Contribution of ICRAF to the Satoyama initiative

Dr. Christian Dupraz, INRA, France Dr. Dennis Garrity, ICRAF, Kenya Dr. Meine Van Noordwijk, ICRAF, Indonesia

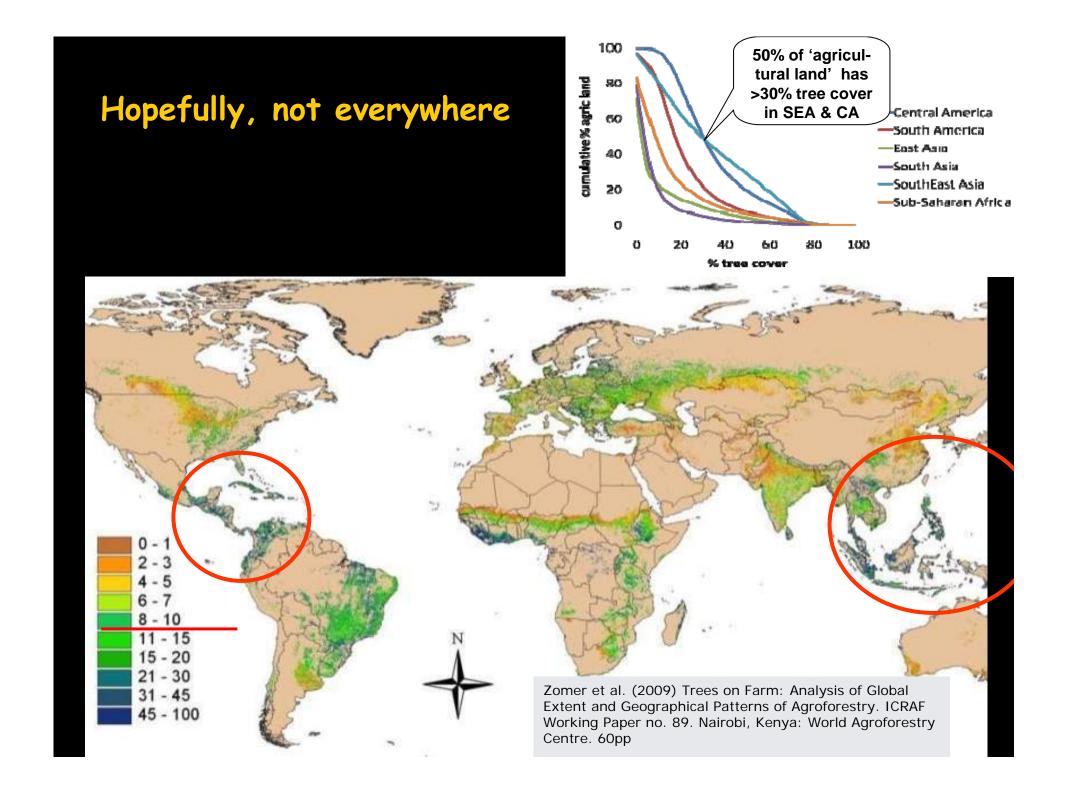




90% of natural terrestrial temperate and tropical ecosystems include trees



But the link between trees and farmer communities is often broken



'The proportion of trees on farms and in forests varies considerably among countries, but two trends seem almost universal in the tropics:

- -- the number of trees in forests is declining, and
 - -- the number on farms is increasing'

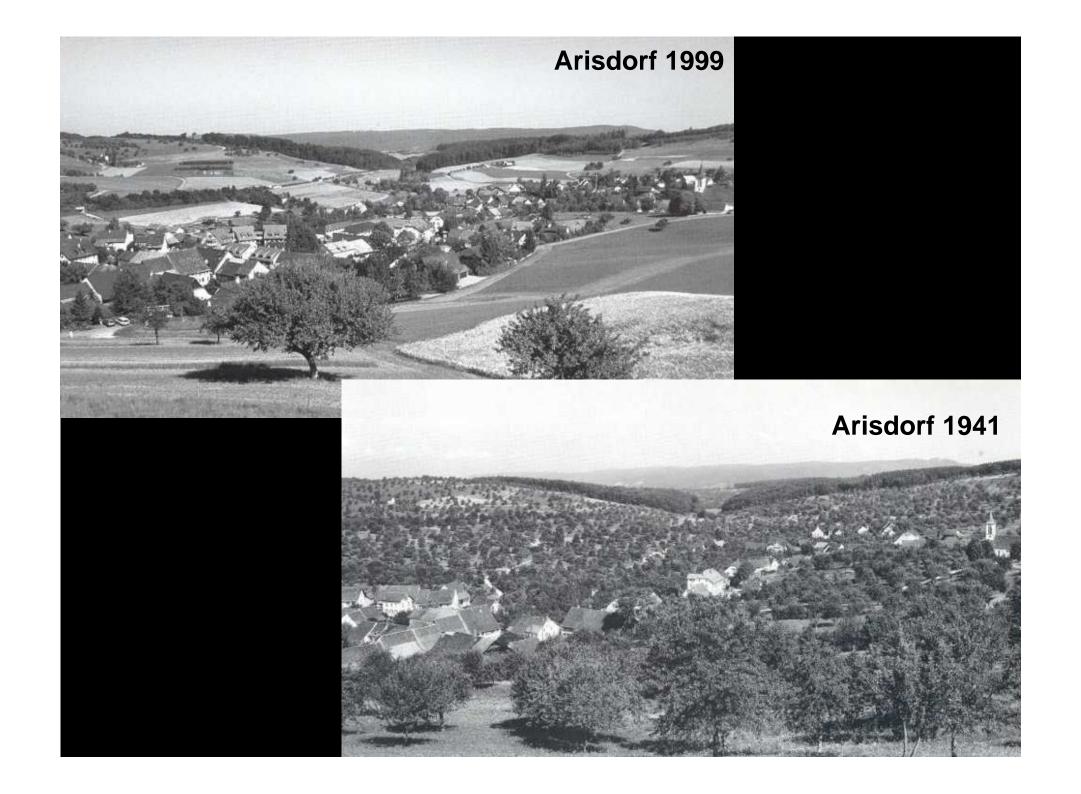
FAO. 2005. State of the World's Forests

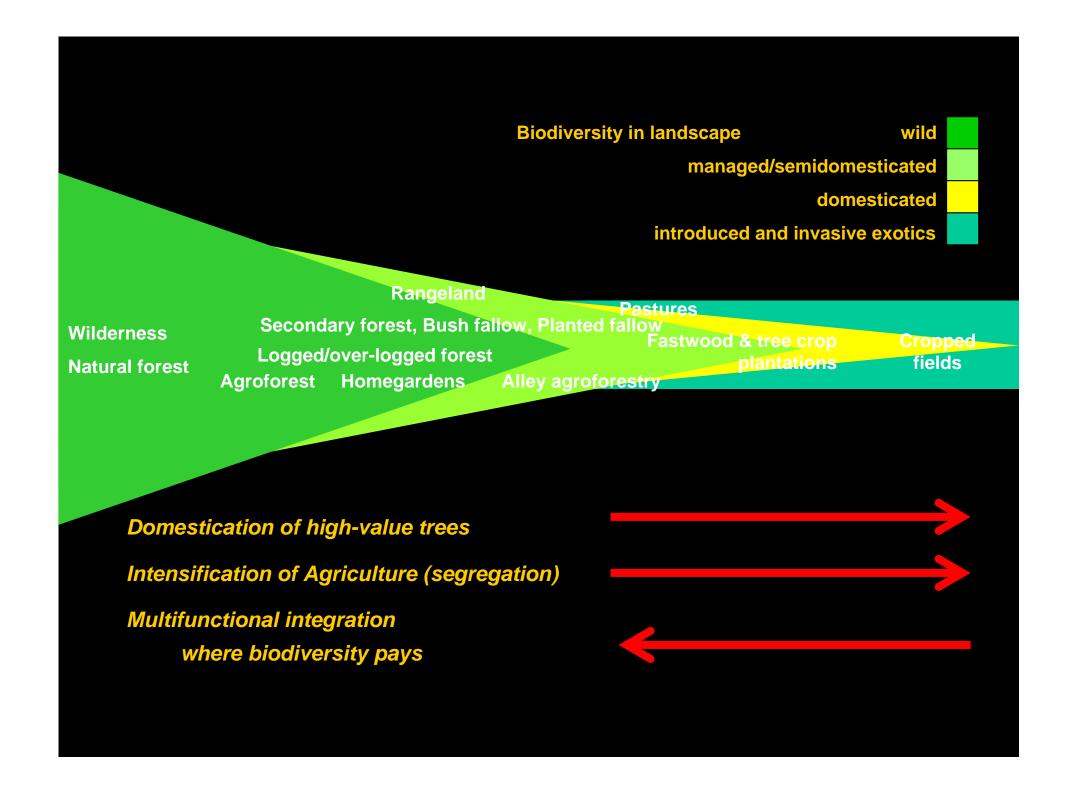






Rural Trees: a century of decline, worldwide







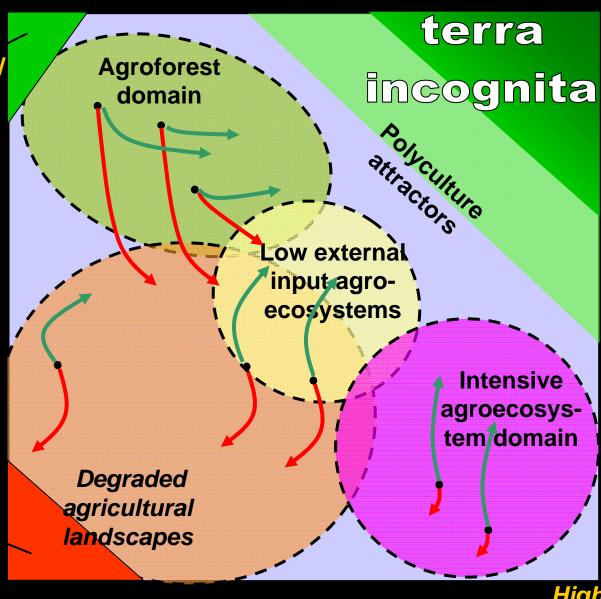
High

Core wilderness/ natural forest

Current dominant trend

Biodiversitybased alternative pathway

& associated **Siodiversity**



Low

Agricultural productivity

High

- 1. Towards an agronomy of multispecies landscapes
- 2. Encourage farmers to work (again) with trees
- 3. Adapt national and community legislations
- 4. Include environmental services in the balance
- 5. Adress both small and large holders

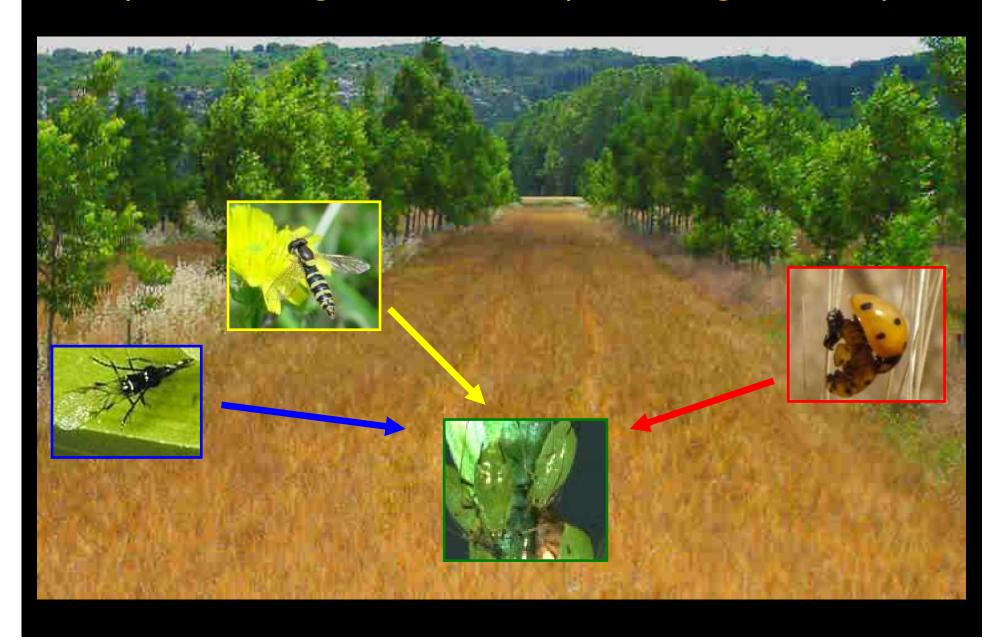


- The need to recognize and support research
 - Mimicking nature in agriculture: multispecies systems, agroforestry
 - Funding difficult due to the lack of lobbying (eg: EU funding for ICRAF projects very limited)
 - Try new directions: Select crop varieties for shade tolerance, deep-rooting, high-yield polycultures, high biomass

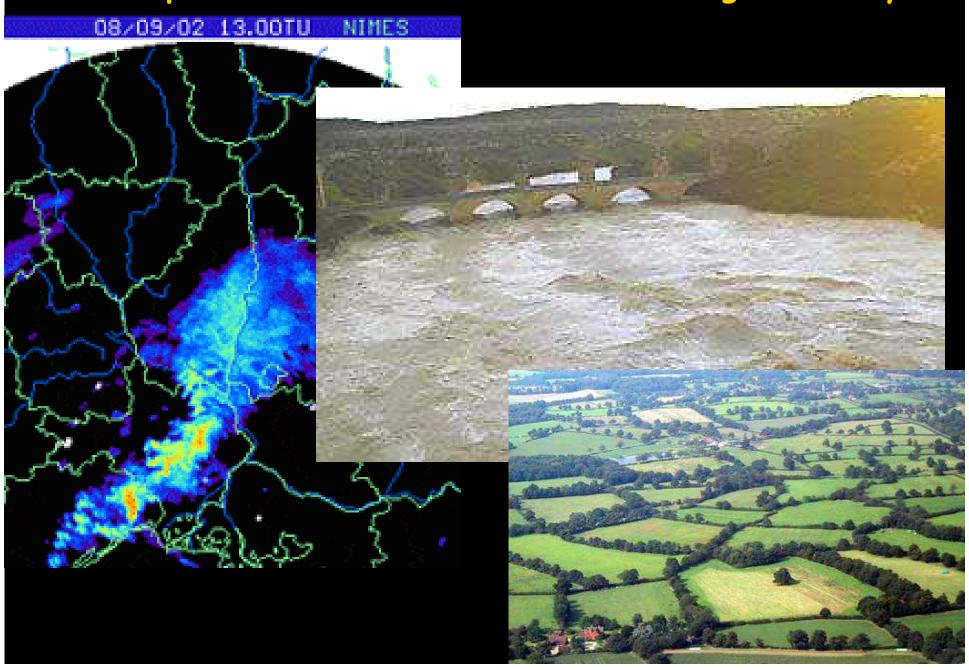




Exemple 1: Biological control of pests in agroforestry

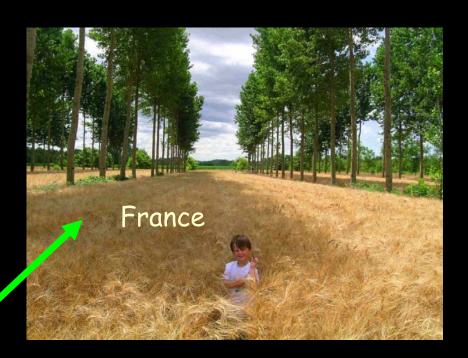


Exemple 2: Flash flood reduction with agroforestry





Share experiences across





- · 2. Encourage farmers to work again with trees
 - Technical and marketing assistance needed
 - Beware of mechanisation: new innovative systems required





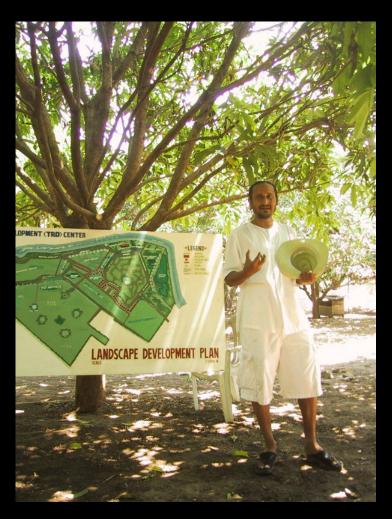


- Bring trees back in systems
 - Protect seedlings with efficient and novel methods
 - Financial incentives? Long-term interest is safer
- · A tree needs an owner... who is responsible, and motivated
- A tree needs security.

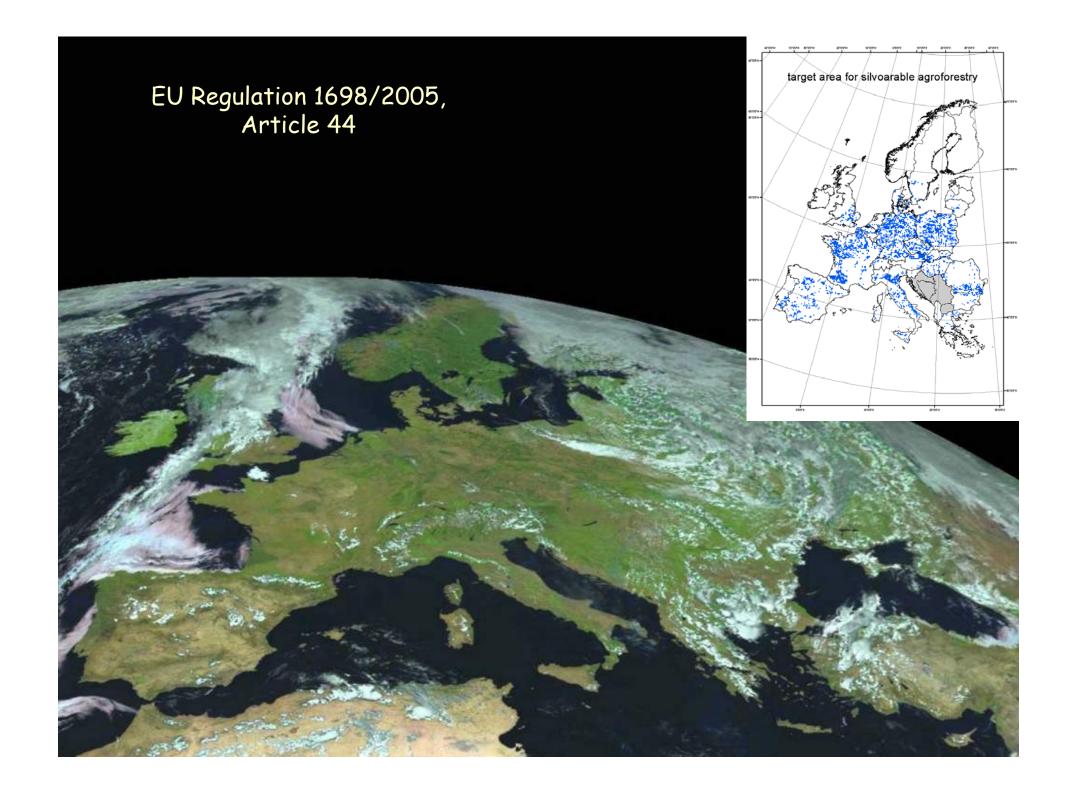




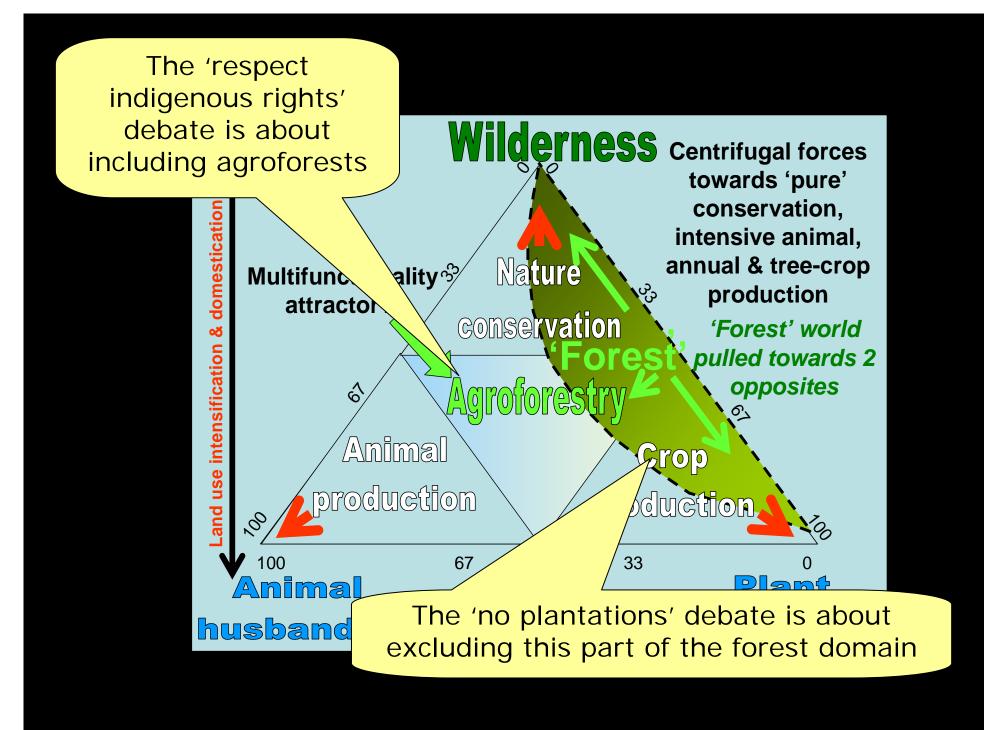
- 3. Adjust national and community legislations
 - Tree and tenure
 - Trees are part of the farming system
 - « Trees = tractors », same regime for taxes...
 - Encourage land-scape level action



Agroforestry Policy Initiative



- 4. Include ecosystem services in the balance
 - Support farming communities to be major stewards of biodiversity
 - Shift agricultural subsidy systems to ecosystem service payments
 - Include C sequestration in the port-folio... but
 - · Better to cover first livelihood needs with C rich systems
 - Smallholder-focussed CDM mechanisms have high transaction costs: make systems viable independently of C payments?



5. Adress both small and large holders farmers

 Safods: Smallholder Agroforestry Options for Degraded Soils



Expected/potential cooperative activities under the Satoyama Initiative.

Define new research avenues

- Support multispecies systems research
- Assess the tradeoff and synergy between ecosystem services ad product flows; focus on water flows and biodiversity
- Experience with 'voluntary' forms of compensation for maintaining public goods in the form of ecosystem services from mixed landscapes
- · Local monitoring as part of 'conditional' and 'outcome-based' policies
- Recognition of existing policy bottlenecks

Follow up

- Website of 2nd World Congress of Agroforestry contains many links, including the Satoyama sessions
- The World Agroforestry Centre (ICRAF) is active on landscape issues across the Tropics
- The European agroforestry network can be triggered to offer cooperation on temperate zone, with a good experience on policy issues
- We do look forward to new cooperation





