

Learning Brief

Opportunities to Reach Base-of-the-Pyramid Consumers by Partnering with Food Processors



Severina Paul, AA Nafaka stores, AINFP Client Tanzania. Photo: Bobby Neptune

► Overview

In this brief, we look at the opportunities and challenges in the food processing sector to better reach BoP consumers, presented by findings and experiences from the [Alliance for Inclusive and Nutritious Food Processing \(AINFP\)](#) program in working with over 240 food processors. AINFP is a partnership program between [USAID](#), [TechnoServe](#), and [Partners in Food Solutions \(PFS\)](#) that aims to create a more competitive and resilient food processing sector and, in turn, positively affect food systems in Ethiopia, Kenya, Malawi, Tanzania, and Zambia.

► Introduction

A significant number of consumers in East and Southern Africa, as well as across the global south, face barriers in accessing nutritious diets. For instance, [88-96%](#) of rural East African consumers' current food expenditures were insufficient to afford a nutritious diet. This scenario is only marginally better in urban areas, where 87-91% of the population still cannot afford a healthy diet with their current spending. These consumers, often categorized as base-of-the-pyramid (BoP) consumers due to their lower income status, face challenges not only in accessing nutritious foods but also in achieving overall food security. Gaining a deep understanding of BoP consumers' demographics, challenges, and needs is essential for crafting targeted interventions aimed at enhancing the accessibility of nutritious foods for this demographic. In addition to understanding how to better reach BoP consumers, it is crucial to recognize the potential for private sector companies to support improved diets among this population. [Studies](#) have shown that the private sector has the potential to improve the diets of BoP consumers. Furthermore, private sector actors can [benefit from business opportunities](#) in reaching this significant consumer segment. Therefore, identifying ways to engage private sector actors in developing and delivering affordable and nutritious food products to BoP consumers could yield significant benefits for both the private sector and BoP consumers.

Studies have shown that the private sector has the potential to improve the diets of BoP consumers.



Factory worker sorting fresh vegetables, Kestel Agro, AINFP Client Zambia. Photo: AINFP

► Empowering Food Processors to Reach BoP Markets

AINFP provides holistic support to food processors, as emphasized in the [Impact Brief: Private Sector Engagement Approaches to Affect Local Food Systems](#). However, when it comes to reaching BoP consumers,

AINFP focuses on three main approaches: BoP bootcamps with a cohort of food processors, customized technical assistance (CTA) provided to individual food processors, and linkage facilitation that helps food processors connect with other food systems actors to sell their products in BoP markets.



Understanding food processor appetite for adapting their marketing strategies:

To effectively reach BoP markets, it is crucial for food processors to be willing to adapt their marketing strategies. AINFP engages with food processors by conducting an intake assessment to gain insights into their business strategies, including their current marketing approaches. AINFP came to understand that most food processors lacked specific market strategies, had limited understanding of how to gather consumer feedback before launching new products, and faced challenges in accessing new

markets. Additionally, during this process, AINFP discovered that many food processors were interested in exploring new avenues to access diverse markets, such as high-value and BoP markets, and to market their products differently to cater to these specific consumer segments. Additionally, some food processors demonstrated a social motivation and a commitment to making their products accessible and affordable for BoP consumers. If a food processor expressed interest in adapting their marketing strategies and if they were a good fit, AINFP would enroll them in the three BoP initiatives mentioned earlier.

AINFP engages with food processors by conducting an intake assessment to gain insights into their business strategies, including their current marketing approaches.



Processed fortified flour, Dina Foods, AINFP Client Ethiopia. Photo: Bobby Neptun

► BoP Bootcamps

BoP bootcamps are 5-day training implemented with a cohort of food processors to better understand the BoP competitive market and the opportunities for improving marketing and distribution to low-income consumers. During these bootcamps, food processors create or rethink their business models using the Business Model Canvas approach, which walks food processors through thinking of their customer segmentation and marketing channels. Additionally, during BoP bootcamps, food processors visit local markets to assess product availability, engage with potential end-market retailers, and discuss their products with consumers. At the end of the BoP bootcamp, food processors walk away with an action plan, which articulates how they plan to adapt their marketing strategies to reach BoP markets. AINFP provides 1:1 follow-up support to these food processors to support them in

Client Spotlight: Following the BoP bootcamp in Tanzania, Shambani Milk invested \$32,000 in a small packaging machine to make 150ml yogurt cups. The smaller yogurt cup size allows Shambani Milk to cater to the needs and affordability of BoP consumers. Furthermore, Shambani Milk also invested \$78,500 for two distribution vans and cooler boxes. This

investment was made to expand their distribution channels and ensure that their products reach the intended target market effectively. These distribution vans and cooler boxes enable Shambani Milk to transport and store their products in optimal conditions, maintaining their freshness and quality during delivery to BoP markets.



Milk storage cold room at Shambani Milk, AINFP Client Tanzania.

Photo: Bobby Neptune

implementing their action plans. Over the course of the AINFP program, 98 food processors have attended BoP Bootcamps. Of these, 44% have successfully adapted their product formulation and marketing strategies to sell their products in new BoP markets. The Head of Research and Development

from Prime Meats attended a BoP bootcamp in Ethiopia and reflected on her experience “It really helps connect what we are doing beyond numbers, beyond sales figures, and contracts and really go in-depth into who we are serving to think about what our impact is beyond just profit.

44%

Food processors selling their products in new BoP Markets

► Customized technical assistance (CTA) to reach BoP markets

AINFP acknowledges that every food processor has their own specific challenges, opportunities, and objectives. In order to cater to these individual needs, AINFP offers CTA to food processors, focusing on the specific areas that the processor wishes to address. One of these areas involves working closely with the food processors to gain a deep understanding of their products and the target consumers they aim to reach. This includes assessing where the food processors currently sell their products and identifying opportunities for increasing market penetration, both in high-value markets and BoP markets.

AINFP has promoted the following BoP approaches in its CTA with food processors:

- **Product development and refinement:** AINFP provides CTA to food processors to develop new products that will better fit the food purchasing power of BoP consumers. The specific approach varies depending on the client and their product, but strategies could include developing a new product that utilizes lower-cost raw materials (such as repurposing meat by-products that were previously discarded) or exploring packaging options that either offer smaller, more affordable quantities of the product or support bulk packaging for institutional or wholesale buyers. In Tanzania, AINFP supported 14 food processors to develop or adapt their products to better fit the needs of BoP consumers.
- **End-market research:** AINFP observed that a majority of food processing clients did not conduct market research, resulting in limited knowledge about market opportunities and the need for product adaptation to better fit the needs of their potential customer base. In Tanzania, AINFP supported 10 food processing clients to conduct end-market research which resulted in development of new products, increase in BoP distribution channels, and increase in sales for the food processors. In Kenya, AINFP carried out an end-market analysis focused on seven specific product categories: dairy products, flours, snacks, cold-pressed oils, juices, condiments and spreads, and mushrooms. This study yielded valuable market insights on 20 supermarkets and mini-markets, 17 distributors, and 12 hotels. The findings from this study have been shared with food processors associated with the AINFP. The dissemination of this market data is anticipated to equip these processors with the necessary information to refine their marketing strategies and product offerings effectively.
- **Developing an inclusive marketing plan (IMPs):** Business and marketing plans are a crucial tool that outlines various business strategies and activities, with a particular emphasis on customer segmentation and marketing strategies to target different consumer segments. In Kenya, for example, AINFP has supported 4 food processors working in Sorghum and Millet to develop IMPs, which go beyond a standard business plan. These IMPs encourage processors to explore opportunities for inclusivity in their supply chain activities, particularly to adapt business strategies to reach BoP markets.

► Facilitating linkages between food processors and other food systems actors to sell products in BoP markets

Over the last several years of the program, AINFP has found that food processors have limited connectivity with other market actors, which negatively affects their access to productive inputs and resources, as well as output market opportunities. A critical strategy for increasing the supply of value-added nutritious foods in BoP markets is by facilitating forward linkages between food processors and other food systems actors, including transporters, traders, retailers, and institutional buyers (e.g., schools, humanitarian assistance organizations, hospitals). For instance, AINFP organized a business-to-business forum

in Nairobi, Kenya, in 2022 that brought together government representatives, retailers, distributors, digital marketing service providers, financial service providers, cold chain service providers, and last-mile distribution and packaging service providers. The forum, attended by 136 individuals, served as a platform for sharing information on low-income consumer markets in Kenya, innovative sales and distribution services that could be adopted (including digital technology), and business linkages between food processors and potential buyers. Furthermore, the forum provided opportunities for exhibiting food products, sales, and distribution services.

Over \$1.8M

The value of the food products processed by seven food processors in Kenya who were able to sell 826 MT of processed food products, through newly established market linkages.

As a result of this forum, seven food processors in Kenya were able to sell 826 MT of processed food products, valued at \$1,847,992, through newly established market linkages.

► Understanding the “so what?": Results from BoP Activities:

To evaluate how well food processors are reaching BoP consumers, it is important to look at whether their products are readily available and affordable, as well as desirable, to this demographic. These factors play a key role in determining if BoP consumers are able and interested in purchasing these products. The results presented below are from AINFP's clients, as well as a BoP study AINFP conducted in 2023 to understand the market penetration of AINFP-supported clients' BoP products and BoP consumers' perceptions of these products. The insights are based on quantitative and qualitative interviews with 935 BoP consumers, 26 food processors, and 80 retailers.



Milk packing at Zagol Milk, Melkam Endale, AINFP Client Ethiopia
Photo: Bobby Neptune

Availability increases but BoP consumer awareness of the product remains low: The BoP consumer study highlighted that only 12% of Kenyan and 35% of Zambian BoP consumers were aware of the products from food processors supported by AINFP, despite these products being sold in the same markets frequented by these consumers. Specifically, in Zambia, awareness was highest for Seba Foods, with 93% and 94% of surveyed BoP consumers recognizing their thobwa drink (traditional fermented mixed flour drink) and texturized soya protein product. However, awareness of other products was generally low, starting as low as

0% awareness. This raises the question: what influences consumers to change their food purchasing habits and try new products? The study indicated that positive word of mouth from family and friends, as well as radio and TV advertisements, drove the high awareness of Seba Foods' products. On the other hand, the low purchase rates for other products could stem from perceived affordability issues. A significant percentage of Kenyan (71%) and Zambian (50%) retailers carrying products from AINFP-supported food processors believe that these products are not affordable for consumers.

► Availability of food products in BoP Markets

The availability of food plays a crucial role in influencing people's food purchasing and consumption patterns. [Current trends](#) highlight a concerning lack of access to nutritious foods, especially fruits, vegetables, and animal-source foods. In total, AINFP-supported food processors have successfully sold 276,000 metric tons of products worth more than \$127 million to BoP markets. Moreover, these food processors have gained access to over 9,000 markets where their products were not sold previously. After attending the BoP bootcamp in Tanzania, AFKO, a company that produces nutritious blended flours for women and children, invested \$860 in marketing activities to

sell their products in BoP markets. So far, AFKO has set up 141 new distribution channels in BoP markets to enhance market penetration and boost the availability of nutritious flours and has increased their sales by more than 50%. The founder of Lake Farm & Lodging, a fish processing company in Zambia, expressed the importance of the BoP bootcamp to their company, "The training played a crucial role in our company's current level of growth and successful penetration into BoP markets." As a result of their investments and adjustments to their business model, Lake Farm & Lodging achieved a significant milestone, with 55% of their fish sales coming from the newly accessed BoP markets.

► Affordability of food products for BoP Consumers

The affordability of the food processors' products is a key determinant of their success in targeting BoP consumers. It is necessary to evaluate whether the prices are within the means of BoP consumers, taking into account their purchasing power. AINFP has supported food processors to consider food affordability by adapting their packaging sizes, improving business efficiencies, and adapting their marketing and pricing strategies. Following BoP bootcamps, 43 AINFP-supported food processors have adopted specific strategies to consider the affordability of their products. One AINFP client, Asili Dairy in Tanzania, implemented a creative solution to enhance product affordability for BoP consumers. They introduced a milk vending machine, known as a milk ATM, which offers milk at varying prices ranging from \$0.08 per 200 ml to \$0.42 per liter. Through this innovative approach, Asili Dairy was able to sell a remarkable 32,000 liters of milk, amounting to \$13,633.92 in value between 2022-2023. The milk ATM eliminates the need for packaging, reducing costs that would otherwise be passed on to the consumer. Furthermore, the milk ATM provides flexibility for consumers to choose the quantity that fits within their budget.

In Ethiopia, Prime Meats, another client under AINFP, has effectively catered to both BoP consumers and higher-value markets by segmenting their consumer base. They have supplied a total of 13.29 MT of meat products, valued at \$121,957.47, to Ethiopia Airlines and an East African hotel chain. They have also taken a parallel approach by creating a more affordable product that utilizes meat by-products that were previously discarded. This innovation aims to provide a cost-effective option for BoP consumers.

Nonetheless, food affordability still drives food purchasing behavior, with 91% of Zambian and 80% of Kenyan BoP consumers surveyed citing financial constraints as a significant barrier to consuming more nutritious foods. To provide an example, during focus group discussions in



The food affordability dilemma with value-added foods - what is realistic and who is really BoP?

As food systems practitioners, our goal is to foster the development of local food systems that cater to the needs of consumers, particularly BoP consumers. We often rely on the private sector as a key player in achieving this objective. However, it is crucial to critically assess whether private sector actors can truly meet the food purchasing power of BoP consumers. An important finding from the BoP study is that 34% of Kenyan and 30% of Zambian BoP respondents consume only two meals or fewer per day. These respondents earn between \$5-8, a considerably higher income compared to those living in extreme poverty, who earn \$2.15 or less daily (per the World Bank), who are often the population development programs and policies aim to reach. This finding raises a pressing concern: if even those earning four times as much as those in extreme poverty are still facing food insecurity, does the development industry need to reconsider the role food processors really have in transforming diets of BoP consumers? It becomes imperative for programs aimed at enhancing the competitiveness of food processing to realistically assess what is feasible and identify the type of BoP consumers that food processors can effectively reach.

AINFP has supported food processors to consider food affordability by adapting their packaging sizes, improving business efficiencies, and adapting their marketing and pricing strategies.

Zambia, participants mentioned that they used to consume sardines and mopane worms in the past. However, these items have become relatively expensive, costing between USD 0.96 and 1.15 per plate. Nevertheless, food processors supported by AINFP are now offering products that are significantly cheaper compared to these prices. For instance, Fisenge Dairy sells 250 ml of pasteurized milk for USD 0.23, and Trinity Foods sells pre-cooked beans for USD 0.38. These lower-priced options are aimed at making nutritious food more affordable for consumers, but it is important to remember that food affordability remains a challenge in BoP markets.

Packing sachets of peanut powder at Delish & Nutri, AINFP Client Kenya
Photo: Bobby Neptune

► The desirability of Food Products to BoP Consumers

In addition to food availability and affordability, the desirability or appeal of food plays a crucial role in food purchasing decisions. When consumers evaluate whether they like and want a particular food, they consider various factors such as taste, quality, and perceived value. Addressing this, BoP study respondents in Zambia and Kenya have shown that they also consider the quality of the product (54% in Zambia and 61% in Kenya), the trustworthiness of the brand (27% in Zambia and 23% in Kenya), and the brand reputation (27% in Zambia and 23% in Kenya) in their purchasing decisions. Recognizing the importance of meeting consumer preferences, the AINFP program, through CTA, has supported food processors to adapt their products and conduct consumer research to better understand if their

products are desirable. For example, Afya Bora in Kenya, a yogurt producer, worked with AINFP to receive feedback on their yogurt and subsequently improve its taste, texture, and packaging to better cater to BoP consumers. By listening to consumers and making necessary adjustments, food processors can enhance the desirability of their products, ensuring they meet the evolving needs and preferences of BoP consumers. Interestingly, when BoP survey respondents in Zambia and Kenya were asked about their perception of nutritious foods, just 5% of respondents in Zambia and 3% in Kenya identified processed foods as nutritious. This finding suggests that food processors producing nutritious processed foods may need to address and overcome the blanket perception that processed food is not healthy.

► Understanding the “why?”: What is the business case for food processors to reach BOP markets

When working with food processors, programs and local systems actors, such as business development service (BDS) providers, can support them in identifying the business case for addressing the low-income markets. Some of the rationales AINFP has identified in working with over 240 food processors include:

- **Social Responsibility:** Many food processors begin with a mission to provide nutritious and safe foods to those in their community and feel a strong sense of social responsibility to make their products accessible to low-income consumers. In particular, many food processors feel that there is a compelling case to produce and make safe, nutritious foods accessible to mothers and children, as they represent the future of their communities.
- **Brand Perception:** Some food processors believe that targeting their products to BoP consumers, especially to improve the nutrition of mothers and children, can enhance their brand and can help them be seen as serving the community. Therefore, some food processors have an interest in adapting their strategies to better reach BoP markets and enhance the perception of their brand across all consumer income brackets.
- **Market segmentation for increased profits:** Most food processors focus on their bottom line and understand that entering new markets can boost their earnings. By creating products tailored to the needs of these markets or by adjusting their distribution methods, they are able to tap into these new customer segments. Some food processors, such as Aspendos Dairy in Kenya, recognize that their smaller-sized products will not provide a large profit margin, yet it is a consistent, year-round market channel. To offset this, they offer other products to higher-end markets that allow for higher margins.
- **Low-investment options are available:** For some food processors, entering BoP markets can appear daunting due to perceived barriers such as the need to forge new relationships, negotiate contracts with retailers, and invest in transportation infrastructure. However, AINFP has found that some food processors have employed low-investment distribution strategies, thereby reducing their barrier to entry. For example, they can sell their products to wholesalers who already have relationships with rural retailers. These retailers then resell the products in smaller quantities to customers in rural communities.

► Moving forward: Better meeting the needs of BoP consumers and food processors serving this consumer group

AINFP recently reflected on where practitioners, including policymakers and program implementers, can focus their attention to support food processors to better consider and reach BoP consumers with safe, nutritious foods. Broader recommendations for strengthening the competitiveness of the food processing sector, which extends beyond the topic of reaching BoP consumers covered in this brief, can be found in AINFP's [Impact Brief: Private Sector Engagement Approaches to Affect Local Food Systems](#).

► Recommendations for meeting the needs of low-income consumers:

1

Understand BoP Consumer preferences:

Given the affordability challenges highlighted among BoP survey respondents, it is important for food processors to delve deeper into segmenting the BoP consumer market. This segmentation can help them better understand their target audience and tailor their product design, distribution, and marketing strategies accordingly. Moreover, there is a need for additional research to investigate whether certain processed foods can make a minimally nutritious diet more affordable. By studying price sensitivities and elasticities, government and donor programs can determine the feasibility of targeting BoP consumers with processed foods instead of promoting the consumption of raw commodities, which may be more cost-effective. By conducting such research, programs, and policymakers can make informed decisions on how to best serve and reach BoP consumers to support the consumption of healthy diets.

3

Enhancing BoP Market Reach:

AINFP found that food processors are often unaware of the opportunities to reach BoP consumers and how they can adapt their marketing strategies to best reach this customer base. Therefore, it recommended that future programs continue to support food processors, through technical assistance and sector-wide training, to facilitate the uptake of potential marketing and distribution strategies. In particular, it is recommended to help food processors explore various distribution channels that could include local retail markets and micro-retailers. These channels can play a crucial role in delivering nutritious foods to BoP consumers, especially in remote areas where availability is often constrained.

2

Facilitating Product and Packaging Innovations:

Some of the adaptations that can help food processors reach BoP consumers necessitate that food processors modify their product formulations and/or packaging strategies. To facilitate these changes, food processors may need technical assistance to understand and implement new approaches. Moreover, these adaptations can involve acquiring new materials like smaller-sized packaging or different machinery, to better cater to the needs of BoP consumers. Future programs should support food processors with the transition in product formulation and packaging, as well as reviewing their full business portfolio to help the processor balance different product lines and revenue streams. This support will enable them to produce offerings that are not only appealing but also affordable to BoP consumers, thereby expanding their market reach.

4

Partnerships and collaborations:

Engaging with a variety of stakeholders including NGOs, government agencies, private sector entities, and local community organizations allows for the leveraging of both resources and technical expertise. Such collaborative efforts are essential for creating impactful changes that can significantly improve access to nutritious, affordable foods and enhance food security among the most vulnerable populations. By working together, these partnerships can foster an environment that supports sustainable industry practices that take BoP consumer preferences and needs into account. For instance in Kenya, AINFP collaborated with the National Duka Owners Association, which comprises 40 Smart Duka Groups encompassing 2,000 micro-retailers across 10 informal settlement regions in Nairobi, Kiambu, Embu, Machakos, and Mombasa. These micro-retail groups aggregate demand for products from manufacturers, including food processors, to capitalize on economies of scale and discounts. To date, 10 (4 women-owned/led) AINFP Food Processors are distributing their products through the Smart Duka Groups. The products range from dairy, peanut butter, and blended flours, to baked goods.

**Fortified noodle packing at Java Foods,
AINFP client in Zambia. Photo: AINFP**



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