

# SEASONALITY OF CONFLICT AND LIVESTOCK PRODUCTION: EFFECTS ON MICRONUTRIENT AND DIETARY ADEQUACY AMONG NIGERIAN HOUSEHOLDS




Olusegun Fadare<sup>1</sup>, Giacomo Zanello<sup>2</sup>, Chittur Srinivasan<sup>2</sup>

<sup>1</sup>PhD Candidate ([o.a.fadare@pgr.reading.ac.uk](mailto:o.a.fadare@pgr.reading.ac.uk))

<sup>2</sup>PhD Supervisors

# MOTIVATION

- African countries in conflict are faced with serious **food and nutrition challenges**.
- Agricultural households often **build resilience to conflict (shocks)**, and device **food consumption coping strategies**.
- **Agricultural production** in Nigeria largely depends on rainfall and are subsistence in nature, hence **vulnerable to seasonality and extreme events**.
  - **Off season vs On season.**
- Protracted conflict may take seasonal pattern and align with seasonality in agricultural production. 
  - Households may experience inadequate dietary intakes and malnutrition in two agricultural seasons. (FAO and Tufts University, 2019)

# RESEARCH JUSTIFICATION AND OBJECTIVES

- Studies suggest that seasonal patterns in weather events, and seasonality in agricultural labour demand are among key drivers of conflict.
  - *Landis (2014); Raleigh et al. (2015); Guardado & Pennings (2016); Maystadt & Ecker (2014); Crost et al. (2018); Madu & Nwankwo (2020).*
- There is dearth of empirical evidence on the impact of seasonal pattern of conflict on diets and food consumption of agricultural households.

## ***Research Objectives:***

- To examine seasonal pattern of violent conflict in Nigeria.
- To assess the effect of seasonality of conflict on ASFs consumption and HDD among agricultural households in Nigeria.

# DATA AND METHODS

## ACLED dataset (2009 to 2019)

### *Outcome variables:*

- Violent conflict incidence
- Farmer-herder conflict incidence

### *Main explanatory variables:*

- Number of months with violent conflict events in LGAs.

## LSMS-ISA–ACLED dataset (2012-2016)

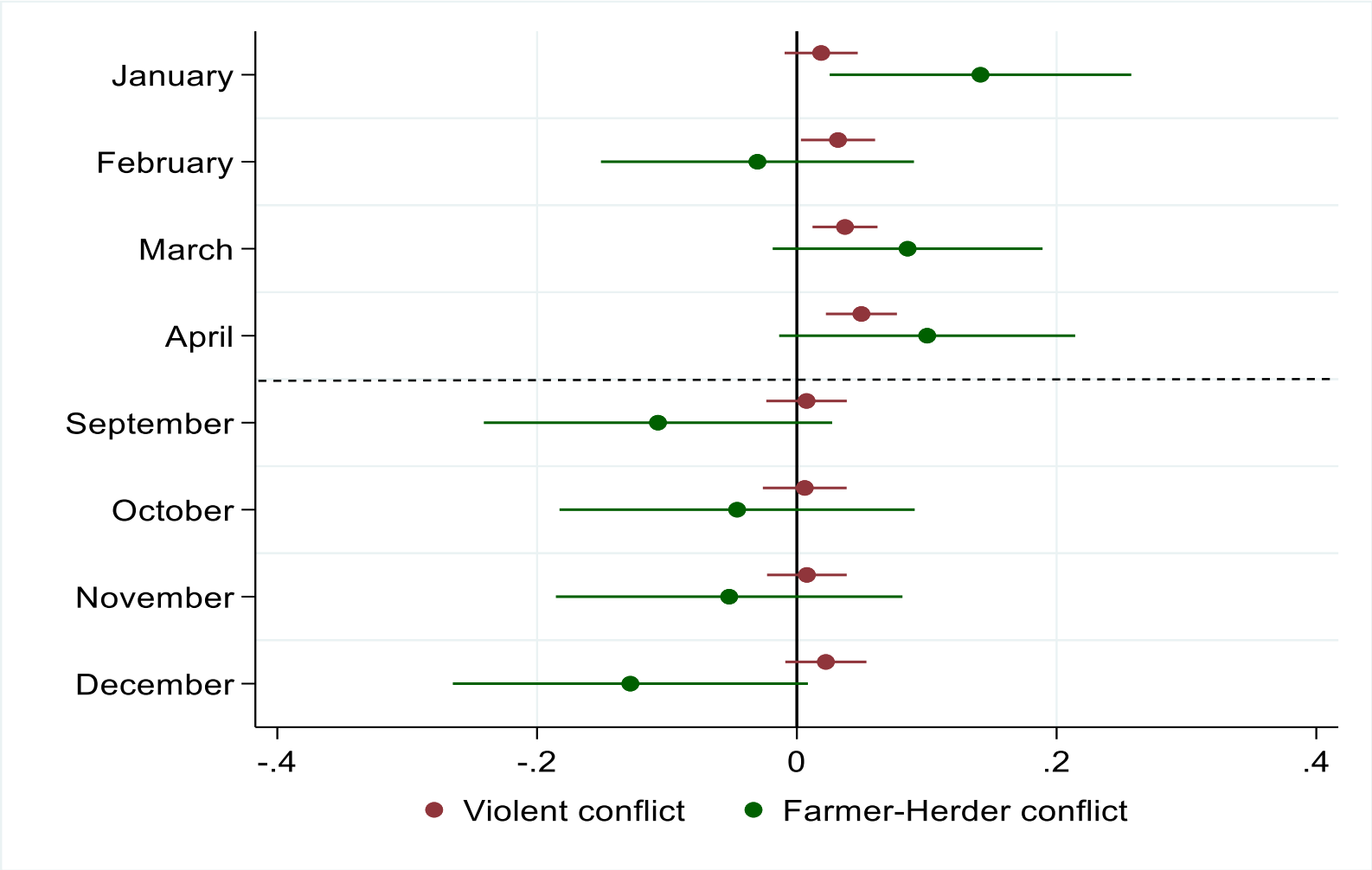
### *Outcome variables:*

- Household consumed ASFs
- Household diversified diets

### *Main explanatory variables:*

- Postharvest\*Violent conflict
- Postharvest\*Farmer-herder conflict

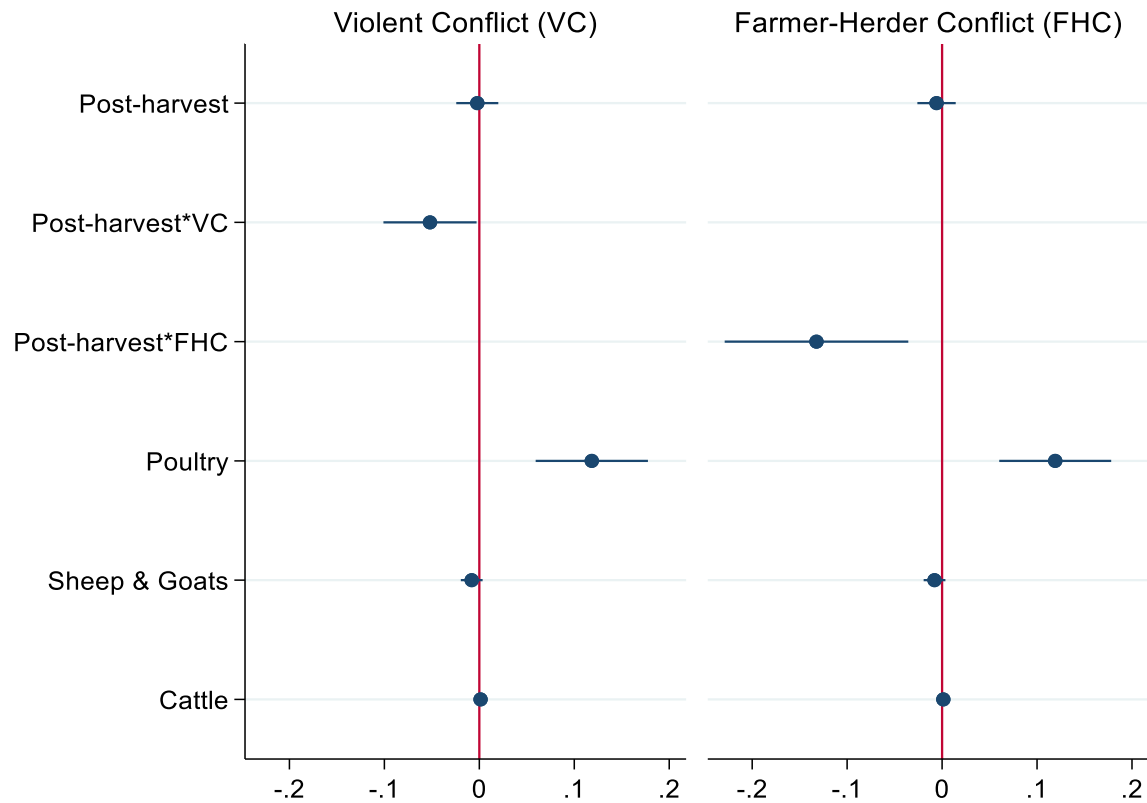
# EMPIRICAL RESULT OF SEASONALITY OF CONFLICT



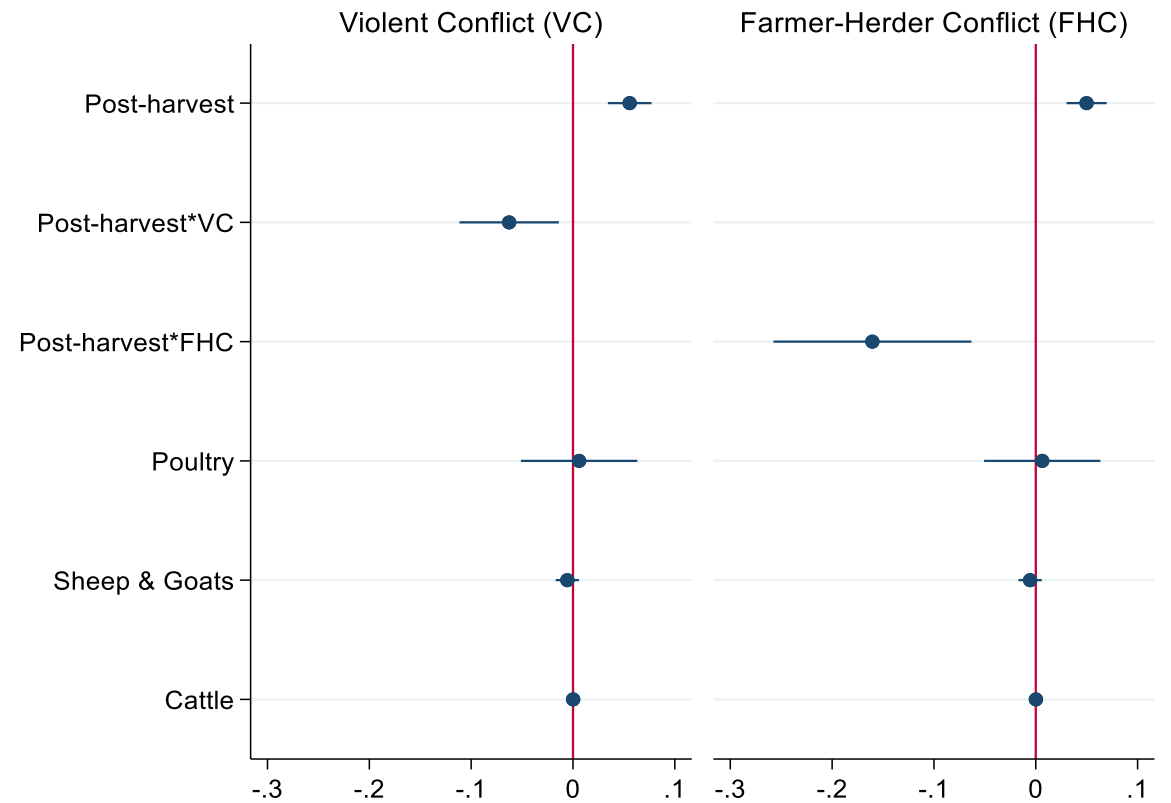
***Regression coefficient plot of the association between agricultural seasons and conflicts.***

# IMPACT OF SEASONALITY OF CONFLICT AND LIVESTOCK PRODUCTION ON ADEQUATE DIETS

## Animal Source Foods Consumption



## Household Dietary Diversity



# CONCLUSION

- There is seasonality of conflicts in Nigeria during the year understudied, especially farmer-herder conflict, and they align with agricultural seasons.
- Households diversify diets in post-harvest season, but conflict exposure limits such consumption patterns.
- Livestock production may not sustain adequate diets for households across seasons in conflict situation.
- Production of other micronutrient-rich crops such as vegetable gardening should be encouraged to complement staple diets of most agricultural households in Nigeria.

# POLICY IMPLICATIONS

- Mainstream climate change adaptation into livestock production systems to reduce conflict associated with extreme weather events.
- Increase off-farm job opportunity for rural youths to reduce the incentive to join violent groups during the season of low demand for farm labour.
- Target micronutrition intervention programmes towards critical months/seasons of inadequate dietary intakes in conflict affected regions.
- More research should examine food consumption of households in conflict situation and incorporate seasonality dimension to improve understanding of seasonal food consumption vulnerability.



**THANK YOU FOR LISTENING**