Meat consumption dynamics and demand elasticities in Dakar, Senegal

Executive summary

This technical note presents the main findings of an in-depth study on meat consumption patterns and demand elasticities in Dakar, Senegal. The analysis is particularly relevant considering recent global shocks, including the COVID-19 pandemic and the crisis in Ukraine, which have significantly impacted the region's economic landscape and food security. It shows that fish, chicken, and beef are the most consumed meats in Dakar, although there are significant differences in the quantities consumed, depending on the level of household income. Policy recommendations are made, highlighting the role of public authorities in ensuring food security at the national level.

Context

Commissioned by the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) as part of the Regional Sahel Pastoralism Support Project, or PRAPS 2, the 'Analysis of the characteristics and patterns of meat consumption and demand in West Africa' study was conducted in 2023. It was carried out jointly by researchers from the International Livestock Research Institute (ILRI) and the Centre for International Cooperation in Agricultural Research for Development (CIRAD) in 4,000 households in the capitals of Senegal, Côte d'Ivoire and Nigeria. Its main objective was to characterize and analyze current and future trends in meat consumption and demand as well as their sensitivity to price and income variations. This technical note summarizes the main results relating to Dakar and the consumption patterns and factors influencing meat demand in this city.

Senegal's economy has faced substantial challenges, with inflation rates soaring to 9.7% in 2022, primarily driven by rising food prices. The country's population is approximately 17.2 million, with a high poverty rate complicating access to nutritious food, including meat. The agricultural sector remains a critical component of the economy, contributing significantly to GDP and employment.

Main results

Consumption habits
Fish (100%), chicken (98%), and beef (92%) are the most consumed meats by households in Dakar. Goat and pork meat are consumed by less than 8% and 4% of households respectively, largely due to cultural and religious factors, including the predominance of Islam (94% of the population).

Weekly consumption averages:
- Fish: 3 kg
- Chicken: 1.1 kg
- Beef: 0.78 kg
- Mutton: 0.33 kg
- Eggs: 0.15 dozen
- Goat meat: 0.004 kg
- Pork: 0.008 kg

Higher-income households consume more meat overall. For example, high-income households consume an average of 4.3 kg of fish per week, while low-income households consume about 2.56 kg.

Economic expenditure

Average weekly expenditure on meat is around 17,200 FCFA, with significant variations depending on income level:

- High-income households: 28,983 FCFA[1]
- Middle-income households: 22,377 FCFA
- Low-income households: 13,680 FCFA

Variability of expenditure

Expenditures vary considerably, with some households spending as little as 8,600 FCFA per week, while others may spend more than 142,000 FCFA.

Elasticity of demand

- All types of meat are classified as normal goods with positive income elasticities. However, the sensitivity of demand to income changes varies.
- Fish and chicken have higher elasticity than beef and other meats.

Demographic influence

Household size influences demand for beef and chicken, while goat and pork consumption remain relatively unaffected. The gender of the household head also affects demand for mutton, particularly during cultural events such as Eid al-Adha.

Policy implications

1. **Mitigating inflation**: To combat rising food prices, the government should introduce targeted subsidies for essential foodstuffs and improve local meat production to stabilize supply. This could involve supporting local farmers and reducing reliance on imports.

2. **Improving food safety**: Policies should aim to improve the accessibility and affordability of meat, particularly for low-income households. This could involve initiatives to increase local production and improve supply chain efficiency.

3. **Promoting sustainable consumption**: Encouraging a diversified diet with plant-based proteins can ease pressure on meat demand and contribute to sustainability goals. Nutrition education campaigns could help change consumer preferences.

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[1] $1 USD = 612.3 CFA francs - Average market exchange rate at 30 June 2024

4. **Investing in local agriculture**: Strengthening local livestock and poultry farming can improve self-sufficiency and stabilize prices, thereby improving food security. This includes providing financial support and training to farmers.

5. **Continuous research and monitoring**: Continuous analysis of consumption patterns and demand elasticity will enable policymakers to adapt their strategies in response to changing economic conditions and consumer preferences. Regular surveys and data collection should be a priority.

Conclusions

Understanding meat consumption dynamics and demand elasticity in Dakar is critical to developing effective agricultural and economic policies. By addressing the challenges of inflation and food insecurity, the government can strengthen the resilience of the food system and improve the livelihoods of Senegalese households. Implementing targeted policies will ensure that all population segments have access to affordable and nutritious food.

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