

# Small pelagic fish chain governance and food security in Ghana

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## Introduction

Chain governance framed as interactions and relationships among chain actors exert influence along the chains (Gereffi et al., 2005). While some of the effects of chain governance have received considerable attention especially in fisheries, there is less emphasis on how different forms of governance affect availability, access, quality and stability of food products for poor urban consumers (Greenwood, 2015; Altenburg, 2006).

First, this paper identifies different forms of governance in fish chains, and second, it examines how they influence fish chains and food security in Ghana.

## Methods

The study was conducted in two cities of Ghana: Accra in the south and Tamale in the north (Figure 1).

Data collection methods include:

- Surveys and key informant interviews with fish traders (processors, wholesalers, retailers) and institutions involved in small pelagic fish chains, and
- Participant observation in fish markets.

The study focused on small pelagic fish chains (sardinella, anchovy and mackerel) because:

- They account for >70% of marine fish landings in Ghana
- Poor consumers depend on them for their animal protein needs.

Data was analyzed using:

- Descriptive analysis
- Content analysis

Figure 1: Study areas



## Results

### 1. Chain governance

I distinguished between governance by market (private) actors and governance by external actors (institutions). Three forms of governance arrangements were identified among market (private) actors:

#### Market

- Common in every part of the chain
- Traders sell fish to any buyer who is available and ready to buy

#### Relational

- Sellers supply fish (mostly on credit) to buyers with whom they are related or have developed long term relationships
- Relationships are based on trust, family ties and mutual reliance

#### Captive

- Small-scale fishermen depend on women in a patron-client relationship
- The women are either boat owners or pre-finance fishing activities of fishermen
- Fishermen obliged to sell to these women at relatively lower prices

## Results cont'd

Institutions that play a role in fish chains include the state, Food & Drugs Authority (FDA), Ghana Standards Authority (GSA) and NGOs.

### 2. Governance influence along the chains

#### Private sector influence in chains

In market, relational and captive:

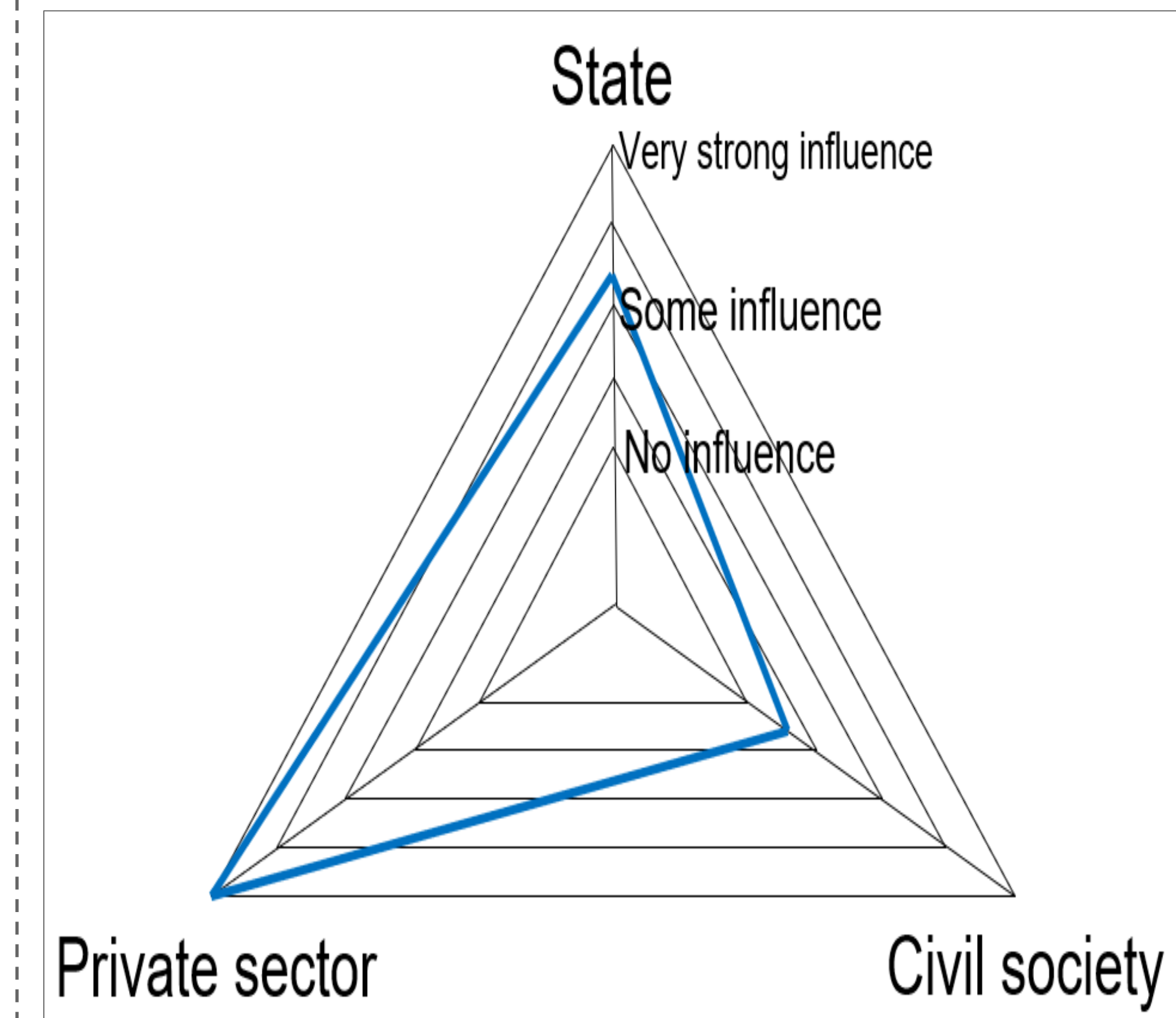
- The private sector appears highly influential in fish chains (Figure 2).
- Marine fish is caught and smoked in fishing communities in Ghana's south; imports also enter through Tema in the south
- Traders distribute the smoked and imported frozen fish along dispersive local supply chain networks encouraging availability and access in urban markets
- Fishmongers smoke and store fish during bumper catch; and sell during lean season ensuring fish is available year-round (stability)
- However, fish quality and safety are at risk as there is unhygienic handling and chemical adulteration of fish.

#### Institutional influence along the chains

The state has limited influence along the chains (Figure 2):

- It is biased towards regulating fish capture
- Capacity to implement and enforce existing regulations remains weak
- However, state agencies (FDA, GSA) have higher influence at points of imports and exports, addressing quality of fish

Figure 2: Governance influence on fish chain



## Conclusion

- Private sector governance is dominant in every part of the chain promoting fish availability, access and stability
- State agencies focus on regulating capture fisheries and imports to ensure sustainability and quality, respectively.
- Need to address fish quality and safety
- Encourage formation of fish traders associations
- Improve capacity of regulatory institutions

## References

1. Altenburg, T. (2006). Governance patterns in value chains and their development impact, *European Journal of Development Research*, Vol. 18, No.4 Dec. 2006, pp.498-521
2. Gereffi et al. (2005). The governance of global value chains, *Review of International Political Economy* 12:1 Feb. 2005:78-104
3. Greenwood, M. (2015). Governance and change in the British seafood supply chain 1950 to 2013 (Unpublished Doctoral thesis, City University London)