

# Future Forestry sector Development in Africa

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TRANSFORMING LIVES AND LANDSCAPES

# Outline

**I will talk about:**

- 1. AFRICA'S FORESTS, TREES AND AGROFORESTRY**
- 2. A CROSS SECTORAL OVERVIEW**
- 3. FORESTRY SECTOR CHALLENGES**
- 4. STRATEGIES FOR FUTURE FORESTS, TREE PRODUCTS AND SERVICES**
- 5. POLICY, CAPACITY AND INSTITUTIONAL MATTERS**
- 6. CONCLUSION**

# THE RAINFOREST



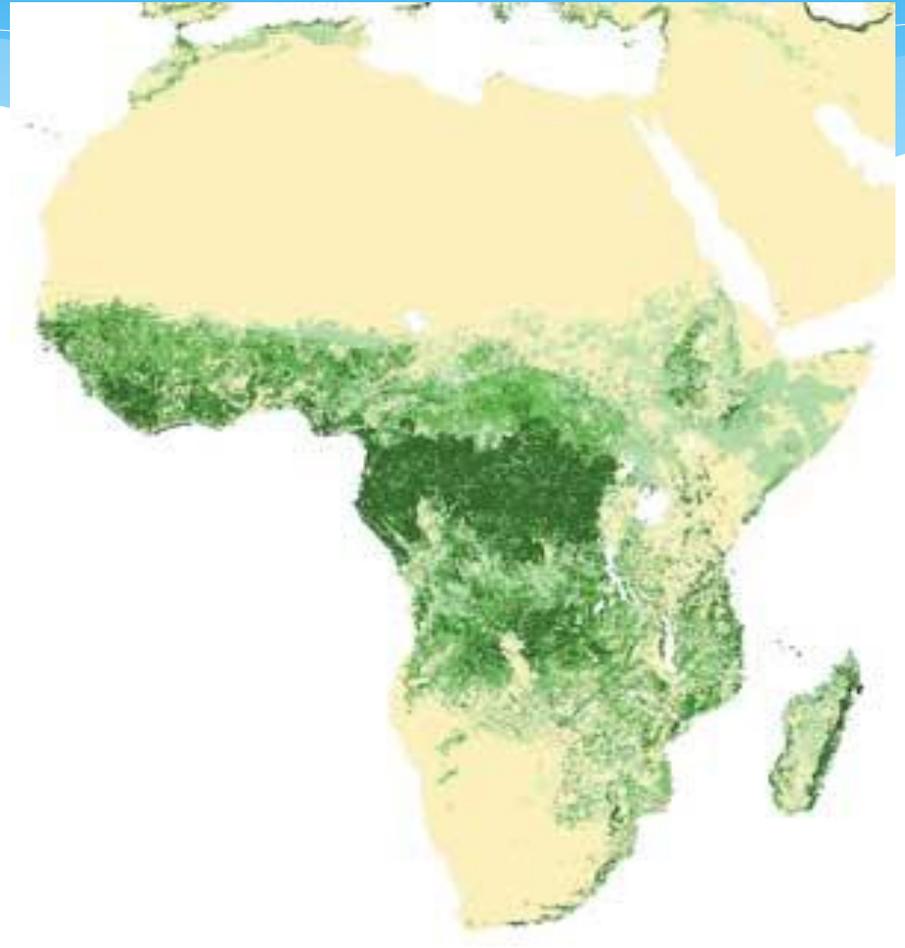
# Global Image of African Forests

- \* Few facts used to distort the true image of Africa
- \* ***Save the Rainforests*** crusades
- \* Economic and Social importance of forests understated
- \* Underestimated potential for products and services
- \* Mindset on Africa is frozen in the 1960s!!



# The correct statistics

- \* 650 mi ha or 17% of the world's forests. (>60% of Western Europe!
- \* Of which 1.5% planted
- \* 25% of the land covered by deciduous forests
- \* 0.8 ha/capita: global average is 0.6 ha
- \* > 90% public ownership



# Biodiversity

- \* Numerous global biodiversity hotspots
- \* Source of energy, food, timber, medicines
- \* 6% of GDP (direct harvesting excluded)
- \* 80% of harvested wood goes to energy (charcoal and firewood)



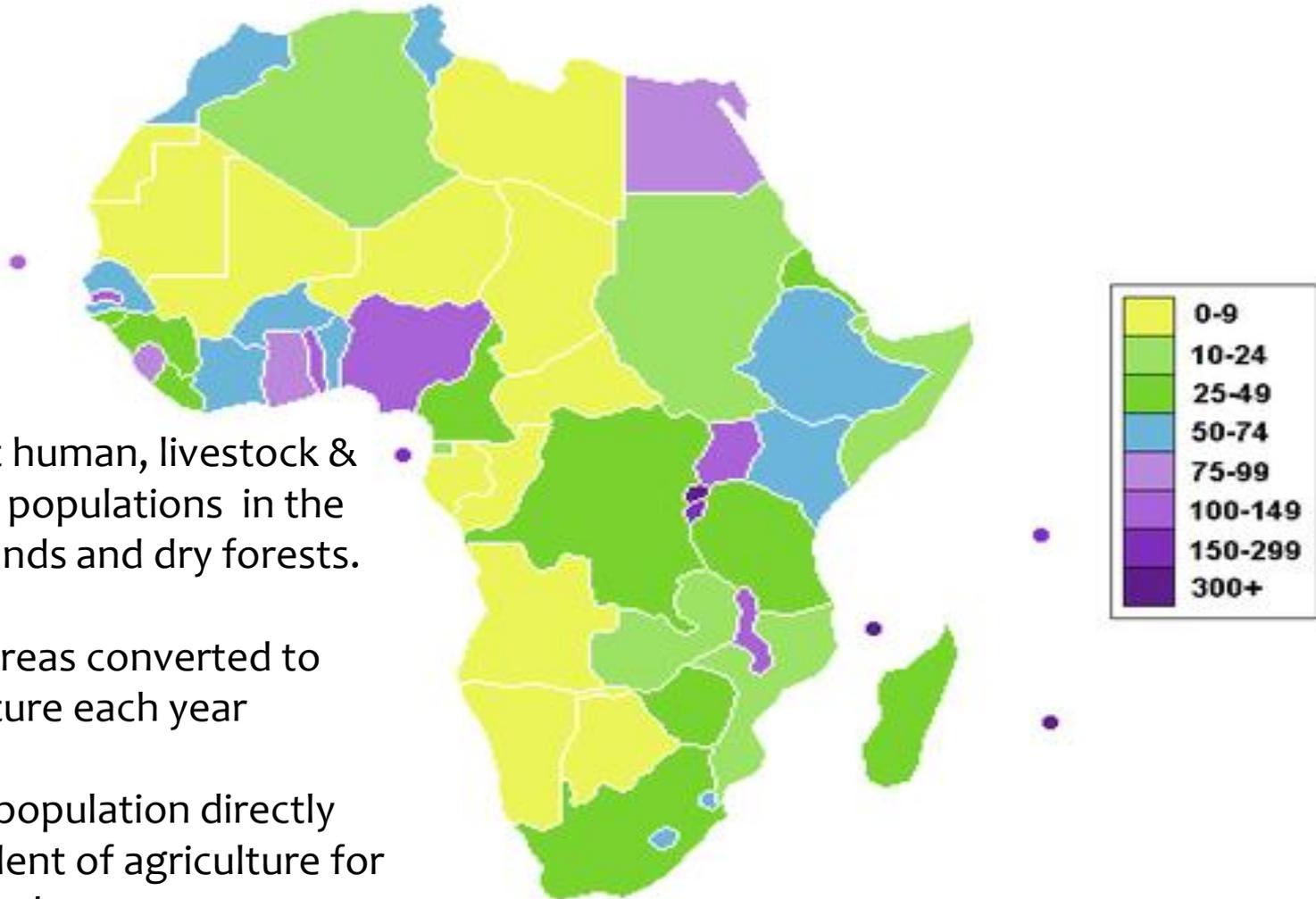
# Comparative population and land statistics

Parameters	Africa	China	India
Population (million)	1,032	1,347	1,210
Land area (Million Sq. Km.)	30.22	9.60	2.97
Desert area (Million Sq. Km.)	4.73	0.22	0.22
Net potentially productive area (Million Sq. Km.)	25.49	9.38	2.75
Productive land area per capita (ha)	2.5	0.70	0.23

# Agriculture

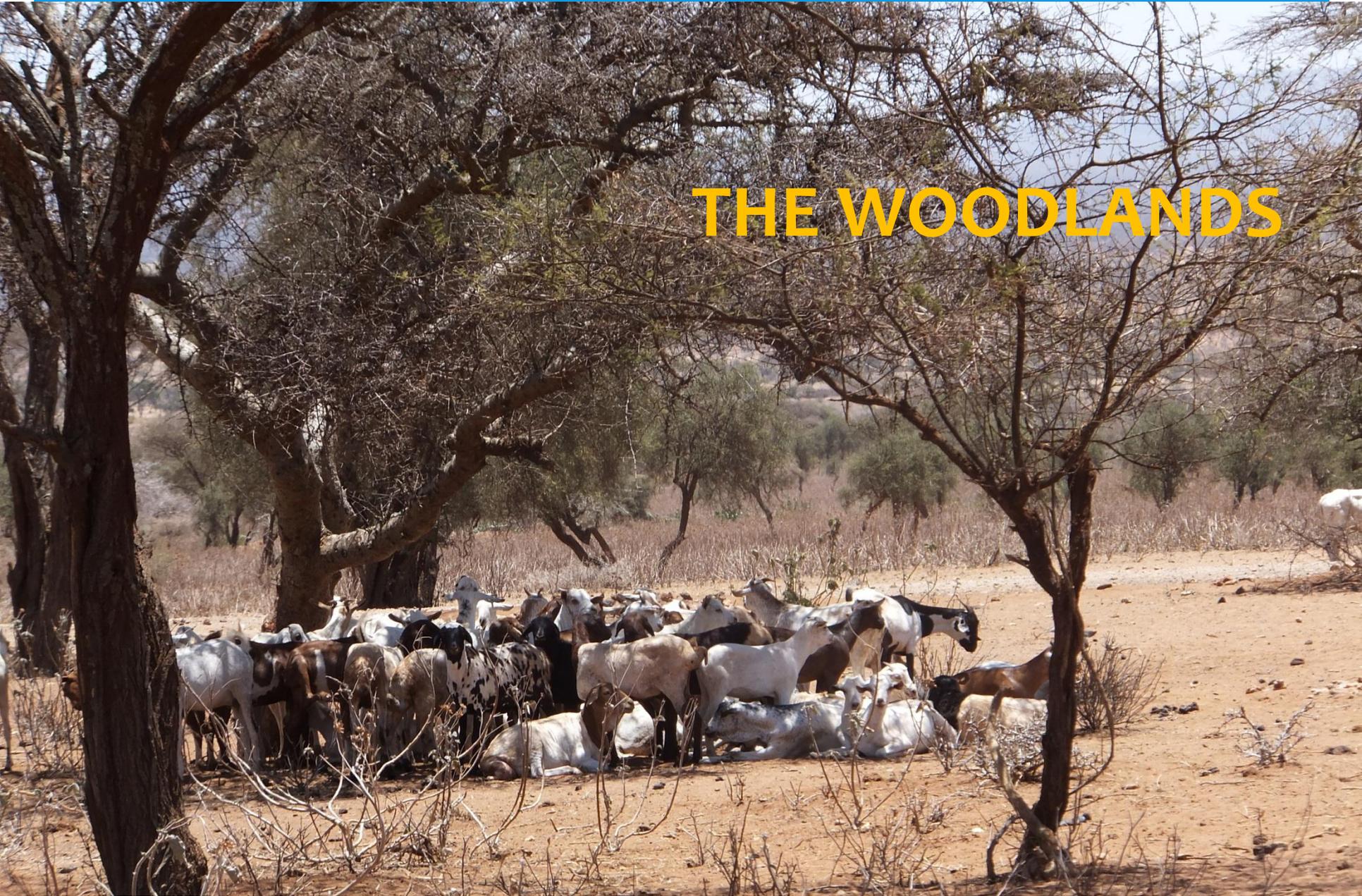
- \* Dominated by small-scale farming
- \* Pastoral systems with 70%-80% of the production going to direct consumption.
- \* Land fragmentation in high potential areas, *and in some cases is* approaching uneconomic holdings.
- \* Sensibilities that hold back rapid policy moves in this area.
- \* Large areas of 'public land' In drier zones, extensively managed and easily accessible to local populations.

# Population Density

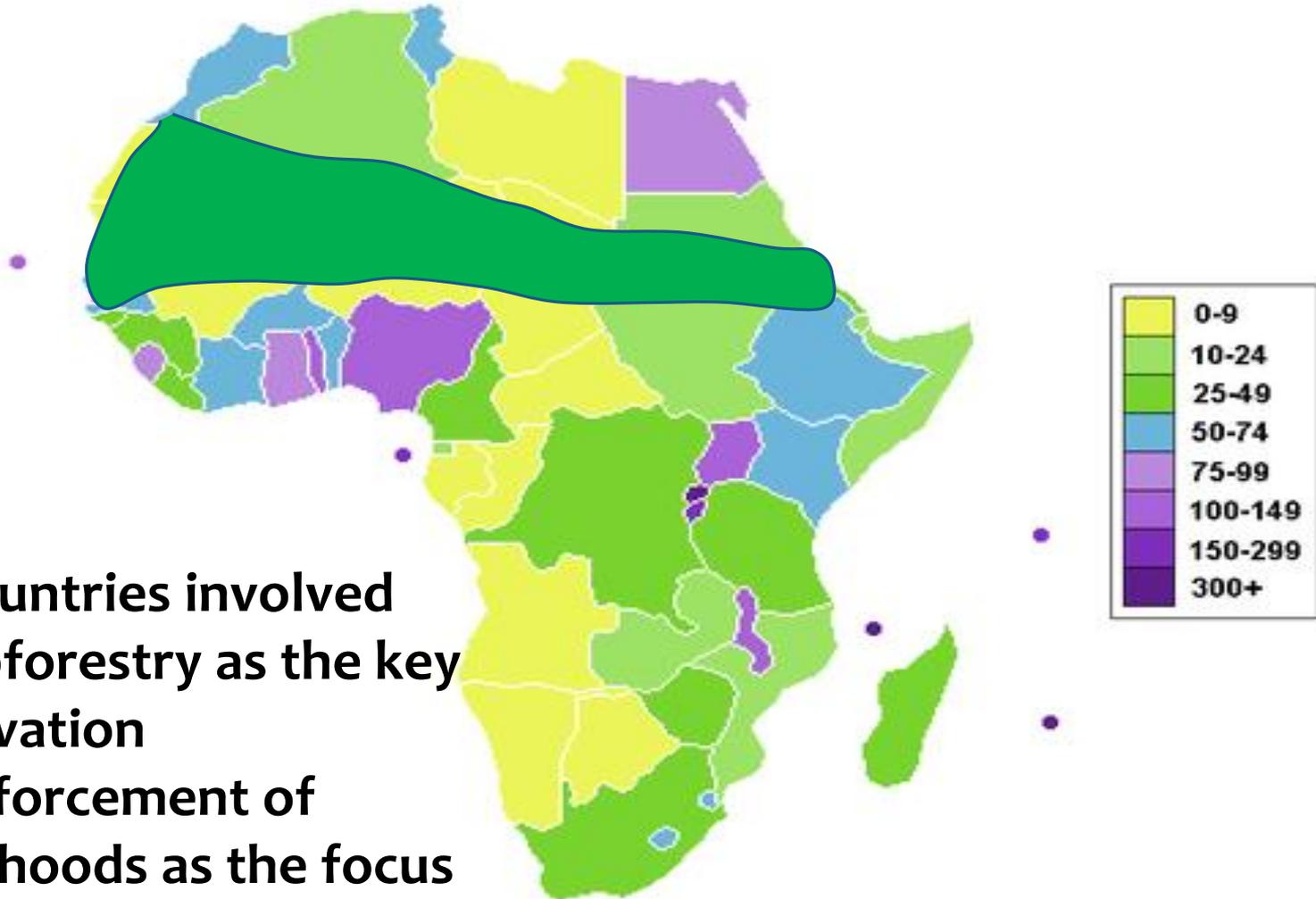


- Largest human, livestock & wildlife populations in the woodlands and dry forests.
- Large areas converted to agriculture each year
- 80% of population directly dependent of agriculture for livelihood

# THE WOODLANDS



# The Great Green Wall for Sahara and Sahel Initiative (GGWSSI)



- 21 countries involved
- Agroforestry as the key innovation
- Reinforcement of livelihoods as the focus

# Climate change

- \* The continent will be much warmer than the rest of the world, by up to 2° Celsius.
- \* Increases in extreme weather events such as droughts and floods (whose predictability is elusive) are already being experienced.
- \* Threats to basic needs especially for fibre, energy and animal feed, the threats on livelihoods are real.
- \* Changes in plant phenology, threats to species biodiversity, and fauna and flora migration are all likely to have impact on sedentary agriculture.
- \* Thus, fortifying Africa's **agriculture through climate smart actions** as proposed by the African Union is imperative.

# Taking mitigation and adaptation together

- \* Broader landscape management: Simultaneous production and ecological functions monitoring
- \* Unmistakable roles of trees and forests in climate change mitigation and adaptation
- \* Huge diversity of trees and shrubs is a very important key in the adaptation to climate change effects
- \* Climate analogue research provides adaptation lessons from human, fauna and plant communities living in analogue areas.

# REINFORCING OTHER SECTORS

**Climate change challenges have mediated a better appreciation of cross sectoral linkages:**

- \* Forests, agriculture, food and nutrition**
- \* Forests, trees and energy**
- \* Forests, health and education**
- \* Forests, water and fish**
- \* Forests, flora, fauna and tourism**
- \* Forests and environment**

**Multi-functionality of trees is deeply appreciated!**

# Agroforestry: A growing practice

**Perennial tree crops such as**

- \* coffee and tea in Eastern Africa,**
- \* oil palms, cocoa and rubber in West Africa,**
- \* gum Arabic in the Sudano-Sahelian region,**
- \* date palms in North Africa and**
- \* a wide variety of fruit trees in eastern and southern Africa are part of the strategy for Climate Smart Agriculture, leading to landscape transformation.**

# *Multi-functional Landscapes*



# Trees at centre of 3 conventions

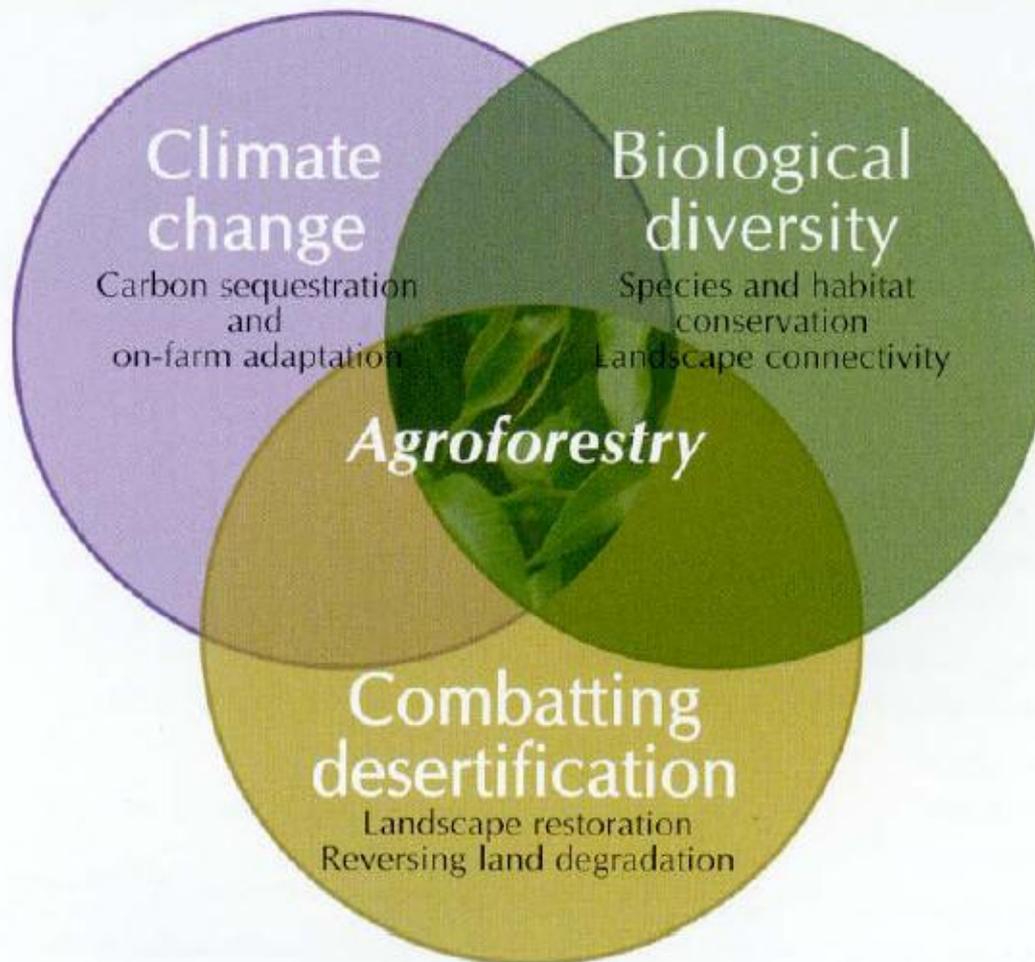
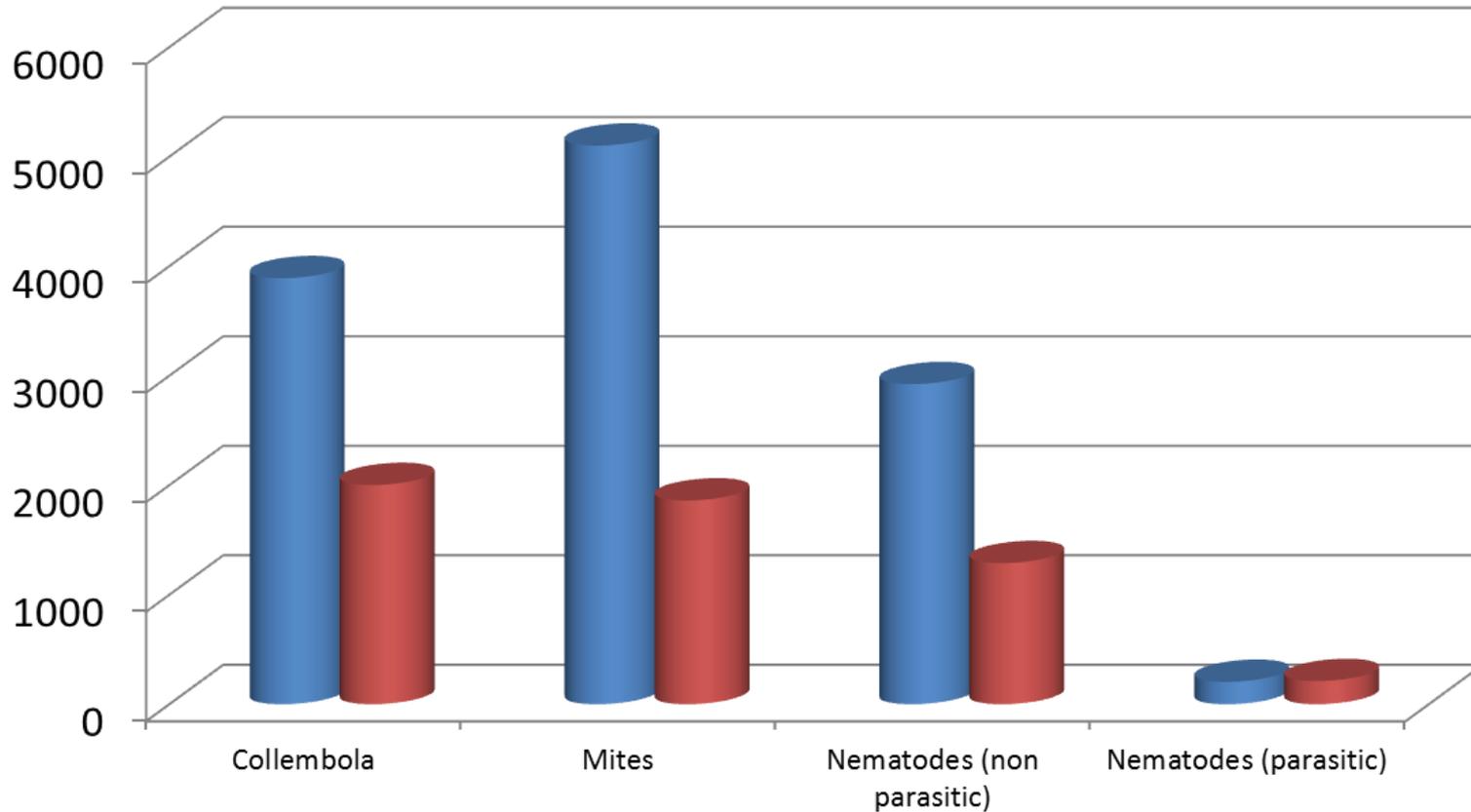


Figure 9: Agroforestry at the 'heart' of the three environmental conventions

# Soil biota density under crops compared with agroforestry

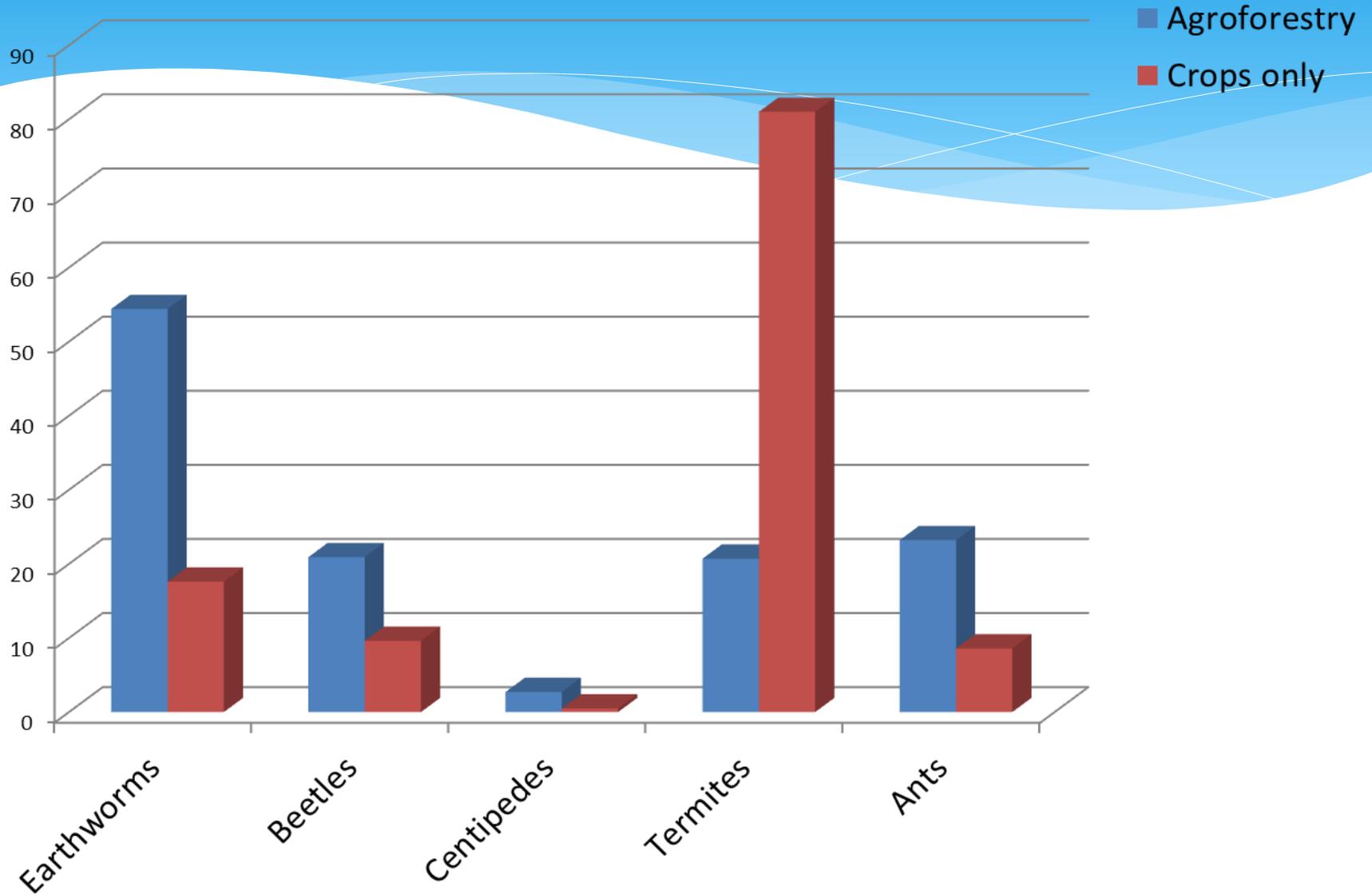
Number per m<sup>2</sup> (Barrios et al 2012)

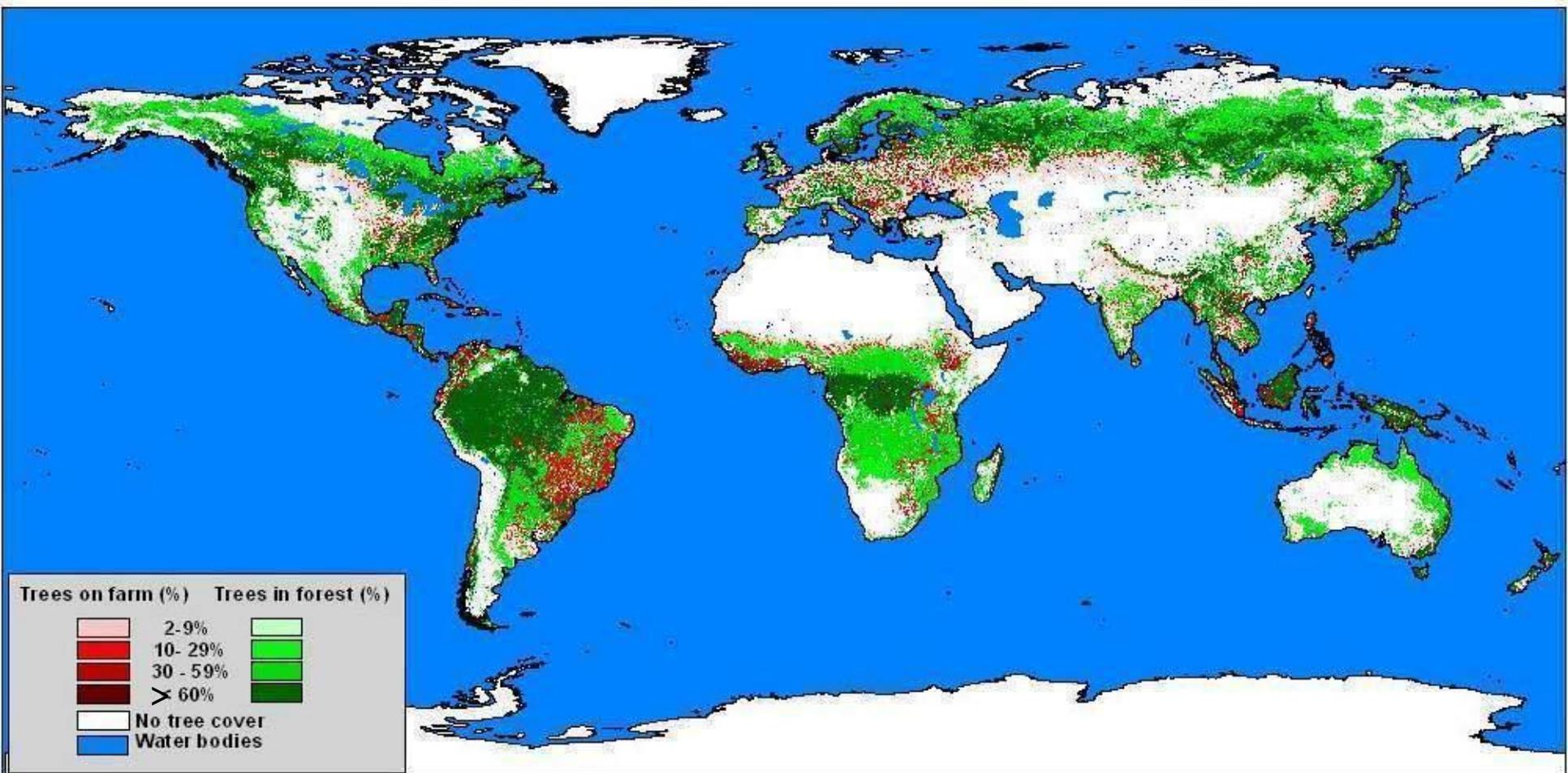
■ Agroforestry  
■ Crops only



# Soil biota density under crops compared with agroforestry

Number per m<sup>2</sup> (Barrios et al 2012)





# The holistic forest+tree view of the world

Source: Global tree cover inside and outside forest, according to the Global Land Cover 2000 dataset, the FAO spatial data on farms versus forest, and the analysis by Zomer et al. (2009)

# Drivers of change

- \* Rising economic prosperity is driving up the demand for wood and other tree products
- \* The emerging middle class has taste for fancier and healthier life (luxury goods)
- \* The ICT is freer and more diverse in its use than in many parts of the globe!(e.g. MPESA)
- \* The world has never been smaller!

# Business Opportunity 1

- \* A small forest owners approach to tree products development is a growing reality:
  - \* The crying needs are:
    - \* Policies that promote investment in this business
    - \* Working partnerships between investors and farmers
    - \* Strategies and plans that capture, process and market the products
- Sweden has the experience, knowledge and innovations needed!

# Business Opportunity 2

Non-wood tree products need greater recognition, strategic production and harvesting, processing and marketing:

- \* Pharmaceutical products: Medicines, gums and resins, dyes and tannins, stimulants
- \* Cosmetic products including essential oils
- \* Novel foods, spices, condiments

Domestication and value adding for such products is the way forward

# Business Opportunity 3

## Industrial plantations:

- \* High tree growth rates , 10-15 years for pulp and paper, 20-35 years for sawnwood and panel products!
- \* Private sector driven initiatives with adequate diligence on environment conservation and social responsibility
- \* Out-grower schemes involving local investors a real opportunity
- \* In the Mt Kenya region, over 70% of sawnwood comes from agroforestry!
- \* No replacing of natural forests, “land grabbing”, or using inappropriate genetic

# Business Opportunity 4

## Providing Environmental services

- \* The natural forests and woodlands of Africa are centres of huge biodiversity. Forests in mountain areas play major roles in conserving soils, water quality and water flow. These life supporting services are valued and should be paid for!
- \* Conservation is no longer just a public service. It is fast becoming a fully-fledged business area, with private delivery for greater efficiency and effectiveness. More work is needed to develop this area.

# Policy and institutional preparedness

- \* Rising peace and social stability
- \* Rising economic performance for most countries (Up to 11% growth per year)
- \* Declining corruption
- \* Positive investment policies at regional, sub-regional and country levels
- \* Rising recognition of cross-sectoral linkages, thanks to climate change!

# Africa's Forestry Capacity

- \* Under-investment in forestry education and industries has eroded the capacity
- \* New challenges require a different knowledge and skills with forestry and a broader economic, landscape and environment profession
- \* Technical education is crucial for future development
- \* 'REFOREST Africa'\* is a visionary proposal that should be funded to enable professional forestry growth in Africa

**\*Regional Research School in Forest Sciences in Eastern and Southern Africa: A Sokoine University/SLU proposal.**

# CONCLUSION

- \* The prevailing image of Africa as an unproductive wilderness inhabited by poor communities is a myth and is evaporating as the economic engines have started to significantly transform Africa
- \* Many valuable tropical timbers, such as mahoganies, teak and some others, are not as slow-growing as often stated;
- \* Trees and forestry have a much greater role in Africa's economic development than has been acknowledged
- \* Investment in forestry on the continent today is not only potentially lucrative, it is imperative.
- \* A paradigm shift is taking place and let us be part of the change!

# My Message is:

**Never before have needs and opportunities for investments in trees and forestry **by farmers, communities and the private sector** been so explicit and promising for Africa.**

An aerial photograph of a rural settlement in a semi-arid region. The landscape is a mix of sandy, light-brown soil and patches of green vegetation. In the center, there is a cluster of several traditional, round huts with conical thatched roofs. To the left of this cluster, there is a circular, shallow pond. The surrounding area is dotted with small trees and shrubs. The overall scene suggests a rural, possibly agricultural, community.

**THANK YOU!**