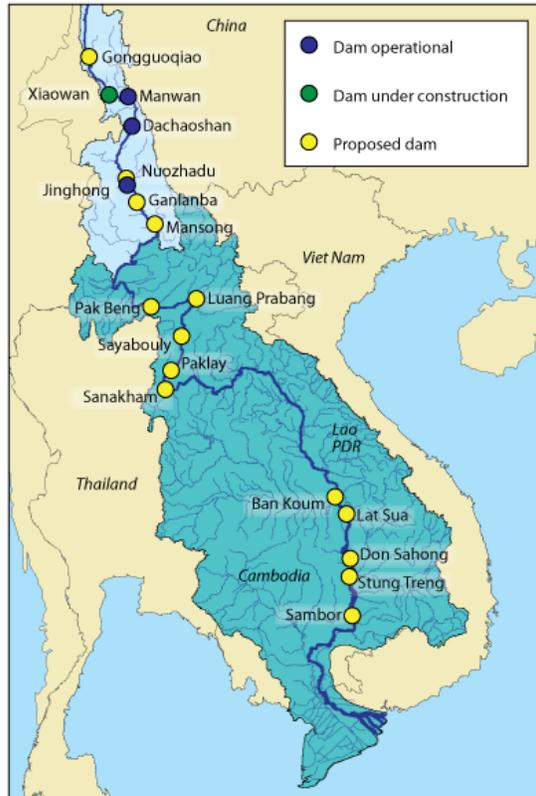


## Dams as Barriers to Fish Migration in the Mekong River and Possibilities for Mitigation

Glenn Cada participated in an Expert Group Meeting sponsored by the Mekong River Commission (MRC) Fisheries Programme in Vientiane, Laos on September 22-23, 2008. Seventeen scientists from around the world met in closed session to advise the MRC on the possibility of mitigating impacts of proposed hydroelectric dams on fish communities. Specifically, the group addressed the following questions:



What is the importance of fish migration in the Mekong River?

What is a barrier to fish migration?

Would a barrier to migration have the same effect on all fish species?

Can fish ladders be used to provide upstream passage for migrating fishes?

Can other types of fish passes (such as fish locks and fish elevators) be used to enable fish to pass high-level dams?

Should fish passes be built if the upstream habitat has been altered?

Can fish survive downstream migration over spillways and through hydroelectric turbines?

Do fish friendly turbines produce less electricity than traditional turbines?

Are there mechanisms for guiding fish away from entrainment in turbines, and through an alternative route for downstream migration?

How do survivals of fish passing hydroelectric dams via different routes (turbine, screening and bypass, spill, trap-and-transport) compare?

What general conclusions can be made, based on experience, about the effects of dams on fisheries resources in tropical rivers?

What measures can be undertaken to maximize the yield from fisheries created in reservoirs used for hydropower production?

What measures can be undertaken to maintain fisheries production in rivers downstream of dams?

How does the yield from fisheries created in impoundments after dam construction compare with the yield lost from the former river-based fishery?

The products of the conference were (1) an Expert Meeting Report and detailed recommendations; (2) Fish Passage Presentation of the findings of the Expert Meeting to a subsequent Regional Multi-Stakeholder Consultation meeting; and (3) a scholarly paper.