



Mangrove Project

Developing knowledge-based approaches
to reconcile multiple demands

Scientific and Technical Symposium on Sustainable
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***Approaches for Embedding Stakeholder Realities
in Coastal Planning Processes: Cases from
Mangrove Restoration and Rehabilitation in South
East Asia***

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The EU Sixth Framework Program MANGROVE Project began in 2005 and will run until 2009.

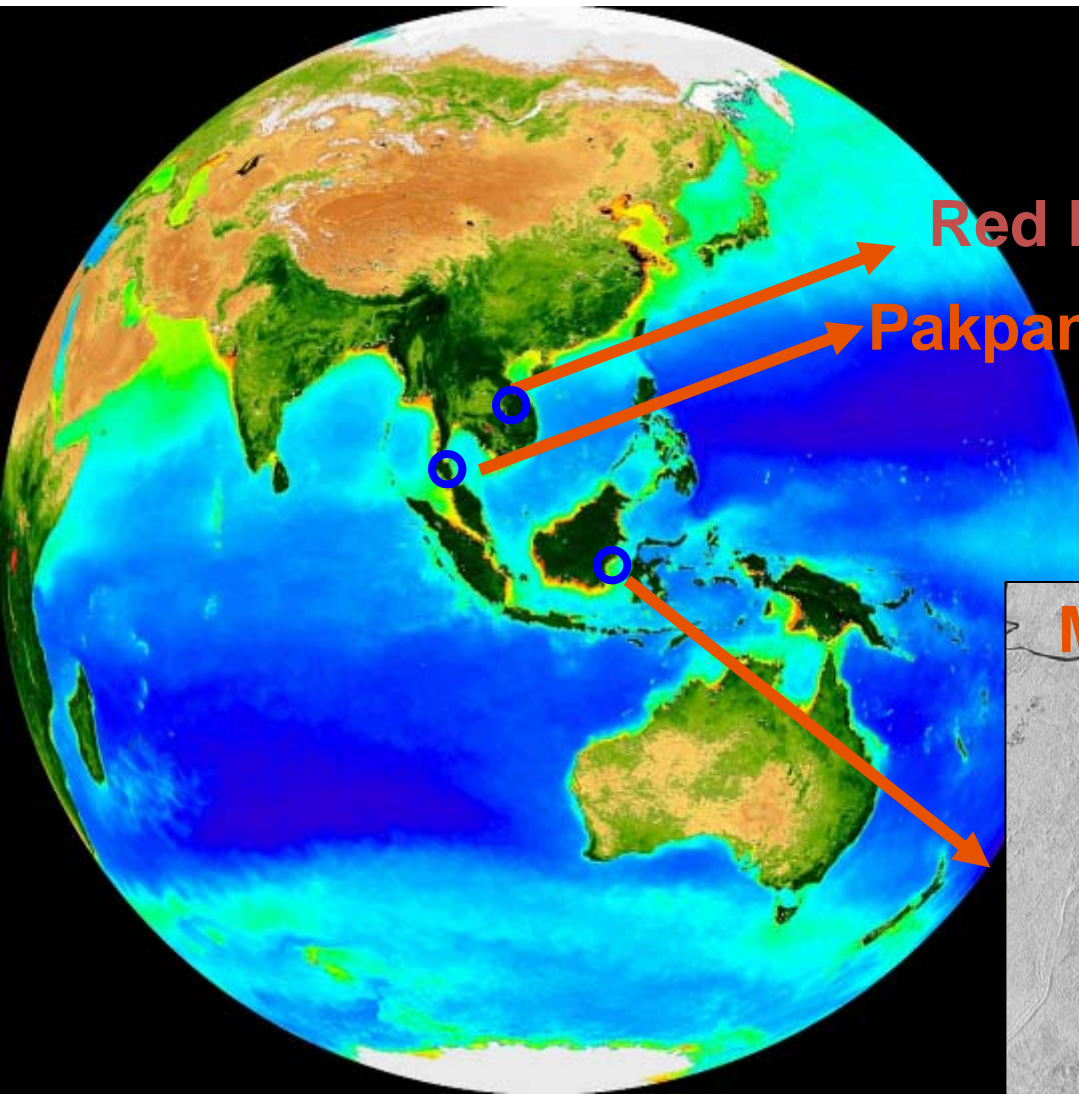
Objective:

The project aims to improve understanding of mangrove ecosystems, communities and conflicts and to develop knowledge-based approaches to reconcile the multiple demands on mangroves and adjacent coastal zones in Southeast Asia.



www.enaca.org/modules/mangrove/

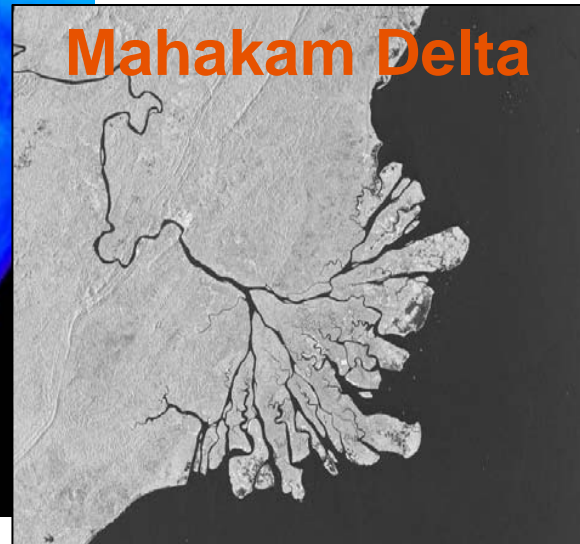
EU Mangroves



Red River delta

Pakpanang delta

Mahakam Delta





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The consortium members are:

- Mulawarman University, Indonesia
- Kasetsart University, Thailand
- Mangrove Ecosystem Research Division, Vietnam National University
- Wageningen University
- Network of Aquaculture Centres in Asia-Pacific (NACA)
- Centre for Environment and Society, University of Essex
- Stockholm Environment Institute



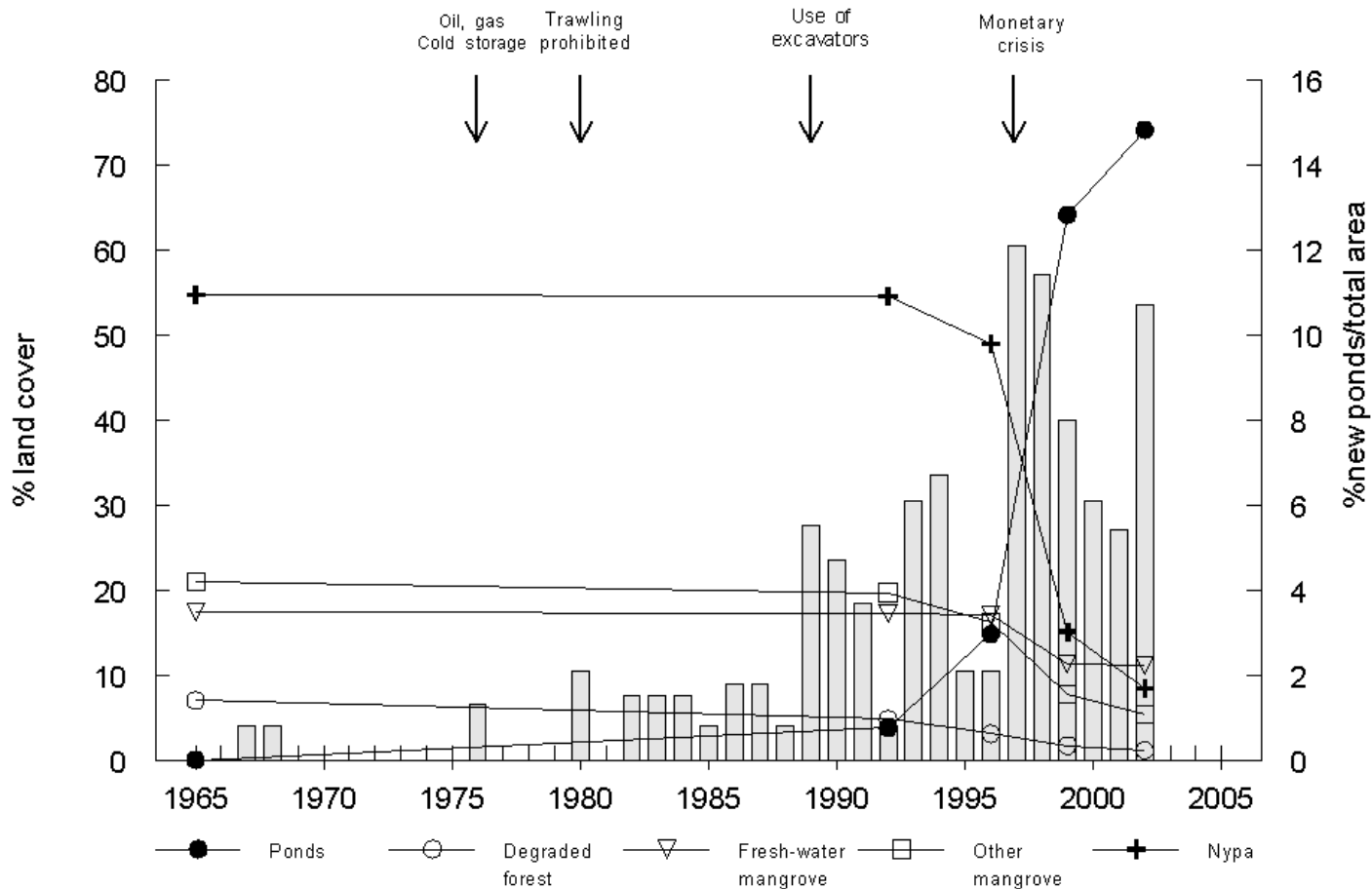
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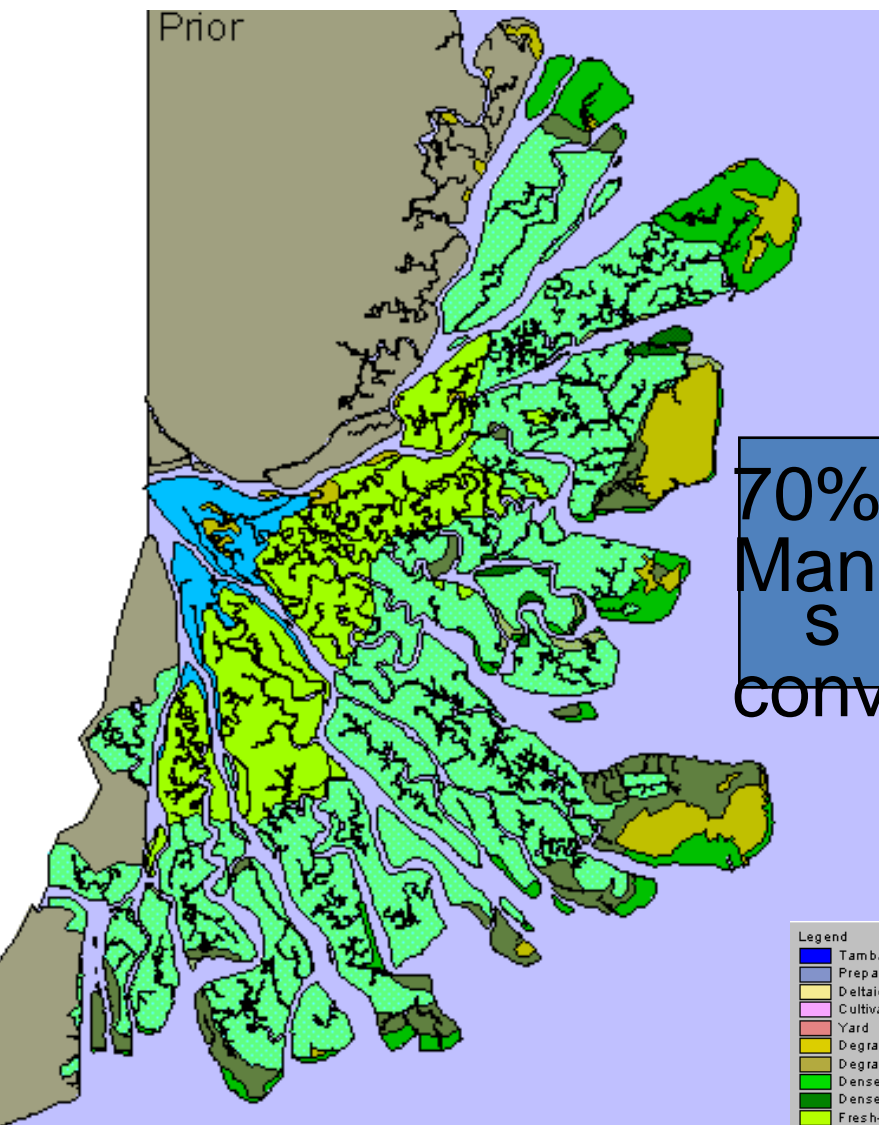
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Towards a multi purpose approach for mangrove rehabilitation

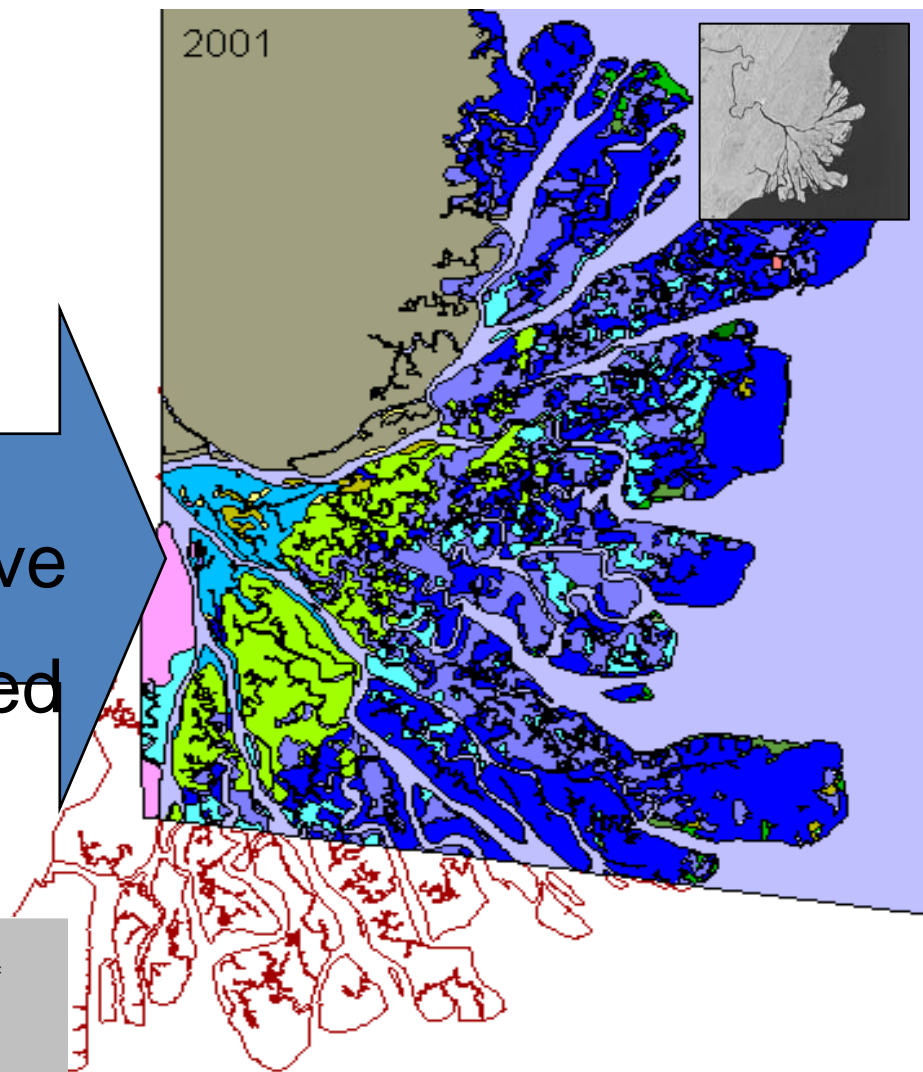
- Biophysical analysis
- Institutional analysis – Soft system theory; CATWOE – Client, Actor, Transformation, Worldview, Owner, Environment
- Livelihoods analysis

Shift caused by economic drivers/opportunities

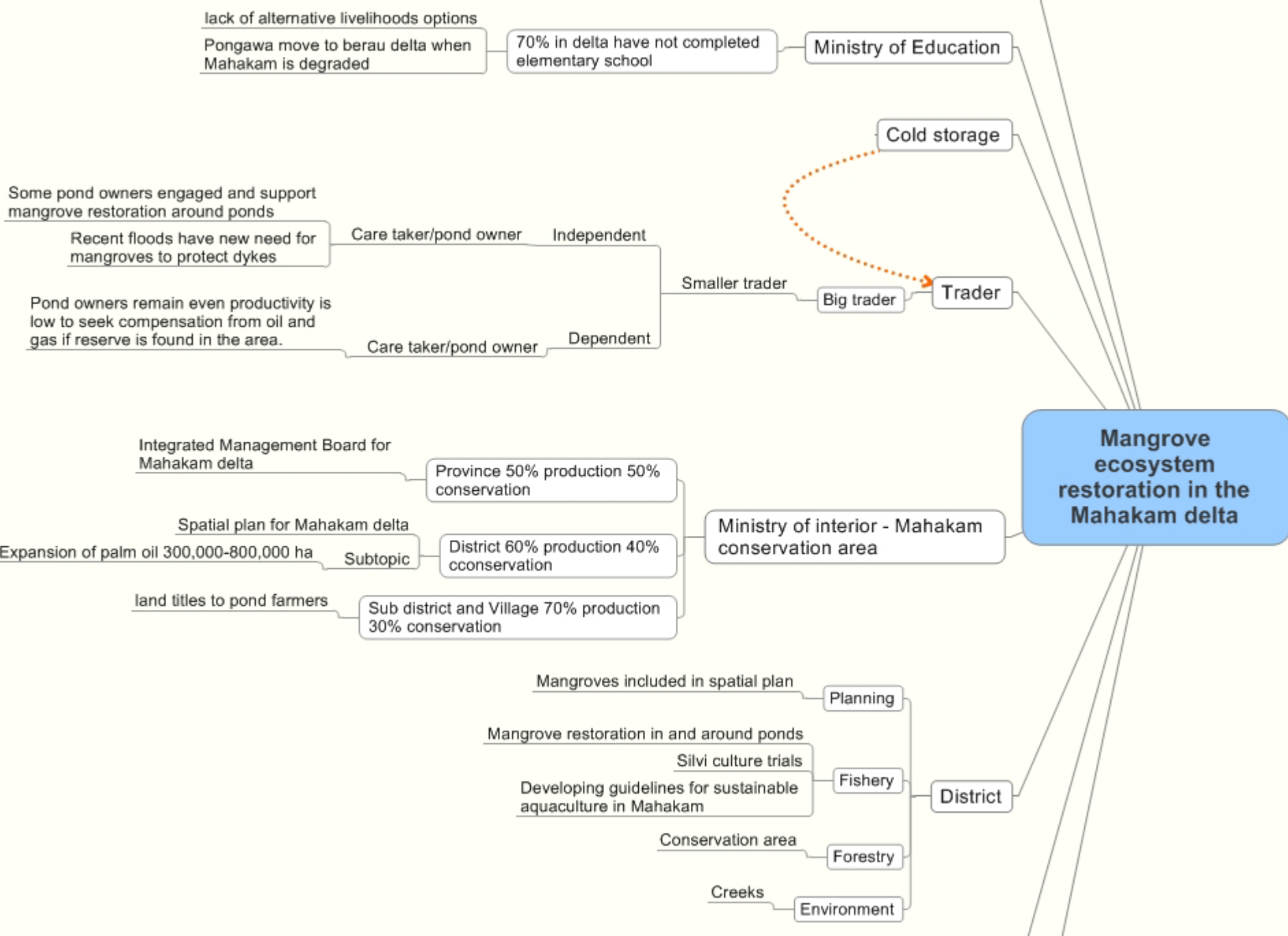


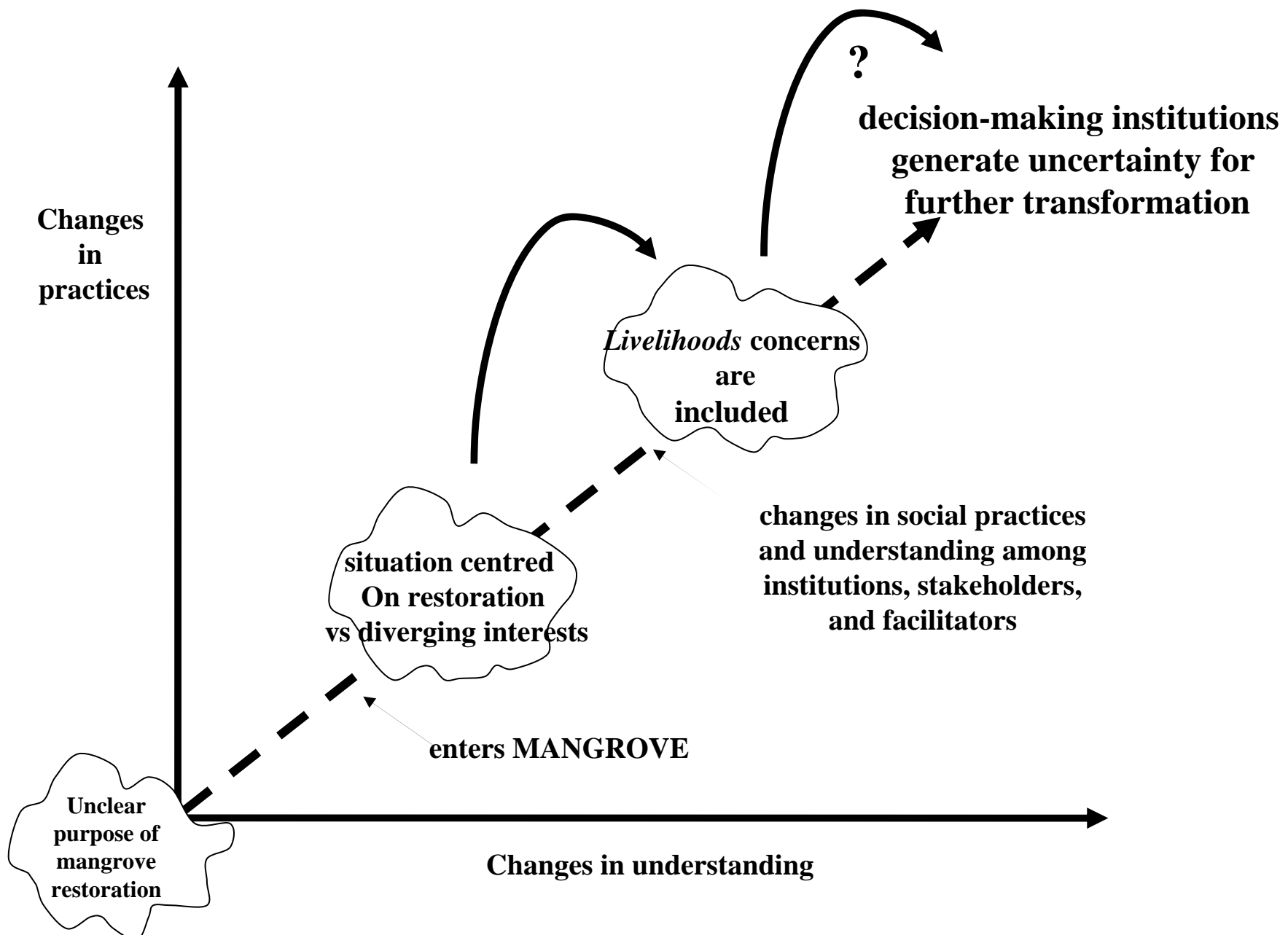


70%
Mangroves
converted



- Legend
- Tambak
 - Preparation for Tambak
 - Deltaic culture
 - Cultivated plain
 - Yard
 - Degraded forest
 - Degraded marsh
 - Dense Avicennia
 - Dense Rhizophora
 - Fresh-water mangrove
 - Mixed fresh-water forest
 - Nypa and Rhizophora
 - Nypa and dispersed Avicennia
 - Pure Nypa
 - Sonneratia
 - Hilly area
 - Open water
 - Not classified





Commonalities

- Land use plan/ land titles
- Aquaculture industry
- Upstream-Downstream linkages
- Overlapping regulatory framework
- Weak governance system and enforcement

Indonesia, Vietnam and Thailand – supporting restoration of mangroves

- Single purpose approach – balancing need for development with protecting ecosystem services
- Planting trees (not from Ecosystem perspective)
- Vietnam – mitigating impact of natural hazards and protect national dyke
- Thailand – Dept of Forestry direction from national level