorate General of Forestry, Indonesia (1983) are shown in Table 2 below. These data were used as the initial information used to grant logging permit to concessionaires.

Table 2. Initial standing stocks of ramin based on provinces

| No | Province | Total peat-swamp forest area (ha) | Initial standing stock (x 1000 m ³) | |
|----|--------------------|-----------------------------------|---|---------------|
| | | | Diam. ≥ 35 cm | Diam. ≥ 50 cm |
| 1. | Riau | 2,222,000 | 9,228.6 | 6,191.7 |
| 2. | Jambi | 397,500 | 2,127.5 | 1,293.1 |
| 3. | South Sumatra | 684,750 | 3,221.0 | 2,266.0 |
| 4. | West Kalimantan | 3,731,100 | 38,564.5 | 27,707.0 |
| 5. | Central Kalimantan | 5,491,250 | 76,106.6 | 50,390.3 |
| 6. | South Kalimantan | 154,000 | 630.5 | 355.1 |
| 7. | Central Sulawesi | 486,500 | 842.0 | 672.6 |
| 8. | Maluku | 166,800 | 1.7 | 0.0 |
| | Total | 13,333,100 | 130,722.4 | 88,876.7 |

Source: Directorate of Planning, DG of Forestry, Indonesia (1983)

It can be seen from Table 2 that the provinces with the highest potential for ramin were in West Kalimantan and Central Kalimantan. More recent assessment conducted in 1997 shows that the population throughout Indonesia has considerably declined (Soehartono and Mardiasuti, 2002). It has been shown that the population has dropped considerably. The density of the population is very sparse and the past harvest must have been unsustainable as a result.

In Sarawak the number of ramin trees over 20 cm in diameter was estimated at 2-20 trees/ha in mixed swamp forest. The standing stock of ramin may be as high as 35 m³/ha in mixed peat swamp forest and 17 m³/ha in alan (*Shorea albida*) swamp forest. Current data is not available, but it is believed that all population of ramin throughout the range has declined to a very low level.

2.4 Population trends

In Indonesia, according to Soerianegara and Lemmens (1994) the productive ramin peat swamp forest of West Kalimantan had an extent of 1 million ha with an average standing stock of 30 m³/ha. In Central Kalimantan the ramin forest covered about 1.5 million ha with an average standing timber volume of 25 m³/ha. The annual allowable cut was established at 696,000 m³/year for West Kalimantan with a potential of 480,000 m³/year, and at 865,000 m³/year with a potential of 600,000 m³/year for Central Kalimantan. Therefore, the annual production from two provinces alone was more than 1 million m³.

In Indonesia the trend of decline may be approached from the annual production, calculated from production by concession units, shown in Table 3. In the 1991-1992 it was known that Indonesian average production was 900,000 m³/year (CITES, 1994). About ten years later, the production declined to about 300,000 m³ in 1998. The decline continued to about 130,000 m³ in 2000 (data from the National Bureau of Statistics, BPS). However for the year of 2000 there was discrepancy on the data, in that official figure from the Ministry of Forestry showed that the total annual allowable cut (AAC) for ramin was only 24,000 m³.

Table 3. Indonesian annual production of ramin (m³)

| Year | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|---------|---------|---------|---------|---------|---------|----------------------|----------------|--------------|--------------|
| Prod | 665,245 | 652,198 | 601,130 | 498,289 | 292,176 | 211,995 | 131,307/ 24,000*) | logging ban | 8,000 **) | 8,000 **) |

Source: Statistics Indonesia (various years), National Bureau of Statistics; Directorate General of Forest Protection and Nature Conservation

Note: *) 24,000 m³ was the official approved AAC by the Ministry of Forestry
 **) annual harvest quota established by Indonesian CITES Management Authority

For Malaysia, the largest ramin producing States Sarawak, has also shown declining population. Steady production is shown by Peninsular Malaysia. Table 4 shows the annual production for the three areas of Malaysia.

Table 4. Malaysian annual production of ramin (m³)

| No | Year | Peninsular Malaysia | Sarawak | Sabah |
|----|------|---------------------|---------|-------|
| 1 | 1990 | 37,586 | 521,155 | |
| 2 | 1991 | 87,865 | 354,260 | |
| 3 | 1992 | 64,290 | 296,017 | |
| 4 | 1993 | 85,850 | 256,424 | |
| 5 | 1994 | 75,524 | 244,239 | |
| 6 | 1995 | 72,920 | 219,282 | |
| 7 | 1996 | 43,213 | - | |
| 8 | 1997 | 36,697 | 139,216 | |
| 9 | 1998 | 38,097 | 72,948 | |
| 10 | 1999 | 50,505 | 71,957 | 181 |
| 11 | 2000 | 70,337 | 67,020 | 133 |

Source: TRAFFIC South East Asia (2004 *in litt.*)

2.5 Geographic trends

The species, especially the most valuable *G. bancanus* has been heavily depleted throughout their geographic ranges, especially in Indonesia and Malaysia because of the over-exploitation to supply high demand of the international markets (Soerianegara and Lemmens, 1994). In Sarawak, where large stands occur, it has been heavily overcut for some decades, and in Kalimantan the pressure on natural populations is also very high. In Peninsular Malaysia large areas of peat-swamp forest have been cleared for agriculture plantations.

2.6 Role of the species in its ecosystem

Ramin stands can only be found naturally in peat-swamp forest as its habitat. Peat lands are categorized as marginal lands and prone to disturbances. Peat land degradation are usually attributed to logging, forest fire and reclamation. Andriesse (1988) cited by Istomo (2004) noted that peat development is only 0.5 – 1.0 mm per year, while the peat decrease because of reclamation reaches 1.5 – 3.0 cm per year. There have been found that the existence and abundance of ramin correlated strongly with the peat depth (Soerianegara *et al.*, 1996). At the study sites in Central Kalimantan ramin started to be abundant at peat land of Organosol soil of more than 500 cm depth with more than 30 trees per ha. The most abundant ramin trees exists at peat land of more than 600 cm depth with 85 trees per ha (Istomo, 1997). Ramin was not found at the podsollic soil at the 0 cm peat depth, and it was observed that ramin seedlings were found at less than 50 cm peat depth but no pole nor tree were found.

In many instances ramin is found to be dominant single tree species. For example, in average for Kalimantan, *G. bancanus* distributed widely and often dominant with the potential was about 40-60 m³/ha of timber, of which ramin constitutes 27-40 m³/ha. Other common timber species such as kauri (*Agathis* spp.), meranti (*Shorea* spp.) and keruing (*Dipterocarpus* spp.) was only 1-3 m³/ha (Soerianegara and Lemmens, 1994). However, the actual problems with the role of the species in the ecosystem are dealing with the impact of logging or harvest method at the swampy areas, because peat swamp forest is not normally rich in species and ramin is often found as single dominant species. Access to swamp forest where ramin grows is mostly very difficult because of the spongy soil, stagnating water and the presence of fallen branches and trees. Logs are hauled on wood sleds by men. Under the above condition and the method of harvest about 22% of the forest are made totally opened (Soerianegara, 1996).

2.7 Threats

The sustainability and management of ramin are currently facing many problems (Soerianegara *et al.*, 1996). These include (1) over-exploitation, which is shown in the field by unbalanced ratio between trees felled for timber and the number of growth for regeneration, (2) the management and logging plans are not fully implemented in the field because of the land conditions, (3) the silviculture of ramin has not been totally known, and (4) illegal harvesting.

One of the major threats to ramin forests is forest degradation. Much of the peat swamp forest area has been subject to degradation caused by conversion to other uses and forest fires (Ministry of Environment, 1996). The rate of deforestation is not accurately known, though various estimates have been made, ranging from 700,000 to 1,200,000 ha per year. Peat-swamp forest is prone to fire. In 1997 a massive fire struck Sumatra and Kalimantan, Indonesia. Among the worst incidences was the forest fire on peat-swamp forest.

The shallow to deep peat (between 2-3 m) were classified as conversion forest, i.e. for conversion to agriculture, although these areas have at best very marginal potential and the incidence of crop failure was very high. These areas were subject to clear cutting and commercial logging was generally carried out unsustainably; canals that facilitated log transport subsequently drained the peat dome, leading to subsidence, peat oxidation and fires.

In Peninsular Malaysia large areas of peat-swamp forest have been cleared for agriculture, especially to establish oil-palm and pineapple plantations (Soerianegara and Lemmens, 1994).

Kalimantan suffers heavily from illegal logging which has encroached deeply into protected areas such as Tanjung Puting National Park in Central Kalimantan. The encroachment into national parks may indicate the scarcity of the species outside the protected areas and have also been one major source of threats (Samedi, 2003).

3. Utilization and trade

3.1 National utilization

Very wide range of products can be made of ramin (Soerianegara and Lemmens, 1994). The whitish timber of ramin is highly prized and popular as a decorative cabinet timber. More generally it is suitable for furniture, interior decoration such as wall paneling, light flooring, toys, turnery, broom handles and other non-impact handles, Venetian blind slats, dowels, rulers, picture frame and drawing boards. Ramin is used for general light construction such as door and window frames, mouldings, skirtings, ceilings, partitions, stair treads and counter tops. Various other application include planks, barrels, boxes and shipboard. Ramin is very suitable for veneer, plywood and blockboard manufacture and can be made into satisfactory quality of particle board (Soerianegara and Lemmens, 1994). Some species also produce agarwood and well-known as 'gaharu' or 'gaharu buaya' and is used as incense similar to those of *Aquilaria* spp.

Ramin is a valuable timber species in which the unit price is in kg (instead of m³). Averagely, every cubic meter weighs about 260 - 500 kg. The average international ramin price is about USD 1.56 per kg, except in 1995 where the price reached USD 4.7/kg, but in 1996 the price dropped to USD 0.93/kg.

3.2 Legal international trade

Ramin is one of the major export timbers of South-East Asia. Indonesia was the most important exporter, followed by Sarawak and Peninsular Malaysia (Soerianegara and Lemmens, 1994). During 1994 to 2003 Indonesia has exported ramin products to 28 countries worldwide with the total approximately 165,820 m³ of finished products (Soehartono, 2003). Indonesia's annual exports can be seen in Table 5 below. By rank, the five main destination of these exports were Japan, Taiwan (Province of China), Italy, Singapore and China, being Japan as the largest importer in Asia, and Italy appeared to be the major importer from the European countries.

Table 5. Export figure of ramin from Indonesia

| No | Year | Export volume (m ³) |
|----|------|---------------------------------|
| 1 | 1994 | 45,140 |
| 2 | 1995 | 34,280 |
| 3 | 1996 | 24,210 |
| 4 | 1997 | 22,930 |
| 5 | 1998 | 260 |
| 6 | 1999 | 170 |
| 7 | 2000 | 2,850 |
| 8 | 2001 | 8,570 |
| 9 | 2002 | 1,400 |

Source: National Bureau of Statistics

Exports of sawn timber by Malaysia and Singapore can be seen in Table 6.

Table 6. Exports of sawn timber by Malaysia and Singapore

| No | Year | Volume of exports (m ³) | | | |
|----|------|-------------------------------------|---------|-------|-----------|
| | | Peninsular Malaysia | Sarawak | Sabah | Singapore |
| | 1985 | 2,488 | 112,618 | | |
| | 1986 | 7,312 | 152,158 | | |
| | 1987 | 14,387 | 153,879 | | |
| | 1988 | 14,030 | 175,000 | | |
| | 1993 | 4,713 | | | |
| | 1994 | 1,987 | | | |
| | 1995 | 2,520 | 75,570 | | |
| | 1997 | 2,517 | | | |
| | 1998 | 10,970 | | | |
| | 1999 | 24,397 | | | |
| | 2000 | 39,651 | | 60 | 87,215 |
| | 2001 | 39,793 | | 346 | 64,122 |
| | 2002 | 29,361 | 33,417 | 139 | 10,000 |

Source: TRAFFIC South East Asia (2004 in litt.)

3.3 Illegal trade

The sharp decline of Indonesian production was reflected by the decline of production from each province known to have ramin populations. The decline of ramin production in the wild, unfortunately, was due to excessive harvest triggered by illegal logging and associated international trade. Indonesia suffers greatly by the rampant illegal logging and associated international trade in illegally harvested timber (Samedi, 2003; Soehartono, 2003). This has been one of the major problems in the management of Indonesian forestry, and Indonesia has spent enormous monetary and human resources to fight this problem.

As seen in Table 4 the annual allowable cut (legal production) was 24,000 m³ in the year 2000 (even though the National Bureau of Statistics recorded the production of that year more than 130,000 m³) and zero in the year 2001. However, stockpiles inventory undertaken after the impose of logging ban, found that more than 400,000 m³ (log equivalent from timber in the forms of logs, sawn timber, moulding, dowels and finished products) timber products. It was suspected that such a discrepancy was caused by illegal timber produced from outside the allowable cut. Furthermore, source from Indonesian Forestry Community, quoted by Intip Hutan Magazine (Annon, 2003), had claimed, that by the ramin trade ban Indonesia would lose annual earning about US\$ 200 million, equal to about 200,000 m³ ramin products. Comparing this claim (if it was true) with the export data from the Central Bureau of Statistics, which was maximum only about 45,000 m³ (Table 5), the allegation that most ramin trade was sourced from illegal logging and undertaken illegally may be justified.

Malaysia has reported many cases of confiscation of ramin known to be shipped from Indonesia into Peninsular Malaysia during 2002 – 2004 (Ahmad, 2004). In 2002 there were 6 cases of ramin confiscation involving 107 m³ logs. In 2003 there were 21 cases of ramin confiscation totaling 234 m³ logs, 76 cm LSS and 593 m³ sawntimber. In 2004 from January-March, there have been 7 cases with 582 m³ logs, 169 m³ LSS and 2,317 m³ sawntimber.

3.4 Actual or potential trade impacts

The harvest of ramin is heavily driven by international trade. The wide range uses of the timber makes the species valuable in international market. The impact of trade on the population and habitat as seen on the decrease of productions and exports volume by Indonesia and Malaysia

has been obvious that the international trade has driven to an over-exploitation of such a high value resource.

Other important aspect of peat swamp forest harvesting such as ramin, is the sustainability of smaller trees (diameter 15 – 30 cm) used for sleepers and log beds to support the rail track and wood sleds. The small trees are important in the ecological cycle to regenerate the forest. Based on the study by Soerianegara *et al.* (1996) within one cutting block (100 ha) there would be about 3210 sleepers or 210 m³ or about 800 small trees (diameter 15-20 cm) are required. For this requirement, the small trees must be cut from about 15 ha areas, or the trees must be cut from both sides of the rail track at about 75 m wide from both left and right sides of the track. It is worsened that the trees cut for sleepers include also ramin species.

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin)

None.

4. Conservation and management

4.1 Legal status

4.1.1 National

Major ramin habitat that has been totally protected, in the forms of protected areas in Indonesia includes Tanjung Puting National Park, Central Kalimantan (415,000 ha), Muara Kendawangan Nature Reserve, West Kalimantan (150,000 ha), Gunung Palung National Park, West Kalimantan (130,000 ha) and Kerumutan Nature Reserve, Riau (120,000 ha).

In Indonesia, logging ban was imposed in 2001 by the establishment of the decree of the Minister of Forestry No. 127 of 2001. The logging ban was followed by the inventory of the stockpiles, which was then freezed. The stockpiles were then allowed for exports under a strict control until the end of 2001. After 2001, in order trade to be controllable only concessionaires holding certificate of Sustainable Forest Management are allowed to harvest and export ramin on the basis of annual harvest quota set by the Government of Indonesia. Furthermore, based on the Decree of the Minister of Forestry No. 168 of 2001, no ramin export in the forms of log and sawn timber is allowed.

To reduce the smuggling from Indonesia to Malaysia the Malaysian Government has imposed import ban in all logs from Indonesia into Malaysia.

4.1.2 International

Ramin is currently listed in CITES Appendix-III, which entered into force on 6 August 2001, on the request by the Government of Indonesia. For this purpose, CITES Secretariat has distributed several Notification to the Parties No. 2001/026, No. 2001/040, No. 2001/053 and No. 68/2001. Starting from 22 October (Notification No. 2001/092) Malaysia has entered a partial reservation, which applicable only to all recognizable parts and derivatives except sawn timber and logs.

4.2 Species management

4.2.1 Population monitoring

Even though Non Detriment Finding (NDF), in accordance with Article IV, is not required under the Appendix-III listing, Indonesia has made NDF for the species since the Appendix-III for the species came into effect. Indonesia establish annual harvest quota, based on surveys undertaken by Scientific Authority. The surveys are undertaken to verify the Annual Cutting Plan (established based on 100% timber cruising) made by the concessionaire. Monitoring of regeneration in the logged over areas is also undertaken in the concessionaire. The Ministry of Forestry, through its Forest Research and

Development Agency, plans to undertake comprehensive inventory and monitoring surveys of ramin nationwide. The proposal for such surveys is being assessed by the ITTO for funding.

4.2.2 Habitat conservation

The main areas in Indonesia for habitat and species protection and conservation for ramin include Tanjung Puting National Park in Central Kalimantan (415,040 ha), Muara Kendawangan Nature Reserve in West Kalimantan (150,000 ha), and Gunung Palung National Park in West Kalimantan (90,000 ha). In Sumatra some protected areas important for ramin habitat and population protection and conservation have been designated. These include Bukit Batu Game Reserve, Riau (21,500 ha), Giam-Siak Kecil Game Reserve, Riau (50,000 ha), Kerumutan Game Reserve, Riau (120,000 ha), Tasik-Serkap Game Reserve, Riau (6,900 ha), Berbak National Park, Jambi (162,000 ha), River of Sembilang National Park, South Sumatra (202,896 ha), and Padang Sugihan Game Reserve (86,932 ha).

4.2.3 Management measures

In Indonesia, natural ramin peat-swamp forest is managed under the Indonesian Selective Felling and Planting system, with a diameter limit of 35 cm and a cutting cycle of 35 years. At least 25 healthy trees/ha of over 15 cm in diameter should be left as core trees. Enrichment planting is also undertaken to ensure healthy regeneration.

In Sarawak large areas of logged-over mixed peat-swamp forest are regularly treated to stimulate regeneration and growth of ramin. The problem is that ramin is shade-loving and grows slower than other species in a regenerating forest (Soerianegara and Lemmens, 1994), therefore, a particular measure must be undertaken to manage the regeneration.

4.3 Control measures

4.3.1 International trade

Under the Appendix-III status Indonesian Government requests other Parties to CITES to control international trade in the species. Therefore, Indonesia must issue Export Permit and other range States must issue Certificate of Origin to cover exports specimens of the species. However, Malaysia as the other major range State has placed partial (finished products such as furniture) reservation on the Appendix-III listing.

Indonesia believes that the Appendix-III listing contributes effectively towards controlling illegal logging in the country and managing any international trade, but international cooperation is still required to make this work (Samedi, 2003). However, even though Parties are requested to implement the same level of control as of Appendix-II, it is realized that Appendix-III controls are not as widely understood and widely implemented as those of Appendix-II (Buitron and Mulliken, 2003). Appendix-III listing still provides loopholes for illegal trade. The additional requirements of legal procurement and sustainability assessment (non-detriment finding by the CITES Scientific Authority in exporting states) for exports under Appendix II are not currently applicable to the Appendix-III listing. This may lead to unsustainable harvests and trade, even though they can be made legal by granting permits or certificates.

The fact that some key importing States or territories, such as Taiwan (Province of China) and Japan do not have provisions in place to implement Appendix III for imports, but do have provisions for App II-listed species, would make the trade controls for Ramin potentially much more effective.

The tri-national workshop held in Malaysia in April 2004 reached consensus on the formation of a tri-national taskforce to focus on eliminating illegal Ramin trade between Indonesia, Malaysia and Singapore, and supporting the implementation of correct CITES

procedures to control the legal trade. The operationalising of such a taskforce would significantly enhance the long-term management of the trade from the two key ramin producing States, and in addition, allow Singapore's role as a re-exporter to be thoroughly transparent in its operation.

Therefore, in the case of ramin, Appendix-II listing is regarded as more appropriate.

4.3.2 Domestic measures

Indonesian regulation allows only concessionaires holding certificate of Sustainable Forest Management (issued by Forest Stewardship Council, accredited by Indonesian Institute of Ecolabel). At present, only one company has been granted with such a certificate, and export permits have been accordingly given to cover exports of specimens of ramin by the mentioned company.

In order to combat illegal logging in Indonesia the Government has, in 2001, established National Task Force on Combating Illegal Logging, which consists of elements from the Ministry of Forestry, Attorney General, Ministry of Justice, National Police Head Quarters, Ministry of Trade and Indonesian Arm Forces. At the provincial level, the provincial governments also established Integrated Team (with similar composition to those of national task force), which can directly undertake territorial enforcement operations. All over Indonesia, territorial enforcement operations involve about 4,000 forest rangers (forest police) and Civil Investigators. Total budget planned for the operations is about IDR125 billion (US\$ 16 million) for the year 2004.

5. Information on similar species

Ramin is a lightweight to moderately heavy hardwood with the density ranges from 460-840 kg/m³. Because of its luxurious appearance, wood properties and easy to work ramin timber is highly in demand. Few species can substitute ramin for such wide ranges uses. Some species such as rubberwood (*Hevea brasiliensis* Wild. ex A.L. Juss) and Jelutong (*Dyera costulata* Miq. Hook. f.) have been identified to possess similar properties to ramin, but because of the difficulty to work and not as smooth as ramin in appearance, they have not been able to replace ramin in international trade.

6. Other comments

There have been three workshops held recently, in Indonesia and in Malaysia supported and facilitated by TRAFFIC South East Asia discussing the issues on the trade in ramin. Indonesian workshop was held on 7 January 2003, and the recommendations out of this workshop include the actions need to be taken to address the problems on enforcement, quota monitoring, harmonization of trade data and issues on barter trade. The Malaysian national workshop was organized on 8 March 2004 and the recommendations out of this workshop include dissemination of CITES procedures to industry and other agencies, addressing the issue on barter trade, identification of mechanism to enforce CITES for imports of logs and sawntimber, increase of checks of illegal landing sites in Peninsular Malaysia, determination of mechanism to ensure that free zones are not used for laundering illegal ramin, and determination of procedure for disposal of confiscated specimens.

The most recent workshop was Tri-National workshop organized by TRAFFIC South East Asia on 15-16 April 2004 and attended by delegates from three countries: Indonesia, Malaysia and Singapore. The delegates to the workshop agreed that the three countries should take immediate actions and recommended on the formation of a tri-national taskforce on CITES ramin trade law enforcement.

7. Additional remarks

None.

8. References

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