

# **Gender, Feminist Political Ecology, and Climate Resilience: Navigating Aquaculture Adaptation in Northeast Thailand**

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## Focus of the presentation

- Global NBs and women's local expertise
- Gendered dimensions of climate-adaptive aquaculture through a feminist political ecology lens
- women's roles, power dynamics, and resilience strategies



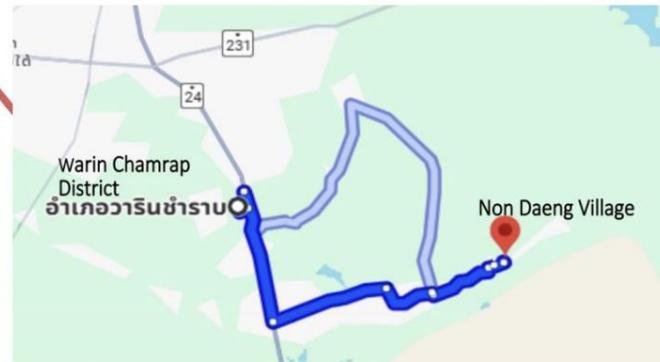


## IUCN Global Standard for Nature-based Solutions

A user-friendly framework for the verification, design and scaling up of NbS

First edition

- Needing consistency and grounded applications
- The Standard provides a systematic learning framework
- lessons can improve and evolve the applications, leading to greater confidence in NbS among decision makers (IUCN, 2020:2)



### Study areas

- Non Chan village
- Non Daeng village of Ubon Ratchathani Province, Northeast Thailand

Qualitative research method in 2 years

Ubun Ratchathani Province, NE region of TH

Non Deang village (1), warinchamrap district

- Rianfed/no irrigation
- Mixed between upland and lowland
- Small streams
- Ox-bow lake
- Risk of floods/droughts

- Agriculture: rice, corns, cattle, sugarcane and vegetables, cassava
- Off-farm activities

A medium-sized village with nearly 228 households

- Fish aquaculture supported by DoF
- Supplementary and food

Non Chan village (2), Phibun Munsaharn district

- Rainfed and irrigation
- Near the large reservoir of the big dam
- less risks of floods and droughts

Agriculture: rice, rubber, cassava, vegetables, cattles, off-farm activities

A large-sized village with nearly 400 households

- Fish farming (sell as both main and supplementary income and eat)
- Fish process for sale (online and onsite market)
- Wild captured fisheries (Fish mainly for food)



## 2 types of NBs of aquaculture practices in the two villages

A fish pond in the rice field that uses no commercial feed, relying only on natural feed



A fish pond in the rice field using a mix of commercial and natural feed



**A fish pond in the rice field using a mix of commercial and natural feed supported by government: solar energy**

**Gender dynamic and uneven among women in aquaculture**



## Uneven access to irrigation water in aquaculture



Fish pond located on the elevated land



Fish pond located near the canal



Pumping water from the canal to farmland and fish pond

Ban Non Chan village established "Non Klang Subdistrict Community Enterprise for Sustainable Livelihoods" in 2020

Led by chief of the headman Amnat Dadsantia.

Received support from the District Chief of Phibun Mangsahan



Logo of fish products and fish products by the The Non Klang Subdistrict Enterprise Group

As a village leader, he has many opportunities to receive training on investment, marketing, organic products, integrated farming, and aquaculture.



Fish production station

Processed fish products of  
Non Klang Subdistrict  
Community Enterprise for  
Sustainable Livelihoods  
-products are sold both  
inside, outside and online

## What are NbS practices in both villages?

- Planting trees chaya (tree spinach), Water lettuce (Jok Waen), Water spinach (Phak Bung) around the pond for food supply and providing shade for the fish.
- Rice straw
- Keeping natural grass
- Fish sandwich method – layering rice straw, cattle/buffalo manure, and more straw on top, secured with wooden stakes to prevent floating
- Cow manure mixed with small portion of commercial feed
- Insects/worms
- Dead woods



## Women's expertise in aquaculture through learning from many sources

- 1. Learning from family:**
- 2. Support from government**
- 3. Knowledge exchange within the community**
- 4. Learning from direct experience**



- From FPE, this presentation highlights
  - gendered expertise underpins resilience in aquaculture
  - women's aquaculture practices are everyday NbS, rooted in local environments
    - respond to food security and resilience
    - reflect situated knowledge, adaptive strategies
    - showing how NbS emerge from lived experience rather than global checklists
  - access to water is main contribution to climate resilience
  - Inequality access to water and government services generate inequality among women
  - males have better opportunities to access to information and standard knowledge on NBs and integrated farming system
- The need for inclusive governance
  - recognizes women's expertise
  - supports equitable access to resources
  - strengthens women leadership in sustainable aquaculture