




The status and Trend of Vegetation





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Notable changes in extent of narrow stratum of riparian vegetation along upper rocky slopes

Changes driven by wood collection for fuel, construction materials and land conversions for 'river gardens'

Indicator: Channel: Extent of upper bank vegetation cover					
Area	Status	Abundance estimates as % relative to 2015			
	2015	1900	1950	1970	2000
Mekong River in Laos PDR	C	140%	110%	105%	100%
Mekong River in Laos PDR/Thailand	C	130%	110%	105%	100%
Mekong River in Cambodia	C	150%	120%	105%	100%
Tonle Sap River (incl. K. Cham)	-	-	-	-	-
Tonle Sap Great Lake	-	-	-	-	-
Mekong Delta	-	-	-	-	-



Minimal changes in thin strata of riparian vegetation on lower rocky slopes

Probably substantial loss in last decade from the rise of low-water levels during dry season on account of Chinese dams

Indicator: Channel: Extent of lower bank vegetation cover

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	C	120%	120%	120%	110%	
Mekong River in Laos PDR/Thailand	C	120%	120%	110%	100%	
Mekong River in Cambodia	C	120%	120%	110%	100%	
Tonle Sap River (incl. K. Cham)	-	-	-	-	-	
Tonle Sap Great Lake	-	-	-	-	-	
Mekong Delta	-	-	-	-	-	



Sporadic sandbars and rocky pools on banks are often occupied by herbaceous marsh vegetation.

Small marsh habitats are transitory in the river channel and generally associated with ephemeral pools (not too important)

Indicator: Channel: Extent of herbaceous marsh vegetation

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	B	120%	120%	110%	100%	
Mekong River in Laos PDR/Thailand	B	120%	110%	110%	100%	
Mekong River in Cambodia	B	120%	110%	110%	100%	
Tonle Sap River (incl. K. Cham)	-	-	-	-	-	
Tonle Sap Great Lake	-	-	-	-	-	
Mekong Delta	-	-	-	-	-	



Most changes took place in distant past due to deforestation of upper banks

More recent decreases in lower bank vegetation due to dry-season elevation of water levels on account of Chinese dams in upper Mekong reaches

Indicator: Channel: Biomass of riparian vegetation

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	C	125%	120%	120%	100%	
Mekong River in Laos PDR/Thailand	C	115%	115%	107%	100%	
Mekong River in Cambodia	C	125%	120%	107%	100%	
Tonle Sap River (incl. K. Cham)	-	-	-	-	-	
Tonle Sap Great Lake	-	-	-	-	-	
Mekong Delta	-	-	-	-	-	



Indicator: Channel: Wetland Community Structure and Species Composition

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	C	140%	140%	130%	100%	
Mekong River in Laos PDR/Thailand	C	140%	140%	130%	100%	
Mekong River in Cambodia	C	140%	140%	130%	100%	
Tonle Sap River (incl. K. Cham)	-	Difficult to quantify due to plant community complexity – but vegetation structure is now modified substantially, especially around Siphandone				
Tonle Sap Great Lake	-					
Mekong Delta	-					
	-					



Wholesale annihilation of DELTA flooded forest and forests in the vicinity of Phnom Penh and Kampong Cham

Tonle Sap flooded forest relatively intact, but agricultural land conversions are increasing on outer banks of the lake's floodplain

Indicator: Floodplain: Extent of flooded forest cover

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	-	-	-	-	-	
Mekong River in Laos PDR/Thailand	E	140%	130%	120%	100%	
Mekong River in Cambodia	-	-	-	-	-	
Tonle Sap River (incl. K. Cham)	E	140%	130%	130%	100%	
Tonle Sap Great Lake	B	120%	115%	110%	100%	
Mekong Delta	E	800%	110%	105%	100%	

Marshes are drained near urban areas and prone to encroachments by rice and lotus agriculturalists as well as fish farming in rural zones

Floating invasives (mostly water hyacinth, but also others) have also reduced the extent of native marsh vegetation



Indicator: Floodplain: Extent of herbaceous marsh vegetation

Area	Status	Abundance estimates as % relative to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR	C	100%	100%	100%	100%	
Mekong River in Laos PDR/Thailand	C	120%	110%	100%	100%	
Mekong River in Cambodia	-	-	-	-	-	
Tonle Sap River (incl. K. Cham)	E	?	?	?	100%	
Tonle Sap Great Lake	D	110%	105%	105%	100%	
Mekong Delta	E	800%	110%	110%	100%	



Biomass diminished by encroachment of rice fields; also by deforestation due to extractions fuel and construction materials.

Delta has lost almost all of its forests and marshlands

Indicator: Floodplain: Biomass of riparian/aquatic cover

Area	Status	Abundance estimates as % relative to 2015			
	2015	1900	1950	1970	2000
Mekong River in Laos PDR					
Mekong River in Laos PDR/Thailand					
Mekong River in Cambodia					
Tonle Sap River	E	140%	130%	130%	110%
Tonle Sap Great Lake	D	120%	115%	110%	100%
Mekong Delta	E	800%	110%	105%	100%



Selective wood collectors have altered woody plant communities

Marshland management by agriculturalists (rice and lotus primarily) have altered marsh plant communities

(Difficult to quantify)

Indicator: Floodplain: Wetland Community Structure and Species Diversity

Area	Status	% relative change to 2015				
	2015	1900	1950	1970	2000	
Mekong River in Laos PDR		Difficult to quantify due to plant community complexity – but vegetation structure is now modified substantially, especially in the delta and ca. Phnom Penh & Kampong Cham				-
Mekong River in Laos PDR/Thailand		Difficult to quantify due to plant community complexity – but vegetation structure is now modified substantially, especially in the delta and ca. Phnom Penh & Kampong Cham				-
Mekong River in Cambodia	D	130%	130%	120%	100%	
Tonle Sap River	E	150%	130%	130%	100%	
Tonle Sap Great Lake	D	140%	120%	110%	100%	
Mekong Delta	E	180%	120%	110%	100%	



Mimosa pigra – a riparian shrub - was introduced about 40 years ago. Now expanding in distribution at increasing rates due to **DISTURBANCE OF FLOODED FLORESTS**

Imperata grass is also spreading on banks of the Mekong River

Indicator: Floodplain: Extent of Invasive riparian plant cover

Area	Status	Abundance estimates as % relative to 2015			
	2015	1900	1950	1970	2000
Mekong River in Laos PDR	-	-	-	-	-
Mekong River in Laos PDR/Thailand	-	-	-	-	-
Mekong River in Cambodia	E	0%	0%	0%	70%
Tonle Sap River	E	0%	0%	0%	70%
Tonle Sap Great Lake	D	0%	0%	0%	20%
Mekong Delta	E	0%	0%	0%	90%



Floating water hyacinth and various aquatic grasses are now ubiquitous in floodplains.

Indicator: Floodplain: Extent of floating and submerged invasive plant cover

Area	Status	Abundance estimates as % relative to 2015			
	2015	1900	1950	1970	2000
Mekong River in Laos PDR	-	-	-	-	-
Mekong River in Laos PDR/Thailand	-	-	-	-	-
Mekong River in Cambodia	-	-	-	-	-
Tonle Sap River	E	0%	5%	5%	10%
Tonle Sap Great Lake	E	0%	5%	10%	20%
Mekong Delta	E	0%	10%	50%	100%



Thanks for attention