



MEKONG DELTA

Much of South and Southeast Asia is experiencing extensive flooding from this year's intense monsoon. The Mekong River delta and Cambodia's lowlands are witnessing the most extensive flooding in half a century. As Southeast Asia's largest river, the Mekong is normally immune to disastrous flooding from the annual monsoons.

The fertile Mekong Lowlands support very large populations of Vietnamese, Cambodians and Laotians. An estimated 3 million people have been displaced by the floods which affected more than 25,000 square miles (64,750 sq. km.).

American civilians and military personnel who lived through the Vietnam War are very familiar with the Mekong River. It was along this famous water course and on the Mekong Delta that some of the fierce fighting occurred between North Vietnamese-supported Viet Cong forces and South Vietnamese and the United States from 1965 and 1975.

The Mekong River is the world's 11th longest river, arising high on the Tibet Plateau and flowing more than 2,500 miles (4,023 km.) to the east and southeast. The river touches or crosses six countries on its way to the South China Sea, including China, Laos, Myanmar (Burma), Laos, Thailand, Cambodia (Kampuchea) and Vietnam.

The upper Mekong is a rapidly flowing and turbulent stream often sandwiched in a narrow valley by cliffs on both sides. Very little of the upper reaches of the river is navigable. After the Mekong leaves China, its valley begins to widen at

places, creating occasional floodplains. From the Chinese border to Cambodia, sections of the river are separated by rapids, but are locally navigable. From Cambodia to the Mekong Delta, most of the river is navigable, even by ocean-going vessels, especially during the wet season.

The Mekong Delta is latticed with waterways, consisting of distributaries and small rivers that form a birds-foot delta, somewhat like that of the Mississippi Delta.

Quite unique to the Mekong is a hydraulic basin and lake in Cambodia that serve as a reservoir for the Mekong's floodwaters. Tonle Sap is the lake connected to the Mekong by a small stream. This stream reverses its flow when the Mekong's flood levels begin to rise during the summer wet season. The natural hydraulics causes Tonle Sap to fill, thus temporarily storing the Mekong's floodwaters.

Southeast Asia and South Asia benefit from the Asian monsoon. Monsoon rains come to the region during Northern Hemisphere summer and early fall.

Cambodia's huge basin are heavily cultivated. In fact, one of the reasons the delta was so contested by the Viet Cong and the South Vietnamese was its large rice crops. Much of the crop is transported to market by water.

Monsoon rains in Southeast Asia this year have generally been 30 to 50 percent greater than normal. This unusual precipitation appears related to La Niña. La Niña is a strong upwelling of cold ocean water along South America's west coast, that spreads westward across the Central Pacific toward Southeast Asia.

In general, El Niños occur every three to five years, bringing an interruption to the normal Asian monsoon. El Niños occur when a lens of warm ocean water flows back eastward across the Pacific Ocean interrupting normal Trade Wind development.

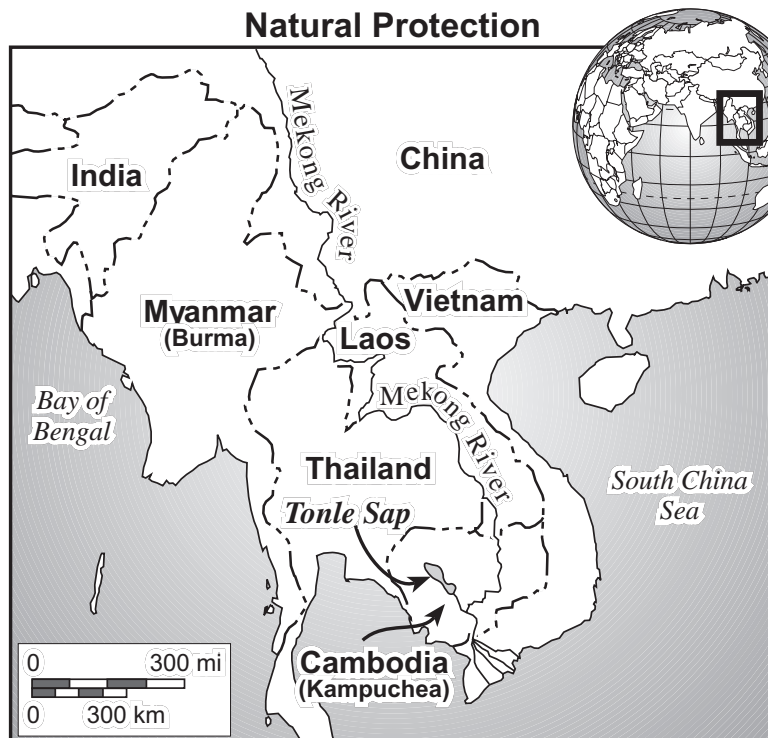
In non-El Niño years, the normal upwelling of cold ocean water along South America keeps the central Pacific relatively cool and the Asian monsoons usually arrive on time. La Niñas represent the peak of inter-El Niño periods when the cold water in the Pacific is at its greatest. Although any non-El Niño year will typically result in an average Asian monsoon, when La Niñas form, the strength of the monsoons appear increase.

Over the past year, La Niña has been moderately strong and South and Southeast Asia have seen exceptionally heavy monsoon precipitation. The Mekong's ability to handle its normal floodwaters by storing some in Tonle Sap has been overtaxed. With the whole region receiving such heavy precipitation, Tonle Sap was overflowing long before the end of the summer.

Such is the case all across South and Southeast Asia's low plains. Many in these heavily populated regions continuously struggle with too little or too much water. This year has been exceptional. Few Vietnamese and Cambodians are old enough to remember greater floods.

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Drenching downpours and thunderstorms bring 40 to 100 inches (102 to 254 cm.) or more of annual precipitation, virtually all falling between May and September. Sometimes additional rains from passing typhoons in the South China Sea or cyclones in the Indian Ocean punctuate the end of the monsoon season.

Vietnam's Mekong Delta and