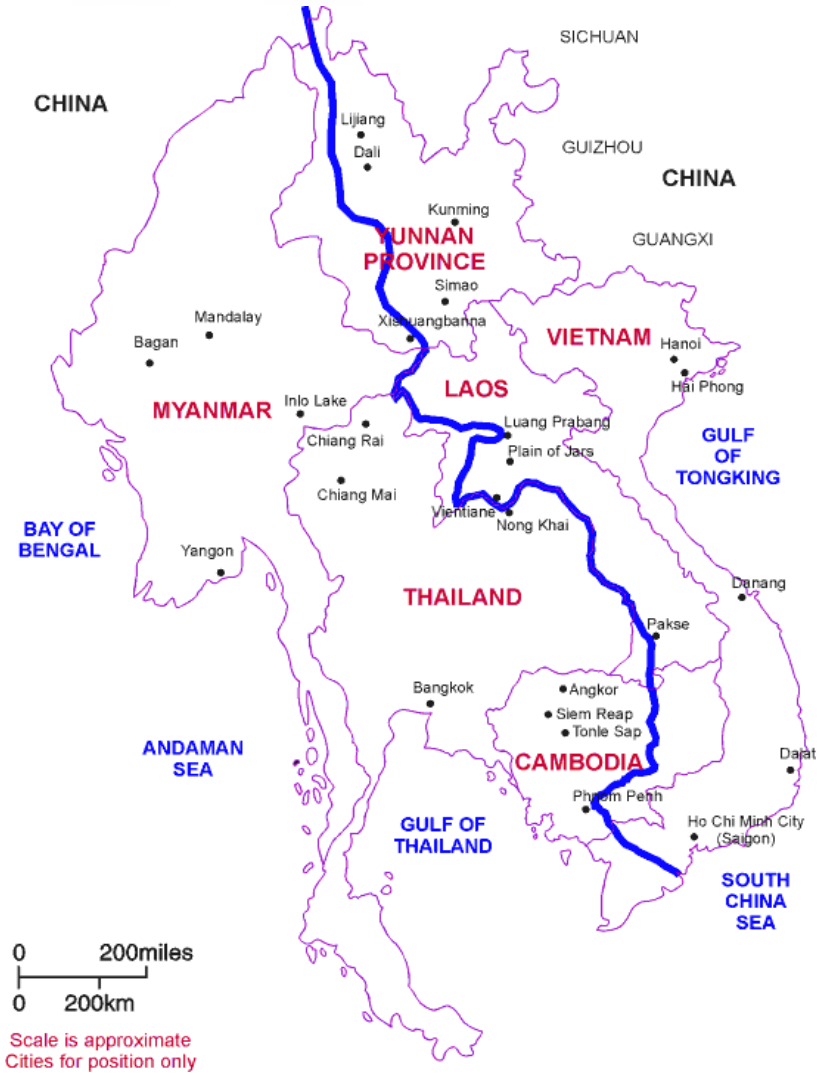
The Fate of the Sesan River in Lower Mekong River Basin



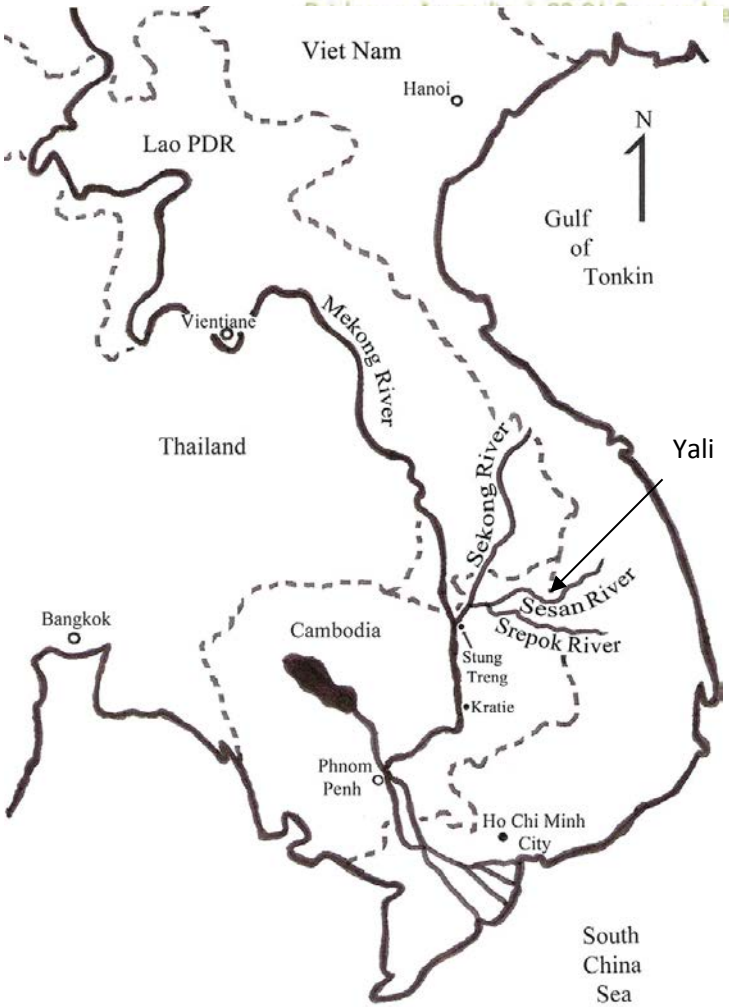
Reba Paul, Post Graduate Student, International Water Center/University of Queensland and Former Programme Coordinator, GWP-South Asia

The Sesan River

- The Sesan is a major tributary of Lower Mekong River. It originates in central highland of Vietnam and passes through Vietnam and Cambodia and falls into South China sea.
- The river is 462 km long, has 83 tributaries and a catchment of 18600 sq km. 60% of the catchment located in Vietnam and 40% in Cambodia.
- About 700,000 people live along the river basin and almost all of them belong to ethnic minority (Kinh, Ba na, Gia Rai, Xe dang, Gie, Tay and Brau and others).
- They are entirely are dependant for their food, livelihoods and culture on the river and its resources.
- The basin economy is manly agriculture based.



Source: Physical map of Mekong River (Mekongexpress)

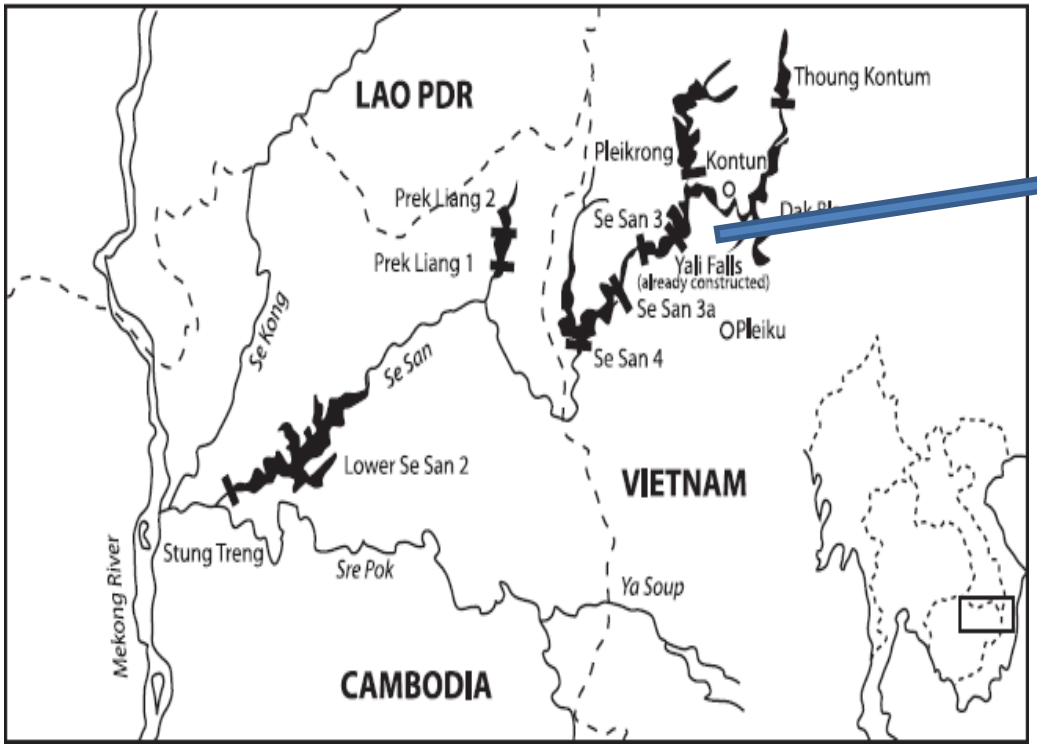


Mekong Lower basin and its tributaries (Baird and Mean, 2005)

Hydropower Development

Sl. No	Hydropower Project	Catchment Sq.km	Installed Capacity	Status
1	Yali Falls Dam	7455	720	Under operation from 1996 (partial) and fully operated in 2001
2	Sesan 3	7788	260	Commissioned in 2002
3	Sesan 3A	8084	108	Commissioned in 2003
4	Sesan 4	9326	330	Commissioned in 2004
5	Upper Kon Tum	350	220	Commissioned in 2006
6	Pleikrong	3216	100	Commissioned in 2003

Dams on Sesan River and Yali Falls Dam



69 meter high and 720 MW 70 km upstream of Cambodian border in Vietnam, 64.5 sq. km reservoir, construction started in 1993, completed 1996

Cost US$ 1 billion supported by Government of Russia, Ukraine, Vietnan, Swiss and the World Bank

Consequences of Yali Falls Dam

- Changed hydrology and ecology and blocked reproductive migration of fish (important food sources of Tonle Sap lake).
- At least 39 people including children drowned into the river from erratic release of water without any notification and damaged crops, houses, livestock, boats, fishing gears and other resources.
- 55,000 ethnic villagers in Ratanakiri and Stung Treng provinces of Cambodia and many thousands in central highland of Vietnam continue to suffer from the losses and they are not compensated yet.

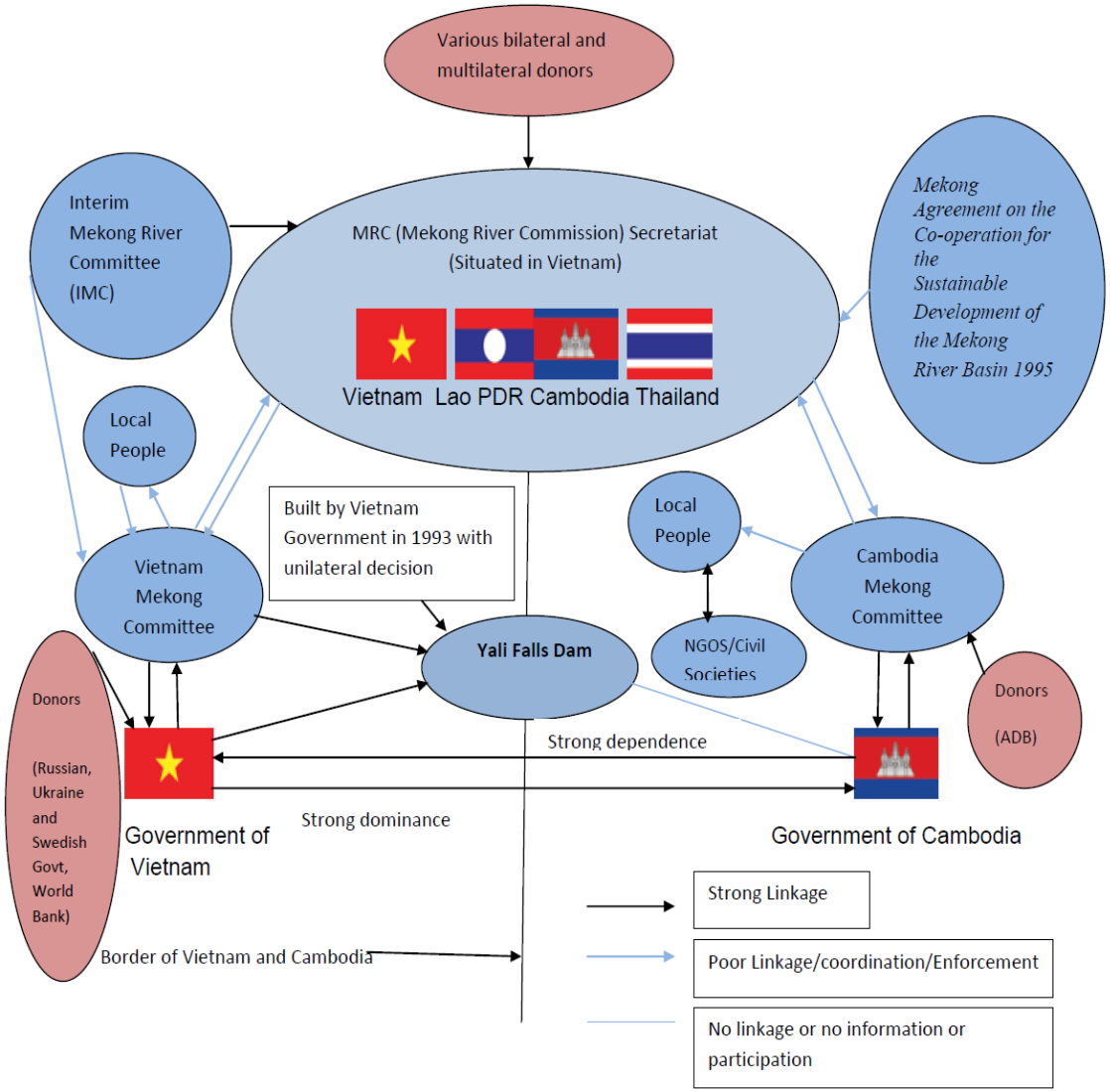
Drivers of such consequences

- Strong national interests.

(unilateral decision, ignorance of EIA/SIA, violation international law and agreement)

- Short sighted development policies (no science based evaluation of costs-benefits and consideration of equity issues)
- Lack of capacity of national governments to wisely engage private sectors.
- Poor capacity of downstream country and its dependence on powerful country.

Political Economy and Governance failure

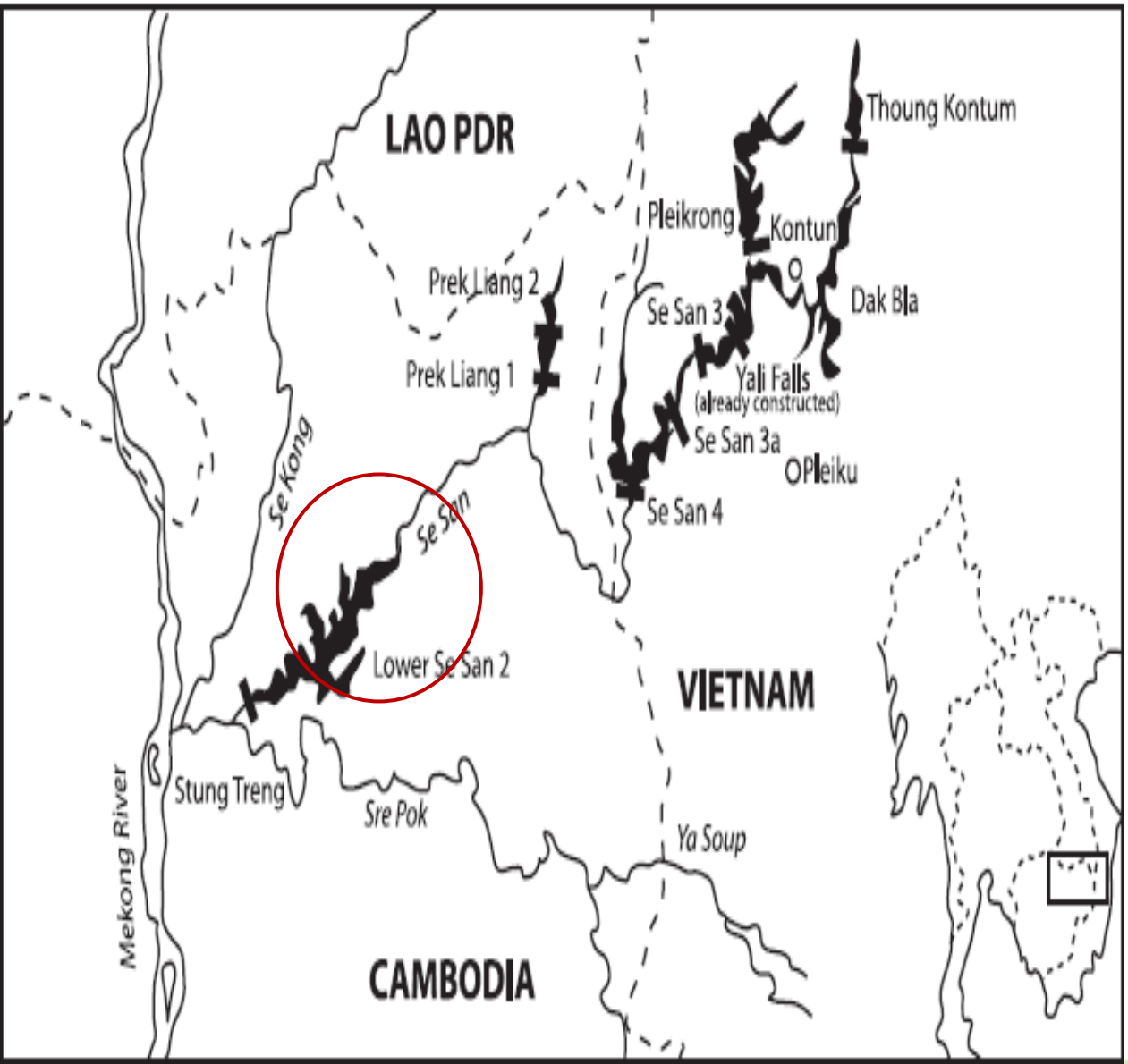


Lesson Learnt from Yali Falls Dam ignored

- Despite the negative consequences from Yali Falls dam, Vietnam Government have undertaken five more hydropower projects which are either under operation or construction. In all projects , people participation is not yet being considered.

- In Cambodia, communities formed the Sesan-Srepok-Sekong (3S) Rivers Protection Network to create pressure on the Vietnam and Cambodia Government for compensation and prior notification of the release of water from dam. International Rivers (IR) is working to support the Network to halt further dam construction on the Sesan River until community demands are met.

Lower Sesan 2 Dam



Sesan 2: 75 m high, 400 MW

5000 people to be displaced.

Similar impacts as of Yali Falls Dam

30,000 ha agricultural and forest

Fish resources will be declined further

Severely protested by 3S River Network

Proposed Hydropower from Mainstream LMB

- The 12 proposed mainstream dams on Lower Mekong can produce up to 14,697 MW which can meet only 6-8% of the requirement of the Lower Mekong Basin by 2030 (Stimson, USA).
- Most of the power would go to the Thai grid.
- But this will be achieved at the cost of the Lower Mekong river.

Conclusion

- Any large dam construction has negative impacts but those could be minimized through comprehensive science based Transboundary EIA and SIA and proper compensation plan.
- The countries should follow international laws and agreement and respect the equity issues
- The negative impacts on food security, livelihoods, water availability and water quality have huge potential to jeopardize the region's hard-won regional peace and stability (Stimson, USA).