Resilience of the cocoa value chain in Ghana

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1 Introduction

Ghana is the second biggest producer of cocoa in the world after Ivory Coast. Cocoa is a key crop for Ghana as it accounts for 30% of the total export earnings[1] and provides income for more than six million Ghanaians[2]. The cocoa value chain is susceptible to various types of shocks (weather-related hazards, pest and disease infestations, world price fluctuations on cocoa, etc.) which can have detrimental effects on the sufficient and safe supply of cocoa. Thus, the question this study is:

- **How resilient is the cocoa value chain in Ghana;**
- **and how can its resilience to shocks be increased?**

2 Research steps

1. Mapping of the cocoa value chain Ghana
Based on literature review, secondary data and stakeholder interviews, the cocoa value chain was analyzed by identifying first the main and supporting actors and then through the mapping of material, financial, and information flows.

2. Resilience assessment
A resilience assessment was conducted among different value chain processes (private and governmental input supply, production, internal marketing, transportation, processing, and retailing) based on data generated through interviews with value chain actors and experts, as well as available literature and secondary data. Each process of the value chain was assessed semi-quantitatively based on a five-tier scale.

3. Interventions for resilience building
A stakeholder workshop gathering 24 stakeholders from different processes of the cocoa value chain was held in Kumasi (Ghana) to identify potential interventions for building resilience of the cocoa value chain to key shocks, such as drought and price fluctuations.

3 Results

Resilience assessment

The results show that **governmental input supply**, **internal marketing**, and **processing** have relatively ***high resilience*** due to improved management, reliable information channels, adequate capital, and insurance protection. **Private input supply**, **transportation**, and **food retailing** show a ***heterogeneous resilience*** picture. On the one hand, these processes rely on a large network of small and highly diversified businesses, but on the other hand, small businesses often lack resources to expand and develop due to high interest rates that limit their access to loans. **Production** shows ***low resilience*** due to overdependence on income from cocoa, lack of planning and collaboration, as well as limited knowledge of efficient farming practices.

Process / Resilience attribute	Private input supply	Governm. input supply	Production	Internal marketing	Transpor-tation	Processing	Retail
Buffering capacity							
Capital (social)							
Capital (environm.)							
Capital (financial)		n/a					
Profitability		n/a					
Connectivity							
Diversity							
Information & learning							
Self-organization							
Transform-ability							
Equitability	no data	n/a		no data			

Shock / Actors / Interventions	Drought: Input suppliers	Farmers	Disaster mgmt organiz-s	Resear-s	NGOs	Price fluctuations on cocoa: LBCs	Transpor-ters	Process-s	Retailers	COCOBOD represen-tatives
Early warning system	■	■	■	■	■					
Alternative income sources		■			■	■	■	■	■	■
Savings		■	■				■		■	■
Insurance	■	■		■			■		■	■
Self-organization		■		■	■	■		■		
Support from government			■	■	■	■				■
Diverse input sources	■						■	■	■	
Trust between actors	■			■		■				
Infrastructure quality							■		■	■
Stocks of inputs/ outputs						■		■		
Quality of input sources	■									
Independence in dec.-making							■			

Interventions to enhance the resilience

Following the resilience assessment, key stakeholders of the cocoa value chain were invited to a workshop to discuss about possible interventions against two major shocks, drought, and cocoa price fluctuations. ***Early warning systems*** were proposed to be the most important measure against **drought**, while ***alternative income sources*** were unanimously agreed to be a mean to sustain **price fluctuations**. ***Savings***, ***insurance protection***, and ***self-organization*** were seen to be beneficial for resilience against **both shocks**.

4 Key highlights

This study highlights the following:

- Actors closely and actively interacting with COCOBOD (governmental input supply, internal marketing, processing) overall show higher resilience.
- Cocoa production show the lowest resilience scores due to a lack of financial capital and insurance schemes, low diversification of income, as well as limited collaboration with other actors.

5 References

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