



Acceso and Lavi Peanut Butter | An Innovative Community-Based Solution for Acute Malnutrition in Haiti

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Food Science in Action:

- ✓ Food Security
- ✓ Food Safety
- ✓ Food Policy



*Above: Lavi Smallholder Farmers.
Below: The Sant Pwodiksyon Nourimaba production facility in Haiti.*

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In 2019 Acceso with the support of the W.K. Kellogg Foundation launched the **Lavi Peanut Butter** brand, which is fully cultivated and processed in Haiti to meet international food safety standards including the control of aflatoxin. Income from Lavi is used to support efforts to alleviate malnutrition in Haitian children and has provided over \$5 million income for more than 10,000 small holder farmers. This income to smallholder farmers helps to further reduce poverty in Haiti, a root cause of malnutrition.

Lavi represents a success story of how local Haitian entrepreneurs together with the technical expertise and commercial experience of Acceso have been able to meet the demands of international markets for safe food products from Haiti and create a sustainable source of income for Haitian smallholder farmers and their communities.

Introduction

In the aftermath of the devastating earthquake of 2010, more than \$17 billion in international aid from governments and NGOs has been spent in Haiti. Disorganized and uncoordinated aid magnified an already weakened government and local institutions. Today more than 6 million of the total 11 million Haitians live on less than \$2 a day, and communities continue to struggle with poverty, dysfunctional government, and weakened local institutions. These dysfunctions prevent Haitians from retaining value from food production in their local communities and limit progress towards resolving poverty and malnutrition.

Acceso is a social enterprise that offers an alternative philanthropic model by providing holistic seed-to-market services with technical and commercial solutions, which enable Haitian smallholder farmers and Haitian food processors by eliminating barriers to access international markets (Figure 1).

Peanuts are a staple food in the Haitian diet and have been cultivated for hundreds of years. However, sourcing of peanuts from local smallholder farmers has been a challenge due to high levels of aflatoxin, a poisonous carcinogen produced by fungi found on peanuts and other crops.

Aflatoxins are tightly controlled under Codex Alimentarius and cannot surpass a level of 15 ppb. Historically, peanut farmers in Haiti struggled to meet this standard. Farmers, inadequately equipped and improperly trained, were therefore unable to sell their peanuts to export markets. This limitation represented an economic barrier which perpetuated a cycle of poverty for Haitian smallholder farmers.

To address this systemic food safety issue, Acceso worked with partners and smallholder farmers on creating a fully integrated food system in Haiti that reduces the levels of aflatoxin to meet the international Codex Standard. After many years of comprehensive training and education for Haitian farmers to control aflatoxin in their crops, Acceso launched the Lavi Peanut Butter brand in 2019. Lavi is the first Haitian-grown and produced peanut product approved for international markets.

Project Overview

Beginning in 2014, Acceso began working with a community of Haitian smallholder farmers and Sant Pwodiksyon Nourimanba (SPN), on the safe production of peanut butter entirely sourced and produced by Haitians. Five years later, in 2019, Lavi Peanut Butter was officially launched using peanuts that are fully sourced from Haitian smallholder farmers and processed in a 100% Haitian operated food processing plant (SPN) that is HACCP audited and includes control of both aflatoxin and *Salmonella* (See Figure 2).

Lavi Peanut Butter is setting the standard for Haiti peanut butter designed to meet international markets. Profits from the sale of Lavi Peanut Butter are used to support the production of Nourimanba. Nourimanba is a peanut-based ready-to-use therapeutic food (RUTF) supplemented with black bean protein, vitamins, and minerals produced for Zanmi Lasante (Partners In Health) to treat malnutrition in Haitian children.



Figure 1. Acceso social enterprise model for Lavi Peanut Butter. (Reprinted with permission from Acceso)

This has been accomplished by using a four-tiered approach to aflatoxin food safety control that includes:

- (1) Safe harvest and testing for aflatoxin in the fields of smallholder farmers
- (2) Aflatoxin testing in government-funded local Haiti university labs
- (3) Aflatoxin testing in the SPN plant

- (4) Aflatoxin testing in an accredited food analytical laboratory in the United States.

Since 2019, international sales of Lavi Peanut Butter to the United States started to generate revenue to supplement Nourimanba production. Today 100% of the peanuts that are used in both Lavi Peanut Butter and Nourimanba are sourced from Haiti. In addition to ensuring the safety of the peanut butter, Acceso has also provided other

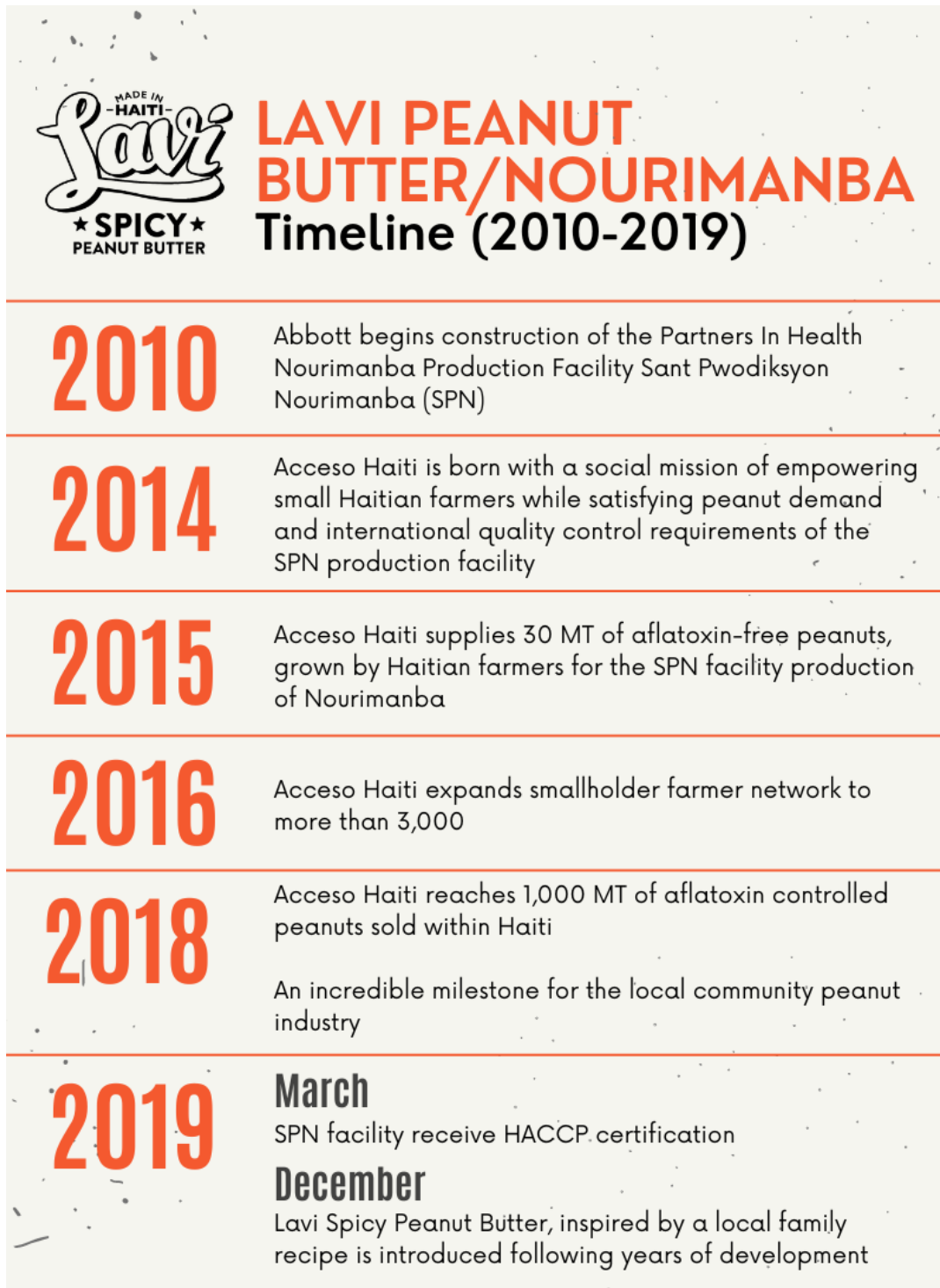


Figure 2. Lavi Peanut Butter/Nourimanba sequence of events. (Adapted with permission from Acceso)

critical supply chain logistics to help Lavi reach international markets including financing, export certification, sales, and delivery.

Successes

The Lavi Peanut Butter business venture created by Acceso is a social business model that provides an innovative philanthropic solution to both malnutrition, poverty, and community development in Haiti. To adequately address these challenges, the Haiti Food Safety Alliance (HFSA) was organized by Acceso, 13 local organizations and the W.K. Kellogg Foundation. The HFSA is a community-led initiative striving to create real economic value for local Haitian communities, gender equity with community-based solutions. The alliance has created real economic value for the local community and gender equality with community-based solutions. Since 2015, Acceso Haiti has helped generate over \$5 million in revenue for Haitian smallholder peanut farmers for the production of peanut butter.

Based on the recommendations and research of a USAID funded grant to the University of Georgia, Acceso created a comprehensive program with Haitian smallholder farmers to

control the level of aflatoxin in peanuts (see Further Reading).

The creation and launch of Lavi Peanut Butter by Acceso comes from nearly a decade of working, building partnerships, sharing local expertise, and engaging with generations of smallholder farmers and local peanut butter processors. Acceso works directly with smallholder Haitian farmers to ensure the safe cultivation, harvest, and processing of peanuts. This has significantly improved safety, yields, and international market access, while simultaneously improving value chains for smallholder farmers and their local communities.

Three dollars of revenue has been created for smallholder farmers for every dollar donated to Acceso. Today, Acceso has created a network of more than 10,000 local smallholder farmers that has produced tens of thousands of pounds of aflatoxin safe peanuts for Lavi Peanut Butter and other peanut products in Haiti. In October 2021, Acceso and their partners published an [article](#) on how their approach has been implemented successfully in Haiti with smallholder farmers, including supporting gender equity for women farmers (see Further Reading).

The income from Lavi Peanut Butter sold to international customers has been used to:

(1) subsidize the production of Nourimanba RUTF to feed severely malnourished children; and



Figure 3. Acceso Haiti Farmer: Improving the livelihoods of small producers. After Acceso Haiti reengineered the peanut supply chain to mitigate the risk of aflatoxins and to add local processing, Saintania is one of 5,000 farmers who can now sell her crops to large local buyers and abroad, including through Lavi Peanut Butter. (Reprinted with permission from Acceso)

(2) respond to humanitarian crises directly within Haiti such as the 2021 Haiti earthquake.

By partnering with the World Central Kitchen, Lavi provided more than 20,000 jars of Lavi Peanut Butter for 1.5 million peanut butter snacks that were used to feed more than 500,000 Haitians affected by the 2021 earthquake.

Looking Ahead

IFT Seeding The Future Global Food System Challenge

In December 2022, Acceso was honored to be awarded the grand prize of the 2022 IFT Seeding The Future Global Food System Challenge out of a field of 600 global applicants. According to the press release Acceso received the award for:

“...(Acceso’s) work to eliminate aflatoxin from smallholder supply chains. Acceso is working to eradicate dangerous aflatoxins in smallholder supply chains, starting with peanuts in Haiti. This system utilizes an innovative combination of economic incentives, rigorous testing, and strategic logistics which prevents aflatoxin contamination at the farmer, buyer, and consumer levels.”

The grant will allow Acceso to further build out its innovative social business model, which creates income for Haitian smallholder farmers and simultaneously addresses acute malnutrition for children in Haiti.

Haiti Food Systems Alliance

Acceso and its partners with the long-term support of the W.K. Kellogg Foundation announced in May 2022 the formation of the Haiti Food Systems Alliance (HFSA). The HFSA believes that “Haitians can feed Haitians, and every Haitian should be fed.”

The recent formal launch of the HFSA culminates from more than a decade of collaboration between 14 local NGOs across various sectors including: (a) 6 food production (b) 5 service centers and (c) 3 strategic health & education feeding partners. The Acceso-W.K. Kellogg Foundation-HFSA partnership could be foundational for a sustainable food systems and

community driven solutions for food insecurity in Haiti (see Appendix).

Innovative Philanthropic Future

While recent extreme civil unrest and gang violence have created additional development “headwinds” for Lavi and Nourimanba, with the commitment and experience of Acceso, the W.K. Kellogg Foundation, and partners in the HFSA, the future remains promising for Lavi Peanut Butter, Nourimanba, and their local Haitian communities.

More importantly, Acceso, Lavi Peanut Butter, and the HFSA could serve as a new innovative philanthropic model that creates a sustainable safe food system solution in Haiti that addresses the root causes of poverty in local communities. Though food safety science and microbiological controls are essential, it is also just as important that local communities effectively adapt these practices to meet international food safety standards.



Figure 4. Traditional spicy version of Lavi peanut butter. (Photo courtesy of Acceso)



Further Reading

Videos and News Articles

- 2022 IFT Seeding The Future Global Food System Challenge
- As Haiti Unravels NY Times Nov 29, 2022 (subscription required)
- Acceso Board Trip: Frank Giustra (2020)
- Acceso Haiti: Improving the livelihoods of small producers (2020)
- Feed the Future Innovation Lab for Peanut Productivity and Mycotoxin Control - University of Georgia
- Haiti – Aiding and Abetting “Foreign aid has done little to help the impoverished Caribbean Country - The Economist Feb 5, 2022 p. 28 (subscription required)
- Next Billion – Sustainable Solutions for the World’s Failing Food Systems: Acceso’s CEO Discusses its Innovative Approach - June 16, 2022
- Pwodiksyon Lokal Alyans (HFSA) Vimeo Video May 2022
- United Nations UN News - Haiti: UN sounds alarm over worsening gang violence across Port-au-Prince July 16, 2022
- With Instability in Haiti, Doors Remain Open at PIH Facilities Zanmi Lasante not going anywhere, committed to our mission. Oct 4, 2022

Publications & Presentations

- Barton-Dock M. Sigh RJ. Haiti: toward a new narrative - systemic Country Diagnostic. Washington DC: The World Bank (2015)
- Kostandini G, Rhoads J, MacDonald GE, Tanellari E, Johnson R, Carroll E & Pressoir G. Production, post-harvest management and gender dynamics among smallholder peanut farmers in Haiti: Agriculture and Food Security 10:42 (2021)
- Hagedorn S, Sengupta C & Zhang F. Acceso Lavi Peanut Butter – An Innovative Community Based Solution for Acute Malnutrition in Haiti – Presentation of the IFT Food Science For Relief & Development (FSRD) 2022 IFT FIRST Fireside Chat July 11
- MacDonald G, Brenneman T, Kemerait R, Kostandini G, Brown D, Tillman B, Barkley N, Jordan D, Brandenburg R, Srivivasan R, Wolff P, Laroche FB, Johnson R, Rhoads J, Nolin F, University of Georgia, University of Florida, & Quisqueya University - USAID Grant 2013-2017 \$15 Million Grant - US Agency on International Development (USAID) Grant Research Proposal: Haiti Peanut Value Chain Interventions (2013-2017)



APPENDIX HAITI FOOD SYSTEMS ALLIANCE PARTNERS



Who is the Alliance?

The **Haiti Food Systems Alliance (HFSA)** represents diverse local partners working across agriculture, education, healthcare, and community development in Haiti. More importantly, Alliance members represent and consist of hundreds of Haitian staff and workers, thousands of Haitian farmers, students and patients, and dozens of affiliated Haitian community organizations. In line with its strong focus on employment equity, family economic security, and income generating opportunities, the Alliance was founded by **six partners all working in rural communities** at the start of value chains to increase farmer production:

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Production Partners

- Association des Cadres pour la Protection de l'Environnement (ACAPE)
- Acceso Haiti (ACCESO)
- Association Zanmi Agrikol (AZA)
- Haiti Christian Development Fund (HCDF)
- KORE Foundation (KORE)
- Partenariat Development Local (PDL)

- Centre d'Appui et de Services aux Entreprises Locales et Internationales (CASELI)
- Centre Haitien du Leadership et de l'Excellence (CLE)
- Haiti Development Institute (HDI)
- University Quisqueya (UNIQ)

Service Center Partners

- Association pour le Developpement de Fondes-Blancs (ADF)

Strategic Health & Education Feeding Partners

- Health Equity International (HEI)
- Model School Network (MSN)
- Zanami Lasante (Partners in Health -ZL)

HAITI FOOD SYSTEM ALLIANCE (HFSA)



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Dana François - Haiti Program Officer, W.K. Kellogg Foundation

“Over the years, despite great challenges, families and communities continue to show up to solve their problems in unique and innovative ways, to shape the conditions they envision for their children and their future. Acceso and our other partners in the Haiti Food System Alliance mirror this commitment and dedication.”



Rob Johnson - Chief Executive Officer, Acceso Haiti

“We have succeeded and failed in Haiti, and there have been many, many challenges along the way working on tough issues under tough conditions. We’ve come a long way and already achieved a lot - but we have so much more work to do, and the only way we’ll succeed is if we keep working together.”