

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Other proposalsA. Proposal

Inclusion of *Latimeria menadoensis* in Appendix I of CITES.

B. Proponent

The Republic of Indonesia

C. Supporting Statement1. Taxonomy

- 1.1 Class: Vertebrata
- 1.2 Order: Crossopterygii
- 1.3 Family: Latimeriidae
- 1.4 Genus: Latimeria
- 1.5 Species: *Latimeria menadoensis* Pouyaud et al, 1999.
- 1.6 Scientific synonyms: none
- 1.7 Common names: English: King of the sea, Menado coelacanth
 French:
 Spanish:
 Indonesian: Ikan raja laut

2. Biological Parameters

2.1 Distribution

L. menadoensis is a newly discovered species and confined to a rare marine fish species of very limited distribution in Indonesia. This species, up to this present time, is known only in one locality, off shore of Menado Tua Island, North Sulawesi- Indonesia (Erdmann et.al. 1998; Erdmann, 1999). This species was at first thought to be conspecific with *L. chalumnae*, that is known only from Grand Comoro Archipelago, west off Madagascar, and popularly known as living fossil (Smith, 1940). Underwater caves of rocky and steep shore habitats were thought to be one of the limiting factors of *L. chalumnae* distribution (Forey 1984, Baloen et. al. 1988).

2.2 Habitat availability

L. menadoensis is found in sea at depth of about 150 – 250 m. Its habitat was thought to be likely similar with that of *L. chalumnae*, volcanic island with steep rocky shore, where underwater caves can be found (Forey, 1988 a and b).

2.3 Population status

The population status of this species is still unknown, but it is believed to be low or rare, although population study has never been undertaken. This is because the species is very rarely caught by fisherman. One experienced fisherman informed that during his life as a fisherman this species was caught not more than 30 times or not more than one or two times per year (Mark Erdmann, pers. comm.). The growth of its population is likely to be very slow, not so much different from *L. chalumnae*. The shark fisherman at Menado Tua Island generally catch 1-2 individuals of *L. menadoensis* annually as bycatch (Erdmann and Kasim Moosa, pers. comm). This is an indication that its population, underwater survey is a prime important.

2.4 Geographic trends

This species is up to now found only from one locality (off shore of Menado Tua Island). Further research is being developed to know its natural distribution.

2.5 Role of the species in its ecosystem

The same with sharks, this species is also predator, hunting small fishes of other species as also shown by *L. chalumnae*.

2.5 Threats

This species is not purposively caught by fisherman. Mostly, the fishermen obtain this species as bycatch during shark fishing. However, the increasing demand with attractive price of this species could possibly force fishermen to catch and to sell it illegally.

3. Utilization and Trade

Before 1998 this species has no price and it was sold incidentally with low price because of its taste and so fatty. The present high demand is likely limited for further studies, research and for public attraction.

4. Conservation and Management

4.1 Legal status

This species has been totally protected by law under the Indonesian government regulation no. 7 of 1999.

4.2 Species management

Bycatch monitoring of this species is being developed at Menado and other similar localities in Sulawesi and the surrounding areas.

Habitat conservation effort it also being developed. Proposal listing the species in red data Book of IUCN is also being considered.

5. Information on Similar Species

The most closely related species is *L. chalumnae* which has been in the Appendix I since 1990.

The population of *L. chalumnae* is also unknown, but from the annual catch by fishermen before 1970 it was only 2-3 individuals per year. However, during the last decade it has increased to 7.5 individuals per year due to human pressure through official (legal) and illegal catch (Thomson, 1991). From the reproduction biology data the highest number of eggs ever recorded from brooding female were 19, but the highest number of the young with yolk in one female were only 5 (Thomson, 1991). This existing cannibalism and many predators (sharks) at their surrounding habitat in grand Comoro may possibly reduced the success breeding.

6. Additional Remarks

Collaborative underwater observation is being developed in coordination with international scientist started from October 1999. It is hoped from this observation that the population status of this species can be estimated and their habitat can be localized and protected.

7. References

- Balon, E.K., Bruton and H.W. Fricke, 1988. A fiftieth reflection on the living coelacanth, *Latimeria chalumnae*: some new interpretations of its natural history and conservation status. *Envir. Biol. Fishes* 23(4).
- Erdmann, M.V., R.L. Caldwell and M.K. Moosa, 1998. An Indonesian king of the sea discovered. *Nature* 395.
- Erdmann, M.V., 1999. An account of the first coelacanth known to scientist from Indonesian waters. *Envir. Biol. Fish.*
- Forey, P.L., 1984. *The coelacanth as a living fossil*. In: N. Eldredge and S.M. Stanley (ed): *Living Fossil*. Springer Verlag, New York.
- Forey, P.L., 1998a. *History of Coelacanth Fishes*. Chapman and Hall, London.
- Forey, P.L., 1998b. A home for Coelacanth. *Nature* 395.
- Hissmann, K., H. Fricke and J. Schauer, 1998. Population monitoring of the coelacanth. *Conserv. Biol.* 12 (4).
- Smith, J.L.B., 1940. A living coelacanth fish from South Africa. *Trans Roy. Soc.S. Afr.*28.
- Thomson, K.S., 1991. *Living Fossil. The Story of Coelacanth*. W.W. Norton and Co., New York.