

# Assessing tomato producers' resilience to market influences and climate change events

## A comparative study between Morocco and Ghana

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### Introduction

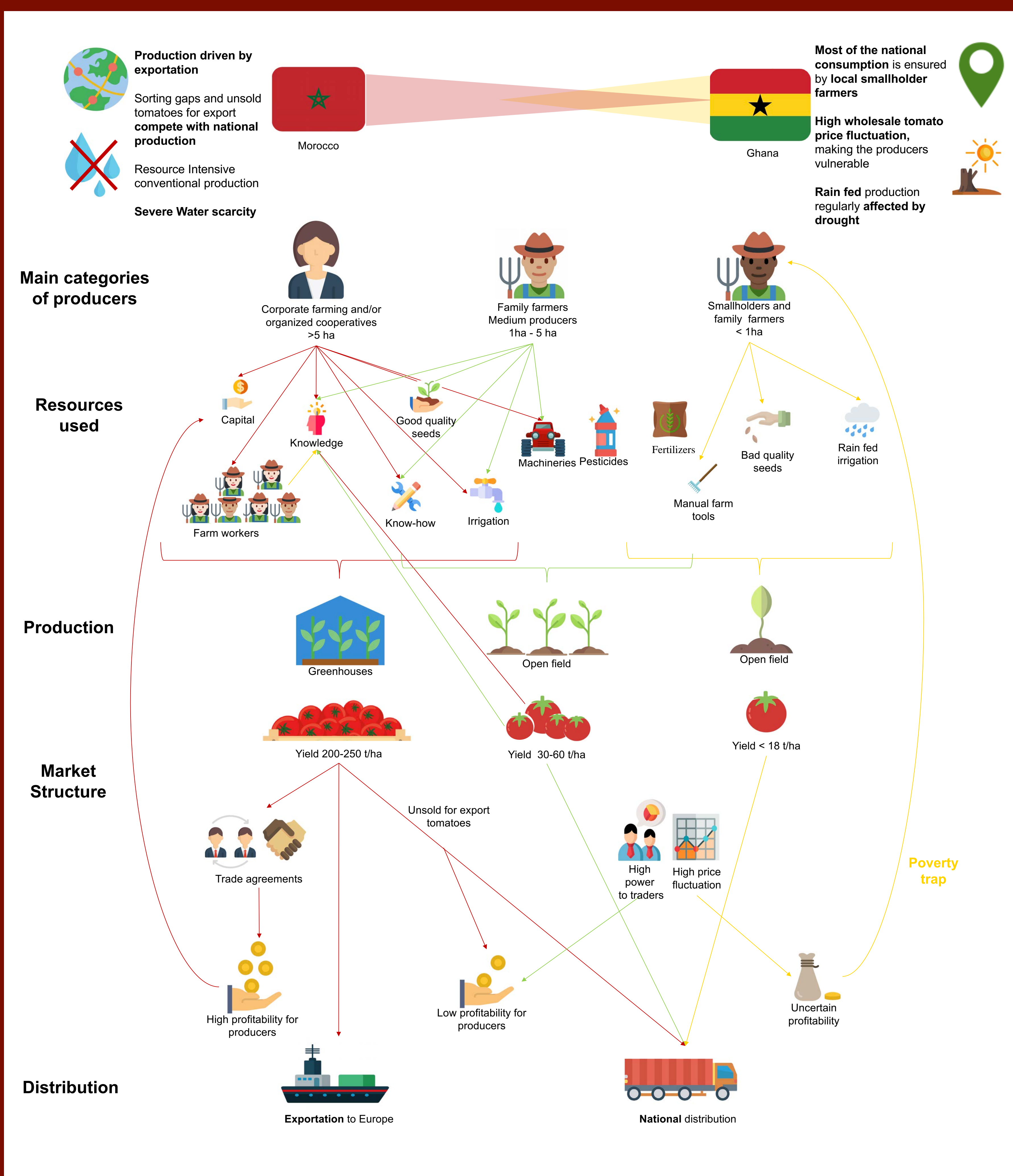
Tomato is a nutrient rich vegetable and a **key cash crop in Morocco and Ghana**, tackling both food and nutrition security challenges in both countries. However, the situation regarding market prices and production management, varies significantly between those countries. **This raises concerns about the ability of value chain actors, in particular tomato producers, to be sustainable and resilient to unexpected changes.**

This thesis aims to contribute to a better **understanding of different market structures and their effects on decision-making processes of tomato producers in Morocco and Ghana in the face of market price fluctuations and use of inputs.**

The **key objectives** and the **expected results** for the following **3 key research questions** of this thesis are:

1. What characterizes and drives market price volatility of tomatoes?
2. How does the use of agro-inputs **influence farmers' income**?
3. How are tomato producers reflecting price uncertainty and increasing risk from drought in their production practices? And **how can farmers enhance their resilience**?

### Moroccan and Ghanaian Context



### Material and Methods

In this thesis, the expected outcomes will be achieved through a **multimethod approach** (combining qualitative and quantitative methods). For each of the **3 research questions**, the following methods will be applied:

#### 1 - Market Structure

- Experts and stakeholders interviews
- **Price analysis**
- Seasonality
- Price volatility
- Price transmission

#### 2 - Influence of the use of agro-inputs on producer's production

- **System Dynamic Model**
- Causal loop Diagram
- Feedback loops
- **Farmer's survey**

#### 3- Enhancement of the resilience of producer's production

- **Shock implementation**
- Models' Behaviour in face of shocks
- **Resilience assessment**
- Focus Group

### Expected Outcomes

This research aim is to provide a better understanding of **tomato producers' resilience in Ghana and Morocco**, by focusing on the market structure, the systems leading to producers' income generation and producers' ability to cope with changes and shocks, like **market influences and climate change events**. This will lead identifying the **mechanism and opportunities to enhance resilience and sustainability of tomato producers.**



### References

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