A Forest Garden

Using Analog Forestry to strengthen production systems and improve ecosystem resilience

Charith Senanayake

Rainforest Rescue International

Non timber forest product use

Medicinal products

Food products

Commodities sourced from forests

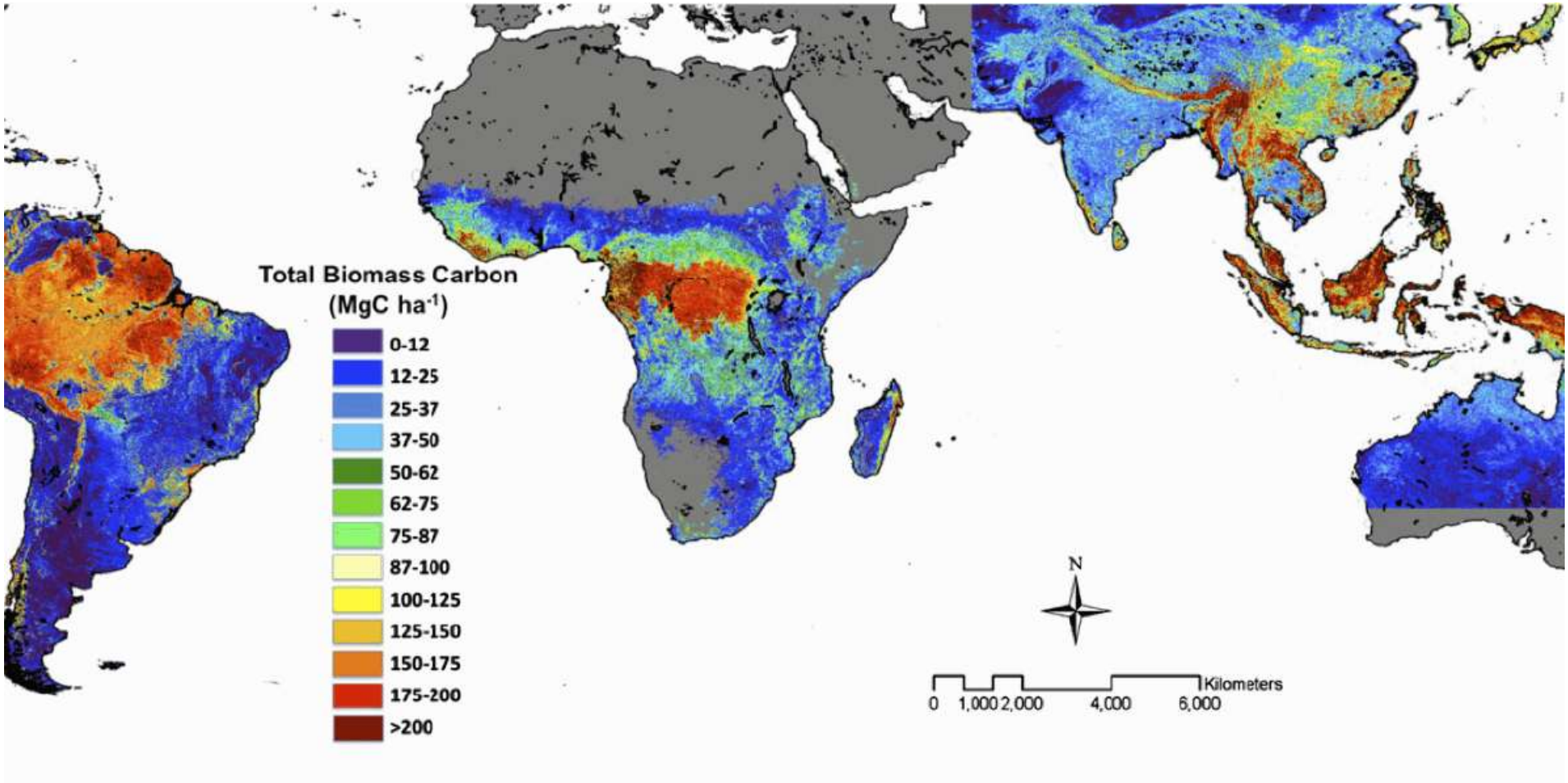
Sandal wood

Coffee

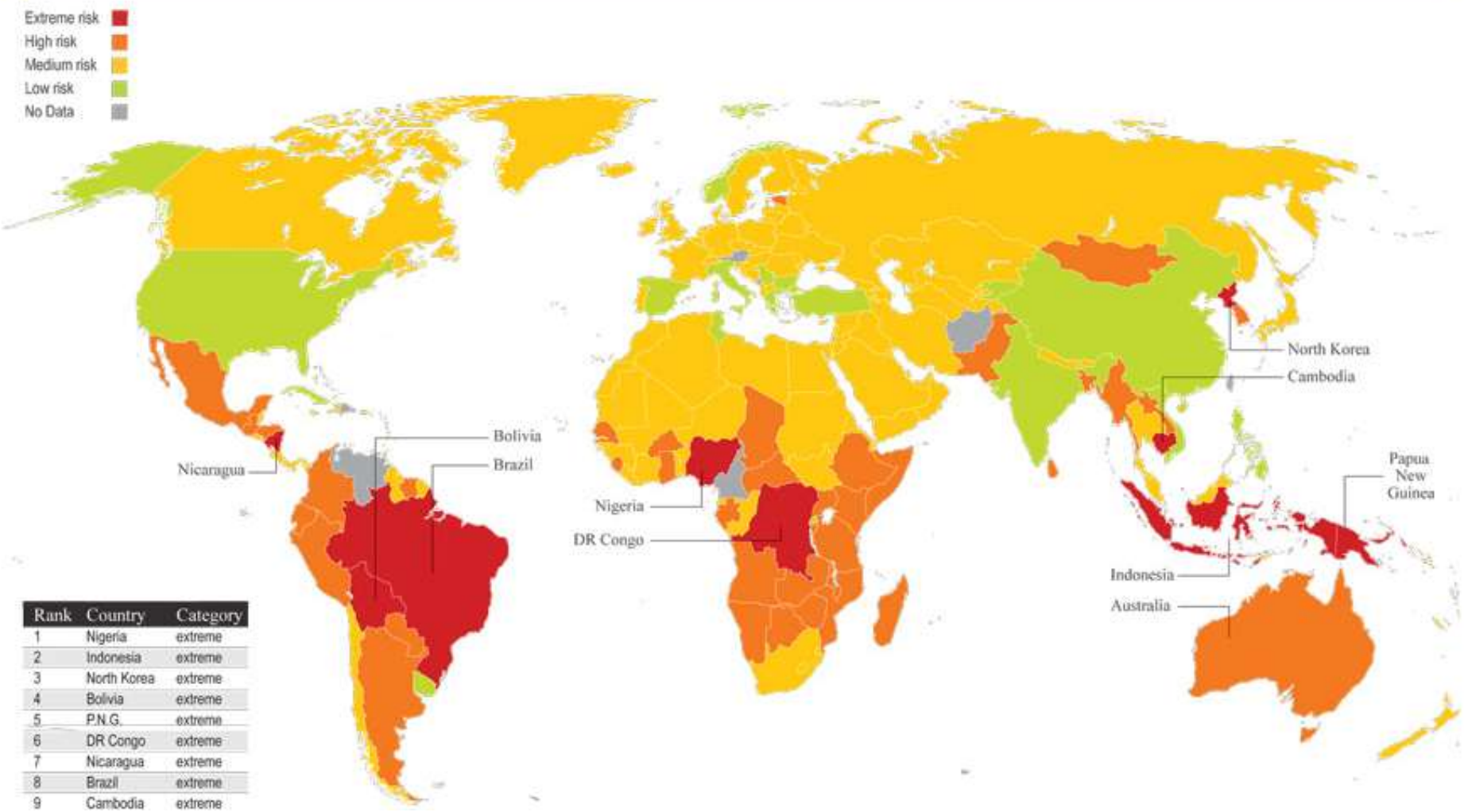
Landscape level change for production purposes

Unsustainable Land Management by communities

Tropical Carbon Sinks

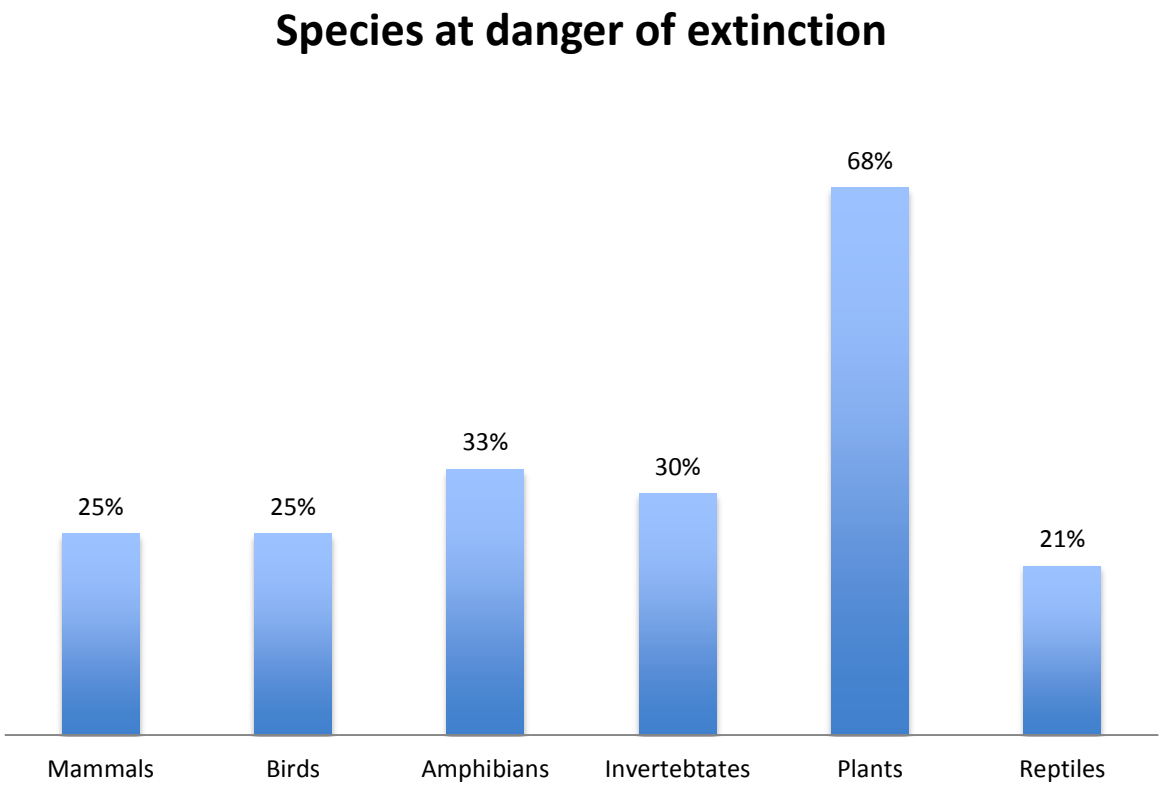


Global Deforestation Rates 2012



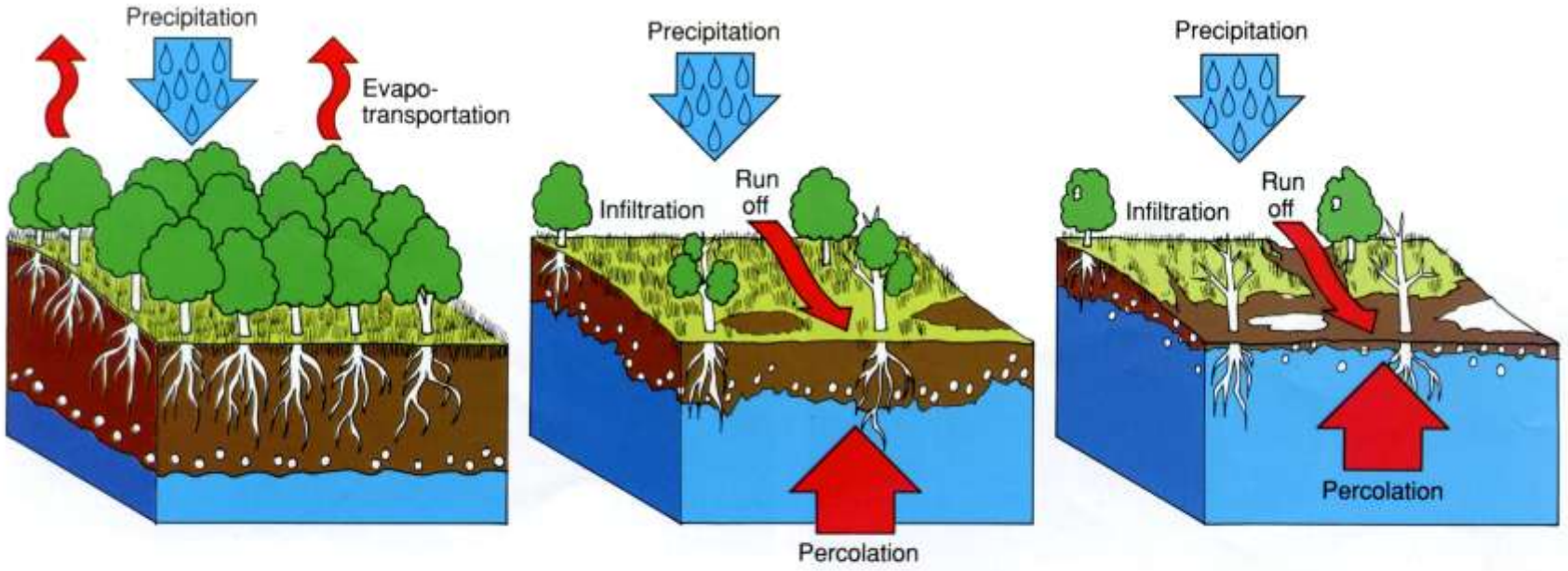
Rank	Country	Category
1	Nigeria	extreme
2	Indonesia	extreme
3	North Korea	extreme
4	Bolivia	extreme
5	P.N.G.	extreme
6	DR Congo	extreme
7	Nicaragua	extreme
8	Brazil	extreme
9	Cambodia	extreme

Threats to biodiversity



Conservative estimates propose a loss of around 10,000 Species per Year.

Salinization impacting water quality



Before clearing
Most water is used where it falls. The system is in balance.

After clearing
Saline groundwater rises and is concentrated at the surface by evaporation. Vegetation growth is affected.

Later
Accumulation of salt at the surface kills protective plant cover. The land is open to erosion.

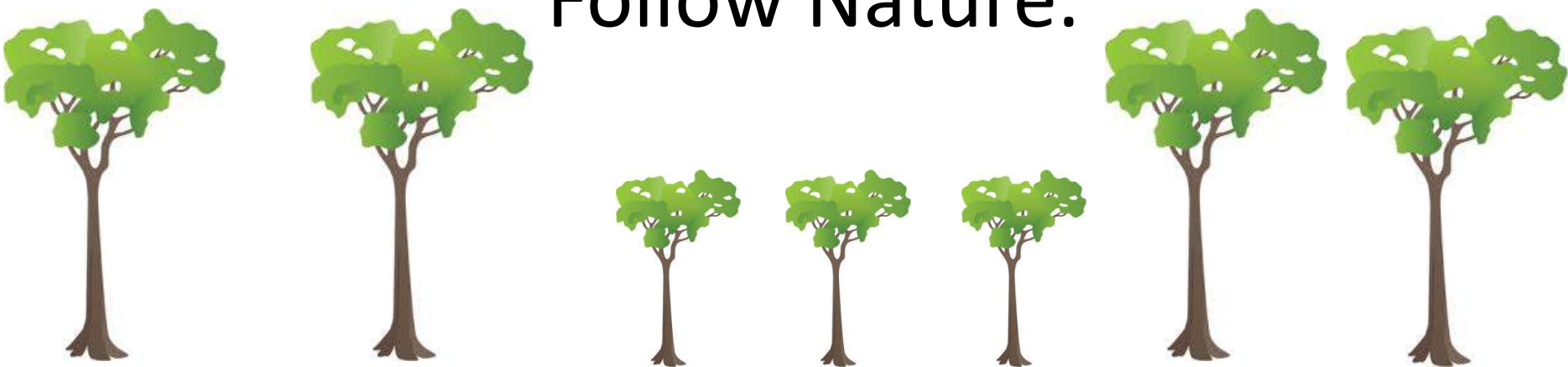
Asia Pacific Context

Do we have any solutions for the future?

Yes !

How?

Follow Nature.



Analog forestry

- Seeks to establish ecosystems with architectural structures and ecological functions similar to the original climax or sub climax vegetation.
- It also seeks to strengthen rural communities, socially as much as economically, through the use of species that provides for food sovereignty and market orientation.
- First trials begun 1987, and in April 1994 it was accepted as a methodology integrating the protection of biodiversity within the context of sound landscape management by scientific experts at the Open-ended Intergovernmental Meeting of Scientific Experts on Biological Diversity (sponsored by the UN) in Mexico City.

General Steps in Designing an Analog Forestry Restoration Action

1. Map and record vegetation types
2. Evaluate resource availability and production needs
3. Identify land scape level features
4. Design and implement restoration action

Ecuador New AF Planting

Ecuador 1st seral stage

Ecuador 2nd seral stage

Mature Analog forest in India

Comparative approaches land management.

Farmers following organic approaches and integrate Forest Garden Planning

Value Added Production

Coffee

Cardamom

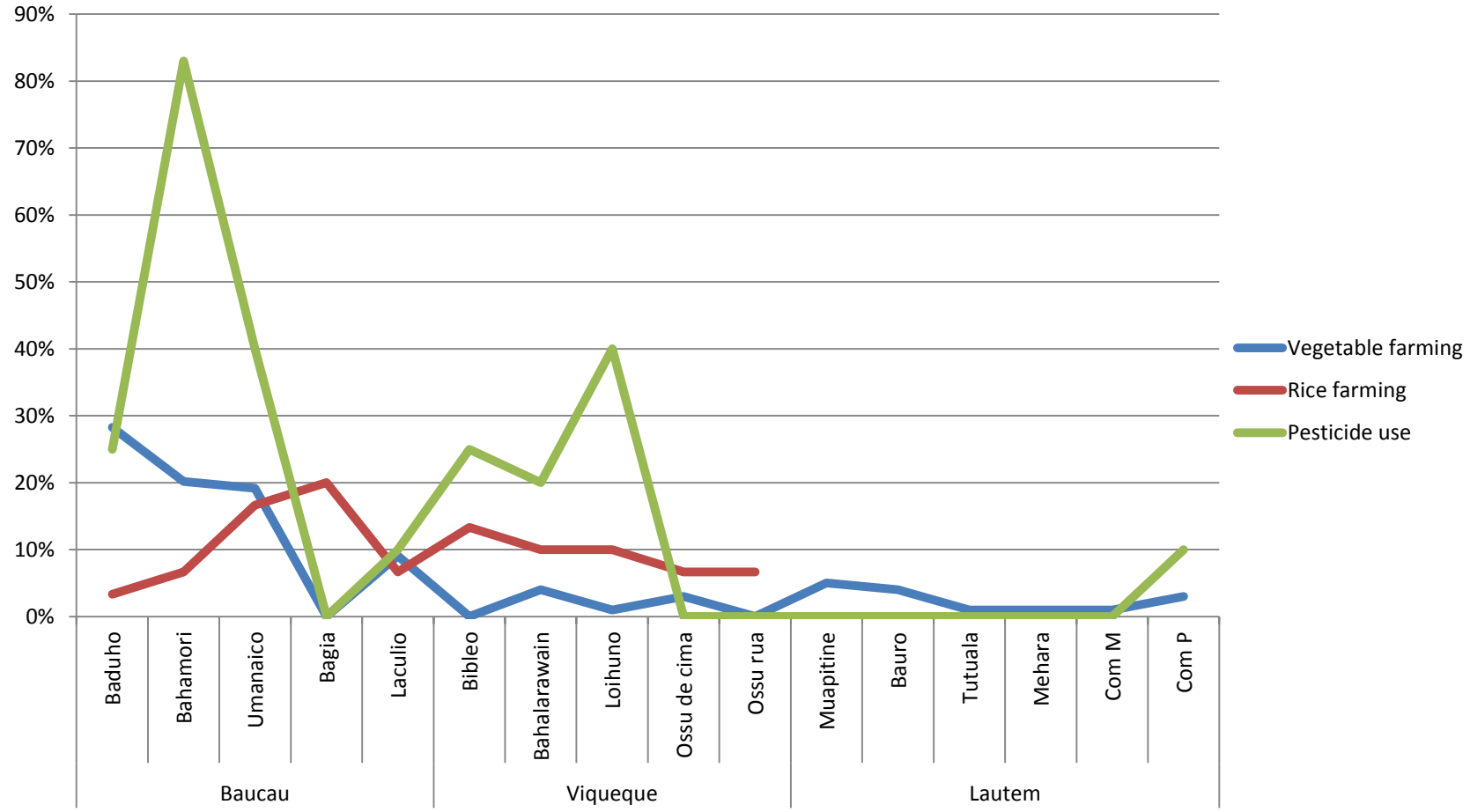
Vanilla

Banana, Ginger

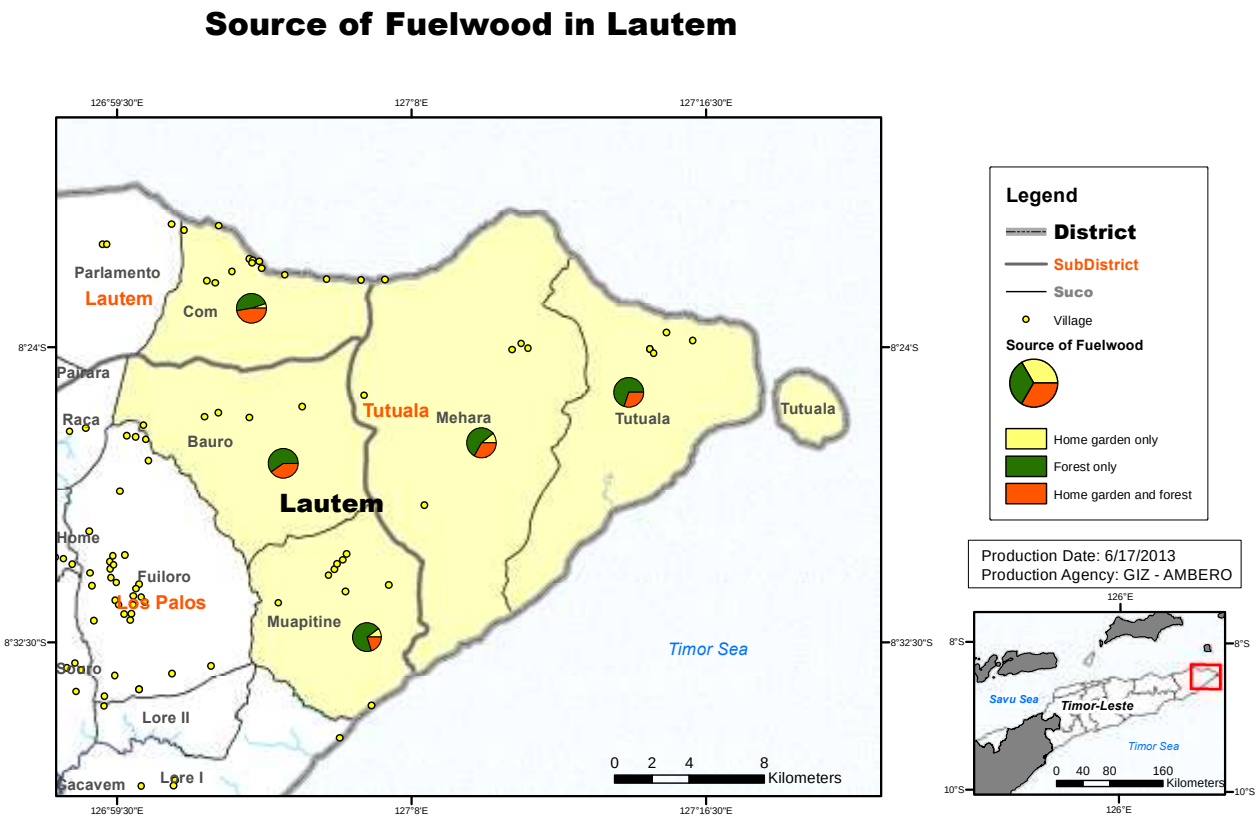
Observations in Timor Leste

- In 2013 an Agro-biodiversity survey was completed in three districts by Ambero-GIZ and MAF.
- NTFP resource use were also assessed.
- An ABD data base was installed at UNTL.

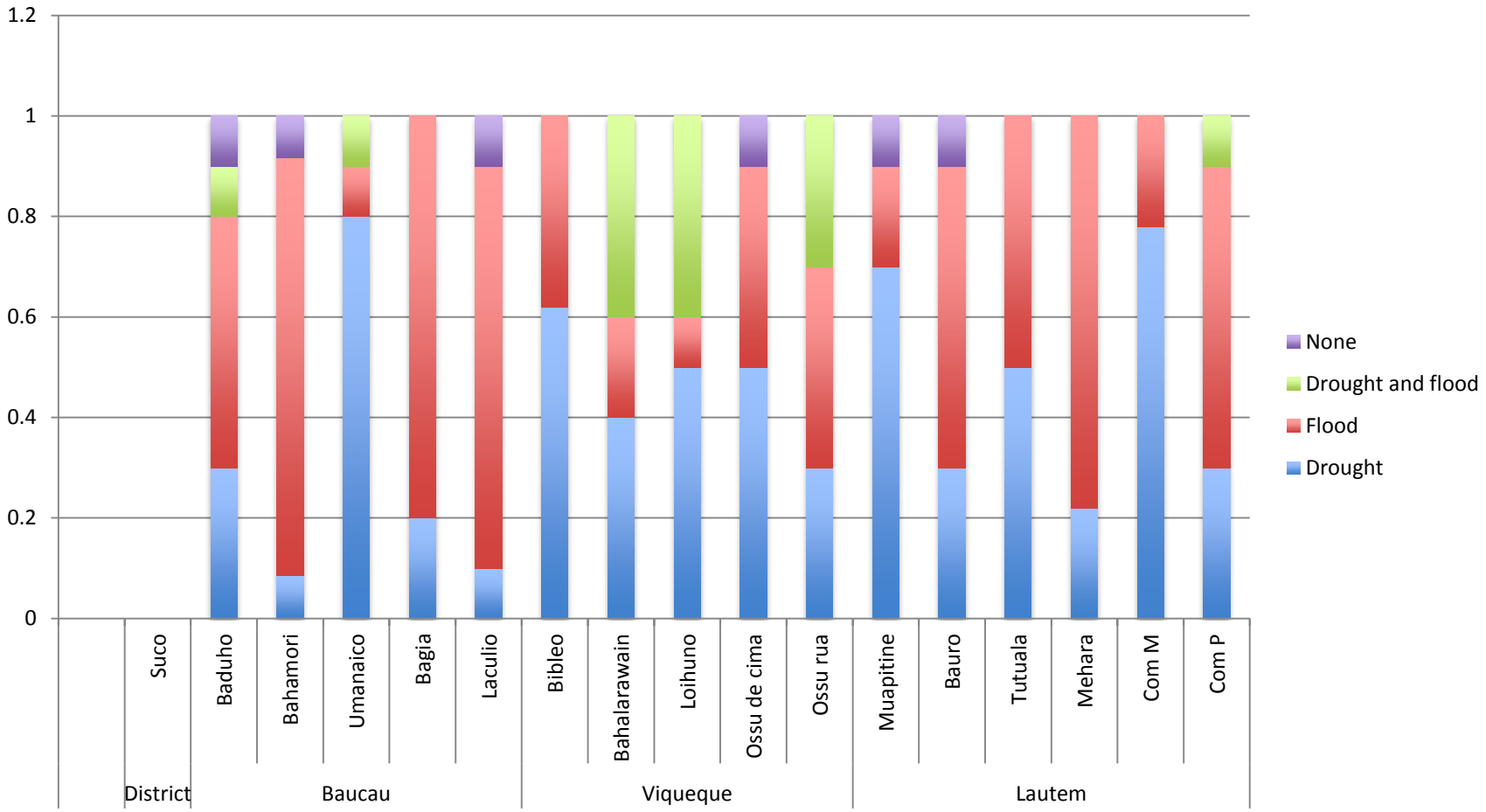
Increasing reliance on pesticide use by farmers.



50-75% Reliance of on fuel wood extraction from existing forest for domestic purposes.



Climate impacts faced by communities



ABD Farmer Manuel Ximenes
Sara Ida, Baucau

Potential interventions

- Policy support by GOTL to promote sustainable and locally appropriate silvicultural programs (AF,FMNR) along all buffer areas, Forest fragments and watersheds and coastline.
- Integration of resource mapping (especially watershed) into Village Development Planning.
- Promotion of erosion control methodology such as SALT on lands with steep gradients and Improvement of fuel wood supply chain.
- Develop existing baselines(such as the ABD database in UNTL) and monitor.

Obrigado – Barak

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