



Towards territorial forest-based bioeconomies through value webs from native palms in Colombia

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Context



- Colombia is a highly **bio-** and **ethno-diverse** country
- Its territory contains **314 types of ecosystems** that provide habitat to **26000** identified plant species, more than **6000** used by humans.
- Ethnic diversity is represented by **87 indigenous groups** and **afro-colombians (14%** of Colombia's population), who have collective ownership rights of **34%** of the national territory, mainly in forest areas.
- Plant richness and traditional knowledge poses Colombia's bioeconomy towards **socio-biodiverse value webs**

Forests & bioeconomy



- Forest** ecosystems cover around **60 million hectares — 52%** of total **national area**
- Forest represent a key upgrading factor for the development of Colombian's territorial bioeconomies through the use of **Non-timber Forest Products (NTFP)**.
- One of the strategic areas of the Colombian Bioeconomy mission (2020) is **closing gaps** for the sustainable procurement and use of NTFP
- Currently, with the Decree 690 of 2021, there is a **high potential** for enabling the **use of Wild Flora and NTFP**.

Problem



- Achieving **conservation, livelihood diversification** and **value-added** processes and products through **NTFP commercialization** strategies has not been achieved as this development pathway has not yet been able to be competitive in comparison to other extractive systems
 - This leads to **conversion of forest areas** to profitable and extractive economies that threaten biodiversity, ecosystem services and wellbeing.
- How can forest areas be **conserved** while becoming a **key source of value** for the **colombian bioeconomy** and a competitive factor for the **territories**?

Aim

- Taking **palms** as case study, we discuss the **potential of NTFPs for Colombia's bioeconomy** with the imperative of balancing forest conservation and socio-economic development.



Why palms?

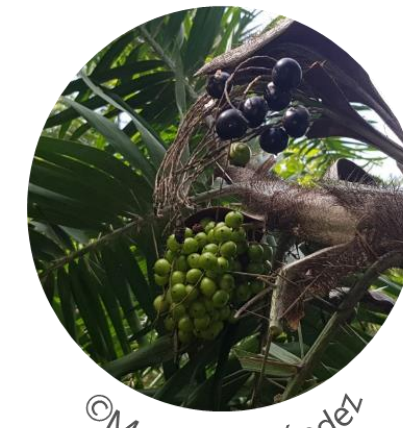
- 41% of **NTFP** studies are focused on **palm species** (Ticktin 2004)
- Palms (Aracaceae) represent **one of the largest** plant families and NTFP resource in Colombia, with more than **250 native species**. Colombia ranks **second worldwide** in **palm diversity** (SiB Colombia, 2022)
- Potential of palms in Colombia's Bioeconomy as **multipurpose/multi-value species**
- Palms maintain key **ecological processes** in their ecosystems.
- Palms are used for **multiple purposes** mainly by **forest-based communities** and they are part of the **cultural identity** across the national territory.
- Three case studies of **palm-based value webs** in Colombia:

Euterpe spp.



- ✓ *Natural abundance in the tropical rainforests in the pacific and amazon regions*
- ✓ *Existing market at regional and national levels, expanding at international level (e.g. pulp, ice cream, juice)*
- ✓ *Consolidated value chain*
- ✓ *Semi-domesticated spp.*

Bactris guineensis



- ✓ *Natural abundance in the tropical dry forest in the Caribbean region*
- ✓ *Existing market, regional and expanding to national level (e.g. wine, pulp, ice cream, juice)*
- ✓ *Consolidated value chain*
- ✓ *Wild spp.*

Mauritia flexuosa



- ✓ *Natural abundance in the Orinoco and Amazon basin*
- ✓ *Developing market, mostly local markets (e.g. oils, pulp flour, biscuits, cosmetics, animal feed)*
- ✓ *Developing value chain, small-scale actors*
- ✓ *Wild spp.*

Outlook

- Need to boost **R&D activities** on native palms to offer **implementable solutions** along palm-based value webs
- Promote an **integral view** for **palm-based territorial bioeconomies** that **interlinks** industrial policy, innovation systems and traditional knowledge
- Need of **matching productive initiatives** in the territories with **R&D** efforts and **policy** mechanisms
- Importance of prioritizing **palm-based value webs** that fulfill goals of **value adding, conservation and livelihood diversification** as **blueprints** for other palm spp.

- Key questions for envisioning forest-based and socio-biodiverse bioeconomies in Colombia:

→ How to incorporate **intertwined social-ecological** aspects in the development of **forest-based bioeconomies**?

→ How to **diversify development pathways** in Colombia's emerging bioeconomy and foster **bottom-up** solutions that fit to the **territory**?

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