Floods, Forests and People: dissecting the triangle

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

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The debate: forester/conservationist versus hydrologist paradigms

1A. Forests regulate water flows and reduce flood incidence

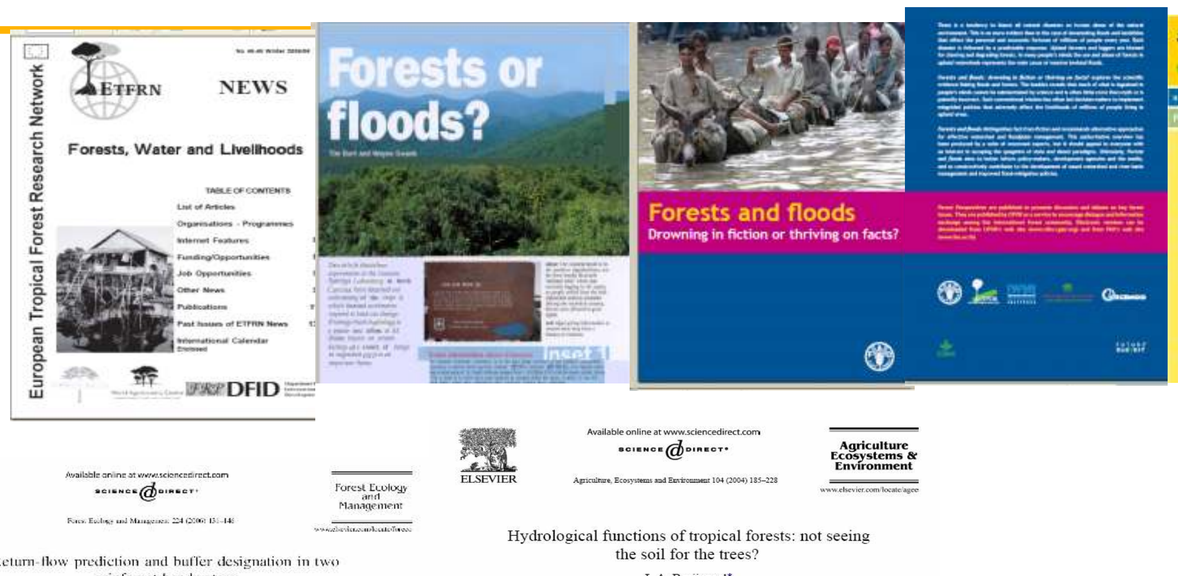
1B. Forests don't help during big, devastating floods; reforestation does not reduce risk

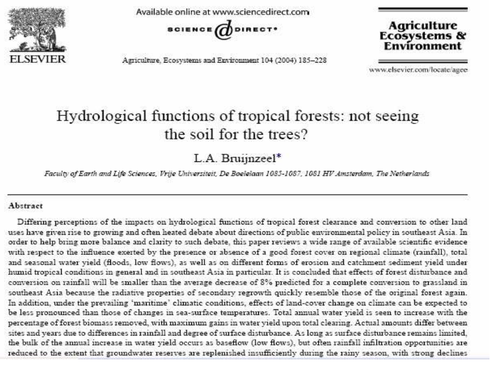
2A. Flood prevention is a major argument for forest conservation

2B. Other arguments (biodiversity, intrinsic value) prevail

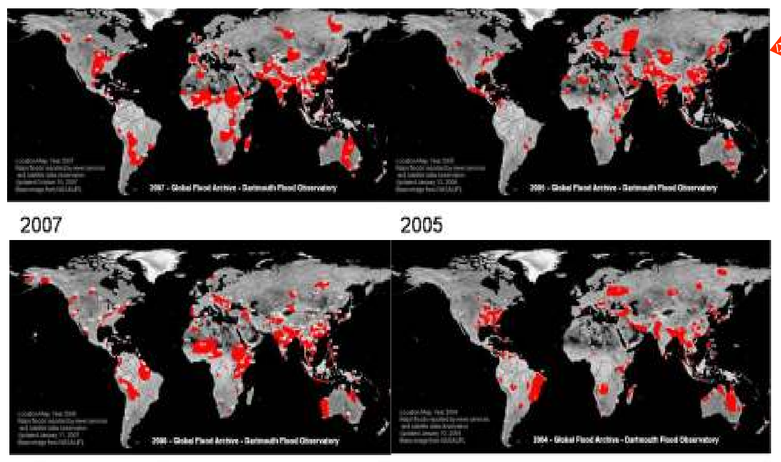
3A. Reforestation is among the best options for flood prevention

3B. Moving people out of harms way is more effective



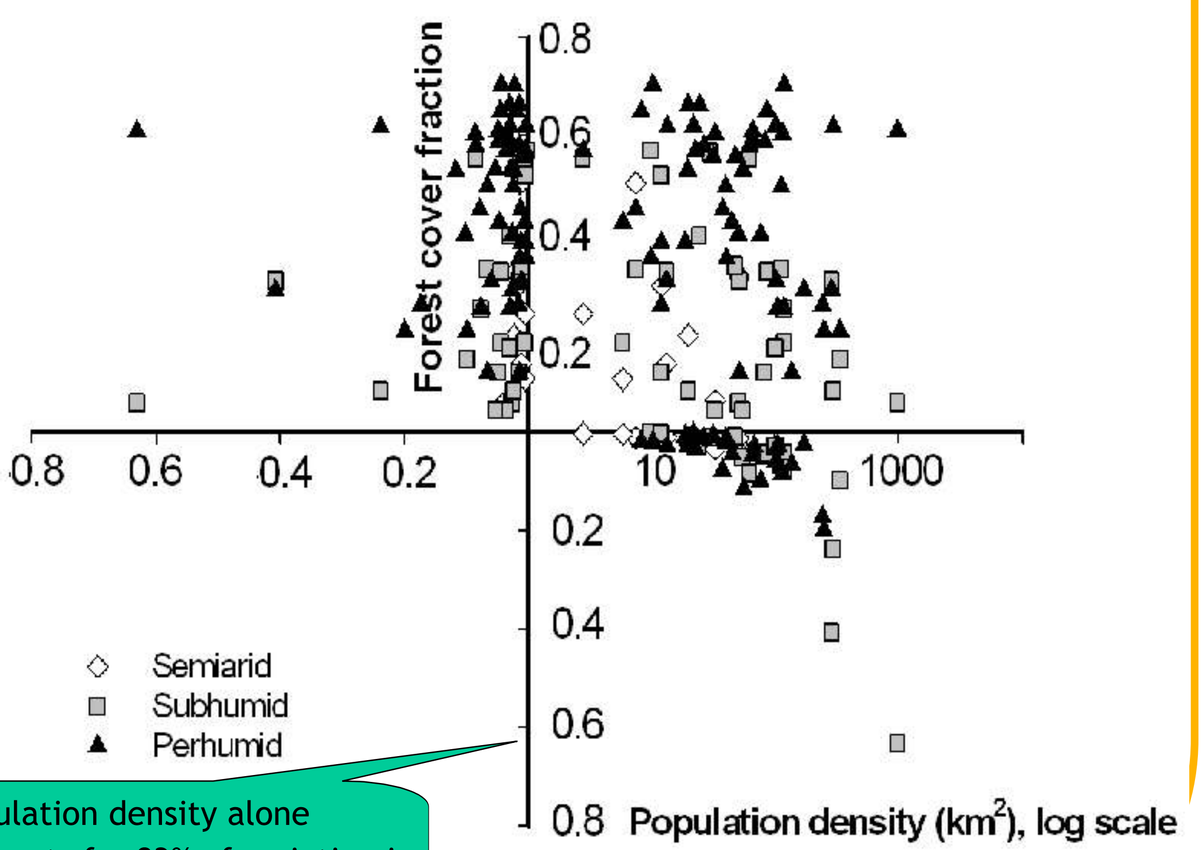


A closer look at the Bradshaw et al. Evidence



Dartmouth Flood Observatory. World Atlas of Large Flood Events. Available from: http://www.dartmouth.edu/~floods/archiveatlas/index.htm (2007)

Human population density in this data set accounts for a much larger share of the variation than any model presented by Bradshaw et al. Their 'forest cover effects' may well be indirect…



The Bradshaw data set suffers from:

- Absent of indicators of x-border causation
- In-country differences between watershed
- People+ and forest cover- reporting bias
- Inconsistencies and errors in 'non-forest' land use data

Challenges Ahead

Communication:

- Polarized views (authors and GCB editors don't appreciate to be critiqued)
- NGO's and government agencies (and ICRAF??) are slow to abandon quoting wrong reasons for right things…