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ILRI and CIRAD Abdrahmane Wane and Serena Ferrari Meat consumption dynamics and demand elasticities in Abidjan, Ivory Coast

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# **Executive summary**

Meat consumption is widespread in Abidjan, the capital of Côte d'Ivoire, with a strong preference for fish and beef. Income levels are crucial in food choices: wealthy households favor mutton and beef, while chicken and pork are more prevalent among lower-income households. Reducing economic disparities is imperative to improving food security and nutrition. This requires implementing appropriate policies to ensure equitable access to diverse protein sources and to strengthen local agricultural initiatives.

# Context

Commissioned by the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) within the framework of Regional Sahel Pastoralism Support Project, or PRAPS 2, the 'Analysis of the characteristics and models of meat consumption and demand in West Africa' study was conducted in 2023. It was undertaken 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 Abidjan and the consumption patterns and factors influencing meat demand in this city.

Côte d'Ivoire has a population of approximately 28.2 million, 48.4% of whom are women. The country has undergone significant political and economic changes since the end of a violent political crisis in 2011, which severely affected the economy and social fabric. Côte d'Ivoire has recorded robust economic growth following the crisis, with an annual gross domestic product (GDP) growth rate exceeding 7% and a 32% increase in GDP per capita since 2011. Despite this growth, poverty remains a critical problem, affecting 46% of the population. The rural poverty rate is exceptionally high, at 56.8%, compared to 35.9% in urban areas, indicating significant disparities in resource access. Food security is a major concern, with the country facing malnutrition, undernutrition, and overnutrition exacerbated by regional disparities.

# Characteristics of meat consumption

### 1. Prevalence of meat consumption

About 99.8% of households consume animal protein, with fish (98%), beef (92%) and eggs (73%) being the most common. Goat meat is consumed by only 7% of households, while pork and mutton are consumed by 32% and 43% of households, respectively.

### 2. Consumption patterns by income level

- Beef: Over 90% of households consume beef across all income categories.
- **Chicken**: About 79% of low-income households consume chicken, compared to 83% of middle-income households.
- **Fish**: This is the most widely consumed protein, with 97% of households consuming it across all income categories.

- **Pork**: Consumption is more common in low-income households (36%) than in middle-income (33%) and high-income (23%) households.
- Mutton: High-income households have higher consumption (60%).
- **Eggs**: Consumption varies, at 67% in low-income households, 73% in high-income households, and over 75% in middle-income households.

#### 3. Weekly consumption estimates

- Average weekly consumption: Each household consumes about 2 kg of fish, 1.6 kg of beef, and 0.8 kg of chicken weekly. Goat meat has the lowest average weekly consumption, at 0.008 kg.
- **Income variation**: Consumption increases with income for most meats, except for pork, which is less consumed in high-income brackets.

#### 4. Meat expenses

- **Average weekly expenses**: The average is 16,460 CFA francs<sup>1</sup>, with significant variation; 24,300 CFA francs for high-income households, 17,000 CFA francs for middle-income households and 12,340 CFA francs for low-income households.
- **Distribution of expenses**: Meat expenditure varies widely, with 50% of households spending more than 13,500 CFA francs per week.

# Elasticities of meat demand

#### 1. Demographic influences

The municipality of residence significantly affects meat demand, with strong mimicry in consumption patterns. However, household size, age and gender of the household head have minimal impact on overall meat demand, except for a slight effect of household size on chicken demand.

#### 2. Elasticities of demand

Demand for different meats varies considerably across income levels, with higherincome households consuming more expensive meats such as mutton and beef. In contrast, lower-income households tend to consume more chicken and pork.

#### 3. Income elasticity

As income rises, demand for more expensive meats increases, while demand for cheaper meats decreases. This reflects the economic constraints faced by different income groups.

# Policy recommendations

These recommendations aim to improve food security, promote healthy and diversified diets, and strengthen the resilience of the food system in Côte d'Ivoire. They take into account socioeconomic dynamics and specific challenges encountered by different segments of the population.

<sup>&</sup>lt;sup>1</sup> \$1USD = 612.3 CFA francs - Average market exchange rate at 30 June 2024

#### 1. Improve economic accessibility

- Establish targeted subsidy programs for essential meats, such as chicken and pork, to make these products more affordable for low- and middle-income households.
- Encourage local meat production through financial incentives and increased support for local farmers, which could help stabilize prices and reduce reliance on imports.

### 2. Promote food diversification

- Promote balanced diets that include more plant proteins to encourage a diversification of protein sources. This could be achieved through nutrition education campaigns and initiatives to make plant proteins more accessible.

#### 3. Strengthen food security

- Develop and implement integrated food security strategies that consider regional disparities and the specific challenges faced by rural households.
- Develop contingency plans to address potential food crises and fluctuations in food prices.

#### 4. Invest in infrastructure and logistics

- Improve transportation and storage infrastructure to reduce food losses and ensure product quality throughout the supply chain.
- Facilitate access to markets for local producers to stimulate competition and make food products more affordable for consumers.

#### 5. Promote research and innovation

- Support continued research on food consumption patterns, demographic trends, and demand elasticities to inform public policies and agricultural development initiatives.
- Encourage technological innovation in agriculture to increase the productivity and efficiency of local agricultural practices.

### 6. Strengthen governance and planification

- Strengthen institutional capacities for effective agricultural and food sector governance, emphasizing transparency, accountability, and stakeholder participation.
- Actively involve local communities and consumer groups in formulating food policies to ensure that they effectively respond to local needs and realities.

## Conclusion

The results illustrate a complex relationship between income levels, demographic factors, and meat consumption patterns in Côte d'Ivoire. The widespread consumption of meat, mainly fish and beef, highlights its importance in the diet. In contrast, expenditure and consumption pattern disparities reveal persistent economic inequalities and food security challenges. These lessons are critical for policymakers addressing nutritional needs and improving food security. There is a need to develop targeted interventions that consider the socio-economic dynamics of different population segments to strengthen household food and nutrition security.

### Authors

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