

The Mekong Feeds Millions

Dams Threaten Southeast Asia's Vital Lifeline

The Mekong is the longest river in Southeast Asia, and the twelfth longest river in the world. **The Mekong supports the livelihoods and food security of 7 in 10 of its basin's inhabitants** through agriculture and one of the most productive and diverse freshwater fisheries in the world. Their livelihoods are threatened by 82 existing dams in the watershed and a further 153 under construction or planned, including 11 dams that would block the lower mainstream Mekong.



More than 60 million people live in the Lower Mekong Basin, and half of them live within 15km of the river. The Mekong is a lifeline for over 70 ethnic groups. It is known by many names: near its headwaters it is called the **Turbulent River**. Downstream it is the **Mother of Waters**. And near its delta, it is called the **Nine-tailed Dragon**.

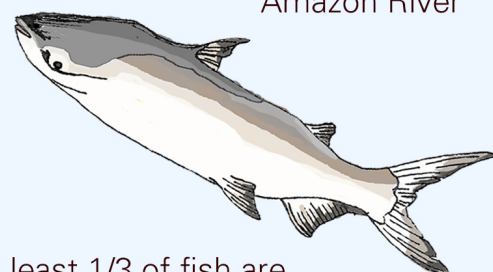


THE WORLD'S LARGEST INLAND FISHERY AT RISK

Inland fisheries in the lower Mekong Basin produce up to **2.5 million tonnes** of fish per year



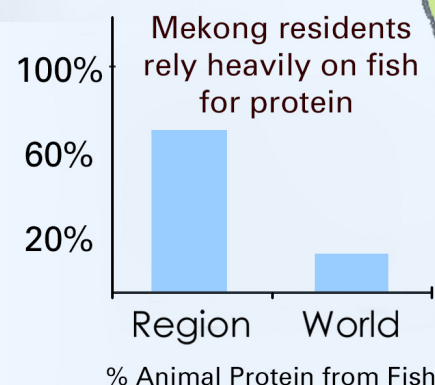
The river's biological diversity is second only to the Amazon River



This is **7-22%** of global freshwater production

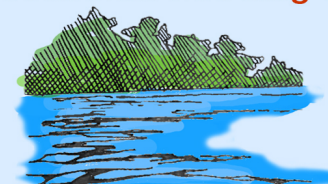
... and worth ~ **\$4.2-7.6 billion**

At least 1/3 of fish are migratory, like the Mekong Giant Catfish



DAMMING THE FLOW THREATENS FOOD SECURITY

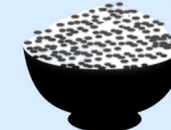
Seasonal flooding is key to productive farms and fisheries health



Floodwaters inundate land and carry valuable nutrients and sediment



Nutrients stimulate the food web and enrich soil



Crops are grown to be eaten or sold and fish stocks are renewed



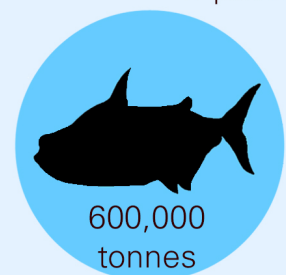
The sediment load of the Mekong could be drastically reduced

However, hydropower projects in China and the 3S rivers will cut the sediment load (~160-165 million tonnes/yr) by **50%**

With the addition of planned mainstream dams the load would be **halved again**

Mainstream dams would devastate fisheries . . .

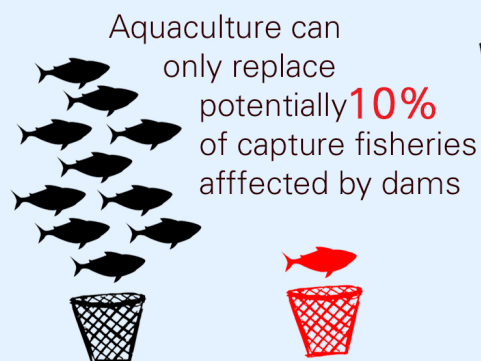
If planned mainstream dams are built, the likely loss in fish capture could be over 600,000 tonnes fish/yr



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2X the annual livestock production of **CAMBODIA & LAOS**



Aquaculture can only replace potentially **10%** of capture fisheries affected by dams

Huge amounts of land and water resources would be needed to replace lost fish protein and calories with livestock products

+19-63% increase in land used

+6-17% increase in water used

-\$274 billion

Losses to ecosystem services from dam development have been estimated as high as \$274 billion, indicating the danger that **huge and unanticipated losses** could occur



The dams will cause a net loss in agricultural production

Losses due to inundation by dams, lost nutrients from sediment trapping, and lost riverbank gardens totals **\$50 million/yr**



SOURCES

- 1) "Dams on the Mekong River: Lost fish protein and the implications for land and water resources," Orr et al. (2012)
- 2) "Fisheries of the Mekong River Basin," Hurtle (2009)
- 3) "Mekong Fisheries and the current situation on Mekong mainstream dams," Chheng Phen (2014)
- 4) "State of the World's Rivers," International Rivers (2014)
- 5) "Strategic Environmental Assessment of Hydropower on the Mekong Mainstream," ICEM (2010)
- 6) "The State of World Fisheries and Aquaculture," FAO of the UN (2014)
- 7) World Wildlife Federation

