



The role of the cocoa sector in the REDD + process:

The current IITA experience in Cameroon

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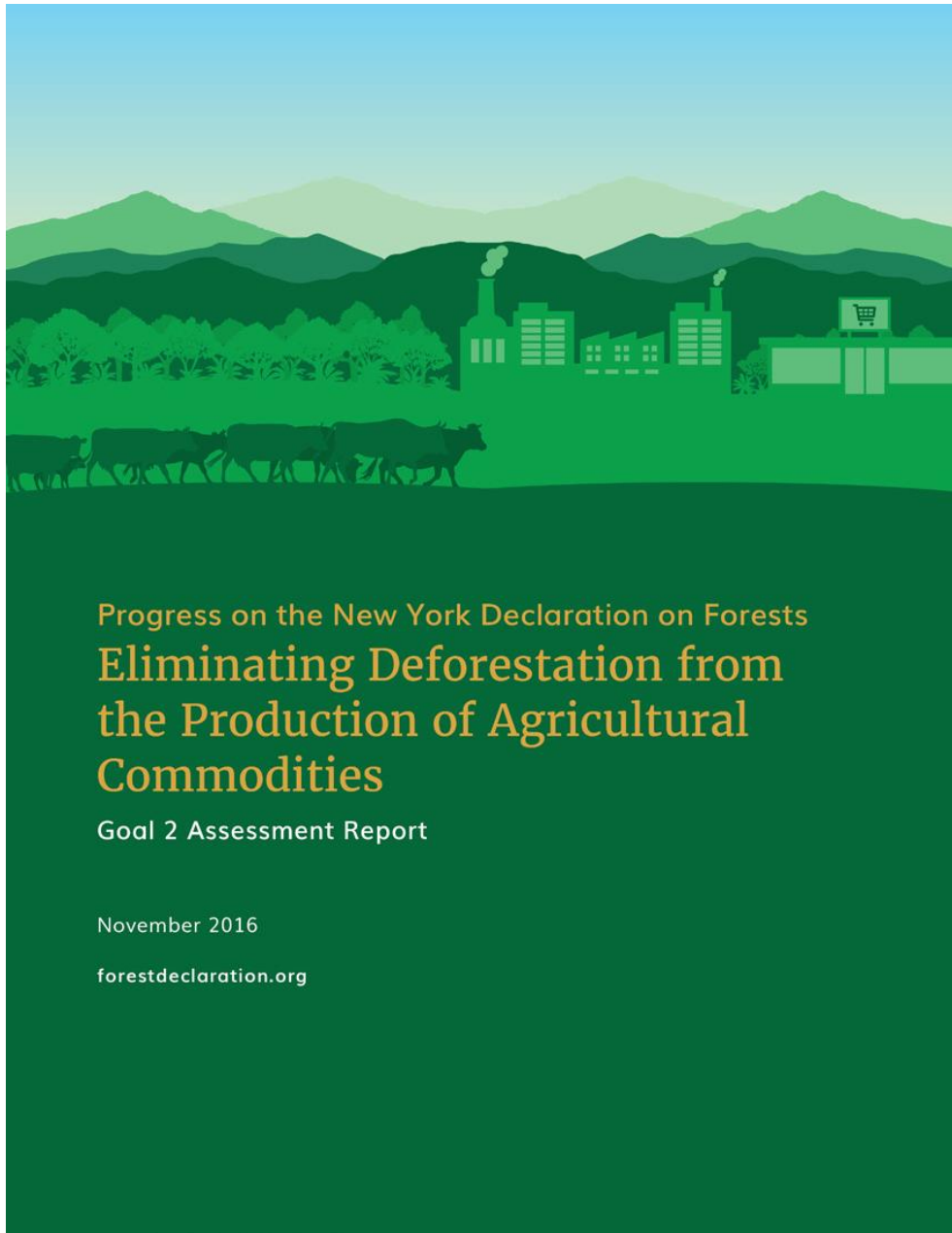


Plan



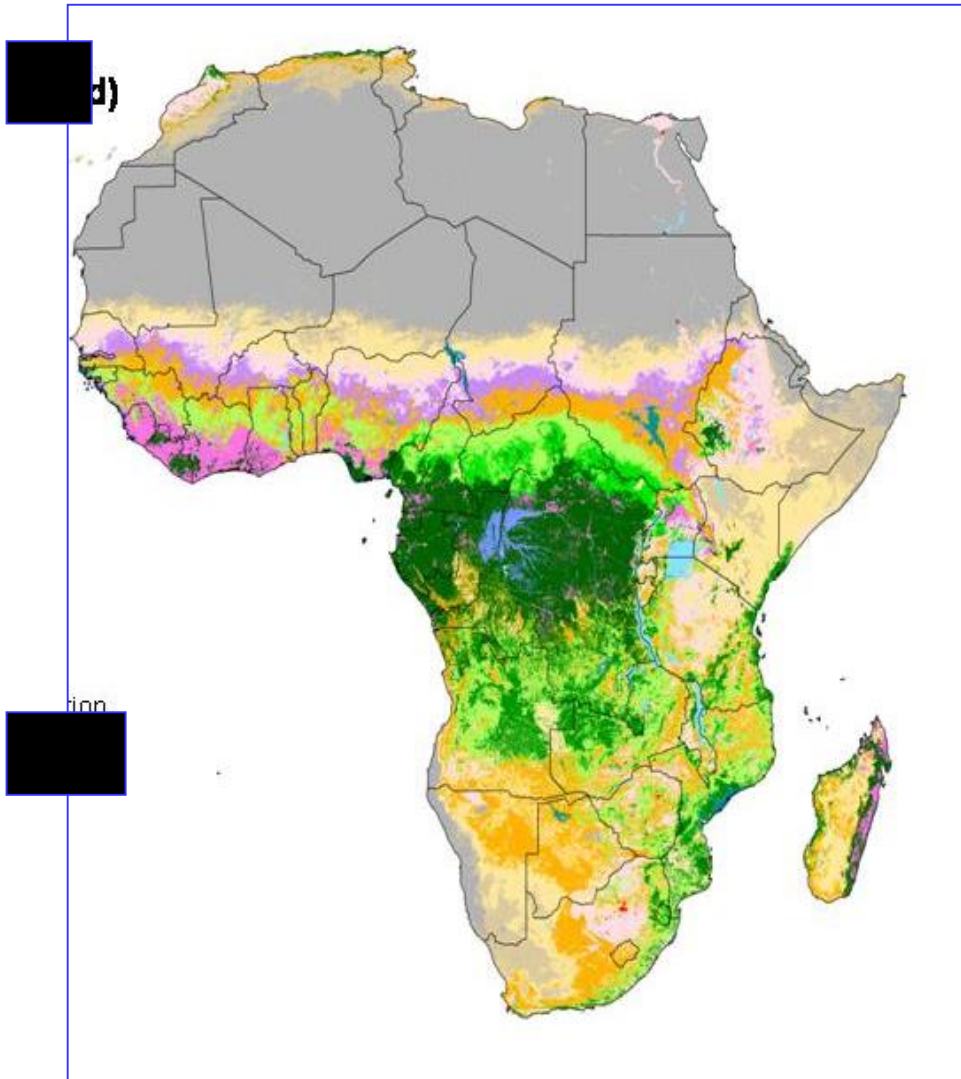
- Expectation from cocoa farms
- Piloting REDD+ activities
- Understanding cocoa environment to improve REDD+
- Conclusion and way forward

Expectation from cocoa farms



What implications for
cocoa
In the REDD+ agenda?

Expectation from cocoa farms



- West Africa had been deforested with the contribution of cocoa expansion
- The earth of the continent is still green (Ex. DRC), but may be the next frontier of agro - industries extension after west Africa
- **What can we learn from Cameroon experience?**

Expectation from cocoa farms

→ Sustainable cocoa production

→ Diverse livelihood products (plants associated with cocoa)

→ Ecological services
(Formerly provide by Forest)

*Biodiversity conservation
(inside cocoa and the cocoa/forest landscapes)

*Carbon storage

*Zero deforestation

CBD & UNFCCC

Current Cocoa value chain project locations

Southwest region:

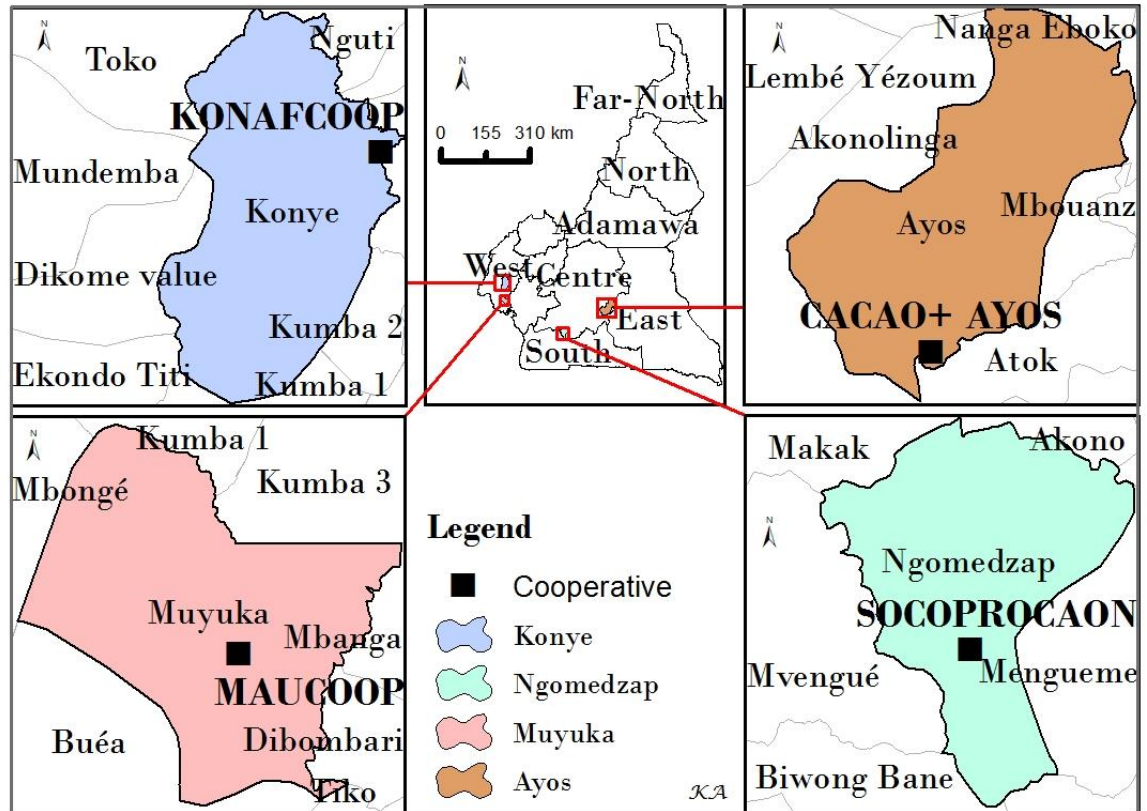
Konye, Muyuka

**(KONAFSCOOP,
MAUCOOP) +3 in 2017**

Center region:

Ayos and Ngomedzap

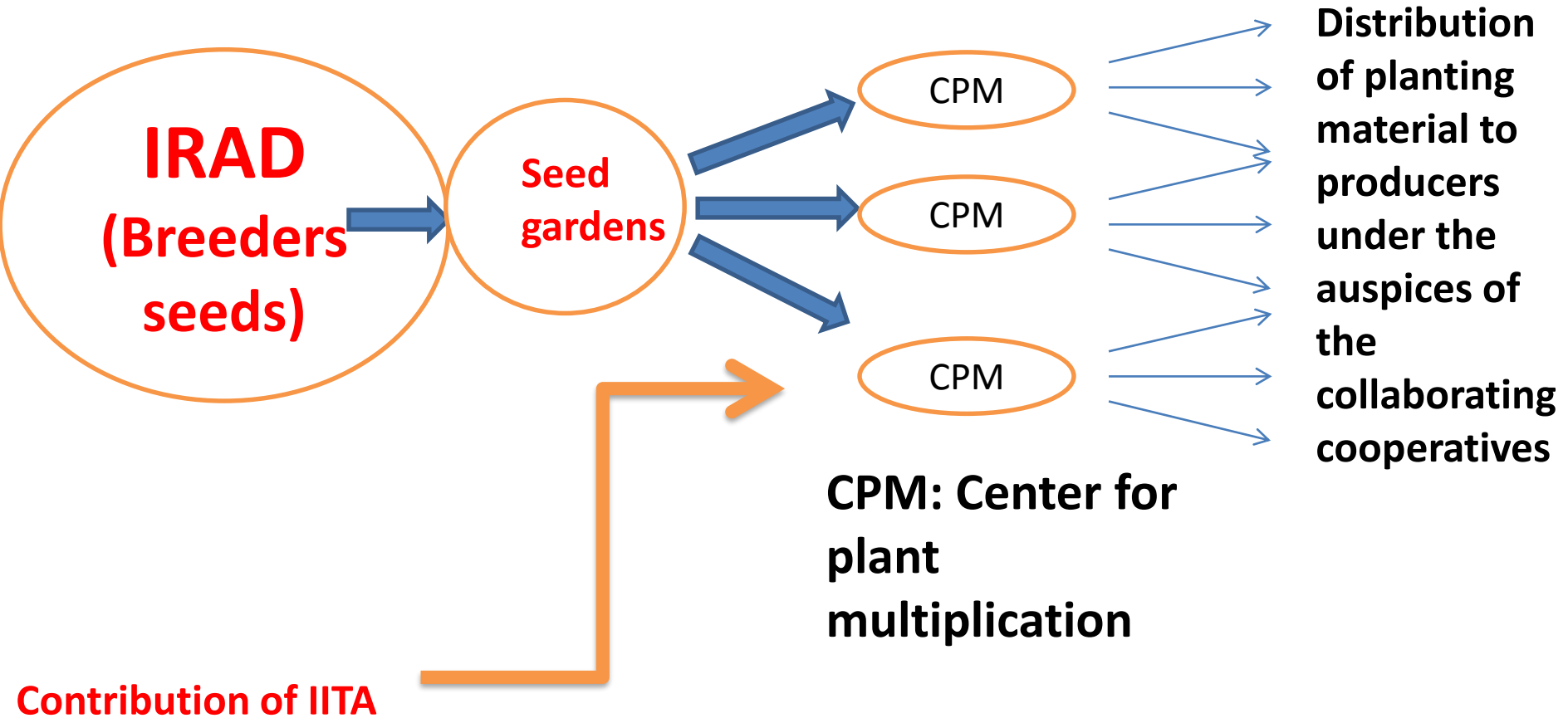
**(COCOA+AYOS,
SOCOPROCAON)**



→ Working at the plot level

- Characterization of the cocoa production systems – baseline analysis
- Farmer training on good cocoa production and intensification (Farmer Field Schools).
- Promotion of mass plant multiplication of cocoa and associated crops and trees through establishment and maintenance of seed gardens, community-based plant multiplication centers,
- Rehabilitation and regeneration (replanting, grafting, and diversification).
- Succession planning and youth engagement in cocoa farming.

Integration of seed gardens with centers of plant multiplication (CPM)



Baseline assessment – Field verification

**Total of 120 fields (30 in each site) were visited:
(part of MRV activities)**

- Information obtained through the field interviews and visits
 - Field characteristics (size, age, previous land use, source of planting materials, other trees, etc.)
 - Yield and input types (fertilizer, pesticides, herbicides)
 - Labour input (by age, hired/own, gender)
 - Direct assessment of pests and diseases
 - Soil characteristics (texture, pH, carbon and essential nutrients)
 - Shade and carbon stock (in wood, litter, soil, and roots).
 - Diversification, other crops,



Farmer Field Schools

Diffusion of good agricultural practices

- *Training of trainers (40; 10 in each locality).*
- *Target: 12000 producers*

- *FFS et FLG :*
 - *Integrated crop protection, good agricultural practices (harvesting and phytosanitation);*
 - *Occupational health and safety*
 - *Regeneration of cocoa plantation: planting, replanting and diversification.*



Farmer Field School

Establishment of demonstration plots

- 40 plots (10 in Konye, 10 in Muyuka, 10 in Ngomedzap & 10 in Ayos)



Innovative diversification with plantains, cassava, and trees (fruit and timber trees)

Plant multiplication

Centers for Plant Multiplications (CPM)

- 12 centers of the multiplication of plantains, cocoa fruit trees, leguminous trees and forest trees.
- Konye, Muyuka, Ayos and Ngomedzap
- Already operational
- Yearly production of ~40,000 cocoa seedlings, 24,000 plantains plantlets, and 8,000 fruit trees.
- Land provided by cooperatives
- Two young attendants per center; one supervisor per région
- Integrate women and youth
- Revenue generating activity
- Business plan under development.



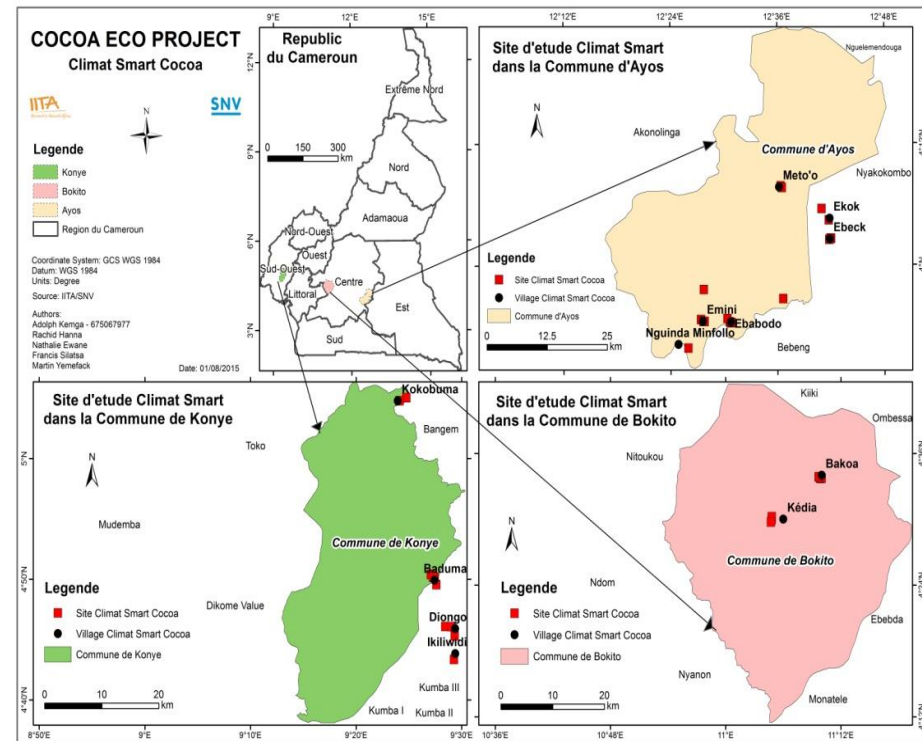
➔ Additional cocoa research to support the future REDD+

- Mirid management (pheromone technology, biopesticide development, delivery system)
- Cocoa pollinators diversity and conservation.
- Impact of climate change on cocoa production and development and promotion of climate change adaptation and resilience practices.
- Soil fertility enhancement and impact on productivity through inorganic soil amendments.
- Succession planning and youth engagement in cocoa farming.
- Cocoa value chain analysis

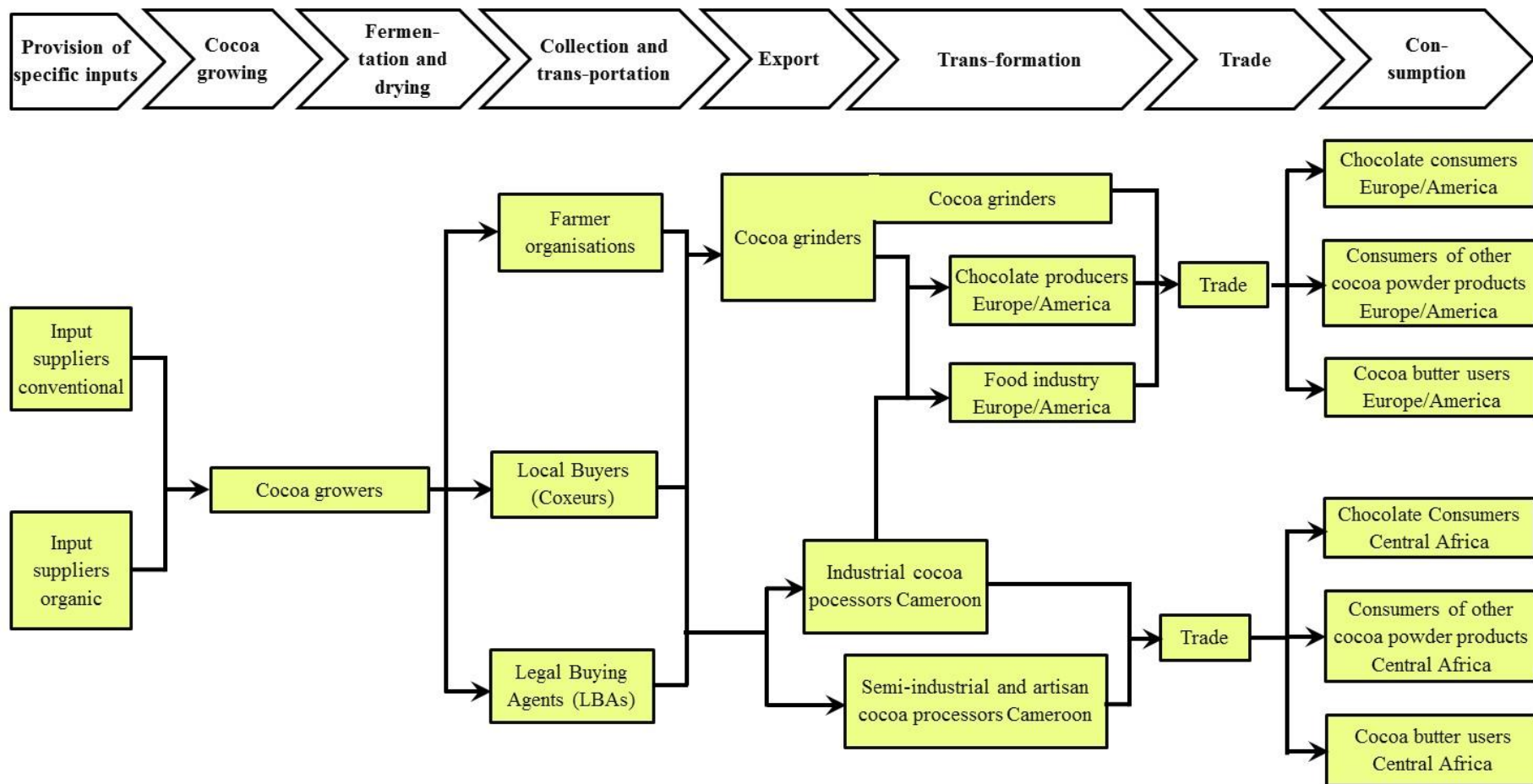
Climate smart cocoa production

Resilience and climate change adaptation

- 27 plots
- 9 in each of three locations across climate gradient with different levels shading
- Quantifying shades through tree/canopy measurements, fish-eye method, and drones
- Soil fertility enhancement (NPK, Mg, Ca)
- Soil water and plant water relations.
- Data collected on phenology, pest/disease/yield/quality
- Rainfall, relative humidity, temperature; soil and plant water status



Value chain analysis



Source: Maria Geitzenauer

- ➔ Cocoa dynamic can play an important role in enabling or reversing forest degradation and deforestation
- ➔ Cocoa value chain is an entry points for REDD+ activities in Cameroon
- ➔ Pledges by private sector constitute an opportunities to use cocoa for REDD+ activities in Cameroon and others countries of West and Central Africa
- ➔ Research institutions had an important role to generate knowledge for REDD+, but also to pilot some REDD+ activities and contribute to early lessons learning process



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