

Can highly nutritious semi-processed products help reduce food waste in Kenya?

Understanding consumer behaviors and habits to ensure low-income consumers have improved access to safe, affordable and nutritious fruits and vegetables in Kenya.

Background: Increasing demand for low visually appealing vegetables

The UNEP Food Waste Index Report 2021, indicated that every Kenyan throws away an average of 99 kilograms of food every year, with the country wasting a total of 5.2 tonnes of food every 12 months. Most of this food loss happens post harvest when there is oversupply as well as due to preference of high visually appealing produce.

TechnoServe, through the NutriSave project, **aims to reduce food loss by increasing consumption of highly nutritious semi-processed products** specifically focusing on mango juice, tomato paste, and porridge fortified with african leafy vegetables, which would increase demand for low visually appealing vegetables. The project targets low-income consumers in urban and peri-urban areas in Nairobi.

Conducting the research

We conducted surveys with 150 households and in-depth interviews with 15 consumers and 15 retailers over the age of 18 in Nairobi Kenya. The objective was to uncover purchasing and consumption behaviors of fruits and vegetables among low-income consumers (LIC) in urban and periurban areas in Nairobi, segmented across different demographics & value chains (mango, tomato and african leafy vegetables).

project facts

Key words

Food waste, fresh food, fresh fruits and vegetables, low income consumers, nutrition, semi-processed products, women

Behavioral themes

Decision-making, influence

Research design

Mixed methods (qualitative and quantitative)

Scope

- Surveys with 150 households and IDIs with 15 consumers and 15 retailers
- Research participants were low income consumers in Nairobi

Start date: 9th October 2023

End date: 30th November 2023

Location

Embakasi, Kasarani, Roysambu and Makadara in Nairobi, Kenya

Partner

TechnoServe NutriSave

Ethics approval

No IRB



- » Semi-processed products for low-income consumers (LICs) should be **packaged in small quantities** to match their fruit and vegetable expenditure budgets.
- » LICs are price sensitive, hence, products should be **priced affordably** within their budget allocation for fruits and vegetables.
- » Semi-processed products should be **accessible at minimarts, shops/dukas, juice shops, cereal shops (porridge), and kibandas/street vendors**.
- » Marketing campaigns should **target women & mothers**, with a focus on **nutritional benefits, time/ease of cooking, affordability and taste**.

Implications

For policy makers: Policymakers can drive consumption of nutritious semi-processed products by necessitating the processors to indicate the proportion of nutritious content in the packaging. This can probably go an extra step by color coding the packaging based on how much actual produce (mango) is in the package.

For practitioners: There exists scant information on the definition of low-income consumers in urban areas. This study supports the practitioners' understanding of who they aim to target with their products and the best way to reach this audience and maximize their impact.

Target Population: Low-income consumers will have and increase in highly nutritious semi processed options.

Recommendations for future research

Understanding cultural norms and gender roles remains pertinent to determine decision-making and financial responsibilities within households, which determine both purchasing and consumption of semi-processed products in Kenya. Further research should be conducted on information pathways, to understand how knowledge on semi-processed products is transferred and consumed by respondents across different segments of society.

Further reading

Mytton, O.T., Nnoaham, K., Eyles, H. et al. (2014). *Systematic review and meta-analysis of the effect of increased vegetable and fruit consumption on body weight and energy intake*. BMC Public Health 14, 886. <https://doi.org/10.1186/1471-2458-14-886>

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Study team

Wanjiku Kiarie, Edel Koki, Nengapate Kuria, Daniel Mogere, Mugambi Murithi, Wairimu Muthiki, Robert Nyaga, Zeena Oberoi, Ruth Wambua

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38 Apple Cross Road, Nairobi, Kenya www.busara.global