Mekong Water Management & Peoples’ Movement
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Mekong Community Institute (MCI) & Living River Association (LRA)

- E-NGOs based in Chiang Mai
- We produce, promote, and use local knowledge and tools for the sustainable management of riverine ecosystems
1) Mekong Geography

- Through 6 countries, 4,909 Kms
  - Upper Mekong (Lancang in China) 2,198 Kms
  - Lower Mekong 2,711 Km., Myanmar, Laos, Thailand, Cambodia, & Vietnam
Mekong Delta: Mother of Vietnam
- 72% is farmland
- Rice 55%, fruit 75%, fish-OAA 80% (Duong Van Ni 2013)
- Population density

Tonle Sap: Cambodian stomach
- In rainy season, expand 9 times
- World biggest fresh water fishery
Natural resources: “Kai”

- “Kai”: Mekong water weeds by T-PBS, [https://goo.gl/RKKljt](https://goo.gl/RKKljt)
- Grow only in dry season
- Important food for fish, such as Mekong Giant catfish
- Important food and income of locals, especially women
Natural Resources: Fish

- 1,000 – 1,700 fish species
- 39% of fish caught is long-distant migratory fish
- Many endemic and endangered species: MK Giant Catfish, stingray, dolphin
- Fish pass through Khon Fall 30 tons/hour
Fishery and Economic

- World biggest fresh water fishery
- $3,900-7,000 millions/year
- In 4 Mekong countries,
  - fish catch 2.6 million tons/year,
  - OAA 500,000 tons/year
- Mekong people eat fish more than other regions
- Fish is 47-80% of protein for Mekong locals
- In Thailand, 2 fishing seasons, March – June & October – November

Photo: Kumpin Aksorn
Riverbank Garden

- Identity of Mekong people, found along the river and tributaries
- Food & income security of local communities
- Low investment
Natural resources: wetland

- Important for Mekong fish and ecosystems
  - Fish and wildlife habitats, such as Fishing Cat
- 17 wetland forests in the Lower Ing River
- Important resources for local communities
People and cultural diversity

- Different societies and cultures
- 90 ethnic groups
People and cultural diversity: Naga

- Naga as belief and holy animal
- Naga as culture: https://youtu.be/5flJ3cxTEpA
- Naga as native people
- Naga as ecosystems
2) Navigation Project (1st Phase)

- **Project information:**
  - The Lancang-Mekong Navigation Channel Improvement Project
  - To make the river as a water channel for commercial ships, 100-300 tons
  - From China to Laos
  - Remove 11 rapids, started in 2002
  - Boat sizes by T-PBS, [https://goo.gl/49LyfE](https://goo.gl/49LyfE)
  - Rapids by Thapanee, [https://goo.gl/rfSlrc](https://goo.gl/rfSlrc)
2) Navigation Project (1st Phase): Impacts

- Ecosystem changes: a) Rapids are destroyed, b) Water change: fluctuation, direction change, speed
  - Ecosystems changes,
  - fish & birds habitat lost, especially the MK giant catfish
  - Riverbank erosion, degradation and extinction
  - Wetland forest
  - Lost & dangerous from water
- Wave from the big ships
- Thai-Lao border line is changed >>
  National Security & conflict
2) Navigation Project (1st Phase): Impacts

New islands in 2018, Viengkane district

Photo: Dr. Sommai Iewpradit
2) Navigation Project (1st Phase): Impacts

Photo: Dr. Sommai Iewpradit
2) Navigation Project (1st Phase): Impacts

Photo: Dr. Sommai Iewpradit
2) Navigation Project (1st Phase): Impacts
2) Navigation Project (1st Phase): Local Movement

- Chiang Khong Conservation Group: a Local NGO in Chiang Khong District, a strategic area

Activities against the project
- Campaign
- Research
- Seminar
- Green walk
2) Navigation Project (1st Phase): Local Movement

Taibaan Research at Khon Phi Long (August 03 – June 04)

- 10 km long with different islands & rapids
- 65 Plants
- 96 fish species, the giant catfish
- 63 fishing gears
- 17 birds
- Kai
2) Navigation Project (1st Phase): Local Movement
2) Navigation Project (1st Phase): Local Movement

- April 2003, Thai government postponed the project and require new EIA
- 2004, the project was canceled
- The project blasted only 10 rapids in China and Myanmar-Lao border
3) Navigation Project (2nd Phase)

- Project info.
  - Blast rapids from Thai-Lao border and more downstream, including Khon Phi Long
  - Make winder water channel for 500-ton ships
- March 2016, Chinese government proposed the project
- December 2016, Thai government approve the project’s study
3) Navigation Project (2nd Phase)

- Survey and research on ecosystems and birds
  https://youtu.be/b8SRmHETK5Q
- Local protest by T-PBS, https://goo.gl/Nc0Ncy
- Seminar at CMU
- Campaign in Chiang Khong
3) Navigation Project (2nd Phase)

Letter from locals to Chinese President, Xi Jinping
Questions about the project

- Why does this project is pushed forward although It’s not worth it? Less ships at Chiang Sane ports
  - Land transportation via R3A is faster, cheaper, and more convenient
  - Risk from water level problem

- Ship size [https://goo.gl/49LyfE](https://goo.gl/49LyfE)
- Rapids & islands by Thapanee [https://goo.gl/rfSlrc](https://goo.gl/rfSlrc)
Questions about the project

- Who will get the benefits from river trade & this project?
  - A few ships belong to Thais
  - Go upstream cost more and take longer time

- What will local people get?
  - Fishermen are not allowed to use some gears: net
  - Small boat cannot go out
  - Lost and dangerous from wave and oil
  - Less fish, food, and income
Questions about the project

- Will this be a reason for Chinese gun ships to come downstream?
- The cabinet resolution in Dec. 16 didn’t go through the council?
- Thai government didn’t protect Thai people but make it worse
- This project does not consult Vietnam and Cambodia
4) Upper Mekong Dams

- 11 dams finished & 10 more, see map
- The Lancang River
  - 45% of Mekong water,
  - 100% of Mekong water in Northern part

<table>
<thead>
<tr>
<th>Upper Mekong Dams in China</th>
<th>MW</th>
<th>storage capacity (cunnet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linchang</td>
<td>72</td>
<td>?</td>
</tr>
<tr>
<td>Yuelong</td>
<td>120</td>
<td>?</td>
</tr>
<tr>
<td>Kagong</td>
<td>240</td>
<td>81,400,000.00</td>
</tr>
<tr>
<td>Runmei</td>
<td>2100</td>
<td>?</td>
</tr>
<tr>
<td>Guxue</td>
<td>1200</td>
<td>7,752,000,000.00</td>
</tr>
<tr>
<td>Gushui</td>
<td>cancelled</td>
<td></td>
</tr>
</tbody>
</table>

- Wunonglong: 990 MW, 298,000,000.00 operational
- Lidi: 420 MW, 73,000,000.00 operational
- Tuoja: 1400 MW, 3,602,000,000.00 planned
- Huangdeng: 1500 MW, 1,613,000,000.00 operational
- Dahuaosao: 900 MW, 293,000,000.00 operational
- Miaowei: 1400 MW, 560,000,000.00 operational
- Gongguoqiao: 900 MW, 120,000,000.00 operational
- Nianwan: 4200 MW, 15,000,000,000.00 operational
- Manwan: 1750 MW, 920,000,000.00 operational
- Daxhaoshan: 1250 MW, 940,000,000.00 operational
- Nuozhadu: 5850 MW, 27,490,000,000.00 operational
- Jinghong: 1750 MW, 249,000,000.00 operational
- Gantinba: 155 MW, ? planned
- Mangsong: cancelled

- Total operational: 21310 MW, 47,844,000,000.00
- Total planned: 5641 MW
4) Upper Mekong Dams
5) Lower Mekong Dams

- 11 planned, 2 under construction
- **Xayaburi Dam**
  - Being built in Laos
  - Electricity 95% export to Thailand
  - Built by Thai companies
  - Loan from Thai banks
6) Dam Impacts

- **Changes**
  - Blockage of nature cycles: fish, sediment, water
  - Water flow: time, amount, speed, direction
    - In dry season, 100% of Mekong water in Chiang Rai & 45% of the whole river come from China
  - Water levels change slowly: highest in Aug, decrease in Dec, lowest in Apr.
  - Flood in tributaries
  - Erosion
6) Dam Impacts

- Impacts from the changes
  - Ecosystem changes: riverbank plants,
  - Natural resource: fish instinct, wetland, birds, wildlife, forest, plants
  - Fishery: Tonle Sap, local communities, fishing gear lost
  - Land lost: home, riverbank gardens
  - Saltwater elution: MK delta
  - Culture: food, Naga Ball, belief
  - National security: border lines
  - Tourism: flood
  - Transportation:
6) Dam Impacts: Xayaburi Dam

Riverbank gardens flooded in dry season

15 Jan 2019
ท.หินโงม อ.เนือง จ.หนองคาย
photo: สุรินทร์ บุญณสะอาด

https://www.matichon.co.th/region/news_1316911
6) Dam Impacts: Xayaburi Dam

Water levels dropped in rainy season.

Water Level at Xayaburi Dam
different 32.75 m., 23 July 19

upstream 271.69 m. downstream 238.94 m.

Photo: Chainarong Setthachua
6) Dam Impacts: Xayaburi Dam

Impacts to river plants, fish's habitats

Photo: Chainarong Setthachua
7) Local Movement: Xayaburi Dam
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7) Local Movement: Pak Beng Dam & Datung Company (SoE)

- Thai PDP plan not to buy electricity from the dam, Apr19
- Datung company stop, 8 Aug 19

Datung company & Lao government at Mekong School in Chiang Khong district, 15 Jan 2018
https://www.facebook.com/watch/?v=1833183583381313

Datung company & Lao government at CMU, 14 Nov 2018
8) Local & Regional Movement against Mekong Dams

Save the Mekong Coalition (StM)

- Regional network of villagers, NGOs, academics, artistes, etc
- 5 coordinating committees
- against Mekong dams
- Activities: meeting, seminar, statement, sharing information
9) The Mekong & Geopolitics

- **Lancang Mekong Cooperation (LMC):**
  - Mekong river & Belt Road Initiative (BRI), a Chinese global program to enhance economic cooperation and trade

- **Mekong River Commission (MRC)**

- **Lower Mekong Initiative (LMI)**

- **Green Mekong Initiative** by Japanese Government

- **Mekong-Japan Initiative** for SDGs toward 2030

- Etc.
Thank You