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## Key Messages:

- Gender disparities shape consumer purchasing patterns for fruits and vegetables (F&Vs) in urban retail markets. Women predominantly buy from informal markets, while men prefer the formal retail outlets, underscoring the need for gender-responsive retail and infrastructure planning.
- Fruit and vegetable consumption among Kenyan adults remains critically low, despite accessibility to formal and informal retail markets. Only 3.1% of women and 4.5% of men meet the recommended daily intake of five or more servings, highlighting the need to address barriers related to affordability, awareness, and access.
- Expanding access to safe, inclusive, and conveniently located markets is essential, particularly in underserved areas with limited availability and access to fresh and affordable nutritious foods.
- Gender-responsive policies and market regulations are vital to achieving equitable food environments. Strengthening these frameworks will promote fairness in retail access and support healthier consumer choices.
- Targeted consumer education and behaviour change initiatives are needed to boost fruit and vegetable intake. Investing in tailored awareness and nutrition campaigns can foster sustainable improvements in dietary habits.

## Introduction

Non-communicable diseases (NCDs), including cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases, are becoming the leading cause of mortality in Africa (Müller et al, 2024). In newly developing urban areas, dietary habits are shifting towards unhealthy diets due to a variety of factors such as changes in consumer socio-economic and



lifestyle behaviours (Casari et al, 2022). This dietary shift poses threats such as micronutrient deficiencies, stunting, overweight, obesity, and related NCDs (Popkin and Ng, 2022), with far-reaching societal and epidemiological consequences. Consuming an adequate number of fruits and vegetables (F&Vs) can result in beneficial health and nutrition outcomes (Food and Agriculture Organization -



FAO, 2021), as they provide essential nutrients, vitamins, minerals, and fiber that are necessary for the body to function optimally. However, despite efforts to promote increased F&V intake across all dietary guidelines, national surveys confirm that dietary intakes are suboptimal and have not increased over time (Woodside et al., 2023). A joint report by the FAO, European Union, and CIRAD (2023) further highlights that F&Vs account for only about 5 percent of the typical Kenyan diet, underscoring the need to promote healthier and more diverse food consumption. Food environments influence consumer purchasing decisions, dietary habits, consumption of healthy diets, and nutrition outcomes (Kennedy et al, 2023; Thomas et al, 2024). Retail markets are key to promoting healthier diets by providing consumers with easier access to nutritious foods, such as F&Vs. Based on a study conducted, this policy brief outlines actionable policy recommendations to ensure all Kenyans can sustainably access and consume adequate amounts of F&Vs for better public health outcomes. This study used a mixed-methods approach to explore F&V consumption patterns in Eldoret City, the Kenya's fifth-largest city. It combined insights from adult consumers with perspectives from F&V vendors, county government officials, and market leaders. A range of formal and informal markets across the city were randomly selected to ensure a fair and representative understanding of urban retail environments.

## Key findings and Policy implications

- **Gender disparities in purchasing behaviour**
  - Women are the primary purchasers in informal markets (82.2% compared to 17.8% of men), reflecting the gendered differences in market access, roles and shopping preferences
- **Fruit and vegetable consumption remains critically low**
  - Despite physical access to markets, adult women and men consume an average of only two servings per day, well below the recommended five by World Health Organization. Women consume fewer vegetables weekly than men, highlighting gendered differences in dietary patterns
- **Multiple Factors influence fruit and vegetable consumption**
  - Daily fruit intake is influenced by age, education level, occupation and perceived market safety
  - Weekly fruit intake is affected by age, distance to the market and perceived market safety
  - Daily vegetable intake is largely determined by monthly income
  - Weekly vegetable intake is influenced by occupation, monthly income, travel time to the market, and perceived market accessibility



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# Low intake of fruits and vegetables among women and men

## women



**82%**

Buy from  
informal  
markets

Average consumption of fruits and vegetables  
was the same for women and men  
2 servings/day



Meeting Recommended  
intake 3.1%

## men



**18%**

Buy from  
informal  
markets



Meeting Recommended  
intake 4.5%

**Support policies that increase access and consumption of fruits and vegetables**

In summary, F&V consumption among adults is critically low, with notable gender disparities in purchasing patterns. Consumption is influenced by multiple factors, including age, income, occupation, market accessibility, and perceived safety. These findings highlight the need for targeted, gender-responsive interventions that address both market infrastructure and consumer behaviour. Policies should prioritize safe and conveniently located markets, support women in informal retail, and promote nutrition education and awareness. Effective action will require coordinated efforts across health, agriculture, urban planning, and social protection sectors to ensure equitable access to F&Vs for all.



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## Policy Recommendations

- **Strengthen Informal and Formal Market Infrastructure**

- Recognize the critical role of informal markets in providing fruits and vegetables, particularly for urban consumers



- Upgrade informal market facilities by investing in improved storage, hygiene and sanitation facilities, and effective regulatory oversight to ensure safer, more resilient and appealing market environments

- Design and prioritize gender-friendly infrastructure with features such as wider walkways, designated rest areas, and accessible layouts to create inclusive market spaces for all shoppers.

- **Promote Safe, Gender-Inclusive Market Spaces**

- Enhance both perceived and actual safety in informal markets, which serve as primary shopping and selling spaces for women vendors in urban areas
- Engage communities and stakeholders in decisions about retail market locations to ensure accessibility, usability and acceptance
- Provide training for market managers on gender-sensitive practices and protocols that prioritize women's safety, comfort and well-being

- **Bring Markets Closer to Communities**

- Strengthen community-based markets and mobile stalls (*mama mboga*) in underserved areas such as slums and urban food deserts to improve access to fresh, affordable fruits and vegetables and reduce reliance on processed, less nutritious and healthy foods
- Support local authorities in implementing market zoning policies that prioritize establishing retail markets close to residential neighborhoods, especially in low-income communities

- **Invest in Consumer Awareness, Nutrition Education, and behaviour change communication**

- Implement targeted campaigns that raise awareness about recommended portion sizes, health benefits, and preparation methods for fruits and vegetables, tailored to the needs of both women and men
- Leverage digital platforms and behaviour change communication tools to promote increased fruit and vegetable consumption among urban consumers



- Integrate comprehensive nutrition education into school curricula and community nutrition outreach programs to build long-term healthy eating habits
- **Supportive Market Policies and Regulations**
  - Implement policies that allows flexible market operating hours to better meet the needs of diverse consumers and vendors
  - Enforce regulations to stabilize fruit and vegetable prices, ensuring these nutritious foods remain affordable for all consumers
  - Introduce incentives that promote healthy competition among markets, fostering innovation and improving service delivery

### **Implementation Considerations**

While the study highlights the urgent need for targeted, gender-responsive interventions that address both market infrastructure and consumer behavior to improve access to, and consumption of F&Vs, successful implementation requires careful attention to several practical challenges.

### **Key Barriers and Strategies for Overcoming Them**

Key barriers include:

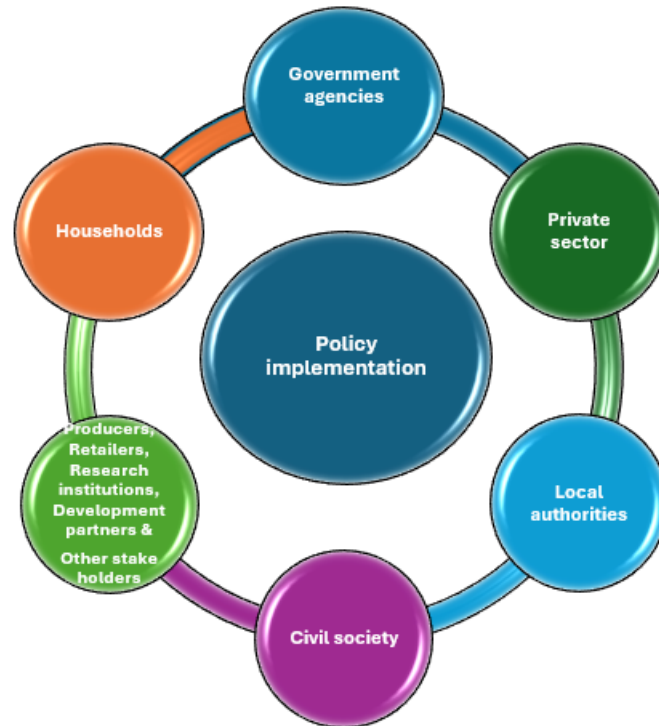
- Financial constraints that limit households' ability to afford adequate F&V intake
- Conflicting interests among market stakeholders, policymakers, and communities
- Competing policy priorities that may shift focus away from nutrition-related interventions

To overcome these challenges, a coordinated, multi-stakeholder approach is essential. Effective, gender-responsive interventions to improve fruit and vegetable access and consumption require collaboration among a wide range of stakeholders, including producers, retailers, government agencies, local authorities, civil society, the private sector, health and nutrition experts, gender specialists, financial and research institutions, community representatives, and development partners, who can co-design and implement context-specific, inclusive, and sustainable strategies that reflect local realities and needs.

By incorporating these considerations into policy and practice, Kenya can strengthen pathways towards equitable and sustainable access to and adequate consumption of F&Vs.



## Relevant Stakeholders for Policy Implementation



This represents a significant step forward in improvements in public health, nutrition, and food systems resilience across urban communities.

### Conclusion

To effectively combat diet-related chronic diseases, Kenya must address not only the supply of fruits and vegetables but also the social, economic, and gender-related factors that shape demand and consumption patterns. Policy actions should prioritize improving market safety, reducing access barriers, and targeting low-income, underserved populations. Implementing context-specific, gender-responsive retail market policies and regulations is essential, particularly those that enhance market infrastructure and influence purchasing and consumption behaviors among both women and men. Equally important is fostering public participation in local government decision-making. Engaging consumers, retailers, and suppliers ensures that diverse needs and perspectives are reflected in market planning and regulation, ultimately improving access to and consumption of nutritious foods. By taking these inclusive and targeted actions, Kenya can create a food environment that promotes equitable nutrition and reduces the burden of diet-related chronic diseases.

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