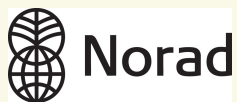


# Assessing changes in social and ecological systems with local communities: examples from Indonesia

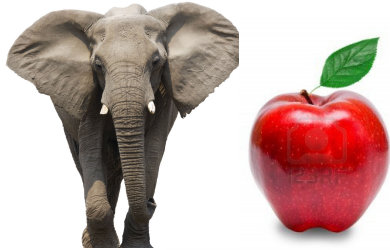


Manuel Boissière and Douglas Sheil

Tuesday 6 May 2014, *Measuring complex changes in complex landscapes*



# Focus



We consider two contrasting situations:

- “traditional” monitoring
- Local participation for Measuring, Reporting, Verifying (MRV)\* carbon stocks for Reduction of Emission from Deforestation and forest Degradation (REDD)

\*N.B. MRV includes causes of change

# Big picture (1)

## Global concern

- forest loss
- biodiversity loss
- CO<sub>2</sub> emissions
- declining resilience
- vast areas lack apparent control

... what can we do?



## Big picture (2)

- Local people manage and observe much of our planet ...
- Includes direct control over  $>10,000,000$  km<sup>2</sup> of relatively intact natural habitat (more than 3x area under official protection)

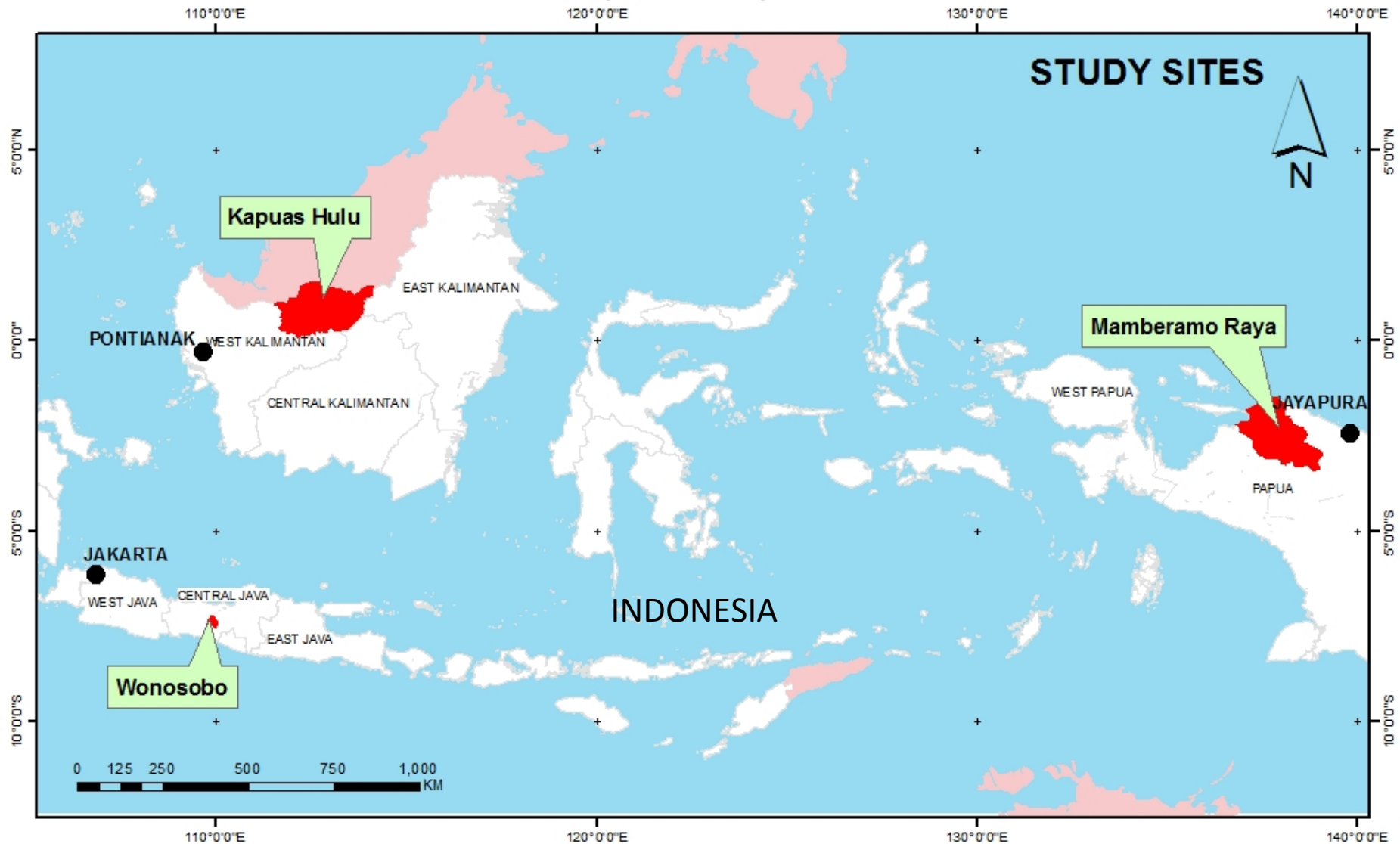


# Participatory monitoring

- Local participation could help **monitor** forests
- Most work has emphasized efficiency & quality



# Locations



Papua (Mamberamo) since 2004. West Kalimantan (Kapuas Hulu) and Central Java (Wonosobo) since 2013



# Methods



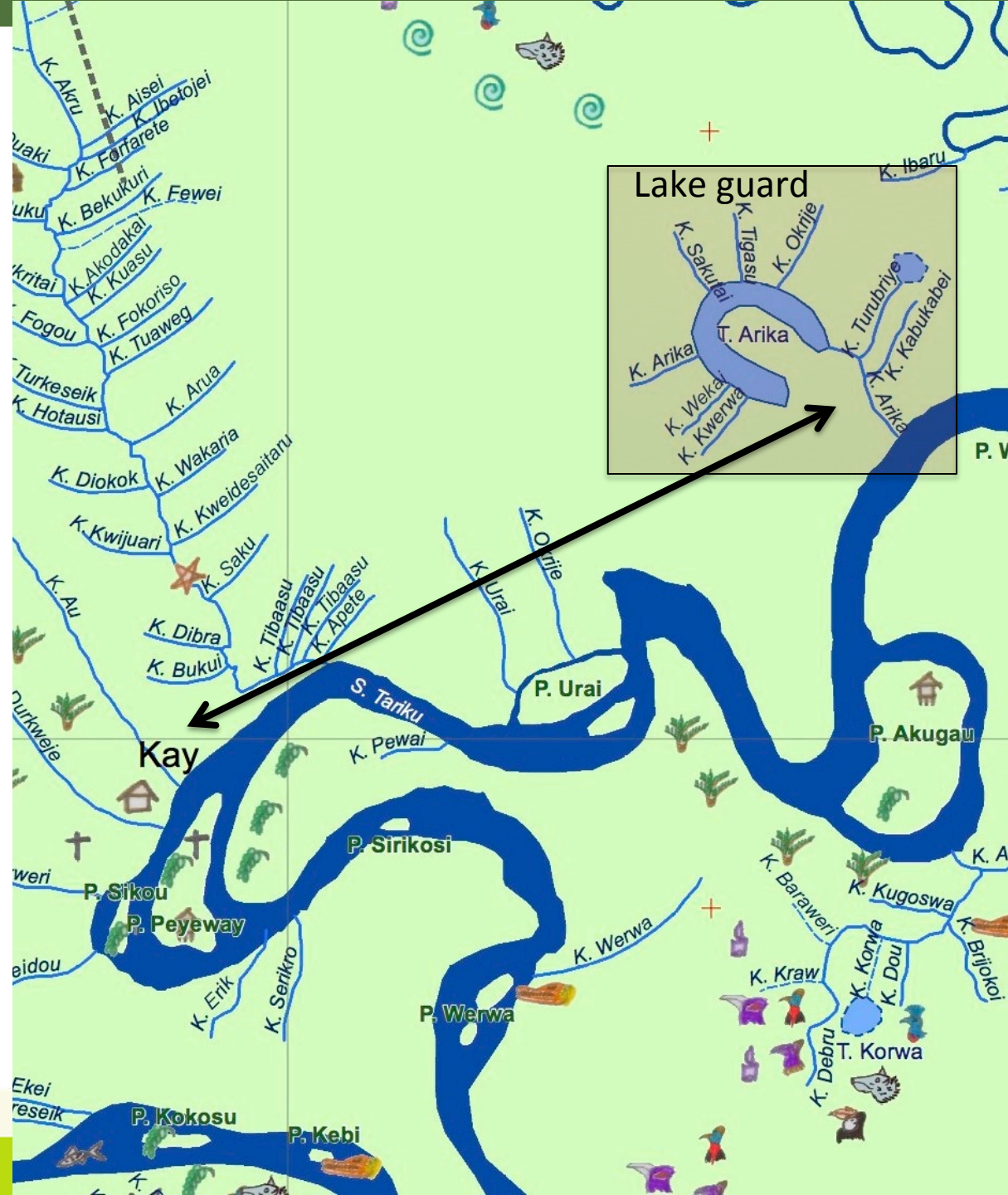
# Examples from Papua





# Lessons from “traditional” monitoring (1)

- Controls site access and resource extraction (community & outsiders)
- But seldom an activity in itself
- Rapid response possible



# Lessons from “traditional” monitoring (2)

- No formal analysis but evaluation leads directly to decisions (rules, institutions ... leads to sanctions, restrictions)
- Deterrent
- Methods are seldom quantitative
- Can adopt new practices
- Main control over vast regions



# Participation in non-traditional activities

## Why participate in government programs?

### Kalimantan

- free saplings, agriculture inputs, tools, and money
- **contribute to village**
- **social obligation**
- to learn
- fun

### Java

- tree seeds
- loans
- experience
- **public infrastructure**
- **sense of duty**

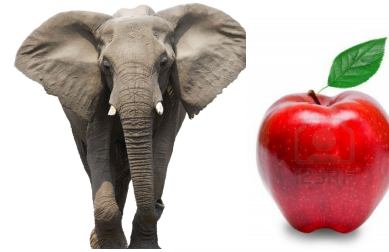
### Papua

- money
- status
- **community benefit**

# Participation requirements

- Opportunities match:
  - Availability (season, competing tasks/opportunities),
  - Education, literacy, experience
  - Legitimacy (social organization, tenure and rules)
- Adequate motivation/incentive:
  - Status
  - Training opportunity
  - Payment
  - Curiosity
  - **Sense of duty**
  - **Benefits from outcomes**

# Discussion



1. Opportunity of existing activities and roles
2. Help understanding changes
3. Caring about the outcomes
4. Includes responding to concerns
5. Reporting? (not “traditional” but existing local health care systems, & village leaders)
6. Verification? ... who verifies who? (partnerships)
7. Empowerment? Needs more than data collection ... control over land and resources is key

# Conclusion

- Local monitoring already happens and generates resilience
- We can work with it
- Good monitoring requires motivation
- Sustainability best motivated by outcomes



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