

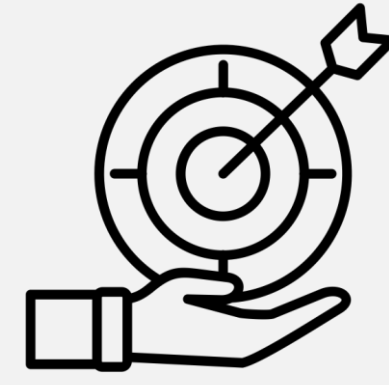
Cocoa Sustainable Business Models and Poverty Traps in Rural Areas of Colombia

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Introduction

- Cacao agroforestry systems with an organic management plan (OCAFS) are promising sustainable solutions for fostering climate change mitigation and peacebuilding processes.
- Sustainable business models for cocoa provides quantifiable ecological and/or social value along with economic value.
- 80% of production in Colombia is for the domestic market (bulk cacao for drinking chocolate).
- Two large companies as a main buyers: Casa Luker (30% of national production) and Nutresa (50% of national production).
- 95% of total exports are classified as fine and flavor cocoa.
- The traditional and predominant business model is dominated by middlemen who buy cacao beans in the pulp (*en baba*). It implies a self-sustaining mechanism of poverty — *poverty trap* — for smallholder cacao farmers.



The main objective was to evaluate promising sustainable business models and analyze the persistence on poverty traps.

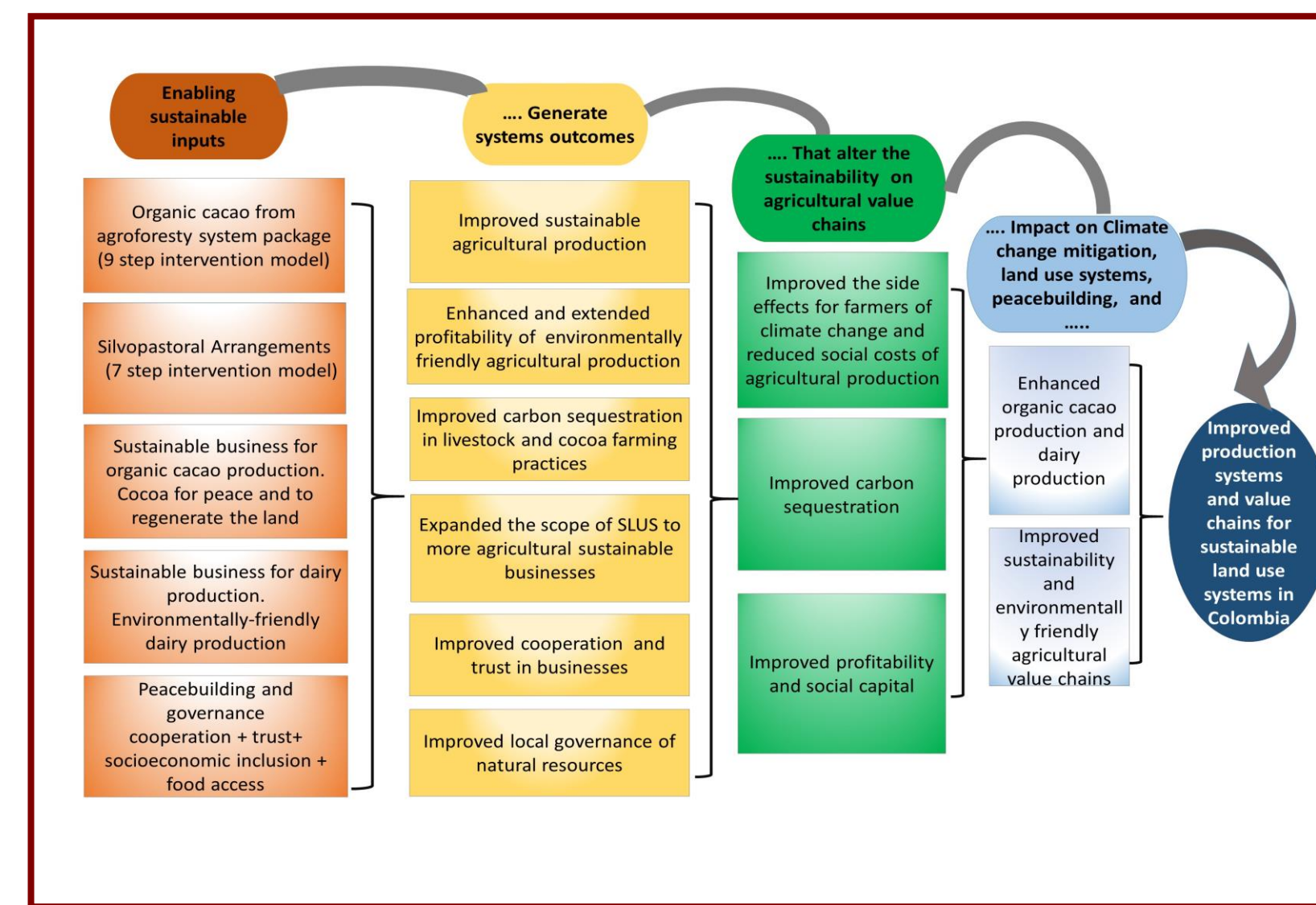


Figure 1: Theory of change approach of the SLUS project



© Martha Del Río. cacao drying at the association - Cesar

© Martha Del Río. Cacao Farmer - Caquetá

Material and Methods

	National	Caquetá	Cesar
Total area (1,000 ha) ¹	111,452	7,953	2,232
Agricultural Land use (1,000 ha) ¹	43,025	1,574	1,478
Cacao area (ha) ¹	199,549	2,088	3,255
Cacao production units (#) ²	65,341	1,347	1,577
Annual Deforestation in 2019 (ha) ³	158,894	30,317	444
Land degradation by erosion (%) ⁴	40	22.6	81.9
Land overuse rate (%) ⁵	15	13	33
Agricultural production units with water use constraints (%) ¹	54.7	26.1	68.0
Land Restitution requests (#) ⁶	142,466	5,550	8,628
Farmer association membership (%) ¹	26.3	37.9	34.4

Table 1. Main Economic, social and environmental characteristics in the country and regional case studies. Sources: 1. (Departamento Administrativo Nacional de Estadística - DANE, 2016) 2. (Dirección de Cadenas Agrícolas y Forestales, 2021) 3. (Ministerio de Ambiente y Desarrollo Sostenible - MADS & IDEAM, 2020) 4. (IDEAM & U.D.C.A, 2015) 5. (Instituto Geográfico Agustín Codazzi -IGAC-, 2014) 6. (Unidad Administrativa Especial de Gestión de Restitución de Tierras Despojadas, 2022).

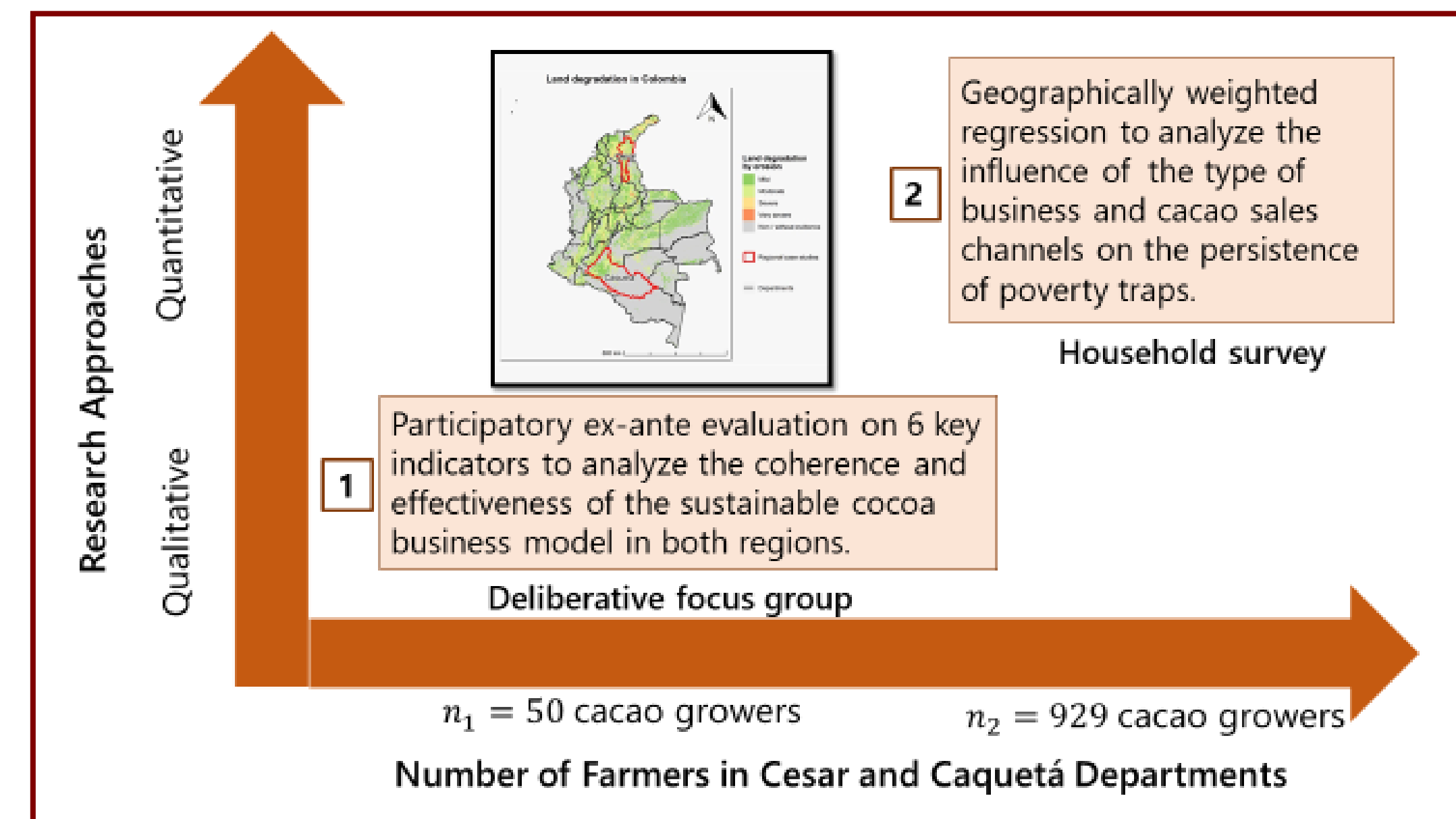


Figure 2: Methodological approach

Resultados Cesar

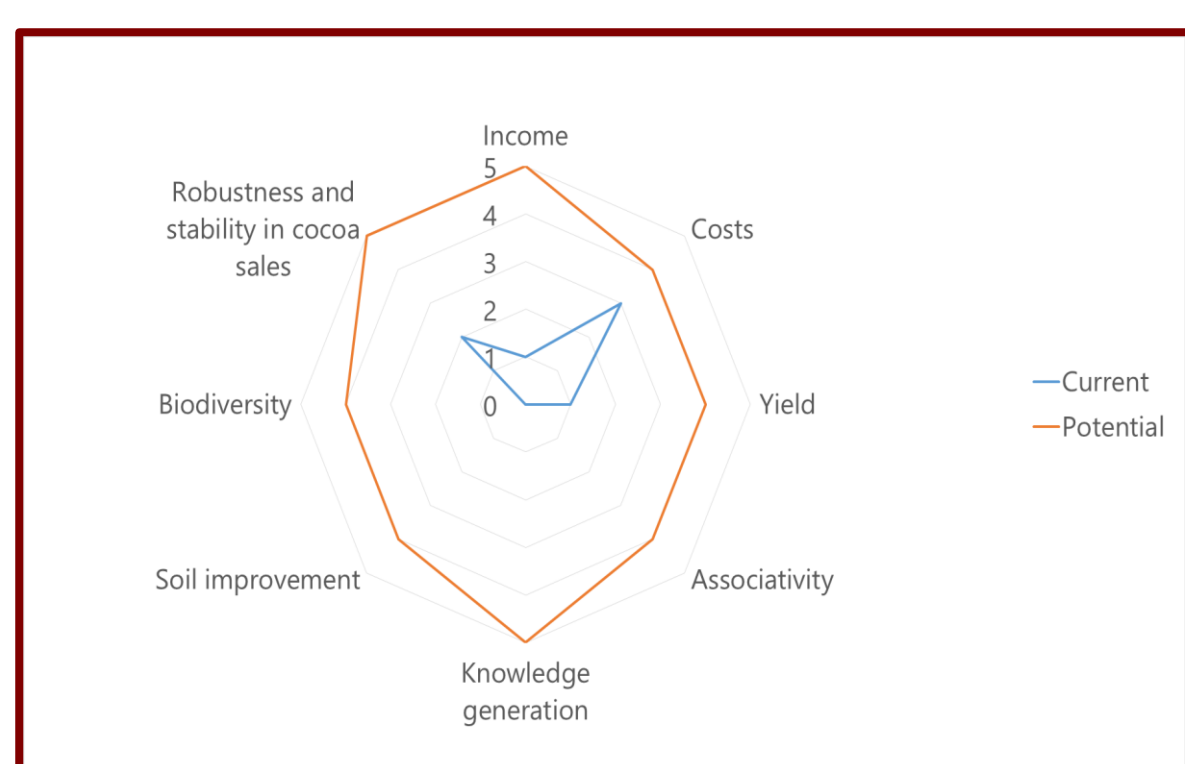


Figure 3: Sustainable business model evaluation in Cesar

Current business model:

Cacao sold in *baba* (humid) to a middleman who lends money to the producer in return for receiving his harvest.

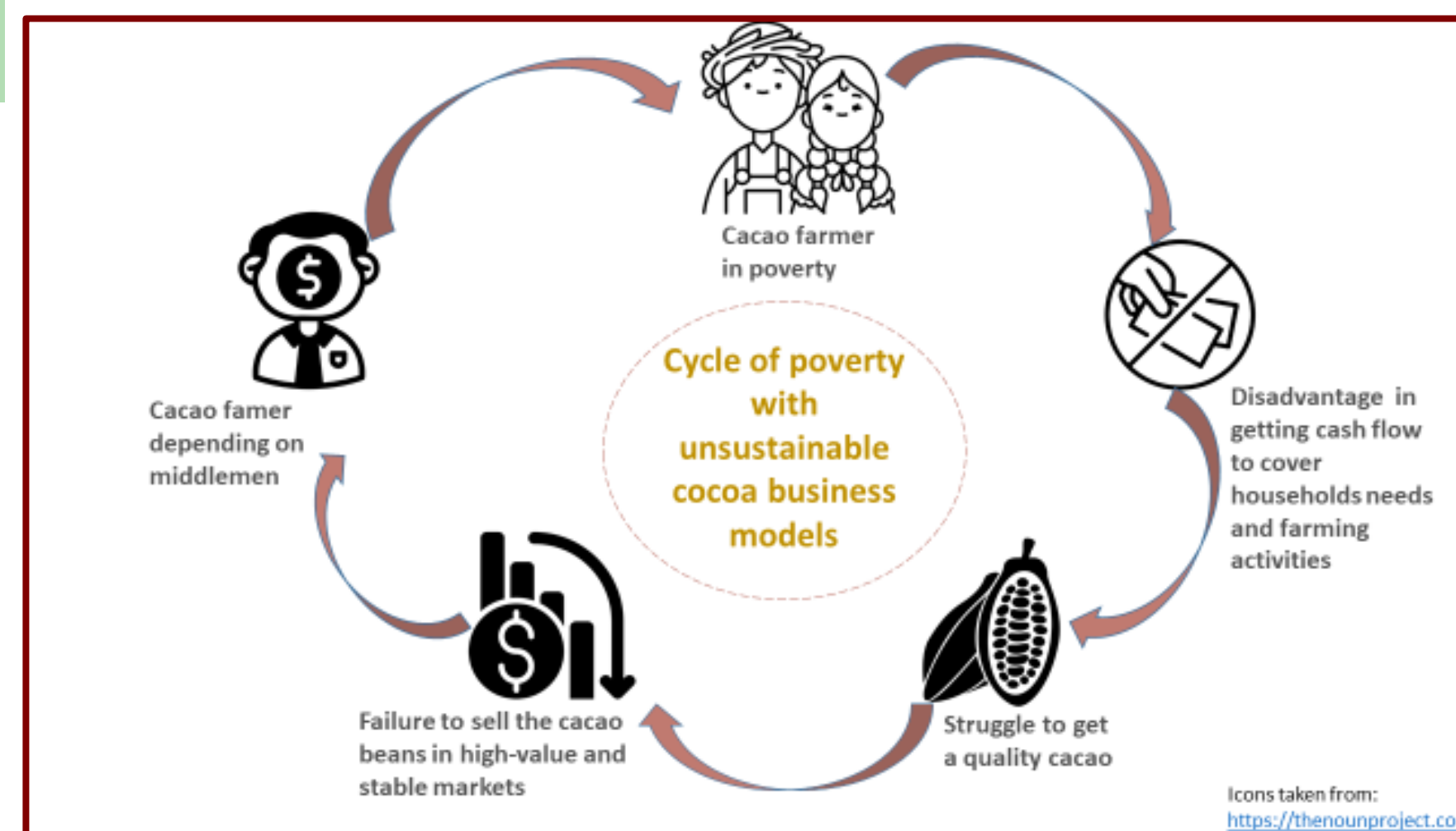


Figure 4: Unsustainable business model and poverty traps

Resultados Caquetá

Current business model: Cacao with quality issues and sold to middleman located far away from the farm.

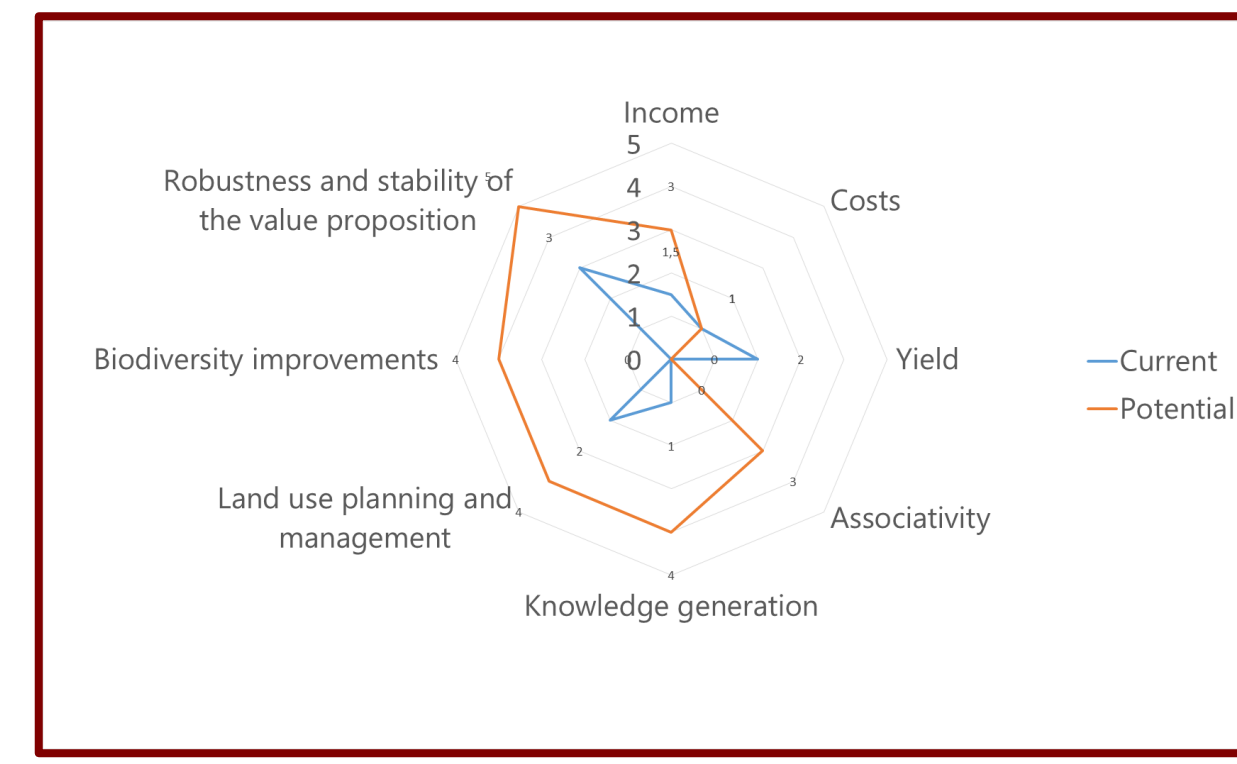


Figure 5: Sustainable business model evaluation in Caquetá

Best quality cocoa with organic fertilizers, fermented and dried on the farm and sold associatively to a customer who manages good prices.

Factors fostering the adoption of OCAFS

- High prices of OC in international markets.
- The high price of chemical inputs pushes to look for other types of production.
- The low humidity of the region helps to have a good quality cacao.
- Institutional support for implementing OCAFS
- Proactive attitude of farmers to collaborate and implement changes.

Factors hindering the adoption of OCAFS

- Lack of genetic material suitable for the region.
- Lack of irrigation districts.
- Diseases arriving with climate change that are difficult to control with organic inputs.
- Extreme droughts.
- National markets without incentives for OC.
- Potential new armed conflicts.
- Lower yields in the short run due to pruning.

Final Remarks

- The current cocoa business model, especially in Cesar, is dominated by a middleman leading to persistence of poverty and non sustainable land use systems.
- Cacao growers cannot stop selling to the middlemen because they provide credits and cash flow during the non-harvest season. The price given by the middlemen is too low and without added value because they sell the cacao in *baba* in most cases.
- The value proposition involves a price premium of up to 100% over conventional cocoa to encourage organic production and on-farm processing.
- In the proposal for a sustainable business model, the need to strengthen associations that offer complementary services such as technical assistance was emphasized.
- The organic cocoa business model should recognize the importance of biodiversity.

Potential Business Model:

Clean cocoa without the use of chemicals and sold to markets that pay at least double the price of conventional cacao

Factors fostering the adoption of OCAFS

- New ways to produce energy through solar panels.
- Water availability and suitable climate.
- Less use of chemicals improves farmers' health.
- More integration with the community.

Factors hindering the adoption of OCAFS

- Bio factories demand energy for their construction, and some farms do not have it.
- Illicit crops and their high prices.
- Transport issues affect cocoa quality.
- Current cocoa prices do not compensate the efforts made. And lack of experience with OCAFS.
- Rising prices of inputs due to the increase in the dollar.