



Rencontre de l'eau sur la Coopération décentralisée en Loire-Bretagne

- Integrated management of Stung Sen River
 - tributary of Tonlé Sap Lake
 - CAMBODIA

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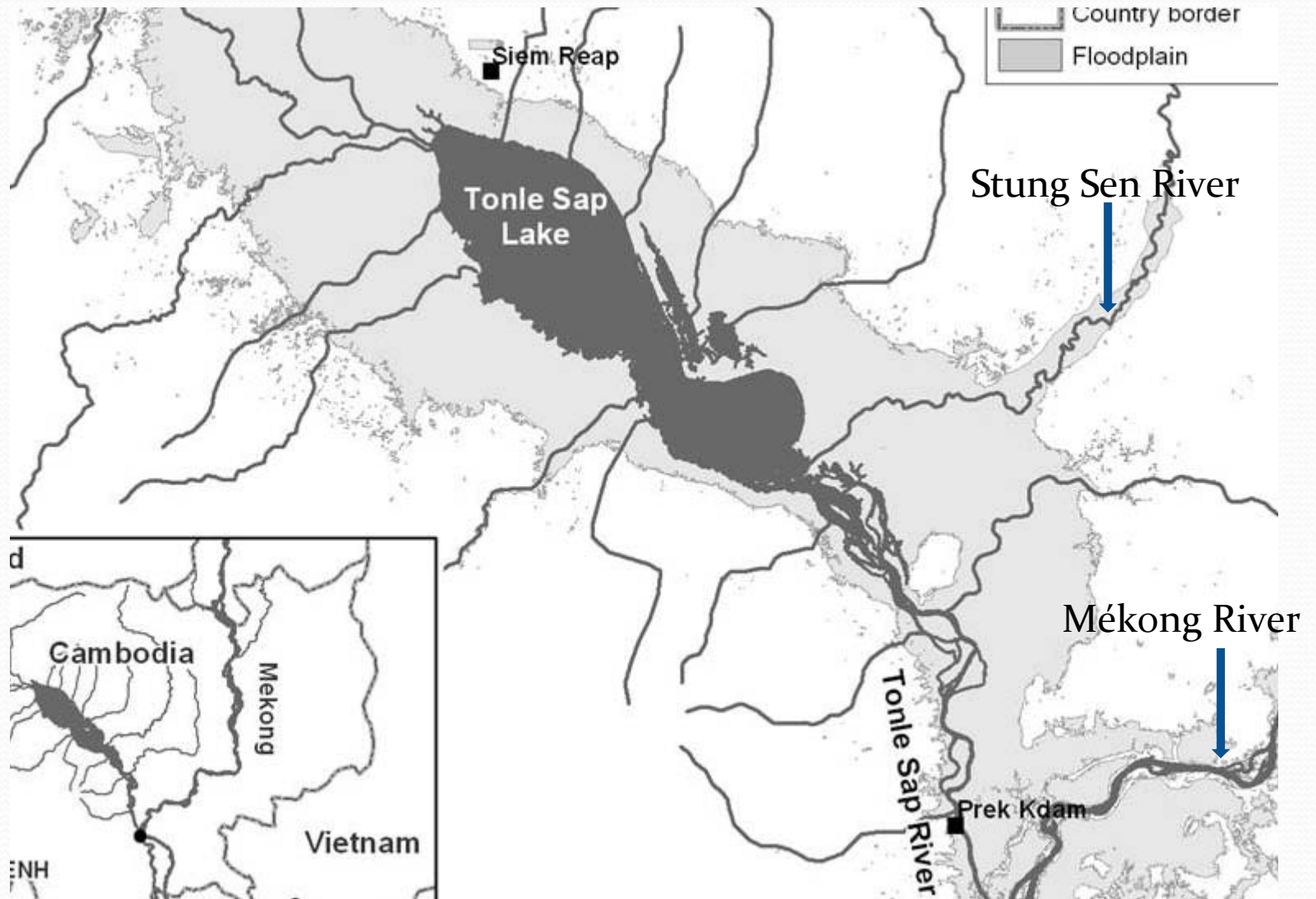
13 September 2011, Angers meeting

- MEKONG & TONLE SAP LAKE

- Hydrology of Tonle Sap Lake depends on flow regime of Mekong River during the monsoon season.
- In the rainy season in June, Tonle Sap Lake fills up from the Mékong River until October and in November the Lake flows back into the Mékong and Bassac River during the dry season.

TONLE SAP LAKE

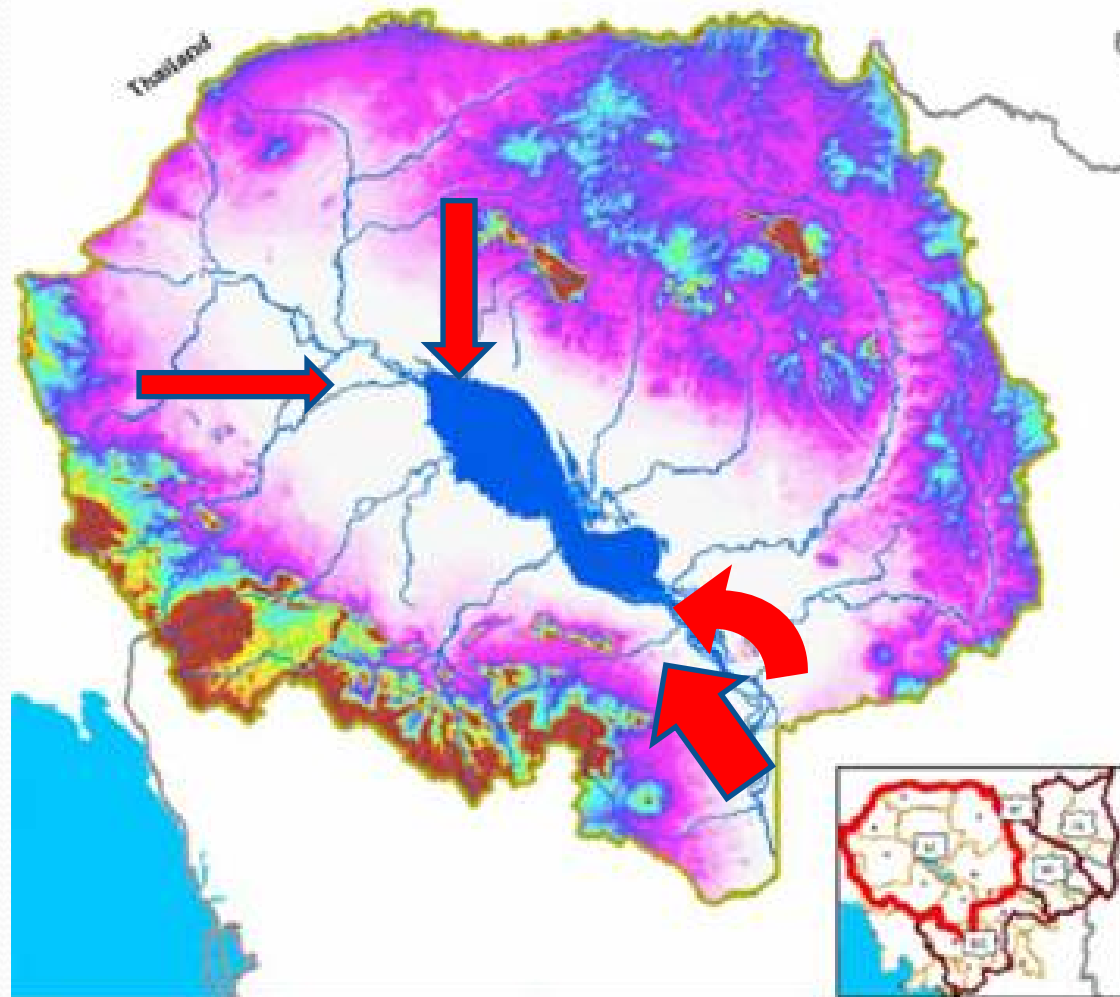
- Tonle Sap Lake is the largest freshwater Lake in Southeast Asia.
- It covers an area around 250,000ha in the dry season and around 1.6 million ha in the wet season.
- Tonle Sap's water level is 1-2 meters in the dry season and 8-11 meters in the wet season.
- It is a crucial flood regulator as it absorbs 20% of the Mekong River's flood waters.



Water inflows into the Tonle Sap Lake

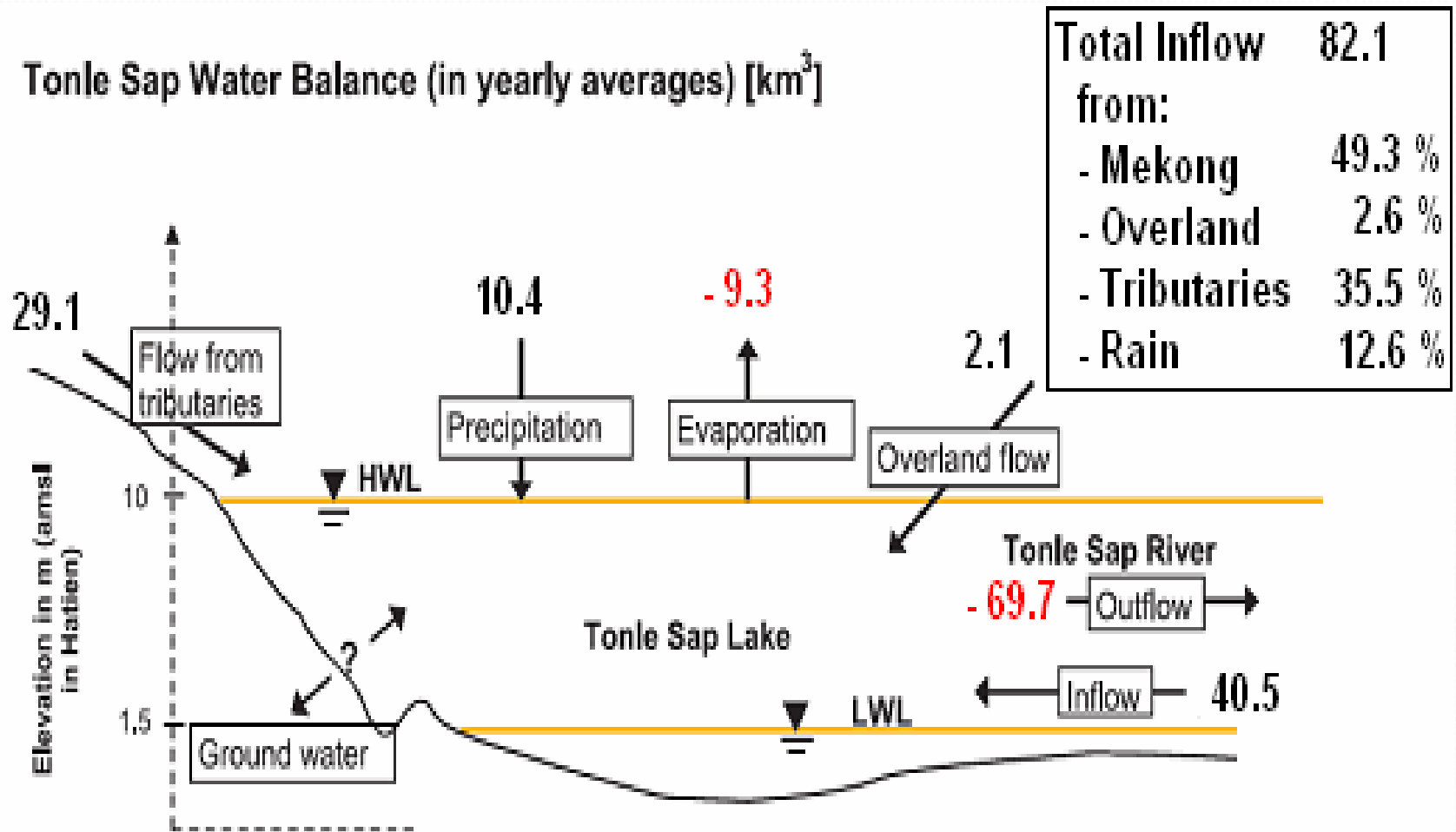
All water flows into the whole area of Tonle Sap Basin

= inflows from all of the tributaries catchments + inflows from the Mekong via the Tonle Sap + inflow via the overland flow.



Tonle Sap Lake Water Balance

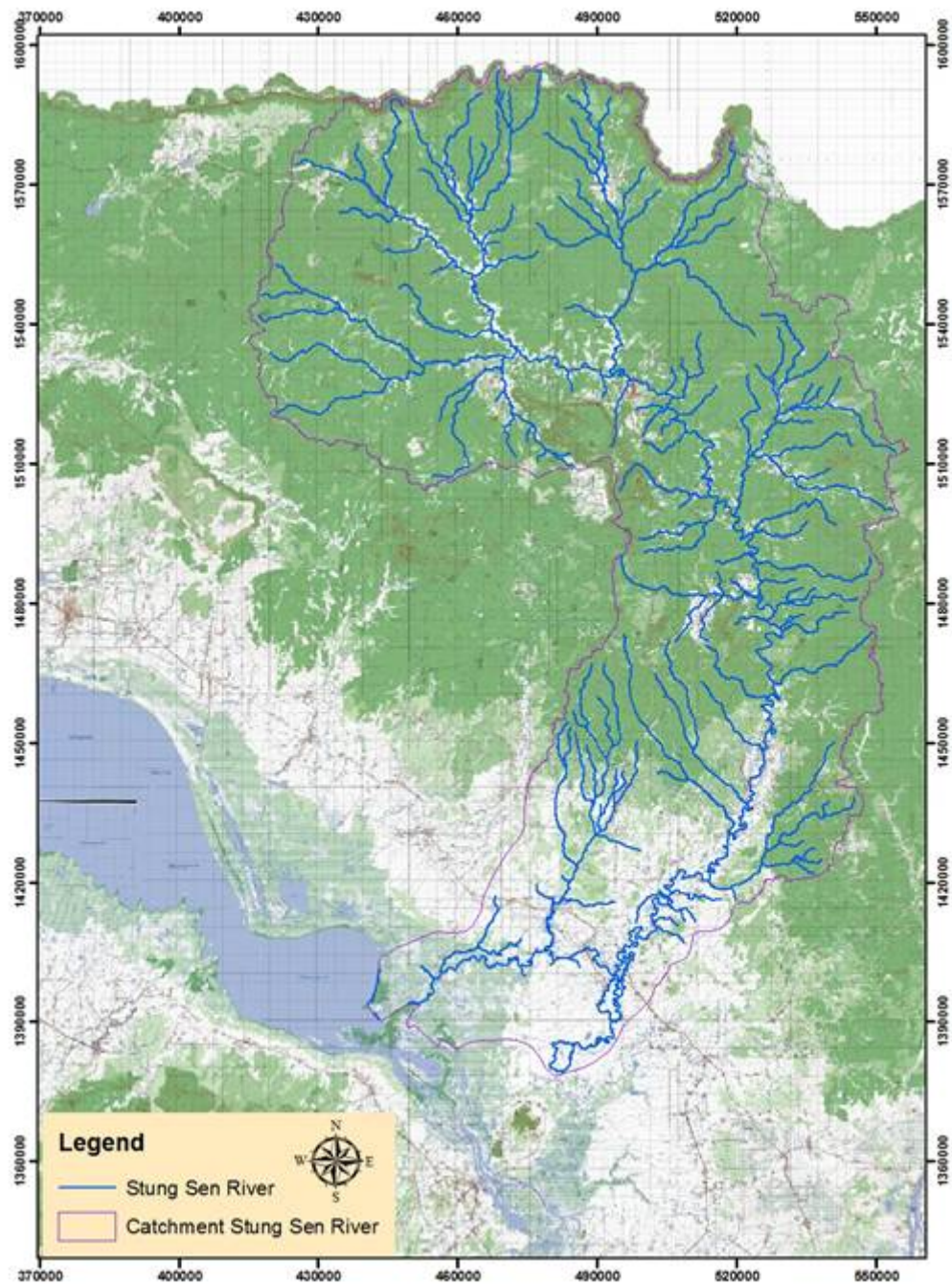
- The water balance was based on the modeling results and the measured values covering the period from 1997 to 2004.



Stung Sen River

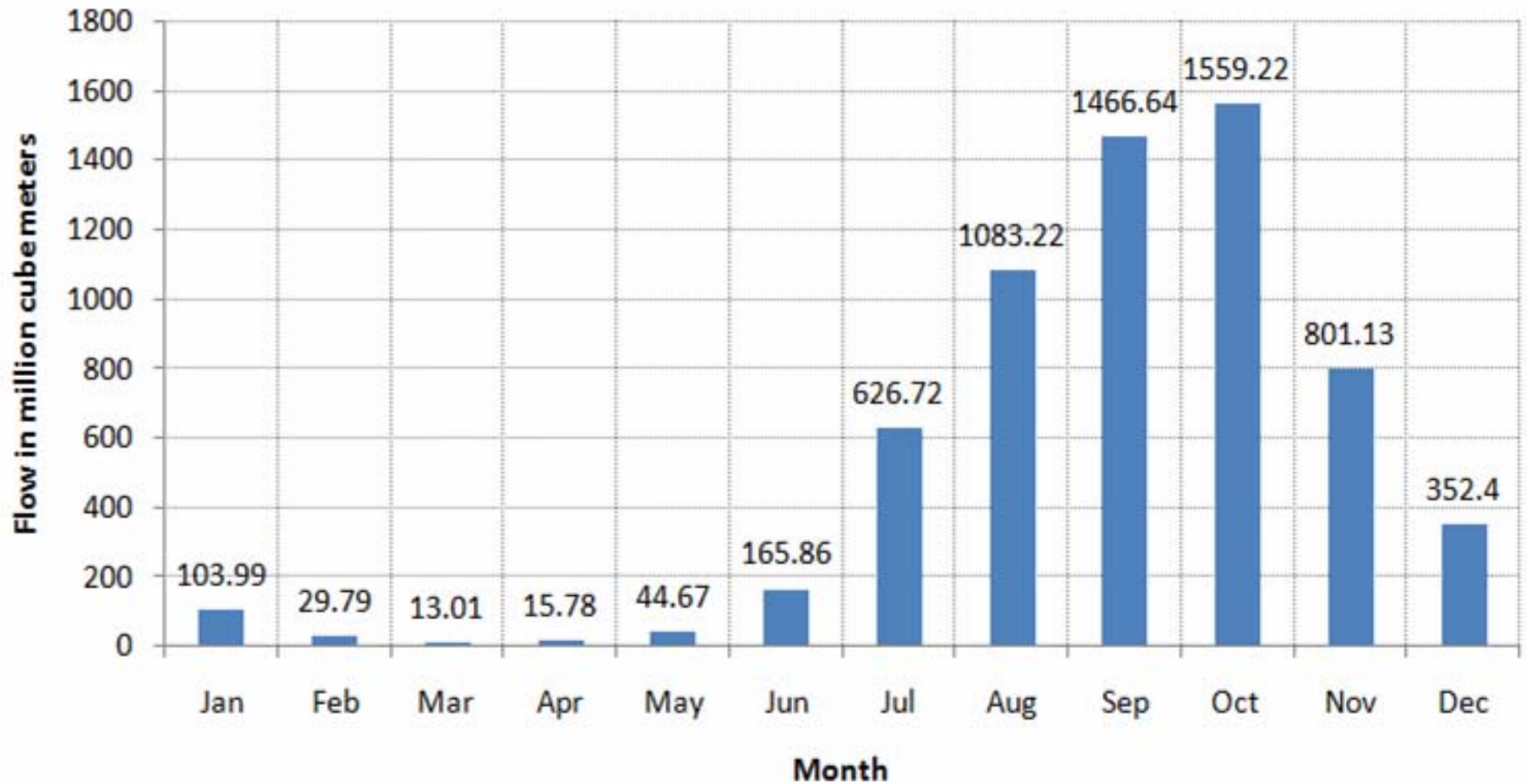
- The Stung Sen River is the largest tributary flow down to the Tonle Sap Lake , contribute around 12.5% fill up Tonle Sap Lake
- Stung Sen River Catchment: 16,344 Km²
- Total length of the Stung Sen River : 508 Km
- Flows through Preah Vihear and Kompong Thom Provinces
- Kompong Thom province: 697 369 inhabitants, city: 54 618 inhabitants
 - Why to study the integrated water resources management in the Stung Sen River?
- Dam/reservoir project in 2015: 2 dams on Stung Sen River
- to irrigate 128 507 ha of cultivated area and to generate hydropower at the 2 dam sites.
- 30 to 40% only of the community has accessed to safe drinking water.
- Intensive agricultural practice and Urban pollution.

Stung Sen River Catchment



Flow of The Stung Sen River

Monthly Flow Distribution of the Stung Sen River at Kompong Thom Station



An aerial photograph of Kampong Thom City, Cambodia. The city is situated along a wide, muddy river that curves through the landscape. A bridge spans the river in the middle ground. The surrounding area is a mix of dense residential buildings, agricultural fields, and some industrial or institutional structures. The overall scene is captured from a high angle, providing a comprehensive view of the city's layout and its relationship to the river.

Kampong Thom City

Thanks for your attention



www.tonlesap.gov.kh

What is Tonle Sap Authority (TSA) ?

The sound development and conservation of Tonle Sap for sustainable livelihood enhancement and sound economic growth while protecting ecological integrity

➤ Stated reasons for establishing TSA include:

- ❖ Royal Government Advisory
- ❖ Monitoring and Evaluation on project implementation
- ❖ Other task that provided by government



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- The intended scope of its activity is broad:
 - ❖ Measure and Protection of Tonle Sap lake and relevant area
 - ❖ Ensuring that the socio-economic status for people living around Tonle Sap lake and relevant area.
 - ❖ the '*coordinate*' multitude of projects in the Tonle Sap lake and relevant area.