

# [A blue Mekong means sinking biodiversity and hard times for river communities](#)

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*After the unusual change of color of the Mekong River last year, environmental expert Santiparp Siriwattanaphaiboon warned that manmade changes “will eventually bring an end to the civilization of those living on the banks of the Mekong.”*

The waters of the Mekong River have traditionally been a muddy brown. Recently its waters have turned blue, a sign of an emerging natural and social calamity.

*The Isaan Record's* Yodsapon Kerdviboon talks to Santiparp Siriwattanaphaiboon, a lecturer at Udon Thani Rajabhat University's Department of Environmental Science, about the recent phenomenon.

The change in the Mekong River's color, Santiparp explains, “is because the Mekong River is not now flowing naturally. When not flowing naturally, soil and sediments from fossils in the water drop to the bottom of the river.” This process, he says, turns the water's color to blue.



Santiparp Siriwattanaphai boon, a lecturer at Udon Thani Rajabhat University's Department of Environmental Science, focuses on river ecology and natural resource management in Northeast Thailand.

[Springing from its source](#) in the Tibetan Plateau, the Mekong River picks up water from melting glaciers before flowing through continuously changing climates. When the river arrives in Thailand and Laos, the climate becomes hot. In Vietnam, it becomes humid.

“The water from melting glaciers [in the mountains of Tibet] brings soil and sediment into the Mekong River, says Santiparp. “At the same time, when the water flows through tropical forests, it gathers sediment from the forests, which causes the Mekong River to fill with nutrients.”

As the river flows through different climates, picking up various nutrients along the way, its water becomes populated by various aquatic animals, creating a specific environment with a high biodiversity.

The changed color of the Mekong's waters concerns Santiparp because when the water is clear, it means that the sediments are not flowing naturally, leading to a disruption of the river food chain.

“When the water is clear, nutrients in the sediment will not flow naturally. When

the water doesn't have any nutrients, it will affect aquatic animals and water plants," Santiparp explains. "It will eventually result in fewer aquatic animals, affecting the food security of those living along the banks of the Mekong."

### **Restricting the flow of water**

The construction of dams along the Mekong is disrupting the natural flow of the river, Santiparp argues. Dams not only restrict the flow of water but also trap sediment and prevent it from reaching the various rock formations in the river. Sediments are sources of food for fish which hide and lay eggs inside the rock formations.

"Rock formations are breeding grounds for fish, and they also trap natural sediment. This causes water in that area to be appropriate for fish, resulting in an increase in the amount of fish," Santiparp says.

The Mekong River currently hosts 23 dams, with 11 in China, seven in Laos, three in Cambodia and another two straddling the Thai-Laos border.

"The dams in the Mekong River will cause an enormous change in the river that might be irreversible. The Mekong River will not be the same," Santiparp argues.



Villagers living on the banks of the Mekong River in Ban Ta Mui, Huay Pai subdistrict of Ubon



Ratchathani's Khong Chiam district report that they are catching many fewer fish than before. Photo by Panumas Sanguanwong.

## **Disrupting people's way of life**

The changes to the Mekong River have definitely affected those living along its banks, especially fishermen. In the past when the river was still abundant with nutrients, people could make a living selling fish. But in recent years, fishermen [have been catching fewer fish, resulting in lower incomes.](#)

Santiparp warns that it's not only the loss of fisheries that affect riverine community economies. "It's not only the money that they lack," he says. "but also other resources."

Santiparp explains that every river is subjected to natural changes and people along the Mekong have been adapting to these changes for centuries. But the current changes are occurring much faster than ever before.

"In the past, rivers would change, but it would be a slow change. Gradual changes lead to animals and human beings to be able to adapt," he says. "But nowadays, the river has been forced to change by mankind."



Small fish and shrimp from the Mekong River have been a source of income for villagers living along

the banks of the Mekong in Ban Ta Mui, Huay Phai subdistrict of Ubon Ratchathani's Khong Chiam district. Photo by Panumas Sanguanwong.

The Mekong River has become a helpless target for profit-seeking investors and companies constructing dams and producing electricity. But those who depend on the Mekong River to make a living are forced to deal with the rapid changes caused by these projects. Those unable to adapt often have to move out of the villages and migrate to work in the city. The communities along the banks of the Mekong River are slowly becoming depopulated.

“When there are no people, there is no way of life, no beliefs, and no culture,” Santiparp says. “The civilization of those living along the banks of the Mekong will eventually come to an end.”

*Interview by Yodsapon Kerdviboon, [first published in Thai](#) on 6 January 2020.  
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