

1-3. Fish Diversity in the Mekong Basin

Fish and other freshwater aquatic species are the main source of protein for people who live in rural areas of the Lower Mekong Basin (the four countries of the Lower Basin, not including China and Burma). With the exception of Vietnam's Mekong delta, which is adjacent to the sea, the consumption rate of freshwater fish is extremely high in almost all areas of the basin. This paper is an overview of the use of Mekong River fish by people of the region from *The Fisheries Baseline Assessment Working Paper* of the Mekong River Commission's Strategic Environmental Assessment (ICEM 2010).

The Diversity of Fish Species in the Mekong Basin

The Fisheries Baseline Assessment Working Paper estimates the diversity of fish species in the Mekong River from data registered in *the FishBase* database of fish inhabiting 204 rivers and 32 lakes worldwide. According to data registered as of 2009, it has been confirmed that the 781 fish species found in the Mekong River is second only to the 1,271 species of the Amazon River, showing that the Mekong River is the second river in the world for fish diversity. According to a report by the World Wildlife Fund (WWF), the Mekong River basin is a biodiversity hotspot where more than 279 new species of fish have been discovered in the last decade. It was previously estimated that there were around 1,200 species of fish in the Mekong River, but at present it is thought that there are 850 freshwater species, and that around 1,100 species inhabit the river if marine fish that make temporary incursions into the Mekong River delta are also included. Furthermore, 197 fish species are registered in *the FishBase* for the Cambodian lake Thonle Sap, indicating that this lake is fourth in the world for fish species diversity (Japan's Lake Biwa is sixth, with 69 species).

The number of fish species in 20 locations in the river basin (including tributary river sub-basins) is shown in the following table:

Location	Species	Families	Endemic
China-headwater	24	3	4
China-upper reach	34	4	4
China-middle reach	48	8	7
China-lower reach	122	21	15
Northern Laos	140	30	26
Nam Ou	72	15	29
Nam Ngum	156	27	43
Nam Mang	57	19	17
Nam Kadingh	99	21	38
Songkhram	216	40	39
Xe Bang Fai	157	31	51
Xe Bang Hiang	160	33	47
Mun/Chi	270	38	49
Downstream of the Khone Falls	168	34	25
Stung Treng-Kratie	204	37	33

Sekong	214	33	63
Sesan	133	26	24
Srepok	204	32	38
Thonle Sap	284	45	31
Mekong Delta	486	73	28

Table: Species richness in 20 locations of the Mekong Basin (ICEM 2010:11)

It can be seen from the table that even excluding the Mekong River delta, where marine fish also contribute to the diversity of fish species, the Mekong River and its tributaries are very rich in aquatic life. There are especially abundant numbers of fish species in Thailand's Songkhram River basin and Mun/Chi basin, as well as in the Mekong mainstream between Stung Treng and Kratie, and Cambodia's Sekong and Srepok basins.

References

International Center for Environmental Management (ICEM). 2010.

Mekong River Commission (MRC) Strategic Environmental Assessment (SEA) for Hydropower on the Mekong Mainstream: Fisheries Baseline Assessment Working Paper. Vientiane, Lao PDR: MRC.

<http://www.mrcmekong.org/about-the-mrc/programmes/initiative-on-sustainable-hydropower/strategic-environmental-assessment-of-mainstream-dams/>

Yuka Kiguchi