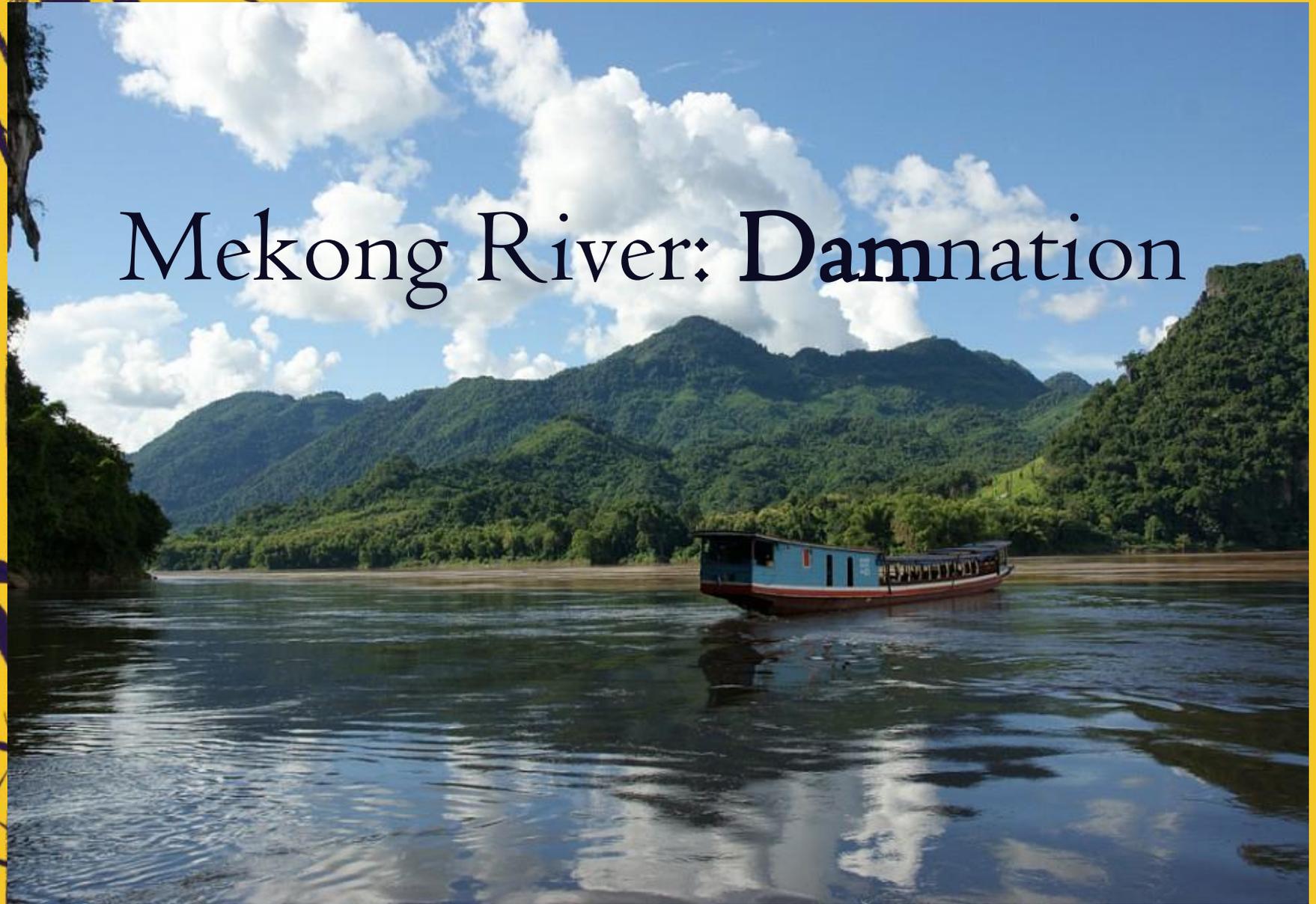


Mekong River: Damnation





<https://www.youtube.com/watch?v=N6N2SX5Id7w>

Some Basic Facts

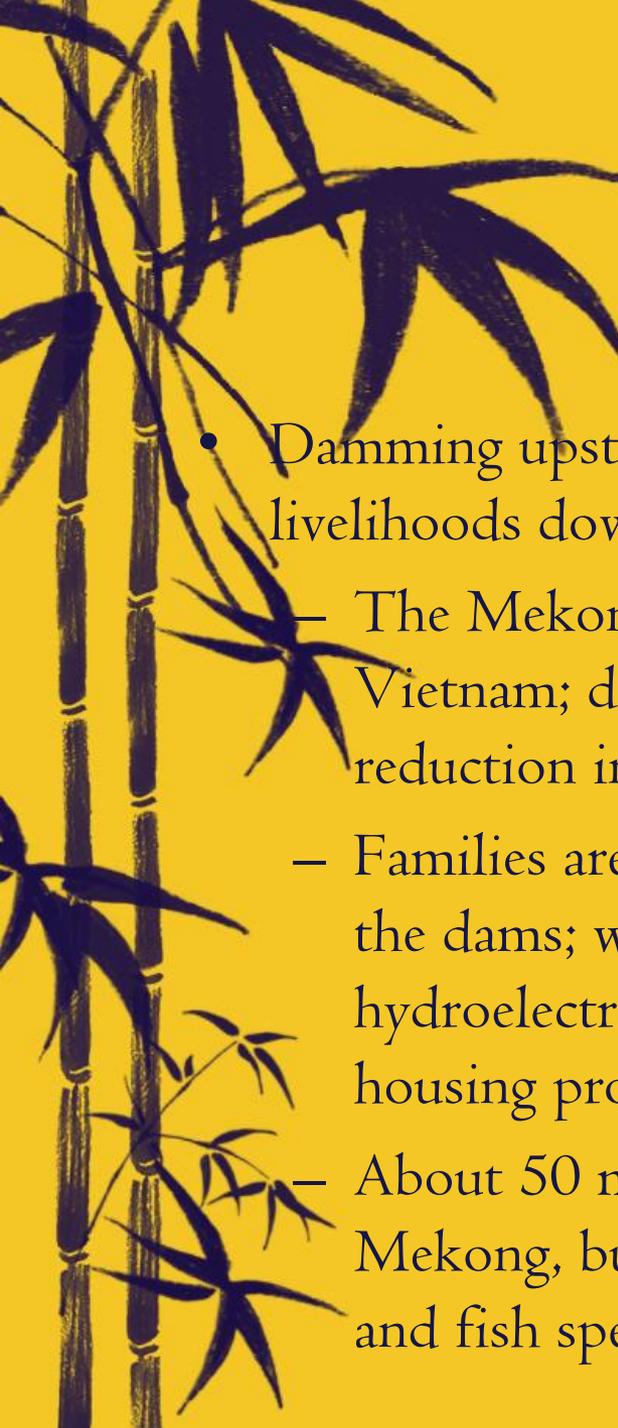
- The Mekong River is one of the top ten largest rivers in the world; it is the seventh in water discharge and the tenth in length at 2,703 miles
- The entire length of the river rises from China through Myanmar, Laos, Cambodia, Thailand, the Vietnamese Delta and into the South China Sea
- It is the least developed river used by 60 million people



Environmental Damage

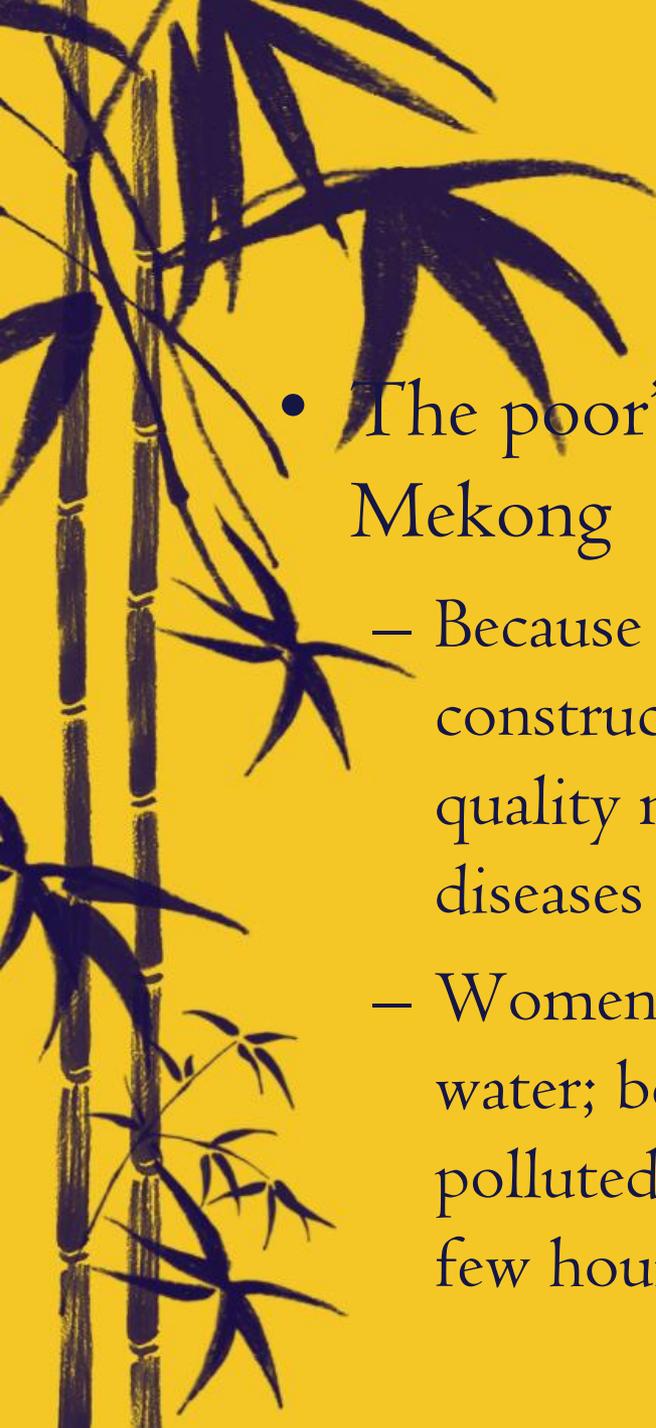


- Chinese over damming and improper waste management has led to the endangerment of sea life
- Species such as the Irrawaddy dolphin are severely endangered due to fisheries bycatch and habitat degradation; there are as few as 78 dolphins in the Mekong Delta now
 - Various species of giant catfish that are depended on for local food security are losing habitats to dam construction
 - Chemical and industrial runoff leads to degradation of water quality, algal blooms and deformities in animals



Dam the People

- Damming upstream has led to the endangerment of local livelihoods downstream
 - The Mekong Delta is the primary source of rice production in Vietnam; damming reduces the water quality, leading to reduction in rice productivity and cropland salinization
 - Families are forced to evacuate their villages to make room for the dams; while some enjoy conveniences powered by hydroelectricity, many have still not received compensation or housing promised
 - About 50 million people depend on fish caught in the Mekong, but dam construction has led to losses of fisheries and fish species; the urge to dam leads to food crises

A decorative illustration of bamboo stalks and leaves in a dark blue color, positioned on the left side of the slide against a yellow background.

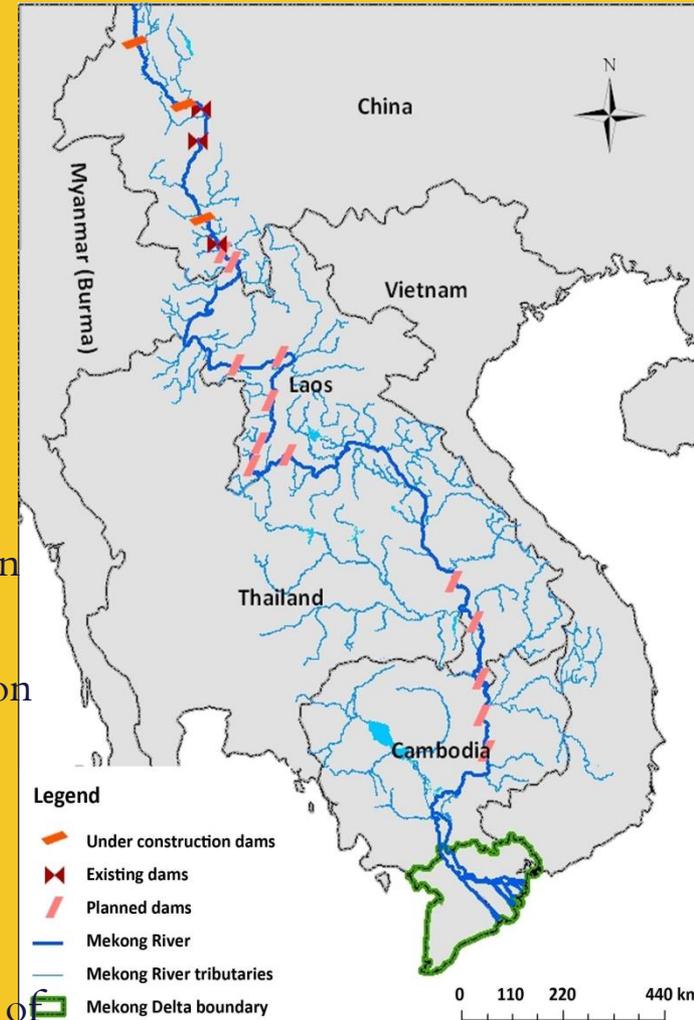
Sanitation

- The poor's lives are directly tied to the Mekong
 - Because of lack of sanitation systems coupled with construction runoff from damming degrades water quality making people are prone to water borne diseases such as diarrhea, malaria and dengue fever
 - Women in particular spend hours a day collecting water; bottled water can cost 3-10 times local polluted water and piped water is only available a few hours a day

Cross-Border Conflicts

Who?

- China
 - Vietnam
 - Myanmar
 - Laos
 - Thailand
 - Cambodia
- 15 dams have been constructed or under construction since 2005 and 11 future plans to build by China
 - Concerned citizens in SE Asia demanding cancellation of dams
 - River communities demanding rights to be upheld
 - Government leaders calling for a delay in future construction
 - Environmentalists trying to educate decision makers of the severe impacts



Sources:

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China vs. SE Asia

China has the upper hand by controlling the headwaters of the Mekong River

Livelihood of neighboring countries:

- Health

- Polluted waters from pesticides, fertilizers, waste and agricultural run-off from China (80 million people in SE Asia lack access to clean water)
- Also affecting fish species such as catfish, which 30% SE Asians consume most of their protein from

- Economy

- 40% of the world's poorest people already live in SE Asia
- Rice production and fisheries around the river are being hindered, which accounts for the greatest exportation in countries such as Vietnam



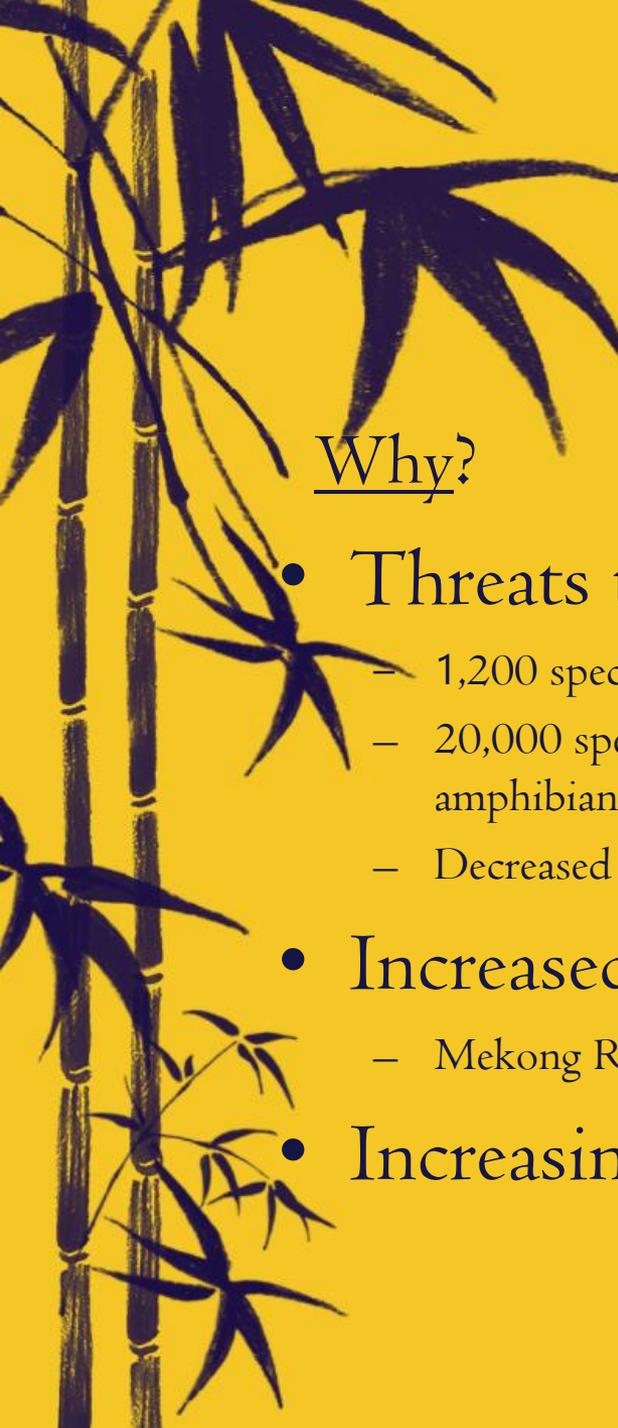
Effects on Region

- Over damming

- Millions of SE Asians rely heavily on the Mekong River, approximately 60 million people
- Chinese dam building is lowering water levels, which is particularly a problem during droughts
- Also traps nutrient rich sediments from being carried downstream
- Increased potential for flood disasters along the river because of tectonic activity (about 2,000 earthquakes averaging a 4.2 mag occurred near SE Asia in the past year)

- Pollution

- Heavy amounts of chromium, iron and copper found in areas south of hydroelectric dams
- Many organic pollutants found in Lower Mekong's water (toxic chemicals to humans)

A decorative illustration of bamboo stalks and leaves in a dark blue color, positioned on the left side of the slide against a yellow background.

Future Concerns

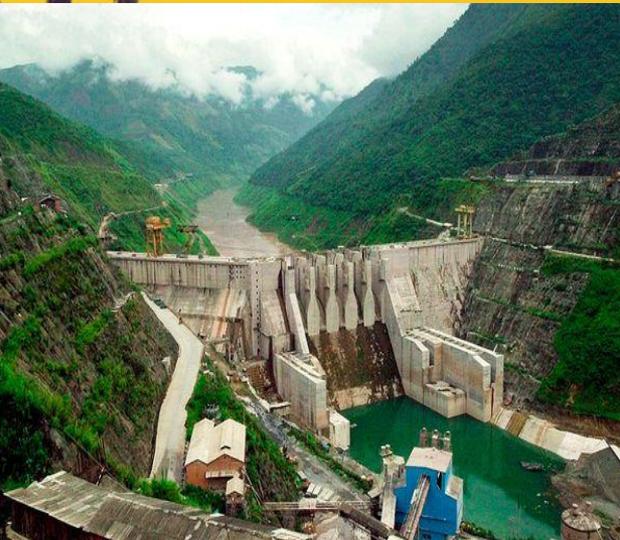
Why?

- Threats to Ecosystems
 - 1,200 species of fish
 - 20,000 species of plants, 1,200 bird species, 800 species of reptiles and amphibians, and 430 mammal species
 - Decreased water flows, high potential for droughts
- Increased Chinese Control
 - Mekong River Commission been in affect for 15 years but China has yet to join
- Increasing Population, increasing demands

Effects on the World

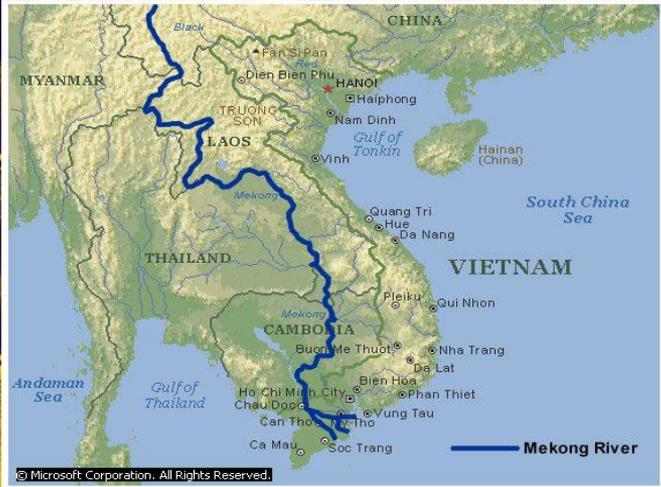


- Global impacts of climate change, pollution, agriculture, logging, aquarium trade, urban development, and population
- Structural changes affect habitat
- Water distribution
- Climate change affecting precipitation and water temperature
- Health affected by poor water quality
- Economy effected because Mekong river effects major exporters



Solutions

- Remove obsolete dams
- Design new dams that take into account natural pattern of river flows
- Reduce need
- More efficient irrigation techniques
- Increase capture of rainwater
- Conservation
- Avoid use of harmful chemicals



A decorative illustration of bamboo stalks and leaves in a dark green color, positioned on the left side of the slide against a light green background.

Conclusion and Interesting Findings

- This river is depended on by more countries than other major rivers in the World
- China recently surpassed the United States on energy needs, therefore gains much from hydroelectric dams
- Second only to the Amazon in regards to fish biodiversity
- China dams a lot more than we thought at one time
- Dam you China!



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