

Seasonal fluctuation of food consumption pattern in rural Burkina Faso

Sakiko Shiratori*¹, Eveline M. F. W. Sawadogo Compaore², and Hsiaoping Chien³



^{1,3} Japan International Research Center for Agricultural Sciences (JIRCAS), Japan

² Environment and Agricultural Research Institute (INERA), Burkina Faso

* Corresponding author: Shiratori.Sakiko@affrc.go.jp



Introduction

- One of the aspects of food security is that people have access to food at all time.
- Food and nutritional supply for rural people is believed to be dependent on seasonal food availability.
- We present how food consumption pattern changes based on recent bimonthly household survey data in rural Burkina Faso.

Methods

Target region

- Six rural villages from north (Yako's district) & south (Po's district) in Burkina Faso.
- Yako: limited crop production due to the climate.
- Po: close to Ghana, wealthier in general.



Target households

- App. 200 households.
- Randomly selected from census survey (conducted before the main survey to make a household list).
- Visit the same households repeatedly to interview in order to construct panel data.

Survey period

- every two months from April 2019 to February 2020 (six rounds of survey in total).

Results

Hungry feeling

- Subjectively measure their hungry feeling experience in the previous one year (asked in Feb 2020).
- No households felt hungry in Nov-March.
- Aug is the peak.

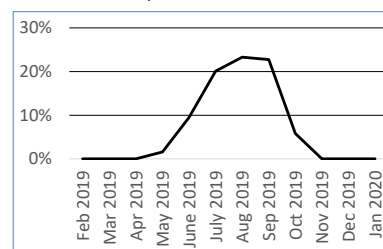


Fig 1. Percentage of households experienced hungry in the last year

Number of meals /day

- From 24-hour recall
- Most households ate meals <3 times/day (average: 1.7).
- Regional difference for seasonal fluctuation (Po: stable).

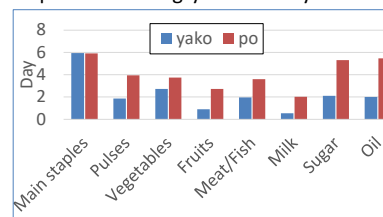


Fig 2. Consumption frequency in 7 days

Food group consumption

- From FFQ in 7 days.
- Animal source foods' consumption is limited.
- Po: more varieties.

Recipes

- From 24-hour recall
- Tô: most commonly seen throughout the year.
- Regional difference such as rice: mainly in Po.
- Seasonal difference such as more dependent on Tô in lean season, especially in Yako

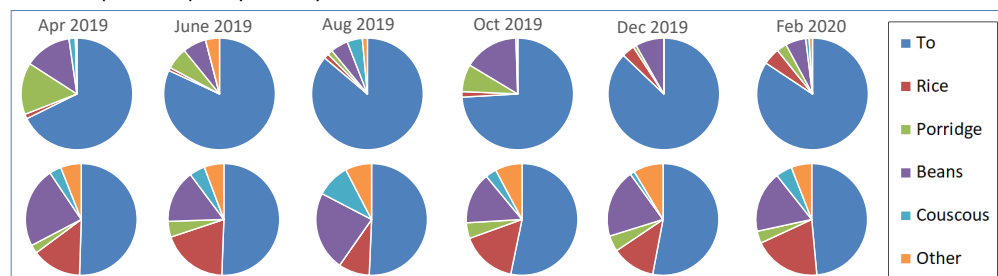


Fig 4. Ratio of prepared recipes in proportion to total recipes by season and region (upper: Yako, lower: Po)

Food Consumption Score (FCS)

- Based on frequency of food groups consumed in the past 7 days.

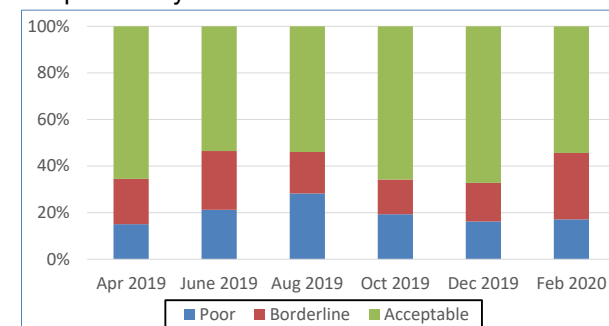


Fig 3. Percentage of households categorized by FCS

- In total, their diets are categorized as poor (20%), borderline (20%), and acceptable (60%).
- There are regional differences (Po: more than 90% on average of HHs' diet is acceptable).
- When the harvest starts (Oct), FCS improves.



Conclusions

Seasonality exists in their food consumption patterns. August is the hungry month before the harvest, and food consumption score changes accordingly. Yet, regional difference due to the climate is larger than seasonal difference in general. Households in the north are more likely to be food insecure and more vulnerable to seasonal changes.