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Project facts

Key words

Behavior change, Community-driven interventions, Food waste, Market systems, Vendor training

Behavioral themes

Self efficacy, Capability, Cognitive load

Research design

Immersive up-skilling workshops to engage stakeholders in refining interventions and building ownership

Scope

Start date: January 2025

End date: December 2025

n=7 (4 grassroots organizations in Kenya and 3 in Nigeria)

Location

Kenya: Nairobi

Nigeria: Abuja and Lagos

Partner

Posner Foundation of Pittsburgh

Ethics approval

N/A

How can community-driven interventions reduce food waste in traditional Kenyan and Nigerian markets?

Behaviorally informed interventions can reduce food waste in traditional markets. Cosmetic rejection of nutritious, funny-looking produce drives significant losses. Strengthening vendor and community capacity through training, co-designed tools, and context-specific behavioral strategies fosters trust, shifts purchasing behaviors, and embeds sustainable food waste reduction practices across market systems.

Background

Funny-looking produce, often rejected by vendors and consumers due to cosmetic imperfections despite being nutritious, contributes significantly to food waste. To address this, we implemented dual interventions in Kenya and Nigeria targeting both vendors and consumers. The interventions included trainings, market activations, and communication campaigns emphasizing the safety, nutrition, taste, and value of less visually appealing produce. These activities aimed to foster trust, reduce waste, and encourage positive purchasing behaviors. Insights from the implementation informed the development of a toolkit and efforts to promote sustained behavior change.

Conducting the research

We used a phased, participatory methodology that combined organizational screening, qualitative inquiry, and capacity building. The process began with a scanning of NGOs and grassroots organizations working on food waste and adjacent issues. Next, they were screened using five criteria: reach, relevance, capacity, innovation potential, and willingness to test behavioral approaches. Semi-structured key informant interviews then assessed programming focus, community engagement models, familiarity with behavioral approaches, internal systems, and readiness for experimentation. Finally, selected organizations participated in an interactive workshop that supported the co-creation of context-specific interventions using tools such as journey mapping, barrier identification, and persona development.

- » Behaviorally informed capacity building can strengthen grassroots organizations' ability to design and sustain food waste reduction interventions.
- » Context shaped priorities. In Kenya, consumer-facing nudges resonated more strongly in markets, while in Nigeria participants emphasized system-level enablers, highlighting the need for locally adapted approaches.
- » Sustained food waste reduction requires combining practical toolkits, immersive learning, and ongoing support so organizations can embed behavior change into practice alongside broader structural improvements and strong local ownership.

Implications

For Donors and Funders

Provide flexible, long-term support that enables experimentation, local ownership, and capability building to maximize returns from low-cost behavioral interventions.

For Policymakers and Public-Sector Actors:

Combine infrastructure and regulation with behavioral insights addressing everyday decision-making. Partnering with NGOs, market associations, and local champions improves policy relevance, uptake, and monitoring.

For Market Actors (Vendors, Farmers, Transporters, Consumers):

Vendors, farmers, transporters, and consumers respond to context-relevant interventions. Involving them as co-designers supports adoption.

Reducing food waste requires a system-wide approach. Lasting impact depends on embedding behavioral insights in existing structures, working through trusted intermediaries, and promoting continuous learning and adaptation across the food system.

Recommendations for future research

The project shows behavioral science can create accessible, scalable tools for non-specialists. Future research should track longer-term outcomes, expand sample sizes, and support open dissemination to increase uptake.

Studies should explore how behavioral nudges interact with structural constraints like storage, transport, and markets, and compare performance across different value chains and contexts.

Research should assess cost-effectiveness and mechanisms of change, providing guidance on when and how behavioral approaches are most impactful in food system interventions.

Further reading

Jumare, F., Schun, L., & Jain, J. (2025). Behavior change interventions toolkit for reducing food waste in Sub-Saharan Africa [Practitioners toolkit]. Busara Centre for Behavioral Economics. <https://busara.global/wp-content/uploads/2025/11/Posner-Practitioners-Toolkit-Nov-2025-WEB.pdf>

Jumare, F., Muthike, W., Hammann, J., & Kuria, N. (2023). Preventing Food Waste in Kenyan and Nigerian Markets. <https://www.stecon.org/wp-content/uploads/2023/06/GCA-9735-4.pdf>

De Hooge, I. E., van Giesen, R. I., Leijsten, K. A. H., & van Herwaarden, C. S. (2022). Increasing the Sales of Suboptimal Foods with Sustainability and Authenticity Marketing Strategies. *Foods*, 11(21), 3420. <https://doi.org/10.3390/foods11213420>

Hezarkhani, B., Demirel, G., Bouchery, Y., & Dora, M. (2023). Can “ugly veg” supply chains reduce food loss? *European Journal of Operational Research*, 309(1), 117-132. <https://doi.org/10.1016/j.ejor.2023.01.033>

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