

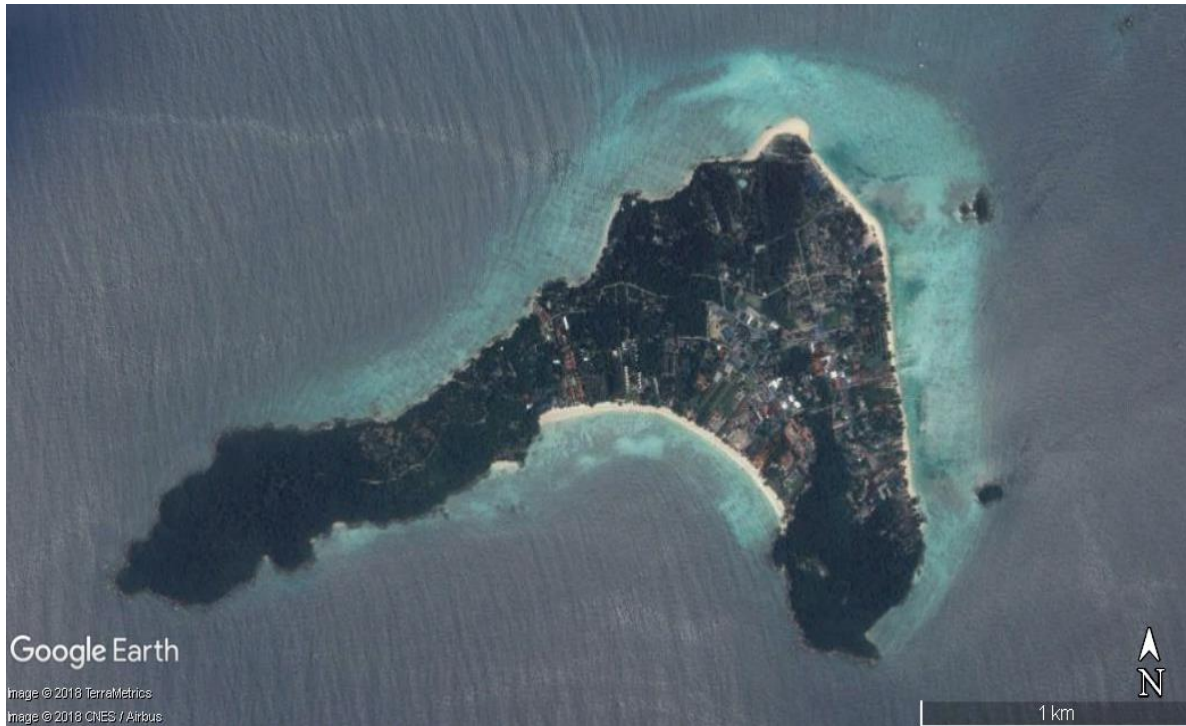
A scenic view of a tropical coastline. The foreground shows clear, turquoise water with visible coral reefs and rocks. A small boat with several people is in the middle ground. The background features a lush, green forested hillside under a clear blue sky.

Potential for Co-Management of Coral Reefs in Koh Lipe, Thailand

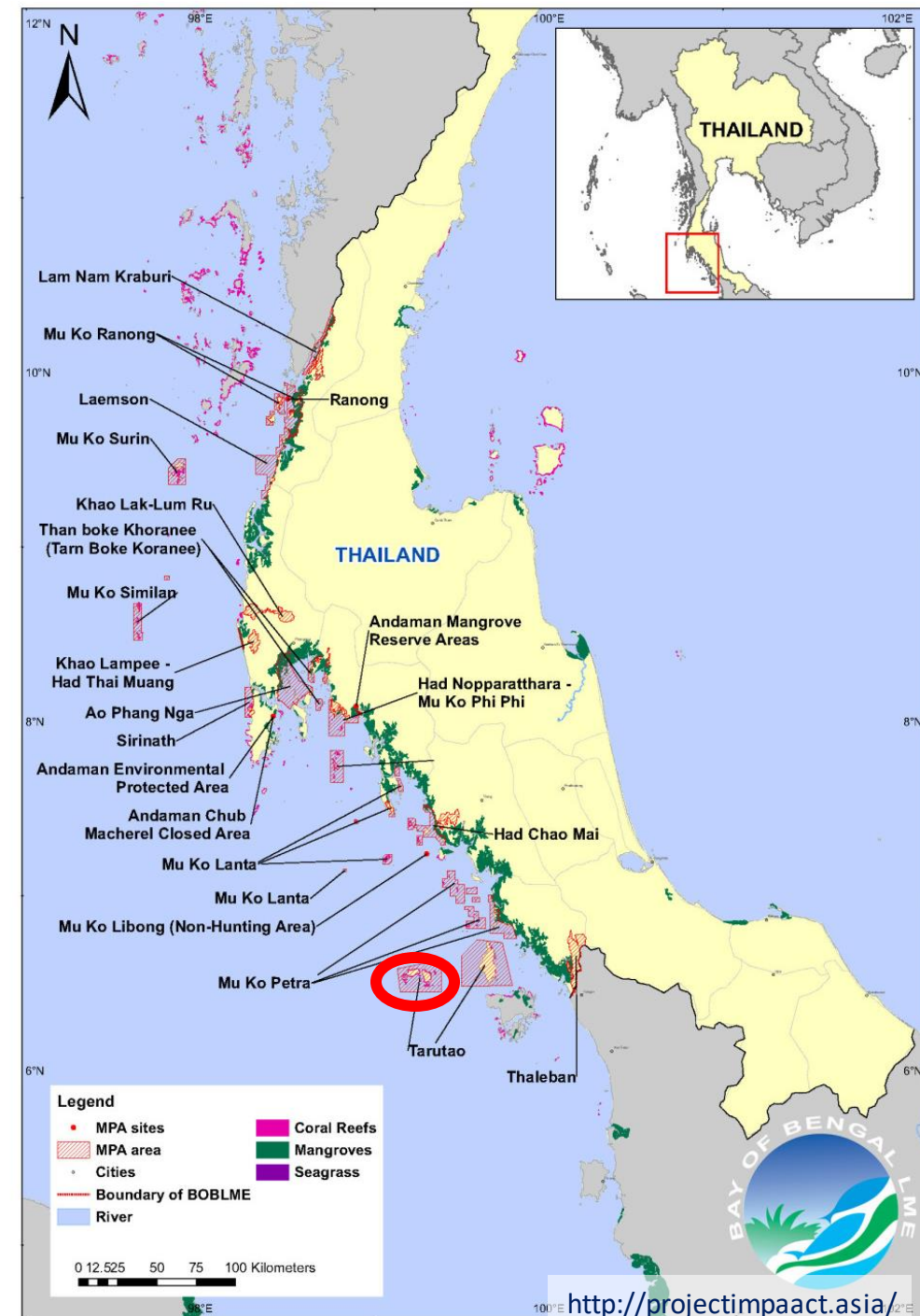
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Background: Koh Lipe

- Global, regional, local pressure on marine ecosystems
- Adjacent to Tarutao National Marine Park
- 2 km²



Google Earth, 2018



“To seek out a better understanding of and support for the links between sustainable livelihoods and environmental conservation, from a community perspective”



Community Conservation (2016)
Research Network



Research Objectives

- 1. Understand the environmental and social changes that have occurred on Koh Lipe since the introduction of mass tourism and how these changes are affecting the marine environment**
- 2. Investigate ongoing conservation efforts and how local stakeholders are involved and envision a form of marine conservation more responsive to their needs**
3. Motivating factors
4. Management implications

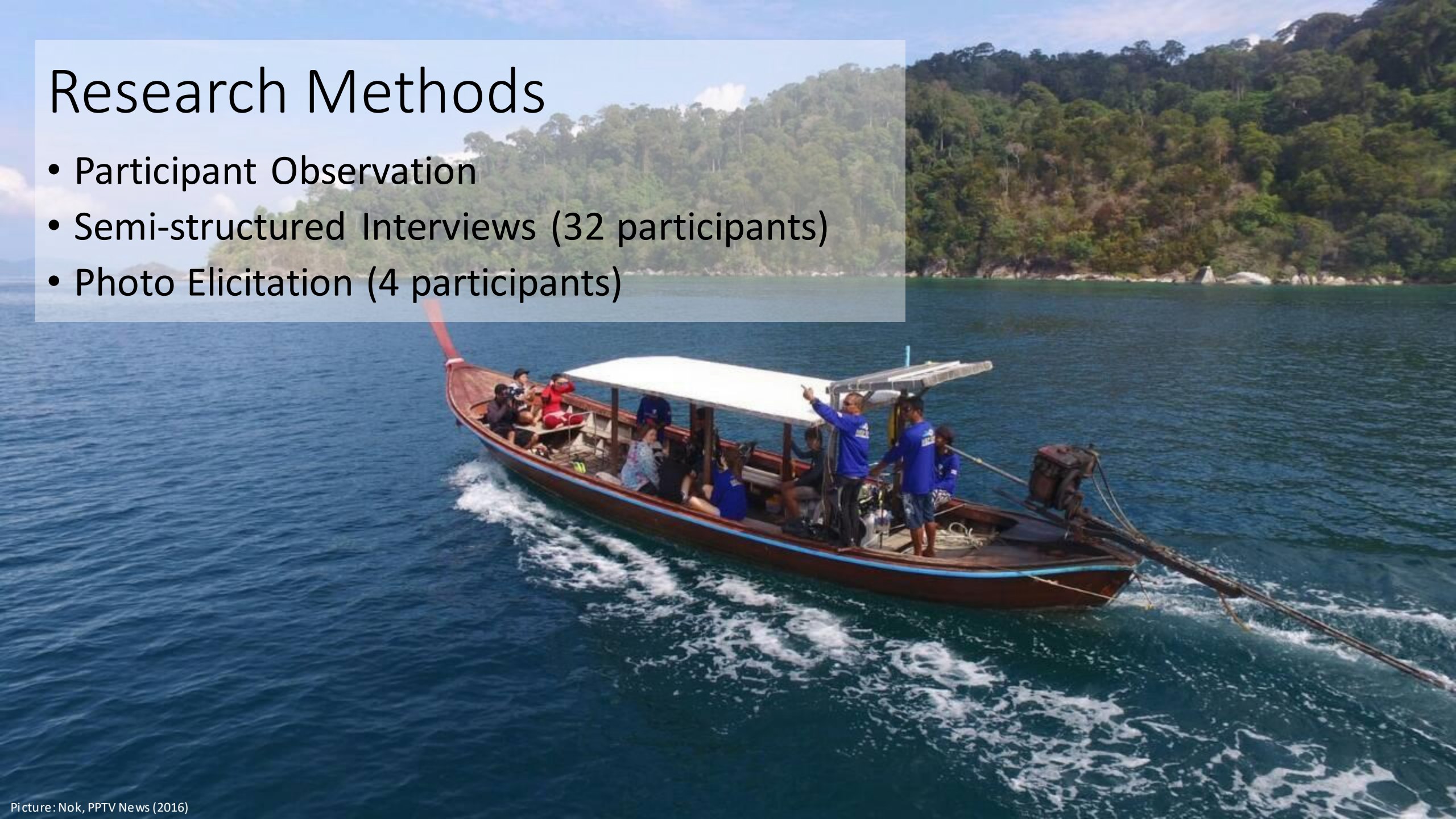
Study site: Koh Lipe

- Chao Ley, semi-nomadic sea-faring people, have inhabited island for over 100 years
- Koh Lipe has become a tourist hot-spot over the past several decades
- Rapid development to accommodate tourists



Research Methods

- Participant Observation
- Semi-structured Interviews (32 participants)
- Photo Elicitation (4 participants)



Results: Environmental Changes

- Lack of law enforcement
- Higher cost of living
- User group conflicts

Fishing

- Local fish traps on reef
- Dynamite fishing
- Commercial fishing boats
 - Line fishing
 - Bottom trawling



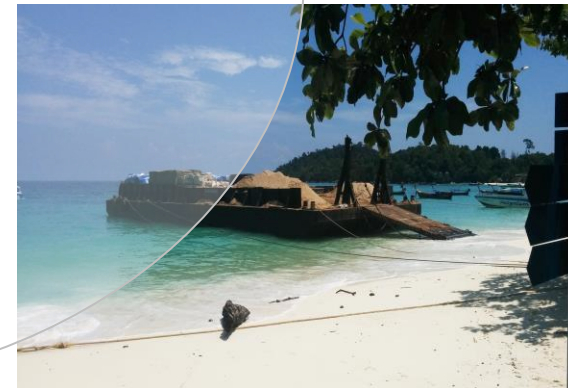
Tourist Activities

- Too many longtail/speedboats
- Too many tourists
- Lack of buoy lines
- Anchoring on coral
- Damage from snorkelers/divers
- Uneducated/careless guides
- Increase in pollution



Infrastructure Development

- Heavily loaded boats
- Wastewater run-off
- Flooding in low season
- More single-use material
- Pollution and waste from buildings, resorts



Results: Social Changes

- Displacement
- Restriction of movement

“Before, I used to sing on Koh Lipe and people could hear me from Koh Adang. It was very peaceful.”

– Ms. Y, Chao Ley Singer



Results: Social Changes

- Conflict between stakeholders: local fishermen vs. divers
- Conflict between community members and Thailand government

“We borrowed some money from my boss to build the net but the divers came and cut it. So now we don’t have any fish to sell to pay back my debt. We have no fish for food.”

- Sau, member of Chao Ley Fishing Family



Results: Community-Based Conservation

The Fighting Boys

- 5 Chao Ley boat captains
- Educate tourists
- Install buoy lines
- Teach other boat captains
- Fix broken coral



“We are working, and while we are working, we protect the nature... We are from here so we love the sea. This is our job – we don’t have nature, we don’t have a job. A piece of our family is nature.”

– Mr. P, Fighting Boys group member

Results: Community-Based Conservation

Local Dive Shops

- Adopt a dive site
- Install buoy lines
- Educate new divers
- Underwater clean-ups
- Fishing net removal
- Seek assistance from RG, DNP



Results: Co-management

Reef Guardian

- Supported by Thailand government
- Meet with local stakeholders
- Educate local tourism workers, school children
- Ecological surveys
- Install buoy, mooring lines
- Organize reef clean-ups
- Eco-tourism activities



Conclusions

Observed on Koh Lipe

- Action-based solutions to perceived problems by community-led and co-managed groups
- Shared values and aspirations among community groups
- Potential for co-management of coral reef resources

Limitations

- Lack of strong leadership
- Lack of strong vertical linkage between community and government
- Lack of strong local institutions, social capital, and trust

Acknowledgements



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