Population and Food Insecurity in Angola 2019-2021: Utilizing the Food Insecurity Experience Scale (FIES) as a Metric.

Extended summary

1. Introduction

Food shortages represent one of the most serious manifestations of poverty, posing a significant social challenge in many countries, especially those with high poverty rates. Faced with this reality, promoting food security has become one of the main concerns of governments and organizations, aiming to ensure equitable access to safe, nutritious, and sufficient food. This concern is reinforced by the Sustainable Development Goals (SDGs) established by the UN in 2015, which highlight the eradication of hunger as a crucial goal by 2030, emphasizing the importance of addressing food disparities that particularly affect the poorest and most vulnerable (ODS, 2018).

In this context, the Food Insecurity Experience Scale (FIES) emerges as an essential tool for assessing progress in achieving these ambitious goals. Globally, food insecurity affects millions of people, with around 900 million experiencing severe food insecurity between 2020 and 2022. In Angola, a country that has faced decades of civil war and economic challenges, food insecurity is a pressing concern, impacting over 30 million people and resulting in a significant increase in the prevalence of severe food insecurity (SOFI, 2022).

Although the Angolan government implemented the National Food and Nutritional Security Strategy (ENSAN) in 2009 to address this issue, challenges persist, including economic instability, drought, and a lack of effective commitment to social policies. The COVID-19 pandemic has further exacerbated these issues, highlighting the urgent need to understand and address food insecurity in the country (ENSAN, 2009).

In this context, this study aims to analyze food insecurity in Angola from 2019 to 2021, seeking to understand its socioeconomic and geographical dimensions, as well as the impact of the pandemic. By using the Food Insecurity Experience Scale (FIES), this work aims to contribute to a more comprehensive understanding of food insecurity in the country,

enabling international comparisons and providing important insights for the formulation of effective policies and interventions.

2. Methodology

This study uses data from the Angola Labor Force Survey (IEA) from 2019 to 2021 to analyze food insecurity in the country. The IEA is a quarterly survey focused on the population residing in family households, with a quarterly rotating sample of 8,240 households, weighted to ensure representativeness. In addition to characterizing the labor situation of the population, the IEA incorporates a quarterly questionnaire related to the Food Insecurity Experience Scale (FIES) from FAO, directed to the head of the household.

The assessment of food insecurity is based on the FIES, composed of 8 specific questions. The determination of the prevalence and intensity of food insecurity follows FAO-UN guidelines, using the weighted Rasch model. This method calibrates the national scale against the global standard of the FIES, allowing for consistent analysis over time. The psychometric properties of the FIES are evaluated using Rasch modeling, with the exclusion of extreme scores.

Results show acceptable performance of FIES items, except in 2020, where one item presented issues, suggesting possible translation or comprehension issues during data collection. The reliability of the Rasch model was satisfactory in all years. No evidence of multidimensionality in the FIES was found. The relative severity of each item is estimated based on the global distribution of responses, showing significant variation over the years.

3. Results and Discussion

Data analysis reveals a concerning situation regarding food insecurity in Angola from 2019 to 2021, especially with the significant impact of the COVID-19 pandemic. Before the pandemic, in 2019, around 30% of the population faced severe food insecurity, 49.1% in moderate food insecurity, and 21.1% in mild food insecurity. The arrival of COVID-19 in 2020 brought mixed effects, with a reduction in severe food insecurity but a significant increase of 7.1% in moderate food insecurity, indicating possible exacerbations of pre-existing vulnerabilities. In 2021, levels of food insecurity reached alarming levels, especially

in the severe category, highlighting the devastating socioeconomic impacts of COVID-19 in Angola.

Stratified analysis by area of residence reveals significant differences between urban and rural areas. In 2020, urban areas predominantly faced moderate food insecurity, highlighting direct economic impacts of COVID-19 such as job loss. Rural areas, on the other hand, exhibited higher levels of severe food insecurity, emphasizing the influence on agricultural production and rural communities. This underscores the importance of regionally tailored strategies, focusing on job protection in urban areas and support for rural agriculture.

Analysis by gender reveals nuances in socioeconomic differences and impacts of COVID-19 between men and women. While both genders were affected, women appear to face greater vulnerability, especially in moderate and severe food insecurity situations, possibly due to factors such as unequal resource distribution and traditional gender roles.

Stratified analysis by education level shows a clear relationship between socioeconomic disparities and COVID-19 impacts among educational groups. The less educated faced greater challenges in terms of food insecurity, highlighting the importance of promoting education in mitigating these disparities.

Finally, analysis by province reveals significant variations in socioeconomic conditions and COVID-19 impacts between different regions of the country, emphasizing the need for specific strategies for each region, considering local factors, especially those affected by drought.

This comprehensive analysis of results highlights the complexity of factors influencing food insecurity in Angola and the importance of differentiated and targeted approaches in developing response strategies, taking into account the socioeconomic particularities and specific impacts of the pandemic on each group and region.

4. Final Considerations

The results of this analysis offer a comprehensive and concerning view of the food insecurity situation in Angola from 2019 to 2021, especially in light of the significant impact of the COVID-19 pandemic. Before the arrival of the pandemic, an alarming reality was already observed, with a substantial portion of the population facing severe, moderate, and

mild food insecurity. The arrival of COVID-19 brought mixed effects, with a reduction in severe food insecurity but a significant increase in moderate food insecurity, indicating exacerbations of existing vulnerabilities. In 2021, levels of food insecurity reached alarming levels, especially in the severe category, highlighting the devastating socioeconomic impacts of the pandemic in the country.

Stratified analysis by area of residence revealed significant differences between urban and rural areas, emphasizing the need for regionally tailored strategies, focusing on job protection in urban areas and support for rural agriculture. Additionally, analysis by gender and education highlighted socioeconomic disparities and differentiated impacts of the pandemic, emphasizing the importance of promoting education and gender equality as measures to mitigate food insecurity.

Finally, analysis by province revealed significant variations in socioeconomic conditions and COVID-19 impacts between different regions of the country, emphasizing the need for specific strategies for each region, considering local factors such as exposure to drought, to address the challenges of food insecurity.

In light of this complex panorama, it is evident that food insecurity in Angola is a multifaceted problem that requires a comprehensive and coordinated approach. Effective policies and interventions must be implemented to ensure equitable access to safe, nutritious, and sufficient food for the entire population, taking into account the socioeconomic and geographical particularities of the country. Only through concerted and committed efforts will it be possible to address this challenge and work towards a fairer and more prosperous future for all Angolans.