

A Food Sovereignty Assessment: Massabielle, Haiti

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TABLE OF CONTENTS

<i>Background</i>	3
<i>Methodology</i>	4
<i>Results</i>	5
Demographic Information	5
Food Systems, Land and Resource Access	6
Community Food Security.....	9
Food, Politics, and Power	11
Food and Environment	13
Health Inventory	14
Gender and Food	15
Food Culture	16
Future Visions	18
<i>Conclusion</i>	19
<i>References</i>	20

BACKGROUND

In 2024, hunger in Haiti was the worst ever recorded, with some labelling it as “Haiti’s worst hunger crisis in history” (Taylor, 2023). Over a million people were on the brink of famine (UN News, 2024). Historically, food insecurity has been concentrated in rural Haiti, where 45 percent of Haitians still reside. However, chronic challenges for rural producers – the lack of state support, structural adjustment policies that weakened local food production and kick-started food import dependence, poor infrastructure (irrigation, transportation and food storage), alongside climate change impacts like erratic weather, have worsened food insecurity. Despite these struggles, agriculture continues to be a key source of income and food provisioning in Haiti, contributing to a quarter of the country’s GDP annually (World Bank Group, 2023; Berman and Kuperberg, 2024).

There is a real need to respond to food insecurity in Haiti’s contemporary crisis, and foreign organizations are largely leading this response. Yet, international NGOs and bilateral agencies have a history of mismanaging aid and responding inappropriately to crises (Edmonds, 2013; Ramachandran and Walz, 2015; Schuller, 2016; Kushner, 2019, 2019; Abi-Habib, 2021). For decades, non-governmental organizations (NGOs) have been the primary providers of services in Haiti, including food aid and food security interventions (Schuller, 2017; Guillaume *et al.*, 2023). Their efforts are often based on food security assessments conducted by various state and international actors.

In concrete terms, food security exists “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996). It tends to be defined by four pillars: access, availability, utilization and stability (FAO, 1996; Coates, 2013; Jones *et al.*, 2013; Burchi and De Muro, 2016; Scicchitano, 2019). Globally, food security assessments are used by NGOs and governments to assess caloric sufficiency, hunger levels, dietary diversity, and to evaluate nutrition. These assessments orient development programs, including food aid, and can be important in offering early warnings of hunger and famine.

While food security assessments provide some valuable data, they have significant limitations. They often overlook social, historical, political and gender dynamics and fail to consider local experiences of food challenges or community-proposed solutions. Critics argue that food security assessments don’t fully capture the interconnections between food, land, environment, health, trade, and gender relations, and these omissions can mask different experiences within food systems (Levkoe & Blay-Palmer, 2018; Burchi & De Muro, 2016; Coates, 2013). Increasingly, scholars agree that a more holistic approach is needed, moving beyond traditional food security frameworks (Haysom & Tawodzera, 2018; Loring & Gerlach, 2009; Kuhnlein *et al.*, 2006). Many suggest that food systems assessments should include socio-ecological perspectives (Ruiz-Almeida & Rivera-Ferre, 2019; Chappell *et al.*, 2013), democratic decision-making that involves local stakeholders (Tschersich & Kok, 2022; Candel, 2022; Canfield *et al.*, 2021), and analyses that consider health, nutrition, land access, and traditional food systems (Jones *et al.*, 2015; Alonso *et al.*, 2018; Renzaho & Mellor, 2010). Food sovereignty is seen as a framework that addresses these connections (Levkoe & Blay-Palmer, 2018; Ruiz-Almeida & Rivera-Ferre, 2019; Morrison, 2011).

Food sovereignty assessments offer a broader perspective than food security assessments. Coined in 1996 by the global peasant movement Via Campesina, food sovereignty focuses on the right of people to access healthy, culturally appropriate food produced through sustainable methods, and on their right to define their own food systems. The 2007 Nyéléni Declaration frames it as a movement against corporate control of food systems, advocating for local economies, peasant-driven agriculture, and transparent trade that guarantees fair incomes and rights over natural resources. It calls for social relations free from oppression and inequality, emphasizing how power relations are embedded within food systems and

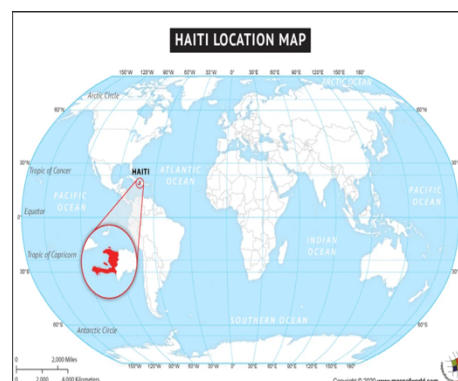
advocating for democratic decision-making to achieve goals like poverty reduction, improved nutrition, and environmental sustainability (Nyéléni Declaration, 2007; Bernstein, 2014; Wittman, 2015).

In the context of Haiti, there is growing recognition of the need to incorporate Haitian perspectives – particularly the food sovereignty aspirations of civil society and peasant organizations, which have championed food sovereignty for over a decade (La Via Campesina, 2010; Haiti Libre, 2013; Steckley & Weis, 2017; PAPDA, 2021; Daniels, 2022) – into food systems reporting. This report offers a case study of a community-based Food Sovereignty Assessment (FSA) conducted in the summer of 2024 in Massabielle, Haiti. This report has two main objectives: to document and provide an overview of the resources, vulnerabilities, and aspirations related to the food systems in Massabielle, and to present a case study of how our team has used the Food Sovereignty Assessment, to share its potential contributions to food systems research and reporting.

METHODOLOGY

This report offers a case study of a community-based food sovereignty assessment developed by a team of Haitian community partners (n=30) and Haitian and Canadian researchers (n=6). Our research team was motivated by the Government of Haiti's 2018 publication of the National Policy for Food Sovereignty, Food Security and Nutrition [*Politique et Stratégie Nationales de Souveraineté et Sécurité Alimentaires et de Nutrition en Haïti*] (PNSSANH). The PNSSANH calls for moving beyond food *security* approaches and assessments (that have historically focussed on caloric sufficiency and food access) and advocates engagement with food *sovereignty*. The PNSSANH considers broader food systems questions, including how traditional food cultures and pro-peasant agriculture are fundamental to creating healthy, economically and environmentally sustainable, and culturally enriching food systems in Haiti. After multiple workshops, our team collaboratively designed a food sovereignty assessment tool ¹, the main sections of which include Demographic Information, Food Systems, Land and Resource Access, Community, Food and Health, Food and Power, Food and Environment, Health Inventory, Food Security, Gender, Food Culture, and Future Visions.

Using our Food Sovereignty Tool, interviews were conducted between June and July 2024 in Massabielle, a remote village on the bank of the Limbé river in the Limbé commune of Haiti's North department. Informed consent was received from all participants (n=29). Interview data was recorded by completing the food sovereignty tool questionnaires by hand and were transcribed into an online version of the tool post-interview to share data with research team members. Data was analyzed manually and included both frequency distribution and the coding of qualitative responses, which was done through meta-theme categorizations that matched the food sovereignty tool sections (see sections noted above).



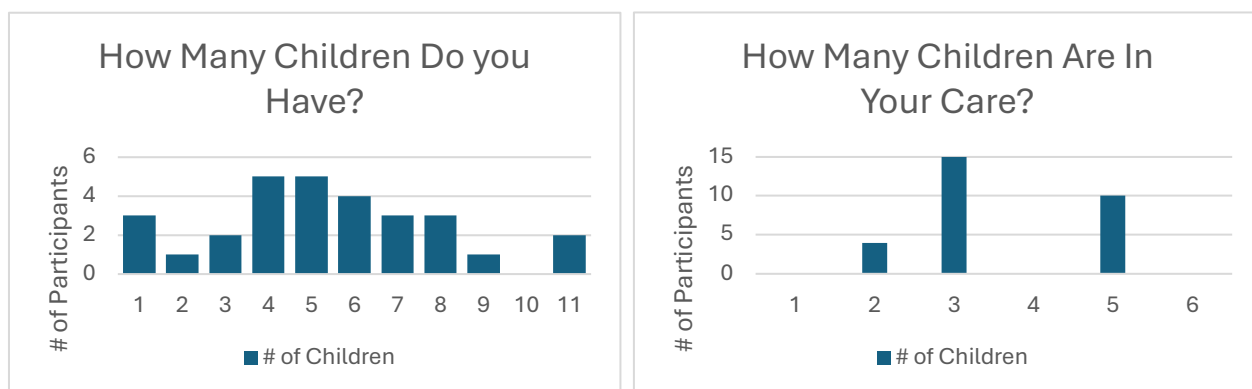
¹ For a more detailed overview of the food sovereignty assessment tool, including information on its impetus, development, and an overview of its key sections see Steckley et al. (2024).

RESULTS

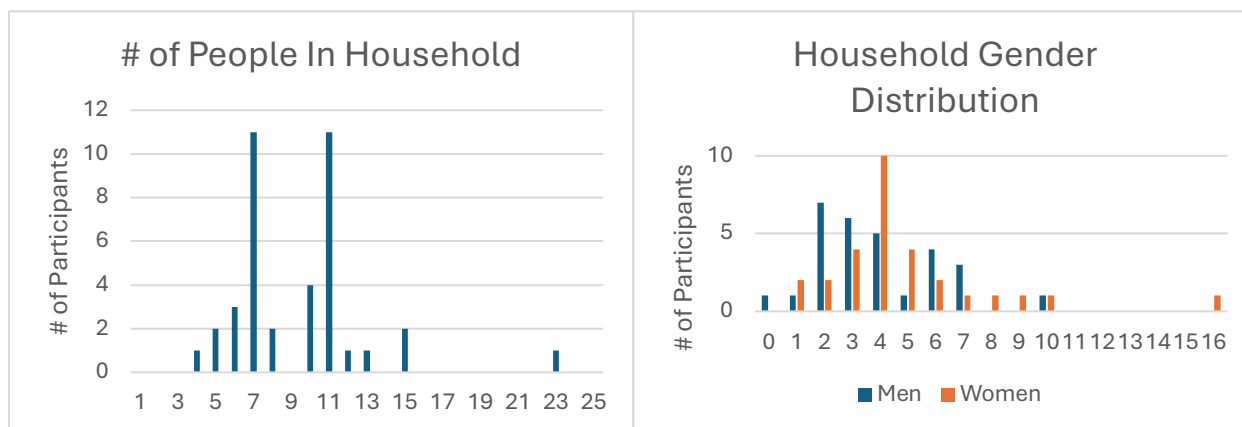
DEMOGRAPHIC INFORMATION

Participants in our study ranged in age from 25 to 74 years old, and interviews were conducted with 12 men and 17 women. For context, in 2024 the median age, and life expectancy in Haiti were 24 and 65 years, respectively. Ninety-seven percent of participants were born in Haiti's North Department (with one person born in the Artibonite Department), and 27 percent lived in Massabielle, with two living in Camp Coq and Acul Jeannot. Forty-five percent of participants were married, and 55 percent were in *plasaj*² relationships. While some have emphasized that *plasaj* relationships remain the most common union in rural Haiti, it is notable that this was not the case among participants (Beverly Bell 2013, 22; Moral 1961, 172). The social significance of relationship distinctions of different intimate relationship types in Haiti is also worth noting. Specifically, legal marriage tends to carry more social prestige, and both women and children outside of the primary relationship with a male are often denied inheritance rights.

Intimate partner relationships bear heavily on household composition, an important dimension of household food insecurity and systems assessments. In many contexts, including Haiti, there is often a gap between the number of children individuals have and the number of dependents they support. To illustrate,



² The term *plasaj* is conceptually thorny and describes a range of relationships that cannot be easily categorized. The term *plasaj* [literally, placed] stems from colonial slavery, when food provisioning was difficult and enslaved people were sometimes allocated small, often disconnected, plots of land to cultivate, called *plas a viv* [provision grounds]. These land parcels were often marginal, and remote and men were considered the primary landholders. Still, female partners often tended the land and cared for children while men laboured on sugar plantations. In this sense, women were said to be “placed” on the land as guardians (Moral, 1961; Nicholls, 1985). Following Haitian independence in 1804, these relationship patterns continued in different forms. The custom was for men to carry the responsibility of providing and furnishing a house for their partner and children, and it was common for a man with more resources to have several land plots, and so multiple *plasaj* relationships. Some scholars have emphasized the polygamous nature of male-female unions in rural Haiti (Paul Farmer 1998), some refer to *plasaj* relationships as a form of conjugal union (Barbara de Zalduondo & Jean Maxius Bernard 2013, 164), and others use the term *plasaj legal* (legal *plasaj*) to describe legal civil unions administered outside religious institutions (Accilien, 2008).



participants in Massabielle had an average of 5.6 children but 8.8 people in their households. Put differently, roughly nine people per household ate from the same cooking pot³. Women were also overrepresented in most participant families, among participant households, there were 140 women and 119 men.

Concerning education, roughly 70 percent of participants indicated that they had finished primary school, a completion rate much higher than the national average, which is roughly 30 percent (Haiti Now, 2017). And 20 percent of participants said they had completed secondary school, which was in line with the national average. Ten percent of participants never attended school.

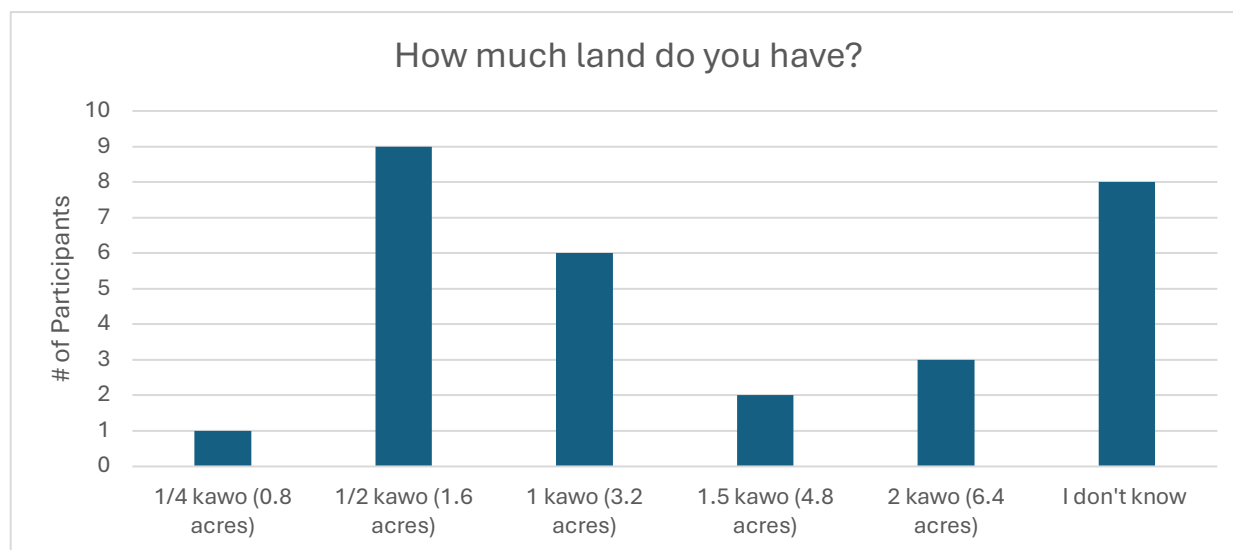
Overwhelmingly, agriculture was the main livelihood activity, with 90 percent of participants expressing that this was their main economic activity in the past year. One respondent expressed that they were a teacher, one reported that their main activity was to *fè komès* [literally to do marketing/commerce], and one described that their main role was caring for children. Sixty-two percent of participants said their work changed seasonally. For example, participants said: “When the rainy season comes, I have to do other things”, “My economic activities respond mostly to the agricultural seasons”, and “My main livelihood is agriculture, but when I’m not doing that, sometimes I work as a day labourer in construction [housing].” One respondent described that they *fè komès* but stipulated that, “When the planting season arrives, I leave my little activities to devote myself to agriculture.”

FOOD SYSTEMS, LAND AND RESOURCE ACCESS

Land access and ownership are problematic in Haiti for a few reasons. First, access to sufficient and good quality land is limited: 41% of participants in Massabielle said they had difficulty accessing land, with one participant explaining that “The majority of the local population has no access to land.” For those with land, many struggle with having very small and often disparate plots: the ownership of several non-contiguous land holdings is indeed quite common in Haiti. In our study, some participants (n=8) were not able to say how much land they had because they had multiple plots in a range of places, and their land had never been formally measured. As one participant put it, “I don’t know how much I have. My land is in several pieces”. Among those who could describe the size of their land plots, land holdings ranged from .25 to 6.5 acres, roughly in line with a World Bank survey that reported average landholdings of 4.2 acres in Haiti (Joseph

³ Some have suggested that a household in Haiti tends to be understood as those who “eat from the same cooking pot”, rather than household sleeping conditions (Alvarez and Murray, 1981).

et al., 2023). At a national level, roughly 50 percent of farmers have less than 1 acre, and only about 20 percent of farmers have more than three acres of land (Joseph *et al.*, 2023).



For those who described owning land, ownership largely reflects informal holdings. That is, most rural dwellers have customary, but not legal, rights to their land parcels. Informal tenure complicated participants' ability to report on the amount of land that they have. For example, one participant said, "I can't tell you precisely the amount of land I own because the land doesn't have a deed, and we don't have surveyors." Haiti does not have a comprehensive land tenure system, and only about 5 percent of land in Haiti is formally registered in the national land cadastre (The Earth Institute, 2012; Comité Interministériel d' Aménagement du Territoire, 2015). This means that most rural Haitians tend to have *de facto* ownership and do not have a land title that would ensure their legal rights to their land. As a result, land transactions and exchanges tend to happen informally. Insecure tenure has indeed caused conflict, land grabbing and peasant dispossession in many places in Haiti (Dolisca *et al.*, 2007; Steckley and Shamsie, 2015; Lopes, 2016). Yet, at the same time, customary rights have a history of being respected in many rural communities and are often more reliable and trusted by peasants than the statutory system (Smucker, White and Bannister, 2000). For most participants in our study, land rights and conflict over land were not a concern. Still, 10 percent of participants described land grabbing as a community problem and a threat to peasant agriculture. Some also reported familial disagreements over heritage and inheritance rights.

Insecure tenure has important ramifications beyond local land disputes. Insecure tenure can undermine environmentally friendly land management practices, impair disaster and emergency responses to crises, and limit state and humanitarian willingness to invest in large-scale irrigation projects (Dolisca *et al.*, 2007; Steckley and Shamsie, 2015; Lopes, 2016). Indeed, only one participant in our study had irrigated land. Although lack of irrigated land has long been expressed as a significant barrier to peasant agriculture and food security – only about 10 percent of agricultural cropland in Haiti is irrigated (USAID, 2010) – irrigated land is of higher value, and irrigation projects can, therefore, increase land claims and cause land conflict (Steckley and Weis, 2017). In Haiti, the overall lack of agricultural infrastructure, including irrigation systems, entails a heavy reliance on rain-fed agriculture, which significantly undermines national production (Joseph *et al.*, 2023). In this way, land tenure security, peasant production, and food security are connected in important ways. Indeed, 70% of participants expressed that the lack of access to water and irrigation systems was a major barrier to peasant production.

Seed security is also a significant problem in Haiti, and a lack of access to quality seed undermines national agriculture (Joseph *et al.*, 2023). Three-quarters of participants identified that the lack of access to seeds was a recurrent problem, and 93 percent expressed that they had experienced being unable to plant because they lacked the means. Two participants put this plainly, saying: “We don’t have enough means to plant or cultivate,” and “One of the biggest challenges I face is the lack of financial means to buy seed.” At a national level, roughly 98 percent of seeds used by Haitian farmers come from informal sources, and certified, improved, and imported seeds make up only a small portion of seed use. Roughly 15-20 percent of seeds come from harvests or grain stocks (rather than being produced separately), and most seeds are sold and purchased at local markets, with some also traded or shared among community members (USAID/Office of Foreign Disaster Assistance, 2010). Seed purchases cost farmers an average of USD\$ 60 to USD\$ 70 seasonally, a significant expense, particularly given that Haiti’s GDP per capita is US\$ 1700 ((World Bank Group, 2024). Given that many have recommended the development of small farmer-driven seed production, saving and marketing systems, the control and management of local seed distribution in Haiti suggests that farmers and communities may be well poised to take up such projects. The challenge, however, has been the lack of investment and state support for seed innovation, plant breeding activities, and local seed saving and distribution networks.

In addition to the importance of land, irrigation, and seed resources, transportation systems and mobility are important parts of food systems, food exchange and provisioning. At a broad level, only about five percent of rural Haitians have access to paved roads (Greenstein, 2012). Vehicle access is also extremely limited: there are approximately four passenger vehicles for every 1,000 people, but those are concentrated in urban areas (HelgiLibrary, 2024). Unequal access to transportation has a long history in Haiti, with both the state and development organizations prioritizing urban elites and export interests in road construction (Yarrington, 2015). The lack of access to transportation infrastructure and mobility opportunities for rural dwellers has seriously constrained access to education, employment opportunities, and health resources, but poor transportation infrastructure also exacerbates food insecurity and significantly hinders food mobility and distribution, undermining farming livelihoods (Stokenberga *et al.*, 2023). Notably, in our study, 96 percent of participants said they did not have a reliable form of transportation, and most had a difficult time accessing the nearest market: two-thirds of participants get to the market on foot, and one-third rent a moto-taxi.



The challenges of food mobility and exchange are exacerbated by the lack of food storage infrastructure in Haiti, both at the national and household level, and the lack of food distribution and storage infrastructure severely undermines food security. Roughly 50 percent of fresh foods, and in particular fruits and vegetables, spoil before they reach the market (Joseph *et al.*, 2023) and the limited farmer access to appropriate transportation infrastructure (refrigerated and food packaging that prevents bruising and spoilage) is a barrier to accessing urban markets (Eckert and Latané, 2017). At the household level, food storage options (like silos or depots) are also extremely limited, and household refrigeration is virtually non-existent in rural areas. Indeed, 90 percent of participants in our study did not have the means to store food after harvesting. As a result, farmers are forced to consume or sell agricultural goods immediately, or they lose their harvest and income. The persistent lack of ability to store food in Massabielle

and, more broadly, in rural Haiti also entails a low availability of fruits and vegetables at markets, increasing the prices of those products that are of good quality.

COMMUNITY FOOD SECURITY

When asked what nutritious eating and healthy foods meant to them, participants recurrently said that nutritious foods are natural, enhance strength, have a lot of vitamins and protect health. For example, one participant described their perception of healthy foods in clear terms: “Nutritious foods are natural foods that have lots of vitamins. They have no chemicals, and they are very good for your health”. Another said, “Nutritious food for our area means healthy, natural food that gives people energy and strength.”

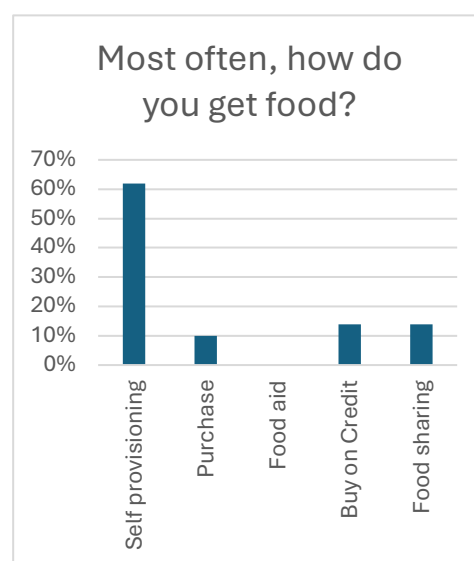
Participants were asked to describe their diets, and while most said they did not have a specific diet, many described general daily food habits. For example, participants said: “Usually in the morning, I drink coffee. In the afternoon, I eat yam, banana, or rice”, and “Usually, when I get up, I have coffee with either cassava or bread. Then I have banana, yam or corn with avocado or herring. When it's mango time, I eat some of those too”, and “Generally I drink coffee or hot chocolate, then in the afternoon I eat tubers.” Many expressed that tubers are a common food for them.

When asked how people in Massabielle learn about how to make healthy dietary choices, there was a strong consensus that nutritional wisdom comes from family legacies, cultural heritage, and generational knowledge. Participants said:

- “It's a legacy that our grandparents left us.”
- “Our grandparents taught us which foods are nutritious, and which are not. For our grandparents, generally, foods grown underground contain a lot of vitamins. p Then, products that contain milk, like breadfruit, are very energetic. We follow the advice of our grandparents to choose nutritious foods.”
- “Most people identify nutritious foods based on our culture and the practices of our grandparents.”

Participants described that to ensure a healthy diet: “We choose local foods,” and “We choose foods that are natural.” One participant put it simply: “If it's kreyòl [Haitian] food, we know it's good.” It is important to note that food wisdom and healthy food knowledge were not expressed as concerns by participants in our study. Indeed, one participant was emphatic, “We know what good healthy food is!” Instead, food sufficiency was described as a key problem.

At the national level, the main source of people's food provisioning is through their food purchases. Still, roughly 40 percent of the population relies on subsistence agriculture to meet their consumption needs (Thomas, Rosenberger and Pawloski, 2014), and this holds in the North Department as well (Pressoir *et al.*, 2016). In our study, most participants (62%) expressed that they mainly grow their food, and participants also described engaging in food-sharing practices. Still, for many, their food supply is insufficient. When we asked participants whether people in their community receive adequate food daily, all participants expressed that people suffered from hunger and said there was not enough food in their community. Participants said things like:

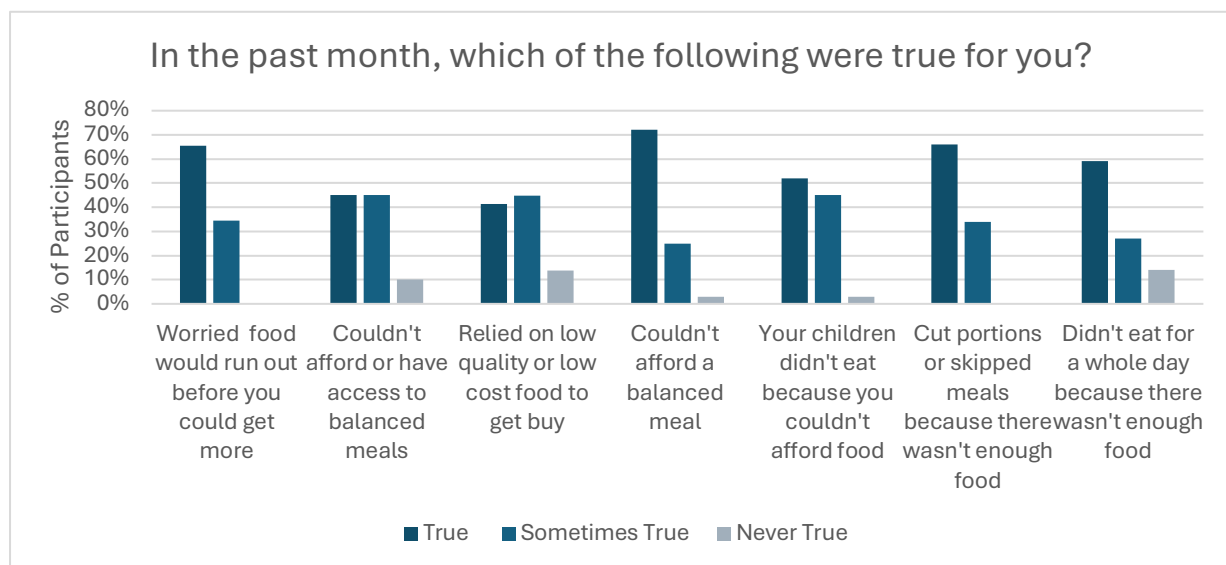


- “Many people in the community have to resort to begging.”
- “Not everyone in the community has access to the necessary food every day. Some of them are in famine.”
- “No, we don’t have enough food. Many of us are starving because we have no means to live.”

For over half of the participants in our study, accessing food is a challenge. One participant expressed this in clear terms: “Feeding myself every day is difficult for me.” Many also described experiences of hunger and food insufficiency, noting that the price of food was one important cause of food insecurity, but also emphasized connections between hunger and poor agricultural outcomes, saying:

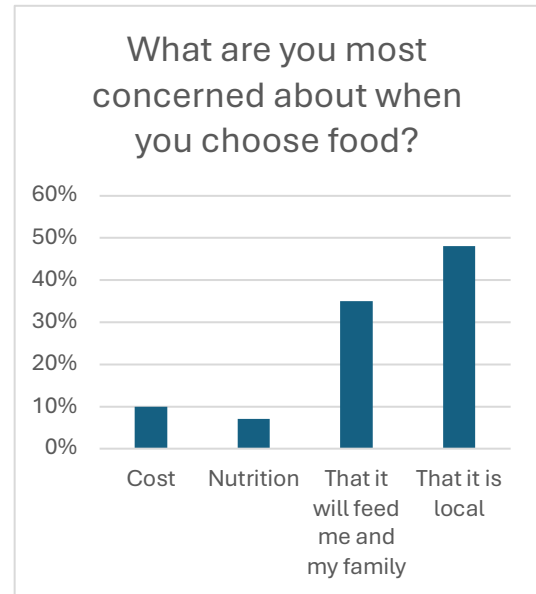
- “In our area, even though farmers work a lot, we don’t have the food that we need. I know people who cannot feed themselves daily.”
- “Because we lack equipment and financial means and because of the frequent droughts, we don’t have the necessary food available in our community. Some families can’t eat after losing their harvest.”
- “In our area, farmers work hard. Before the harvest period, though, people really suffer. And not everyone has the same profitability during harvests. Some people die of starvation only two weeks after their harvest”.

While participants had uneven experiences of food insecurity, all described worrying that their food supply would run out before they could access more. Participants also recounted various coping mechanisms to deal with hunger and food insufficiency in their homes, including choosing cheaper, lower-quality foods, skipping meals or abstaining from eating for over a day, and reducing portion sizes.



One participant emphasized that the situation is sometimes so bad that people are compelled to sell their land and migrate elsewhere to earn a living. But sometimes, they said, even this does not solve the problem. As one participant explained, “People are dying of starvation in the community. And some people who sold all their land to try to move away ... they didn’t succeed. They had to return here. But now they have no land to work”.

It is important to emphasize that despite food insufficiency and hunger, participants expressed that food quality and source remain extremely important to them. Nearly 50 percent of participants were not comfortable with the quality of the food they regularly consume, and 28 percent expressed concerns about potential chemicals in their food. Participants were particularly worried about the quality of imported and processed foods. And even though 35 percent of participants said that they were most concerned about accessing food that could fulfill the needs of their family, 50 percent said that the most important thing to them was that their food was locally sourced. Participants expressed that they feel good and strong both when they eat regularly and when they consume local products, saying things like: “When I can eat during the day, I feel good, I feel peaceful,” and “When I eat for a day, I feel comfortable, especially when I eat local foods.”



FOOD, POLITICS, AND POWER

Before the 1980s, Haiti produced roughly 80 percent of the food consumed in the country (Joseph *et al.*, 2023). Structural adjustment policies were imposed in Haiti in the late 1980s and early 1990s, and tariff levels on many food imports plummeted. For example, tariffs on rice dropped from 50 to three percent, on maize from 50 to 15 percent, and milk and eggs from 40 to zero percent (Steckley *et al.*, 2023). Today, Haiti has some of the lowest tariffs on imported foodstuffs in the world (Pressoir *et al.*, 2016). These policies severely undermined national agricultural production and peasant livelihoods: today, food imports make up approximately 50 percent of goods consumed in Haiti, and Haiti imports about 20 times more agricultural products than it exports (Pressoir *et al.*, 2016). Put differently, in 2025, food imports to Haiti are triple what they were in the early 1990s, and consumption patterns have changed radically: the consumption of imported condensed milk, chicken, vegetable oil, packaged snacks, and processed meats have all increased (Pressoir *et al.*, 2016). In interviews, participants were asked to describe any historical examples of events that had disrupted or altered their community food systems and to share any food system changes that they had noticed over the years. Participants recurrently described the increasing prevalence of imported foods in local markets. For example:

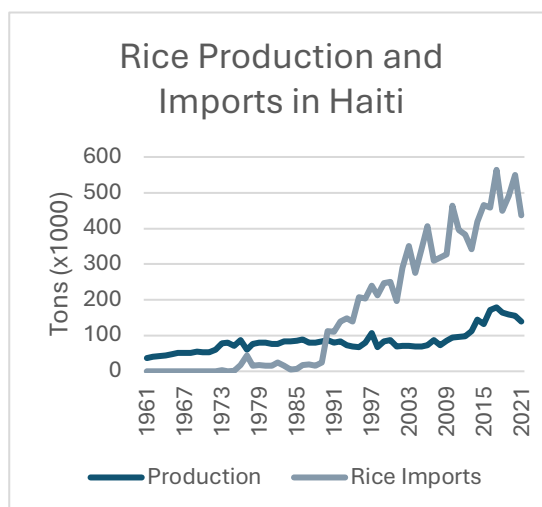
- “Our food system has changed because of the arrival of imported food products in the community. This represents a threat to local production.”
- “Imported products are negatively impacting our health.”
- “Because of customs policies, the Haitian market is invaded by foreign products. This has caused changes to the food in our community. Local products can’t compete with those coming from abroad.”

Many people gave specific examples of dietary change, saying, “There are many things that people are now eating that didn't exist before. Today, many families eat rice and fried chicken every Sunday. That didn't happen before,” and “With the arrival of imported products in the community, people eat rice every day.” Indeed, the consumption of rice has increased threefold since the 1990s, and rice is now primarily imported. Another participant said,

“For some time now, certain foreign products like sausage have invaded our area. Many people consume a lot of those things instead of herring. Before, we didn't eat rice every day. But today, some families only eat rice with chicken every day.”

These statements align with the broader trade context: the consumption of Dominican sausage increased over 30 times since the 1990s (Pressoir *et al.*, 2016). The story of rice is even more stark. In the mid-1980s, Haiti produced roughly 86 thousand tons of rice annually and imported about 7 thousand tons. However, after structural adjustment, domestic production stagnated, and imports rose year on year, reaching 550,000 tons in 2020 (FAO, 1996).

NGOs have also exacerbated Haiti's food import dependence, undermined local production and contributed to rural-urban migration in Haiti (NYU School of Law Center for Human Rights and Global Justice *et al.*, 2010; Steckley and Weis, 2017). In the mid-1990s, the United States, France, and Germany sent an average of 123,600 metric tons of food aid to Haiti annually, and from 1990 to 2010, 1.5 million tons of food grown in the United States went to Haiti as emergency and development food aid (NYU School of Law Center for Human Rights and Global Justice *et al.*, 2010; Schwartz, 2015). This influx of free imported foods reduced prices for locally produced staples, including rice and millet, and undermined local production. In many cases, food aid has been inappropriate, of poor quality, and has not aligned with the Haitian food culture or preferences (NYU School of Law Center for Human Rights and Global Justice *et al.*, 2010).



Despite the high prevalence of food insecurity in the North Department and the Limbé commune, in our study, all participants said that there had never been a food aid program in the area: none had benefited from the assistance of NGOs. Still, participants had strong perceptions of food aid. When asked if food provided by NGOs is healthy, nutritious and suited to people in their community, 96% of participants said “no.” And despite never receiving it, participants had strong opinions on food aid, with one participant saying, “I heard from others that the food donated by NGOs, that comes from other places, it's not of good quality.” Many participants expressed concern or distrust of food aid, with participants saying things like:

- “Food aid contains chemicals that harm health.”
- “Food aid programs bring disease and pollution.”
- “Food programs bring contamination and illness.”

While participants recognize the need for more food in their communities, it is important to emphasize that they are not looking for *any* food. Participants articulated in clear terms that they needed support but emphasized that food aid and food systems programming should support local agriculture and Haitian food culture.

FOOD AND ENVIRONMENT

Participants overwhelmingly described clear connections when asked about their perceptions of the relationship between food and the environment. One theme of comments reflected participants' thoughts about environmental health and food production. For example, participants said:

- “It is the environment that nourishes us. If it is sick, the food will also be sick.”
- “Our food comes from the depths of the earth. If she is sick, she can't give us anything to eat.”
- “A sick environment can only produce sick products. The environment is the basis of all food production.”

Participants also described that dietary choices have environmental and health implications. For example, one participant said, “Of course, there is a connection! Some foods people consume are poisonous for people's health and for the environment.” Another commented, “If we don't eat well, it causes health problems. And if the environment is polluted, it can also cause health problems.”

When asked to describe any environmental changes or challenges that they have noticed or experienced, participants reported a range of concerns, including drought, soil erosion, flooding, landslides, worsening hurricane seasons that ravage agriculture and kill animals, extreme weather, the disappearances of some animal species, the increase in overall temperature rises and more acute heatwaves, plastic pollution and a lack of waste disposal processes. Many participants also described the rise of crop-destroying pests and diseases (particularly *maruca vitrata*, or bean pod borer] but also *tiyogann* [*cylas formicarius*, or sweet potato weevil] and caterpillars. Indeed, in 2024, the Haitian government was warning of anthrax in animals in some parts of the country and encouraged farmers to have their animals vaccinated, but many lack access to vaccinations. Participants noted that these pests and diseases negatively impact human health and the environment, cause enormous crop losses, and threaten the viability of peasant agriculture.

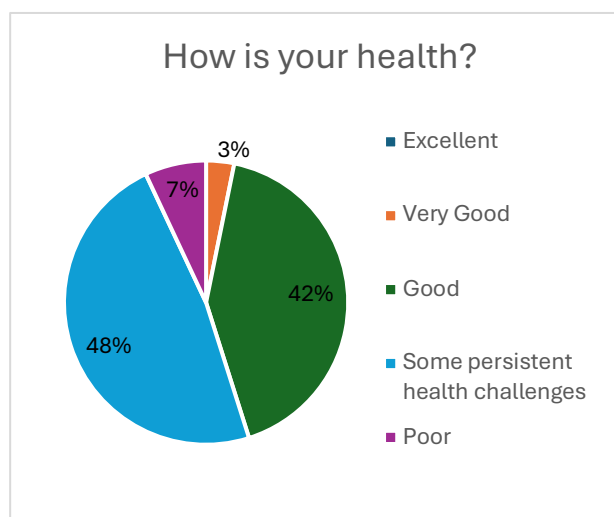
Participants are acutely aware that many environmental changes that they witness are related to climate change. When asked to describe threats to peasant agriculture, 97% of respondents cited climate change. Indeed, Haiti ranks third worldwide in the long-term climate risk index (David Eckstein, 2021) and there is widespread recognition that climate change is a major barrier to food security in Haiti (Singh and Cohen, 2014; Steckley and Steckley, 2023). Participants said that climate change represents a significant cause of food system disruption and environmental change in Massabielle, saying:

- “Climate change is a major problem for the community, and climate change is having serious consequences.”
- “Climate change is driving the transformation of the food system and the environment.”
- “Climate change is transforming our food system. It reduces the quantity of local production.”

When asked if the environmental impacts of agriculture are considered by decision-makers, 100 percent of participants said “No.”

HEALTH INVENTORY

Notably, no participants described being in excellent health, and only 3 percent described being in very good health. Forty-two percent described being in good health, and half experienced significant health challenges. While the food sovereignty assessment probes about weight and height, most (70 percent) did not know their weight or height. Still, when asked to offer a subjective assessment of their weight, most (62 percent) considered that they were of a healthy weight, with seven percent of participants considering themselves overweight, and a concerning 31 percent considered themselves underweight. In terms of health concerns, participants described that they struggle with a range of problems: fever, typhoid, eye problems (glaucoma, cataracts), H. Pylori, cholera, chronic pain, migraines, fatigue and weakness from lack of nutrition.



In addition to individual health concerns, we probed about some health conditions common in Haiti, and participants indicated that high blood pressure, heart disease, thyroid issues, and fibroids are challenges, but anemia was the most cited problem, with 73 percent of participants expressing that anemia is a concern in their community. Haiti has one of the highest prevalence rates of anemia in the world, and the condition is highly gendered: roughly 50 percent of Haitian women between the ages of 15 and 49 suffer from anemia (Palacios *et al.*, 2021). We also asked participants to describe other health concerns that they were worried about in their community, and in qualitative responses, participants cited a range of health issues that cause them concern: typhoid, H. Pylori, diabetes, eye problems, fever, cholera, migraines, the flu, diarrhea, hypertension, and prostate issues. The most mentioned conditions were H. Pylori and typhoid. H-Pylori is significantly linked to socioeconomic status, close living quarters and lack of access to sanitation infrastructure, including clean water and sewage services: some have dubbed it a “silent epidemic” in rural Haiti (Louis *et al.*, 2021). Typhoid is also caused by contaminated food and water and is prevalent throughout Haiti. In fact, in 2024, the Haitian Ministry of Health reported 1200 cases weekly (CDC, 2024). In terms of sanitation facilities, open defecation is an important public health challenge in Haiti, and a lack of access to latrines increases susceptibility to a range of diseases, including cholera and typhoid. In our study, roughly 29 percent of participants expressed that they do not have access to a latrine at home, this is roughly in line with national latrine access rates in rural Haiti (Paul *et al.*, 2022). Indeed, participants in our study recognized that the lack of sanitation infrastructure and limited access to potable water were causes of community health problems.

In addition to limited sanitation infrastructure, participants overwhelmingly reported (82 percent) that the lack of access to healthy foods exacerbates health problems in Massabielle. When asked if the food that participants eat addresses their health needs, 55 percent said “No,” explaining their position by saying things like:

- “The lack of food is a problem that is the basis for some diseases in our community, like anemia.”
- “The foods we consume worsen our health because many of them contain harmful ingredients.”
- “The disease H. Pylori is a dietary issue.”

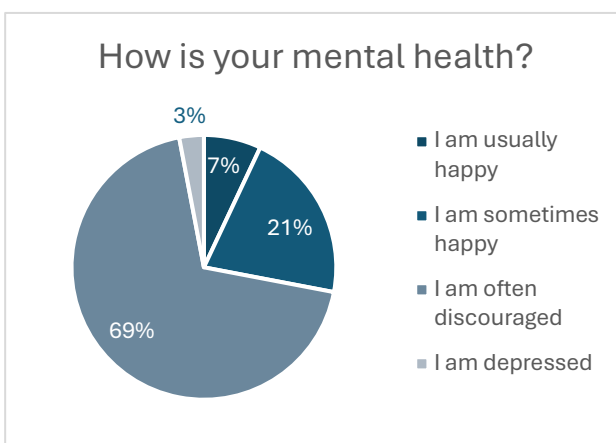
Many participants also linked poor-quality food, and disease prevalence to imported and processed foods, saying:

- “It was with the arrival of imported products that we began to face new diseases.”
- “Imported products prevent us from living healthy.”
- “The consumption of imported foods aggravates the health problems of community members.”

Overall, 90 percent of participants felt that access to more food and healthier foods would positively impact their individual and community health issues.

In addition to individual and community-level health concerns, participants expressed significant obstacles to accessing healthcare, emphasizing the lack of hospitals and clinics, and the inability to pay for healthcare services as central challenges. In concrete terms, roughly three-quarters of participants said that in the past year, they had avoided seeking medical care because of cost. When asked which health services participants tend to consult when they can seek health support, 93 percent said they consult a Western medical doctor, 45 percent said a *medsen fey* [leaf doctor/traditional herbal doctor], and three percent said a *fanm saj* [wise women/midwife].

Participants were also asked about their sense of community, belonging and mental health, which scholars tell us are connected to food security (Jones, 2017; Pourmotabbed *et al.*, 2020; Trudell *et al.*, 2021; Saputra *et al.*, 2024). Overall, the majority (59 percent) of participants had a strong sense of belonging in their community, and 38 percent described their sense of community as “somewhat strong”. Participants also tended to feel somewhat satisfied with their lives (71 percent), but most (69 percent) also said they are often *dekouraje* [discouraged/depressed], with 3 percent saying they are depressed. A concerning 57 percent of participants also said that most days they experience extreme stress and another 25 percent experience stress daily.



GENDER AND FOOD

Gender impacts food security in complex ways, with land rights, household food distribution and gendered illness all bearing on women’s food access. In terms of land distribution, all participants said that men and women have equal land rights legally, and that men and women have rights to inherit equal amounts of land. Yet, 68 percent of participants also said that men tend to be prioritized for land inheritance. Indeed, scholars have shown that daughters tend to be less tenure secure on inherited land than sons (Kelly, Deaton and Amegashie, 2019). While 90 percent said that there are no social gender preferences that manifest in other ways, 10 percent of participants said that when there is not enough money to send children to school, boys tend to be prioritized.

When asked if gender impacts health, 70 percent said “No”. Most participants believed that men and women suffer equally and recognized that many illnesses impact both men and women (with participants citing Typhoid and H. Pilory, as examples). Still, some expressed that women suffer from more health problems. For example, one participant said, “Almost all members of the community suffer from

typhoid and H. Pylori, but women are more vulnerable.” Some also noted women’s disproportionate health challenges relating to reproductive health and childbirth. For example, one participant said:

“When it comes to health, women suffer more than men, especially during childbirth. We do not have a hospital in the community. We have to carry women to town on a make-shift bed for them to give birth.”

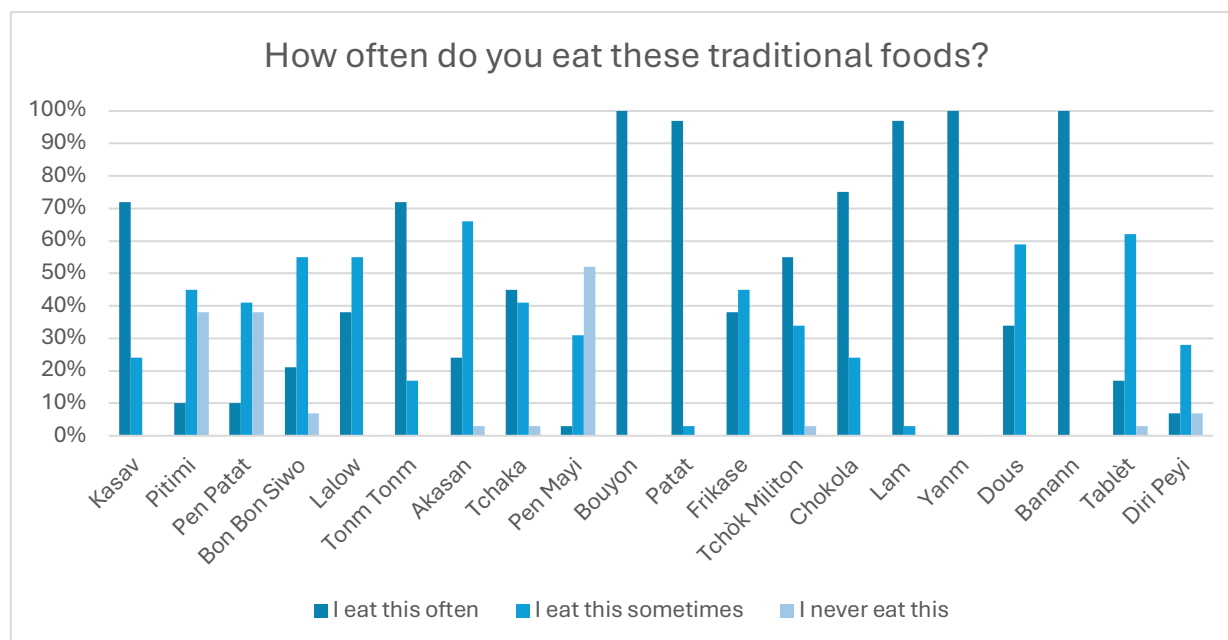
Other questions also revealed gender imbalances that may impact health. For example, while men and women are both engaged in agriculture and most participants (65 percent) said they are equally exposed to chemical pesticides and fertilizers, 35 percent of participants said that men are more exposed to agrochemicals. Household food distribution is another example: most participants described that women tend to be responsible for food preparation and distribution, but men are given more food and are the priority. Participants said things like:

- “I’m the one who prepares the food and eats first. But I give more meat to my husband.”
- “Of course, it’s the man who has priority for food.”
- “In the house, men eat before everyone else and receive more food. Afterwards, there are the children. Women eat last.”

Household food distribution is an important indicator of female food security, and the prevalence of anemia in rural Haiti, particularly among women, is a significant concern. Anemia is strongly influenced by diet, and the fact that household food distribution – and meat particularly distribution– is highly gendered, may impact rates of anemia among Haitian women.

FOOD CULTURE

When asked to describe traditional foods, participants mentioned: yams, plantains, taro, maize, manioc, sweet potatoes, beans, breadfruit, rice, and mangoes. These make up the bedrock of the Haitian diet (Pressoir *et al.*, 2016). Participants also mentioned prepared dishes like *tchaka* [a stew made from maize, beans, pumpkin and meat], *tchèk* [Bluggoe banana], *tonmtonm* [a dish based on mashed breadfruit], *mayi moulèn* [a savory cornmeal-style porridge], *bouyon* [stew], *sòs kalalou* [okra sauce], *mousa* [based on



mashed cassava and pigeon peas], *doukounou* [sweet cornmeal pudding], and *banbocha/kasav* [cassava flatbread]. These dishes and foods aligned with those that participants said were grown in the community. We asked participants how often they eat these, and other traditional Haitian foods, and participants most commonly consumed *lam veritab* [breadfruit], *yam* [yam], *patat* [sweet potato], and *bannann* [plantain].

Overall, most (66%) said that the food they consume aligns with their traditional food systems. Dishes with tubers and plantains were the most reported foods consumed, while foods like *pen mayi* [corn bread], *pen patat* [sweet potato bread] and *pitimi* [sorghum/millet] were consumed less regularly. When asked about their knowledge of many traditional foods, many participants said that local rice is quite expensive, and many wanted to know more about how to make *pen patat*, and *pen mayi*.

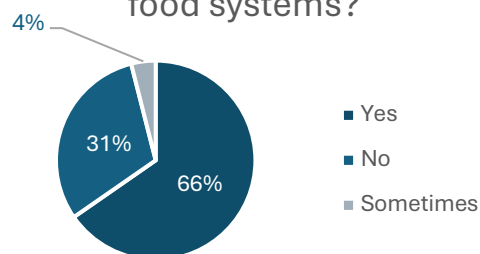
Three-quarters of participants said they eat traditional foods as much as they like, and most (60 percent) said their community wanted to preserve traditional foods. Participants said things like:

- “Yes, we want to preserve traditional cultural foods, that’s why we continue to work the land,” and
- “We want to preserve traditional cultural foods, it’s our identity.”

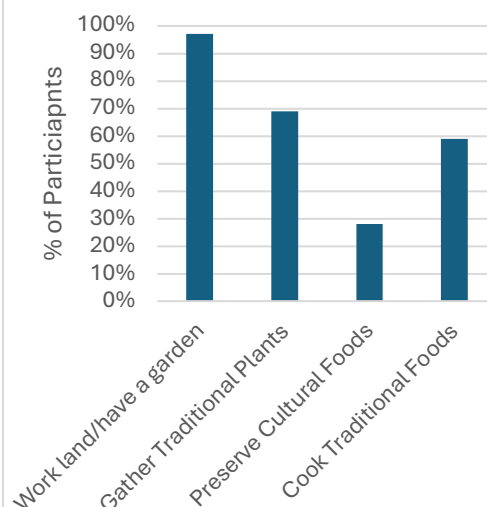
Many participants are, indeed, engaged in traditional food activities, cultivating land, cooking traditional foods, and gathering and preserving traditional and wild plants. However, some also expressed concern that traditional foods are not being prioritized enough, both by consumers and by NGOs and the state. Participants (66 percent) expressed concern that traditional agricultural practices and crops are eroding in their community. For example, participants were worried that crops like millet and local rice are being lost. Indeed, at the national level, the consumption of corn, cassava, yams and plantains is decreasing and imported products like palm oil, chicken and rice, among others, are on the rise (Pressoir *et al.*, 2016).

This has not only impacted rural diets, and health but also religious practices. While most (55%) indicated that ceremonial foods are available in Massabielle, 38 percent of participants said that the foods that they need for ceremonies are not available in their community, and seven percent indicated that they are available only intermittently. Further, many who indicated that the foods for ceremonies are available also stated that people often don’t have the means to buy them, and many also said that they are obliged to travel to Limbé to buy food for ceremonies.

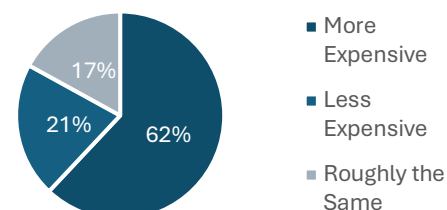
Does the food you eat align with your cultural heritage and traditional food systems?



Traditional food activities



Are Ceremonial Foods More or Less Expensive than Other Foods?



When asked about the barriers to consuming traditional foods, many (40 percent) said that they are too costly. Participants emphasized that local rice is very expensive, and many said that although they desire to eat local foods, there are significant barriers. As one participant put it, “We have the will, but it’s a lack of means that prevents us from consuming them”. Some described that the place where they used to source traditional foods had been developed or taken over (12 percent), many also said they did not know where to get some local foods (8 percent) and some indicated that they didn’t know how to make traditional dishes (4 percent). Participants also said that some local and traditional foods are seen as taboo, with 40 percent of participants saying there is social discrimination towards local foods. For example, participants said:

- “I often chose to eat imported products because people say disparaging things about local products.”
- “Sometimes I don’t eat *pitimi* [sorghum/millet] because people say that it’s chicken food.”
- “Often, because of people saying negative things about local foods, our children do not want to eat local products.”

FUTURE VISIONS

When we asked to describe their community needs and their visions for improving healthy food systems, participants said they would benefit from various kinds of support, including support for water, seeds, tools and fertilizers; land reform and land access; agricultural credit and banking services; access to agricultural experts and technicians to provide training and help with problem-solving when problems arise; a cultural centre and to work on mutual solidarity; and for rural development and food systems programming to support peasants and peasant agriculture. Participants also emphasized that to protect traditional foods, people need to value them and need to be able – to have the means – to consume local traditional foods. To accomplish these goals, supporters could help raise awareness about: the value of local foods (including local food and producer promotion and advocacy); the benefits of avoiding chemicals and how to avoid chemical products and agrochemicals; and could help teach children to value them. As one participant put it, “To better protect traditional Haitian foods, we must cultivate them, consume them, and teach our children to love them.” At a broader level, participants also expressed the need to stop imported products from invading the community, to create agro-food centers that celebrate traditional foods, and to establish agricultural banks that support local farmers and products. Participants also noted the need to improve production and access to traditional foods.

When asked who is currently working to solve the food problems in their community, participants were given some options (NGOs, the state and community organizations), but participants overwhelmingly said that peasants and members of the community were the main actors in solving the community’s food problems. For example, people said things like: “It’s only the peasants who are working on these things”, “No one else but peasants”, and “Farmers are the main actors in the matter of food in the area”. Only one participant mentioned the state, and no one mentioned NGOs or humanitarian organizations.

Finally, when asked if there was anything they would like to add, participants again emphasized the lack of means in their community, and called for more support:

- “We want to have the means to work”.
- “We need food aid in our community”
- “We hope that the state will give us their assistance.”
- “We need help.”

CONCLUSION

The barriers to food security and food sovereignty in Massabielle, and in Haiti more broadly are significant. Participants in our study highlighted several key issues, including climate change, inequitable food distribution based on gender, health and mental health concerns, food safety risks, limited access to land and water, the erosion of traditional foods, and trade and humanitarian policies that reinforce dependence on imported foods at the expense of local food systems. Haitian peasant and civil society groups have been advocating for food sovereignty for more than a decade (La Vía Campesina, 2010; PAPDA, 2021). But there is a growing paradigm shift in Haiti: the values and goals of food sovereignty are increasingly being embraced beyond grassroots movements. In 2018, the Haitian government published the PSNSSANH (Government of Haiti, 2018), marking the first time that language and core values of food sovereignty were taken up by the state.

Mainstream food security analyses in Haiti often emphasize statistics on hunger, declining crop yields, and immediate causes of food insecurity such as political instability or adverse weather events. These analyses leave critical gaps that could be addressed by aligning them more closely with the PSNSSANH framework and the visions and experiences of Haitian farmers and communities. Understanding the aspirations and experiences of Haitians concerning their food systems, alongside a broader analysis of the complex dynamics affecting food security, as explored in this study, could prove crucial for developing effective and context-sensitive humanitarian responses to Haiti's ongoing crisis. Additionally, it would enable policymakers, NGOs, and community leaders to assess the historical drivers of food insecurity and identify avenues for improvement.

Of course, improving assessments of food systems through a food sovereignty lens does not guarantee that governments or humanitarian organizations will respond appropriately, or that resources and programs will align with local priorities. Still, food systems assessments serve as important periodic snapshots. They are often conducted several times a year and can become meaningful historical records of food system vulnerabilities. Incorporating food sovereignty assessments, as this study does, could improve the quality of these reports, providing both actionable and historically relevant information. For example, if regular food sovereignty assessments were conducted, documenting issues such as climate change, the unique burden of hunger on women, or local calls for the preservation of traditional foods, a very different narrative might emerge compared to standard food security reporting, which tends to focus on “documenting damage” (Rojo et al., 2022). Consistent tracking of food sovereignty concerns could highlight persistent challenges, make them more visible, and provide advocates and researchers with the data needed to push policymakers and international actors to do more in support of local food system aspirations.

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