

Behavioral Science and Agriculture: Environmental Sustainability

Preventing Food Waste in Traditional Kenyan and Nigerian Markets

Overview:

This brief is a snapshot of our qualitative findings so far. The project objective is to create dual consumer-supplier interventions that encourage consumers and suppliers in Kenyan and Nigerian markets to reduce food waste at the point of selection. **Target: consumers and vendors at traditional markets in rural and urban areas.**

Nigerian markets: Wuse & Nyanya | Kenyan markets: Wote & Othaya

Additionally, understand whether vendors and consumers consider less visually appealing food (LVAP) in their individual purchase decisions, and if this as a result leads to waste.



Our approach

Complete

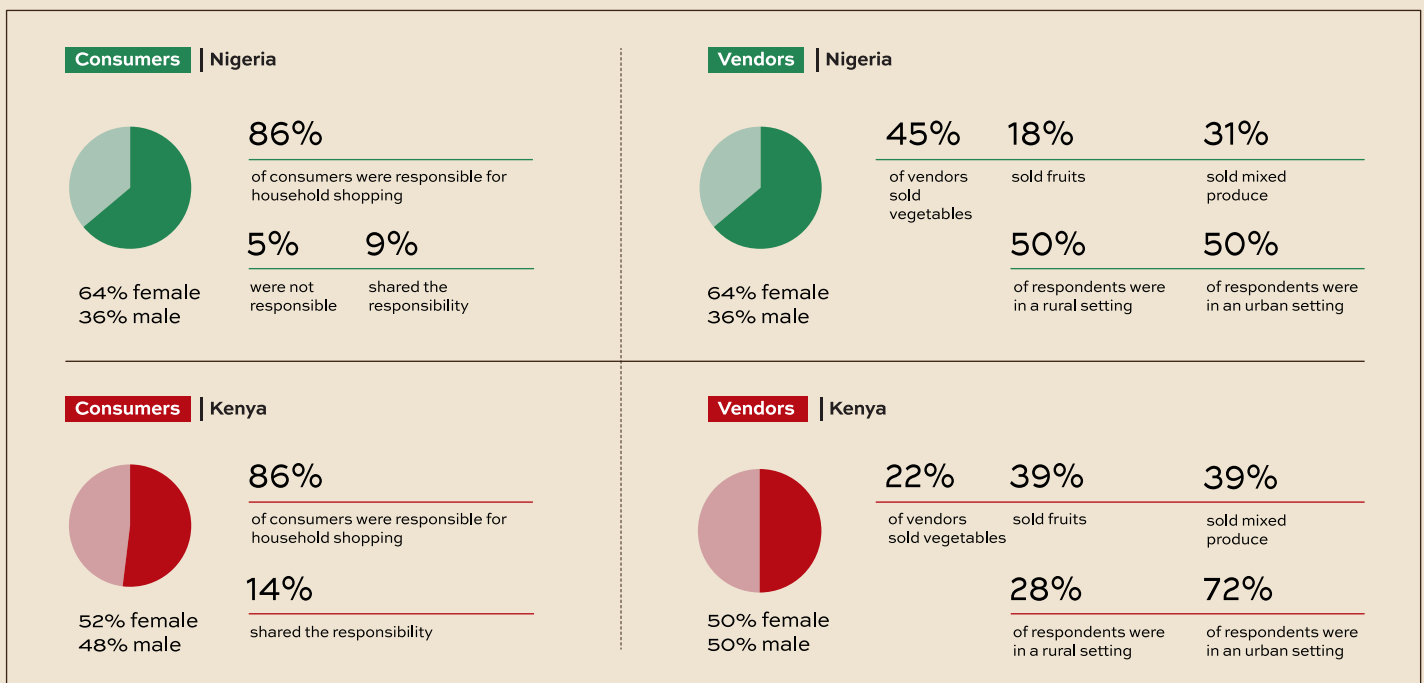
Formative research: Conducted desk research, stakeholder interviews and market observations to contextualize the food waste landscape and understand key barriers and enablers that can be leveraged towards preventing food waste.

Qualitative phase: Conducted 83 qualitative interviews to understand the behaviors of consumers and suppliers that occur at the point of selection in traditional markets across Kenya and Nigeria.

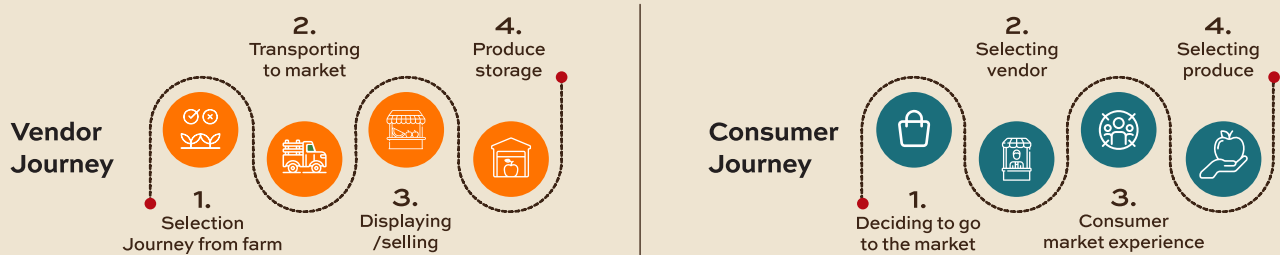
Upcoming

Intervention design: Co-design workshops to ideate, iterate and develop intervention prototypes that would address key barriers and leverage on levers to prevent food waste.

Testing: Refine and test the interventions before deployment.



Food waste occurs in different ways at varied points in the vendor and consumer journey



Findings	Potential recommendations
Accessibility In Nigeria, suppliers have more direct access to farmers, while in Kenya, they purchase from wholesalers who are middlemen.	Educate farmers and vendors on packaging to prevent food waste at the point of transportation by increasing interaction about food handling, while loading and unloading.
Gender Perceptive Male vendors in Nigeria are less likely to consider freshness of produce and to display less visually appealing food. In Kenya male vendors are more likely to bundle food to minimize visibility of less visually appealing produce. For consumers, differentiating between LVAP and spoiled produce is difficult.	Target male vendors in education/awareness efforts to boost their confidence in displaying LVAP. Getting users to differentiate between spoiled food and LVAP to see LVAP as edible is a key point to intervene and prevent waste.
Local regulations Vendors in Nigeria are hesitant to display LVAP due to the possibility of fines by government health inspectors. In Kenya, vendors are more likely to receive and sell LVAP as they receive it from the same source.	Interventions in Nigeria should consider training law enforcement agencies to understand the difference between spoiled produce and LVAP. While in Kenya, interventions should target vendors as the primary audience.
Location Urban markets in Nigeria have guidelines on displaying food on tables, off the ground. This is not the case in rural markets where food is sometimes displayed on the ground. Vendors in both rural and urban markets in Kenya display food based on individual capability (to construct a temporary structure) and resourcing.	Intervention may need to differ with rural and urban settings in both countries. E.g in Kenya and Nigeria have makeshift stalls in both rural and urban markets. Additionally, consumers in both Kenyan and Nigerian markets dislike food displayed on the ground and in the direct sun, making this a key selling point for vendors.

Observation: In Kenya , the term "traders" instead of "vendor" is commonly understood to reference people who sell produce within markets. In Nigeria , vendors in urban markets who have LVAP will peel and cut out the sections which look odd and arrange the whole produce properly so as not to be fined.	Contextual Barriers: <ul style="list-style-type: none"> High aesthetic standards resulting in large scale rejection of edible foods Overstocking due to inaccurate order and forecasting Fruits and vegetables are perishable products with a short shelf life
---	---

Behavioral Mechanism

Bias	Application - To test
Decoy Effect: When choosing between two alternatives (Normal Foods and LVAP), the addition of a third, less attractive option (the decoy), can influence our perception of the original two choices. Discounts / Incentives.	AB Testing A) Bundling of LVAP B) Segmentation of LVAP, Mix of LVAP and Perfect Produce (PP), PP only.
Halo Effect: Positive impressions of people, brands and products in one area positively influence our feelings in another area.	Hygiene Practises Appeal for the produce can be strengthened by improving the hygiene conditions of the vendor, their outward appearance and how they handle produce. This might result in consumers perceiving LVAP as edible and fresh as PP. Packaging The appeal of the packaging is intrinsic to the appeal and perceived quality of the product within.
Framing Effect: Our decision are influenced by the way information is presented to us.	The terms for LVAP tend to focus on the negative aspects of produce, so instead we rename them to "funny foods" with a more positive attribution. Point of Purchase Conversation guide: Interaction between vendor and consumer Renaming LVAP Purpose or nutritional value and origin of produce

Questions that will inform our next steps:

- How might we create more demand for LVAP among consumers?
- What other methods can vendors use to ensure that they sell their leftover produce and LVAP?
- How might we educate vendors on proper/safer handling of produce?

For further information on our work on food system resilience and climate risk management contact:

Nimo Muthike
nimo.muthike@busaracenter.org

Julia Hammann
julia.hammann@busaracenter.org

Fadila Jumare
fadila.jumare@busaracenter.org