

Monumental site Site (with natural scars) Kampong (modern source) Kampong (historical source)

Prehistoric site Angkor era bridge Modern town

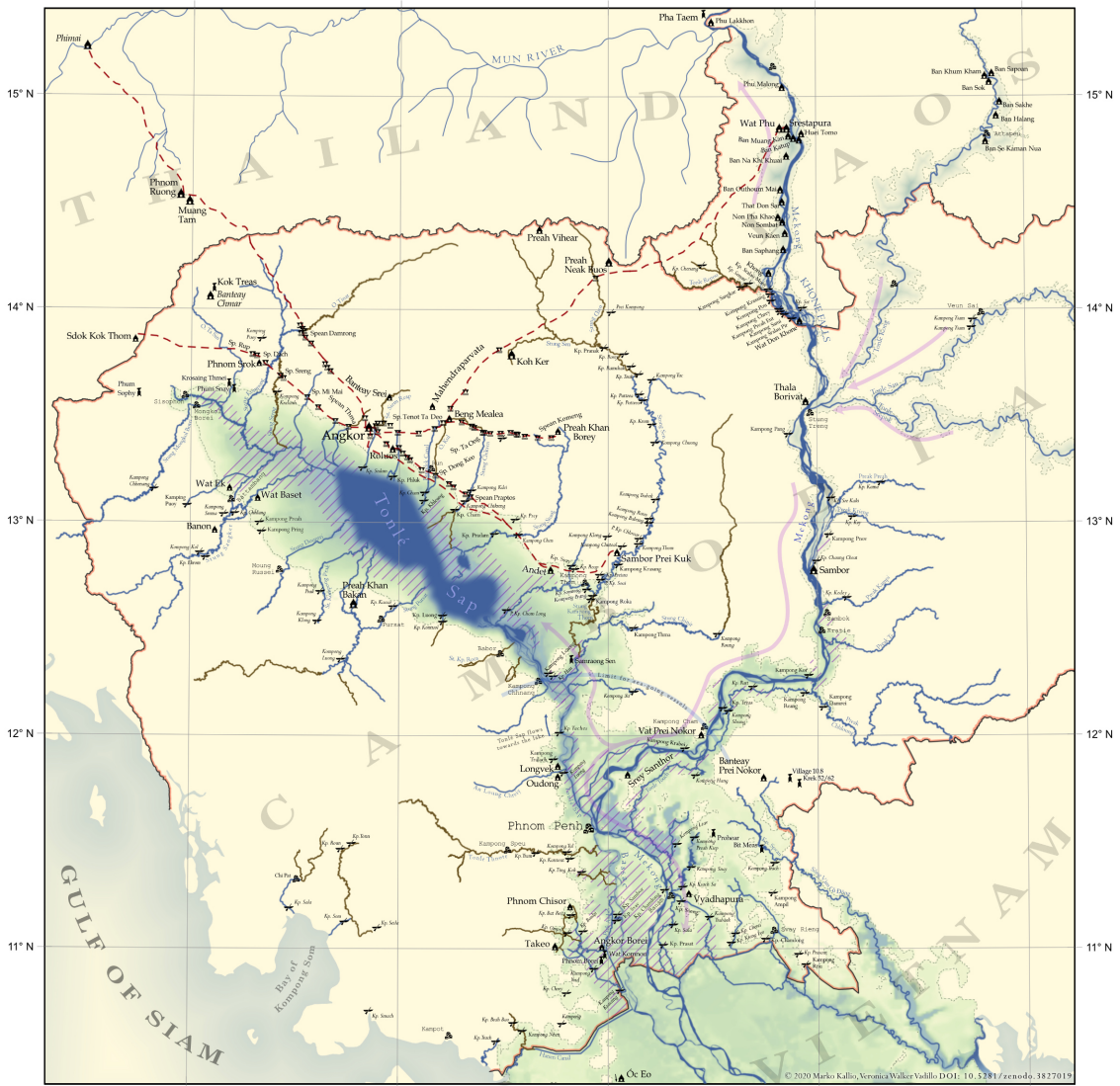
Rajk River: navigable / limited / non-navigable Angkorian road: usable / non-usable

Deep pools 2 5 10 20 50 meters

Flood duration Shorter Longer

Cambodian fishing logs Wet / dry season fish migration Maximum flood extent

Mekong



Environment The rainy season starts around June, and is characterized by constant rainfall and an average temperature of 23C min and 33C max. Large portions of the landscape are covered in water, river courses overflow into floodplains, and forests are flooded. In June, the course of the Tonle Sap river runs northwards, into the Tonle Sap Lake, which increases several times in size. Maximum inundation is reached between September and October, and waters start receding immediately afterward.

Navigation The increasing stream flow, paired with debris from heavy rainfall, makes rivers hard to navigate, especially the main course of the Mekong River.

Land transport The excess of water makes the roads difficult to transit for animal-traction carts.

Fisheries White fish arrive in the floodplains from June to August, while snakeheads breed in the floodplains. Around September and October, fish disperse throughout the floodplain, where they feed.

Rice cultivation Buffaloes are used to prepare raised and floating rice paddies, between June and August most planting activities take place. Short wet rice is harvested in August. Buffaloes are in the villages in September and October, when the rice is growing.

Other activities The bamboo bridge from Kampong Cham to Koh Pehn is dismantled or flushed away as the river swells in June. Cattle water makes local in September-October.



Rainy season

Main data source used in this study is Walker-Vallito, Verónica. The Fluvial Cultural Landscape of Angkor. University of Oxford, 2016. Map design by Marko Kallio and Verónica Walker-Vallito. Historical data sources were used to complete the data-research. In addition to the main documents, we used historical maps by D. Howard (1876), P. Charon (1881), A. Pavie (1901), G. Lapegrière (1901, 1911), Service géographique de l'Indochine (1891), and Office local de cartographie au Cambodge (1920) to create the historical landscape model. We also used modern map services - Google Maps, OpenStreetMap, and a paper road map published by Cambodia Airways. For additional kampongs, locations for historical sites in the Seding basin and upstream of Mekong from Khone Falls were approximated from Corfield (2014). The Angkor era roads and bridges were digitized and traced through satellite imagery and maps by R. Nguyen (2005), and the paper road map published by Cambodia Airways. The Angkor hydraulic system shown in this study was traced using information from M. Kumon (2009). Deep pool locations were sourced from the Mekong River Commission, and fishing lists approximated from maps published by the Soil Food and Agriculture Organization. The hydrology is derived from MMR's Hydrology Department. Digital elevation data were derived from the SRTM30+ dataset. The inundation data were derived from the SRTM30+ dataset. The photos of the flooded forest in the Mueang-Neris / Fluk (CC-BY 3.0), the muddy plain by Khan_N7 / Flickr (CC-BY-NC 3.0). This is version 1, published on 2018-06-25. If you are a publisher, please cite DOI 10.5381/zenodo.1827019.