



Flagship Species of the Mekong – a Tool for Wetland Ecosystem Conservation and Management

The Mekong River Basin provides habitat to a wide array of globally threatened species such as the Mekong River Irrawaddy Dolphin, Sarus Crane, Siamese Crocodile, and the Mekong Giant Catfish. These four species have also been selected as flagship species for the Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP). In order to address the range of issues affecting the wetlands in the Lower Mekong Basin, conservation and management of the flagship species has been selected as one of the approaches. The four species mentioned above have been selected because they fulfill one or more criteria:

- inhabit a broad diversity of important wetlands and therefore are representative of threatened wetland habitats and their associated fauna;
- are regional in distribution and trans-boundary in nature; and/or
- provide an opportunity for enhancing regional collaboration for conservation and management of biodiversity and ecosystems.

As part of the flagship species approach the MWBP has initiated the Species Conservation Action Planning (SCAP) process, with the target of completing action plans by the end of Phase A. To date, the action planning process has involved an array of activities including the following:

- Implementation of priority field interventions to address urgent conservation issues affecting the flagship species. Some examples include:
 - Establishing a full-time monitoring and enforcement team and implementing a catch data collection programme for the giant catfish and associated species.
 - Training monitoring teams in handling and tagging of threatened fish.
 - Supporting the Department of Fisheries Cambodia in the implementation of the Cambodian Mekong Dolphin Conservation Strategy which includes a range of field activities.
- A regional network of experts has been established. For example, for the Giant Catfish Action Planning Process, a network of global and regional experts, is actively working on developing the conservation action planning and activities.

- Public awareness and education material on the flagship species has been produced and distributed.
- Partnerships have been established with other organisations in order to combine resources to achieve common goals in the conservation of the flagship species.

The fate of the Mekong Giant Catfish and the Mekong River Irrawaddy Dolphin is still uncertain. However, the recent listing of these species as critically endangered has resulted in the beginning of new partnerships that strive for common action – to ensure the recovery of these species in the wild and maintain the ecological integrity of its habitat.

Mekong Giant Catfish *Pangasianodon gigas*

The Mekong Giant Catfish (*Pangasianodon gigas*) is one of the largest freshwater fishes in the world, reaching a maximum length of 300cm and total weight up to 300kg. It was listed as critically endangered on the IUCN Red List in 2003.

P. gigas is a Mekong endemic. Historically, the Mekong Giant Catfish occurred throughout the large rivers of the Mekong River Basin but now appears limited to the Mekong and its tributaries in Cambodia, Lao PDR and Thailand. Through a captive breeding programme in Thailand, it has been introduced to rivers and reservoirs throughout Thailand but is it not known to result in any established populations.

The population of Mekong Giant Catfish is declining throughout the basin and is now very rare. The highest catch is normally in Cambodia and now averages 5-10 fish per year. Key threats to the Mekong Giant Catfish include over-fishing and river modifications.

In order to address the critical status of the giant catfish, and in recognition of the need to collaborate to accomplish this, IUCN has partnered with the Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP).

As a trans-boundary migratory the Mekong Giant Catfish provides an opportunity for regional cooperation on fisheries management issues. MWBP aims to address conservation and management issues affecting the giant catfish through the development and implementation of a Species Conservation Action Plan (SCAP).

Since the inception of the action planning process in early 2005, the partnership has expanded to include



a range of national, regional and global institutions. Implementation of conservation actions on the ground have also taken off. This includes establishment of the world's first freshwater fish concession to protect the Giant Catfish and a full time monitoring programme in Cambodia. A historical agreement has also been confirmed and details are currently in progress for Thai and Lao fishers to end hunting of the Mekong Giant Catfish. In addition, recent proliferation of activities and efforts on giant catfish conservation have also resulted in the Thai Department of Fisheries giving serious consideration to designation of its reported spawning area along mainstream Mekong as a conservation zone. Through the MWBP, preparations have also been made to implement a telemetry study (due to start in April 2006) to understand the migration patterns and spawning locations of wild giant catfish in northern Thailand.

Mekong River Irrawaddy Dolphin *Orcaella brevirostris*

The sub-population of Irrawaddy dolphins that inhabit the Mekong River was listed as 'critically endangered' by the World Conservation Union (IUCN) in 2004 (Smith and Beasley 2004). Preliminary mark-recapture estimates of abundance established that the population now numbers at least 125 (95% CL = 107 – 145, CV = 0.07) individuals and no more than 180 dolphins, as of April 2005 (Beasley in prep). The entire dolphin population is now restricted primarily to the upper Cambodian Mekong River, inhabiting nine deep water areas in the 190km river segment between Kratie to Khone Falls, just upstream of the Lao PDR/Cambodian border.

The main threat to the dolphin's survival in the Mekong River is accidental catch in gillnets, particularly large-mesh size gillnets. Other assumed threats that warrant further investigation are: illegal fishing activities (such as dynamite and electric fishing), water pollution, boat noise and collision, direct catch and tourism harassment. The dolphins inhabit selected deep pools along the Mekong which are also important dry-season fish refuge and effective conservation measures would also mean maintenance of fish stocks, this primary source of protein for people of the Mekong.

The Mekong Dolphin Conservation Project (MDCP) was initiated in 2001 by James Cook University and was conducted in collaboration with the Department of Fisheries and the Wildlife Conservation Society – Cambodia Program. Research and conservation activities were conducted in southern Laos, Cambodian and Viet Nam.

Based on this initial research and community discussions, the Mekong Dolphin Conservation Project (MDCP), developed the 'Mekong Dolphin Conservation and Management Plan'. This conservation strategy was recently adopted by the Cambodian Department of Fisheries as national policy and adopted by the Minister of the Ministry of Agriculture, Forestry and Fisheries in January 2005. It enables a clear initial framework for future conservation efforts.

A partnership initiative (established in mid 2005) between the MWBP, WWF, the Wildlife Conservation Society (WCS) and a number of other organisations is currently supporting the Cambodian Department of Fisheries in implementation of the Cambodian Mekong Dolphin Conservation Strategy.

This new partnership has pooled resources and expertise to support crucial on-the-ground conservation activities as outlined in the strategy. Over the past eight months, the partnership has played an important role in championing the cause of the Mekong River Irrawaddy Dolphins. To name a few, the partnership has successfully facilitated the establishment and demarcation of Dolphin Conservation Zones, construction of dolphin monitoring posts, trained fishers on methods to release entangled dolphins and conducted research on mortality causes including analysis of tissue samples.

Beyond the Mekong, the partnership has contributed to the development of a Conservation Strategy for all the remaining freshwater populations of Irrawaddy Dolphins across its range. This strategy is being developed in collaboration with the IUCN Cetacean Specialist Group and will be published in 2006.