



Changes in the role and management of wetland commons in Lao PDR: the case of Pak Peung wetland

Outline

- **Lower Mekong floodplains and wetlands**
- **Governance and management in Lao PDR**
- **Development impacts on wetlands commons**
- **Pak Peung case study and the Fishway**
- **Interviews with elders**
- **Findings**
- **Conclusions**



Lower Mekong floodplains/wetlands



Institute for Land,
Water and Society
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84,000km² floodplains in wet season
Over 1,000 fish species and OAA
High consumption and dependence on fisheries
(Cambodia 37kg/cap/yr; Lao PDR 30kg/cap/yr)



Governance and Management in Lao PDR



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409 wetland commons in Laos on government land
Subject to government fisheries/water management laws
Open access with community based management
Two Ramsar sites with management plans

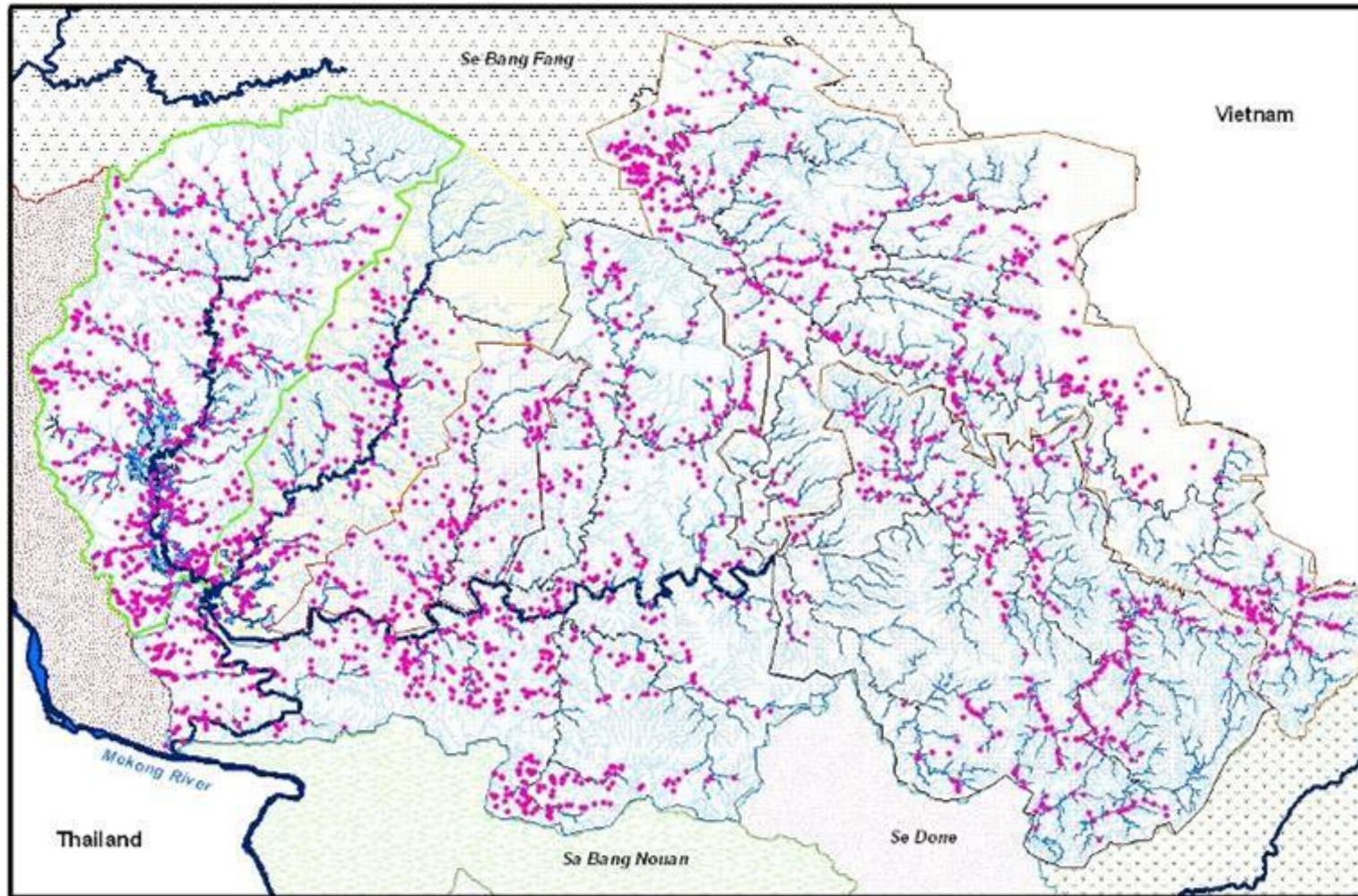


Development impacts on wetlands

- **Urban development**
- **Water storage for hydropower/water supply**
- **Irrigation for agriculture**
- **Overfishing**
- **Flow regimes altered**
- **Fish migration reduced**
- **Habitat decline**
- **Pollution**
- **Loss of large fish species**

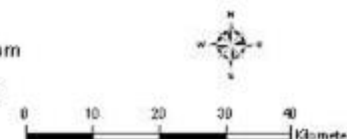


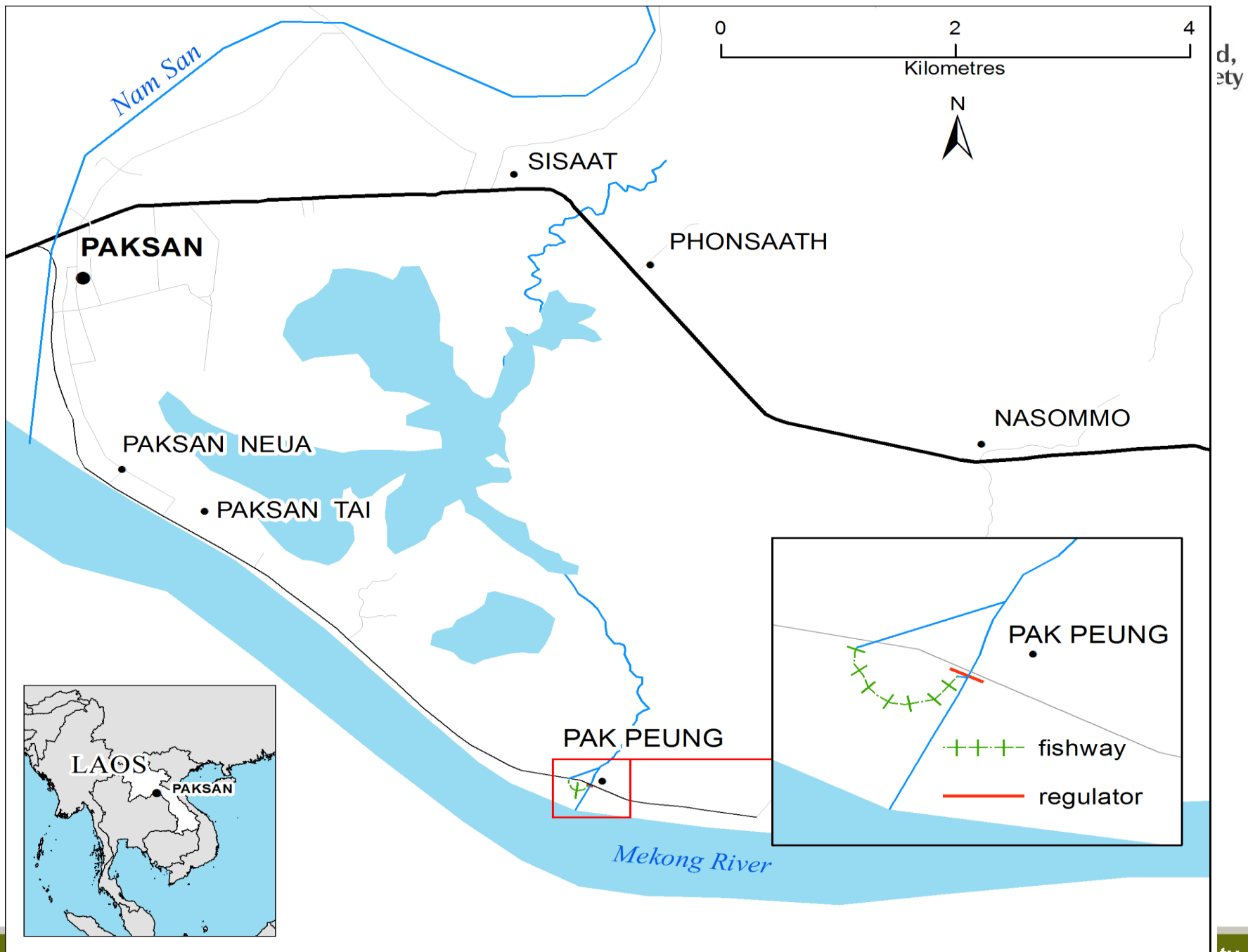
Barrier Mapping



Legend

- All Barriers Se Bang Hieng
- Permanent Major Rivers
- Permanent Streams
- Intermittant Streams
- Canals
- Wetlands
- Se Thamouak
- Se Banghiang
- Se Lanong
- Se Koumkam
- Se Champhone
- Se Xangxoy
- Se Koumkam
- Se Yepong





The Fishway Project 2011-2015



Australian Government

Australian Centre for
International Agricultural Research



Charles Sturt
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In depth interviews with 25 elders in 2012

- To explore their observations of changes in wetland condition and commons management
- To get their suggestions on strategies for future management



Aged 60 to 89 years
16 males, 9 females



Changes in wetland condition and fish

In the past there was;

- More vegetation and habitat for fish to breed and hide
- More fish, easier to catch, lower water levels
- More wildlife

“After build weir not many trees in wetland, not many wildlife. Before building, many fish moved from the Mekong river. Big fish would come....Pa Nyai - big fish: Pa Khao, Pa Ngon, Pa Lart, Pa Khop”
[Elder from Ban Paksan Nua]

“After weir construction I can have a rice field and grow vegetables to sell in market now better than before. But after weir, big fish species are not seen” **[Elder from Ban Nasammo]**

Causes of wetland and fish decline

- More people fishing and for commercial use
- Use of modern fishing gear
- Illegal fishing methods (eg electric)
- Fish cannot migrate past the weir wall
- Felling trees to trap fish

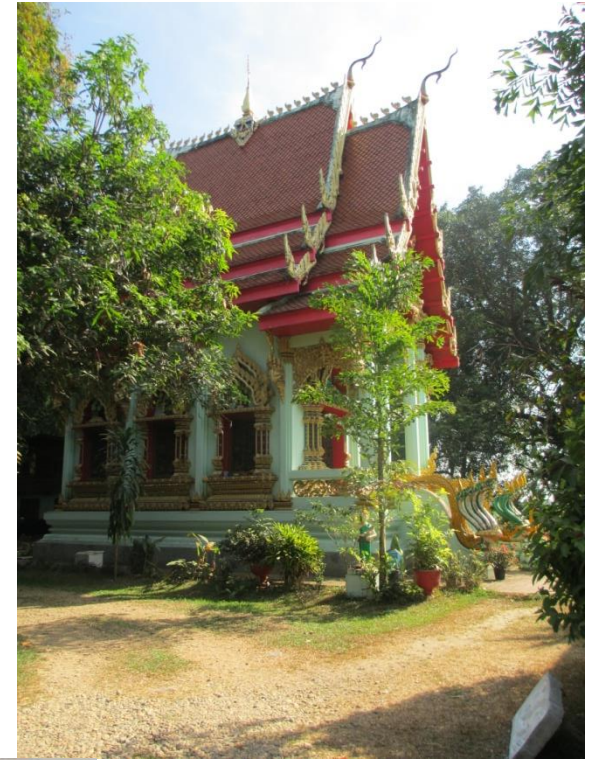


“Many people catch fish for home eating, for trading and use modern fishing gear e.g. gillnet, cast net, electrofishing” **Elder from Paksan Nua**



Traditional management practices

- Some village regulations in the past
- Head monks, buddhist holidays, full moon- no fishing
- Fish for families or temples only
- No small fish or breeding fish
- Conservation areas established



Elder suggestions

- Conservation zones for breeding habitat
- Not allow fishing at the regulator during the wet season
- Stronger policing of illegal fishing methods and tree cutting
- Let more water out in the wet season
- Revegetate around wetland
- Need support from district and provincial government

“Build relationships within the local population to create an understanding about fish, fishing gear and a good management plan for conservation. Build strong relationships and it will enhance knowledge and understanding of the wetland” **[Elder from Phonsaat]**



Transition to co-management



Conclusions

- From culturally managed to scientifically co-managed
- Can cultural laws/practices come back, would they be effective?
- Role of elders, youth and monks?
- Power of markets, government, army, development
- Will require careful community facilitation and ongoing engagement with all wetland users.



Acknowledgements

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