

## Can tropical forestry bring lessons to conservation science?

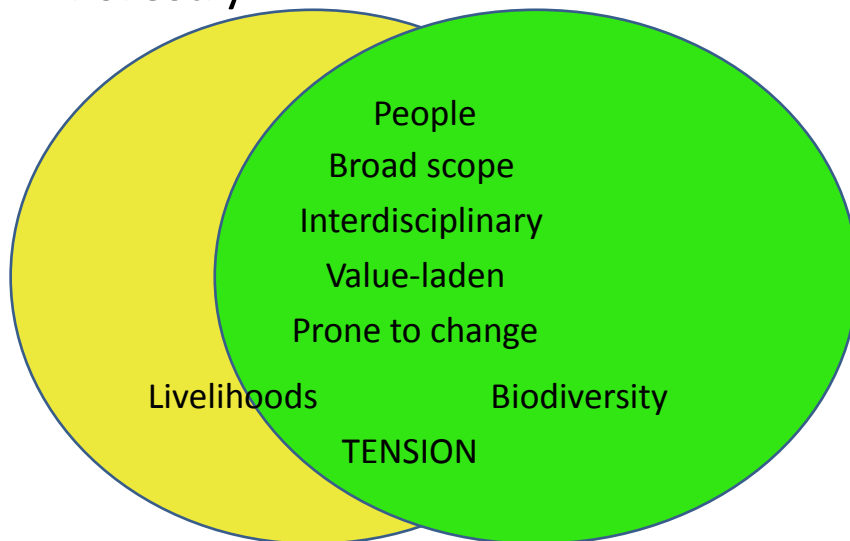


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Tropical  
Forestry

Conservation  
Science



## TENSION



## First part of talk

- What are roots of tensions between foresters and conservation scientists?

logging = deforestation

sustainable forest management = timber mining

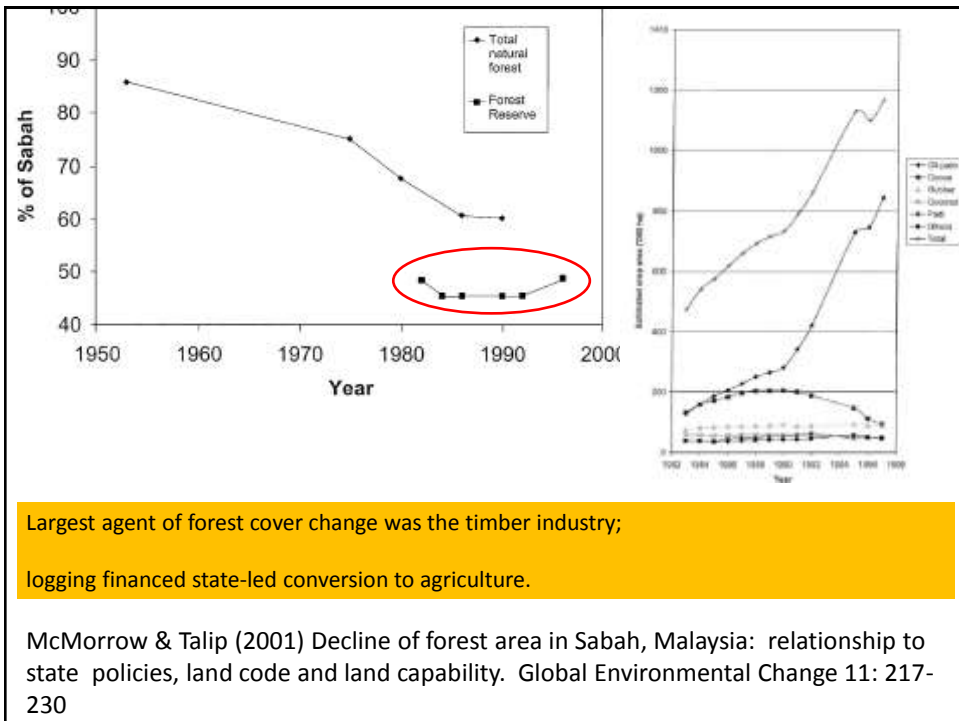
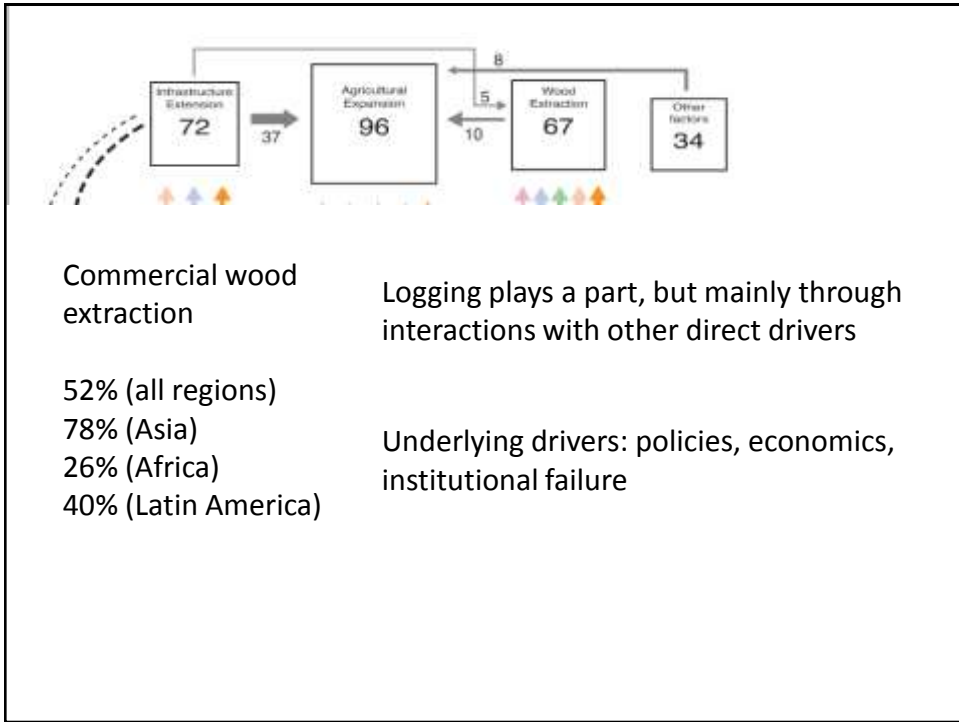
Deficit model – how science influences policy and opinion



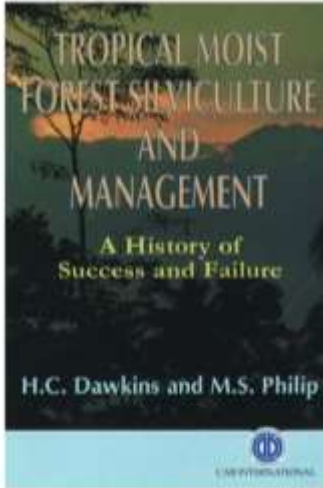
## Drivers of tropical deforestation

- Geist and Lambin (2002) BioScience 52 (2): 143-150.
  - looked at 152 published case studies (1940-1996), frequency of causes, interactions amongst factors





## Do we know how to manage tropical forests sustainably?



Yes

“The main message . . . is that natural forest management can be done; conservation and production are not incompatible. . . . p312

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## Is there a place for Sustainable Forest Management?

Yes

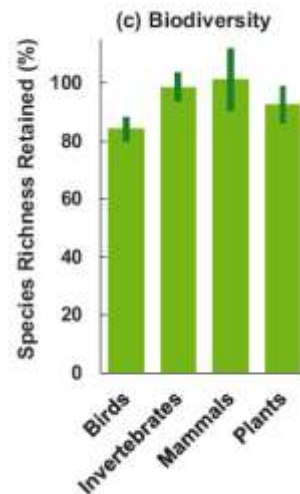
We know how

Logged forest have high conservation value

Progress with forest law enforcement, governance and trade

Use it or lose it

Putz et al. (2012) Cons Letters



# Is there a place for Sustainable Forest Management?

No

Multi-national corporations have little interest in local sustainability

Shearman et al. 2012 Biol Cons doi: 10.1016/j.biocon.2011.10.036

Assumes no regulations

No

“little or nothing is known about specific autecological characteristics of the timber species to be managed . . .”p 479

Zimmerman and Kormos (2012) BioScience 62 (5): 479-487

Re-interpretation of published studies



“If they only understood . . .if only they knew what we know”

Deficit model

- rationale role of knowledge
- science provides neutral expertise
- facts and values distinct



## Message from first part

- SFM is not same as timber mining but requires that some conditions are met (rules).
- “facts” can be interpreted in different ways  
Chan et al. 2007 Cons Bio 21 (1): 59-68.
- Don't assume lack of uptake is due to lack of understanding or awareness

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## Second part of my talk

- In forestry, often some values and perspectives are privileged over others





## Some practices okay, some not okay



- Value-laden terms
  - Forest loss, degradation
  - Land improvement
  - Pristine
- From whose perspective are we valuing the resource, is conservation more important than social justice?
- Costs and benefits of decisions are unequally distributed

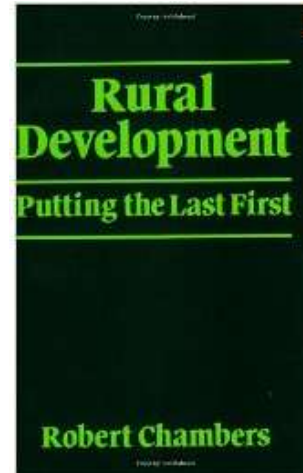


Lele & Kurien (2011) Environ Cons 38 (2): 211-233.

## Messages from second part

Our experience and perspective influence what we value, what we see, what we measure.

Knowledge exchange and self-reflection can help.



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## Third part of my talk


Is community forestry the answer?

Ecological sustainability

Local community benefits

Some responsibility and authority in community





**ELINOR OSTROM**  
2009 Nobel Laureate  
in Economic Sciences








Nobel medal © The Nobel Foundation

Tole (2010) Environmental Manage. 45: 1312-1331.

Charnley & Poe (2007) Annu. Rev. Anthropol. 36: 301-336.

Porter-Bolland et al. (2012) For Ecol Manage. 268: 6-17.

Need to connect people, groups, organizations  
– Deliver services to users that want them

## Need to connect people, groups, organizations

- Give voice
- Governance structures
- Share experience and knowledge



## Sangha Tri-national World Heritage Site (Congo Basin)



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Author: Andrea Turcato



## Conservation and Livelihood Indicators

### Local Natural Asset

Availability of Non-Timber Forest Products  
Availability of Bushmeat . . .

### Global Natural Asset

Population of elephants  
Population of gorilla

### Social Assets

Level of activity of local NGOs  
Corruption in public & private sectors . . . .

### Physical Assets

Number of casava fields  
Quality of housing . . .

### Human Assets

Access to health care  
Quality of education . . .

Sayer et al. (2012) International Forestry Review 14(1): 90-98.

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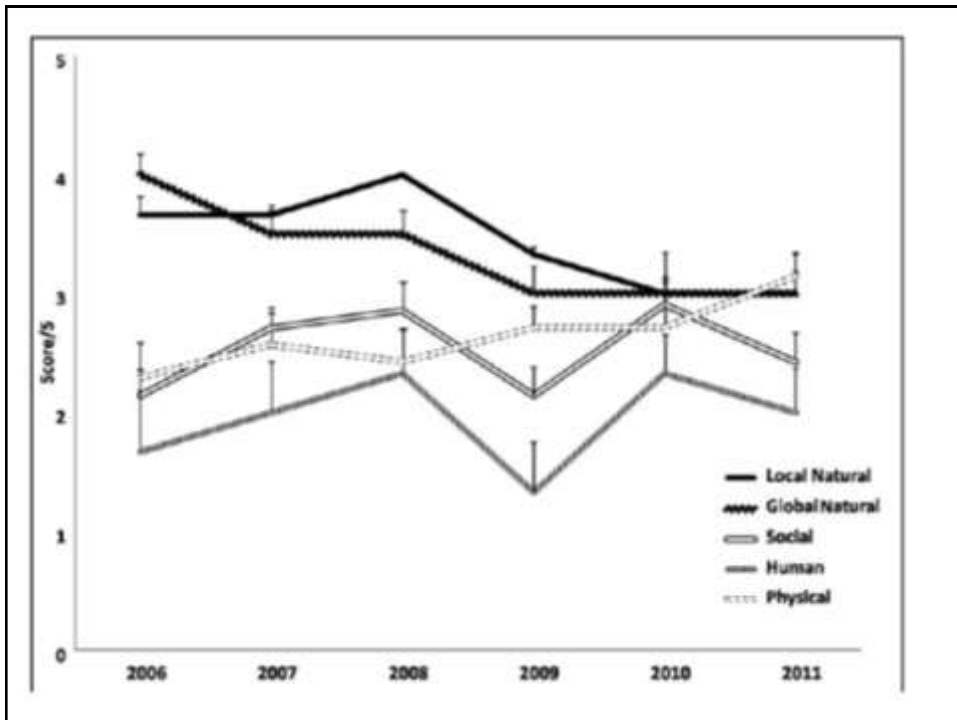
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## Messages from third part

- Experience with community-based forestry mixed, context specific, rules are important
- External factors influence community-based organisations as well as industry
  - Sometimes positive, sometimes negative, unpredictable
- Importance of loose linkages (vertical and horizontal)

## Take home message

- Self-reflection important
- Partnerships and friendships are important
- Need to work at multiple scales to address complex problems



<http://www.resalliance.org/>

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