Contribution of ICRAF to the Satoyama initiative

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90% of natural terrestrial temperate and tropical ecosystems include trees

But the link between trees and farmer communities is often broken.
50% of ‘agricultural land’ has >30% tree cover in SEA & CA

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**

Rural Trees: a century of decline, worldwide
Domestication of high-value trees

Intensification of Agriculture (segregation)

Multifunctional integration where biodiversity pays
Low Agricultural productivity

Core wilderness/natural forest

High

Agroforest domain

Low external input agro-ecosystems

Intensive agroecosystem domain

Biodiversity & associated ecosystem services

Current dominant trend

Biodiversity-based alternative pathway

High
Challenges

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. Address both small and large holders
How to overcome challenges?
Challenge 1

• 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
Tree clearing
Philippines

Share experiences across

France
Philippines
Challenge 2

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

![Image of a landscape with trees and crops]
• 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.
Challenge 3

• 3. Adjust national and community legislations
  - Tree and tenure
  - Trees are part of the farming system
  - « Trees = tractors », same regime for taxes...
  - Encourage landscape level action
EU Regulation 1698/2005, Article 44
Challenge 4

- 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 portfolio... 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?
The ‘respect indigenous rights’ debate is about including agroforests.
The ‘no plantations’ debate is about excluding this part of the forest domain.
Challenge 5

• 5. Address both small and large holder 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 and 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 2\textsuperscript{nd} 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.
A suivre…
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