



# Beekeeping for sustainable forest management

DSL-IP Learning Event – 26<sup>th</sup> September 2024

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IMAGE CREDIT

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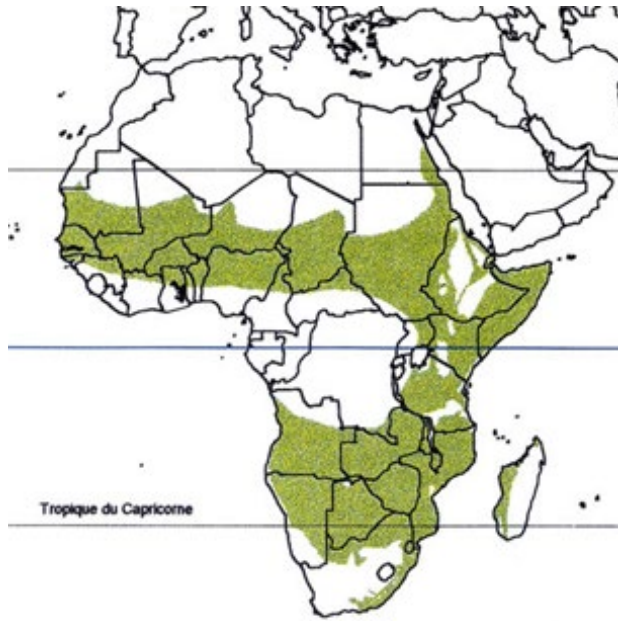
Systems / Connections / Benefits / Challenges

3. Beekeeping in the “Sustainable Landscape Production Framework” (DSL-IP)

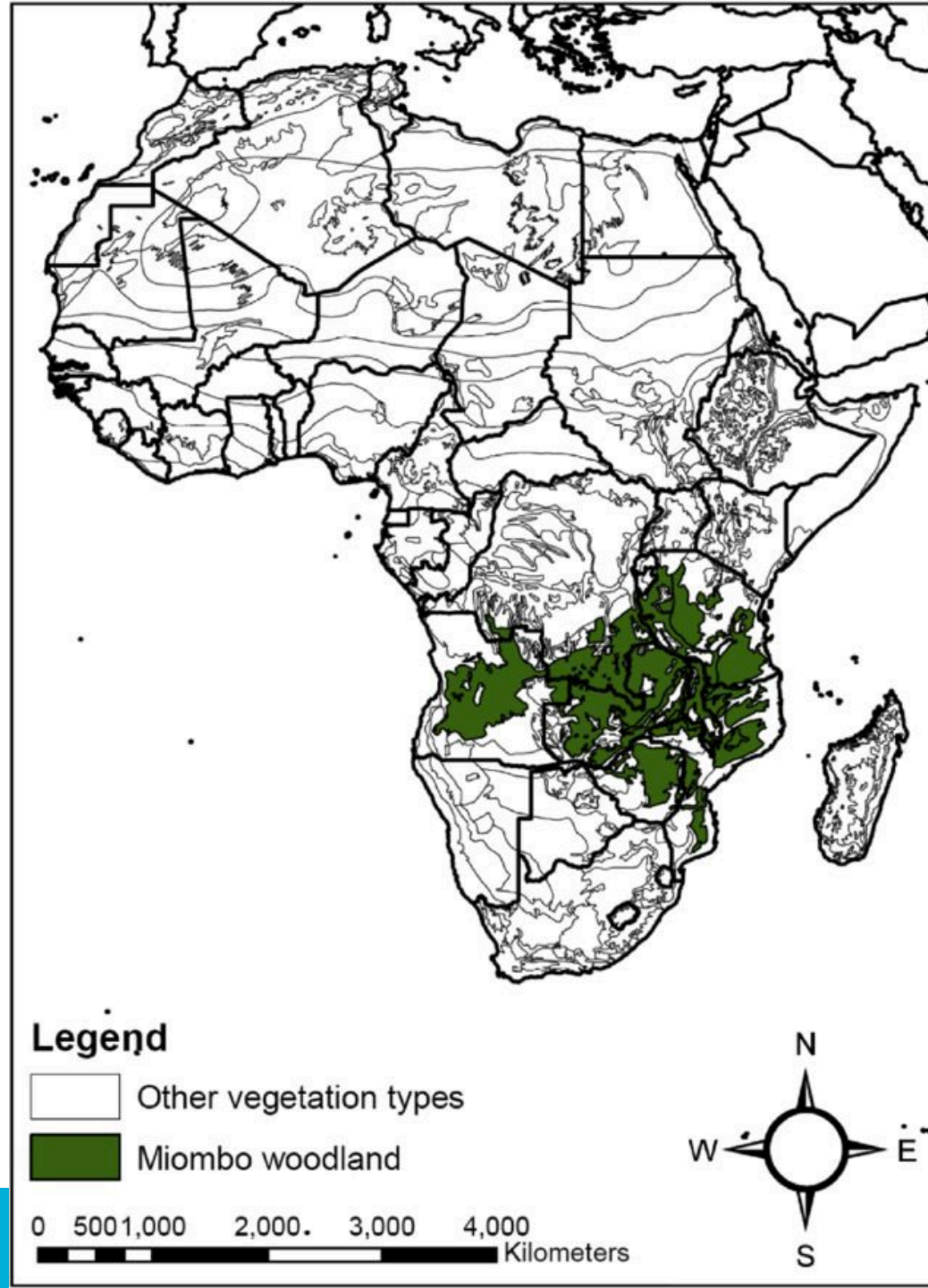


Source: Kata Wagner (2016)

**Why does beekeeping in  
drylands matter?**

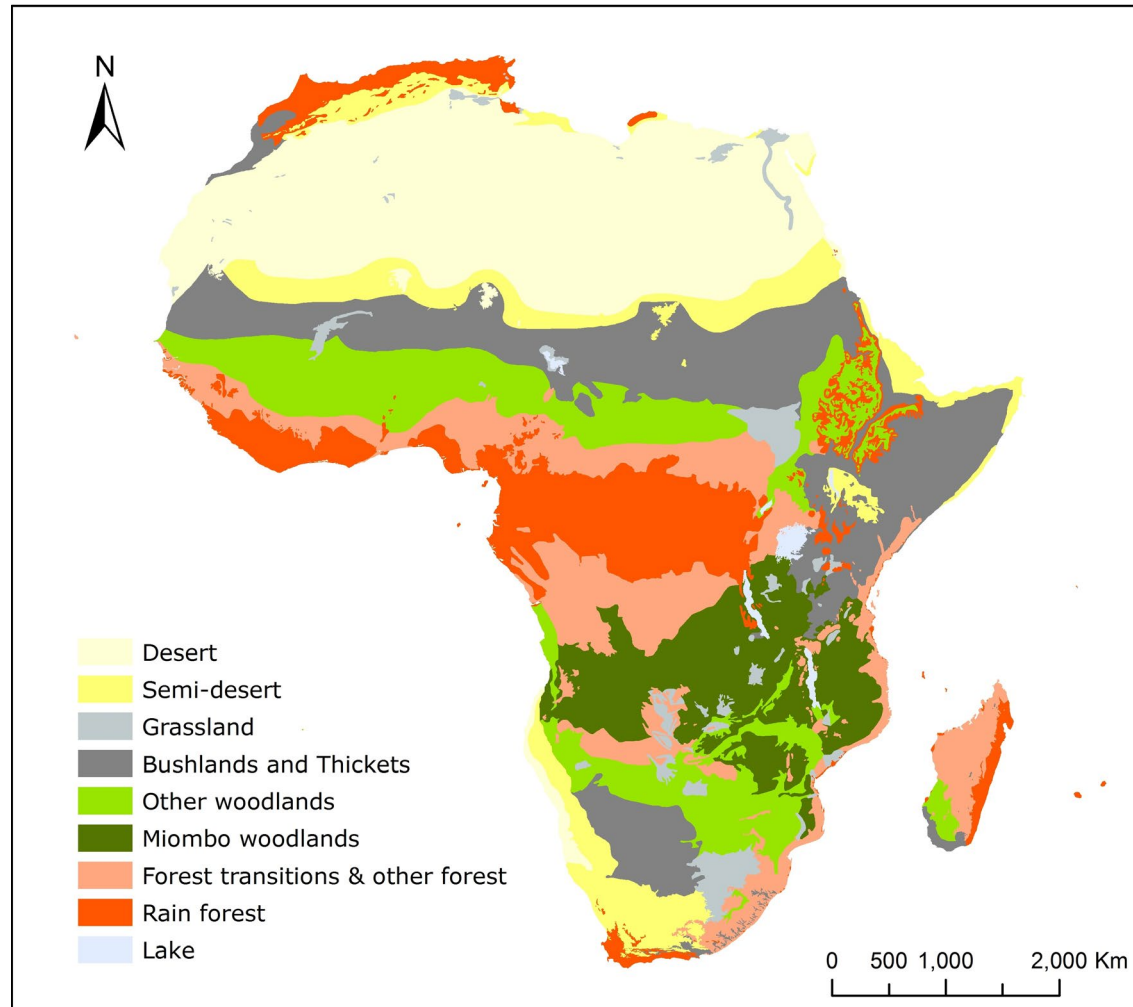


Source: Fauvet (1996)



Source: Seymour (2014)

# The Miombo



Source: White (1983)

Dominance of *Brachystegia*,  
*Julbernardia* and/or *Isoberlinia*

## Tanzania:

5% of population keeps  
bees  
(Hausser and Mpuya 2004)

## UK:

0.07%  
(National Bee Unit 2017)

## Farm Africa's goats and bees help rural Ethiopians forge new livelihoods

Villagers discuss the impact of Farm Africa's goat-rearing, beekeeping and irrigation programmes a year on from the 2013 Guardian Christmas appeal donations to the Tigray Food Security project

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### Bee-keeping saving the environment in Sironko




## Uganda: How beekeeping offers a new way of life for villagers

A profit-making village beekeepers' association in western Uganda is offering villagers an alternative to a life of poverty




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### Project assists beekeepers to develop resilience to resource scarcity

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## Honey changes everything

The social business in East Africa that is using bees and smartphones to help lift subsistence farmers out of poverty.

By Jonathan Kalan  
18 November 2014

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### Creating a buzz: Using bees to pull people out of poverty

By Thessa Lageman  
Business reporter, Silliana, Tunisia

7 July 2016 Business [f](#) [t](#) [+](#) [Share](#)



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### Double harvest: Maasai women keep bees and get to conserve their environment

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## In Uzbekistan, beekeeping benefits communities and the environment

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## Buzz of success in Zimbabwe's forests

As organic beekeeping spreads like wildfire across eastern Zimbabwe, the industrious little insects are helping to preserve forests and prevent woodland fires.

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## Money from Honey

WEDNESDAY, APRIL 29, 2015

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### The Taste of Afghan Honey Proves Irresistible

January 22, 2015



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Source: Kata Wagner (2016)



Source: African Beekeeping Resource Centre (2015)

# **Sustainable Forest Management (SFM) and beekeeping – a question of diversity and complexity**

**Systems / Connections / Benefits / Challenges**



# What do we mean by SFM?

“...dynamic and evolving concept that aims to maintain and enhance the economic, social and environmental values of all types of forests for the benefit of present and future generations...”

(Source: United Nations General Assembly 2007)

# Thematic elements of SFM

Extent of  
forest  
resources

Forest  
biodiversity

Forest health  
and vitality

Productive  
functions of  
forest  
resources

Protective  
functions of  
forest  
resources

Socio-  
economic  
functions of  
forests

Legal, policy  
and  
institutional  
framework



**SFM is defined  
by countries and  
is context  
specific**

## **Forest beekeeping livelihood-system:**

A complex system where ecological and human elements are intricately connected in a social-ecological system

# Bees and trees belong together

- Bees developed in forests
- They prefer trees for nesting, if possible higher locations
- Dryland woodland genera are highly melliferous



Source: Wikimedia Commons



Honey hunting	Local beekeeping systems	Transitional beekeeping systems (top-bar hives)	Fixed-frame hives
<b>WHAT:</b> Harvest wild honey sources	Local hives hung in trees, minimal management	Box-hive without frames, hung in trees or placed on structures near ground	Fixed-frames with possibility to add on
<b>PRO:</b> no BK inputs required	Cheap, adapted to local bee biology and climate	Honey quality, wax harvest, relatively cheap	Easiest to inspect, transport, larger honey quantity
<b>CON:</b> Destruction of trees, forest fire	Difficult handling, quality issues, brood destroyed	Hive production requires expertise, comb more fragile than fixed-frame, less insulated, easy to steal	Expensive, requires even more expertise, need extractor to harvest, no wax harvest
<b>SFM link:</b> overall negative effect	Extensive use of forest resources, hive trees protected, early burning	As local BK systems + may encourage fodder planting	As local and transitional BK systems

# Beekeeping as a vital component of SFM

- Bees are a vital part of forest ecosystems
- Bees maintain biodiversity
- Many forest flora and fauna species need bees for survival
- BK activities encourage forest protection and regeneration



Source: One Earth (oneearth.org)

# Beekeeping as a vital component of SFM – cont.



Source: Paul Latham via [Flickr](#)

- Managing forests for livelihoods AND ecosystem health is vital
- Beekeepers as forest-keepers
- Conservation through commercialization
- NTFP commercialization with mixed results, but forest honey may be an exception

# Challenges



Source: Wikimedia Commons

- Vicious cycle: Habitat destruction – lack of colonies – lack of fodder - low forest regeneration
- Climate change
- Lack of access to inputs, infrastructure, markets and knowledge



# **Beekeeping in the Sustainable Landscape Production Framework of the DSL-IP**

# DSL-IP technical support model

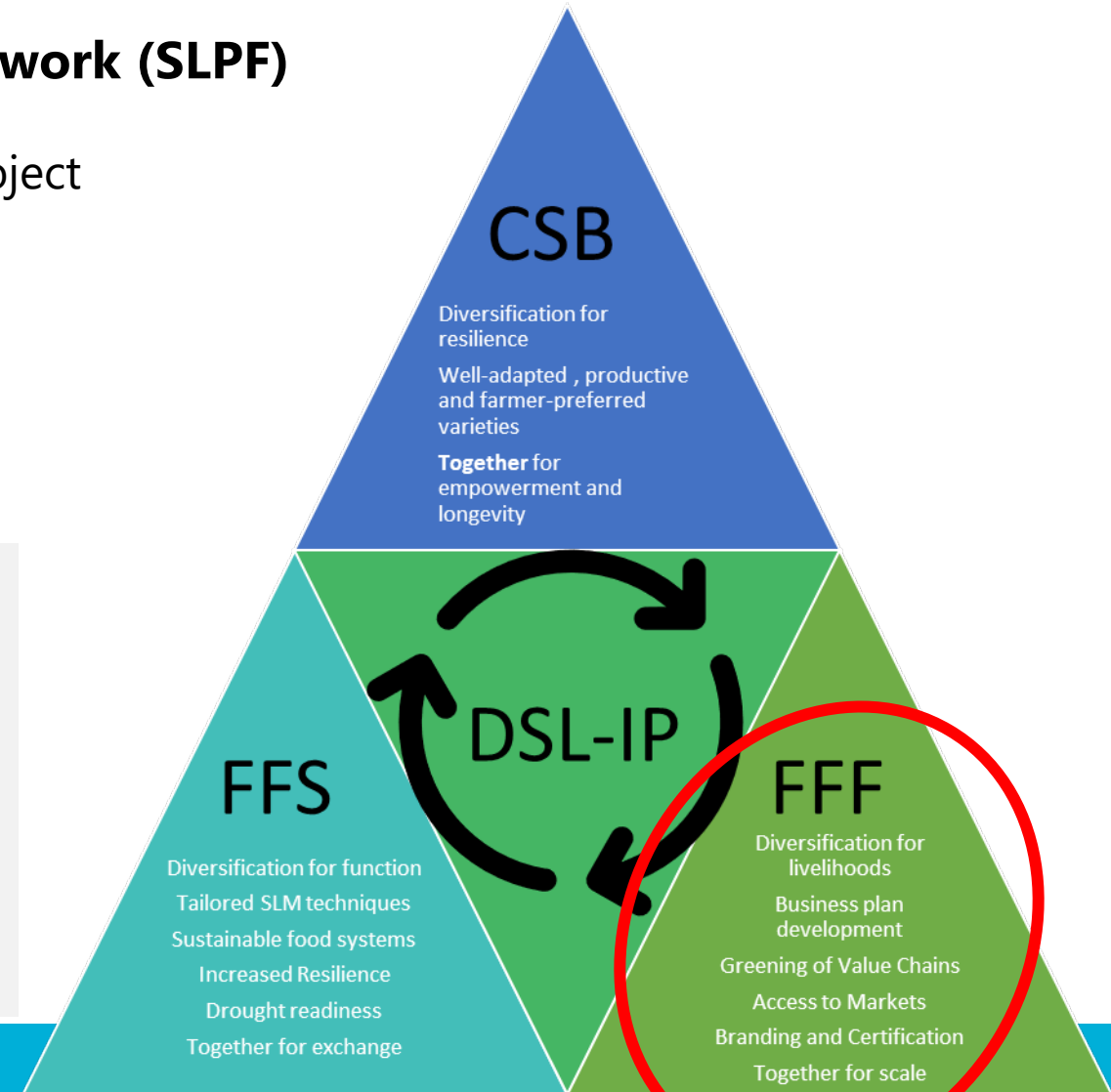


## Sustainable Landscape Production Framework (SLPF)

- Provide technical assistance in line with project
- Ensure complementary
- Support country driven priorities

### Tailoring considerations:

- **Thematic focus:** Core Themes for each country
- **Geographic scope:** mapped landscapes "pockets"
- **Target groups:** FFPOs assessments / household surveys / CNAs / support



# Pathway to scale for DSL-IP through FFPOs at different levels



**Thank you!**

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