

The Mekong River Village Project

- Overview -

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&

Research Partners in China, Myanmar, Laos, Thailand, Cambodia and Vietnam

23 April 2025

The Mekong/Lancang River



China:

- Prof. Dr. Shi Min, College of Economics and Management, Huazhong Agricultural University

Myanmar:

- Mr. Chit Myolwin, Yangon, Consultant

Laos:

- Mr. Phouvong Phami, PhD student Wuhan University

Thailand:

- Mr. Nopporn Tantisirin, Ubon Ratchathani University
- Dr. Somkid Naprom, Udon Thani Rajabat University
- Dr. Chompunuch Nantajit, Ramkamhaeng University
- Ms Suputra Boriwut, Student of Economics, Ramkamhaeng University

Cambodia:

- Mr. Chea Chaeath, Consultant

Vietnam:

- Mrs. My Hao Van, Consultant

Germany:

- Dr. Niels Wendt, IT coordinator
- Prof. Dr. H. Waibel, Overall coordinator

Two major changes in the Mekong River Basin:

1) Establishment of Hydropower Dams:

- 167 hydropower stations in the Basin; 13 directly at the Mekong; another 20 in planning
- Current capacity: 50,000 MW
- Potential Mekong Basin capacity: 1.3 million MW (Ang, et al. 2024, in: Earth Syst. Sci. Data, 16, 1209–1228)
- 10 % of Thailand's energy from Hydropower Dams in Laos

2) Extraction of Sand from Mekong River:

- Started: since late 90ties
- Estimated extraction/year: ~50 million tons (*Bravard et al. 2021*)

- 1) River water flow less predictable (*e.g. Hecht et al, 2019*)
- 2) Risk of droughts and flash floods increases, exacerbated by climate change (*Schmitt et al, 2021*)
- 3) Change in sediment flows and in river bed (*Hackney et al., 2021*)
- 4) Destruction of river banks, loss of farm land (*e.g. Hughes, 2024;*)
- 5) Loss of natural resources, mainly fish&other aquatic resources (*WWF, 2023*)
- 6) Navigation more restricted
- 7) Upstream-Downstream conflicts intensify (*e.g. Oishia&Tajikab, 2024; Singh& Ramachandran, 2019; Kuenzer et al. 2012*)
- 8) Highly diverse research results about economic benefits of Hydropower Dams and their external costs (*e.g. Constanza et al, 2018; MRC, 2011;*)
- 9) Not much is known about the economics of sand extraction

1. Investigate changes in the Mekong River on the livelihoods of rural villages: *“a socio economic survey of Mekong villages”*
2. Assess Hydropower Development in the Mekong Basin: *a case study of the Xayaburi Dam, Laos* (Master Student Uni Hannover)
3. Assess benefits and costs of sand extraction from the Mekong River in Thailand

1) Mekong Village Survey (2023/24)

- Research Partners and Consultants from six Mekong Countries
- Coordination: Prof. H. Waibel, Leibniz University Hannover (LUH)
- Project Assistance:
 - Dr. N. Wendt (LUH/IT consultant)
 - Ms Suputra Boriwut, economics student RU, Bangkok;

2) Survey of Sand Companies along Mekong River in Thailand (2024/25)

- Collaboration with Dr. Chompunuch Nantajit, RU Bangkok
- Coordination: H. Waibel, LUH
- Project Assistance: Ms Suputra Boriwut, RU

3) Economics of Hydropower: Xayaburi Case Study (completed 05/25)

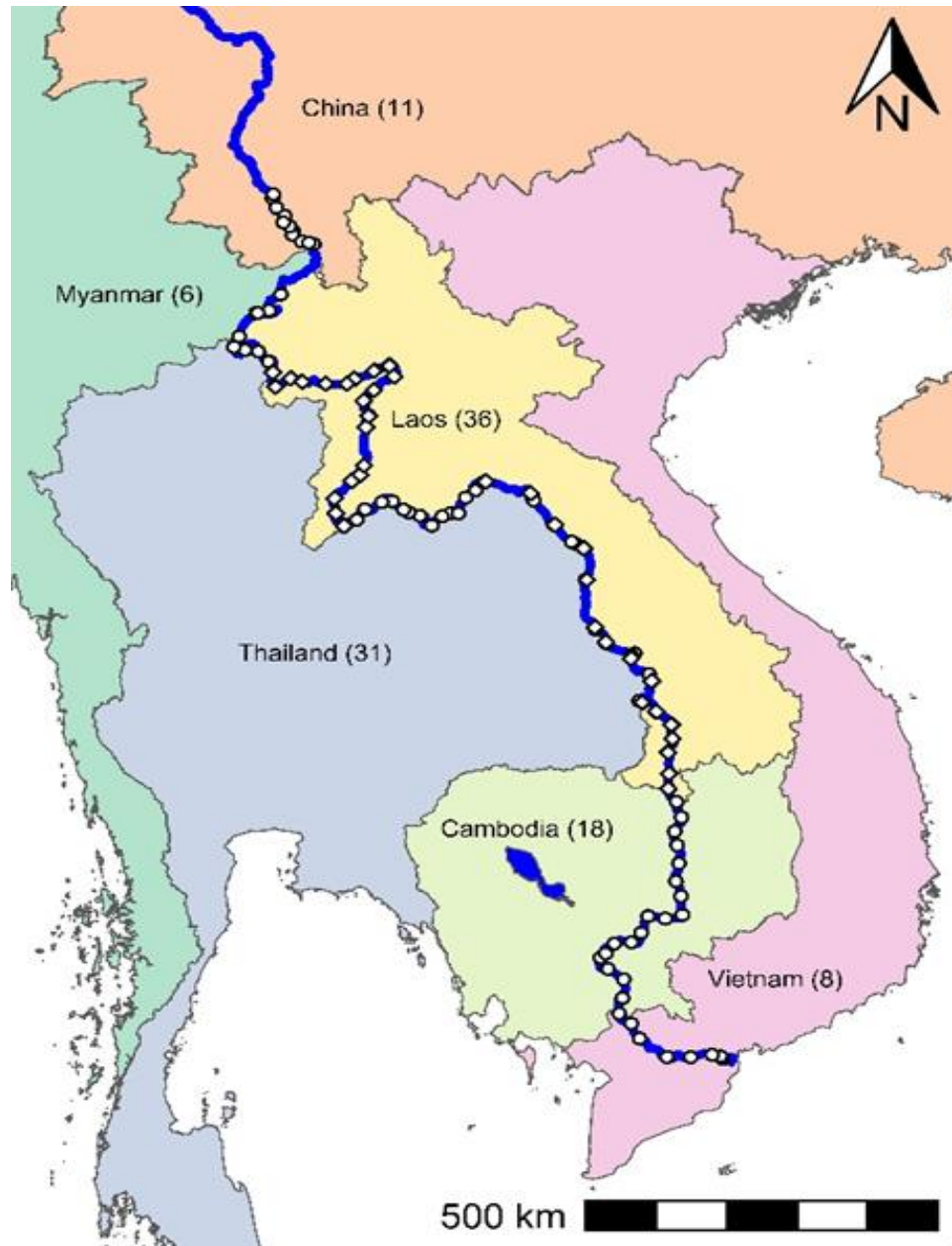
- Master Student J. Leugner, LUH
- Supervised by Prof. M. Breitner, Information Systems Research, LUH
- Co-supervisor: H. Waibel

4) Economic and Geography Research (summer semester 2025)

- Collaboration with Prof. M. Grimm, Institute of Development Economics, University of Passau; supervision of Master thesis topics; co-supervisor: H. Waibel

- 1) Georeferencing the Mekong River
- 2) Establish equal-distance reference points
- 3) Identify Villages along and in proximity to the river
- 4) Three time points: 2003, 2013 and 2023
- 5) Personal Interviews with Village Representatives
- 6) Survey Instrument includes quantitative (e.g. changes in livelihoods, natural resources & land use) and open-ended questions (e.g. impact of changes in the river, future needs) plus: GPS location, Village area, Satellite data, etc.

Map of interviewed Mekong villages, by country



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- Master thesis topics, Institute of Development Economics, University of Passau, Prof. M. Grimm
- Possible Topics (see outline documents)
 1. The role of changes in the Mekong River for Village Development
 2. The effect of hydropwer dams on the development prospects of Mekong villages
 3. Perception of changes in the Mekong River for prospects of village development (may be sociology?)
 4. Village development inside and outside the Mekong Basin
 5. Estimation of the value of sand extraction and their costs from Mekong River in Thailand

Other activities: a Mekong River Village Conference, 2026

- Objective:

Shared prosperity from Mekong Development for Rural Villages in the Mekong Basin

- Approach:

- Present Research Results
- Encourage Stakeholder Interaction:
 - Village Representatives
 - Energy sector
 - Sand Industry
 - Agriculture
 - Fisheries
 - Environment
 - Others

- Output:

- Village Development Fund, Private-Public Partnership

- Partner: GIZ Project at Mekong River Commission, Vientiane, Laos