

Food Processors' Role in Supporting the Consumption of Safe, Nutritious Foods for Improved Nutrition

White Paper



Raw product assessment for processing at Omega Foods, AINFP Client in Zambia. PHOTO: Bobby Neptune

► Overview

This white paper examines the evolving role of food processors in Sub-Saharan Africa in affecting diets and nutrition. It highlights the trade-offs of the processing sector, considering its role in positively affecting diets, but also acknowledging the rise in ultra-processed foods produced by food processors and their impact on dietary patterns and the double burden of malnutrition. The paper identifies ways in which food processors can positively impact diets and food security by developing nutritious and shelf-stable products, proper nutrition labeling, packaging refinement for nutrient preservation, and by adhering to food safety standards. It also acknowledges the benefits of food processors that go beyond nutrition, including the economic benefits of the food processing sector. Finally, the paper highlights the importance of supporting food processors and provides examples from the Alliance for Inclusive and Nutritious Food Processing (AINFP) program.

► Introduction

► Diets and the Double Burden of Malnutrition

The double burden of malnutrition, characterized by the coexistence of undernutrition and overweight or obesity, is a significant challenge in Sub-Saharan Africa. As reported in the 2023 [State of Food Insecurity and Nutrition report](#) by the United Nations, 31.3% of children under five were stunted in sub-Saharan Africa in 2022. Positively, this is a decrease in prevalence from 2012, when an estimated 36.2% of children were stunted. The percentage of children who were overweight decreased from 3.8% to 3.7% but still remained above the target of 3.0%. During this same time, the prevalence of obesity in adults (over 18 years old) increased from 8.0% to 9.2%.

When expanded to consider the percentage of adults overweight, this percentage is remarkably higher. For example, in 2016, [32.7%](#) of female adults were overweight in East Africa, compared to 22.5% in 2000. These increases in overweight coexist with persistent undernutrition among women of reproductive age, as indicated by [a study](#) of the most recent demographic health survey data which shows that 8.87% of women in Sub-Saharan Africa are underweight. A large culprit of this increase in overweight and obesity is the change in diets, or nutrition, which is characterized by a transition to [more processed foods](#) that are high in salt, sugar, and fats.

► The Food Processing Sector

Over the last few decades, the food processing sector in sub-Saharan Africa has experienced remarkable growth due to the rise in incomes, increasing urbanization, and a shift in consumer preferences towards processed foods. For instance, from 2003 to 2019, the proportion of semi-processed and highly processed food intra-Africa agricultural exports increased from [22.0% to 24.7% and 40.9% to 46.3%, respectively](#). On the other hand, the proportion of unprocessed foods traded within the continent decreased from 37.1% to 29.0%. The World Bank estimates that the trade of processed

foods in East and Southern Africa could grow upwards of [90% by 2050](#). These increases and projected increases are a result of a shift in consumer demand. In 2010, unprocessed food made up [29.9%](#) of diets in East and Southern Africa, but by 2040, this is projected to drop to 21.4%. Shifts in consumer demand, fueled by increasing urbanization and rising incomes, will continue to support the growth of the food processing sector. However, the question remains: how can we make this growth beneficial for nutrition?

► Purpose of the white paper

This white paper explores the role the food processing sector plays in supporting the consumption of healthy diets, and the role it can play to combat the rise in the double burden of malnutrition. We present the positive impacts the food processing sector may have on diets and nutrition, as well as the potential harmful impacts, as supported by existing literature and AINFP's experiences. The white paper also offers insights and recommendations for future programs that aim to work within the food processing sector and

improve nutrition, based on reflections from AINFP.

[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 to support nutrition in Ethiopia, Kenya, Malawi, Tanzania, and Zambia. To achieve this, AINFP implements a range of activities, as can be seen below:

AINFP's Core Support to Food Processors



Customized Technical Assistance (CTA):

Through PFS volunteer technical assistance and local consultants, AINFP provides CTA on product development, product reformulation, shelf-life improvement, label design or re-design, process development, food safety, fortification, inclusive business planning and marketing, gender-responsive business practices, and opportunities to access finance, among others.



Sector Wide Training (SWT):

AINFP provides SWT on good manufacturing practices, food safety, fortification, operational excellence, local leadership and organizational behavior, and gender-responsive business practices.



Strengthened market linkage and network development:

AINFP facilitates the establishment and strengthening of linkages between food processors and smallholder farmers to source raw materials and provides CTA to food processors to conduct cost-efficiency analyses, improve logistics, and establish linkages with other food systems actors, including cooperatives, aggregators, and financial institutions, to improve procurement processes of raw materials



Business development and access to finance support:

Through access to finance bootcamps and CTA, food processors learn to develop bankable business plans and investor pitch decks. Additionally, through the Initiative for Smallholder Finance (ISF) Advisors, a sub-partner on the program, processors are supported to access different financial instruments.



Strengthened distribution channels:

AINFP implements base-of-the-pyramid (BOP) activities—including BOP marketing bootcamps, forward linkage business-to-business forums, and trade fairs/exhibitions—to increase food processors' capacity to develop business market canvasses and inclusive business plans towards expanding where they sell their products.



Promoting women's economic empowerment:

AINFP implements gender business leadership courses for women-owned, women-led, and women-managed businesses working with AINFP. As well as networking, and internships for women in the industry, and sector-wide training for the industry to address specific gender constraints and building gender responsive business practices in the sector.

► Food Processors' Positive Impact on Diets and Nutrition

► Improving Diets by Adapting Products and Considering Consumer Preferences

Micronutrient deficiencies are a large concern in East and Southern Africa, with iron, vitamin A, iodine, zinc, calcium, selenium, amongst other deficiencies, affecting upwards of **31-66% of the population**. Additionally, diets in East and Southern Africa are largely comprised of staple foods and are low in **protein**. Therefore, increasing the consumption of **nutrient-rich foods** is critical, which food processors can help support. Specifically, by enhancing the nutrient content of processed foods or transforming already nutritious raw commodities into more convenient, accessible, affordable, and desirable final products, food processors can support improved diets.

Adding micronutrients to foods and condiments: One of the most successful ways food processors can curb nutrient inadequacies is by working with food processors to fortify staple foods, such as grains, oil, milk, sugar, salt, and other food vehicles with micronutrients. AINFP has supported more than 60 food processors in producing fortified foods. Specifically, through expert volunteers from PFS, AINFP has provided customized technical assistance (CTA) to support food processors in assessing the micronutrient content of their products to ensure they meet required fortification standards, adapting their product formulation when necessary and providing support to access financing to obtain necessary inputs (e.g., micronutrient fortificants) and processing technology. Moreover, AINFP offers guidance to food processors in navigating the often complex certification process to sell fortified products.

Making foods more nutritious: Beyond fortification, food processors can enhance the nutritional value of food products by adding nutrient-rich ingredients or combining two or more foods to increase the overall nutritional value of a food product. For example, some caregivers feed their children a porridge primarily made from staple grains, which is low in protein, fats, and essential micronutrients. Food processors have an opportunity to address this nutritional gap by developing blended flours that add nutrient-rich grains and/or legumes, like soya or millet, to wheat, rice, and maize-based porridge. Encouragingly, 32 of AINFP's food processing clients have taken up this approach, creating blended flours that are more nutritious. For instance, in Malawi, AINFP assisted Home Industries, a processor specializing in rice, groundnuts, and sunflowers, to create a nutritious rice and groundnut porridge. Home Industries was keen to expand its offerings with a new, nutritious product line; however, the company required guidance on how to develop a product that was not only nutritious but also appealing to customers. AINFP provided CTA to Home Industries, which included practical product development workshops where they experimented with different recipe formulations. The outcome was a new porridge that enriched the traditional meal options for caregivers, thus contributing to healthier diets for children. This type of support, replicated with 31 food processors, has played an important role in boosting the nutritional quality of widely consumed meals.

Making nutritious foods more convenient: Food processors play an important role in responding to consumer demand for more convenient food options, which is particularly important for consumers with high time burdens, particularly women. By making nutritious foods convenient, food processors can support households to consume nutritious foods in spite of high time burdens. One such example is Yumi Milling, a food processor supported by AINFP in Zambia. Yumi Milling produces blended flours containing soya flour that would typically require manual grinding of the soy if not for the machine milling process. The AINFP team, alongside PFS expert volunteers,

provided CTA to Yumi Milling to formulate an instant corn-soya blend (CSB) according to international standards and to redesign the product label to adhere to local packaging regulations.

Additionally, consumers are increasingly reaching for ready-to-eat meals and snacks purchased outside of the house, such as from kiosks and other vendors. In Tanzania, Sanavita Company addresses the demand for convenient food products while also prioritizing nutrition. The company specializes in producing biscuits and bread made from orange-fleshed sweet potatoes (OFSP), biofortified beans, and maize, offering enhanced nutritional benefits compared to conventional refined products. Sanavita worked with the AINFP team in Tanzania and expert volunteers from PFS to develop standardized recipes for their nutritious biscuits that meet consumer preferences. Additionally, AINFP provided marketing support to Sanavita on how to best market their product to consumers, as informed by AINFP-supported market research on consumer insights and product positioning.

Making nutritious foods more desirable: Food processors also contribute to making nutritious foods more appealing by meeting the taste preferences of consumers. For instance, while some consumers may not enjoy the taste of raw, unprocessed milk, they might find yogurt more desirable, especially when it is enhanced with fruit puree. These product formulation adjustments can help steer consumers toward more nutritious foods. Another example is millet, which is often considered less desirable than maize due to its slightly bitter taste. However, with the right recipes, millet can become more appealing. Through technical support from AINFP, Simply Foods in Kenya has reformulated their instant millet porridge options to include natural lemon, caramel, banana, and strawberry flavors. Simply Foods came to AINFP to support in product reformulation, as the company was having difficulty with their porridge flour not mixing well with milk or water. AINFP, through PFS volunteers, provided technical assistance to improve the consistency and efficiency of the processing process to produce a higher-quality product.

Making nutritious foods more affordable: Furthermore, food affordability plays a significant role in what consumers can and want to purchase. Food processors can be responsive to this by packaging their products in smaller sizes that can be sold at lower prices. AINFP has taken steps to support these efforts by implementing base-of-the-pyramid (BoP) training. These trainings aim to provide food processors with insights into the BoP market and encourage them to identify opportunities for improving their products, marketing, and distribution to better meet the needs of BoP consumers. Following BoP bootcamps, 29 AINFP-supported food processors have adopted specific strategies to consider the affordability of their products. For instance, a food processor in Malawi introduced a 250-gram peanut powder into their product line, which is more affordable to BoP consumers. Similarly, in Tanzania, Prince & Pierre has recently launched a new product line of 250-gram sausages, which are smaller in size and more affordable compared to the company's 500-gram offerings. Food processors can also make nutritious options more affordable by opting for lower-cost ingredients for certain products. In Ethiopia, AINFP provided support to Prime Meat, a meat processor, in developing a new product utilizing meat by-products that were previously discarded. This collaboration led to the successful formulation of three new products sold at lower price points, therefore making them more accessible to BoP consumers. The Research and Development Leader at Prime Meats participated in a BoP training in Ethiopia and shared her insights from the event *"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."*



Dairy processors across AINFP's portfolio are producing desirable dairy products that are responsive to consumer preferences through AINFP's technical support:

- Fisenge Dairy in Zambia, a women's cooperative that collects milk from farmers in the Southern region, has successfully responded to market preferences for traditional fermented dairy drinks by producing a flavored fermented milk (Mtindi), which is a popular traditional Zambian beverage.
- Zagol Milk in Ethiopia is preparing to launch a new flavored strawberry whey protein drink, currently undergoing registration with the Ethiopian Food and Drug Authority.
- Eldoville in Kenya is in the process of launching Whey Cool, a cheese byproduct that has been enhanced with fruit purees like pineapple and mango, which makes the cheese byproduct more palatable.



Milk collection at Wimssy Dairy, AINFP Client in Kenya. PHOTO: Bobby Neptune

► Contributing to Food Security by Improving Shelf-life

An estimated 33% of edible food produced in sub-Saharan Africa is lost after the point of harvest and before it reaches the consumer. Food processing can improve food security by producing products that are more shelf-stable, thereby positively affecting food availability and, potentially, lowering food prices. Specifically, food processing can increase food availability by transforming a raw, often highly perishable commodity into a product that is more shelf-stable and can be sold for longer periods of time. For example, milk that is processed under ultra-high temperatures can be stored without refrigeration and last significantly longer than unprocessed milk. Drying or canning fruits and vegetables can transform them into shelf-stable products, which also helps to preserve nutrients longer. This approach can be applied to other food groups as well, such as animal-source foods, grains, and legumes. For example, Prince and Pierre, an AINFP-supported processor, shifted from using non-air-tight plastic wrapping for packaging their sausages to vacuum-sealed packaging, which extended the shelf life from two weeks to three months. Theoretically, as food loss is reduced, food prices are driven down, as food system actors don't have to make up for lost margins from food loss.

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Quality checks for peanut powder sachets at Delish & Nutri, AINFP Client in Kenya. PHOTO: Bobby Neptune

► Supply of Nutritious Foods to Social Programs

Food processors play a critical role in supplying nutritious foods to social programs, such as school feeding programs, public hospitals and prisons, and humanitarian assistance programs.

AINFP has supported 15 food processors in supplying nutritious foods to public institutions. In Tanzania, AINFP facilitated linkages between Moshono Millers and two school feeding programs in Arusha to replace regular maize flour with fortified maize

flour. This effort has resulted in 3,000 students receiving maize fortified with Zinc, Folic acid, Iron, and Vitamin B12. Additionally, following support from AINFP, ASAS Dairy supplies milk to 41 schools in Dar Es Salaam and Iringa and also integrates nutrition education in their marketing activities to raise awareness and increase the demand for milk. Such collaborations between food processors and school feeding programs can enhance the nutritional value of foods served to children.

► Marketing for Nutritious Foods and Correct Nutrition Labeling

Clear and informative nutrition labeling can empower consumers to make informed food choices. A [study conducted](#) in South Africa found that consumers are more likely to choose healthier products when nutrition information is presented clearly on the packaging. Food processors can contribute to healthier choices by providing accurate and easily understandable nutrition information on their products. AINFP, through Partners in Food Solutions (PFS), has provided CTA to food processors to redesign their packaging and labeling and to better market to

their consumers. For example, AINFP assisted Kongano Foods in Tanzania in enhancing their packaging to more effectively communicate the nutritional benefits and specific ingredients of their product. This was achieved by developing a front-of-package photo that included images of the nutrient-rich ingredients, and a back-of-package label that offered detailed information about these ingredients and the overall nutritional value of the product.



Images of before and after improved packaging of Kongano Foods in Tanzania

► Producing Safer Foods

As the food processing sector becomes more formalized and food processors adopt and adhere to food safety standards, they will play an increasingly important role in providing safe, nutritious foods. This is particularly important in Africa, where it is estimated that approximately 91 million people suffer from foodborne illnesses each year, leading to negative impacts on health and economic productivity. Perishable foods are prime vehicles for foodborne disease. For example, a recent study found that 15% of vegetables sold at the market and in shops in a town in Oromia carried salmonella. Food processors play a crucial role in transforming these perishable food items into shelf-stable products with lower pathogen loads. AINFP works with over 70 food processors who are processing highly perishable foods into more shelf-stable versions. For example, Kihonda Foods in Morogoro, Tanzania, preserves mangoes into dried packaged shelf-ready fruits. Additionally, AINFP provides CTA to food processing clients to improve their packaging and storage methods in order to improve food quality and safety, reduce food loss, reduce profit loss from food loss, as well to

make their products more attractive to consumers. For example, Maisha Millers, a milling company in Tanzania, faced problems with their previous packaging, which wasn't preventing moisture from seeping into their maize products. This exposure to moisture was affecting both the quality and safety of their goods. AINFP advised Maisha Millers and suggested different packaging options that would better protect the maize flour, enhance its quality, and extend its shelf-life.

In addition to transforming foods into more shelf-stable versions, food processors are responsible for adopting and adhering to food safety and hygiene standards to ensure their products are safe for human consumption. In collaboration with local private sector food safety experts, AINFP facilitates sector-wide trainings for individuals and teams working at the front lines of the food processing sector. These trainings aim to impart basic food safety best practices and have already reached over 2,000 participants who have been converted to food safety champions.

Additionally, AINFP offers food safety CTA to its food processing clients, focusing on the implementation of food safety standards at the processing plant, including good manufacturing practices (GMPs), HACCP (hazard analysis critical control points) certification, ISO 22000 certification, traceability, laboratory assistance for aflatoxin testing, pest control, and pesticide management, as well as fostering a food safety culture. To support broader change, AINFP provides technical assistance to enforcement agencies to better respond to lab testing requests from food processors, and

to better support food processors on how to adhere to and meet standards. For instance, AINFP has facilitated a series of trainings with the Zanzibar Food and Drugs Authority (ZFAD) to enhance the skills of their staff in conducting food-related product analysis. This initiative aims to improve testing and compliance processes in Zanzibar by building local capacity, eliminating the dependency on labs in mainland Tanzania for analysis, and enabling food processors to receive their compliance certificates more efficiently.



A sample of processed flour at Beri Foods Ltd, AINFP Client in Ethiopia
PHOTO: Bobby Neptune

► The Imperfect Nature of the Food Processing Industry

► Increasing the Availability of Foods to Limit

While the food processing sector plays a crucial role in increasing the availability of safe and nutritious foods, it is also responsible for increasing the availability of foods that should be limited. These foods, commonly referred to as “foods to limit,” are characterized by high sugar, fat, and salt content, and generally lack nutritional value. Consumption of such foods has been linked to [obesity](#) and the development of noncommunicable diseases, such as diabetes and cardiovascular disease. Examples of these ultra-processed products include sugar-sweetened beverages, snack foods, instant noodles, and fried foods, amongst others. Consumption of these foods have been increasing over the last several decades and is [expected to continue to increase](#). There are troubling trends already, for example, a recent study found that ultra-processed foods made up [nearly 40%](#) of total calories from the sampled population in South Africa. Interestingly, this was remarkably higher amongst youth (18-29 years old) at 40.2% of their total calories compared to adults 40-50 years old (20.3%).

The recent paper titled [“The Processed Food Revolution in African Food Systems and the Double Burden of Malnutrition”](#) highlights supply-side factors that are leading to the growth of the processed food market in Africa, but particularly in the

production of ultra-processed snack foods. According to the author, these foods do not significantly differ in nutritional value from traditional foods prepared at home, such as andazi doughnuts in Tanzania. However, the key distinction lies in the expanding food processing sector, which has seen growth in the last several decades and has become increasingly efficient at producing and marketing affordable ultra-processed foods to limit. The growth of this category within the food processing sector can be seen within Ethiopia, where five sub-sectors make up [80% of the sales and 75% of employment](#) for the whole processing sector, which are grain mill products, bakery products, sugar, malt, soft drinks and water. Given these trends, it is crucial to bolster initiatives that assist food processors in supplying nutritious foods to counteract the growth of the sector in supplying foods to limit, like the AINFP program. AINFP has successfully supported multiple food processing clients in reducing sugar and salt contents in their products, as well as other additives. For instance, AINFP supported FAFFA Food Share Company in Ethiopia to develop a SnackBar made of cocoa, sesame, peanut, and amaranth seed that is low in added sugar and salt. In Zambia, AINFP recommended that Yumi Milling leave out added sugar from their final porridge product, allowing consumers to add sweeteners if they desire.



A food to limit dilemma: While it is important to acknowledge that certain processed foods may not be healthy, they often offer affordability, convenience, and enjoyable taste that many consumers seek. A prime example of this is instant noodles, which are inexpensive, readily available, and require minimal cooking time. Between 2018 and 2022, demand for instant noodles jumped by 160% in Kenya. In Nigeria, one consumer who does not like cooking and likes the convenience of instant noodles noted: “In the seven days of the week, I can eat it [instant noodles] up to five days”. (The Guardian, 2023). However, it is crucial to consider the nutritional value of such foods, as they are often high in sodium and lack essential nutrients. Further, these foods are high in carbohydrates, which are already high in most diets around the world. Balancing the convenience and affordability of processed foods with their potential negative health impacts remains a challenge in promoting both food security and healthy diets.

AINFP supported Java Foods, a food processor in Zambia, to develop a [fortified instant noodle](#) product that not only met the preferences of local consumers but also was a more nutritious alternative. AINFP provided technical assistance to formulate an instant noodle that met consumer preferences and maintained the integrity of the fortificant. Java Foods is committed to expanding access to more nutritious alternatives and is looking to expand in the rest of Southern Africa.

► Marketing and Labeling As Drivers of Consumer Demand for Foods to Limit

In addition to increasing the availability of ultra-processed foods with limited nutritional value, food processing and retail companies have developed highly sophisticated strategies to drive consumer demand for these products. This is significant because food advertising has the power to shape consumer perceptions regarding what is considered valuable, desirable, and healthy to consume, consequently influencing nutrition outcomes. A compelling example of this is the immense success achieved by the food industry in promoting the use of breast milk substitutes over the past three decades. Various studies

have documented the negative impact of advertising for breast

milk substitutes on the recommended breastfeeding and infant feeding practices by the World Health Organization (WHO). This same level of sophistication is now being employed to promote processed foods that should be limited. Several studies have analyzed food advertising in selected areas to determine the proportion of advertisements that promote nutritious foods compared to those promoting foods to limit.

For instance, a study conducted around schools in Kampala, Uganda, discovered a total of 1,034 branded advertisements near 25 schools, with approximately 86% featuring unhealthy food products (defined as per the Outdoor Advertising Protocol and the WHO nutrient profiling model).

Addressing consumer demand for ultra-processed foods that should be limited is a complex issue with no quick solution. However, there are encouraging strategies emerging to tackle this challenge. One of these strategies is the implementation of front-of-package labeling in many countries. These labels provide warnings to consumers about high levels of salt, sugar, and/or fat or use a spotlight approach to grade foods from

green (good) to red (foods to limit). A study conducted in South Africa showed that consumers were less likely to intend to purchase foods to limit when they had warning labels on the front package. Furthermore, 44 countries have introduced taxes on foods to limit, with a particular focus on sugar-sweetened beverages. The goal of these taxes is to reduce consumer demand for these types of foods and beverages. Moreover, as experienced by AINFP, the regulation and enforcement of nutrition fact labels and advertising claims on packaging in various parts of Africa are generally weak. This may create an environment where food processing companies can make false claims about their products, which can mislead consumers.

▷ Assessing other Benefits of the Food Processing Sector

The food processing sector is often under scrutiny when it comes to its impact on diets and nutrition. While it is important to acknowledge the positive role it plays in supporting safe and healthy diets, it is equally crucial to consider the wider benefits that this sector brings to the table. Apart from its influence on nutrition, the food processing industry also contributes to economic growth, fosters social development, and plays an important role in making food systems more sustainable. In a recent [impact brief](#), AINFP touched on the benefits the food processing sector plays across the food system.

Economic opportunity: One of the key advantages of the food processing sector is its positive impact on the economy. By providing an output market for farmers, food processors stimulate agricultural productivity and economic growth, particularly for smallholder farmers. For example, under AINFP, 240 food processors are procuring from 349,000 smallholder farmers. Furthermore, the growth of the food processing sector will produce additional jobs, of which off-farm jobs have been shown to decrease poverty and enhance women's empowerment. [One study](#) estimates that the number of food processing jobs is expected to grow between 12-20% in Tanzania, Nigeria, and Rwanda.

Promoting regional trade: These economic shifts can result in broader country- and regional-level economic impacts, particularly as food processors are able to meet standards for export. [Studies](#) show that as food processing industries better meet international food safety standards, countries see an increase in exports of processed products, which can contribute to an increase in a country's gross domestic product. Moreover, exporting processed foods can help countries achieve trade diversification and reduce reliance on traditional commodity exports, which can [lead to more stable and sustained economic](#)

[growth](#). AINFP has supported 18 food processors to adapt their practices to meet the necessary food safety standards for export. Further, 6 food processors have successfully begun exporting their products as a result of AINFP's assistance.

Women's empowerment in the food processing sector: The expansion of off-farm jobs within the food processing sector has a particularly profound impact on women's empowerment. [Research](#) indicates that increasing the number of women holding off-farm jobs positively affects their empowerment. Women, in particular, benefit from the increased employment opportunities, as it can lead to enhanced economic empowerment and improved standards of living. A [report](#) published by the Food and Agriculture Organization (FAO) highlights the importance of women's equality in agrifood systems, revealing that empowering women could boost the global economy by \$1 trillion and reduce food insecurity by 45 million people. AINFP has partnered with 123 women-owned or led food processing companies to improve their growth and competitiveness and has supported the creation of 1,204 jobs now held by women.

Climate and environmental effects: When considering the environmental and climate impact that the food system has, the food processing sector plays a crucial role in reducing waste, water, and energy use, and in supporting farmers to adopt regenerative agricultural practices. For example, by processing raw, perishable ingredients into more shelf-stable products, food processors significantly contribute to preventing food loss. For example, in Kenya, AINFP provided CTA to BeeCare, a honey processing company, to document their processing practices in compliance with food safety standards. This resulted in BeeCare identifying which practices were causing inefficiencies and enabled them to reduce their waste from 15% to 5%.

► Supporting Food Processors Towards Positive Impact

► Working Within the System

Recognizing the limitations faced by food processors, it becomes vital to work within the existing system and support them in transitioning towards producing safe, nutritious foods. AINFP recently reflected on where practitioners, including policymakers and program implementers, can focus their attention to drive the shift towards healthier food options. Broader recommendations for strengthening the competitiveness of the food processing sector, which extends beyond the topic of nutrition covered in this brief, can be found in AINFP's [Impact Brief: Private Sector Engagement Approaches to Affect Local Food Systems](#).



Impact in numbers - Food systems actors reached by AINFP

- **240 food processors** have received CTA (51% women-owned or jointly owned)
- **2,082 individuals** adopting a new/improved food processing practice (43% women)
- **\$397,661,880** in sales by AINFP-supported food processors (22% by women-owned or jointly owned)
- **\$14,035,494** in finance (loans/grants) accessed (48% by women-owned or jointly owned)
- **2,605 new jobs held created (46% held by women)**
- Sourcing from 349,643 smallholder farmers (41% female)

Assisting in product reformulation: Practitioners should provide technical support and expertise to food processors in reformulating their products and/or in producing new product lines that are nutritious. This may involve reducing salt, sugar, and unhealthy fats, while incorporating whole grains, fruits, vegetables, and animal-source foods. AINFP, through PFS volunteers, has found that food processors are extremely open to designing new products and/or re-formulating their current ones, so long as it makes business sense. In Tanzania, the team helped Sanavita Company reformulate their wheat bread by adding orange-fleshed sweet potatoes. This was done to increase the amount of vitamin A in their product. Additionally, they supported Sanavita in using biofortified beans (containing zinc and iron) in their biscuits. The goal was to be able to provide a product that better met the nutritional needs of pregnant women.

• **Facilitating Access to Nutritious Raw Commodities:** Many food processors face challenges in sourcing affordable, high-quality, nutritious raw materials. Development programs can play a vital role in connecting processors with local farmers, promoting sustainable agriculture practices, and facilitating partnerships that ensure a steady supply of high-quality commodities. AINFP has seen success in this space. For example, through business-to-business forums in Kenya and Ethiopia, food processors have formed partnerships with farmer unions and cooperatives, resulting in a steady and reliable source of grains, nuts, and other raw foods, therefore, securing reliable output markets for farmers while providing access to nutritious raw commodities to food processors.

Enhancing food safety and quality assurance: Policymakers and development programs must support the adoption, as well as the regulation and enforcement, of food safety and hygiene best practices. Programs and sector associations in this space can facilitate training and development of SOPs along the supply chain, pulling from a pool of local experts to food processors to improve food safety practices and enhance quality assurance. By supporting food processors to meet stringent safety standards, food processors can build consumer confidence in nutritious foods.

Staying practical when working with food processors: Ultra-processed “foods to limit” are easy revenue streams for food processors. People all around the world choose to buy convenient and cheap processed food products, particularly those with high salt, sugar, and fat content. Programs and local service providers can work with food processors to reduce sugar, salts, and fats to products, even if they fall into “foods to limit” category. Supporting incremental improvements in products creates trust in the partnership with bottom-line food processors, supporting a relationship that, over time, can lead towards more strategic product diversification into increasingly nutritious products.

Supporting accurate food marketing and labeling: Future programs should consider how to support food processors, particularly those producing nutritious foods, which can include a focus on better packaging, labeling, and marketing products. Nutritional information on packaging and in marketing campaigns supports consumer behavior change and enables food processors to reach a wider audience.



Peanut packaging process at Delish & Nutri, AINFP Client in Kenya
PHOTO: Bobby Neptune

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