Convention sur la conservation des espèces migratrices appartenant à la faune sauvage
Secrétariat assuré par le Programme des Nations Unies pour l'Environnement

16ème RÉUNION DU CONSEIL SCIENTIFIQUE DE LA CMS

Bonn, Allemagne, 28-30 juin 2010

PNUE/CMS/ScC16/Doc.15
Point 12.0 de l'ordre du jour

CONSERVATION DES ESPECES DE L'ANNEXE I DE LA CMS

(Note d'introduction préparée par le Secrétariat de la CMS)

1. L'un des objectifs du Plan de mise en œuvre de la stratégie du Conseil scientifique de la CMS 2006-2011 est la production par le Conseil d'un rapport sur l'état des espèces de l'Annexe I, à soumettre à chaque réunion de la Conférence des Parties.

2. Lors de sa 14ème session (Bonn, mars 2007), le Conseil scientifique de la CMS a lancé un débat sur la présentation du rapport et a convenu que les fiches informatives des espèces individuelles devraient constituer le fond du rapport.

3. Le Secrétariat a organisé des discussions préliminaires sur le format des fiches d'information, avec les coordonnateurs des Groupes de travail taxonomiques avant la réunion. Une fiche projet établi par le Secrétariat a ensuite été soumise aux Groupes de travail taxonomiques pour examen. Le Secrétariat a ensuite produit une version révisée à la lumière des recommandations formulées par les groupes.

4. En vue de réaliser de nouveaux progrès vers la définition du format de rapport et de trouver une compréhension commune du format désiré, dans la perspective de la 15ème réunion du Conseil scientifique et la 9ème Réunion de la Conférence des Parties, le Secrétariat demandé aux Groupes de travail taxonomiques de travailler ensemble pour produire quelques exemples des fiches d'espèces basées sur le modèle. Le Secrétariat a reçu jusqu'ici un projet de fiche d'espèce sur *Platanista gangetica gangetica* produite par le coordinateur du Groupe de travail sur les mammifères aquatiques, le Dr William Perrin.

5. La réunion de planification de l'activité (Bonn, juin 2009) a réexaminé l'opportunité de la réalisation de ce format et a réaffirmé que cet exercice a été cruciale pour assurer que toutes les espèces sont traités de façon égale et en termes de type et de degré de détail des informations. La réunion a donc convenue que tous les groupes de travail devrait produire au moins une fiche d'information avant la 16ème réunion du Conseil.

6. En mai 2010, la fiche d'information sur le Silure de verre géant *Pangasianodon gigas* a été présentée par le Coordinateur du Groupe de travail sur les poissons d'eau douce, le Dr. Zeb Hogan.

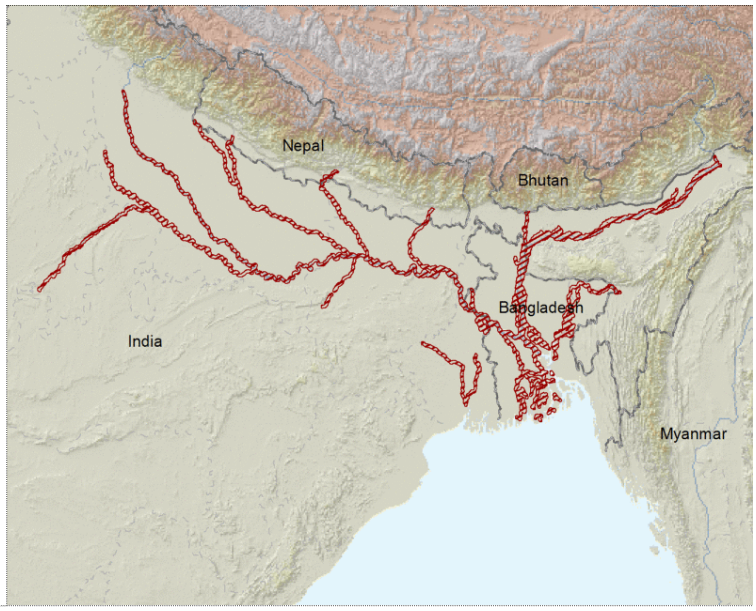
Mesure requise:

- Les membres du Conseil scientifique sont invités à examiner le projet de fiche d'information (Annexes I et II), faites à ce jour par les coordonnateurs des groupes de travail taxonomiques et à discuter des moyens de faire avancer la définition de sa présentation du rapport. Le Conseil devrait également examiner si l'approche adoptée jusqu'à présent permettra une réalisation en temps voulu du rapport avant la COP10 ou si doit être suivie une autre approche plus active.

DRAFT FACT SHEET ON CONSERVATION STATUS OF CMS APPENDIX I SPECIES
(Prepared by W. F. Perrin)

Latin name: *Platanista gangetica gangetica*
Taxonomic reference: Rice, D. W. (1998). Marine Mammals of the World. Systematics and Distribution. *Society for Marine Mammalogy Special Publication* **4.** Lawrence, Kansas, USA.
English name: Ganges dolphin, Ganges river dolphin, Ganges susu
French name: plataniste du Gange, sousou
Spanish name: delfín del Ganges

Distribution map:



Distribution of the Ganges dolphin *Platanista gangetica gangetica* (from www.IUCNRedList.org)

IUCN category of threat: Endangered
Population size estimate: Total of local estimates of abundance from portions of range is about 1,200—1,800. This provides a lower range for the total population. However, since animals in some portions of the range have not been censused, and because some of the available estimates are known to be negatively biased, the true number could be several times as high (www.IUCNRedList.org).
Subpopulation size estimates: Estimates of dolphins inhabiting portions of the riverine habitat from 60 to 505 km long range from 3 (in the Kosi River above Kosi Barrage) to 765-816 (in 505 km of Ganges River from Maniharighat to Buxar). Details of the results of 40 surveys are given in www.IUCNRedList.org/details/41756.
Population trend: declining (www.IUCNRedList.org).
Subpopulation trends: declining (www.IUCNRedList.org).

List of range states: India (legally protected from all hunting), Nepal (legally protected from all hunting), Bangladesh (legally protected from all hunting) and possibly Bhutan. Little national monitoring. Vikramshila Gangetic Dolphin Sanctuary in Bihar, India, but little government support to enforce protective measures. Some protection afforded by inclusion of portions of the range in or adjacent to national parks and sanctuaries (e.g., Kaziranga National Park in Assam, National Chambal Sanctuary in Madhya Presh, and gharial sanctuaries north and south of India/Nepal border) (www.IUCNRedList.org).

List of critical sites: Historically the species' formerly continuous range has been cut up into many isolated segments by the construction of dams and barrages (at least 50). The dolphin has disappeared from some of these segments. Other segments contain only a few dolphins; future extirpation seems almost certain for these. Some sections of the range contain a hundred or more dolphins; these hold the most promise for continued existence of the subspecies. Among them are 460 km of the Ganges mainstem from Patna to Farakka Barrage, 505 km of Ganges River from Maniharighat to Buxar (includes Vikramshila Gangetic Dolphin Sanctuary), 320 km of Bhagirathi River from Jangipur Barrage to Tribenghat, Brahmaputra River (and tributaries) from Sadiya to South Salmara (near India/Bangladesh Border), and Karnaphuli and Sangu River systems (SE Bangladesh), There may be more. (www.IUCNRedList.org).

List of main impact factors:

1. Water development projects (known major factor)
2. Toxic contaminants (potential major factor)
3. Hunting (declining)
4. Bycatch (severe throughout range)

Availability and source of actions plan(s)(or CMS Review Report): none

Priority for concerted action: Listed on CMS Appendix I at COP 7 (Bonn, 2002); proposed by India. Not presently on list of species designated for Concerted Action. Priority should be high.

List of Concerted Actions by CMS and others, including national action plans if they exist: none? [consult with India]

List of research priorities:

1. Assessment of likely impact on dolphins of planned future water development and river embankment construction projects and development of mitigation approaches.
2. Assessment of impacts of dredging and debris removal, and development of advice for regulation to control effects on dolphins and habitat.
3. Investigation of effects of contaminants on health and reproduction.
4. Development of alternatives to use of dolphin oil as fish bait.
5. Surveys of abundance in previously unsurveyed portions of the range.
6. Assessment of scale and impact of bycatch and development of mitigation gear and techniques.

List of reference publications: Comprehensive list given in www.IUCNRedList.org/details/41746.

[Note that IUCN has requirements for use/publication of information in the Red List website]

Annex II

DRAFT FACT SHEET ON CONSERVATION STATUS OF CMS APPENDIX I SPECIES
(Prepared by Z. S. Hogan)

Latin name:	*Pangasianodon gigas*
Taxonomic reference:	Roberts, T. R. & C. Vidthayanon. 1991. Systematic revision of the Asian catfish family Pangasiidae, with biological observations and descriptions of three new species. Proceedings of the Academy Sciences of Philadelphia 143: 97-144.
English name:	Mekong giant catfish
French name:	Silure de verre géant
Spanish name:	Siluro gigante

Distribution map:
Distribution of the Mekong giant catfish *Pangasianodon gigas* (from www.IUCNRedList.org)

Range description:
Pangasianodon gigas is a Mekong endemic (Rainboth 1996). Historically, it was distributed throughout the Mekong River Basin from the coast of Viet Nam to northern Lao PDR. Past reports of the species occurring as far north as southern Yunnan Province in China (Smith 1945, Roberts and Vidthayanon 1991) remain unconfirmed. The species' migration patterns are unknown. However, based on catch information provided by Roberts (1993) and others, it is believed that *P. gigas* migrates from the Tonle Sap Lake in Cambodia, upstream into northeast Cambodia and possibly up to Lao PDR or Thailand to spawn (Hogan *et al*. 2001). At least one spawning site is known (northern Thailand/Lao PDR), with a further possible spawning area in northeast Cambodia (Z. Hogan pers. comm.). There may have been other (lost) spawning sites in the middle and lower reaches of the Mekong (M. Kottelat pers. comm.). The extent of occurrence is estimated at around 4,150 km² (Z. Hogan pers. comm.).

IUCN category of threat: Critically Endangered

Population size estimate: Current population size is unknown. A rate of population decline of over 80% can be estimated from combining annual catch data over the last thirteen years in the Mekong River Basin area.

Overall annual catch data for the Mekong River area indicate that around ten years ago 40-50 fish were caught each year. The figure has now dropped to approximately 5-8 catches per year (Z. Hogan, pers. comm.). The Tonle Sap River is one of the last places where the fish is caught in appreciable numbers. Although the species has been disappearing from Lao, Thailand , and Viet Nam, there is little information on population trends in Cambodia (Hogan *et al*. 2001). In 2001 and 2002, no *P. gigas* were caught in northern Thailand. Annual catch figures for the Tonle Sap River in Cambodia over recent years were, four in 2000, 11 in 2001 and five in 2002.

Generation length has been reported as less than 10 years, however this is difficult to verify. The best estimate of generation length is between 10 and 15 years (Z. Hogan, pers. comm.). (www.IUCNRedList.org).

Subpopulation size estimates: In Chiang Khong (Northern Thailand), the catch has declined from a peak of 69 fish in 1990 to just seven fish in 1997 (Srettacheua 1995, Hogan 1998). In 1999, 20 fish were captured in Chiang Khong, however no fish were caught in the area in 2001 (Hogan *et al*. 2001) or in 2002. In Nong Khai Province (Northeast Thailand) 40-50 fish were caught per year in the early 1900's. However, since that time the number of fish caught has declined. In 1967, fishermen captured 11 fish in the area (Pookaswan 1969), and by 1970, *P. gigas* occurred only rarely as by-catch of beach seine fisheries (Pholprasith and Tavarutmaneegul 1998). Today, very few *P. gigas* are reported from Nong Khai Province (Hogan *et al*. 2001).

In Luang Prabang (Lao PDR) the catch declined from 12 fish per year to just three fish caught in 1968. No fish were caught in 1972, 1973, or 1974 (Davidson 1975) and there has been no significant catch of the species reported since that time (Hogan *et al*. 2001).

In Khone Falls (southern Lao PDR), a few fish were reported by fishermen each year prior to 1993, almost all of them in the first half of the year. No fish were reported in 1993. The status of *P. gigas* in the Khone Falls area has not been assessed since 1993 (Baird, pers. comm.).

In the Tonle Sap River (Cambodia), four fish were captured in the bagnet fishery in 1999 and eleven fish reported in 2000. Fishermen report that they catch a few *P. gigas* each year (Pengbun *et al*. 2001, Hogan *et al*. 2001).

Anecdotal information suggests that the species was once present in the Mekong Delta (Viet Nam), but is now reported as being very rare. One fish was caught close to, but not in, Viet Nam in 2003 (Z. Hogan, pers. comm.). No significant fishery for the species exists in Viet Nam (Lenormand 1996).

Population trend: declining (www.IUCNRedList.org).
Subpopulation trends: declining (www.IUCNRedList.org).

List of range states: Thailand (legally protected from fishing without permission from the Thai Department of Fisheries, Lao PDR (legally protected from fishing), Cambodia (legally protected from fishing) and possibly China, Myanmar, and Vietnam. (www.IUCNRedList.org).

List of critical sites: Mekong giant catfish are still seen and caught in the Tonle Sap Lake (Cambodia), the Tonle Sap River (Cambodia), the Cambodian Mekong near Kampong Cham, the upper Cambodian Mekong near Stung Treng, and in northern Thailand and Laos where the Mekong forms the border between Chiang Rai Province (Thailand) and Bokeo (Lao PDR). The species occurs in a Biosphere Reserve in the Tonle Sap Lake, and a RAMSAR site in northeastern Cambodia, although neither of these sites offers real protection for the species. In Cambodia, it is illegal to capture, sell, or transport *P. gigas*, although bagnet fisheries in the area still catch and sell the species. In Thailand, fishing for this species is regulated based on a quota license of less than 20 catches annually (C. Vidthayanon pers. comm. 2010). (www.IUCNRedList.org)

List of main impact factors:

1. Water development projects
2. Fishing
4. By-catch (especially in Cambodia)

Availability and source of actions plan(s)(or CMS Review Report): none

Priority for concerted action: CMS Appendix I. Not presently on list of species designated for Concerted Action. Priority should be high.

List of Concerted Actions by CMS and others, including national action plans if they exist: none (though the species has been listed on CITES Appendix I since 1975).

List of research priorities:

1. Migration and spawning studies of wild fish in Chiang Khong. The recent catches of Mekong giant catfish in Chiang Khong represent a unique opportunity to study the behavior of the fish in the wild. This may be the last chance to determine the migration route and spawning sites of fish in northern Thailand.

2. Additional research of wild fish whenever/wherever possible, including tag and release, migration studies, and spawning site identification. Research on wild fish is difficult due to the extreme rarity of the fish.

3. Opportunistic study of dead fish, including stomach content analysis, age determination (using otoliths, spines, or vertebrae), and tissue sampling for genetics research. Dead fish should be preserved and stored at the Department of Fisheries or donated to museum collections for further study and display. The American Museum of Natural History has expressed interest in obtaining a preserved catfish.

4. Surveys of the commercial fisheries of the Tonle Sap Lake and upper Tonle Sap River (barrage fisheries) are urgently needed to determine the extent of occurrence of giant catfish in those fisheries.

5. A survey of commercial and small-scale fisheries from Kratie to the Cambodia/Lao PDR border to confirm the presence of spawning fish. This survey could be combined with the surveys of the Mekong River Dolphin Conservation and Research Project.

6. A local knowledge survey of the Xaiyabouri area to determine the history of giant catfish fisheries.

7. Development of a genetically diverse captive-bred population for eventual reintroduction into the wild.

List of reference publications:

Davidson, A. 1975. Fish and fish dishes of Laos. *Imprimerie Nationale Vientiene*, Lao PDR.

Durand, J. 1940. Notes sur quelques poissons d'especes nouvelles ou peu connues des eaux douces Cambodgiennes. Institute oceanographique de l'Indochine, Nhatrang.

Giles, F.H. 1935. An Account of The Ceremonies and Rites Performed When Catching the Pla Buk: A Species of Catfish Inhabiting the Waters of the River Mekong, the Northern and Eastern Frontier of Siam. Natural History Bulletin of the Siam Society 28:91-113.

Hogan, Z.S., N. Pengbun, and N. van Zalinge. 2001. Status and conservation of two endangered

fish species, the Mekong giant catfish Pangasianodon gigas and the giant carp Catlocarpio siamensis, in Cambodia's Tonle Sap River. Natural History Bulletin of the Siam Society 49:269-282.

Hogan, Z.S. 1998. The quiet demise of the Mekong giant catfish. Wildlife Conservation 101:12.

IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. www.iucnredlist.org. Downloaded on May 24, 2010.

Lenormand, Sophie. 1996. Les Pangasiidae du delta du Mekong (Viet Nam): description preliminaire des pecheries, elements de biologie, et perspectives pour une diversification des elevages. Memoire de Fin D'etudes, Ecole Nationale Superieure Agronomie de Rennes.

Kottelat, M., and T. Whitten. 1996. Freshwater biodiversity in Asia with special reference to fish. *World Bank Technical Paper* No. 343, The World Bank, Washington D.C.

Mattson, N., K. Buakhamvongsa, N. Sukumasavin, N. Tuan, and O. Vobol. 2002. Mekong giant fish species: on their management and biology. MRC Technical Paper No. 3, Mekong River Commission, Phnom Penh.

Mengumpun, K. 2000. Giant catfish. Information Booklet for Aquaculture, No. 1. Research Development Fund, Thailand.

Pholprasith, S. and P. Tavarutmaneegul. 1998. Biology and culture of the Mekong giant catfish *Pangasianodon gigas* (Chevey 1930). Paper Number 31. National Inland Fisheries Institute, Bangkok.

Phukasawan, T. 1969. *Pangasianodon gigas* Chevey. Inland Fisheries Division. Department of Fisheries, Bangkok.

Roberts, T.R. and C. Vidthayanon. 1991. Systematic revision of the Asian catfish family Pangasiidae, with biological observations and descriptions of three new species. Proceedings of the Academy of Natural Sciences of Philadelphia 143:97-144.

Roberts, T. R. 1993. Artisanal fisheries and fish ecology below the great waterfalls of the Mekong River in Southern Laos. Natural History Bulletin of the Siam Society 41: 31-62.

Smith, H.M. 1945. The Fresh-water fishes of Siam, or Thailand. United States Government Printing Office, Washington D.C.

Sretthachuea, C. 1995. Mekong giant catfish: the world's largest scaleless fish is nearing extinction. Wildlife Fund Thailand, Bangkok.

Unakornsawat, Y., P. Pittathano, and M. Khachapichat. 2001. Artificial propagation of Mekong giant catfish, *Pangasianodon gigas* (Chevey) by first filial generation rearing in earthen ponds at Phayao Inland Fisheries Station. Phayao Inland Fisheries Station, Department of Fisheries, Thailand.

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