DO CONSUMERS CONSIDER ENVIRONMENTAL FACTORS WHEN MAKING FOOD CHOICES?

INSIGHTS FROM INDONESIA, BANGLADESH, AND KENYA

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SUMMARY

The world is facing multiple interconnected crises, including climate change and escalating conflicts, which pose significant challenges to food systems. These issues highlight the need for systemic transformation to improve food security, nutrition, and environmental sustainability. In response, GAIN's Nourishing Food Pathways (NFP) programme aims to strengthen and support the implementation of food system pathways in 11 countries.

One focus of NFP is exploring the intersection between food and environment, including climate change, to identify consumer actions that promote both nutrition and environmental sustainability in low- and middle-income countries (LMICs). Specifically, GAIN is interested in understanding if our Emotivate™ approach, which leverages emotions to motivate consumers to want better diets, can be extended to include emotions or values associated with environmental sustainability. Our initial hypothesis was that consumers felt emotional tensions related to environmental sustainability as a driver of food choices, which could be leveraged to develop an emotionally resonant campaign.

GAIN thus conducted a formative study in Bangladesh, Indonesia, and Kenya to explore this further. The study revealed varying levels of environmental awareness across the three countries. Consumers were generally aware of environmental issues, but these concerns had limited impact on their daily lives and food choices. Food choices were driven by other factors, such as convenience and cost. Consumers often viewed environmental issues as a responsibility of governments and corporations, and they did not feel personally empowered or compelled to make significant changes. While consumers acknowledged the environmental impacts of packaging and food waste, these concerns had limited influence on food choices. These findings, counter to our original hypothesis, suggest that consumers are unlikely to respond to interventions that explicitly link food choices to environmental considerations as a key motivation for change. The programmatic implication is that it is important to frame messages to resonate with

KEY MESSAGES

- There is limited evidence of consumer-driven actions that simultaneously promote nutrition and environmental sustainability, especially in LIMCs.
- A successful demand-generation approach for healthy diets often leverages consumers' emotions to inspire change. We aimed to explore whether emotions and values linked to environmental concerns could drive such demand.
- Our findings suggest that consumers in Indonesia, Bangladesh, and Kenya are unlikely to respond to interventions that explicitly link food choices to environmental considerations as key motivation for change.
- Programmatic implications include framing messages that resonate with consumers' values, while ensuring that promoted choices are both nutritious and environmentally sustainable.

consumers' values, while ensuring that promoted food choices are both nutritious and environmentally sustainable; next steps in the work will seek to do this.

BACKGROUND AND OBJECTIVE

Global indicators for malnutrition and food security have remained persistently high in the past decade. Currently, the world is facing three interlinked crises: the persistent and increasingly negative impacts of climate change, economic slowdowns and downturns, and a ramping up of conflicts around the world (1). These crises have profound implications for food systems and, ultimately, the people who depend on them. However, these challenges also present a critical opportunity to drive medium-term transformation within food systems to strengthen them and mitigate future shocks.

The two major accomplishments of the United Nations Food System Summit, held on 2021 to address the challenges of food systems across the globe, were widespread consensus on the need for transforming food systems to accelerate progress towards the Sustainable Development Goals (SDGs) and new opportunities for change. This included the establishment of over 100 country food system pathways, enabling nations to outline specific, context-relevant actions and processes for this much-needed transformation (2).

The Global Alliance for Improved Nutrition (GAIN)'s Nourishing Food Pathways (NFP) programme aims to strengthen and support the implementation of food system pathways in eleven countries. Its goal is to accelerate improvements in the consumption of safe and nutritious food—especially for the most vulnerable populations—produced in a sustainable way. The refinement and implementation of these pathways will also serve as exemplars and models for the implementation of pathways in countries beyond the eleven in focus.

One of NFP's workstreams focuses on connecting nutrition and environmental agendas within food system pathways at a practical level. It explores the intersection of food, environment, and climate to identify supply- and consumer-driven actions that can help advance these interconnected agendas. Currently, there is limited evidence on consumer-oriented actions that simultaneously promote both nutrition and environmental sustainability, particularly in low- and middle-income countries (LMICs) (3). Therefore, GAIN is interested in understanding if our Emotivate™ approach, which leverages emotions to motivate consumers to want better diets, can be extended to include emotions and values commonly associated with environmental sustainability. This approach aims to connect with people by recognising the emotional tensions inherent in their current food choices and helping them resolve these tensions through benefits that resonate with consumers' emotions (such as love, joy, happiness, curiosity, and confidence) and values (such as benevolence, self-direction, and respect for tradition). To effectively motivate consumers, our approach moves beyond information sharing and awareness-raising, instead focusing on the development of emotionally engaging campaigns that activate desirability for more sustainable and healthier food choices.

The starting point for this work is understanding how consumers perceive environmental issues and the influence of these issues on consumers' food decision-making processes. Our initial hypothesis was that consumers experienced emotional tensions related to environmental sustainability as a driver of food choices. If confirmed, these tensions could be leveraged to develop an emotionally resonant campaign to address them. To explore this, we conducted a formative study focused on consumers in Indonesia, Bangladesh,

and Kenya, examining their views on environmental concerns and whether and how these perceptions shape their food choices.

The results of the study are intended to inform the development of insights and propositions of how environmental and climate change issues shape consumers' food choices. Building on these insights, the next phase of this project will involve developing a demand creation campaign in Indonesia, along with campaign proposals for Kenya and Bangladesh. This working paper presents the results of the study and outlines key implications for the next steps in the project.

METHODOLOGY

This study was conducted in Indonesia, Bangladesh, and Kenya between 2023 and 2024, with research progressing sequentially: beginning in Indonesia, followed by Bangladesh, and concluding in Kenya. These countries were selected to capture data from diverse contexts, each facing distinct environmental challenges: Kenya is affected by droughts, Bangladesh experiences monsoon-induced flooding, and Indonesia contends with air and water pollution, among others. The methodology was refined iteratively, incorporating insights gained from each preceding country.

In each country, the research began with secondary data collection aimed at: (i) understanding consumer sentiment and awareness of environmental issues and (ii) assessing whether consumers perceived any connection between environmental factors and food. This secondary research involved a non-exhaustive review of various sources, including scientific publications, government policies and statements, as well as social media, online blogs and vlogs, and news outlets. The findings from this phase informed the development of discussion guides for subsequent focus group discussions (FGDs) and allowed us to refine the participant selection criteria for these discussions.

Following the secondary research, we conducted FGDs with consumers with children from diverse age groups and socioeconomic backgrounds to capture various perspectives (see Table 1). We focused on families with children as these make up a large proportion of the population in the countries. Given that the secondary research indicated a general lack of awareness regarding the connection between food and the environment, we adjusted our approach in Bangladesh and Indonesia by specifically recruiting participants with some level of environmental awareness. In Indonesia, we conducted six online FGDs, and in Bangladesh, eight in-person FGDs. FGDs in both countries were held with participants from two different locations, selected by convenience: Jakarta and Surabaya in Indonesia, and Dhaka and Rangpur (a semi-urban area) in Bangladesh. Each discussion lasted approximately 2.5 hours.

Recruiting 'environmentally aware participants allowed us to gather insights from individuals more likely to articulate potential links between environmental issues and food. Therefore, consumer insights from Bangladesh and Indonesia are drawn exclusively from these environmentally aware participants. Findings from both countries, along with secondary research in Kenya, revealed that consumers did not make food choices based on environmental considerations. Thus, we decided to focus on local eating habits and culinary traditions as the primary topic for FGDs and explore it as potential new avenue for informing programme design, dedicating only a portion of the discussions to

environmental issues. Consequently, participant selection in Kenya was not based on environmental awareness-related criteria. In the three countries, all participants were recruited by local research agencies based on the predefined screening criteria.

Finally, in Bangladesh, we also conducted six expert interviews to deepen our understanding of current consumer trends and their connection to environmental issues, by discussing the findings that emerged from the secondary research and FGDs. The experts consulted represented diverse sectors, including food systems (an organic farmer and a processed food manufacturer), the environment (an environmental activist and a food safety researcher), media (an environmental journalist), and health (a nutritionist).

Social media analysis was conducted to assess public attitudes toward environmental and food-related issues; while content analysis was used to analyse other secondary data sources such as reports and publications. Thematic analysis was used for the FGDs and expert interviews, where data were transcribed and systematically coded to uncover recurring themes, patterns, and key divergences in discussions around food choices and environmental concerns. The findings from these different methods were then triangulated to provide an understanding of environmental considerations and their integration into consumers' food decision-making process.

Table 1. Characteristics of FGD Participants

	Indonesia	Bangladesh	Kenya
General description	6 online FGDs with 24 participants, all married with children under 15 years old (4 participants per group)	8 in-person FGDs with 24 participants, all married with children under 15 years old (8 participants per group)	8 in-person FGDs with 24 participants, all married with children under 15 years old (8 participants per group)
Environmental awareness?	Yes	Yes	No
Location	Resident in Jakarta or Surabaya	Resident in Dhaka Metro (4 groups) or semi-urban Rangpur	Resident in rural Kakamega, Kakamega town, Nairobi or Mombasa
Age	25-35 y (3 groups); 36-45 y	25-35 y (4 groups); 36-45 y	22-35 years of age
Gender	3 female groups, 3 male group	4 female groups, 4 male group	4 female groups, 4 male group

RESULTS

This section is divided into three parts: the first offers an overview of the results concerning environmental considerations of consumers, the second analyses the key drivers of food choices, and the third explores the link between environmental considerations and food choices. Given that consumer perspectives on the environment and its influence on food choices were examined more thoroughly in Indonesia and Bangladesh, the focus of these sections is primarily on those countries. A summary of findings from Kenya is presented in Box 1.

ENVIRONMENTAL CONSIDERATIONS

Environmental issues are widely highlighted in both the media and by participants in FGDs in Bangladesh and Indonesia. Although individuals are generally aware of these concerns, the degree of awareness and sense of personal responsibility varies depending on the extent to which the issues directly affect them. Consequently, these issues are categorised into three main types: those having no personal impact, some personal impact, and direct personal impact (see Table 2).

Environmental issues with no perceived personal impact

Both Bangladesh and Indonesia experience environmental problems that primarily affect nature and wildlife without directly influencing people's daily lives, health, or lifestyle. In Bangladesh, these include deforestation, riverbank erosion, and salinity, while Indonesia faces issues such as deforestation, marine ecosystem destruction, and sea pollution. The common theme in both countries is that these issues have no immediate impact on individuals—though they may have long-term impacts—but harm ecosystems. In both nations, awareness about these issues is shaped by news or social media. People attribute responsibility to the government and large organisations, seeing these problems as beyond individual control.

Environmental issues with some perceived personal impact

In this category, the environmental problems have more tangible but indirect effects on people. In Bangladesh, floods, water pollution, and earthquakes are highlighted. Floods and water pollution disrupt essential services like fisheries and create concerns about contaminated resources, but they do not directly harm individuals. In Indonesia, air and water pollution, water scarcity, flash floods, and global warming have more personal relevance, as they affect the environment and resources on which people rely. In both countries, individuals feel somewhat disconnected from these problems, attributing responsibility to industries and government entities, with little personal agency in resolving the issues.

Environmental issues with direct personal impact

When environmental issues directly affect people's lives, the impact is deeply felt in both Bangladesh and Indonesia. In Bangladesh, waste mismanagement, air pollution, drought, and extreme heat cause immediate harm, affecting living conditions, health, and economic well-being. Similarly, in Indonesia, waste mismanagement, air pollution, urban floods, and extreme heat directly impact health, safety, and the overall quality of life. Both countries share a common understanding of these issues due to personal experience and visibility. However, while people in Bangladesh tend to believe that the solution primarily rests with the government, Indonesians see themselves as partly responsible and may engage in community-driven efforts to address these problems.

Overall, consumers consider that environmental issues are largely the responsibility of the government and big corporations. In Bangladesh, people blame industrialisation, urbanisation, and corruption for these problems, while in Indonesia, industrialisation and other economic activities are seen as key causes. According to some participants, natural disasters in Bangladesh are also linked to political mismanagement, while some harmful individual practices are tied to cultural beliefs (e.g., throwing a dirty diaper in the river can prevent child rash).

Despite being aware of their role in managing waste, such as properly disposing of plastic or using reusable items, consumers in both countries find it inconvenient to act. In Bangladesh, the lack of collective effort discourages individuals from making changes, while in Indonesia, some who try to act feel guilty for not being consistent (e.g., reducing their single-use plastic usage by using their own cutlery). Ultimately, while individuals in both countries recognise the importance of small personal steps, the results showed that they remain reluctant to change due to the inconvenience and societal norms that downplay individual responsibility.

Table 2. Environmental issues, by perceived personal impact on consumers' life

	Bangladesh	Indonesia
Environmental issues with no perceived personal impact		
Example	Deforestation, riverbank erosion, salinity	Deforestation, forest fire, erosion, destruction of marine ecosystem, landslide
Impact	Negative impact on nature and animals living in the habitat; no direct impact on life, health, or lifestyle	Negative impact on nature and animals living in the habitat; no direct impact on life, health, or lifestyle
Awareness	Social media or news; school textbooks (for women helping children with their studies)	Social media or news
Responsibility	Outside individual's control; government and large organisations are expected to take action	Outside individual's control; government and large organisations are expected to take action
Environmental issues with some perceived personal impact		
Example	Flood, water pollution, earthquake	Air pollution, water pollution, water scarcity, acid rain, soil pollution, flash flood, global warming
Impact	Floods are common in specific geographies (e.g., Sylhet), impacting affordability & availability of essentials. Water pollution impacts fisheries production in rivers; generates fear of polluting surroundings. Earthquakes are rare and but cause temporary and mild panic. No direct impact on individuals.	Consumers experience these issues personally, especially the ill effects of water pollution. The cause of these problems is usually attributed to larger industries and a lack of governmental policies to regulate the problem.
Awareness	News and social media coverage; anecdotes from peers – e.g., ***'Heard from a friend how they were imprisoned by a flood for weeks'***	News and social media (main source), conversations with friends and family, negative personal experiences
Responsibility	No role for an individual to play, attributed to greater force outside their influence – e.g., authorities, industries, and mother nature/ god.	As the cause is attributed to companies, factories, and other such institutions, its solution is also expected to come from them. Individual intervention is not expected to offer much relief.
Environmental issues with direct personal impact		
Example	Waste management, droughts, climate change and global warming, air pollution	Waste management, urban floods, extreme climate change, air pollution
Impact	Direct impact on liveability, comfort, wellness, and economic well-being. Waste mismanagement generates waterlogging, unhygienic living environment. Climate change causes increased temperature; air pollution causes respiratory problems and unhygienic living environment. Drought disrupts production and availability of food and reduces earnings.	The visibility and proximity of these issues make the problem real and tangible. These issues concern most consumers due to their direct impact on health, safety, material possessions, and overall quality of life.
Awareness	Mix of news media and visible real-life examples (e.g., ability to see garbage dumped on the roads or drainage systems blocked by plastic waste)	Awareness stems from personal experience (e.g., observing garbage disposed of on roads, canals and water bodies). Grassroots organisations and neighbourhoods discuss and spread awareness about these issues.
Responsibility	Consumers believe that the authorities are responsible to mitigate or manage these issues with strict regulations and implementation of laws. The individual has	As the main driver of the issue, consumers feel they have considerable control over the issues and take part of the responsibility, together with the government and corporations.

	some responsibility – but is ultimately seen as powerless in the grand scheme of things.	

DRIVERS OF FOOD CHOICES

In Indonesia, food choices are largely driven by convenience and the fast-paced lifestyle, especially among higher-income households. Cooking at home is often avoided in favour of eating out, with frozen or pre-prepared meals being popular for those who do cook. High-income families prefer these quick and easy solutions to save time. Cost and hygiene are the main reasons for preparing meals at home. In contrast, lower-income households cook more often, viewing home-cooked meals as healthier and an opportunity to bond with family.

Out-of-home dining is common across all socioeconomic groups, with food often purchased from local food stalls. Mothers, in particular, appreciate the convenience and time savings of eating out, and the variety of available options allows family members to choose meals according to their personal preferences. Lack of expertise in preparing complex traditional or international dishes further encourages people to rely on restaurants for these meals. Online promotions and cost-consciousness also influence decisions, as consumers aim to keep expenses low for everyday meals.

In Bangladesh, food represents abundance, indulgence, and a source of joy. For Bangladeshis, food plays a central role in daily life, family gatherings, and celebrations. Women, in particular, gain respect and admiration for the pleasure they bring through the meals they prepare, while children's refusal to eat food that is not appealing causes anxiety for parents. Many men view food as a primary source of pleasure and relaxation.

However, rising food prices, especially due to inflation, are forcing families to reconsider their eating habits. Many are turning to cheaper alternatives or reducing portion sizes to cope with the financial strain. Affordability has become a major concern, leading to compromises in food choices. Additionally, food safety emerged as a significant issue in Bangladesh, with widespread concerns over adulteration, preservatives, and chemicals. Media coverage has heightened awareness of these issues, and consumers are increasingly cautious, often checking expiration dates or inspecting the appearance of food before purchasing to ensure its quality.

In both countries, convenience, cost, and cultural values shape food choices, but in Bangladesh, concerns about safety and abundance also heavily influence behaviour, while in Indonesia, the focus is more on variety, ease, and the limitations of home cooking expertise.

FOOD AND ENVIRONMENT

Consumers in both countries did not spontaneously articulate a meaningful link between food and the environment. In the absence of this link, two lenses were adopted to explore this relationship: i) How food choices impact the environment, focusing on how food consumption (including preparation, presentation, and eating habits) affects the environment; and ii) How the environment impacts food, exploring how environmental

factors influence food choices, particularly in relation to health and well-being. These lenses aim to better understand the perceived interdependence between food choices and the environment, generated after prompting consumers to think about this relationship.

Lens 1 – How do my food choices impact the environment?

In Indonesia, consumers understand that their food choices impact the environment, mainly through the generation and accumulation of plastic waste from food packaging. Frequent purchases of out-of-home meals contribute to significant plastic waste, including disposable cutlery, containers, and packaging. Even home-cooked meals, which involve processed or frozen foods, add to the problem, as these items are typically packaged in plastic. Consumers link this waste to environmental issues such as urban flooding and water pollution, which makes the intensity of the negative impact high.

When probed, consumers recognise different packaging materials like Styrofoam, plastic, aluminium foil, glass, and cans, with plastic and Styrofoam being the primary culprits in waste pollution. These materials are non-biodegradable, leading to pollution of land, water, and soil, and contributing to flooding. Despite some awareness of these problems, consumers tend to outsource responsibility to authorities, believing that corporations should take charge of reducing plastic waste (see example in Box 2). Though some individuals suggest solutions like using sustainable cutlery or bringing personal containers, many find it challenging to implement these practices due to factors like convenience and cost.

In Bangladesh, the link between food choices and environmental impact is relatively new to consumers, with plastic packaging being the primary concern. Both in-home and out-of-home food consumption, especially processed and ready-to-eat foods, contribute to non-biodegradable waste. Out-of-home snacks, particularly in urban areas like Dhaka, exacerbate littering due to insufficient trash disposal options.

Consumers recognise the contribution of plastic waste in Bangladesh to broader issues such as reduced agricultural productivity and urban liveability. Non-biodegradable plastics clog sewage systems and contaminate the soil, rendering it less fertile for crop production. These problems worsen waterlogging and sewage overflow, further decreasing the quality of life in affected areas. Although consumers acknowledge the environmental impact of their food storage and preparation habits, they see these effects as minimal compared to larger industrial contributions.

Lens 2 – How does the environment impact food?

As previously discussed, consumers do not spontaneously connect environmental factors with their food choices. However, when prompted, Bangladeshi consumers see two main ways the environment influences their food: 1) through its effect on food production and availability, and 2) by shaping seasonal food preferences. The impacts on food production and availability are attributed to natural disasters, waste pollution, and climate change.

Natural disasters—such as floods, droughts, and extreme heat—significantly reduce food production and availability while driving up prices. For example, floods submerge farmland, destroy crops, and disrupt agricultural supply chains by hampering communication between producers and sellers. This leads to food shortages, increased irrigation costs, and ultimately higher food prices, making food less affordable for many.

Droughts similarly raise irrigation costs and lower crop yields, further exacerbating price hikes and reducing food availability.

Waste pollution also affects soil health and food production. Non-biodegradable waste, especially plastic, contaminates the soil, reducing its fertility and agricultural output. Social media discussions reflect widespread distrust of the government's waste management policies, with many believing that improper waste disposal by the government and industry is the primary driver of this issue. While consumers recognise their own role in waste mismanagement, they largely blame systemic failures rather than individual actions.

Climate change introduces additional challenges. Rising coastal water levels have submerged farmland, and shifting seasonal cycles are disrupting traditional farming practices. Climate change also shifts seasonal patterns, threatening agricultural production by shortening growing seasons and reducing water availability for crops. Consumers express concern over rising temperatures and altered water cycles but struggle to articulate the specific connections between these changes and their direct impact on food. However, they recognise that extreme heat shortens the shelf life of food, leading to more frequent spoilage and increased food waste.

The second pathway relates to the impact of the weather on consumers' seasonal food preferences. They associate rainy weather with ***khichuri*** (a spicy rice and vegetable dish), cold weather with roasted duck, and hot summer days with refreshing lemon juice. These preferences, though tied to the seasons, are often constrained by food availability and affordability—factors that are increasingly influenced by the environmental issues mentioned above.

In Indonesia, the situation is somewhat different. While environmental issues are not spontaneously associated with food production or consumption, consumers can link waste pollution, microplastics, water pollution, and air pollution to negative impacts on food when prompted.

Waste pollution is the most visible environmental concern for Indonesian consumers, especially in cities like Jakarta and Surabaya, where unmanaged waste, particularly plastic, is prevalent. While some acknowledge that improper household waste disposal contributes to the problem, many believe inadequate government waste management systems and industrial waste are the primary culprits. Consumers consider that even if they separate waste at home, it is often useless due to the lack of proper infrastructure. Industrial waste, in particular, is viewed as the biggest contributor to soil and water contamination.

Plastic waste impacts food in two main ways. First, uncollected plastic waste around street food vendors attracts pests, contaminating the food and posing serious health concerns. Second, plastic and chemical pollutants in the soil affect crop growth and reduce the nutrient quality of food. Microplastics are also a growing concern in Indonesia. Consumers are increasingly worried about the potential health risks posed by microplastics, particularly from food packaging and takeout containers. Black plastic and Styrofoam containers are believed to release harmful chemicals into hot food, causing long-term health risks like cancer. Although many consumers are unclear about the science behind microplastic contamination, they are becoming more cautious about using plastic water bottles and food containers.

Water pollution is another significant issue. Urban flooding, caused by clogged drains and plastic waste in rivers, is common in major cities, and consumers believe that polluted water negatively impacts food quality, especially seafood, as contaminated water flows into the seafood supply chain. There are also concerns about polluted water being used in food preparation, particularly in soups and broths. In Surabaya, where water contamination has led to visible health effects like skin rashes, concerns about water quality entering the food supply are especially high.

Though air pollution is a serious environmental issue, its direct impact on food is less understood by consumers. Air pollution is mainly associated with transportation and industrial activities. While some worry about its effects on the quality of food sold by street food vendors, this concern is not as prominent as concerns about waste and water pollution.

CONCLUSION

Food choices in Indonesia, Bangladesh, and Kenya are not driven by environmental considerations. In Indonesia, food choices are primarily driven by convenience, especially among higher-income households. Quick and easy meal solutions, such as eating out or using pre-prepared meals and ingredients, are favoured to save time. Out-of-home dining is common across all socioeconomic groups, with local food stalls being a popular choice. Convenience, lack of cooking expertise, and promotional deals also play a role in these food choices. In Bangladesh, food holds cultural significance, symbolising abundance and indulgence. However, rising food prices and concerns over food safety have led families to make compromises. Affordability and adulteration in food are primary concerns, which prompt consumers to be more cautious in their food purchases.

Consumers do not make spontaneous connections between their food choices and the environment. Similarly, recent studies in South Africa and Kenya found that environmental concerns were not a key driver of food choices (4,5). When prompted, consumers in our study acknowledge that some of their food choices may have environmental impacts, but they consider these to be minor compared to those caused by industry or by insufficient government action. In short, consumers perceive that their individual food choices have minimal environmental impact and do not feel a sense of responsibility to reduce it.

These findings do not support our original hypothesis – consumers do not seem to experience an emotional tension related to environmental sustainability as a driver of food choice. Although the target consumers of this research are aware of environmental issues, they are unlikely to respond to interventions that explicitly link food choices to environmental considerations as key motivation for change. However, this does not mean that environmental concerns should be overlooked in programmatic efforts. Programmatic implications include framing messages that resonate with consumers, while ensuring that promoted choices are both nutritious and environmentally responsible. For example, in Indonesia such choices would include local fruits and vegetables, and tempeh. The next steps will involve generating contextually relevant insights and propositions for developing a campaign that aligns with salient values and emotions of the target audience.

BOX 1. ENVIRONMENTAL CONSIDERATIONS IN KENYA

Deforestation and waste management present long-term threats to Kenya's ecological balance. Deforestation, driven by agricultural expansion and urbanisation, is gradually depleting Kenya's forest cover, and the mismanagement of solid and electronic waste poses significant environmental hazards. Though these issues are critical for Kenya's long-term environmental sustainability, they remain somewhat removed from the immediate concerns of the average Kenyan consumer.

Several environmental issues are indirectly influencing consumers by affecting food production and availability in different regions. Climate change, for instance, is disrupting agricultural patterns across the country, leading to irregular rainfall and frequent droughts, which negatively impact farmers' ability to grow crops. In rural areas, where some people often rely on their own farms for sustenance, these disruptions are felt more acutely. In urban areas, consumers experience the indirect effects, such as rising food prices and reduced availability of fresh produce. Flooding is another issue that affects food supply chains. As FGDs revealed, floods disrupt local food production, leading urban consumers to feel the impact through price hikes and the scarcity of fresh food options.

There is also growing awareness of the impact of water pollution and waste in food production areas. This concern is particularly pronounced in regions where the pollution of water sources and agricultural land is more visible, such as industrial zones. Even though urban consumers may not witness the direct pollution of farmland, focus group participants expressed concerns about food contamination when prompted. This heightened awareness of environmental pollution and its association with food safety might be beginning to influence how some people think about their food choices, particularly in terms of seeking trusted or cleaner food sources. However, the concerns about food safety might not be linked back to the root causes of the problem; consumers thus fail to consider the linkages between food safety and the environment.

Despite this awareness, most consumers do not actively integrate environmental considerations into their food choices unless there are direct, immediate disruptions to their daily lives, such as natural emergencies. In the absence of immediate crises like floods or droughts, environmental concerns tend to take a back seat to more practical issues like cost and availability. As a result, while consumers may be aware of environmental issues, they are not yet a primary driver in their decision-making around food.

REFERENCES

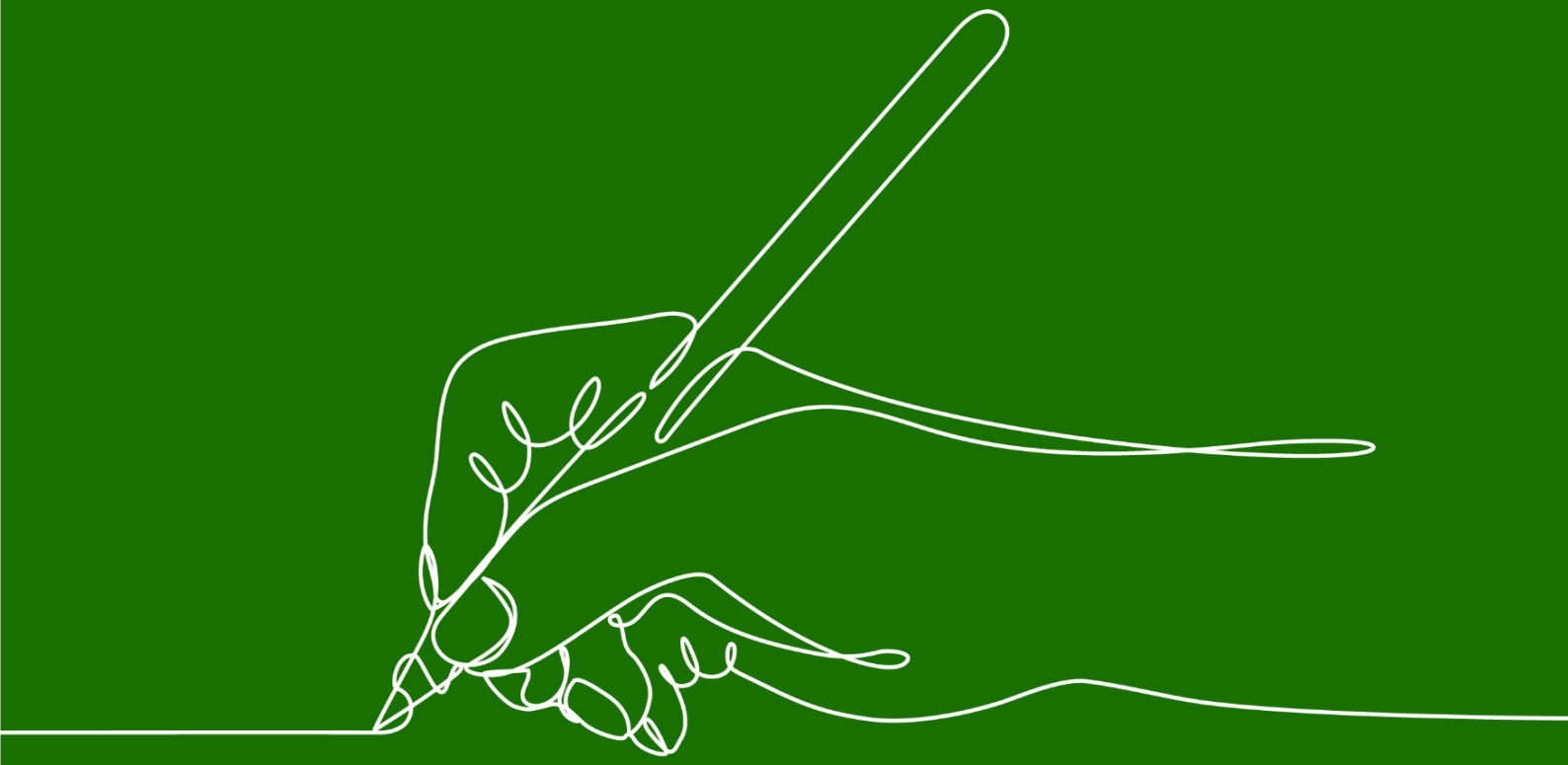
1. FAO, IFAD, UNICEF, WFP, and WHO. The State of Food Security and Nutrition in the World 2024. The State of Food Security and Nutrition in the World 2024. Rome: FAO; IFAD; UNICEF; WFP; WHO; 2024.

2. Nations U. The latest update on the UN Food Systems Summit Dialogues, United Nations. [cited 2024 Sep 29]; Available from: https://www.un.org/en/food-systems-summit/news/latest-update-un-food-systems-summit-dialogues

3. Rampalli KK, Blake CE, Frongillo EA, Montoya J. Why understanding food choice is crucial to transform food systems for human and planetary health. BMJ Glob Health. 2023 May 3;8(5).

4. Magano NN, Tuorila H, De Kock HL. Food choice drivers at varying income levels in an emerging economy. Appetite. 2023 Oct 1;189.

5. Karanja A, Ickowitz A, Stadlmayr B, McMullin S. Understanding drivers of food choice in low- and middle-income countries: A systematic mapping study. Glob Food Sec. 2022 Mar 1;32:100615.



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ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition. Working with governments, businesses and civil society, we aim to transform food systems so that they deliver more nutritious food for all people, especially the most vulnerable.

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