

# What works to promote cacao as an intercrop? – Findings from segmentation study of coconut farmers in Davao Oriental, the Philippines.

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## Importance

- Targeting the right early adopters of cacao intercropping systems to reduce investment costs.
- Applicable to other cacao intercropping systems.

## Background

> Cacao consumption demand; < Land availability  
 Climate-friendly & zero-deforestation international commitments  
 Past cacao intercropping initiatives in Davao Oriental were not successful

➔ **Need low-emission cacao expansion strategies, incorporated with lessons learned & study on farmer acceptance**

## Hypothesis

Certain factors will be positively related to the household's acceptance of new practices

**Aim:** identify key factors, classify farmers based on these conditions, analyse farmer perception

## Methodology

- 425 medium and smallholder farmers participated in the study.
- *Random Forest* model informed 30 most important variables to classify cacao adopters and non-adopters.
- 3 clusters of farmers were identified from clustering analysis.

### Basic Needs

- Educational level
- Household labors
- Household assets
- Poverty
- Perception of safety and security

### Capacity for Innovation

- Land availability (farm size)
- Land tenure
- Crop diversification
- Entrepreneurship
- Access to climate advisories

### Capacity for Action

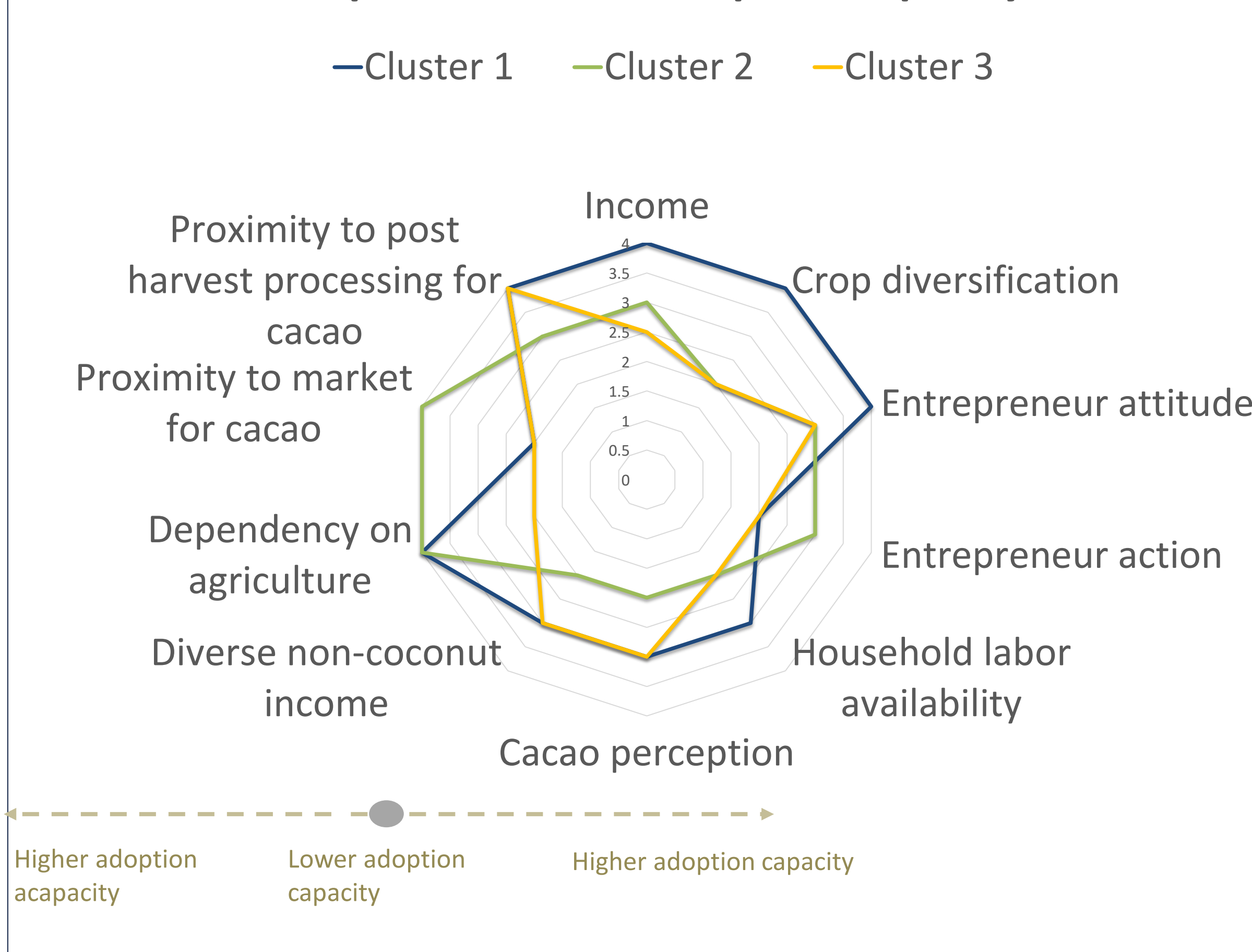
- Coconut income
- Diversified income sources
- Cacao agronomic knowledge
- Bargaining power
- Trust issues
- Connectivity (cell phone, internet, roads, services, etc.)

## Results

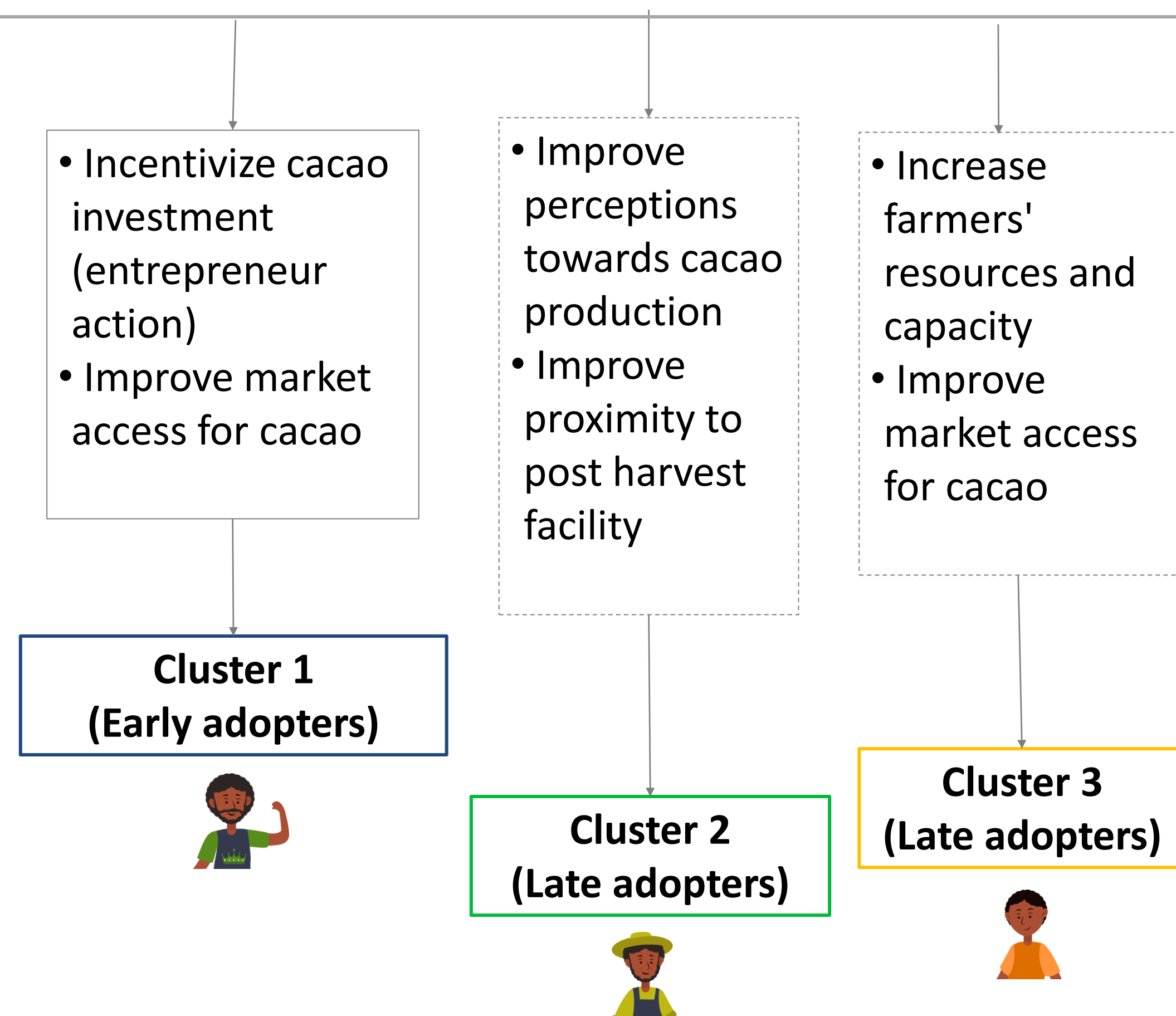
### Key factors driving coconut farmer's decision to adopt cacao

- Farm already had other crops, esp. banana.
- Larger land proportions were given to other crops.
- Positive farmer perception towards cacao.

### Aspects of cacao adoption capacity

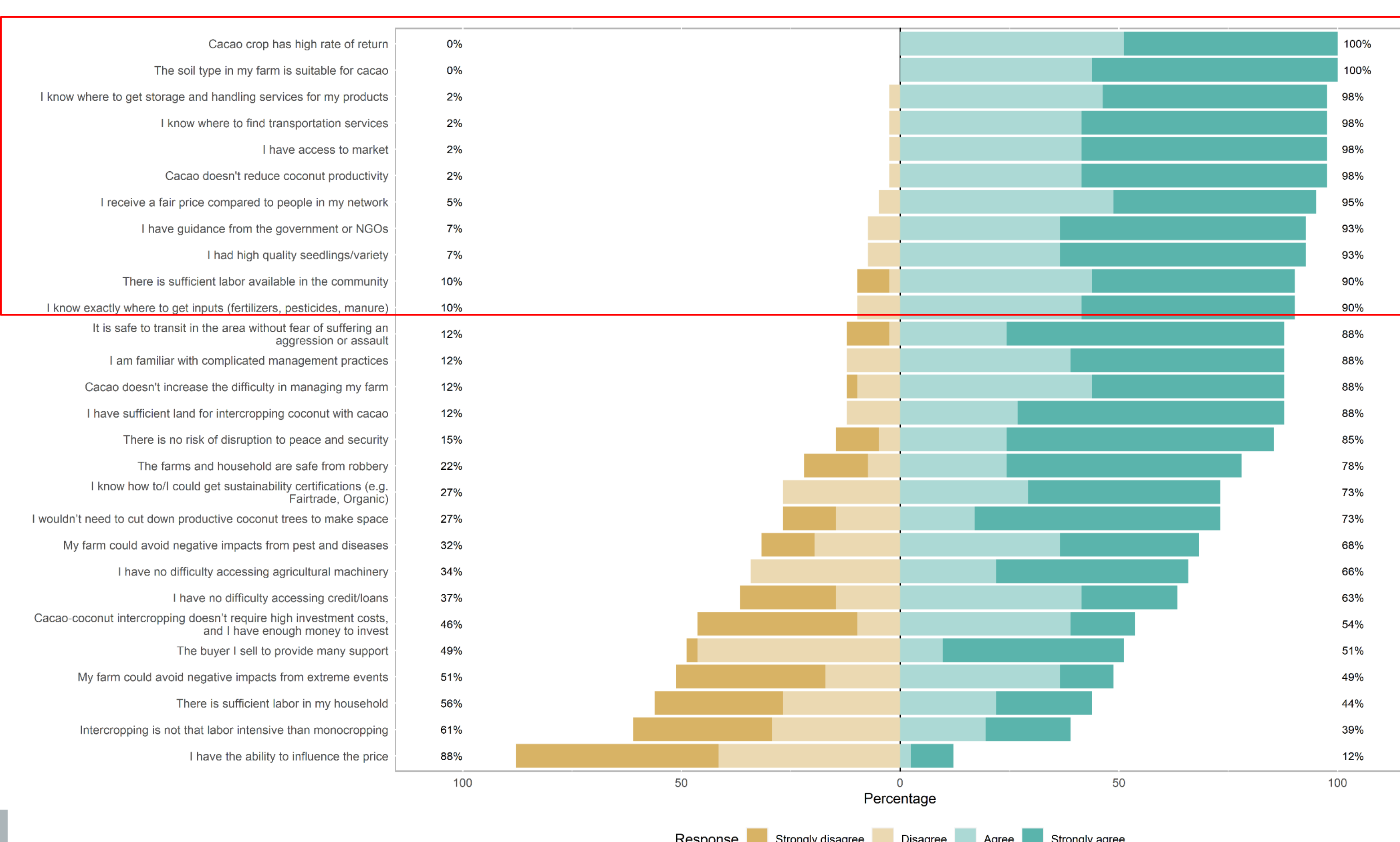


### Current coconut farmers



**Enablers:** cacao income; access to the market, post-harvesting services

**Barriers:** labours intensive; lack cacao knowledge; climate risks, pests and diseases



## Conclusion

- Start with coconut farms + banana.
- Land size > 2.5 ha with land title.
- Increased farmers' access to post-harvesting facilities.
- Incentives for farmers improve labor resources, increase knowledge of cacao production and manage risks.