A. PROPOSAL

Transfer of the Indonesia population of Scleropages formosus from Appendix II to Appendix I

B. PROPONENT :

The government of the Republik of Indonesia,
Ministry of Forestry, Direktorate General of Forest Protection and Nature Conservation
Jl. Jenderal Gatot Subroto - Jakarta Pusat

C. SUPPORTING STATEMENT

1. Taxonomy :
   - 1.1. Class : Teleostei (Pisces)
   - 1.2. Order : Osteoglossiformes
   - 1.3. Family : Osteoglossidae
   - 1.4. Genus : Scleropages
   - 1.5. Species : Scleropages formosus (Muller and Schlegel, 1845)
     - English : Asian Bonytongue, Asian arowana.
     - French : Scleropages d'asie, Scleropages formosus
     - Italian : Scleropages Asiatioco
     - Local name : Kayangan, Siluk, Tangkuso, Tangkalesa, Kelesa, Peyang, Mambangdiawan, Ikan Raja. Local hobiestcall it wrongly as Arwana, the fish that found in Southern America. Indonesia common name has ever been given in 1875 in meeting at PHPA office as "Kayangan:.

This species has been successful to be bred in captivuty. The export quota can be fulfil from the results of captive breeding, not necessary any more fish to be taken from the wild, to increase wild population.

2. Biological Data

2.1. Status in the wild

2.1.1. Distribution

This fish inhabits mainly in freshwater (medium) or large rivers, lakes, which have sandy or slightly muddy bottom with slow to medium current).

Based in the visual observation, four different forms are found : the red, the yellow, the green, and the white (silver) form.

The green form is the most common in Kalimantan, followed by the yellow, the red and the silver form.

Geographic distribution : Sumatra, Kalimantan (Borneo), Malay Peninsula, Thailand, and Vietnam. Based on primary and secondary data in Kalimantan, this species is found at several watershed, especially Kapuas, Barito, and Mahakam watershed, distributed commonly at the upper stream and middle reach areas. In Sumatra is found mainly in Lampung, South Sumatra, Jambi, Riau, and also Bangka Island.

Special survey done at Kapuas watershed (West Kalimantan) in August 1991 gave results the distribution of each form as shown on figure 1.

There is another species *Scleropages jardini*, that is mainly found in Irian Jaya (West New Guinea) and Northern part of Australia. This species which was identified as *leichardti* by Weber and de Beaufort (1913; 1965), has been corrected by Allen and Boeseman (1982) as *jardini*.

2.1.2. Population size, trend and degree of endangerment

This species has been popular as an aquarium fish. The red form is the most expensive one in the world. Earlier report

stated that the red form is commonly found in black waters at upstream areas and its surrounding which are usually showed relatively low pH and high value of hardness.

In 1971, the fish was still only for consumption purpose, its population in most rivers were still relatively good and easy to be cought by fisherment in Sumatra or Kalimantan. Many people (especially Chinese) believe that this fish is able to give fortune to the owner. Until 1975 this species was popular as food for human, and its price was relatively very cheap. This species became popular as ornamental fish in aquarium after it was protected by law in 1980. Since that time its exploitation in most natural habitat increasing rapidly. Almost everyday any size of the fish were caought illegally by the surrounding fisherment because of its high price. Many specimens have been exported illegally and many specimens have been confiscated by immigration authority.

Although detail quantitative study of its populations has never been made, its population in many rivers have shown to be rarer than before, difficult to be caught due to continuous illegal catch and trades.
Illegal catch until now are likely still in practice, although much less frequent than before.

Based on the number of the juveniles/post larvae cought between 1982-1986 from three lakes at upstream watershed areas of Kapuas (lakes Maliau, Semangit, and Aji), the total number of population of parent stock at the areas was estimated to vary about 7,200 - 300,000 (internal report 1987). This estimation was made with assumption of survival rate between 1-10, fecundity 25-75 eggs, annual new hatch (born) 50,000 and sex ratio 1 : 1 until 1 : 10. Qualitative observation in August 1991 showed that the number of population is likely

much lower, it is also demonstrated by the fact that result of illegal fishing activities were very low. To make sure this statement, observation during the rainy season has been done and reported showing similar results.

2.1.3. Other biological aspect

The peak of breeding season of all forms of this fish is between November and January or from the beginning to the middle period of rainy season. Some individuals of the red form in captivity are also found to breed during the end of dry season. The first age of maturity is achieved within 3 or 4 years. The fecundity is between 20 - 65 eggs, depending on the size or age of the fish. Dawes (1989) recorded a brood of 93 and Luxmoore (1990) reported 30 - 80 fries are produced in each brood. The mature eggs diameter is 15 - 17 mm.

The eggs are fertilized externally and to be kept in the mouth of their parents until the larvae reach 8 - 10 cm in size when their yolk are totally absorbed. The brooder individuals can be easily recognized from their swollen head, relatively thinner body and their reflective eyes.

It is not sure whether or not the both parents (male & female) take care the fertilized eggs and the young fries, because it is still difficult to distinguish the male or the female sex visually. Sterba (1962) reported the female one but Scott and Fuller (1976) reported the male one take care the larvae. The fertilized eggs were put in the mouth of their parent until the yolk of the larvae is totally absorbed.

Their breeding habitats in the wild are mostly semi stagnant or slow current waters where there are many of two certain species of plant growing, *Barringtonia acutangula* (= putat) and *Pandanus helicopus* (= rasau).

D. Conclusion

The Government is aware that six farms (i.e. PT. Bintang Kalbar, PT. Munjulprima Utama, PT. Dinamika Kapuas, PT. Sumber Jayabaru Sakti, PT. The Henrie and PT. Hartono) have been succesfull to breed this species in captivity. However only Bintang Kalbar allow to export the surplus F2 generation. In addition the Government did not allowed the exporter's to trade wild specimens even if it is approved by the Conference of the Parties 50 % of the quotas can be taken from the wild. It is therefore, the Government of Indonesia proposes that if this present proposal is approved by CITES, there will be no longer Asian Bonitongue in Indonesia be captured from the wild and will provide the species with adequate conservation status.