

RESEARCH REPORT

part II

of 2 parts

Food Distribution, Production, and Consumption in Haiti

**(with special emphasis on the emerging role of snack
foods and prospects for marketing high quality peanut
based snack foods)**

Report by
Timothy T Schwartz

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CONTRIBUTORS

Team Leader

Timothy T. Schwartz

2nd Consultant

Harold Maass

Assistant Analyst

Keely Brookes

Nutritionist

Adrienne Clemont

Survey Supervisors

Pharrel Emile

Egain Ambeau

Surveyors

Marckenson Emile

Othelo Bisnet

Sylvestre Prophete

Marc Jean Bastist

Jeudy Lucner

Rose-Yolande Desir

Renande Nombre

Reaud Previlus

Logistics and Accounting

Stephanie Pierre

Focus Groups

Nahomie Jeannis

Almathe Jean

Amelie Odney

Focus Groups

Timothy Schwartz

Almathe Jean

Nahomie Jeannis

Rose-Yolande Desir

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9. The Entrance of Imported Snack Food

Introduction

Food preparation specialists have helped popular class Haitians adapt to deepening poverty while still allowing them to obtain high calories at low cost. In the process they invigorate the local economy and earn income to support themselves and their families. But alternative sources of prepared food have emerged over the last two decades that compete with the local food preparation economy. The earliest of these foods were sugar and malt based beverages (sodas, juices, and maltas), cheese cubes, condensed milk, precooked sardines, and corn flakes. More recent snack foods included cookies, salted crackers, and cheese puffs. These foods not part of an integrated local adaptation to poverty but rather a global one. Most are prepared, not in impoverished Haiti and not with Haitian produce, but rather with low cost ingredients from industrial producers in other countries. Some of these countries are geographically near to Haiti, such as the Dominican Republic and Guatemala; others on the far side of the world, such as India and Pakistan. All are developing countries.

There are problems with the current RUF (Read to Use Foods) sold in Haiti that should not be ignored. The foods are imported and sold on the streets, in open-air markets, and in stores, where they come into competition not only with local produce, but also with the cottage food preparation industry seen in the previous section and arguably lead consumers away from success in the quest for affordable and, if not nutritious, at least high caloric foods. The issue is not so much that Haitians are eating the low nutritional foods—such as extruded corn snacks like cheese puffs, made from degermed corn meal (meaning most of the nutrients are stripped away—but that they forego opportunities to spend limited resources on more nutritious fare. As seen in earlier sections, sometimes the problem is simply that higher quality foods are not available, as they have short shelf lives and do not ship well. But now that popular class Haitians have access to these low-nutrition snack foods on nearly every street corner, they are being used as quick substitutes for more balanced, true meals and for the oil laden but often hi-protein street foods.

That is not the worst of it. At least some of the earliest imports were high quality foods. Condensed milk sold in cans, powdered milk, and cheese cubes were three RUFs that offered popular class Haitians an affordable high protein food supplement. But high level entrepreneurs, almost entirely local individuals and corporate entities, have increasingly taken over the market with introduction of imitation brands concocted from low cost and low quality ingredients, most commonly palm oil and soy byproducts. The nutritional threat food substitutes and disingenuous advertising is a problem anywhere. But in a country like Haiti where close to 50% of the population is comprised of a nutritionally stressed and extremely poor people induced to spend scarce cash reserves on junk food the problem is especially acute and should be considered an issue of humanitarian concern for everyone, Haitian and otherwise. Indeed, given the flaunting of accepted international standards and the impact on consumers, the international justice system should take special note. In the sections that follow we attempt to provide as complete a picture as possible of the complexities of the problem.

Entrance of Snack Foods

Manufactured snack foods are a recent phenomenon. The “snack” food market two and three decades past was almost entirely artisanal, comprised of those foods seen in the previous section. The prepackaged industrial foods that popular class Haitians in their 30s and 40s and 50s remember from childhood were condensed milk, cheese cubes, and salted crackers. Today is radically different: 91% of adults report eating prepackaged cookies, crackers, and cheese puffs (Figure 14), 53% of these people eat them at least once per day (Figure 15); 78% buy them for their children (Figure 16) and 44% of them buy them for their children at least once per day (Figure 17).

The new snack foods are purchased far more frequently than other non-staple imported foods, such as milk, cheese, peanut butter, and bread. In the *boutik* survey, 49% of shop owners reported that the most non-staple food items that adults most frequently purchased were cookies, cheese puffs, or salted crackers. In the case of children, 75% of the top sellers were cookies, cheese puffs, hard candy, chewing gum or lollipops (Table 21).

It is no secret, even to many Haitians, that these foods are made of low quality ingredients. What they do not know is that the foods are composed of products deliberately stripped of nutrient—nutrients that are then be resold in other forms, typically as ingredients in higher quality foods destined for more elite consumers. In developed countries the extent to which manufacturers exploit the process is limited through state regulation and inspection. For example, in the United States, corporations that advertise as “milk” concoctions that have no animal milk in them have come under fire, been sued, fined, and forced to relabel the products so that consumers are aware of the substitution and/or modification of the word “milk.” Nothing of the sort applies in Haiti and as discussed in greater detail shortly, even the cheese cubs and condensed milk that Haitians have come to expect are sources of nutrition, have been increasingly supplemented with the same low quality ingredients found in crackers and cookies.



Photo 43: Street *boutik* prepackaged ready-to-eat foods of Cape Haitian



Photo 44: *bak vendor*, note the milk cans at on top



Photo 45: Condensed milk for sale ‘it’s not just milk anymore’



Photo 46: Street foods on the left, some of the new prepackaged ready-to-eat snacks on right

Figure 23: Adults who Eat Manufactured Snacks (N = 632)

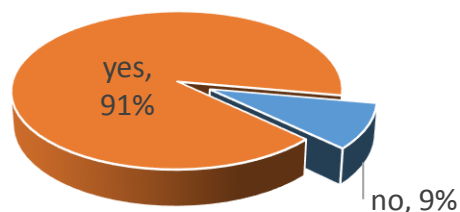


Figure 24: Adults Reported Frequency of snack purchases (N = 632)

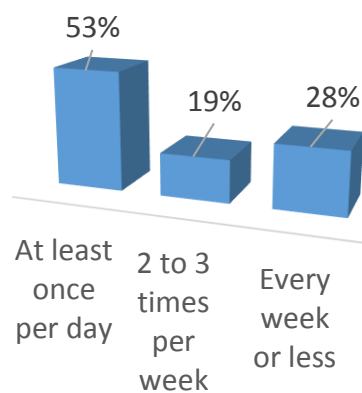


Figure 25: Adults Who Buy Manufactured Snack Foods for Children of the House (n= 632)

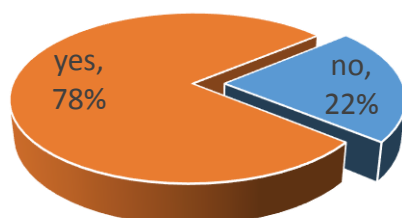


Figure 26: Frequency that Adults Buy Manufactured Snacks for Children of the House (n = 493)

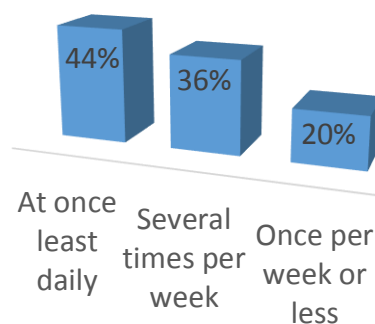


Table 23: Top 10 non-staple foods sold in stores (N=131)

Adults		Children	
Food item	Frequency	Food item	Frequency
Cookies	23%	Cookies	21%
Cheese puffs	16%	Cheese puffs	18%
Salted crackers	10%	Hard candy	17%
Cornflakes	9%	Lollipops	12%
Hard candy	8%	Chewing gum	7%
Bread and peanut butter	6%	Bread & peanut butter	5%
Cheese (processed)	5%	Chocolate	2%
Bread	4%	Cornflakes	2%
Lollipops	3%	Milk	2%
Pringles	2%	Caramels	2%

Consumers themselves explain why they most often purchase these “snack foods.” Sixty-eight percent reported selecting specific snack foods for quality or health reasons (Figure 18). And underscoring the apparent interest in nutrition, 97% said they would pay more for a snack food if they knew that it had more nutritive value (Figure 19). But *boutik* (store) owners were more likely to say the opposite, that consumers were most interested in price (Figure 20).

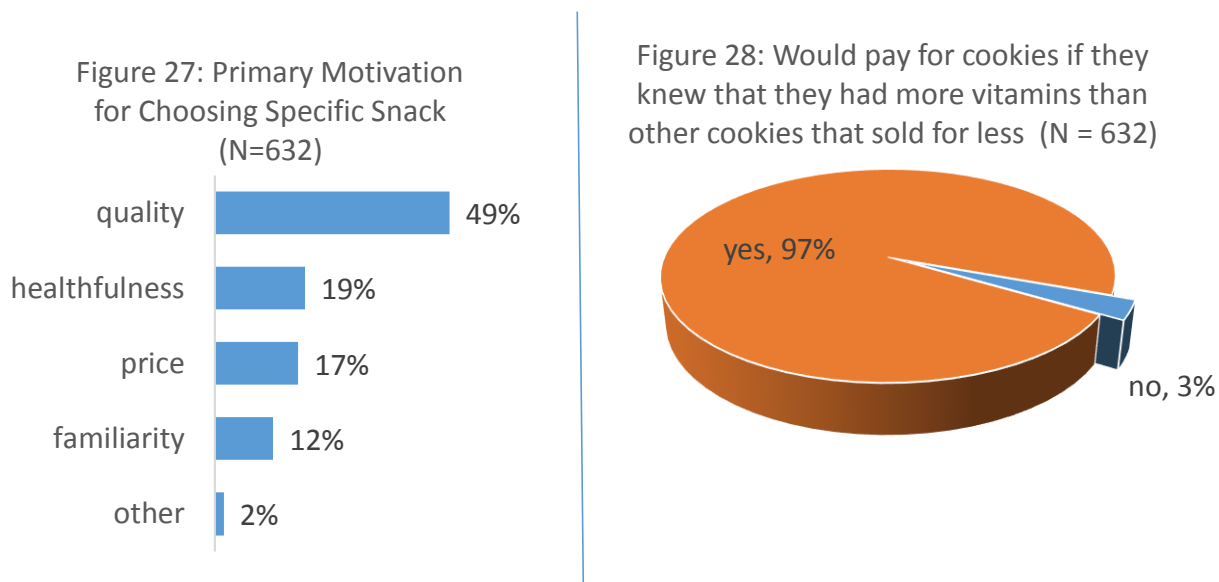
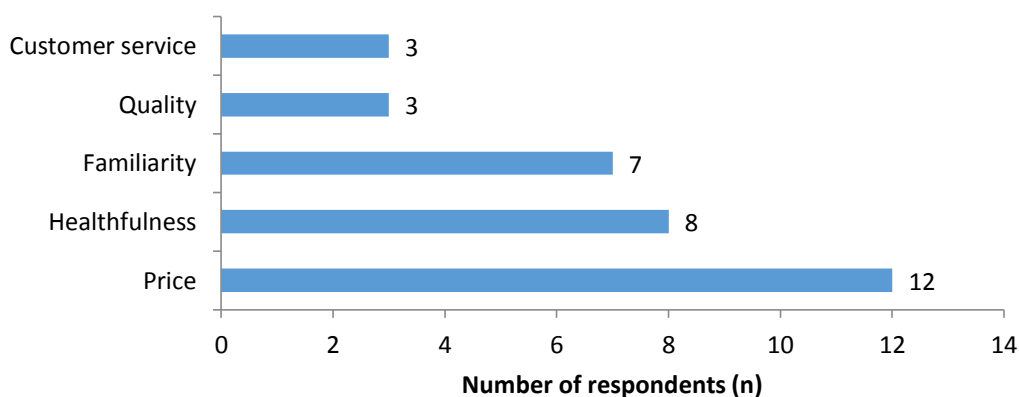


Figure 29: Factors most important to customers when purchasing food (N=33)



The low costs of these foods—typically 5 *goud* (10 US cents) for a pack of cookies, crackers or cheese puffs—and the simple fact that popular class Haitians are economically stressed, might be enough to convince most observers that price is indeed the factor that overwhelmingly determines the incursion of these foods into the Haitian diet.

Cost and the Entrance of Prepackaged Fake Nutritious Foods

Where we can learn more about consumer interest in cost, and the evolution of prepackaged foods on the popular Haitian market is with regard to those that Haitians thought were healthy and which, as seen in Section 5, have been relied on as ingredients for making protein rich baby foods and the *remontan*, and fortifying malts and fruit juices: specifically cheese and condensed milk, both products increasingly being substituted with lower cost “fake” products.¹ And here, any doubt about the power of pricing over the quality of ingredients can be put to rest by considering the success of low cost products such as those sold by what is arguably the most successful Haitian food enterprise, Bongu (Deka Group S.A.).

Bongu, like most Haitian corporations, specializes almost entirely in importing and distributing products produced and manufactured outside of Haiti. In the past decade Bongu has taken a major share of markets in spaghetti from Princessa (Bocel Group of the Dominican Republic), salted crackers from Guarina (Molinos Modernos of Guatemala), condensed milk from Carnation (United States), processed cheese from La Vache Qui Rit (France), protein shakes from Sport Shake (United States), and Corn Flakes from Shurfi (United States). The most obvious way that Bongu has gained market share is by undercutting the competition in cost (see Figure 21).¹

Bongu Products



¹ in the context of the critique made here, it should be mentioned that directors of Bongu have expressed to the consultant regret over the decline in local production and an interest in elevating the nutritional quality of foods on the popular market

Figure 30: Some of the Foods that Bongu has priced out of the Popular Market



Bongu also uses a keen understanding of the preferences of Haitian consumers. Tapping the Haitian interest in products the company repackages and markets imported products under the nationalist label “Bongu”—Kreyol for “Tastes Good”—and associates its products with Haitian athletes and musicians while touting the moto “Bon pour la sante” (good for the health)—Figures 22 and 23.



Figure 31: Bongu Association with Sports



Figure 32: Bongu Good for the Health

How good for the health are the products is hard to say without some investigation. Bongu's labels do not list how much of each ingredient is in a product. Nor do the labels make clear that substitute ingredients have been added. However, we know that international law requires that ingredients be at least listed by the order of quantity, thus the most abundant ingredient first, second most abundant next, and so on. If Bongu has followed the international law then the primary ingredient in its condensed milk—list first—is “skim milk.” Then comes “soy milk”, then “maltodextrine” --a sweetless sugar used as a thickening agent--then “vegetable fatty matter” and finally “soy lecithin.” The other ingredients are an unknown measure of vitamin A and D and chemical preservatives. In comparison, the main and only food ingredient in the Carnation milk competitor—the one knocked off the market by Bongu--is milk (Figure 24). Bongu cheese lists palm oil as its primary ingredient. Then it lists three milk products: milk proteins, powdered milk, and whey. No cheese. In comparison, the main ingredients in the processed cheese La Vache Qui Rit—also almost completely knocked out of the popular market by Bongu--are “cheddar, Swiss, and semisoft cheese” (Figure 25)

Figure 33: Bongu Milk Content Comparison to Carnation

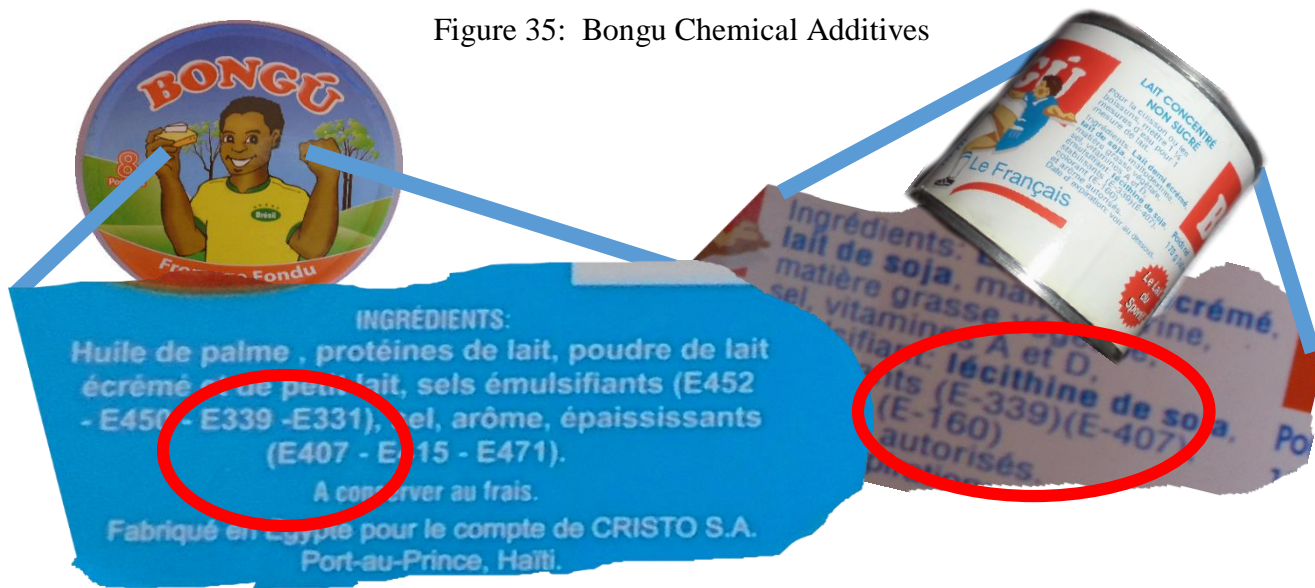


Figure 34: Bongu Cheese Content Comparison to La Vache Qui Rit



It gets worse, while Carnation and the cheese La Vache Qui Rit brands have--under developed world consumer scrutiny--been very careful to use a minimum of safe additives, If we look at the chemical preservatives, coloring and setting agents in the two Bongu products we find that three of the five artificial ingredients in their milk are listed on internet watch lists as dangerous compounds. All three of those in the condensed milk are on watch lists.ⁱⁱ The excerpts below in Figures 26 and 27 are cut directly out of the original food additive guides.ⁱⁱⁱ

Figure 35: Bongu Chemical Additives



E160(b)	Annatto (bixin, norbixin)	the HACSG* recommends to avoid it. Typical products are dairy products
E160(c)	Capsanthin	not permitted in Australia
	Lycopene	not permitted in Australia

407 Carrageenan
E407 'Irish Moss'

Fibre extracted from seaweed, used as a setting agent. It has recently been linked with cancer because it may become contaminated when ethylene oxide is added to an inferior product, this results in ethylene chlorohydrin forming, a highly carcinogenic compound linked to toxic hazards, including ulcers and cancer. The most serious concerns relate to degraded carrageenan, which is not a permitted additive. However, native carrageenan, which does not become degraded in the gut.

PRESERVATIVES
E200 - E299 , E330 - E341
The most dangerous food additives

It is not clear whether Bongu is unusual in its use of these ingredients or not. A common belief among merchants in Haiti is that the elite food distributors that have their own brands--of which there are only four-- have no-competite understandings among themselves. Put bluntly, the rumor is that they collude in an effort to monopolize the market without competing with one another and driving prices and profits down. While that claim is impossible to verify, there is, *prime facie*, little overlap in their products. The largest company in Haiti, Gilbert Bigio Group (owned by the Bigio family) has a food subsidiary, Huileries Haitiennes, S.A (HUHSA) that only sells condensed milk, spaghetti, and corn flakes, all products with a wide range of low cost foreign competitors. But it markets no other products in the Bongu portfolio. Nor do Stanco, Caribbex, and Arlequin, the other three, major corporations with their own brands, have any products that overlap with Bongu. Only Stanco and Arlequin compete directly in the Extruded Corn Snack market.



Figure 36: The only HUHSA products that overlap with Bongu (Cristo S.A.)

The one Haitian pre-packaged ready-to-eat-food brand that appears most often as a price competitor with Bongu is the brand Bonlè, which has entered into competition with Bongu, cutting the cheese price even further (33 gde versus Bongu's 44 gde price for a box of cheese wedges). Bonlè has also entered the condensed milk market as well and it has its own subsidiary brand of Corn Flakes, Anita. But Bonlè is Bongu. It is the same parent company (Cristo S.A.), same products (milks, processed cheese, and corn flakes among them), made and packaged in the same countries (in the case of milk and Cheese, Egypt), with the same low quality ingredients (see above) and the same dangerous colorings and preservatives (ditto).



Figure 37: Bongu Brand and Bonlé/Anita

None of this is to say that Bongu, or rather Cristo S.A. is the sole company marketing low price processed foods with questionable nutritional value, questionable ingredients, and making questionable claims about being healthy. The condensed milk market has at least five imported brands with similarly inferior non-dairy ingredients, most of which laud their high quality ingredients (Figure 29). Other products, such as “Vitamin Cookie Sticks” from China, come with suspicious claims, too (see Figure 30).



Figure 39: A key ingredient in these Vitamin Cookie Sticks from China are “vitamins”-- whatever they may be



Figure 38: Most of the not-really-condensed milks flooding into the country are imported. Note that those originating in developed countries such as Denmark and Greenland have Whole Milk as a primary ingredient

But most interesting for the objective of understanding the Haitian market is that even though there are only a handful of Haitian brands and packaging companies, importers of any product that becomes a big seller in the popular market are likely to become a target of Haitian business interests. Two classic examples are Extruded Corn Snacks and Energy Drinks

Extruded corn snacks, particularly what are known as *chikos*—specifically Chee Co, a brand of the Haitian company Arlequin and suspiciously similar to Cheetos—took over the market from Cheetos with a product that sold for 10 HG, 1/3rd the price of Cheetos. Another Haitian manufacturer Stanco has since replicated the product and captured the market with Chiritos (they also make three other products: Bingo, Crazy Mix, and Anillos). Stanco succeeded by leveraging its distribution and credit networks, incentives to redistributors (50 packs of puffs for every 1000 sold), and, more than anything, by offering and lower priced products: 5 HG. Typical of products discussed earlier, Stanco claims to use “top quality ingredients” and boasts that its products are a “great substitute to those greasy found elseweare” (sic). (see Stanco Website).



Figure 40: From Cheetos cool Cheetah, to Chee Co’s cute baby Cheetah, to Stanco’s not so adorable Rat. With lower prices the Rat won the market.

Another classic marketing story is the energy drink Toro. The first and the most successful energy drink during the early 2000s was Ciclon, an Austrian beverage distributed through the Dominican company Altacopa S.A. In a textbook case of destroying the competition, the Haitian national bottling company BRANA came up with Toro. Twice the size, with more of the active ingredient Taurine, sold at less than half the price, bottled in a plastic container that resisted damage on Haiti's dilapidated roads, and advertised in a way that appealed to the Haitian popular conceptualization of energy drinks as enhancing male vitality, Toro knocked Ciclon out of the market in a matter /of months (Photo 47). Seven years later Ciclon is trying to come back by mimicking Toro's strategy (Photo 49). In the meantime, other companies expanded the energy drink niche with an array of strategies that neatly capture the Haitian conceptualization and marketing predilections of cost, quantity, sexual invigoration, and health. These include Tropic S.A.'s Ragaman, which appealed to progressive minded minority with its allusion to Rastaman and inclusion of Ginseng as an ingredient, and Tropic's Robusto, a malt energy drink that capitalized on the association of Malt drinks with nutrition (Photo 49).

In summary, what we can learn from Bongu, Puffed Cereal products and Energy Drinks is that when it comes to modern marketing of manufacturing items,

- a) the proper order of priorities is indeed, price, quantity, and then quality, but
- b) it's not only about getting calories, hence energy drinks, and
- c) there is a place in Haitian marketing strategies for nutrition and identity, and
- d) poor knowledge of ingredients and the fact that Haitians do not read labels makes them easy prey for suggestive advertising.



Photo 47: Tiny expensive Ciclon & big, inexpensive Toro



Photo 48: Toro, Robusto, and Ragaman covering the market with price, quality and mystic power



Photo 49: Ciclon trying to make a comeback

Government vs. Merchant Elite: Who Controls of the Market

Government Regulations, Standards and Quality Control

The incursion described above of low quality manufactured ready-to-eat foods and beverages on the Haitian popular market has occurred in the context of weak government and the *de facto* absence of controls and consumer protection.

Oversight of production and processing of foods and quality control falls under the auspices of the Ministry of Commerce. In Avis CI/0009 dated February 2010, the ministry reaffirmed that,

Alimentary products should be healthy, appropriately packaged and risk free, meaning processed, prepared and conserved in hygienic conditions. They should also be accurately labeled with the following information,

- Name of food type
- List of all the food ingredients by order of decreasing proportion
- Name and address of the manufacturer, conditioner, and distributor
- Date of manufacture
- Date of expiration
- Lot number

In November 2012, with support from EU, MINUSTAH, the German Institution for Standardization, UNIDO, and the government of Brazil, and more \$5 million Euros, MIC officially inaugurated the Haitian Bureau of Standards (Bureau Haïtien de Normalisation or BHN). The BHN's tasks were to devise and implement standards for production and trade in the country, to train inspectors in applying the standards and enforcing compliance with labeling, quality certification, and international product standardization. In addition to governing the local market, the MIC assured the public that "made in Haiti" would "soon be definitely recognized in the international market." The undertaking was backed up by a new "Metrology Laboratory" where products could be tested for compliance with hygiene safety standards.

There are some problems with the claims. Although the Ministry of Commerce boasts a "brigade of inspectors that strictly applies these laws and punishes non-conformance," observations on the ground and from interviews with government officials confirms that in 2014-2015,

- BHN, the laboratory, and the Ministry do very little. To quote an official at the Direction de Controle de Qualite des Produits, "so long as a product doesn't kill someone it can be imported and sold on the local market."²
- Factory samples of locally made products tested are those brought in by the producers themselves, i.e. they can bring whatever they want to be tested as a sample
- Despite the laws: labeling, controls, and inspection are, *de facto*, non-existent, meaning that respecting the laws above puts manufacturers at a competitive disadvantage relative to non-compliant rivals

² "depi pwodwi ya pap touye moun yo ka enpote'l jan yo vle sou mache ya"

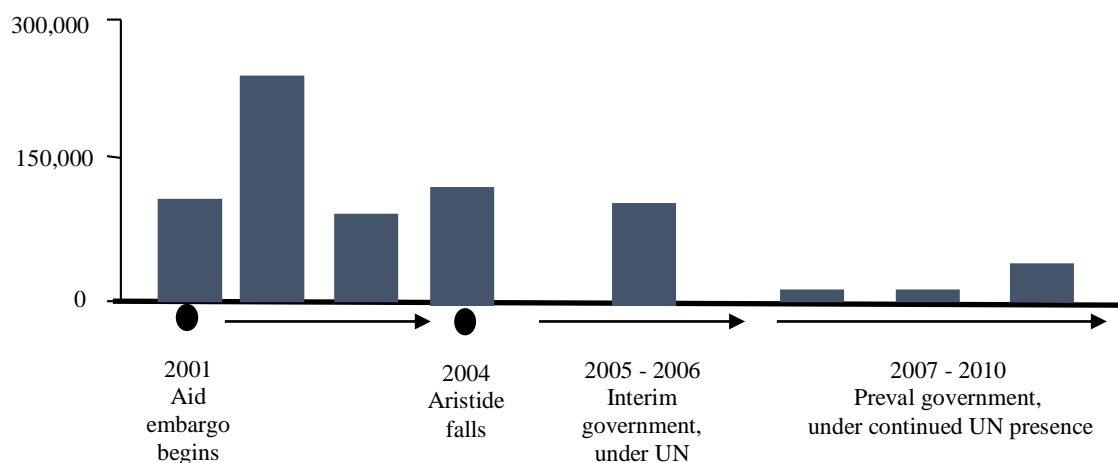
- Enforcement is, need we add, non-existent. Nor are there courts and lawyers competent to deal with adjudicating relevant cases
- Neither MARNDR nor MIC were able or willing to provide the consultants with a single document that defines the law (the document cited above and included in Annex 16 came from a secretary acting independently of the Ministry)
- Most of the Haitian government websites are, to put it bluntly, facades with nothing behind them, no data, no downloadable documents. Click a hyperlink or downloadable document and in the vast majority of cases one gets nothing except perhaps a “site under construction.” Associated service provider sites offer little data as well, other than typically contacts to lawyers or agents with the offer of facilitating access to the market for fees
- MIC staff referred the consultant to the “Director” who knew nothing but recommended a lawyer, saying, ‘he knows’
- According to distributors (see contact list) there are zero controls on patents or use of copyrighted advertisements, for example Spider Man, evident in the “vitamin sticks” from China (see Figure 30 above)
- No inspection labels exist, despite laws mandating them
- When we visited three local peanut producers, having gotten their contact information from jars of peanut butter in supermarkets, we arrived at impoverished households with zero phytosanitary controls. It never occurred to any of them that they could be inspected by a government official
- Imported eggs and breads available in the top Port-au-Prince Supermarkets have no expiration dates
- One distributor/informant interviewed during the course of the research proudly proclaimed that, “Haiti has more laws governing distribution than the US” It is difficult to verify whether this is true, since they are neither applied nor published. But the most important point that the businessman was making is that those laws that are applied are there to protect big business—such as his own. There are no active consumer laws. In short, it is a paradise for unethical and locally connected business owners, but a prospective nightmare for consumers who may fall sick from products.

[Elite, Imports, Corruption, Political Instability and the Stacked Deck](#)

In the absence of government regulations seen above, any endeavors to import must consider the competitive advantage of those already importing and in control of the customs houses and ports. Figure 32 on the following page uses edible oil imports to illustrate the problems with corruption and favoritism, and elite control of customs houses. Haiti produces no edible oil and, as seen earlier, the population is on the margin of survival regarding edible oil consumption. Biologically, the Haitian population cannot survive with significantly less oil than is imported in the maximum years seen in Section 5. Yet, with the lone exception of the year 2002—more than 2 times higher than the two years around it—we see that the official tally of oil imports fell far below this threshold. This is most likely a reflection of the impact of tax evasion by oil importers that fluctuates with the major political events of the time. For example, changes in recorded imports surrounding the fall of the Aristide government in 2004 have been attributed by some observers to

increased imports following the imposition of an aid embargo, and by organized resistance from importers who were being compelled to pay taxes.

Figure 41: Reported Oil Imports and Time Line for Changing Governments



Source AuthorSource: DGI

In summary, important points that can be drawn from what we know about the importers and distributors are that,

- At least some and perhaps most of the highest tier importers pay little to no taxes (as suggested by the data and according to informants interviewed during the course of the present research), so it is almost impossible to compete with them (i.e. their profit margins are less than the taxes that a legitimate importer would pay).
- Corruption at the customs houses means that even if they did pay taxes, other importers face significant and often inscrutable and unpredictable obstacles.
- Some elite local processors and packagers may not conform to international standards or laws and instead use inferior products, mislabel, pirate internationally copyrighted packaging, and make false claims regarding nutritional content. They also understand local culture and values meaning they can do all this in such a way as to take maximum advantage in advertising and managing consumer taste and packaging preferences

Summing up these factors, the owner of one of the largest importing agencies in Haiti explained to the consultant, in private, that “these guys could not survive in a competitive market.” The point being that a distributor who tried to conform to international and Haitian laws and standards would be driven out of business by rivals who evaded taxes and otherwise gamed the system. The primary conclusion that flows from the situation described here is that any social enterprise hoping to reach the popular market with RUTFs may arguably have to work within the existing system, and hence with established distributors.

10. Peanuts and Peanut Butter

Almost every aspect of peanut production and consumption neatly touches on points mentioned in the previous sections. Peanuts are endemic to Haiti. Pre-Columbian Taino Indians planted them. Haitians have always planted them, and eaten peanut products as or more frequently than any other food that is not part of the main mid-day meal. Haitians prefer locally produced varieties over imported peanuts. The path to getting the peanuts is deeply embedded in the household and informal economies. In this penultimate section of the report we examine the peanut value chain, taste preferences, and consumption patterns with the goal of understanding how to best market peanut based RUTFs. In this regard, it is important to note that while informal markets and vendors are the prevailing source of foods for at least 80% of the population, the point of entry for most manufactured foods is the formal sector. The exception, as seen, are many Dominican imports which move in the opposite direction, from the Dominican formal industrial economy, to Dominican semi-formal economy intermediaries. The Dominican intermediaries then bring the goods across the border into the hands of informal economy Haitian traders, or the Haitians traders themselves cross the border and bring the food goods back, often on foot. But if RUTFs are to be produced in Haiti, production will be in the formal economy and the distribution entry point will be the formal sector market. Thus, section is meant to build on analyses in previous chapters and explore in greater detail how peanuts fit into the economy with the goal of defining, in the next and final chapter, how best to navigate RUTFs into the popular market without harming the local peanut value chain.

The Peanut Value Chain

Peanut products are currently part of an artisanal industry, and an important one. This industry is so important that we begin this section with a word of caution that entry into the market with peanut based RUTFs may intrude into the activities of impoverished market women. Roasted peanuts, peanut sugar clusters, *chanm chanm*, and peanut butter are all overwhelmingly local products: locally grown, locally processed, locally transported, and sold by low-income female traders.

Peanut Production

TechnoServe's 2012 landmark peanut value chain report estimates that 35,000 households are involved in production, producing a total of 14,000 metric tons per year. Another 15,000 households depend to some extent on the peanut value chain through the processing and marketing of roasted peanuts, peanut butter and other peanut products discussed below. The production occurs almost entirely on small farm plots, with each farmer cultivating an average .65 hectare in peanuts.

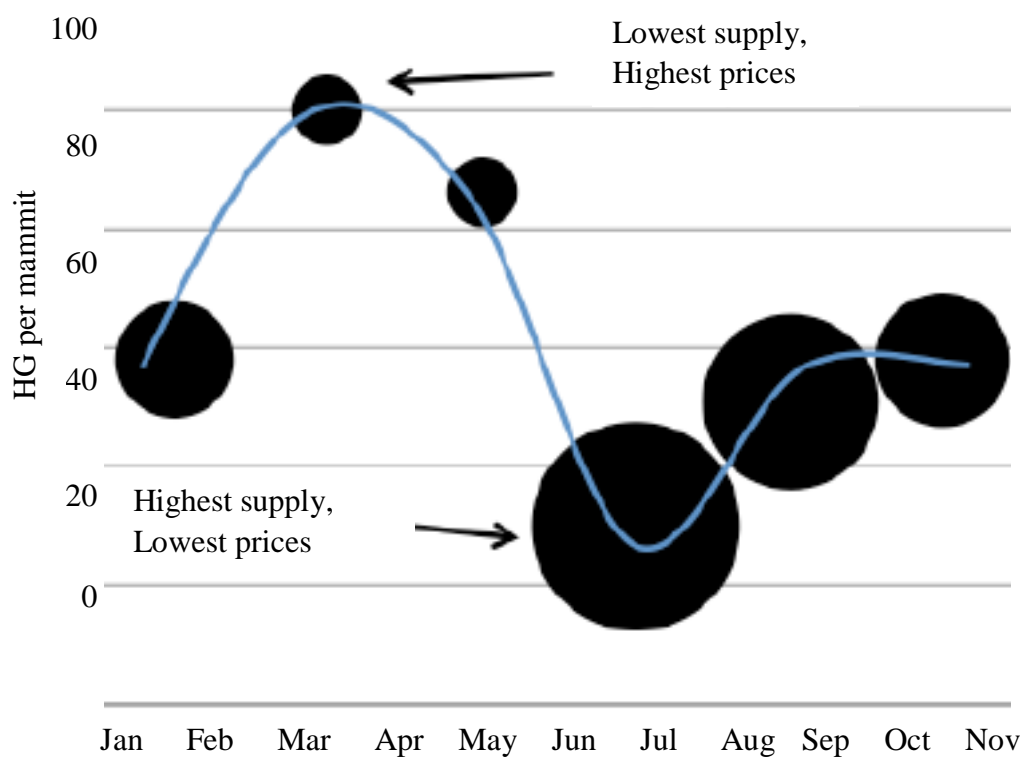
We believe the TechnoServe estimates to be conservative. TechnoServe cites three primary peanut producing regions in Haiti. Using Port-au-Prince market sellers, they estimate the relative importance of the North at 7% of production, the Northeast at 8%, and the Central Plateau at 71%. However, significant quantities are grown in the South (based on common knowledge as well as Jolly and Prophete, 1999). And peanuts are produced at some level throughout the country. Even

in the dry Department of the North West peanuts are the major cash crop grown in many mountain areas where they are intercropped with tobacco, castor beans, sorghum, melons, squash, okra, pigeon peas, sweet potatoes, and sesame. They are also grown at lower altitudes of the North West, in loamy patches of desert where, farmers report, just two rains can be sufficient to obtain a profitable yield.

The Market

Peanuts are definitively a market crop. TechnoServe (ibid) estimates that 5% or less of Haiti's peanuts are consumed by the household that produces them. TechnoServe estimated that only another 5% of peanuts go to the formal sector: 3-4% to industrial peanut butter and peanut processors, 1-2% to RUTFs manufactured by the only two social enterprises in Haiti that engage in the sector, PIH and MFK. Fully 95% of peanuts were going to the informal sector: 46.5% sold immediately after harvest, and 44.9% stored for subsequent sale over a period extending to six months, during which time the revenue generated eventually reaches three times the price at the time of harvest. (see also Jolly and Prophete, 1999).^{iv}

Figure 42: In Shell Monthly Supply and Price Fluctuations
(Source: TechnoServe 2012 page 8)

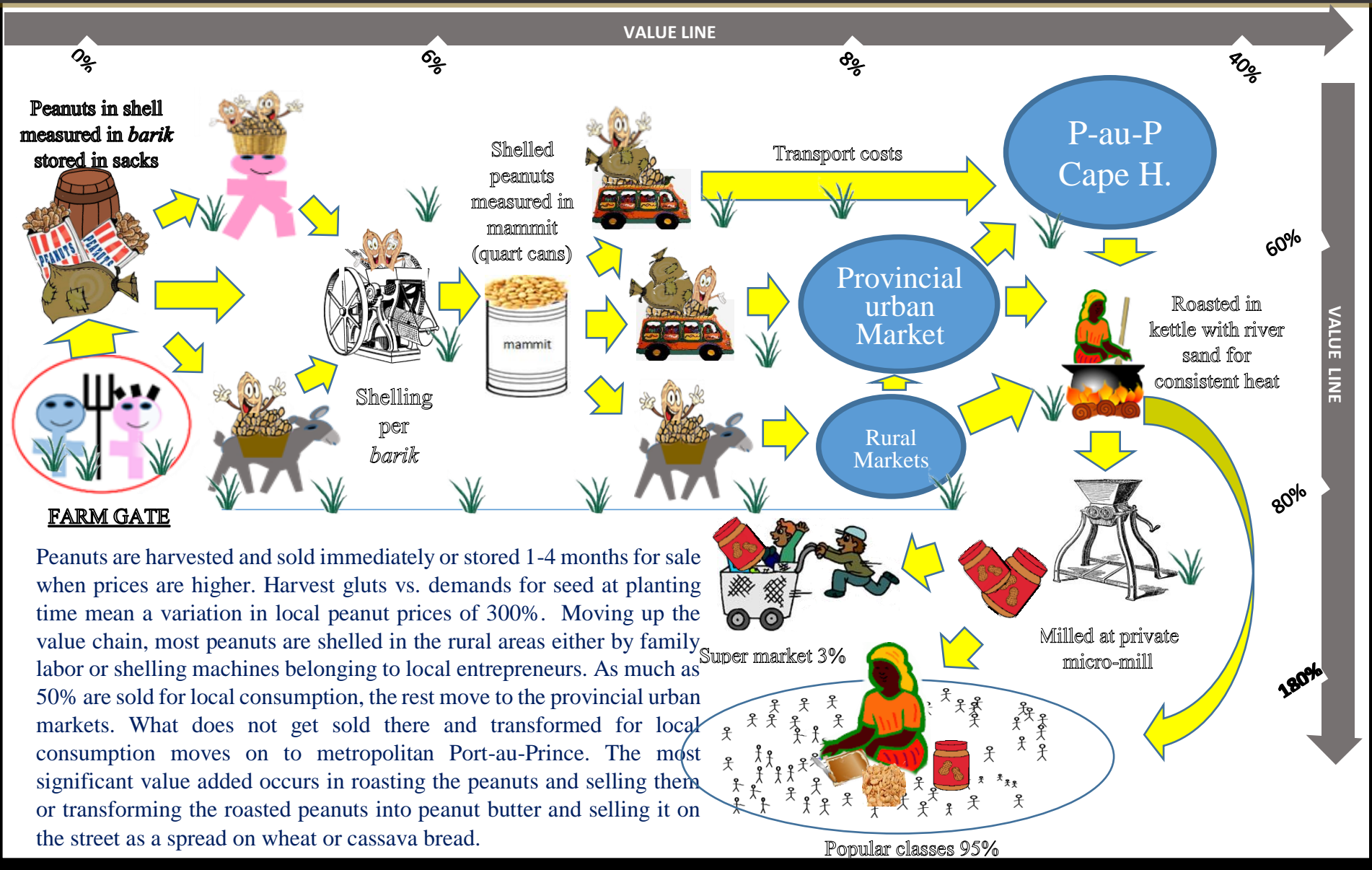


At harvest peanuts are measured by the *barik* (barrel), but stored in sacks. After shelling they are measured by the *mammit* (4 quarts). There are 40 *mammit* of unshelled peanuts in 1 barrel, and generally speaking, 3 *mammit* of unshelled peanuts will yield 1 *mammit* of shelled peanuts. Shelling is almost always done in rural areas. Family labor and the availability of shelling machines--with a cost of 1 HG per *mammit*--mean that value added is minimal. The peanuts are then shipped up the market chain from rural market to provincial urban markets and Port-au-Prince. TechnoServe estimates the cost of transport at 0.032 HG/mmt/km (Haitian HG per *mammit* per kilometer). Markup on prices move at a rate of about an 8% increase from provincial to secondary markets

At each stage of the market some of peanuts are purchased, processed into roasted peanuts and sold as peanuts in small 5-10 HG plastic bags or converted to peanut butter and sold with a value of ~5 HG as a spread on bread or cassava. The profit between purchasing raw shelled peanuts and converting them to peanut butter is as high as 80% (see Table 22)

Table 24: Peanut Butter Value Added			
(based on following 1 <i>mammit</i> of peanuts in shell, through shelling (1/3rd of <i>mammit</i>), to becoming 1/3rd of a <i>bokal</i> (jar) of peanut butter)*			
Stage	Cost	Value of original <i>mammit</i> in shell	Value added as % of farmgate price
Farm Gate	0	45 HG	0%
Shelled	3 HG	48 HG	6%
Transported	1.1 HG	66 HG	40%
MILLED	8 HG	125 HG	180%
Sugared, salted, and/or peppered	3 HG		
*Logic is that 1 <i>mammit</i> in shell = 1/3rd <i>mammit</i> shelled = 0.6 <i>bokal</i> of peanut butter. Transport is 0.032 HG per kilometer per <i>mammit</i> , assumption is the peanuts move and average of 100 kilometers.			
Note: In the present study we found that urban prices for shelled peanuts range seasonally from 150 HG per <i>mammit</i> to 260. Peanut butter had a variation of 25% in seasonal prices			

Figure 43: Peanut Marketing Chain



Problems and Inefficiencies in the Production and Market Chain

There are apparent problems and inefficiencies in the peanut production process and marketing chain in Haiti. TechnoServe sums them up as the lack of a relationship of prices paid to quality of peanuts, or moisture content, and zero awareness of aflatoxin (something Western researcher on the topic determine to be a dangerous carcinogen).³ Another issue is that, as with most products seen earlier, the final peanut butter products sold even in elite super markets have no labels and no expiration dates. TechnoServe analysts also conclude that Haitian peanuts are costly—with shelled peanuts prices averaging 1600 and 2500 USD/MT in Haiti vs. 1250 to 1350 USD on the international market.

The reality of retail market price suggests that there is, in fact, something highly cost efficient about the local value chain. Despite claims of seasonal shortages, TechnoServe observed a constant year-round flow of peanuts into Port-au-Prince's primary produce market (Bosal). The costs of peanuts and peanut butter on the street also are remarkably consistent, changing seasonally by a factor of only 25%, compared to the 300% variation for peanut seed in rural areas. This is true for two reasons, 1) the shelf life of peanuts and peanut products--raw peanuts can be stored for 3 to 4 month and peanut butter stores for another 2 to 3 months, easily spanning the two seasons, and 2) seasonal mountain vs. plain harvests found throughout Haiti result in 3 to 4 harvest periods per year.

Local processed peanuts and peanut butter are not only preferred by consumers, they are 25% less expensive for consumers than the imported counterparts (see Table 23). Moreover, while taxes and transport on imported shelled peanuts bring the price for a MT to USD \$1,900, the low point for shelled Haitian peanuts, at harvest, is \$800 USD/MT. In effect the market chain, actors and interplay of profits in Haiti seem to work out to the benefit of the urban consumer.

Market Name	Imported		Local	
	Lowest cost (Haitian HG)	Size (grams)	Lowest cost (Haitian HG)	Size (grams)
Sigo Market	145	349	130	454
Deli Mart	151	340	117	227
Delmas 2000	192	227	125	454
Belmart	195*	115	190	454
Eagle Market	230	462	130	454
Star Market	135	340	150	454
Compas Market	155	340	120	454
Ratio of HG/gram	0.48		0.39	
Ratio of cents/gram	0.97		0.77	

- Excluded from the ratios as an outlier

³ Anecdotally, we can attest that popular class know nothing of the threat of aflatoxin and even educated Haitian elites typically refuse to accept it as a credible hazard

None of this is to say that only local peanut butter is on the market. In visits to 19 urban supermarkets, we found that all stocked imported peanut butter brands. But that is as far as imported peanut butter gets. It is conspicuously absent from the popular market. One can infer that part of the reason for their absence is the lower cost--as seen, arguably the major determinant of food consumption in Haiti.

Official Imports have increased dramatically in the past two decades, from 16 metric tons of peanut butter in 1998 to 104 metric tons in 2008. However, if accurate, this represents less than 1% of domestic production. At 20 metric tons in 2012, MFK was the only known importer of whole peanuts (Illustrative of the problem with customs and records is that imported peanuts are nevertheless present in supermarkets). It is difficult to evaluate what this means because, as seen in Section 7 above, corruption and poor record keeping at the ports mean that customs data often says more about politics than actual flows of merchandise.

The participation of popular micro-entrepreneurs and the highly integrated informal market system—vs. a clumsy and poorly developed formal sector—are surely key factors that help explain the low cost of domestic peanut products. Family labor is involved in production, shelling, packaging, transport and processing. Peanuts are the most commonly transformed food in Haiti, so one finds mills even in urban neighborhoods, and one would be hard pressed to find an adult woman who has not, at some time in her life, processed and sold peanut butter. Moreover, the actual creation of the peanut butter is only the second step in the value chain. The entire chain can—as seen in Figure 34 above-- touch as many as eight market actors: grower, 1st purchaser, sheller, transporter to 2nd market, 2nd purchaser and processor of peanuts, miller, purchaser of peanut butter in bulk, retailer vendor of peanut butter and bread or cassava.

Consumers Opinions, Preferences and Tastes

Health and Who Consumes Peanuts

Although only 1 respondent in the 50-respondent ‘most nutritional foods’ survey mentioned peanuts, 87% of people in the 632 respondent Consumer Survey said peanuts and peanut butter are good for the health (Figure 36). Indeed, the importance of peanuts in the popular class diet cannot be overstated. Only 26 of the 632 respondents in Consumer Survey (4%) said they do not eat peanuts (Figure 35); fully 96% said they eat peanuts or peanut butter, 54% of these eating them at least once per day, and 30% eating them *more* than once per day (Figure 37).^v



Photo 50: Peanuts afflicted by the fungus that producing aflatoxin

Figure 44: Respondents Who Eat Peanut Products (N = 632)

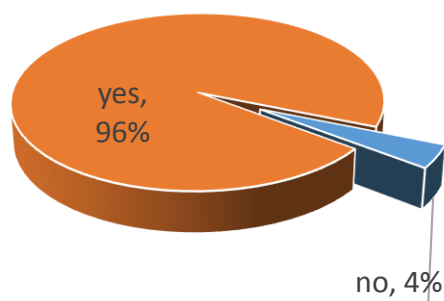


Figure 45: Respondent who Believe Peanut Butter is Healthy (N = 632)

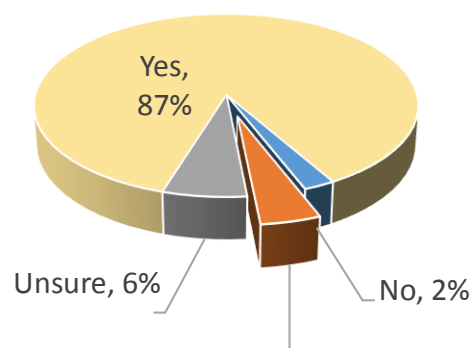
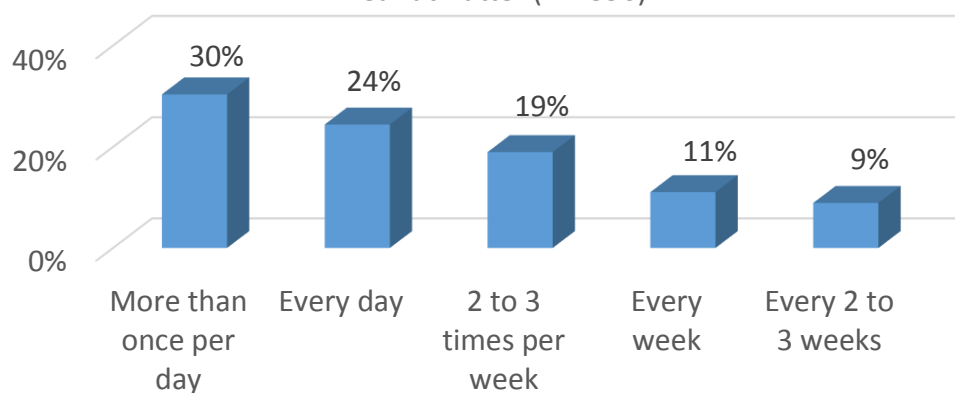


Figure 46: Frequency that Respondents Report Consuming Peanut Butter (n = 596)



We know anecdotally and from focus groups that peanuts are widely thought of as having sexually invigorating properties for men, but only 16% vs. 10% of Consumer Survey respondents said that men consumed them more often than women and 74% said that men and women consumed them with equal frequency (Figure 38). Similarly, peanuts and peanut butter are thought almost as much a food for adults as for children: only 32% of respondents said that children more often than adults consume peanut butter and peanuts; 48% said adults and children consume them with equal frequency, while 20% thought that adults consume more than children (Figure 39).



Photo 51: Focus group at school in Cite Militaire Port-au-Prince

Figure 47: Opinion on Which Sex More Often Eats Peanuts and/or Butter

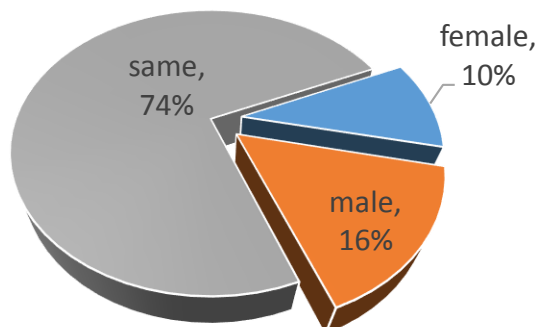
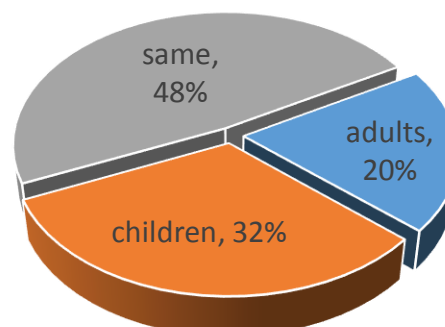


Figure 48: Opinion on Whether Children vs. Adults More Often Eat Peanuts and Peanut Butter



Peanut Base Foods

Peanuts are excluded as an ingredient in the main mid-day meal. We found no reports of any main dish or soups having peanuts. The point is especially peculiar in that peanuts are a salient ingredient in some dishes in West Africa, the population from which Haitian slave ancestors originated. The most important such dish is West and Central African “peanut soup.”^{vi}

Nevertheless, peanuts are eaten in such a way that they appear strategically important outside of the mid-day meal. In some areas, notably Gonaïves, peanuts are eaten on slushed ice. They are sometimes an ingredient in fortified shakes and blends--such as *akamil* and *akasan*—and they are a key ingredient in the powdered peanut-corn blend called *chanm chanm* (all three foods introduced into the Haitian dietary regime through efforts of NGOs and all three rare violations of the rule of exclusion seen in Section 5). Throughout Haiti popular class women make and sell peanut clusters. In some areas they make a type of peanut brittle. The sugar-peanut combination in all these formulations are a high energy snack and, until the invasion of packaged cookies over the past two to three decades, these artisanal peanut confections were one of the premier popular class treats (*dous*, pure sugar clusters and coconut sugar clusters being two others). However, the most common forms in which peanuts are consumed are, 1) roasted (sold in clear plastic bags for 5 and 10 *HG* - 12.5 to 25 cents) and 2) as peanut butter (sold as a spread on bread and cassava at a value of 5 *HG*).

Peanut Butter

Peanut butter is prepared from roasted peanuts, sugar or salt and, in the case of the latter, varying degrees of hot pepper are added, a fact inadequately represented in the data. The most preferred flavor is salty (79%) but more than half of respondents also like sweet peanut butter (58%)--Figure 41. Congruent with respect to local produce, Haitians overwhelmingly prefer domestic over imported peanut butter (Figure 41).

Figure 49: Preferred Flavors for Peanut Butter

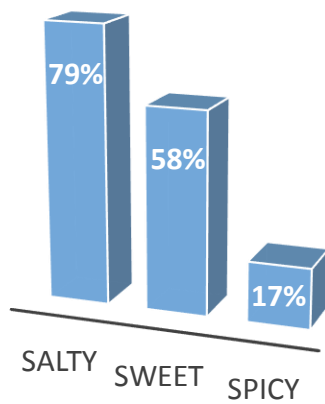
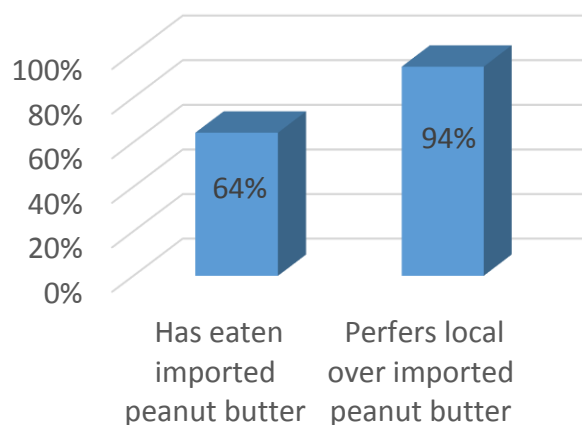


Figure 50: Preference for Local vs. Imported Peanut Butter



Respondents prefer peanut butter over peanuts 60% to 16%, with 24% reporting they like both equally (Figure 42). Both are overwhelmingly considered to be breakfast foods, consumed in the morning to mid-morning (Figure 43 following page). Peanut butter is most frequently smeared as spread on wheat bread and to a lesser extent cassava bread (Figure 44 following page).^{vii} Vendors who sell peanuts, peanut butter, bread and bananas also sell eggs.

Expenditures on Peanut Butter

The average reported expenditure on a single peanut butter purchase is 153 HG (USD3.00), but we believe this is an error in the way the question was posed and reflected not consumption so much as the common practice among women of purchasing peanut butter for resale. We know anecdotally and from interview with vendors that the most common way that people purchase peanut butter is not in a container but as a spread on bread or cassava that the vendor values at 5 to 10 HG but that some vendors use simply as an inducement to selling the bread or cassava. Sixty-seven percent (67%) of buyers want to purchase more, and 88% would purchase more if it were less expensive.

Figure 51: Preference for Peanut Butter vs. Peanuts

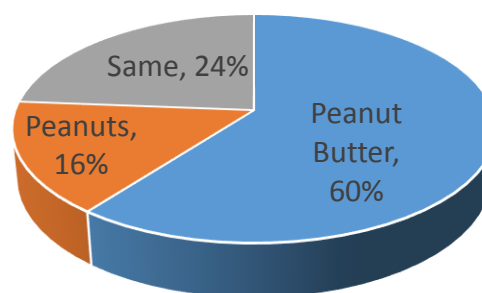


Figure 52: Time of Day that Respondents Eat Peanuts and Peanut Butter

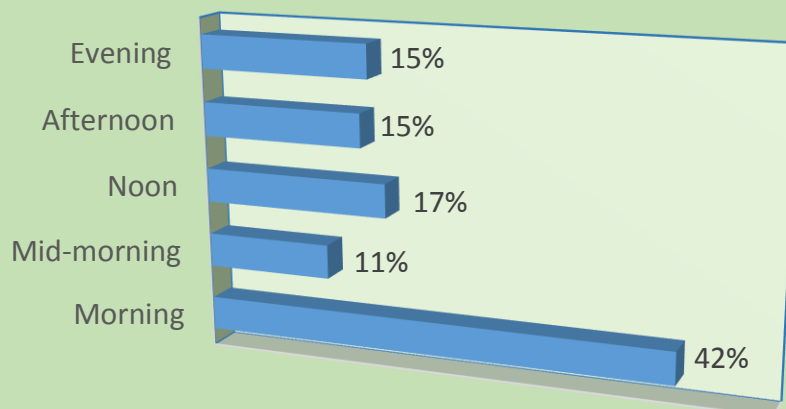
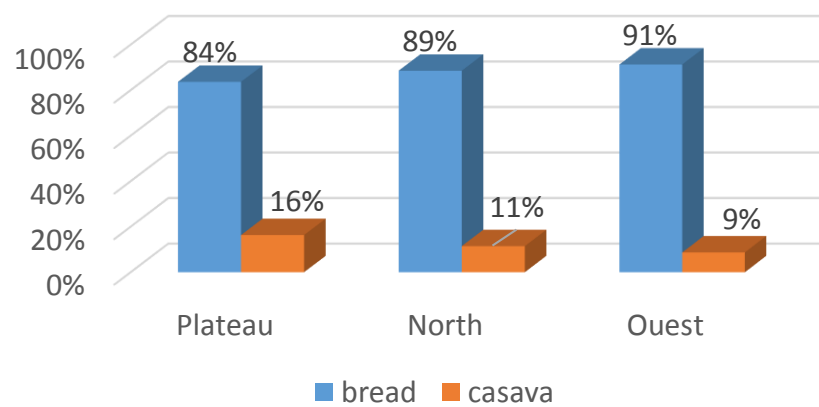


Figure 53: Preference for Peanut Butter on Bread vs. Cassava



Market Potential and Analysis for Peanut Based RUTFs

To get an idea of potential market size for peanut based RUTFs, interviewers used small clear sachets of peanut butter as props for posing questions (see Photo 52). Eighty-five percent (85%) of respondents said they would buy it (Figure 45). Table 24 below summarizes that most said that they would like to pay 5 HG; 69% sixty-nine percent thought they could sell it, saying they would like to pay 3 HG (median) and sell it for 5 HG (median). The recommended number of sachets per case was a median of 100 sachet; 75% felt that there was a sufficient quantity in the sachet, 96% would pay more for if it were bigger.



Photo 52: Sachet of peanut butter

Figure 54: Would Purchase a Sachet of Peanut Butter (N = 632)

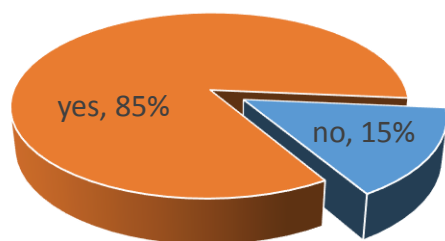


Photo 53: Local vs. Imported Peanut Butter for sale in super market

Table 26: Likelihood of Purchase, Preference and Price for Peanut Butter Sachet									
Would purchase Peanut Butter Sachet	Hoped purchase price as consumer	Would at least purchase once daily	Would most likely purchase in a store	Amount in the sachet is sufficient	Would pay more for larger quantity	Sure that they could resell it	Average suggested wholesale price	Average suggested resale price	
85%	5 HG	68%	70%	75%	96%	69%	6.8 HG	10.3 HG	

Distributors Profit Margins

In Table 1, below: Tier 1 margins describe the mark-up charged by a high-volume distributors in Port-au-Prince. Tier 2 describes the mark-up for a buyer who then sells the case by selling the sleeves within the case, which typically hold six to 12 packets of cookies or crackers (this step is absent with Chiritos and other cheese puffs, which are sold in large plastic bags containing 40 or 60 individual bags).

Snack	Snack type	Retail price (HTG)	Profit Tier 1 (%)	Profit Tier 2 (%)	Profit retail (%)	Turnover (est. in days)
Bongu	Salty	2.5	3%	8%	20%	2
Coctel	Salty	2.5	3%	8%	20%	2
Guarina	Salty	5	3%	11%	20%	2
Maxi	Sweet	5	3%	N/A	N/A	2
Casino	Sweet	10	3%	6%	20%	2
Salix	Sweet	10	3%	13%	20%	2
Chiritos	Puff	5	10%	N/A	21%	1.5
Mini Jumbo	Puff	5	10%	N/A	22%	2

Several distributors said that packaged peanut butter was a product more appropriate for sale in a supermarket than a market stand, although those believing small packets of peanut butter could sell put the street price point at 5 Haitian gourdes.

Competing Processed Snack Foods

Although consumers reported most often making snack purchases based on “quality” of the snack (see Figure 46 and 48), limits on the buying power of the typical Haitian consumer make price an obvious determinant of popular sales. In contrast to the consumers themselves, store owners more often reported “price” as the most important consumer priority (see Figure 47) and as one depot owner put it: “The hottest seller is whatever is cheapest.” This result is a fairly tight range of prices seen above for the most popular snack foods.

Figure 55: Respondents on Priority When Choosing Snacks (Consumer Focus Group Survey N=128)

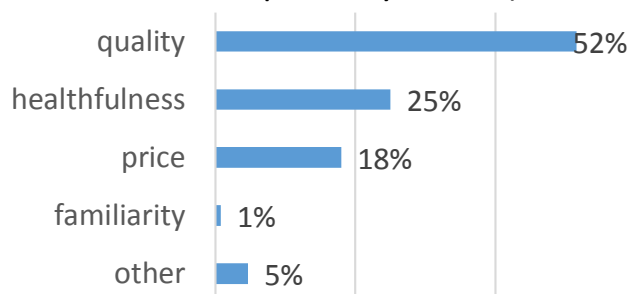
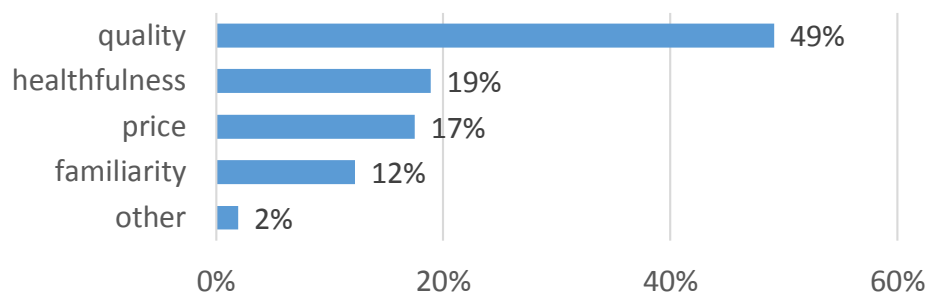


Figure 56: Store Owner on Consumer Priority when Choosing Snacks (N=33)



Figure 57: Reported Most important motivation for Choice of Snack (Consumer Survey (N = 632))



Probability of Sales

Considering the anticipated sale of the peanut butter product, distributors and redistributors split around the opinion that it would sell. An equal number of respondents of both types said that it would “not sell” as said that it would “sell hot”, with a 3 to 1 majority estimating that it would at least sell (Figures 49 and 51, below). The consensus is that it must come in three flavors, salty, spicy, and sweet. Overall, 13 of 19 thought that the peanut butter would sell. Interestingly, while fewer of the distributors thought that peanut butter would sell, more of them thought that it might sell very well.

Figure 58: Distributors Anticipated popularity of Peanut Butter Sachets

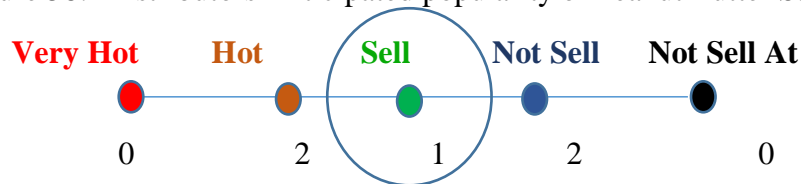


Figure 59: Re-distributors Anticipated popularity of Peanut Butter Sachets

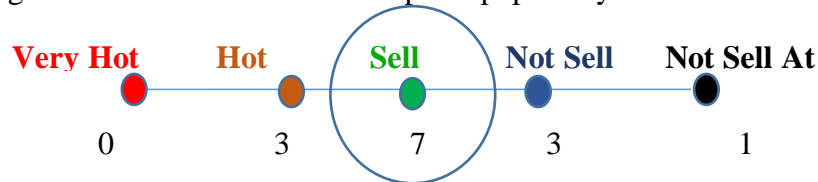
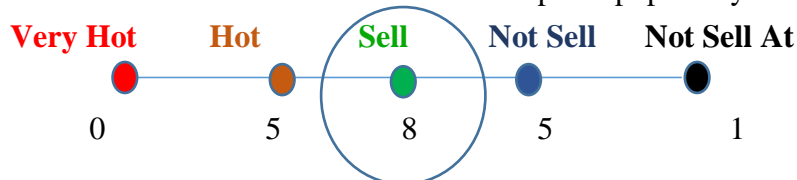


Figure 60: Combined Distributors and Re-distributors Anticipated popularity of Peanut Butter Sachets

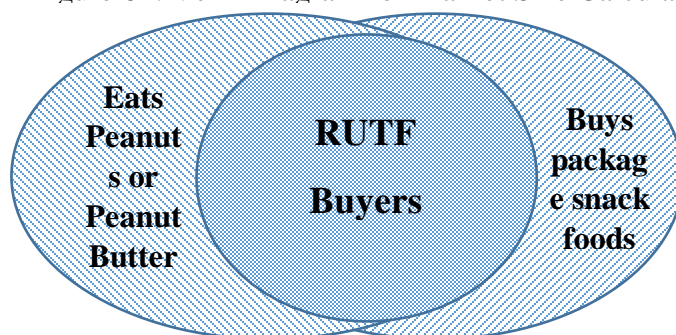


Market Size

To arrive at estimates of potential market size we drew on the random 632 respondent Consumer Survey. The logic behind the calculation was that a person likely to purchase a peanut based RUTF is one who,

- A) Buys prepackaged snack foods
- B) Eats peanuts or peanut butter: calibrated to provide a range of estimates based on the frequency that a person reported buying peanuts and/or peanut butter. Specifically,
 1. eats peanuts or peanut butter at least daily
 2. eats peanuts or peanut butter at least once per week

Figure 61: Venn Diagram for Market Size Calculation



Our calculations in Table 26, following page, are based on two additional assumptions,

- 1) That events A and B are above are independent, meaning that the probability that a person eats peanuts butter does not change the probability that the person eats packaged snacks.
- 2) That children are likely to eat peanuts and/or peanut butter at least as frequently as adults—something evident in the data shown earlier on.

With these assumptions, we then multiplied the resulting probability figures (A*B) by the population for each of the following sample sets,

- a) Port-au-Prince metropolitan area
- b) All of urban Haiti
- c) All of rural Haiti
- d) All of Haiti

Caveats and additional information

We could have eliminated the population under 3 years of age, but the fact is that if it is known RUTFs are high value foods then we can assume from the use of other foods that they may be used in infant foods as well as for toddlers.

Not included in the calculations are that,

- 96% of those interviewed said they would be more likely to purchase a prepackaged product if they knew that it had more vitamins than competing brands. This adds support to the likelihood that RUTFs will sell.
- 85% percent of the respondents said that they would purchase the peanut paste shown during the course of the interview

Table 28: Market Size Calculations

Area	Probably Conditioning Factors			Calculation of probability		Population	Market Size Estimates	
	<u>A</u> Buys prepack snack foods	<u>Bi</u> Eats peanuts or peanut butter at least daily	<u>Bii</u> Eats peanuts or peanut butter at least once per week	<u>A x Bi</u> Probability respondent would purchase a peanut based RUTF at least daily	<u>A x Bii</u> Probability respondent would purchase peanut based RUTF at least daily	<u>D</u> Pop (millions)	<u>A x Bi x D</u> Population over 3 years of age that would purchase Daily	<u>A x Bii x D</u> Population over 3 years of age that would purchase At least once per week
Rural (n=153)	.92	.56	.79	0.51	0.73	4.7	2.4	3.4
Metro (n=216)	.90	.55	.85	0.49	0.76	3.0	1.5	2.3
Peri-Urban (n=103)	.90	.46	.84	0.41	0.76	3.0*	1.2	2.3
Prov Urban (n=101)	.92	.70	.90	0.64	0.83	1.9	1.2	1.6
Town (n=59)	.88	.50	.64	0.44	0.56	1.0	0.4	0.6
Total (632)	.91	.55	.85	0.50	0.77	10.8	5.4	8.3

*Estimated sub-population. Not included in total

Distributors and Credit

All distributors would request/require credit for new product so that they can promote the new product. Distributors large and small said they would expect any producer of a new snack product to advertise and provide samples/tastings to introduce the product to their customers. In Port-au-Prince, this promotional/introductory period often involves the presence of a sales representative of the company posted at the sales station of the warehouse to pitch the product to customers. In this period, to minimize risk, distributors expect to sell on consignment, with the manufacturer providing the product and receiving payment only for what sells. Only after seeing that the product sells are they willing to commit to selling a set amount, or purchasing product outright for resale. The penetration price point can only be raised slowly once a sales record is established.

Government, Import Duties, Sales Taxes and Licenses

If imported, peanut-based products face significant post-production customs and sales duties: a 5% of value customs verification fee, 3% to 20% of value duty (varying by product), and 10% sales tax. If sourced and produced locally post production only a 10% sales tax applies.

For imports, shipping costs must also be factored in. The cost of Miami to Port-au-Prince shipping, handling and other related costs for a 20-foot container is USD \$1,200.

If producing locally, a prospective manufacturer must present the Haitian government with a study and documentation on all machinery and raw material. If approved, the Haitian government charges no taxes on imported raw material, packaging material, or machinery, and no income tax for up to 10 years.

Labeling, Size and Packaging

Legally the products must be traceable, they must be labeled and specify origin and nutritional content. Distributors with their own brands--Bongu and Stanco—want their logos on the sachets. All distributors expressed an interest in printed claim of high nutrition and, if possible/true, the fact that the product is made of local materials (note however that Bongu has refused to sell peanut butter).

Distributors recommended number of sachets per case are 100 sachets. Distributors uniformly said that the larger quantities are more appealing to retailers, as higher volume sales made possible with larger packing units helps reduce costs and maximize profits.



Photo 54: Distributor in Cape Haitian, Extruded Corn Snacks out front

11. Conclusion and Recommendations

The reality of the Haitian market in prepackaged ready-to-eat foods is that the industry is unregulated. The government has laws and claims to enforce them but there is zero (0) enforcement. The market is also monopolized by a small number of elite local businesses. These businesses are protected from foreign competition by the veneer of government legislation and by their knowledge of and connections inside what is essentially an informal and closed system. They also have a distinct economic advantage over any outside competitor that ‘plays by the rules.’ We can conclude from reported tariffs collected at the ports that they pay either no taxes or substantially less than would be legally mandated. Competing with these entities may be impossible. But there are prospective points of entry and advantage that an international social enterprise entering the market can use to its advantage.

Getting past the Elite Merchants

There are three ways to get around the elite national enterprises that dominant the market and to get through the labyrinth of informal government obstacles that gate keep:

- 1) partner with one of the local distributors,
- 2) leverage the role of international social enterprise that has humanitarian goals-- getting RUFTs to hungry children—using appeals to and contacts within embassies, high levels of the Haitian government, the UN, and NGOs to level the playing field,
- 3) both partner with one of the local distributors and leverage the status of social enterprise.

The success of either strategy depends on publicity.

Publicity

Popular Class Haitians are highly sensitive to suggestion and rumor and, very importantly, the population tends to respond to information in an unified, integrated and reactive manner. The extremity of the point was highlighted in 1998 eclipse when warnings on the radio not to look at the sun during the ## minutes of the eclipse became a veritable panic. On the day of the eclipse one would have been hard pressed to find a dog in the streets. Virtually the entire 2.5 million population of Port-au-Prince barricaded themselves in their homes for the entire day. Many stuffed papers and sheets in all the cracks to prevent any sunlight from entering the home. At least 5 people died from suffocation because they so thoroughly sealed their homes they cut off the oxygen supply.



Some advertisers have managed to take advantage of this tendency for rumor and herd mentality. During the 1980s and 1990s, in the collective mind of popular class Haiti, malt beverages became a “fortified” food. The campaign was so effective that malta ranked 27 in the Most Nutritious Food Survey conducted during the course of the research, several notches above Akamil—the fortified bean and grain formula introduced by international nutritionists and NGOs during the 1960s. Energy drinks have also managed to get themselves a place in the top thirty

most fortified foods category, albeit a countervailing rumor has convinced a large minority of the population that Energy Drinks will eventually maim or kill the user and they are taboo to women because of they are believed to have aphrodisiacal qualities that might lead a woman to do things she will regret or that would soil her reputation. The heavily sweetened and unfortified Dominican wine, “Champion,” is another example. Featuring a weight-lifter on the label, it has, with no advertising whatsoever, become equated with vitality and athleticism. Plain salted crackers became a common meal substitute for children because they are “salt food” similar to the balanced mid-day meal.



Every popular class Haitian knows that Dominican Wine sold throughout Haiti revitalizes and invigorates

The belief that such foods are nutritious—especially vis-a-vis popular class Haiti’s sophisticated understanding of nutrition seen earlier in the report—can be conceptualized as a dangerous shift in food consumption patterns and comprehension. The trend is concurrent with urbanization and a greater demand for foods that ship and store well and with long shelf life, particularly important in Haiti where electric service and hence refrigeration is undependable and, in the best of areas, seldom available for more than 8 hours per day. These factors create a situation ripe for exploitation by unscrupulous marketers.

But the gullibility can work to the advantage of any socially conscious marketing campaign. By emphasizing the importance of nutrition, the nutritional value of RUFTs, a responsible marketing campaign can raise the level of awareness and—without directly mentioning other brands—call attention to the low quality ingredients in other products. In this way they can start their own folk beliefs, but one with substance and verifiable. By actually getting the RUFTs onto the market we can reinforce the campaign, providing people with a bona fide alternative to low quality snack foods.

Getting to the Market

Similarly, there are relationships inherent in the Haitian informal vs formal markets that offer significant opportunities to get RUFTs onto the popular market. Specifically, the population of Haiti is radically market and entrepreneurial oriented, as much as 50% of all adults are engaged in some type of trade. There are ways to maximize the interest in trade, scarcity of credit, and links before formal and informal sector merchants what could be utilized to assure widespread distribution of RUFTs.

In the 632 respondents Consumer Survey, fully 29% of all respondents had at least one person in their home who was selling snacks who had sold them within the past 12 months. In 87% of those households, the vendor was a woman; in 12% of the households the vendor was a man, and in 2%

there were vendors of both genders (the total exceeds 100% due to rounding). The most common snacks sold were cookies (46%), crackers (30%), and peanut butter (13%), while only 1% primarily sold popcorn. Thus, while there is only a weak formal distribution system in Haiti—as seen in the previous chapter—the informal distribution system is so pervasive that 1/3rd of all households are involved in redistribution. The reason for the extent of involvement in the snack trade has to do with the sheer numbers of people who are poor and dependent on petty trade. As seen at the outset of this report, 70% of the population hovers around the margin of extreme poverty. The vast majority conduct their daily routines—production, work, trade, and purchases—in the informal economy. But the formal economy impinges on their lives. It is the source of at least half of all food stuffs. And when it comes to trade and distribution there is an interchange between actors in the formal and informal market economies that offers a point of entry for savvy minded distributors, especially those with an eye on working with the poor.

Plugging into the ‘Dueling Economies’

The formal economy is the most important entry point for manufactured products but there is a relationship between the two that should not be overlooked and could provide a valuable tool to make the informal economy work to the advantage of marketers of RUTFs.

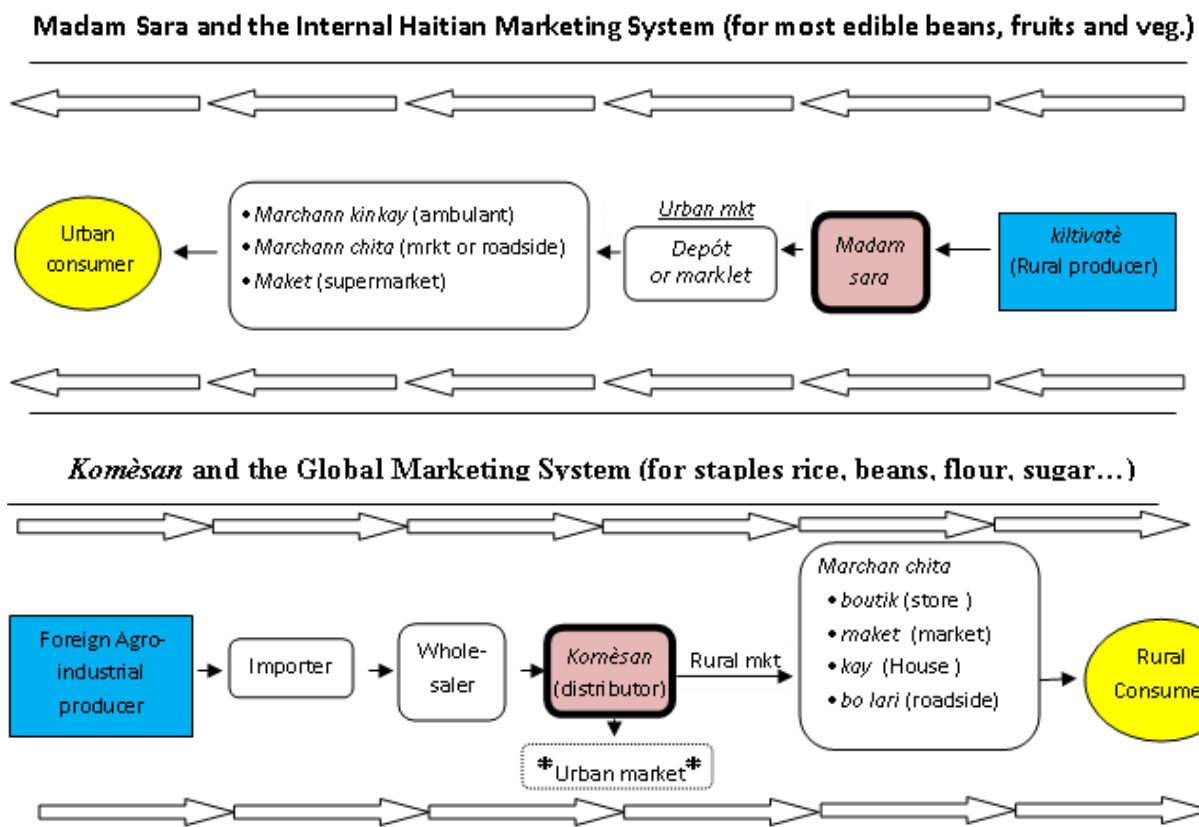
In Section 6 it was seen that main actor in the formal economy is the *komesan*, the redistributor of mostly imported goods. By virtue of his/her link to the formal economy, the *komesan* has greater capital than the key actors in the informal economy, and often has access to a line of low-interest or even interest-free credit. The key actor in the informal economy is the *sara*, and because she is in the informal economy she can only access credit at exorbitant rates, as high as 23% per month. Even in the humanitarian aid-funded credit union sector she must pay 3% to 6% per month.

Thus the *komesan* is able to exploit the *sara* by virtue of her desperation for credit. The *komesan* sell their imported staples, cookies, and crackers to the *madan sara* on credit. The woman has 21 to 30 days to pay for the goods. If she sells it at retail market prices she stands to earn about 20% profit, over the period of one month. If she can sell it all. Because *boutik* and many other women also get the foods on credit and sell imported flour, rice, sugar, cookies and crackers out of their homes, the products sell slowly.

So rather than wait and make a small profit, the *madan sara* dumps the imported foods at below market prices so that she can get the cash and trade in domestic produce, an endeavor in which she can earn more money, faster. The aggregate impact of what she has done is to subsidize agro-industrial imports from developed countries (imports that were already subsidized in the countries of origin). In other words, she is undermining her own local economy. And once again, the reason she does it is that she is desperate for market capital.

The point here is while it seems an almost Machiavellian—but best understood as systemic and incidental—it should not go unnoticed that sellers of high nutrition RUTFs produced with local produce may find it justifiable—even prudent and in the best interest of both malnourished children and local producers—to exploit this arrangement by offering *madan sara* RUTFs on credit and letting them sell it as they see fit.

Figure 62: Dueling Economies



ANNEXES

Annex 1: Contacts

Table A1-1 Government Contracts				
Ministry	Last Name	First name	Title	Tel/tel1
MIC/DGI	Cesar	Henry Claude	Director Diction analysis and Statistique	2228-0473
To come				
To come				
To come				
To come				

Table A1-2: Distributors				
	Last Name	First name	Tel/tel1	Tel/tel2
Ti_Tony	Malebranche	Stefan	37241162	0
Edc,dispodal	Mme clervil	Wiliome	37551386	37153399
Stanco	St. Louis	Vladimir	37943274	0
Roro depot	Etienne	Jean rony	48593321	39049241
Kay salem	Charles	Whitney	38787864	28131338

Table A1-3: Redistributors				
Non/Man25	Non/Man26	Man27	Tel/tel1	Tel/tel2
Dodier	Dieuveut	Manasse dieu tout puissant	36587562	32506357
Maculee	Elise	La foi de job	37657126	0
Pierre	Wilner	Tout a jesus	37885785	38030700
Joseph	Samuel	Reflex store	36017735	0
Fourrien	Fanes	Bien venu depot	33870148	32850264
Louischel	Fritz	Bondieu bon	33193289	0
Baptiste	Henry	La sueure de mon front	33956632	37283917
Cesar	Marie	St jacques tet ste anne	47512640	43999174
Jean marie	Roselene	Beji	37166278	33923505
Jean-Louis	Marie Presta	Le voici provisions alimentaires et gazeuses	36955626	33661116
Obin	Rene	Pas a pas	34488933	36609893
Jean	Manuel	Faveur de dieu	39320389	0
Cadet	Yveline	Merci jesus	48349788	0
Bonel	Pierre	Kay bonel	37404283	0

Table A1-4: Focus Group Participants			
Non	Pre_Non	Tel/tel1	Tel/tel2
Jesumene	Joseph	42737386	0
derivierre	elidienne	42983241	49151990
Augustin	Jasmine	36947132	43671349
Dorsainvil	Gilbert	33399552	36643152
pierre	lucienne	37660896	49098640
Cherichel	Dachelet	47374745	33995575
Bodline	Alesma	38221242	0
louis	aby	46402423	0
remilus	ida	36002759	0
Ana	Emanise	40419425	34720955
Joseph	Dieuna	42618983	0
Dorsainvil	Wilkens	42737386	36909601
Marcelus	Marcelin	37398130	42196882
Michel	Claudy	31487078	32734346
Joseph	Guerline	47963021	43916014
Feline	Jean	33538562	0
Theresiasse	Wismithe	0	0
St louis	Elva	40493614	0
Duverlus	Luscana	42075794	0
Ulysse	Ronel	33917577	37074971
Alusma	Jn williams	34619761	0
jean	michelda	43863978	0
Lubin	Ermelie Ralphtana	39371301	42137786
Charles	Sendy	46213264	0
Raphael	Iselene	33425778	42075794
Caneste	Flander	47206233	0
Dorsainvil	Josue	33534262	38745187
Dorsainvil	Guistine	38560287	0
jean jacques	angelene	33917577	36508199
Joseph	Gizel	38560287	0
docely	christopher	44762842	33535157
Bijoux	Jean Michel	0	0
Joseph	Magdala	32194128	40500841

Table A1-4: Focus Group Participants			
Ulysse	Cesar margarette	43839010	44644357
Joseph	Merciline	40693519	44888347
Dorsainvil	Prosper	0	0
dorneval	denis gerard	33422469	44885586
Jean	Madeleme	36508199	0
Absolu	monite	36002759	0
michel	Isemene	37965223	31690751
duverny	fucien	37531829	0
Pierre	Steve	44028168	48446453
Montrevil	Majorie	44548887	42502088
Vilien	Altero	36647745	0
jeanbaptiste	marcius	31904545	0
jean	Alann	31912483	0
Joseph	Johnny	46213264	0
Luc	Gerome	37220875	0
Cesar	Marvenson	38315731	4.23E+08
paul	Youvensley	47091378	43634048
Sarah	Peterson	42075794	0
Saintilet	Jeff	37144529	0
Joseph	Johnny	46213264	0
CÃ©sar	Kenm	32687299	36991583
Emil	Jennifer	37660896	0
Alicien	Elvius	42577428	0
Florestal	Selony	37144520	0
Ulisse	Bindjino	33182586	39400389
michel	jeanette	22301244	0
Jean	Rose Valine	31861580	0
Augustin	Joanel	38761938	0
legran	Jeffrey	31398057	0
Lamy	Jean boutros	37354862	0
Pierre	Lovelie	47922877	43175698
Saintilme	Adelain	39454605	0
pierre	valerie	37120771	49096040
Petit_homme	Enoc	36389746	0
Raynold	Renald Joseph	37958919	0
Previlis	Michelet	48358338	0
pierre	Roselene	47301243	0

Table A1-4: Focus Group Participants			
Sainvil	Magalie	36398398	38749318
Ducas	Marie Thereze	31034629	0
jules	Junior Nobert	43538657	34185441
Legrand	Junia	44157264	0
Saint fleur	Alarose	38330520	31794824
Previlus	Bendji	49090464	0
Odatte	Loude Djina	33940616	0
Orelus	Micheline	0	0
previlus	paulene	31163259	43942774
Saint juste	Silita	48596560	0
Legrand	Henry claude	31163259	43942774
Legrand	Lidena	0	0
Dorat	Alex	47715073	0
Alexis	Mirelande	31608688	0
paul	carlos	38102694	9999
Luc	Dina	0	0
Joseph	Fredelin	46836235	0
Jeannithe	kednah	38212694	0
Saint Juste	Isemanie	48350068	0
Joseph	Rodeline	38647141	32657898
Pierre	Davidson	0	0
Jean	Samuel	31419290	38099057
Devalsaint	Amissille	0	0
Jean	Jacob	31352034	0
sufrin	Djenika	36126373	0
Montrevil	Marceline	46239983	0
Macelus	Eric	48122148	0
Germain	NEISSA	31012766	0
Fortine	Melissia	48585708	0
Germain	Carl Henry	0	0
Pierre	Odeline	37244237	33475401
fortune	odette	46490549	0
christla	Pierre	31343430	31343430
Pierre	Alex	36035852	38258158
Meristil	Delivrance	44679420	0
brutus	Enock	46339506	0
Desrosiers	Junie kettia	46162160	48012693
Destin	Anithe	37616943	0

Table A1-4: Focus Group Participants			
nelson	Renaud	33139270	0
Marc	Cherline	32954140	0
Pierre louis	Michael	36306816	0
fortune	saintina	37433855	37433855
Jean	Dorlise	33108049	0
Nelson	Hermione	33737861	36695485
Dorneus	Claubert	49039281	34113746
Hyppolite	Evens	37653518	40915121
Cineus	Ricardy	48756475	33960152
Alexandre	Anithe	34268879	0
Belizaire	Johnley	34828552	0
Joseph	EVENSON	36327289	0
Pierre	Chadson	46292277	0
Saintval	Evalien	46580530	0
Theophin	Aklin	47224895	0
Pierre	Wenes	37245867	33104434
Alphonse	Olibrice	36710539	0
Jn baptiste	Gerard	42878983	37611083
Pierre	Chelly	31425584	33590701
Simeon	Jean level	37092027	0

Annex 2: Proposal

Proposal for Baseline Study of RUFs in Haiti

Submitted Tuesday, June 15, 2014

Timothy T. Schwartz, PhD

timotuck@gmail.com

Summary

- 1) Review of the literature from academic and NGO sources
- 2) Interviews at government agencies to collect food related data on laws, regulations and standards
- 3) Key informant interviews with members of the business community and researchers with special knowledge and experience in the area of Haitian nutrition
- 4) Value chain investigations: specifically into local snack foods, street foods and peanuts
- 5) Focus groups: total of 33 focusing on nutrition, food consumption, and child feeding practices
- 6) Frequency List (also referred to as “freelisting”) surveys: 50 lists obtained in association with focus groups. Focused on ranking of most nutritional foods and snack foods.
- 7) Qualitative Cultural Consensus Analysis: 49 interviewed in depth using pile sorts (to develop food categorization profiles/cognitive domains regarding food categories).
- 8) Quantitative survey on consumption patterns: 128 surveys conducted in association with focus groups
- 9) Vendor survey: open interviews with 30 vendors concerning attitudes toward new products, disposition to purchase, credit arrangements, distribution
- 10) Boutik surveys: total of 56 boutiks at
- 11) Boutik Inventories
- 12) Distributors
- 13) Redistributors.
- 14) Quantitative Consumer Survey: 628 respondent survey focusing on snack preferences, prices, frequency and timing of purchases, attitudes toward local vs. imported foods,

Deliverables

Report that includes: import duties and laws pertaining to nutrition, phytosanitary restrictions, labeling and packaging. A diagram of ranked distribution mechanisms and map of market chains and distribution channels and profits at each step in the value chain, market size estimations, demand, and pricing points. Estimation of wholesale and retail outlets per area and population. Profile of local food categories, nutritional perspectives and preferences. understanding significant of fortification, recommendations of how and where the product should be sold, and how to get the product from importation to the end user. Understanding of storage, transport, and infrastructure

Materials and programs

The Cultural Consensus Analysis program Analytic Technologies Anthropic; Quantitative surveys will be conducted with Samsung Tablets programmed in ODK Format with data processed on Columbia University’s Formhub site.

Staff and Survey Structure

Survey staff is made up of the principal consultant and coordinator, a PhD in Anthropology with an emphasis on quantitative field methods and extensive research and survey experience in Haiti; 1 home based operator who handles central logistic, backstopping and data monitoring via telephone (i.e. calls 10% of respondents daily) 2 supervisor-enumerators; 4 enumerators; 6 motorcycles; 1 vehicle; 1 driver. The survey staff will handle all planning and data oversight. Enumerators: All our enumerators have worked with us before and have demonstrated their credibility. A full list CVs is provided on request.

Data Quality and Management

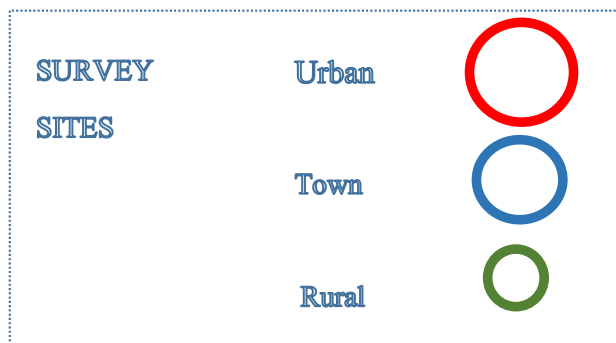
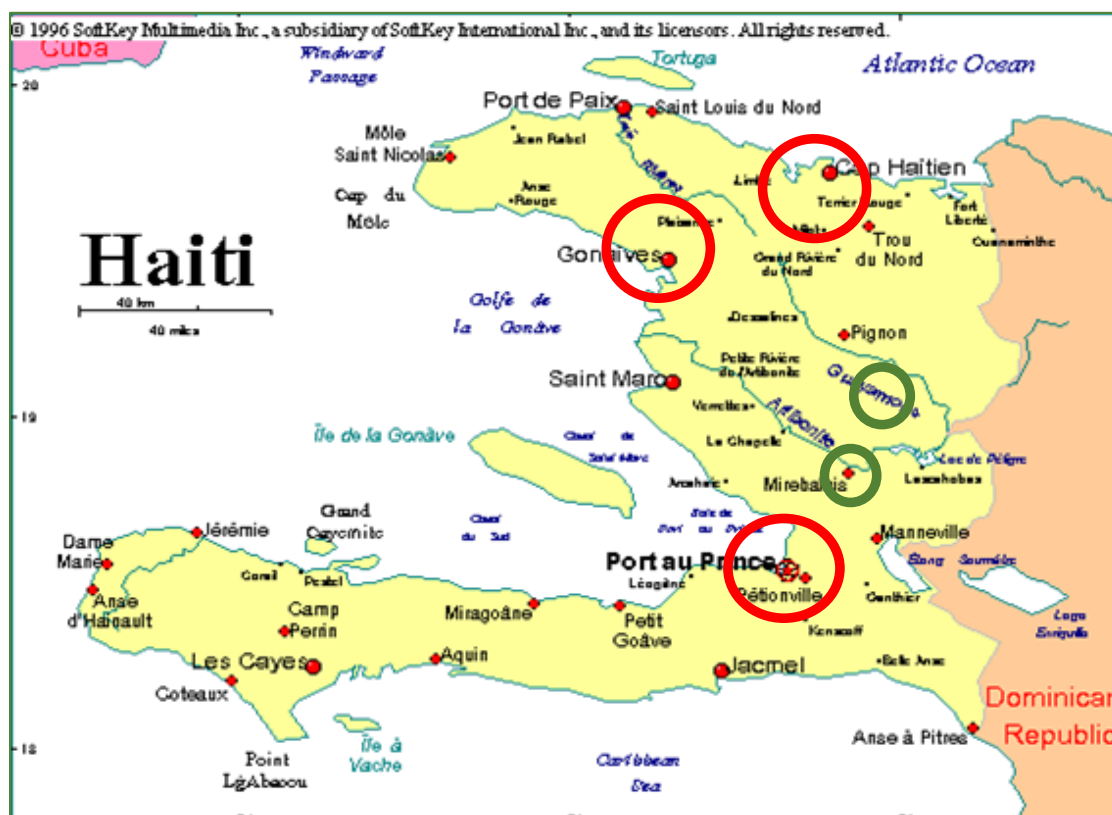
Data quality standards are assured through a strategy of paying enumerators per questionnaire, incentive bonus, close supervision, use of computer tablets, and reliance on cell phone follow up. Specifically, enumerators are paid per accurate and honestly completed survey. They are given a per survey bonus if the survey is completed within the scheduled time. Tablets allow for daily data compounding making it possible to continually review and compare data with respect to each surveyor thereby monitoring competence and performance. Next day cell phone follow up (for 1 of every 10 surveys) during which a key question is verified gives us yet another means to ensure that the survey was conducted.

Schedule

Tasks		Weeks					
		1	2	3	4	5	6
Qualitative interviews and Literature review							
Estimations of boutiques and vendors per área							
Frequency Listing							
Quantitative instruments	Design and pretest						
	Survey						
	Analysis and report						

	Site	Population	Sample Size for City and Town	Total
Urban	1. Port-au-Prince	1,585,826	100	200
	2. Cap-Haïtien	170,422	50	
	3. Gonaïves	109,025	50	
Town	4. Jacmel	42,989	50	200
	5. Mirebalais	11,156	50	
	6. Léogâne	14,453	50	
	7. Kenscoff	52,000	50	
	8. Rural Cape Haitian	-	25	200
		-	25	

	Site	Population	Sample Size for City and Town	Total
Rural		-	25	
	9. Rural West	-	25	
		-	25	
		-	25	
		-	25	
	10. Rural Plateau Central	-	25	
-		25		



Annex 3: Most Nutritional Foods Free-lists

Before we get into the categories, we here review the original source we use to develop the categories for further analysis and exploration. The first two was the freelist survey. The survey involved interviewing 40 women and 13 men between the ages of 17 and 73 with average age of 33 years old. The questions were what are the most nutritious foods for, a) babies, b) children c) pregnant women, d) women, and e) men.^{viii}

Baby	Children	Pregnant	Woman	Man
53	47	47	45	48

The following steps were taken to simplify the data for analysis. In doing so important features of the data became evident and must be noted here. The distinctions help describe the data and suggest further areas of investigation in the subsequent research.

- In first level analysis mixed foods were separated and the dimension of mode of preparation such as pureed beans vs beans *kole* (mixed with grains) was omitted
- If a mixed food was specified, such as rice and beans, or rice and vegetables, the categories were broken down and listed as their constituent entries. Thus, rice and beans became, rice and then beans. Spaghetti and milk became spaghetti and then milk. The only exception was *bouyon* (stew), a concoction so frequently mentioned that we kept *bouyon* as if it were a single food. A justification for this is that *bouyon* included several of the most commonly cited foods that were listed apart from *bouyon* itself, therefore keeping it as a single food type did not effect the frequency of citations for the ingredients
- Smoked herring (imported) became fish
- All poultry and meats were put under meat
- All malt drinks, *extrait de malta* and *guinness*, were put in the single category of malta
- All energy drinks were put in the single category of energy drinks
- All vegetable and fruit juices were put under natural juice vs processed juice (but not the blended starches mentioned above). The most venerated juices in terms of nutrition are lime and passion fruit. Carrots have a very high place on the list of respected nutritional foods and it were often cited as a juice in which cases we translated it not as “natural juice” but, because it is a vegetable, as carrots. This logic may or may not be appropriate
- All non-starchy vegetables and greens were combined together even though among popular class Haitians they are distinct categories (*legim* vs *fey*)
- When respondents said *labouyi* with no qualifier we interpreted it to be understood as ‘wheat flour.’ But it may in times have been used as a catch all

- All *labouyi* (porridge) was broken into its constituent milk and whatever else they identified. But this should come with a caveat because very poor people, or people who are suffering hard times, may not use milk
- The importance of milk may also be underrepresented. Often respondents said coffee and milk or cornflakes and milk. And often when respondents said coffee or chocolate they may not have mentioned milk but, we assume from ethnographic experience, that it is, as with porridges, implied. Similar, even though not specified in the lists, all foods for babies of an age greater than neonate we assumed based on from interviews to be fortified with milk
- Almost all mentions of plantain are green plantains. Most mentions of bananas refer to ripe bananas
- Sweet manioc vs. bitter manioc is an important distinction. Baby foods are made of sweet manioc. Yet, the distinction was overlooked in the data gathering and simply noted as manioc
- Also, most misleading in the category of baby foods is that all starches were flour, *farin*, many of them made from local products such as arrowroot. Sometimes they are store bought and packaged. But often they are homemade. No distinction was made between homemade and store-bought
- Regarding juice, any starch (starchy vegetable or grain) was identified by the named starch combined with milk and, although we left sugar out of the list, it should be understood that they often add sugar.
- Sugar and edible oil are not adequately represented in the summary of foods. Nevertheless, noting the sugar and edible oil rule—wherever they can be added the most possible is added—we have emphasized their conspicuous role in the diet as a constant.
- All varieties of plantain were lumped under the single category of plantain. This was done despite the fact that a variety of plantain called *kiyez* in the North West of Haiti, *pobon* in Cape Haitian and *##* in Port-au-Prince, is considered the most nutritious type of plantain and consistently distinguished from other plantain varieties as a baby food and fortifying for ill adults and children.
- There are dimensions of food preparation not adequately captured in this phase of the research but that will be pursued in greater depth during the next phase of the study. Specifically, foods are *kole* (embedded), *pure* (blended), they can also be *graje* (grated), and *pile* (smashed). In those categories discussed below we captured how foods are cooked (fried, boiled and sautéed) but we generally omitted the dimension of how they are prepared or transformed for consumption.
- Another dimension that we emphasize in the following analysis but that can and will be taken farther in the subsequent inquiry are foods that go together. For example, a rule is that all grains should have black beans either embedded in them or poured over them as a

sauce. Ginger goes with sweets, as does cinnamon, star anise (*Illicium verum*), and fey d'inde. On the other hand, bullion cubes, cloves, peppers, parsley, leeks, tomato paste, onion and salt are almost all—or at least a minimum combination of them--indispensable ingredients in meat and fish sauces.

- Bread was omitted even though we did keep *soup-pen* (bread soup). The reason is because it is highly misleading to mention bread as a distinct category. Bread was often not mentioned when in fact we know that it is one of the most consumed foods, particularly in urban areas. Anecdotally we know that bread is almost always eaten with coffee and chocolate and *akasan*. The pattern is so consistent that it is almost inconceivable to consume these liquids in the absence of bread. People will also commonly and traditionally eat bread with juice, sugar water or even soda. Yet, during the freelist interviews no respondent mentioned bread in the context of these liquids. In this regard it would be interesting to clarify in subsequent research to what degree cookies and crackers have supplanted bread as a snack food.
- The same taking-for-granted of common foods appears true for mangos and perhaps sweet potatoes and bread fruit. They were commonly left out of respondent lists. We suspect same might be true regarding peanuts and peanut butter. They may be so much a part of the diet that people simply took them for granted and failed to mention them. On the other hand, it is clear that they are not recognized medicinal types foods in cases of illness or acute nutritional need. Only one of the fifty people interviewed mentioned peanut butter.
- Other food dimensions that are touched on in the following but that may warrant greater development in the subsequent stages of the research are the dimensions, 1) sweet, salty, spicy and sour, and 2) hot vs. cold. Indeed, it may be useful to explore a type of multidimensional categorization of food types, associations and rules along these lines as well as how they are prepared, liquid, paste, powder or solid if they are natural vs. manufactured, and local vs. imported .
- Another entire realm of foods are those made of imported wheat. These foods are present in the analysis and are given their prominent role in the Haitian diet. But they could be analyzed as their own complex category of foods. We have provided that analysis but, for the time being, relegated it to another annex.
- In short, the food system is complex and we are not able to present all rules and all relationships at this stage. But the following analysis is nevertheless extensive, helps make sense of Haitian culinary patterns, carries us a long way toward identifying where the consumption of peanuts can be promoted and expanded in the Haitian dietary regime, and it lays the foundation for complete profile of culinary rules and consumption patterns in the subsequent stage of investigation.

Table A3-2: Frequency of Respondents Mentioning Food as among Most Nutritious for									
Pregnant Women		Women		Man		Children		Baby	
Maize	63.8	Maize	81.3	Maize	75.6	Maize	72.3	Maize	73.6
Beans	57.4	Juice	54.2	Greens	64.4	Beans	70.2	Beans	71.7
Juice	57.4	Plantain	52.1	Plantai	57.8	Greens	59.6	Milk	60.4
Greens	51.1	Rice	50.0	Juice	48.9	Juice	57.4	Plantai	54.7
Bouyon	38.3	Beans	45.8	Beans	48.9	Bouvo	44.7	Juice	50.9
Plantain	38.3	Greens	43.8	Bouvo	42.2	Meat	34.0	Greens	47.2
Rice	36.2	Bouyon	39.6	Millet	35.6	Rice	34.0	Carrots	43.4
Milk	36.2	Meat	27.1	Rice	35.6	Milk	31.9	Potato	35.8
Millet	23.4	Millet	25.0	Meat	26.7	Plantai	27.7	Bouvo	32.1
Meat	21.3	S.Potato	18.8	Milk	26.7	Fish	25.5	Rice	32.1
Wheat	17.0	Milk	18.8	Fish	20.0	Millet	23.4	Manioc	26.4
Carrots	14.9	Fish	18.8	Wheat	17.8	Fruit	14.9	Flour	20.8
Eggs	14.9	Wheat	16.7	Pasta	15.6	Eggs	12.8	Cheese	17.0
Banana	12.8	Yam	16.7	Eggs	11.1	Potato	10.6	Gerber	15.1
Pasta	12.8	V8	14.6	S.Potat	8.9	Pasta	10.6	Eggs	15.1
Flour	12.8	Malta	12.5	Yam	8.9	Flour	8.5	Meat	13.2
Oats	8.5	E.Drink	12.5	Manioc	6.7	Oats	6.4	Fish	11.3
Brdfrt	8.5	Manioc	10.4	Brdfrt	6.7	Yam	6.4	Banana	11.3
Yam	8.5	Flour	10.4	Banana	6.7	S.Potat	6.4	Brdfrt	9.4
Manioc	8.5	Pasta	6.3	Flour	6.7	Manioc	6.4	Taro	9.4
Fish	8.5	Salad	6.3	Potato	6.7	Dlo	6.4	Fruit	9.4
Fruit	8.5	Carrots	6.3	Coffee	6.7	Wheat	6.4	Aroot	9.4
S.Potato	6.4	Banana	6.3	Pumpk	6.7	Soupe	6.4	Sausag	7.5
Potato	6.4	Brdfrt	6.3	Carrots	6.7	Carrots	6.4	Akamil	7.5
Avocad	6.4	Chocolate	4.2	Fish	4.4	Soup	4.3	Soupe	5.7
Coffee	6.4	Oats	4.2	Pen	4.4	Pen	4.3	Nouris	5.7
Pumpki	4.3	Eggs	4.2	Salad	4.4	C.Scrbl	4.3	Millet	5.7

Table A3-4: Rank of Mentioned Food as among Most Nutritious for Category									
Pregnant Women		Women		Man		Children		Baby	
Maize	3.33	Maize	2.68	Maize	2.51	Maize	2.74	Maize	4.38
Beans	3.52	Juice	3.83	Greens	4.62	Beans	3.12	Beans	4.18
Juice	4.26	Plantain	4.00	Plantain	3.88	Greens	3.96	Milk	5.69
Greens	4.21	Rice	5.00	Juice	3.33	Juice	4.70	Plantain	3.97
Bouyon	5.06	Beans	4.00	Beans	3.45	Bouyo	5.00	Juice	4.59
Plantain	5.22	Greens	3.21	Bouyo	4.10	Meat	4.56	Greens	5.24
Rice	2.53	Bouyon	4.56	Millet	4.26	Rice	3.56	Carrots	4.22
Milk	4.88	Meat	4.44	Rice	4.77	Milk	5.40	Potato	4.74
Millet	5.00	Millet	4.25	Meat	4.33	Plantain	4.31	Bouyo	5.12
Meat	3.70	S.Potato	6.58	Milk	5.00	Fish	6.50	Rice	4.41
Wheat	5.63	Milk	4.22	Fish	5.22	Millet	2.91	Manioc	5.00
Carrots	6.14	Fish	6.38	Wheat	4.56	Fruit	3.14	Flour	5.36
Eggs	4.29	Wheat	6.14	Pasta	4.63	Eggs	4.67	Cheese	6.89
Banana	6.67	Yam	6.40	Eggs	6.38	Potato	6.00	Gerber	1.75
Pasta	8.83	V8	5.00	S.Potat	4.00	Pasta	4.20	Eggs	4.50
Flour	7.17	Malta	7.00	Yam	4.50	Flour	6.00	Meat	6.57
Oats	8.00	E. Drink	6.00	Manioc	5.50	Oats	7.00	Fish	6.17
Brdfrt	9.25	Manioc	6.67	Brdfrt	6.20	Yam	5.67	Banana	6.00
Yam	5.75	Flour	5.00	Banana	5.00	S.Potat	5.67	Brdfrt	8.40
Manioc	7.75	Pasta	6.67	Flour	4.33	Manioc	6.33	Taro	5.20
Fish	1.25	Salad	8.00	Potato	2.33	Dlo	4.33	Fruit	7.40
Fruit	3.75	Carrots	5.33	Coffee	5.67	Wheat	3.33	Aroot	3.60
S.Potato	6.00	Banana	8.67	Pumpk	6.67	Soupe	5.33	Sausag	3.00
Potato	3.00	Brdfrt	6.33	Carrots	4.67	Carrots	7.00	Akamil	5.75
Avocad	6.33	Chocolate	3.50	Fish	7.00	Soup	1.00	S.Pen	2.33
Coffee	4.00	Oats	5.00	Pen	6.00	Pen	7.50	Nouris	5.67
Pumpki	3.50	Eggs	2.00	Salad	7.00	Chicke	7.50	Millet	5.33

Table A3-5: Saliency (Coefficient of Rank + Frequency) of Respondents Mentioned Food

Pregnant Women		Women		Man		Children		Baby	
Maize	0.43	Maize	0.59	Maize	0.63	Maize	0.55	Maize	0.44
Beans	0.38	Juice	0.39	Greens	0.25	Beans	0.48	Beans	0.44
Juice	0.33	Plantain	0.35	Plantain	0.32	Greens	0.34	Milk	0.28
Greens	0.30	Rice	0.20	Juice	0.34	Juice	0.26	Plantain	0.34
Bouyon	0.20	Beans	0.31	Beans	0.31	Bouyo	0.21	Juice	0.28
Plantain	0.18	Greens	0.29	Bouyo	0.25	Meat	0.17	Greens	0.23
Rice	0.29	Bouyon	0.20	Millet	0.21	Rice	0.22	Carrots	0.27
Milk	0.19	Meat	0.23	Rice	0.12	Milk	0.15	Potato	0.19
Millet	0.12	Millet	0.13	Meat	0.14	Plantain	0.17	Bouyo	0.16
Meat	0.12	S.Potato	0.09	Milk	0.07	Fish	0.09	Rice	0.17
Wheat	0.06	Milk	0.12	Fish	0.08	Millet	0.17	Manioc	0.15
Carrots	0.06	Fish	0.06	Wheat	0.10	Fruit	0.10	Flour	0.09
Eggs	0.08	Wheat	0.07	Pasta	0.07	Eggs	0.07	Cheese	0.07
Banana	0.10	Yam	0.03	Eggs	0.06	Potato	0.03	Gerber	0.13
Pasta	0.02	V8	0.03	S.Potat	0.09	Pasta	0.06	Eggs	0.09
Flour	0.04	Malta	0.03	Yam	0.07	Flour	0.03	Meat	0.05
Oats	0.02	E. Drink	0.02	Manioc	0.05	Oats	0.03	Fish	0.05
Brdfrt	0.01	Manioc	0.03	Brdfrt	0.03	Yam	0.02	Banana	0.06
Yam	0.04	Flour	0.03	Banana	0.05	S.Potat	0.02	Brdfrt	0.03
Manioc	0.02	Pasta	0.03	Flour	0.03	Manioc	0.01	Taro	0.04
Fish	0.07	Salad	0.02	Potato	0.05	Dlo	0.02	Fruit	0.03
Fruit	0.05	Carrots	0.03	Coffee	0.02	Wheat	0.04	Aroot	0.06
S.Potato	0.03	Banana	0.01	Pumpk	0.02	Soupe	0.02	Sausag	0.05
Potato	0.04	Brdfrt	0.02	Carrots	0.03	Carrots	0.01	Akamil	0.03
Avocad	0.01	Chocolate	0.03	Fish	0.01	Soup	0.04	Soupe	0.04
Coffee	0.03	Oats	0.01	Pen	0.02	Pen	0.01	Nouris	0.02
Pumpki	0.02	Eggs	0.03	Salad	0.01	Chicke	0.00	Millet	0.03

Table A3-6: Total of all Foods Cited for all Groups in Creole

Item	Frequency (%)	Average Rank	Salience	Item	Frequency (%)	Average Rank	Salience
1. Corn	73.3	3.14	0.531	40. Conch	1.7	5.75	0.007
2. Beans	59.2	3.67	0.389	41. Chocolate	1.7	6.50	0.006
3. Juice Fresh	53.8	4.62	0.270	42. Leeks	1.3	3.67	0.008
4. Greens	55.8	4.25	0.304	43. Salted	1.3	4.33	0.007
5. Plantain	46.3	4.20	0.277	44. Akasan	1.3	4.67	0.007
6. Bouyon	39.2	4.52	0.214	45. Beets	1.3	7.00	0.004
7. Rice	37.5	3.62	0.254	46. Nourisoy	1.3	5.67	0.006
8. Milk	35.4	5.55	0.166	47. Avocado	1.3	6.33	0.003
9. Meat	24.2	4.64	0.120	48. Chicken	1.3	5.33	0.006
10. Millet	22.5	4.30	0.131	49. Juice	1.3	9.33	0.003
11. Fish	19.3	4.97	0.089	50. Protein Shakes	1.3	5.00	0.007
12. Carrot	16.3	5.05	0.086	51. Tomato	1.3	3.67	0.008
13. Potato	12.9	5.23	0.065	52. Cashews	0.8	7.50	0.004
14. Flour	12.1	5.90	0.054	53. Peanuts	0.8	7.00	0.004
15. Manioc	12.1	5.83	0.054	54. Corn Soup	0.8	4.00	0.006
16. Cracked	12.1	5.34	0.053	55. Peanut Butters	0.8	7.00	0.004
17. Eggs	11.7	5.00	0.063	56. Nutrigou	0.8	5.50	0.002
18. Banana	9.9	5.93	0.030	57. Yogurt	0.4	13.00	0.000
19. Pasta	9.6	6.00	0.044	58. Soy	0.4	3.00	0.003
20. Yam	8.3	6.00	0.038	59. Orange	0.4	2.00	0.003
21. Fruit	7.9	4.53	0.046	60. Gratine	0.4	6.00	0.001
22. Sweet	7.9	5.26	0.033	61. Gombo	0.4	5.00	0.002
23. Bread Fruit	7.1	7.06	0.031	62. Liver	0.4	6.00	0.002
24. Oats	5.4	6.69	0.025	63. Guinness	0.4	12.00	0.001
25. Cheese	5.0	7.00	0.020	64. Guavave	0.4	8.00	0.001
26. Bread Soup	4.6	3.55	0.029	65. Abriko	0.4	10.00	0.001
27. Malt Drinks	4.2	4.50	0.022	66. Cray Fish	0.4	9.00	0.000
28. Coffee	4.2	4.78	0.019	67. Cookies	0.4	2.00	0.003
29. Gerber	3.3	1.75	0.030	68. Butter	0.4	11.00	0.000
30. V8	2.9	4.00	0.019	69. Egg Plant	0.4	1.00	0.004
31. Salad	2.9	2.71	0.023	70. Congo Beans	0.4	8.00	0.002
32. Bread	2.5	5.33	0.011	71. Mango	0.4	14.00	0.000
33. Energy drnk	2.5	5.50	0.012	72. Garlic	0.4	1.00	0.004
34. Pumpkin	2.1	6.60	0.009	73. Apple	0.4	1.00	0.004
35. Akamil	2.1	5.40	0.009	74. Sugar Cane	0.4	3.00	0.003
36. Arrow Root	2.1	3.60	0.014	75. Cassava Bread	0.4	12.00	0.001
37. Taro	2.1	5.20	0.011	76. Coconut	0.4	5.00	0.001
38. Soup	1.7	1.75	0.015	77. Soda	0.4	3.00	0.002
39. Sausage	1.7	3.00	0.013				

Table A3-7: Pregnant Women			
Item	Frequency (%)	Average Rank	Salience
mavi	63.8	3.33	0.434
nwa	57.4	3.52	0.386
Juice Fresh	57.4	4.26	0.332
Greens	51.1	4.21	0.308
bouvon	38.3	5.06	0.204
Plantain	38.3	5.22	0.181
diri	36.2	2.53	0.293
let	36.2	4.88	0.194
pitimi	23.4	5.00	0.122
vvann	21.3	3.70	0.125
ble	17.0	5.63	0.069
kawot	14.9	6.14	0.060
ze	14.9	4.29	0.087
pasta	12.8	8.83	0.024
farin	12.8	7.17	0.047
aywan	8.5	8.00	0.025
lam	8.5	9.25	0.018
vanm	8.5	5.75	0.043
manvok	8.5	7.75	0.024
pwason	8.5	1.25	0.074
fwi	8.5	3.75	0.050
patat	6.4	6.00	0.031
nomdete	6.4	3.00	0.042
fig	6.4	2.00	0.058
figmi	6.4	4.67	0.042
zaboka	6.4	6.33	0.015
Kafe	6.4	4.00	0.035
ioumou	4.3	3.50	0.028
chokola	4.3	6.00	0.019
betrav	4.3	7.50	0.011
aran	4.3	7.00	0.009
fwomai	4.3	5.50	0.014
souppen	4.3	2.00	0.037
malta	4.3	4.50	0.024
salad	4.3	4.00	0.028
tomat	4.3	3.00	0.027
sportshake	2.1	3.00	0.016
zebeev	2.1	1.00	0.021
zorani	2.1	2.00	0.016
bonbonsel	2.1	5.00	0.012
chaka	2.1	6.00	0.012
lambi	2.1	4.00	0.016
amidon	2.1	6.00	0.013
akasan	2.1	8.00	0.003
pistach	2.1	4.00	0.014
mori	2.1	11.00	0.002
pen	2.1	2.00	0.019
lav	2.1	1.00	0.021
mamba	2.1	8.00	0.009
legim	2.1	5.00	0.012

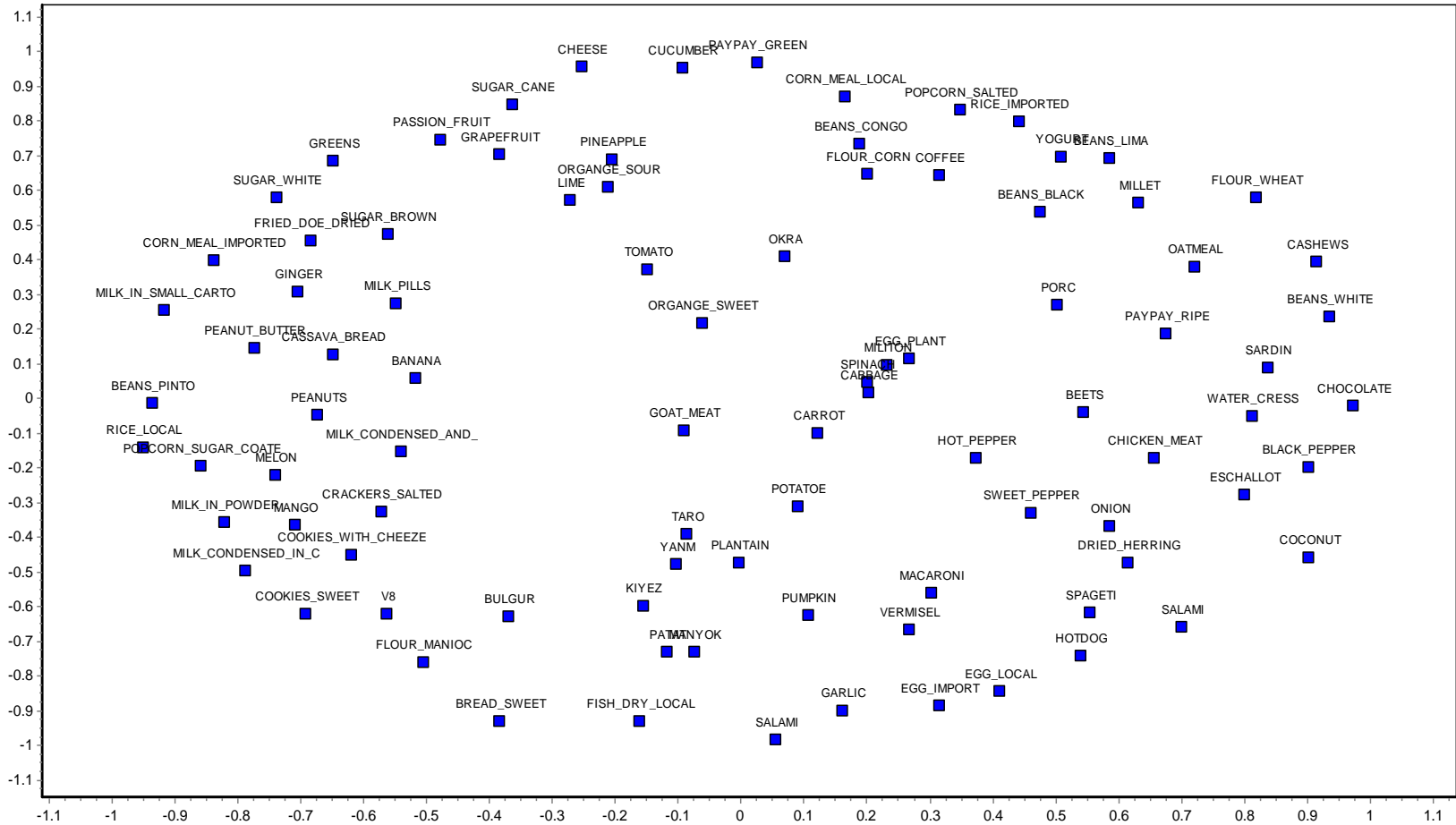
Table A3-8: Women General			
Item	Frequency (%)	Average Rank	Saliency
mavi	75.6	2.68	0.591
Greens	64.4	3.83	0.391
Plantain	57.8	4.00	0.358
Juice Fresh	48.9	5.00	0.207
pwa	48.9	4.00	0.317
bouyon	42.2	3.21	0.292
pitimi	35.6	4.56	0.200
diri	35.6	4.44	0.235
vyann	26.7	4.25	0.133
let	26.7	6.58	0.095
pwason	20.0	4.22	0.121
ble	17.8	6.38	0.067
pasta	15.6	6.14	0.073
ze	11.1	6.40	0.034
patat	8.9	5.00	0.037
vanm	8.9	7.00	0.031
manyok	6.7	6.00	0.028
lam	6.7	6.67	0.036
fig	6.7	5.00	0.031
farin	6.7	6.67	0.032
pomdete	6.7	8.00	0.025
kafe	6.7	5.33	0.031
joumou	6.7	8.67	0.018
kawot	6.7	6.33	0.028
aran	4.4	3.50	0.033
pen	4.4	5.00	0.017
salad	4.4	2.00	0.039
avwan	4.4	7.50	0.017
souppen	4.4	3.00	0.038
legim	4.4	11.00	0.008
berejen	2.2	1.00	0.022
pwakongo	2.2	8.00	0.008
sos	2.2	5.00	0.007
spagheti	2.2	12.00	0.003
soup	2.2	4.00	0.011
fwi	2.2	3.00	0.015
fwa	2.2	6.00	0.010
kann	2.2	3.00	0.017
kola	2.2	3.00	0.011
gwayav	2.2	8.00	0.003
gombo	2.2	5.00	0.011
pom	2.2	1.00	0.022
malta	2.2	6.00	0.004
ekrevis	2.2	9.00	0.002
koule	2.2	4.00	0.011
kreson	2.2	7.00	0.007
figmi	2.2	8.00	0.003
lambi	2.2	4.00	0.006

Table A3-9: Gason			
Item	Frequency (%)	Average Rank	Salience
mavi	81.3	2.51	0.639
Juice Fresh	54.2	4.62	0.258
Plantain	52.1	3.88	0.321
diri	50.0	3.33	0.345
pwa	45.8	3.45	0.312
Greens	43.8	4.10	0.259
bouvon	39.6	4.26	0.211
vyann	27.1	4.77	0.124
pitimi	25.0	4.33	0.141
patat	18.8	5.00	0.078
let	18.8	5.22	0.086
pwason	18.8	4.56	0.106
ble	16.7	4.63	0.074
yanm	16.7	6.38	0.069
v8	14.6	4.00	0.096
malta	12.5	4.50	0.074
energydrink	12.5	5.50	0.059
manvok	10.4	6.20	0.039
farin	10.4	5.00	0.050
pasta	6.3	4.33	0.039
salad	6.3	2.33	0.052
kawot	6.3	5.67	0.028
figmi	6.3	6.67	0.024
lam	6.3	4.67	0.035
chokola	4.2	7.00	0.012
avwan	4.2	6.00	0.023
ze	4.2	7.00	0.016
lambi	4.2	7.50	0.016
viv	4.2	4.00	0.017
iiprocese	4.2	9.50	0.011
sportshake	4.2	6.00	0.019
fwi	4.2	4.50	0.019
soupioumen	2.1	7.00	0.003
souppen	2.1	6.00	0.006
zea	2.1	4.00	0.012
gratine	2.1	6.00	0.006
guinness	2.1	12.00	0.004
fig	2.1	5.00	0.009
betrav	2.1	6.00	0.011
soup	2.1	1.00	0.021
pomian	2.1	4.00	0.015
kafe	2.1	5.00	0.009
pomdete	2.1	9.00	0.006
pen	2.1	5.00	0.009

Table A3-10: Children			
Item	Frequency (%)	Average Rank	Salience
mayi	72.3	2.74	0.551
pwa	70.2	3.12	0.481
Greens	59.6	3.96	0.340
Juice Fresh	57.4	4.70	0.264
bouyon	44.7	5.00	0.215
vyann	34.0	4.56	0.171
diri	34.0	3.56	0.229
let	31.9	5.40	0.150
Plantain	27.7	4.31	0.172
pwason	25.5	6.50	0.093
pitimi	23.4	2.91	0.178
fwi	14.9	3.14	0.108
ze	12.8	4.67	0.076
pomdete	10.6	6.00	0.039
pasta	10.6	4.20	0.069
farin	8.5	6.00	0.034
avwan	6.4	7.00	0.030
vanm	6.4	5.67	0.029
patat	6.4	5.67	0.024
manvok	6.4	6.33	0.013
dlo	6.4	4.33	0.025
ble	6.4	3.33	0.042
souppen	6.4	5.33	0.024
kawot	6.4	7.00	0.017
soup	4.3	1.00	0.043
pen	4.3	7.50	0.011
zebegiv	4.3	7.50	0.009
akasan	4.3	3.00	0.035
figmi	4.3	5.50	0.013
lam	4.3	3.50	0.026
chaka	2.1	2.00	0.019
soupioumou	2.1	9.00	0.002
yogu	2.1	13.00	0.002
be	2.1	11.00	0.002
akamil	2.1	4.00	0.012
nwa	2.1	4.00	0.014
kokove	2.1	5.00	0.007
kafe	2.1	2.00	0.018
malta	2.1	3.00	0.011
pwawo	2.1	3.00	0.015
fwomaj	2.1	11.00	0.005
ptimi	2.1	4.00	0.012
iiprocese	2.1	9.00	0.006

Table A3-11: Baby			
Item	Frequency (%)	Average Rank	Saliense
mavi	73.6	4.38	0.449
nwa	71.7	4.18	0.440
let	60.4	5.69	0.288
Plantain	54.7	3.97	0.347
Juice Fresh	50.9	4.59	0.285
Greens	47.2	5.24	0.234
kawot	43.4	4.22	0.273
nomdete	35.8	4.74	0.196
bouvon	32.1	5.12	0.161
diri	32.1	4.41	0.174
manvok	26.4	5.00	0.151
farin	20.8	5.36	0.099
fwomai	17.0	6.89	0.076
gerber	15.1	1.75	0.134
ze	15.1	4.50	0.098
vvann	13.2	6.57	0.055
nwason	11.3	6.17	0.055
figmi	11.3	6.00	0.062
lam	9.4	8.40	0.039
tawo	9.4	5.20	0.048
fwi	9.4	7.40	0.036
arawout	9.4	3.60	0.064
sausage	7.5	3.00	0.059
akamil	7.5	5.75	0.032
souppen	5.7	2.33	0.041
nourisov	5.7	5.67	0.027
pitimi	5.7	5.33	0.030
nutrigou	3.8	5.50	0.007
epina	3.8	3.00	0.029
nwawo	3.8	4.00	0.022
ble	3.8	6.00	0.016
avwan	3.8	3.50	0.028
bonbonsel	3.8	4.00	0.020
tomat	1.9	5.00	0.011
sov	1.9	3.00	0.011
sik	1.9	5.00	0.011
nwatann	1.9	8.00	0.007
vanm	1.9	1.00	0.019
fig	1.9	7.00	0.003
kafeaklet	1.9	3.00	0.013
kasav	1.9	12.00	0.004
kiskeva	1.9	8.00	0.004
kafe	1.9	8.00	0.004
bonbon	1.9	2.00	0.014
abriko	1.9	10.00	0.003
pasta	1.9	2.00	0.017
pistach	1.9	10.00	0.007
mamba	1.9	6.00	0.008
mango	1.9	14.00	0.001
nwa	1.9	11.00	0.005
aran	1.9	4.00	0.013

ANNEX 4: Cultural Consensus Plot of Food Item Proximity



Annex 5: Alternative and Secondary Meals and Food Rules

Main Meal Alternatives: Soups and Stews

The one acceptable alternative to the main daily meal described above are soups and stews, essentially the liquid form of the meal described above, but less beans and with some variant rules governing composition of the different recipes. The most common concoctions are in table ## below.

Table A5-1: Alternative Main Meals: Soups and Stews				
Bouyon	Soup pen blan	Soup pen ak fey	Pumpkin soup (journou)	Trip (ragou)
Plantain	Bread	Bread	Pumpkin	Vyann
Yam	Margarine	Margarine	Cabbage	Banan
Taro	Bouillon cube	Bouillon cube	Cauliflower	Yam
Dumpling (w. Flour)	Garlic	Garlic	Potatoes	Onion
Carrot	Leeks	Leeks	Plantain	
Spinach	Onion	Onion	Beef	
Beef	Lime	Lime	Vermicelli	
Potatoes		<i>Greens</i>	Celery	
Crab		<i>Carrot</i>	Turnip	
		<i>Plantain</i>	Parsley	
			Sweet pepper	

Food Combination Rules for Soups and Stews

- Soups and stews are for *viv*, *legim*, and meats: no beans and no grains.
- Bouyon should have meat and the primary meat is beef
- Highly nutritious forms of soup/stew meats are goat or cow brains or feet and intestines (the only form most of these foods are eaten)
- No pork

Exceptions to the rules

- Wheat flour in form of dumpling, formerly and still sometimes composed of manioc
- Corn is in a national rural dish called tchaka.

Soup and Stew Relevancy for Peanuts

- Stews and soups are amenable to peanuts or peanut sauce or additive.

Secondary Meals

When asked most Haitians identify only one secondary meal per day, in the morning. But it can be said confidently that in urban popular class there are two if not three secondary meals per day: breakfast, a late afternoon or early evening food, and a light food before bed. These are simpler meals than seen above but also highly consistent with highly patterned rules that say a great deal about acceptable food combinations and help us understand where and how peanuts can be promoted in the Haitian diet. We begin with the morning secondary meal (Table ##).

Secondary Morning Meal

“Sweet” and “Salt” foods permitted. The meal is light and often eaten mid morning, 8 – 10 am.

Table A5-2: Morning Secondary Meal			
Food	Ingredients	Preparation	Accompaniments
Coffee	Sugar, milk/coconut	Boiled	Bread
Chocolate	Sugar, milk/coconut, Cinnamon, Citronel, lime peel, Star Anise, Feuille d'inde, vanilla	Boiled	Bread
Akasan (corn meal)	Milk, Sugar, Cinnamon, Citronel, lime peel, Star Anise, Feuille d'inde, margarine, vanilla	Boiled	Bread
Paté <i>Chodye</i> (wheat flour)	Oil, egg/herring/hotdog. <i>piklez</i> (spicy cole slaw with no mayo)	Fried	Avocado, banana, catsup, mayonnaise, <i>piklez</i>
Paté (wheat flour)	Oil, egg/herring/hotdog	Bake	Nothing
Plantain or green banana	Nothing	Boiled	Herring/fish local/hotdog sauce
Herring/fish local/hotdog sauce	tomato paste, bouillon cube, parsley, clove, margarine, onion, hot pepper, salt	Fried in/as sauce	Boiled plantain or green banana
Spaghetti	Oil, garlic, jamon/herring/hotdog/ground beef, leeks. parsley, margarine, tomato paste, bouillon cube, onion, hot pepper	Boiled and then sautéed	Tomato, lettuce, egg, hotdog, tabasco, catsup, mayonnaise, onion
Egg 1	Oil, salt, bouillon cube, lime, sodium bicarbonate, hotdog/smoked herring	Fried (served in sandwich form or with spaghetti, see above)	Tomato, lettuce, egg, hotdog, tabasco, catsup, mayonnaise, onion
Egg 2	Nothing	Boiled	Tabasco, salt, banana
Banana	Raw		Peanuts, bread
Peanuts		Roasted	Banana, bread, avocado
Bread	-	Simple or toasted	Peanuts. Peanut butter, banana, cheese spread,

Table A5-2: Morning Secondary Meal			
Food	Ingredients	Preparation	Accompaniments
			coffee, chocolate, sweet corn meal (akasan)

Food Combination Rules for Secondary Morning Meal

Salt food Morning Rules

- No chicken, pork, beef except embedded in fried bread or spaghetti
- Sauces are restricted to fish with hotdog becoming a new exception
- Major viv are plantain and green banana
- Sauces are eaten with plantains and/or green bananas
- No *legim*

Sweet Food Morning Rules

- Any liquid or gruel that is sweet can and even should be consumed with bread: coffee, chocolate, akasan, akamil....
- All liquids and gruels should ideally be mixed with milk coconut oil/juice
- Either milk or coconut oil/juice; never both
- No yogurt
- No milk alone
- Patey in the morning/ marinad afternoon and night

Rule Exceptions

- Corn and with pureed bean sauce

Food Combination Rules for Secondary Evening Meals

The best way we see to categorize the evening meals is in terms of street foods versus those made at home. We also have tentatively divided those meals into afternoon-evening and before bed.

Evening Secondary Meal/Street Foods

Table A5-3: Evening Secondary Meal/Street Foods			
Food	Ingredients	Means of preparation	Accompaniments
Pork (<i>griyo</i>)	Pork and edible oil	Boiled and then deep fried	<i>Piklez</i> , fried plantains, <i>marinad</i> , macaroni, catsup
Beef &/or Goat (<i>taso</i>)	Pork and edible oil	Boiled and then deep fried	<i>Piklez</i> , fried plantains, <i>marinad</i>
Chicken	Chicken	Grilled	<i>Piklez</i>
Marinad	Oil, fried manioc flour (<i>akra</i>), taro, doe balls, hotdog	Deep fried	<i>Piklez</i>
Paté <i>Chodye</i> (wheat flour)	Oil, herring/hotdog/ground beef/egg. <i>piklez</i>	Deep fried	catsup, mayonnaise, <i>piklez</i>
Fritay			

Food Combination Rules for Secondary Morning Meal /Street Foods

- Fried foods are for evening
- Marinad, patey, and bbq or grilled or fired meats not cooked in the home.
- Should be eaten with piklez (coleslaw like hot sauce)
- No sauces
- No beans
- No bread (only fried does)
- Rice is not eaten in the late afternoon or evening.

Notable points

- Street foods never mentioned as nutritious...
- Hotdogs are becoming ubiquitous, something that has occurred over the past 20 years.

Table A5-4: Evening Secondary Meal/Home Bed Time Meals			
Food	Ingredients	Means of preparation	Accompaniments
Labouyi (flour of wheat, plantain, or breadfruit)	Milk/coconut, sugar, cheese, cinnamon, milk/coconut, citronel, lime peel, Star Anise, Feuille d'inde, vanilla	Boil	Bread
Oatmeal		Boil	
Corn flakes			Milk
Yogurt			Bread
Chocolate		Boil	
Akasan		Boil	

Food Combination Rules for Secondary Morning Meal

- No meats
- *Labouyi*, oatmeal, and cornflakes are prepared in the home—not the street
- Milk with *labouyi*
- Bread with sweet liquids is more for the morning

Beverages, Gruels and Blends

In previous sections we included juices with the main meal and we included coffee, chocolate, sweet corn meal, and porridges as base secondary meals. We did this because they are locally conceptualized as secondary meals and we are attempting to adhere to our strategy of following local food categories.

Nevertheless, a in popular class Haiti, common beverages can be considered as a substantial part of a secondary meal. For example, a soda and bread is considered a morning meal. Sugar water and bread is also substitute morning meal. But popular class Haitians also concoct their own fortified beverages. They begin with juices mixed with milk and malt drinks—something that beer companies have managed to convince Haitian and impoverished people in many developing countries are vitamin rich and fortifying—but that In Haiti people assure are fortifying by also mixing with milk.

Tbale A5-5: Juices	
Lime	Sugar
Passion fruit	Sugar
Orange	Sugar
Grapefruit	Sugar
Carrots	Sugar
Beets	Sugar
Corosol	Milk (optional), sugar
Cherry	Sugar
Papaya	Milk (optional), sugar
Mango	Sugar
Malta	Milk

Anything Malta is fortifying and ideally mixed with milk

All liquids and gruels should ideally be mixed with milk. This rule even extends to malta.

Energy drinks have aphrodisiacal qualities, give strength and vigor but are dangerous to health (too invigorating, cause lack of sleep, heart to beat fast)

Rebuilding Juices: Fortified Folk Concoctions

Even more interesting with regard to nutrition is a category of what Haitians refer to as *remontan*, “rebuilding,” juices. They are best summed up as fortified folk beverages they include many of the ingredients seen in main and secondary meals described above. Their exclusion in the freelists may have to do with the questions being bias by the word “foods” and the fact that these fortified folk concoctions have a near medicinal status.

Table A5-6: <i>Remontan</i>		
Type/name	Juice	Ingredients
Spaghetti	juice	spaghetti, milk, sugar, vanilla, cinnamon, salt (pinch)-cheese (optional)
Breadfruit	juice	breadfruit flour, milk, banana, potato, milk, sugar, vanilla, cinnamon, salt (pinch)
Beet	juice	beet juice, sugar, carrot, navé, crescent, coconut oil/juice, salt (pinch)
Manioc	juice	manioc, milk, sugar, vanilla, cinnamon
Potato	juice	potato, milk, sugar, carrot, breadfruit, manioc, banana, cheese, papay
<i>Ponch</i>		egg (local), milk, cheese, banana
<i>Coffee remontan</i>		coffee, raw liver, coconut oil/juice, egg (local)
<i>Beet remontan</i>		beet bagasse, coconut oil/juice, malta
<i>Akamien</i>		Black beans (loca), cooked beef, carrot, greens, navé, pumpkin, milk, cheese

Beverages/Juice/Remontan Rules

As with foods, local and organic is gets the highest respect for nutritional value. This also applies to fruits which in the urban environment are most commonly are consumed as juice. It also applies to local milk—called let bef or cow’s milk--which is only available in the informal sector. Milk is mixed with anything meant to be fortifying

Peanuts were mentioned by only one of the 50 respondents in the context of formulas for *remontan*, making them far more conspicuous in terms of their absence. The point is especially acute in lieu of 1) the par nutritional excellence in food categories and 2) the fact that peanuts are a veritable super food....

Baby Foods

Baby foods do not differ greatly from all the food seen above nor in what is considered nutritional superior. Indeed, the most important observation that can be made is arguably that they are similar to what children and adults are eating and it may well be, due to economic constraints, that most babies wind up eating a pureed or otherwise modified food straight out of the adults portions (to be developed: Adrienne...).

Table A5-7: Styles of baby food

- Vermicelli ak let
-farin manyok ak let
-bouyon avek pye kabrit-ti pobon (yon ti banan), ponm d te, pwo ro, epina, be,
-po bon ak aran sel
-po bon avek pwa piree
-mayi ak sos pwa
-mayi, pwa, pitimi, kawot, epina (and some put) let (no sugar)
-laboubi: farin frans ak let, sik
-farin po bon ak let
-farin po bon
-farin banan (kon jwenn nan mache)
-farin manyok (kon jwenn nan mache)
-ze figmi
-mayi ak pwa wo ak be
-pwason, po bon, sos pwa
-ponm de te bouyi ak pwa aka aran sel
*Po Bon, Kiyez, fig banan

- With babies: manyok dous, carrot, arrowroot are classic baby foods, easily digestible....
- Also, most misleading in the category of baby foods is that all starches were farin, many of them made from local products such
- Only three specially fortified baby food blends were mentioned: Nurtigu (2), nutrisoy (1), and gerber (clarify)
- Almost all mentions of plantain are Green. Most mentions banana are ripe
- Manyok dous, important with regard to baby foods, was often overlooked and just manyok noted

Annex 6: Cost and Profit Analysis for 4 Street Foods

Table A6-1: Cost Summaries for Street Food: Mid-day meal and BBQ					
Rice, Beans, Chicken (20 plat 150 hg)			BBQ (25 plat 125 hg)		
Diri (2 mmt)	Rice	300	Kwis poul	Chicken thighs	1400
Pwowo	Leek	20	Vineg (3 boutey)	Vinegar	25
Piman pike	Chile pepper	20	Sitwon	Limes	125
Piman dous	Green pr (veg)	20	Magi	Bouillon cubes	50
Pwa nwa (2 ti mmt)	Black beans	100	Bannan (ti rejim)	Plantains	150
Ponmdete	Potatoes	25	Zonyon	Onions	25
Betrav	Beets	50	Chou	Cabbage	25
Mayonaise	Mayonaise	50	Kawot	Carrot	10
Kawot	Carrot	10	Pwowo	Leeks	25
Poul	Chicken	500	Zonranj si	Sour organce	25
Be kwzine	Margerine	25	Piman pike	Hot pepper	15
Oil (1/2 gallon)	Vegetable oil	150	Moutad	Mustard	60
Saison (1 bottle)	Seasoning	25	Asyet box (12/20)	Plastic to-go cartons	100
Moutad (1)	Mustard	5	Chabon	Charcoal	125
Magi	Bouillon cube	20	Dlo (10 gallons)	Water (10 gallons)	10
Tritri	Seas, shrimp	15	TOTAL		2170
Kokoye	Coconut (1)	50	Cost Per Serving		86
Jirof	Clove	5	Price sold		125
Lay	Garlic	25			
Absan	MSG	5			
Woukou	Red fd color	25			
Zonyon	Onion	50			
Pat tomat	Tomato paste	30			
Vineg (1 boutey)	Vinegar	15			
Zonranj si	Sour oranges	25			
Sitwon	Lime	50			
Chabon	Charcoal	125			
Bwa penn	Pitch pine	5			
Chase	Plastic bags	5			
Napkin (100)	Napkin	20			
Fouchet (25/25hg)(2x2)	F+orks	50			
Asyet (12/100hg)	Plates	300			
Water	Water (30 gal)	30			
TOTAL		1745			
Cost Per Serving		87			
Price sold		150			

*Note in assessing increased markup on mid-day rice-beans-chicken that there is considerably more labor and cookware involved.

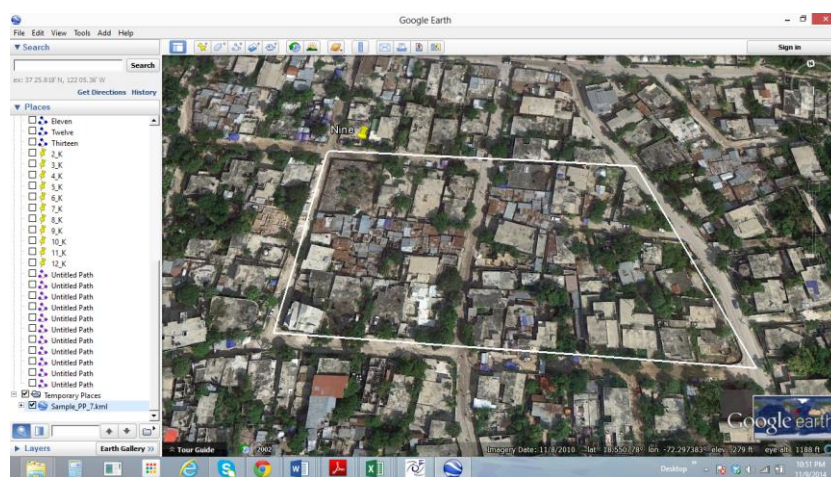
Table A6-2: Cost Summaries for Street Food: Pate and Spaghetti						
Pate (40 pou 25 HG)			Spaghetti (12 plat 60 HG)			
Farin (2 G mmt)	Flour	200	Pasta (3x14)	Pasta		45
Dlo (gallon)	Water (5 gallons)	5	Sos tomat	Tomato paste		50
Lwil bikarobit	Oil (1/2) Baking soda	150	Mayonnaise	Mayo		50
Zonyon	Onion	2	Tabasco	Tabasco		30
Poul	Chicken	50	Zonyon	Onion		25
Chou	Cabbage	150	Ze (12)	Eggs (12)		120
Piman pike	Hot pepper	25	Vineg (boutey)	Vinegar		15
Zoranj si	Sour oranges	25	Fouchet (25)	Forks		25
Magi	Bouillon	25	Asyet plat (25)	Plates (flat)		75
Powo	Leeks	50	gaz	Propane		100
Lay	Garlic	25	TOTAL			535
Chabon	Charcoal	15	Cost Per Serving			45
Sache	Bags	100	Price sold			60
TOTAL		25				
Cost Per Serving		747				
Price sold		19				
		25				

Annex 7: Boutik Survey

For the Port-au-Prince selection was made using a grid overlay on Google maps view of Port-au-Prince, 26 points were chosen randomly and systematically (every third grid cross hair on a grid of ~90 squares).

The closest popular neighborhood was then identified (dense clustering of homes built without residential symmetry or street patterns).

An approximately 100 meter² area was then traced based on easily identifiable boundaries (roads, paths, walls, creeks...). This map was then loaded into Tablets using Mapswithme Pro. Using the tablet map and the built in GPS device, surveyors then located each area and counted all houses. These counts were then multiplied by known residential units per house to estimate the density of *boutik* per residence.



nimewo echantillon	kantite kay	kantite boutik			
		aksepte	pa la	refize	Total
Pwent 1	36	0	0	0	0
Pwent 2	45	1	1	0	2
Pwent 3	76	1	0	2	3
Pwent 4	65	1	0	0	1
Pwent 5	55	1	0	0	1
Pwent 6	44	0	0	0	0
Pwent 7	70	0	1	1	2
Pwent 8	50	0	0	1	1
pwent 9	50	2	0	0	2
Pwent 10	40	0	1	0	1
Pwent 11	58	0	0	0	0
Pwent 12	67	1	0	0	1
Pwent 13	75	2	0	0	2
	731	9	3	4	16

Pwent	Kantite Kay	Boutik			
		aksepte	pa	refize	Total
Pwent 2	12	0	0	0	0
Pwent 3	36	0	0	0	0
Pwent 4	40	0	2	0	2
Pwent 5	72	1	1	0	2
Pwent 6	58	0	0	0	0
Pwent 7	34	3	0	1	4
Pwent 8	115	2	1	0	3
pwent 9	75	5	0	0	5
Pwent	70	1	0	0	1
Pwent	25	2	0	0	2
Pwent	70	2	0	0	2
Total	607	16	4	1	21

Table A7-3: kontaj Port-au-Prince					
nimewo echantillon	kantite kay	kantite boutik			Total
		<i>aksepte</i>	<i>pa la</i>	<i>refize</i>	
Pwent 20	57	1	0	0	1
Pwent 21	66	1	0	1	2
Pwent 22	69	2	1	0	3
Pwent 2	102	2	0	0	2
Pwent 5	97	0	0	1	1
Pwent 6	60	1	1	0	2
Pwent 18	70	4	1	0	5
Pwent 13	58	1	0	0	1
pwent 17	60	2	0	0	2
Pwent 15	43	1	0	0	1
Pwent 16	120	0	0	0	0
Pwent 12	80	0	0	0	0
Pwent 23	140	1	0	0	1
Pwent 24	30	0	0	0	0
Pwent 19	75	2	0	0	2
Pwent 7	123	1	0	0	1
Pwent 11	68	1		0	1
pwent 4	101	3		0	3
Pwent 8	128	3	0	0	3
Pwent 3	72	1		1	1
pwent 25	70	0	0	1	1
Pwent 10	110	1	0	1	2
pwent 26	80	2	0	0	2
	1879	30	3	5	37

Table A7-4: Summary of Boutik per Residence					
Location	Points	Houses	Boutiks	Residence per house*	Boutiks per/residence
Port-au-Prince	25	1879	30	1.36	85
Gonaives	13	731	16	1.36	62
Cape Haitian	12	607	21	1.36	39

*Based on BARR 2010 findings

	Absent	Refused	Interviewed	Total
Port-au-Prince	4	8	33	45
Gonaives	1	4	7	12
Cape Haitian	2	4	16	22
	7	16	56	79

Female	39
Male	17
Total	56

No	16
yes	40
Grand Total	56

	Gonaives	Okap	PAP	Total
market	5	13	13	31
distributor	1	3	17	21
Total	6	16	33	55

Pickup only	52
pickup and delivered	4
Total	56

Drink	24
Equal	8
Snack	24
Grand Total	56

Evaporated Milk	56
Gerber	43
Peanut Butter	34
Powdered Milk	14
Peanut Clusters	2
Raw Peanuts	2
Roasted Peanuts	2
Akamil	1
Akason	1
Corn & Peanut	0

Nothing	33
Peanut butter	13
A hard candy	10
Does not know	4
Bonbon	2
Peanut Brittle	1
Roasted	1

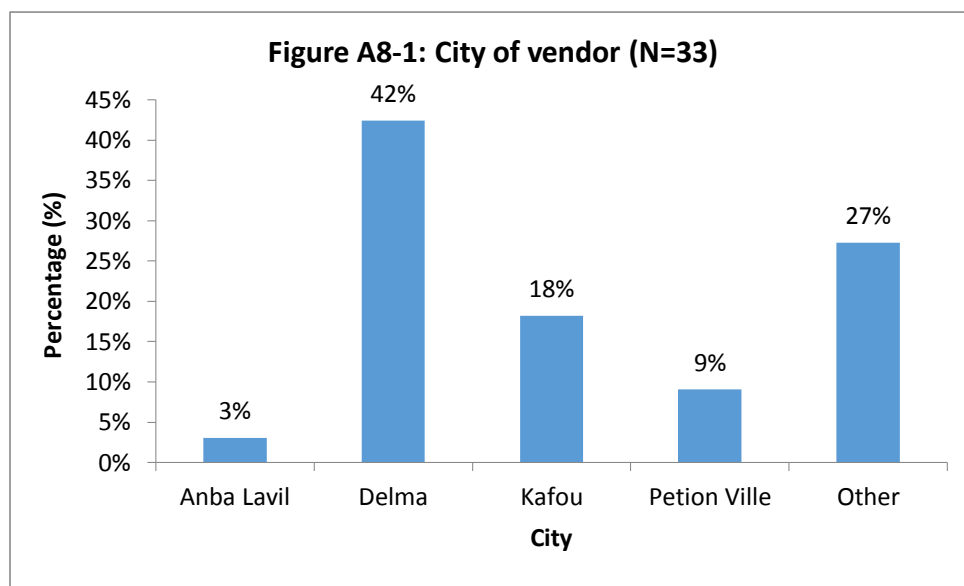
price	24
familiarity	13
healthfulness	9
quality	4
Access	5

First Choice		Second Choice	
Soda	27	Processed Juice	21
Process Juice	23	Soda	17
Energy Drink	3	beer	7
Milk	1	Energy Drinks	6
Beer	1	Malta	1
		Let	1

Malt and Milk were mentioned only once. But we know anecdotally that malt is often mixed with milk and when people cite it as nutritious they typically mean that it is most nutritious combined with milk

Annex 8: Port-au-Prince Boutik Survey

In Port-au-Prince the *boutik* sample included respondents from across the metropolitan area. The Delmas area was most heavily represented (42% of respondents), followed by Carrefour (18%) and Petion Ville (9%). Three percent of the vendors were from Anba Lavil (En Bas La Ville) and 27% were from other areas in and around the capital (Figure 2).



The majority of the survey participants, 58%, were women (Figure ##). The overwhelming majority (88%) owned the store where the interview was taking place (Table ##).

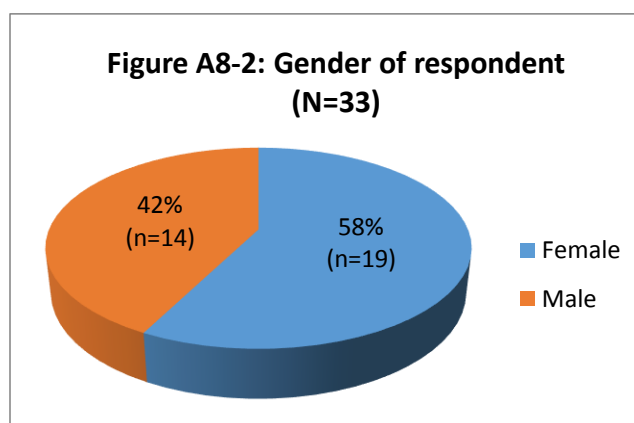


Table ##: Respondent owns business or relationship to owner (N=33)

Owns business	Relationship	Frequency (N=33)	Percentage (%)
YA8-1	n/a	29	88%
No	Mama	1	3%
	Other	2	6%
	Other family	1	3%

Respondents were asked to provide a series of lists on their top-selling non-staple food items, products purchased by children, and fortified products for babies, adults and pregnant women. The results are presented below both as raw frequencies, which show how many of the 33 stores carry each item, and as a percentage of the total responses in each category, which provide an indication of the level of competition in that market.

The most common product type was cookies, which were reported in 29 of the 33 stores (88%, see Table ##) and accounted for 23% of the 127 items (Table ##) listed by all respondents (some respondents did not provide the full lists of five items requested in the survey). The second most common non-staple product sold was cheese puffs, which were cited by 20 of the 33 stores (61%) and accounted for 16% of the items listed by all respondents. The third most common item was salted crackers (13 of 33 stores, 10% of items listed), cornflakes (11 stores, 9% of items listed), hard candy (10 stores, 8% of items listed), bread or cassava with peanut butter (7 stores, 6% of items listed), and cheese (6 stores, 5% of items listed).

Table A8-2: Top 10 non-staple foods sold in stores	
Food item	Stores listing item (N=33)
Cookies	29
Cheese puffs	20
Salted crackers	13
Cornflakes	11
Hard candy	10
Bread and peanut butter	7
Cheese	6
Bread	5
Lollipops	4
Pringles	2

Table A8-3: Top 10 non-staple foods sold in stores	
Food item	% of total (N=127)
Cookies	23%
Cheese puffs	16%
Salted crackers	10%
Cornflakes	9%
Hard candy	8%
Bread and peanut butter	6%
Cheese	5%
Bread	4%
Lollipops	3%
Pringles	2%

Cookies and cheese puffs also ranked as the top two items purchased by children. Twenty-six of the 33 respondents (82%) listed cookies among their top (5) items purchased by children (Table ##), with these items representing 21% of the 137 products listed (Table ##). Cheese puffs were listed by 24 respondents (73%) and made up 18% of the items listed as the most commonly purchased by children. One peanut-based food – bread (or, in one case, cassava) with peanut butter – was among the top 10 non-staple foods purchased by children. It was listed at 7 of the 33 (21%) and accounted for 5% of the listed items.

Table A8-4: Top 10 non-staples bought by children	
Food item	Stores listing item (N= 33)
Cookies	27
Cheese puffs	24
Hard candy	22
Lollipops	16
Chewing gum	9
Bread and peanut butter	7
Chocolate	3
Cornflakes	3
Milk	3
Caramels	3

Table A8-5: Top 10 non-staples bought by children	
Food item	% (N=131)
Cookies	21%
Cheese puffs	18%
Hard candy	17%
Lollipops	12%
Chewing gum	7%
Bread and peanut butter	5%
Chocolate	2%
Cornflakes	2%
Milk	2%
Caramels	2%

Fortified food for babies

The top fortified foods for babies sold by respondents were processed baby food, which was sold in 25 of the 33 stores (75.76%) and accounted for 40.98% of the items listed (Tables X and Y).

The next most commonly listed items were milk (named by 8 of the 33 respondents, or 24.24%) and accounted for 13.11% of items listed, and salted crackers (6 or 33 stores, and 9.84% of items listed), followed by yogurt, Elle et Vire dairy products, and cornmeal (each in 3 stores and accounting for 4.92% of the listings).

Table A8-6: Top fortified foods for babies	
Food item	Stores listing (N=33)
Baby food	25
Milk	8
Salted crackers	6
Yogurt	3
Elle et Vire dairy products	3
Shakes	3
Cornmeal	3

Table A8-7: Top fortified foods for babies	
Food item	% (N=61)
Baby food (gerber)	41%
Milk	13%
Salted crackers	10%
Yogurt	5%
Elle et Vre	5%
Shakes	5%
Cornmeal	5%

Fortified food for children

The top fortified foods for children reported by respondents were milk (in 16 of 33 stores, or 48.48%, and accounting for 20.51% of the 78 listings), shakes (12 or 33.36% of the 33 stores, 15.38% of items listed), and Malta (8 or 24.24% of stores, 10.26% of total responses) (Tables X and Y).

Table A8-8: Top fortified foods for children	
Food item	Stores listing (N=33)
Milk	16
Shakes	12
Malta	8
Cheese	6
Baby food	5
Cornflakes	5

Table A8-9: Top fortified foods for children	
Food item	% (N=78)
Milk	20.51%
Shakes	15.38%
Malta	10.26%
Cheese	7.69%
Baby food	6.41%
Cornflakes	6.41%

Fortified food for adults

Respondents were asked to list the three most common fortified foods for adults. When considered together, milk-based beverages (including milk and canned shake-type drinks) were cited by the largest number of respondents, and therefore were top sellers in the greatest number of stores. Twenty-four respondents (73%) listed one or two of these products as among their three most commonly purchased fortified foods for adults. They accounted for 34% of the 86 listing for top products in this category. Malt-based beverages (Malta, malt extract, and Guinness) accounted for a slightly greater share of the total responses (38%), although they were named by slightly fewer stores (22 out of 33, or 67%). Canned fruit and vegetable juices (V8) were the next most common product in the category, appearing on the lists of 9 (27%) of respondents, and representing 10% of the total responses.

Table A8-10: Top 5 fortified foods for adults	
Food item	Stores listing (N=33)
Milk-based drinks (shakes, milk)	24
Malt-based drinks (Malta, extract, Guinness)	22
Juice	9
Cornflakes	4
Cheese/Processed juice/Energy drinks	2

Table A8-11: Top 5 fortified foods for adults	
Food item	% (N=86)
Malt-based drinks (n=33)	38%
Milk-based drinks (n=29)	34%
Juice	10%
Cornflakes	5%
Cheese/Processed juice/Energy drinks	2%

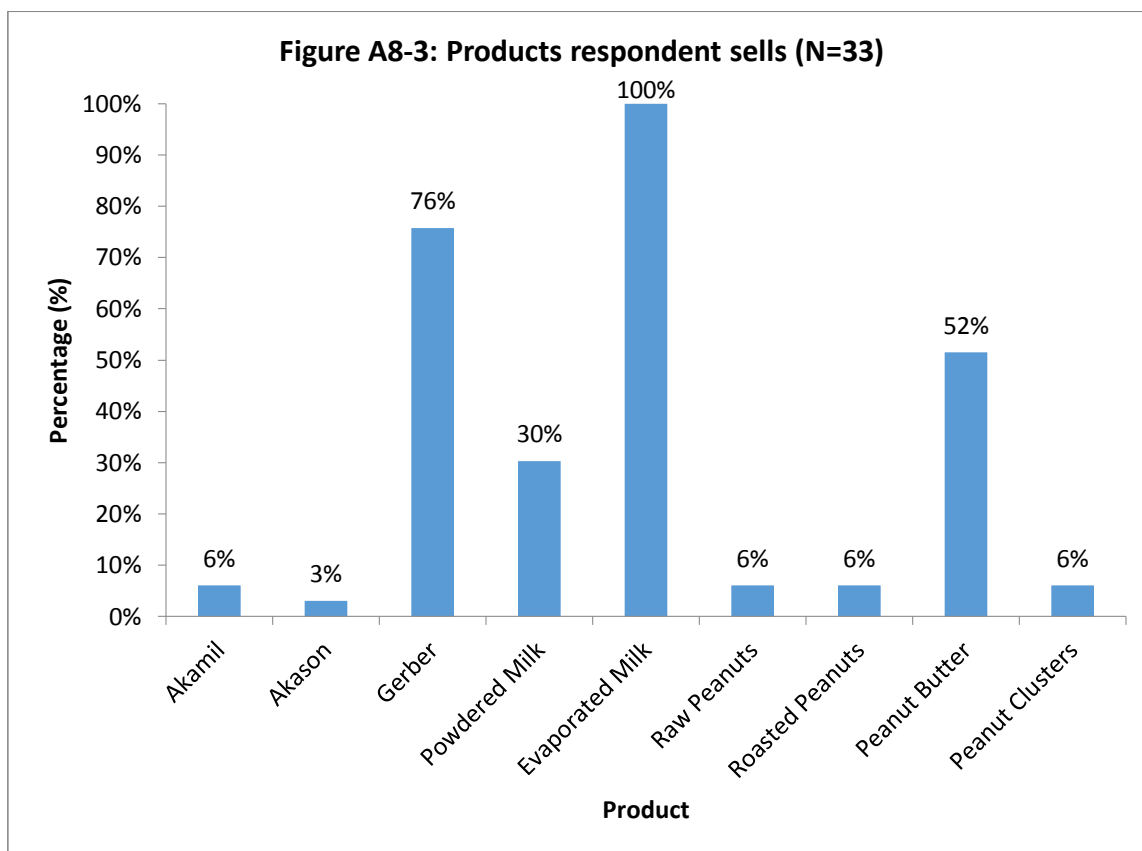
Fortified foods for pregnant women

The most common foods for pregnant women listed by respondents were milk, Malta, shake drinks, V8, cornflakes, and Famoza. Milk was listed by 14 (42%) of respondents, and accounted for 26% of 54 total responses. Malta was listed by 11 (33%) of the respondents, and accounted for 20% of responses, followed by shakes (6 of 33 respondents, and 11% of all responses (Tables X and Y).

Table A8-12: Top fortified foods for pregnant women	
Food item	Stores listing (N=33)
Milk	14
Malta	11
Shake	6
V8	3
Canned fruit juice	3

Table A8-13: Top fortified foods for pregnant women	
Food item	% (N=54)
Milk	26%
Malta	20%
Shake	11%
V8	6%
Canned fruit juice	6%

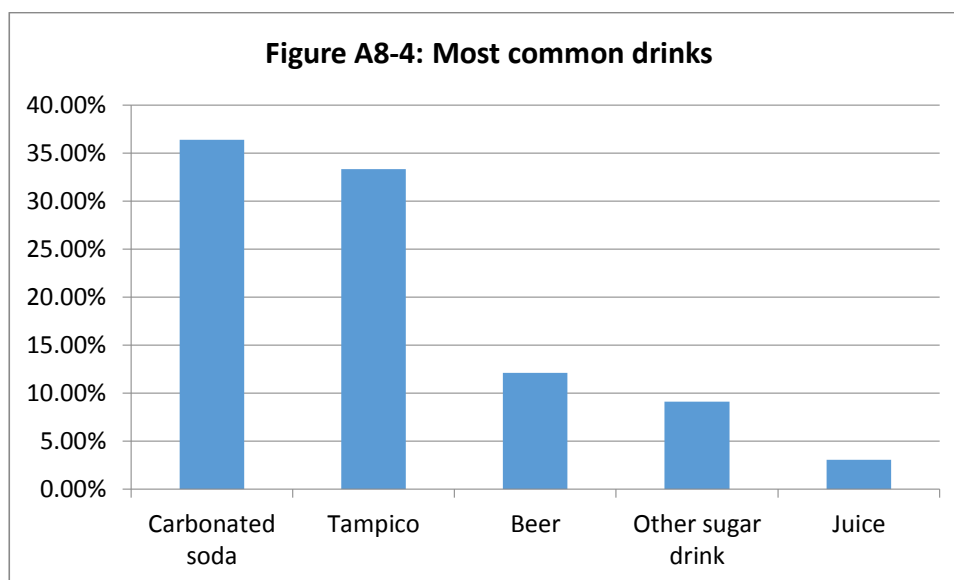
Respondents were asked, specifically, whether they sold a series of fortified and peanut-based food products, including AK-1000 (Akamil), AK-100 (Akasan), Baby Food (Gerber), Powdered Milk, Evaporated Milk, Raw Peanuts, Roasted Peanuts, Peanut Butter, and Peanut Clusters. Evaporated milk was by far the most commonly sold product on this list. All respondents reported that they stocked evaporated milk. The next most frequently listed such item was baby food, with 76% of the vendors reporting that they sold this item most frequently, followed by peanut butter (*manba*) at 52%, evaporated milk at 30%, and raw peanuts, roasted peanuts, peanut clusters, and akamil (AK 1000), at 6% (Figure 3).



Among drinks, carbonated sodas were the most frequently stocked. Twenty-four of the 33 respondents, or 73%, listed sodas as one of their two most commonly purchased beverages, accounting for 36% of the 66 responses. Processed juice (Tampico) was the second most commonly cited drink. It was listed by 22 respondents (67%) and accounted for a third of all responses. The other most common drinks were beer, other types of sugared drinks, and canned juice (Tables X and Y).

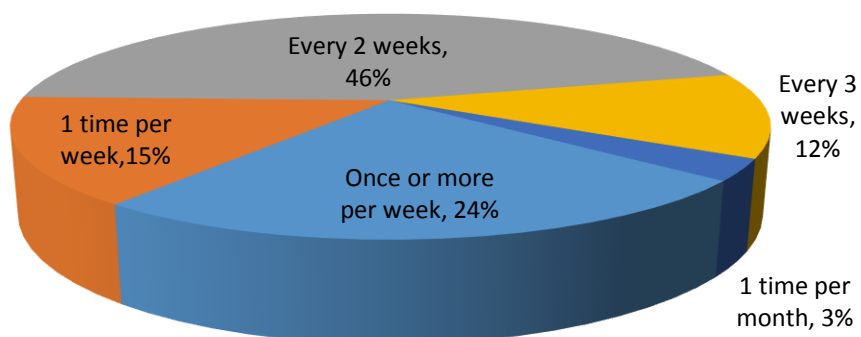
Table A8-14: Top 5 beverages	
Beverage	Stores selling (N=33)
Carbonated soda	24
Processed juice (Tampico)	22
Beer	8
Other sugar drink	6
Juice	2

Beverage	% (N=66)
Carbonated soda	36%
Processed juice (Tampico)	33%
Beer	12%
Other sugar drink	9%
Juice	3%

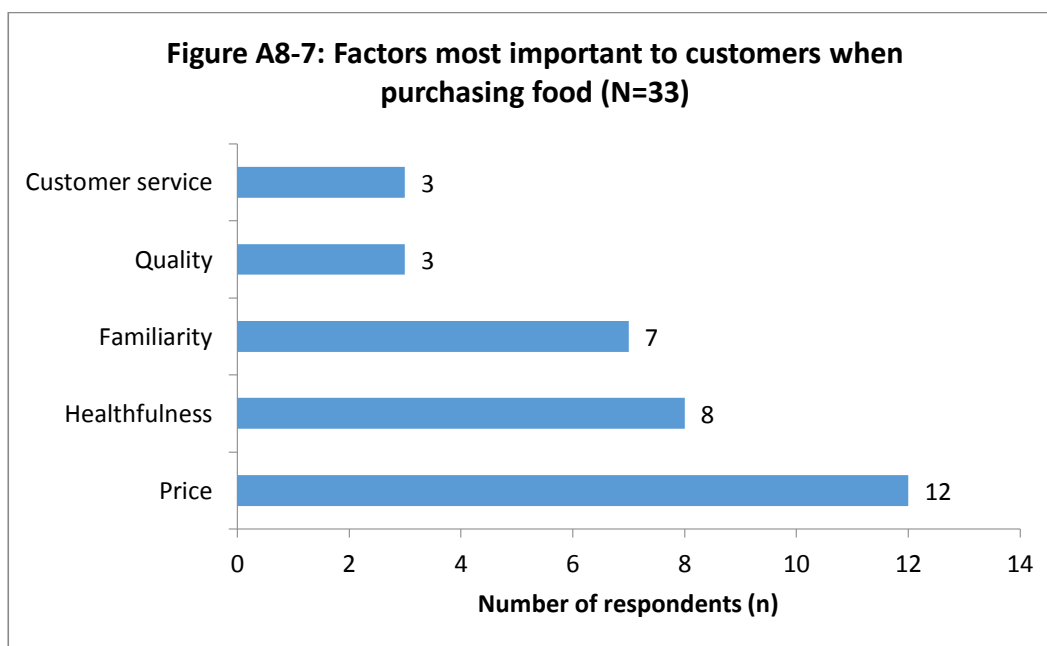
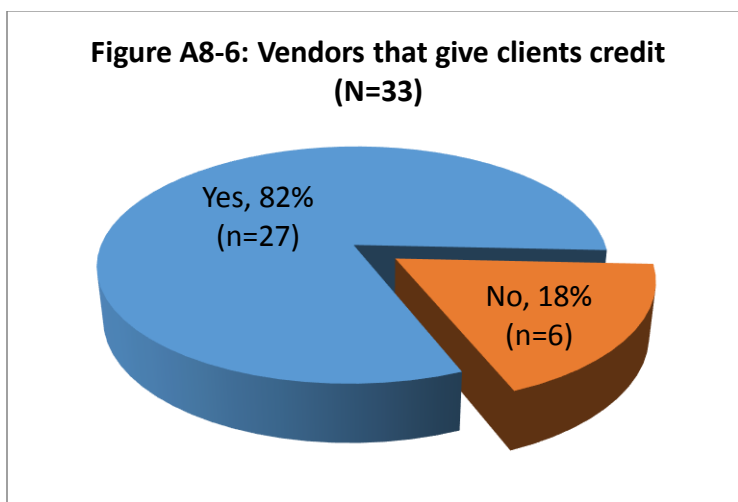


Credit and Re-stocking practices

Thirty-nine percent of respondents said they purchased their merchandise from marketplaces, while a narrow majority (52%) had some other distributor. When asked how frequently they purchased new stock, a strong plurality (45%) said every two weeks, while 15% said once per week, and 24% said one or more times per week. Five (15.15%) of the respondents reported purchasing less than once every two weeks (Table 2). The vast majority of respondents (27 out of 33, or 82%) reported offering customers the option of buying on credit (Figure 9). The most commonly cited factor influencing customer choices in purchases was price (named by 12, or 36% of respondents), followed by healthfulness (8, or 24%) and familiarity (7, or 21%). Quality was only named as the primary factor by 3, or 9% of respondents (Figure 10).

Figure A8-5: Restocking frequency**Table A8-16: Purchasing merchandise (N=33)**

	Frequency (n)	Percentage (%)
Purchaser		
Other Distributor	17	52%
Market	13	39%
N/A	3	9%
Location		
Anba Lavil	15	45%
Petionville	7	21%
Delmas	3	9%
Kafou	3	9%
Bon Repo	1	3%
Kwa de Bouke	1	3%
Other	7	21%
Times per month merchandise purchased		
1 time or more per week	8	24%
1 time per week	5	15%
Every 2 weeks	15	45%
Every 3 weeks	4	12%
Once per month	1	3%



In a rapid assessment of store inventories, the average inventory contained 38 items. There was considerable overlap, with 12 of the 15 stores (80%) selling Kola (domestic and regional carbonated soft drinks), toilet paper, Coca-Cola, spaghetti, hard candies, and sugar. Eleven (73%) sold Malta, Chico, cooking oil, and Bongu brand milk. Ten (67%) stocked laundry soap, eggs, beer, rice, and cornflakes. A majority (53%) sold Divin, Tampico fruit punches, ground corn, Toro energy drink, 7-Up, tomato paste, and Gerbers (baby food). For a full list of inventory items and frequency, see Table 3 below (71 items listed only one time have been omitted):

Item	Freq	Item	Freq
Evaporated milk	15	Salted crackers	6
Malta Beverage	15	Cheese (processed)	5
Artificial juice	15	Peanut butter	5
Cornflakes	10	Shake (Bongu)	4
Cookies	10	Chocolate	3
Sportshake	9	V8	3
Ground corn meal	8	Bouillon cubes	2
Energy Drink (Toro)	8	Juice powder	2
Gerber baby food	8		

Item	Fre q	Item	Fre q	Item	Fre q	Item	Fre q
Laundry soap	15	Rum	8	Notebooks	5	Propane	3
Milk condensed	15	Tomato paste	8	Peanut butter	5	Salami	3
Sodas	12	Energy drink	8	Pens	5	Tabasco	3
Cookies	12	Wine	8	Razors	5	V8	3
Hard candy	12	Bath soap	7	Shampoo	5	Batteries AA	2
Spaghetti	12	Beans	7	Sport shake	7	Bouillon cubes	2
Sugar	12	Chiclet (gum)	7	Charcoal	4	Canned corn	2
Toilet paper	12	Drinking water	7	Clorox (bleach)	4	Cigarettes	2
Cheese puffs	11	Kotex	7	Sardines	4	Diapers	2
Edible oil	11	Bread	6	Toothpaste	4	Extension cord	2
Malt beverages	11	Flour	6	Chocolate	3	Hair relaxer	2
Beer	10	Margerine	6	Clothing die	3	Headache pills	2
Cornflakes	10	Salted crackers	6	Deodorant	3	Juice powder	2
Eggs	10	Alaska milk	5	Dried herring	3	Kindling	2
Rice	10	Cheese (process)	5	Lolipops	3	Kippers	2
Gerber	8	Ketchup	5	Mayonnaise	3	Onions	2
Ground corn	8	Macaroni	5	Mosquito coils	3	Tooth brush	2
Juice (process)	8	Matches	5	Oatmeal	3	Vinegar	2

Annex 9: Summary of Results from the Consumer Focus Group Survey

A questionnaire was applied to the 128 participants in the nine Consumer Focus Groups. Many of the same questions were asked during the 632 respondent random quantitative survey and hence were not included in the main body of the report. As can be seen here, the responses were almost identical to those from the larger random survey. The exception is that far more respondents reported eating peanut butter and peanut products in the morning.

Consumers

All 113 respondents claimed to eat peanut butter. However, 14 refused to taste it and 13 reported never buying it. From market studies conducted elsewhere, it appears that peanut butter sold on wheat or cassava bread as a ready to eat street food is essentially free, used as an inducement to selling the breads. As seen in Table 2, below, this practice is echoed in the fact that the average expenditure per peanut butter purchase is 100 *goud*, significantly more peanut butter than a person can or would eat at one time. In summary, 47% of respondents report buying more than they can eat, 83% eat it with wheat bread rather than cassava (a trend specific to the Northern Cape Haitian region); 61% often wants to eat more than they have available, 85% would eat more if it were less expensive, 56% eats peanut butter more often than peanuts, 88% believes peanut butter is food for the health and 50% believe that it is better for the health than peanuts; 72% think that adults eat it as or more often than children. Regarding flavor, 53% prefer salty over sweet. The popularity of peanut butter and peanuts is illustrated in Figure 7: 61% of respondents eat peanut butter at least every day and 73% claim to eat peanuts every day. Both peanuts and peanut butter are overwhelmingly thought of as breakfast foods (see Figure 8).

Table A9-1: Attitudes toward Peanut Butter

	Buys more than eats at once	Eats PB on wheat rather than cassava bread	Prefers salty over sweet flavor	Often wants to eat more than buys	Would eat more PB if cheaper	Eats PB more often than peanuts	Sure that PB is good for the health	Believes PB better for health than peanuts	Thinks that adults eat PB as or more often than children	
Median cost of peanut butter purchase	100 gd	47%	83%	53%	61%	85%	56%	88%	50%	72%

Figure A9-1: Frequency Consumption of Peanuts vs. Peanut Butter (n=113)

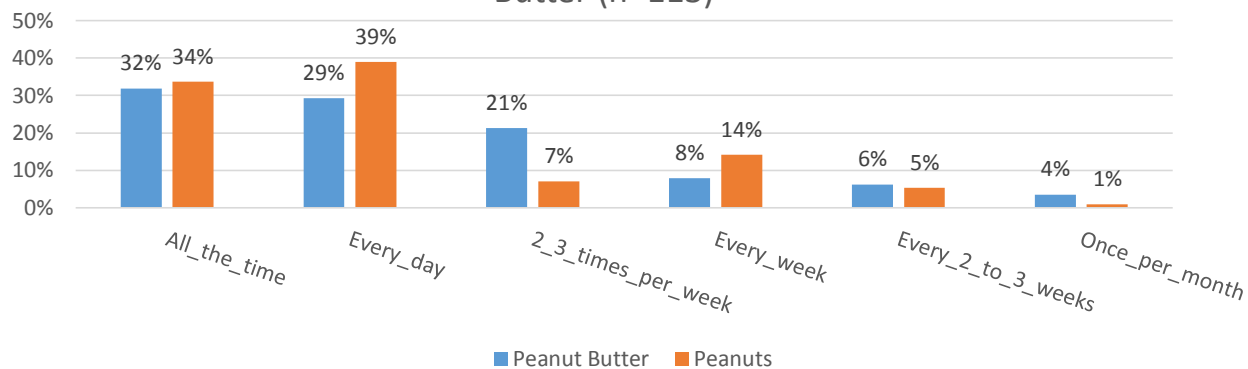
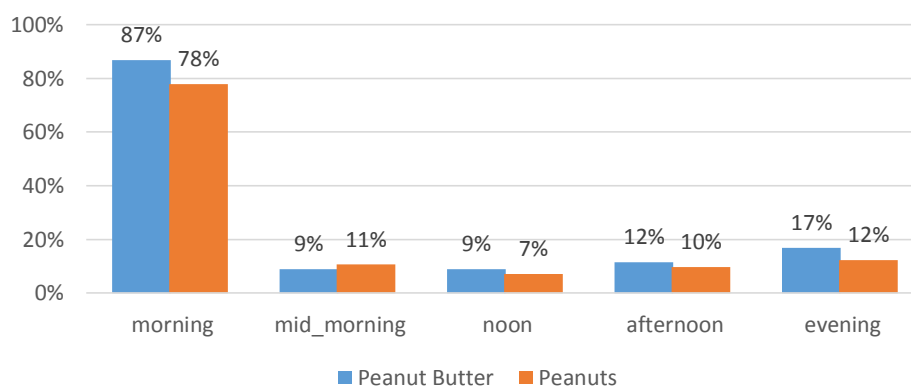


Figure A9-2: Usual Time of Consumption



Regarding the peanut butter sachets, 85% would buy them, most said that they would like to pay 5 *goud*, however, 73% said they thought they could sell it, would like to pay 3 *goud* (median) and sell it for 5 *goud* (median). The recommended number per case was a median of 100 sachet; 85% felt that there was a sufficient quantity in the sachet, 95% would pay more for if it was bigger (Table 3).

Table A9-2: Reactions to Sachets of Peanut Butter

Would buy it	Quantity in sachet is sufficient	Would pay more for bigger sachet	Thinks they could sell it	Purchase		Resale		Recommended number of sachets per case	
				Avg	Med	Avg	Med	Avg	Med
85%	85%	95%	73%	5.3 gd	3 gd	7.8 gd	5 gd	115	100

Annex 10: RUFs Nutrition and Costs Breakdown

Source: <https://www.wfp.org/nutrition/special-nutritional-products>

Name	Ingredients	Micronutrients	Energy	Protein	Fat	Cost 100g
Plumpy'Doz:	peanuts paste, vegetable fat, skimmed milk powder, whey, maltodextrines, sugar.	A, E, B1, B2, Niacin, Pantothenic acid, vitamin C, B6, B12, Calcium, Magnesium, Selenium, Zinc, Iron, iodine, Copper, Phosphorus, Potassium, Manganese, Folic acid	534Kcal 545Kcal	12.7g /13.6g	35g	\$0.20-0.33
High Energy Biscuits (HEBs)			450Kcal	10 to 15g	15g	\$0.12
Compressed food bars	baked wheat flour, vegetable fat, sugars, soya protein concentrate, malt extract.	vitamins and minerals: vit A, D3,E, C, B1, B2, B6, B12, Niacin, Folic acid, Pantothenic acid, Biotin, Calcium, Phosphorus, Magnesium, Iron, Zinc, Potassium, Sodium, Copper, Selenium, Iodine	360Kcal	12.5 g	9.4 g	\$0.30
Micronutrient Powder or "Sprinkles"						\$2-3 per 100 sachets

Annex 11: RUFTs Nutrition and Costs Breakdown for Major Staples

Product	Calories	Carb (Grams)	Fat (Grams)	Protein (Grams)	Cost (\$k per ton)	Cost Index per Calorie	Cost Index per Carb (Grams)	Cost Index per Fat (Grams)	Cost Index per Protein (Grams)
Peanuts	567	16.13	49.24	25.8	2.2	39	1364	447	853
Wheat	342	75.9	1.71	11.31	0.3	9	40	1754	265
Millet	206	41.19	1.75	6.12	0.2	10	49	1143	327
Blackeyed Peas	193	33.62	4.34	5.24	-				
Rice	193	41.41	0.83	3.6	0.42	22	101	5060	1167
Plantain	122	31.89	0.37	1.3	0.95	78	298	25676	7308
Black Beans	91	16.56	0.29	6.03	-				
Corn	86	19.02	1.18	3.22	0.19	22	100	1610	590
Soy	60	5.57	0.1	10.51	0.45	75	808	45000	428

Annex 12: Peanut Butter Value Chains Cape Haitian

Ankèt sou Komesyalizasyon ak konsomasyon kilti pistach													
SIYATI MOUN NAN	LAJ	KOMIN	TELEFON	KONBYEN TIMOUN K'AP VIV NAN KAY LA	KONBYEN PRODIKTE A VANN MAMIT PISTACH LA	KONBYEN MADAN SARA PEYE KALE MAMIT PISTACH LA	KONBYEN MADAN SARA ACHTE MAMIT PISTACH LA	KI PRI REVANDE A ACHTE MAMIT PISTACH LA NAN MEN MADAN SARA A	LE PISTACH LA AK TOUT PO KONBYEN MAMIT LA KOUTE	KONBYEN GODE YON MAMIT AK TOUT PO BAY LE LI FIN KALE	KI PRI TRANSFOMATE A WOULE YON MAMIT PISTACH	KI KONDIMAN NOU METE LE NOU PWAL WOULE PISTACH LA E KI KANTI pa mamit	KOMAN NOU VANN PISTCH LA LE NOU FIN GRIYEL E LE NOU FINI WOULE POU FE MANBA
JEAN Cleance	62 Ans	Terye wouj	31 66 33 66	12	150 gds	—	—	—	50gds	2 gode	20gds	Piman=2gds Silk=2gds Sel=1gds	Pen+Manba=5gds Kasav+Manba=5gds
DESIR Erita	47Ans	Terye wouj	48 41 03 75	5	150gds	—	—	—	50gds	2 gode	20 ges	Piman=1gds Silk=3gds Sel=1gds	Pen+Manba=5gds Ve Manba=100gds
JEAN josee	50Ans	Terye Wouj	47 85 94 95	5	145 gds	—	—	—	50gds	2 gode	20gds	Sel=1gds Silk=2gds Piman=2gds	Ve Manba=100gds
PIERRE Marie Lourdes	47 Ans	Kap Ayisyen	46 83 62 35	6	—	—	—	200gds	—	—	30gds	Piman=3gds Sel=1gds Silk=3gds	Ve Manba=100gds Kasav+Manba=5gds Ve Pistach=5gds
JEAN Mercina	39Ans	Kap Ayisyen	44 60 52 60\48 43 53 52	5	—	—	—	200gds	—	—	30gds	Piman=2gds Silk=2gds Sel=1gds	Pen+manba=5gds
DENIS Guerda	45Ans	Kap Ayisyen	36 75 43 11	6	145gds	10 gds	145gds	—	45gds	2 gode	—	—	—
Mme HONORE Julmiss	43Ans	Kap Ayisyen	48 32 75 08	2	145gds	10gds	145gds	—	45gds	2 gode	—	—	—

Annex 13: Super Market Data: Imported vs. Local Peanut Butters

Table A13-1: Super Markets Visited	
Location	Maket Name
Cape Haitian	Kokijai Market
	Fiesta Fiesta
	Super Mart
	Super Marche
	Total champion
	Total Morne Rouge
	Central Market
Port-au-Prince	Food Max
	Bigstar
	Sigo Market
	Deli Mart
	Delmas 2000
	Belmart
	Eagle Market
	Star Market
Compas Market	
Gonaive	JAMYVRIC
	Cosmotic plus
	Gonaibo Super Market
	Ginou (St Marc)

Table A13-2: Peanut Butter Prices, Imported vs. Local				
Maket Nom	Imported		Local	
	Lowest cost	Size	Lowest cost	Size
Kokijai Market	200	454	250	454
Fiesta Fiesta	....	....	150	454
Super Mart	...	....	200	454
Super Marche	150	283	...	...
Total champion	....	....	125	227
Total Morne	225	510		
Central Market	....	....
Food Max				
Bigstar	143	454		
Sigo Market	145	349	130	454
Deli Mart	151	340	117	227
Delmas 2000	192	227	125	454
Belmart	195	115	190	454
Eagle Market	230	462	130	454
Star Market	135	340	150	454
Compas	155	340	120	454

Table A13-3: Imported vs. Local Peanut Butter Prices for Port-au-Prince Super Markets				
Maket Nom	Imported		Local	
	Lowest cost	Size	Lowest cost	Size
Sigo Market	145	349	130	454
Deli Mart	151	340	117	227
Delmas 2000	192	227	125	454
Belmart	195*	115	190	454
Eagle Market	230	462	130	454
Star Market	135	340	150	454
Compas Market	155	340	120	454
Ratio of	0.48		0.39	
Ratio of	0.97		0.77	

- Excluded from the ratios as an outliers

Annex 14: Most Popular Snack Brands, Profitis and Turnover Rates

Redistributors were asked to list their three top-selling brands of each of the three main categories of snacks – sweet cookies, salted crackers, and cheese puffs/popcorn (also a salty snack). Not all distributors named three in each category. The most popular salted crackers were the Bongu, Coctel Fiesta, Guarina, and Maryela crackers (Table ##). The most popular sweet snacks (cookies) were Maxi, Casino, Salix, and Tempo (Table ##). The Chiritos brand produced in Haiti by Stanco was by far the most frequently cited best-seller (Table ##).

Table A14-1: Best-selling cookies	
Product	Frequency
Maxi	9
Casino	7
Salix	6
Tempo	6
Anika	3
Coctel Fiesta	3

Table A14-2: Best-selling cheese puff/popped snack	
Product	Frequency
Chiritos	9
Mini Jumbo	3
Chiko	2
Arlequin	2
Bingo	1
Popcorn	1

Table A14-3: Best-selling salted crackers	
Product	Frequency
Bongu	8
Coctel Fiesta	6
Guarina	5
Maryela	5
Diana	2

Margins and Turnover for Other Snacks

Turnover of such snack products and other frequently purchased foods is fast. A telephone survey on turnover found that distributors who stocked cookies (n=40) purchased 215 units and restocked every 13 days, on average; those selling salted crackers (n=41) bought 305 units and restocked every 12 days; and those selling puffed grains purchased 5,733 units and restocked every 14 days (Table X). This is consistent with previous research indicating that on a provincial market day a vendor can sell out of a fast-selling snack food and open a new case or bag the same day. Between market days, vendors can take three to four days – sometimes a full week-- to sell a case or other wholesale purchase, although the typical turnover rate for common food and household products (such as matches or batteries) is one to two days. Regardless of turnover rates, however, distributors said the margins that they and their customers require is based on the wholesale quantity (case or large bag). The major distributors all said that the popped millet should be sold in large bags or cases with 40 to 50 individual bags of the product. This is consistent with the packaging of the most common potential competitor – various brands of cheese puffs – which sells

in large plastic bags of 40 or 60 individual bags, each of which retails for 5 gourdes (US \$0.11 or 1 Haitian dollar or HTD). Given those quantities, distributors said they would need a margin of 10 to 20 gourdes per 40- to 50-bag case or sack, and their client would need to a margin of 50 gourdes per case or sack (see Table 3).

This is consistent with reported margins for other snacks. Marche Ti Tony, for example, reported a 3% margin for cases of cookies such as Salix, which it purchases for US \$14.75 and sells for US \$15.25 (one case has 17 sleeves, each with 6 individual packets of cookies), and Casino (a case has 21 sleeves of 6 individual packs of cookies), which it buys for US \$17 and sells for US \$17.50. Its margin on cheese puffs is 10% (purchase

of Mini Jumbo sack of 40 at 30 HTD (150 gourdes or US \$3.26), and sells at 33 HTD (165 gourdes or US \$3.59). The retailer sells each of the 40 bags at 5 gourdes, making 200 gourdes for a margin of 21% (before factoring in transport and loading/unloading costs). Similarly, Chiritos are purchased at US \$3.50 and sold at US \$3.50, but the manufacturer (Stanco) offers Ti Tony a promotion, providing 100 cases free for every 1,000 purchased, again 10%. Kay Salem reported receiving the same promotion, but sweetening the deal further by purchasing at 30 HTD and selling at 31 HTD, for a total margin of 13%. Varyete depot in Croix-des-Bouquets reported receiving no promotion for a competing brand, but purchased the 40-bag sack at 30 HTD and selling at 35 HTD (17%). The profit breakdowns reported on cookies and crackers in Mirebalais, Hinche, Verrettes and Saint-Marc followed similar patterns, with margins of 2% to 3% reported on sales of cases of the best-selling cookies and crackers from wholesalers to retailers. For Bongou salted crackers, for example, a wholesaler who purchased a case of 40 sleeves with 12 packets each for 180 HTD would sell it for 185 HTD (3% margin). A second tier wholesaler/retailer could then sell the 40 individual sleeves of 12 packets for 5 HTD each (200 HTD total, for a gross profit of 15 HTD or 8%). The individual packets of crackers were sold at the rate of two for 5 gourdes (or 1 HTD). This brings 6 HTD per sleeve, for a gross profit of 1 HTD (20%) per sleeve.

Summary

Tier 1 margins describe the mark-up charged by a high-volume distributor in Port-au-Prince. Tier 2 describes the mark-up for a buyer who then sells the case by selling the sleeves within the case, which typically hold six to 12 packets of cookies or crackers (this step is absent with Chiritos and other cheese puffs, which are sold in large plastic bags containing 40 or 60 individual bags).

Table A14-4: Restocking rates for top-selling snacks

Snack type and top 3 brands	Ave. units purchased	Days to restocking
Cookies (n=40)		
1-Maxi (n=22)	215	13
2-Tempo (n=9)		
3-Casino (n=4)		
Crackers (n=41)		
1-Bongou (n=12)	305	12
2-Coctel (n=12)		
3-Guarina (n=9)		
Chikos (n=38)		
1-Chiritos (n=17)	5733	14
2-M.Jumbo (n=5)		
3-Titatos (n=3)		

Table A14-5: Popular Snacks, Pricing, Profit, and Retail Turnover						
Snack	Snack type	Retail price (HTG)	Profit Tier 1 (%)	Profit Tier 2 (%)	Profit retail (%)	Turnover (days/case or sack)
Bongu	Salty	2.5	3%	8%	20%	2
Coctel	Salty	2.5	3%	8%	20%	2
Guarina	Salty	5	3%	11%	20%	2
Maxi	Sweet	5	3%	N/A	N/A	2
Casino	Sweet	10	3%	6%	20%	2
Salix	Sweet	10	3%	13%	20%	2
Chiritos	Puff	5	10%	N/A	21%	1.5
Mini Jumbo	Puff	5	10%	N/A	22%	2

Annex 15: Child Snack Purchases and Use of Vitamins for Pregnant Women

Those parents purchasing snacks for children do so frequently. Most respondents (53%) reported purchasing snacks in the street for the children in the house (Table X). Another 9% said they purchased snacks “sometimes”. Forty percent of those purchasing snacks for children said they purchased them once or more every day (Table X). A similar number (55%) said they bought snacks for their children in stores, with Parents who buy snack foods remain conscious of nutrition, with 16% saying they purchased snacks in stores sometimes. Among those purchasing in the street, the average frequency was 1.4 times per day. Among those purchasing daily in stores, the average frequency was 1.6 purchases per day. Thirty-four percent of these parents make these purchases once or more per day. Parents purchasing snacks remain conscious of nutrition, with 97% saying they would pay for more expensive cookies if they had more vitamins than cheaper ones.

Frequency	In Street (n=282)		In Store (n=318)	
More than once per day	12%		11%	
Every day	28%		23%	
2-3 times per week	28%		27%	
Every week	18%		21%	
Every 2 to 3 weeks	10%		15%	
Once per month	4%		3%	
Less than monthly	1%		0%	

Only 129 respondents reported that children in the household sometimes purchased snacks on their own, with 69% of those respondents saying the children buy snacks once or more per day, and 17 % saying 2-3 times per week. Nevertheless, a larger group (266 of 449 for whom the question was relevant) reported giving money to children for snacks when they go to school – 32% reported that children get snack money all or most of the time, with another 28% (Table X). In only 35% of those cases did all of the children of the household get the same amount of money. The average received by the child receiving the least was 26.5 Haitian gourdes (US \$ 0.58). A little more than half spend all of the money at once at least some of the time, although only 12% spend everything all of the time, and another 12% do so most of the time (Table Y).

Table A15-2: Children who get snack money for school (n=449)

All the time	21%
Most of the time	11%
Sometimes	28%
No	35%
Do not know	5%

Table 15-3: Children spending snack money all at once

All the time	12%
Most of the time	12%
Sometimes	35%
No	11%
Do not know	30%

Table A15-4 summarizes Consumer Surey Response for female viatamin use during pregnancy. “Combined” refers to the fact that the if the respondent was a woman who had born children we asked about her own vitamin use during last preganancy, if it was a man who had fathered children we asked about the most recent mother-of-child’s use; if a woman or man who had not yet born children we asked about his or her mothers use of vitamins during last pregnancy.

Table A15-4: Combined Vitamins: Mothers, fathers, and non parents, self or significant other took vitimins last time pregnant (N= 6	
All the time	25%
Do_not_know	36%
Most the time	14%
No	6%
Sometimes	18%
Total	100%

Annex 16: Government Regulations

République d'Haïti
Ministère de l'Économie et des Finances (MEF)
Site de Documentation Numérique (SDN)
Section : Règlements Généraux
Programme de Vérification des Importations

Intitulé: Programme de Vérification des Importations - République d'Haïti - Guide de
L'Importateur
Date de l'acte: 23 Juillet 2003

Source : Publication de l'Administration Générale des Douanes et de la Société Générale de
Surveillance

Remarques: voir aussi le Décret du 3 Octobre 1983 relatif à la Société Générale de Surveillance
S.A. (SGS)

Abréviations utilisées

AED : Accord sur l'Évaluation en Douane de l'OMC
AGD : Administration Générale des Douanes
ARA : Avis de Refus d'Attestation (Non Negotiable Report of Findings)
AV : Attestation de Vérification
B/L : Connaissance (Bill of Lading)
DPI : Déclaration Préalable à l'Importation
CFR : Coût et Fret
DVB : Valeur en Douane selon la Définition de Bruxelles
FCL : Conteneur complet (Full Container Load)
FOB : Franco à Bord (Free on Board)
IAE : Inspection avant Expédition
IFIA : Fédération Internationale des Sociétés d'Inspection
L/C : Lettre de Crédit
LCL : Conteneur de groupe (Less than Container Load)
LTA : Lettre de Transport Aérien (AWB)
OI : Ordre d'Inspection
OMC : Organisation Mondiale du Commerce
PVI : Programme de Vérification des Importations
RFI : Demande d'Informations (Request For Information)
SGS : Groupe SGS (Société Générale de Surveillance) / ses Filiales et Agents
TAS : Trade Assurance Service (de la SGS)
VTD : Valeur Transactionnelle Déclarée

Ministère de l'Économie et des Finances
Ministère du Commerce et de l'Industrie
Communiqué Conjoint relatif au

Programme de Vérification des Importations avant Embarquement (PVI)

Il est porté à la connaissance du public en général, des commerçants, importateurs et déclarants en particulier, opérant sur toute l'étendue du territoire national, qu'en application des dispositions du Décret du 3 Octobre 1983, paru dans le Moniteur No. 75 du 31 Octobre 1983, il est institué un Programme de Vérification des Importations avant embarquement (PVI) ayant pour objet de fournir une assistance technique à l'AGD en vue de sauvegarder les intérêts de l'État, des importateurs, des producteurs et des consommateurs.

Le présent communiqué définit les procédures du PVI qui devront être suivies par la SGS, les déclarants, les importateurs, l'AGD et les autres parties concernées.

La SGS analysera les transactions relatives à des biens devant être importés en Haïti et effectuera sur cette base une vérification physique sélective de la nature, des qualités et quantités des biens et une vérification systématique de la valeur en douane et du classement tarifaire aux fins de dédouanement des marchandises.

La SGS effectuera ses vérifications d'une manière non discriminatoire, et appliquera objectivement et sur une base égale à tous les importateurs et/ou exportateurs les procédures et critères utilisés dans la conduite de ses activités.

La SGS traitera tous les renseignements reçus au cours de ses vérifications comme des renseignements commerciaux confidentiels dans la mesure où ces renseignements ne sont pas déjà publiés, généralement accessibles à des tiers ou du domaine public. La SGS ne divulguera pas de renseignements commerciaux confidentiels à des tiers; il demeure entendu toutefois qu'elle pourra partager des renseignements de ce type avec les autorités qui l'ont mandatée conformément aux dispositions de l'Accord sur l'Inspection avant Expédition de l'Organisation Mondiale du Commerce.

La SGS établira et maintiendra un Bureau de Liaison en Haïti afin de coordonner ses prestations.

La SGS n'interviendra pas pour des importations dont la valeur FOB de la commande est inférieure à l'équivalent de USD 5,000.00 (Cinq Mille dollars US) exceptions faites :

a. des biens importés en conteneurs par un consignataire unique qui seront soumis au Programme, quelle que soit leur valeur;

- b. des importations supérieures ou égales à l'équivalent de 5,000 USD livrées partiellement;
- c. des importations dont la valeur FOB de la commande se situe entre USD 3,000.00 (Trois Mille dollars US) et USD 5,000.00 (Cinq Mille dollars US), pour lesquelles l'importateur ou son représentant sera tenu de lever une Déclaration Préalable à l'Importation (DPI).

Pour toute importation en Haïti d'une valeur FOB égale ou supérieure à l'équivalent de USD 3,000.00 (Trois Mille dollars US), l'importateur ou son représentant dûment autorisé formulera dès confirmation de sa commande à son fournisseur, et en tout état de cause au moins 5 jours avant la date d'embarquement prévue, une demande pour l'émission de la Déclaration Préalable à l'Importation (DPI)

Sur la base des éléments et documents fournis par l'importateur, la SGS analysera les transactions couvertes par une DPI d'une valeur égale ou supérieure à USD 5,000.00 (Cinq Mille dollars US) et déterminera sur cette base l'opportunité d'une vérification physique de la nature, des qualités et quantités des biens ou d'une simple vérification de la valeur en douane et du classement tarifaire.

Les DPI d'une valeur comprise entre USD 3,000.00 et USD 5,000.00 pourront faire l'objet d'une inspection à destination, et/ou d'une vérification de la valeur et d'une vérification du classement tarifaire. Cette inspection à destination pourra être sollicitée par l'AGD.

Dans les cas où la DPI donnerait lieu à une vérification physique avant embarquement, la SGS procédera à une identification de la marchandise dans le pays de provenance ainsi qu'à une vérification de prix. Cette identification consistera en une vérification qualitative et quantitative à des fins douanières.

L'importateur est avisé que l'intervention de la SGS dans le cadre du PVI ne le dégage en rien de ses obligations selon la réglementation à l'importation en Haïti.

L'importateur est avisé que la SGS intervient exclusivement dans le cadre et sur la base du présent Communiqué qui met en oeuvre le PVI et que, par conséquent, l'intervention de la SGS ne dégage en rien le vendeur de ses obligations envers l'importateur et la SGS ne se porte pas garante de la bonne exécution des obligations contractées par le vendeur envers l'importateur.

Pour les importateurs établis en Haïti et se trouvant à Miami, Floride, États-Unis d'Amérique du Nord, et souhaitant effectuer une exportation vers Haïti par le port de Miami River, la SGS mettra en place une procédure exceptionnelle de levée de la Déclaration Préalable à l'Importation (DPI) directement auprès de l'affiliée SGS à Miami. L'importateur devra se conformer aux dispositions du présent Décret. L'importateur / exportateur sera informé si la marchandise concernée par la transaction sera soumise à une vérification physique avant embarquement ou à une simple vérification documentaire.

L'inspection des produits importés en vrac tels que le riz, la farine de blé, le sucre, etc... aura lieu à destination.

Seront exemptés de toute intervention de la SGS :

- a. pierres précieuses et métaux précieux;
 - b. objets d'art;
 - c. munitions et armes autres que de chasse et/ou de sport;
 - d. explosifs et articles pyrotechniques;
 - e. animaux vivants;
 - f. métaux de récupération;
 - g. journaux et périodiques courants;
 - h. effets personnels et objets domestiques usagés y compris un véhicule usagé;
 - i. colis postaux;
 - j. échantillons commerciaux;
 - k. fournitures aux missions diplomatiques et consulaires;
 - l. fournitures aux organismes dépendant de l'Organisation des Nations Unies, importées pour leurs besoins propres;
 - m. équipements, machines, machineries destinés aux entreprises de sous-traitance internationales travaillant exclusivement pour l'exportation et exonérés du paiement des droits pour visa de facture consulaire prévu par le Décret du 19 Septembre 1958 modifié par celui du 8 Novembre 1982;
 - n. pétrole et ses dérivés;
 - o. dons offerts par les Gouvernements étrangers ou organismes internationaux aux fondations, oeuvres de bienfaisance et organismes philanthropiques reconnues d'utilité publique;
3. Il est institué un Comité Directeur pour coordonner la mise en oeuvre du PVI et définir les modalités opérationnelles de ce dernier.

Le Comité Directeur comprendra un (1) représentant du Ministère de l'Économie et des Finances (MEF), un (1) représentant du Ministère du Commerce et de l'Industrie (MCI), deux (2) représentants de l'Administration Générale des Douanes (AGD) et un (1) représentant de la SGS.

La SGS recevra, au Bureau de Liaison SGS à Port-au-Prince, les demandes en vue de l'émission des Déclarations Préalables à l'Importation (DPI) à compter du Lundi 11 Août 2003.

Pour toutes marchandises soumises au PVI et embarquées à partir du lundi 25 Août 2003 (date du titre de transport faisant foi), l'importateur devra présenter à la Douane une Déclaration Préalable à l'Importation et une Attestation de Vérification pour procéder au dédouanement.

Seront publiées en même temps que le présent Communiqué, les obligations des parties concernées et les modalités opérationnelles du Programme de Vérification des Importations. Lesdites procédures rentreront en vigueur à la date citée au point 17.

Fait à Port-au-Prince, le 23 Juillet 2003.

Le Ministre de l'Économie et des Finances, Faubert GUSTAVE

Le Ministre du Commerce et de l'Industrie, Paul DURET.

Modalités Opérationnelles et Obligations des Parties

Pour toute importation en Haïti d'une valeur FOB égale ou supérieure à l'équivalent de USD 3,000.00 (Trois Mille dollars US), l'importateur ou son représentant dûment autorisé formulera dès confirmation de sa commande à son fournisseur, et en tout état de cause au moins 5 jours avant la date d'embarquement prévue, une demande pour l'émission de la Déclaration Préalable à l'Importation (DPI).

Cette demande est une formalité déclarative en vue de l'obtention de la DPI. Elle se fera au moyen d'un formulaire dûment complété qui sera mis à la disposition de l'importateur par la SGS en y joignant deux (2) copies du contrat de la facture pro forma, bon de commande, télex de confirmation ou documents équivalents, fournissant de manière détaillée la description des marchandises et les termes et spécifications de la transaction.

La demande pour l'émission de la DPI pourra être présentée au Bureau de Liaison SGS à Port-au-Prince ou transmise directement par télécopie lisible ou courrier électronique contre accusé de réception. La demande pourra également être enregistrée directement sur un service Internet en ligne dont les conditions d'accès et d'utilisation seront déterminées par la SGS.

Le Bureau de Liaison SGS enregistrera les éléments présentés pour l'émission de la DPI et s'adressera directement et immédiatement à l'importateur en cas d'informations ou de documents manquants ou de clarifications requises.

La SGS confirmera par écrit à l'importateur ou à son représentant l'enregistrement de sa demande en émettant une DPI qui comportera un numéro d'identification unique. Cette DPI sera émise dans un délai maximum d'un (1) jour ouvrable suivant la réception complète des documents et informations requises selon le présent Communiqué et sera mise à la disposition de l'importateur au Bureau de Liaison SGS à Port-au-Prince.

Sur la base des éléments et documents fournis par l'importateur, la SGS analysera les transactions couvertes par une DPI d'une valeur égale ou supérieure à USD 5,000.00 (Cinq Mille dollars US) et déterminera sur cette base l'opportunité d'une vérification physique de la nature, des qualités et quantités des biens ou d'une simple vérification de la valeur en douane et du classement tarifaire.

Par la suite, la SGS transmettra par voie électronique toute DPI d'une valeur supérieure à USD 5,000.00 (Cinq Mille dollars US) au correspondant de la SGS dans le pays d'expédition. La SGS informera immédiatement l'exportateur des besoins documentaires et d'une éventuelle inspection physique avant embarquement pour la vérification en lui envoyant un formulaire de demande d'information.

Obligations de la SGS

13. Vérification des prix. Sur la base de l'inspection des biens et/ou des informations disponibles, la SGS fournira un avis sur la valeur en douane des biens conformément à la législation haïtienne tout en considérant les prix pratiqués vers d'autres pays d'importation, et conformément à l'Accord sur la mise en oeuvre de l'article VII du GATT dès sa mise en application comme défini par la législation ou la réglementation haïtienne.

14. Classement tarifaire. Sur la base de l'inspection des biens et/ou des informations disponibles, la SGS indiquera son avis sur le classement tarifaire SH approprié des biens, conformément à la nomenclature en vigueur en Haïti.

15. Éligibilité à l'importation. Sur la base de l'inspection des biens et/ou des informations disponibles, la SGS vérifiera si les biens n'enfreignent pas les prohibitions et restrictions à l'importation précisées dans chaque cas par l'État haïtien.

16. Scellement des conteneurs. La SGS assistera à la mise en conteneur et apposera un plomb spécial de sécurité à condition qu'une inspection physique soit sélectionnée, qu'il s'agisse d'un conteneur à consignation unique, qu'il soit présenté vide à l'inspecteur SGS et que l'emportage se fasse simultanément à l'inspection des biens. La SGS indiquera le numéro du plomb sur l'Attestation de Vérification afin de faciliter le dédouanement des conteneurs à l'arrivée en Haïti.

17. Avis de Résultat de Vérification. Après chaque intervention, la SGS émettra un Avis de Résultat de Vérification qui sera tenu à la disposition de l'importateur afin de l'informer de la situation de son dossier et de l'inviter à présenter, en vue de l'émission d'une Attestation de Vérification, les documents mentionnés à l'article 9 ci-dessous.

18. Attestation de Vérification. Une Attestation de Vérification sera émise dans tous les cas où la vérification physique et/ou documentaire conduira à un résultat satisfaisant.

L'Attestation de Vérification ne pourra, en tout état de cause, être délivrée que si l'importateur fournit au Bureau de Liaison SGS à Port-au-Prince une (1) copie de la facture définitive relative à l'opération accompagnée du connaissement maritime ou de la lettre de transport aérien ou de tout autre document requis par la SGS. En outre, la copie de la facture définitive remise au Bureau de Liaison SGS à Port-au-Prince devra impérativement et exclusivement concerner tout ou partie des marchandises identifiées par la SGS avant l'expédition.

L'Attestation de Vérification sera émise dans les 2 (deux) jours ouvrables après réception par le Bureau de Liaison SGS à Port-au-Prince des documents finaux de la part de l'importateur ou de son représentant.

19. Label de Sécurité. Lorsque ceci est requis pour les besoins du paiement ou d'une confirmation, la SGS (dans le pays de provenance ou le pays fournisseur) apposera un Label de Sécurité sur un exemplaire de la facture finale de l'exportateur confirmant l'accomplissement satisfaisant de la vérification. Le Label de Sécurité confirmera la vérification physique ou documentaire de la marchandise figurant sur la facture et sera retourné au vendeur.

20. Rapport d'anomalies. La SGS émettra un Rapport d'Anomalie à l'intention de l'importateur et si nécessaire de l'exportateur lorsqu'une ou plusieurs obligations de l'importateur et/ou de l'exportateur, conformément au présent règlement, n'ont pas été respectées et que ce manquement empêche l'émission d'une Attestation de Vérification ou d'un Label de Sécurité. Si l'importateur ou l'exportateur remédie aux anomalies après l'établissement de ce rapport, la SGS pourra remplacer le Rapport d'Anomalie par une Attestation de Vérification.

La SGS portera sur l'Attestation de Vérification les éléments principaux en vue de la tarification et de la détermination des droits et taxes applicables par l'AGD. Les informations contenues dans l'Attestation de Vérification émise par la SGS ont valeur d'avis consultatif.

Obligations de l'importateur

13. Pour être recevable, la déclaration en douane devra être obligatoirement accompagnée, en plus des documents requis par le Code Douanier, de l'original de l'Attestation de Vérification émise par la SGS et de la DPI correspondante pour les importations supérieures ou égales à 5,000.00 USD FOB.

Sous peine d'irrecevabilité de la déclaration en douane, la référence complète de l'Attestation de Vérification sera indiquée sur ladite déclaration.

Pour les importations comprises entre 3,000.00 USD et 5,000.00 USD FOB, la déclaration en douane doit être accompagnée, en plus des documents requis par le Code Douanier, de l'original de la DPI correspondante uniquement.

14. Il est rappelé que le fractionnement des factures et/ou commandes afin de contourner le PVI constitue une tentative de fraude qui sera sanctionnée conformément au Code Douanier en vigueur.

15. Tout importateur en Haïti enregistrera une Déclaration Préalable à l'Importation (DPI) au Bureau de Liaison de la SGS en complétant le formulaire ad hoc d'ordre d'inspection et en y joignant deux (2) copies du contrat de la facture pro forma, bon de commande, télex de confirmation ou documents équivalents, fournissant de manière détaillée la description des marchandises et les termes et spécifications de la transaction.

16. Chaque convention d'achat conclu entre un fournisseur et un importateur en Haïti stipulera l'observation des obligations de l'exportateur indiquées dans le présent Communiqué.

17. En demandant l'émission de l'Attestation de Vérification, l'importateur ou son représentant doit fournir à la SGS les documents finaux suivants : la facture finale concernant les biens, les documents de transport, une (1) copie de la facture définitive relative à l'opération accompagnée du connaissement maritime ou de la lettre de transport aérien ou de tout autre document requis par la SGS, ainsi que les informations sur le régime d'importation.

18. À l'exception des exemptions énumérées ci-dessous, les importateurs ne seront pas autorisés à dédouaner des biens, ni à déclarer des marchandises sans l'original de l'Attestation de Vérification dont la référence complète sera indiquée sur la déclaration en douane :

- a. pierres précieuses;
- b. objets d'art;
- c. munitions et armes autres que de chasse et/ou de sport;
- d. explosifs et articles pyrotechniques;
- e. animaux vivants;
- f. métaux de récupération;
- g. journaux et périodiques courants;
- h. effets personnels et objets domestiques usagés y compris un véhicule usagé;
- i. colis postaux;
- j. échantillons commerciaux;
- k. fournitures aux missions diplomatiques et consulaires;
- l. fournitures aux organismes dépendant de l'Organisation des Nations Unies, importées pour leurs besoins propres;
- m. équipements, machines, machineries destinés aux entreprises de sous-traitance internationales travaillant exclusivement pour l'exportation et exonérés du paiement des droits pour visa de facture consulaire prévu par le Décret du 19 Septembre 1958 modifié par celui du 8 Novembre 1982;
- n. pétrole et ses dérivés;
- o. dons offerts par les Gouvernements étrangers ou organismes internationaux aux fondations, oeuvres de bienfaisance et organismes philanthropiques reconnues d'utilité publique;

14. Il incombe à l'importateur de faire connaître à l'exportateur les nouvelles procédures d'importations désormais en vigueur en Haïti. L'importateur veillera à préciser à l'exportateur notamment

a. que le vendeur devra prendre toutes les mesures nécessaires pour que l'exécution par la SGS des inspections qualitatives et quantitatives puisse se faire dans les meilleures conditions. Il devra assurer à la SGS l'accès aux ateliers, usines, magasins ainsi que la présentation convenable des biens concernés;

b. que le vendeur est tenu de faciliter l'exécution par la SGS de la comparaison de prix dont le but est notamment de rechercher le prix FOB normal à l'exportation à la date contractuelle ainsi que celui du fret, le cas échéant;

c. qu'avant l'inspection, le vendeur devra mettre à la disposition de la SGS :

- un exemplaire de la facture pro forma indiquant le prix FOB pour chaque produit, la valeur FOB totale et, s'il y a lieu, la valeur C & F totale de la commande concernée;

- un exemplaire du contrat, de l'accréditif, de la liste de colisage et/ou de tout autre document concernant les biens ou marchandises objets de la transaction et que la SGS estime nécessaire à l'exécution de son mandat;

- toute déclaration concernant les commissions, rabais, escomptes, etc...;

- tout document technique et commercial (certificats de matières premières, procès-verbaux d'essais, catalogues, tarifs, etc...) demandé de même par la SGS.

d. qu'il incombe au vendeur de donner à la SGS un préavis d'au moins trois (3) jours ouvrés avant la date de vérification voulue. Que la SGS pourra commencer à titre conservatoire, ses opérations de vérification physique dans les pays fournisseurs, sur la base de convocations par les vendeurs. Toutefois, cette intervention ne donnera pas lieu à l'émission d'une Attestation de Vérification ou d'un Rapport d'Anomalies tant que l'ordre d'inspection n'aura pas été reçu par le Bureau de Liaison SGS en Haïti.

e. que le vendeur devra remettre à la SGS deux (2) exemplaires de la facture finale indiquant la valeur FOB totale et, le cas échéant, la valeur C & F de la marchandise;

f. que tous les frais de manutention, présentation, essais, etc... liés à l'inspection des biens sont à la charge du vendeur, de même que les frais d'intervention supplémentaire de la SGS en cas de convocation de cette dernière par le vendeur sans que la marchandise ait été préparée pour la vérification;

g. que le vendeur est mis en garde contre l'embarquement des biens soumis à vérification physique et qui n'auraient pas été inspectés par la SGS ou qui n'auraient pas fait l'objet d'une Attestation de Vérification;

h. que le vendeur est avisé que l'intervention de la SGS ne le dégage en rien de ses obligations contractuelles envers l'importateur;

i. que le vendeur est avisé que les expéditions partielles à valoir sur un contrat, une commande ou un ordre d'achat couvert par une Déclaration Préalable d'Importation d'une valeur FOB égale ou supérieure à l'équivalent de 5,000.00 USD sont soumises au PVI et peuvent être soumises à la vérification physique avant embarquement et sont soumises de manière systématique à la comparaison de prix avant embarquement et au classement tarifaire.

Obligations de l'exportateur

13. Il incombe à l'exportateur vers Haïti de retourner dûment complétée la demande d'information et de donner à la SGS un préavis d'au moins 3 (trois) jours ouvrables avant la date d'intervention voulue.

14. L'exportateur mettra à la disposition de la SGS un exemplaire de la facture pro forma, de l'ordre d'achat, de la liste des prix, de l'éventuel accréditif, du contrat et/ou de tout autre document que la SGS estimera nécessaire à l'exécution de ses services de vérification dans le cadre du PVI.

15. L'exportateur sera tenu d'accorder toutes facilités, en vue de l'exécution par la SGS des vérifications et tests pouvant être requis. L'exportateur est tenu de prendre des dispositions en vue de la manipulation, la présentation, l'échantillonnage, les certificats de tests, etc... des biens, en vue de l'intervention de la SGS. Toutes dépenses encourues à cet effet seront à la charge de l'exportateur.

16. Si l'exportateur a demandé une intervention de la SGS sans avoir préparé les biens pour cette intervention ou si les biens ont été vérifiés et ne correspondent pas avec les documents, les coûts d'une intervention supplémentaire de la SGS seront à la charge de l'exportateur.

Obligations des transporteurs maritimes

Les consignataires des navires sont tenus de transmettre à la SGS par voie électronique et dans un format agréé, le manifeste cargo maritime dans les 24 heures suivant l'arrivée du navire.

Annex 17: Questionnaires

Consumer Taste Test Questionnaire

Enumerators initials*

Surveyor: Where is the interview taking place*

Vil de Port-au-Prince

Vil de Cape_Haitian

Vil de Gonnaives

Andeyo Port-au-Prince

Andeyo Cape_Haitian

Andeyo Gonnaives

Sex*

male

female

Hello. My name is _____. I am working for a company that is studying foods. We would like to ask you some questions and share some snacks with you. After we share the snacks we would like to know what you think of them, if they are tasty... Do you agree to respond to the questions?*

ok

Sex*

Respondent's name

Last Name*

Department*

Where were you mostly brought up?*

Port-au-Prince mtro area

City in the provinces

Peri_Urban

Town

Country

Department*

Neighborhood*

Port-au-Prince mtro area

City in the provinces

Peri_Urban

Town

Country

age*

What class did you finish?*

Do you have a skill?*

(LIST OF SKILLS)

What do you do to earn money?*

Telephone number

In general, according to you, what is the most important consideration when buying a snack?*

price

quality
 healthfulness
 familiarity
 prestige
 other

And what do you think is most important for most people?*

price
 quality
 healthfulness
 familiarity
 prestige
 other

Do you ever sell anything/trade?*

yes
 no

Do you eat mamba (Peanut Butter)?*

yes
 no

Do you eat pistach peanuts?*

yes
 no

Is mamba healthy?*

yes
 no
 unsure

Which is better for you, *

peanuts
 peanut butter
 same

Is it good for children?*

yes
 no

Who most frequently eats it?*

children
 adults
 same

What the respondent thinks, *Would you like to taste some mamba?*

yes
 no

Apart from you, who do you think would buy it? *Do you ever sell anything/trade?*

yes
 no

And you, do you think that could resell this product?*

yes

no

unsure

If you bought it, how much would you want to pay?*

And how much would you resell it for?*

And how many bags would you like to see in a case?*

Consumer Quantitive Questionnaire

Enumerators name*

Hello. My name is _____. I am working for a company that is studying foods. We would like to ask you some questions about food. Do you agree to respond to the questions?*

ok

Respondent's name

First Name*

Telephone number

tel 1*

tel 2*

Sex of respondent*

male

female

Estimate her/his age*

Where are you from?

Department*

Where were you mostly brought up?*

Port-au-Prince mtro area

City in the provinces

Peri_Urban

Town

Country

Department*

Neighborhood*

Port-au-Prince mtro area

City in the provinces

Peri_Urban

Town

Country

What class did you finish?*

Kindergarten

1st_Grade

2nd_Grade

3rd_Grade

4th_Grade

5th_Grade

6th_Grade

7th_Grade

8th_Grade

9th_Grade

10_Grade
 11_Grade
 12th_Grade
 13th_Grade
 University
 Professional_School
 No_School

What do you do to earn money?*

Agriculture
 Livestock
 Commerce
 Fishing
 Crafts
 Skilled_labor
 Unskilled_labor
 School_teacher
 Professional
 Non_Professional min avek djob sale
 Employe_leta
 Taxi_moto
 Nothing
 Other

Do you eat Peanut butter?*

yes
 no

Have you ever eaten imported peanut butter?*

yes
 no

Do you prefer local or imported peanut butter?*

Local
 Imported

How do you prefer it?*

salty
 sweet
 pike
 nothing
 Other

And do you prefer, *

with_much_oil
 not_much_oil
 Normal

How often do you eat peanut butter?*

All the time
 Every_day
 2_3_times_per_week
 Every_week
 Every_2_to_3_weeks
 Once_per_month
 Less_than_monthly

When do you most often eat peanut butter?*

morning
 mid morning
 noon
 afternoon
 evening

When you eat reanut butter, how much do you pay for reanut butter (goud)?*How long does it last?*

Eat it on the spot

1 day
 2 days
 3 days
 4 days
 5 days
 1 week
 more than 1 week

In what kind of container do you usually buy it?*

bread
 casava
 Other

Is it enough? Do you find yourself wanting more?*

yes
 no

Would you eat more if it was cheaper?*

yes
 no

Do you eat more peanuts or reanut butter?*

peanuts
 peanut butter
 same

Is it healthy?*

yes
 no
 sometimes

Is it good for children?*

yes

no

Who most frequently eats it?*

children

adults

same

Who most frequently eats it?*

male

female

same

Show bag*

ok

Would you buy it?*

yes

no

How much would you pay per little bag? *If you could find it anywhere, how often do you think you would buy it?*

All the time

Every_day

2_3_times_per_week

Every_week

Every_2_to_3_weeks

Once_per_month

Less_than_monthly

When you bought it, how many bags would you buy? *How long would that last?*

Eat it on the spot

1 day

2 days

3 days

4 days

5 days

1 week

more than 1 week

Where would you most prefer to buy it?*

Market

Street

Vendor_House

Store

Other

Do you think there is enough in the bag?*

yes

no

Would you pay more for a bigger bag?*

yes

no

And you, do you think that could resell this product?*

yes

no

sometimes

If you bought it, how much would you want to pay?*

And how much would you resell if for?*

A couple more quick questions*

ok

Do you ever buy snacks like cookies or potato chips?*

yes

no

When you buy them, what is most important to you?*

price

quality

healthfulness

familiarity

prestige

other

How often do you buy them?*

All the time

Every_day

2_3_times_per_week

Every_week

Every_2_to_3_weeks

Once_per_month

Less_than_monthly

When you buy them do you usually buy, *

to eat on the spot

to eat and to save a little for later

to eat later

Do you usually, *

I eat them alone

I usually share them

Where do you most often buy them?*

Market

Street

Vendor_House

Store

Other

Does anyone in your house currently sell snacks?*

yes

no

Who?*

Myself

Mother

Grandmother

Sister

Wife

Father

Grandfather

Brother

Husband

Other

What do they most often sell?*

Cookies

Crackers

Douses

Pepet

Pistach

Manmba ak pen oswa kasav

pen oswa kasav

Other

Ok, now if I may I would like to ask a few questions about child who live in your house*

ok

Do you ever buy snacks in the street for the children?*

yes

no

sometimes

How often?*

All the time

Every_day

2_3_times_per_week

Every_week

Every_2_to_3_weeks

Once_per_month

Less_than_monthly

Do you ever buy snacks at the boutik for the children?*

yes

no

sometimes

How often?*

All the time
 Every_day
 2_3_times_per_week
 Every_week
 Every_2_to_3_weeks
 Once_per_month
 Less_than_monthly

Do you think the children sometimes buy snacks on their own?*

yes
 no
 sometimes

How often?*

All the time
 Every_day
 2_3_times_per_week
 Every_week
 Every_2_to_3_weeks
 Once_per_month
 Less_than_monthly

When the children go to school, you give them money to purchase something to eat?*

no
 Sometimes
 Most the time
 All the time
 Do_not_know

Do all the children get the same amount of money?*

yes
 no

The smallest amount?*

The most amount?*Do they spend it all?*

no
 Sometimes
 Most the time
 All the time
 Do_not_know

Would you pay more for a cracker if you know that it had more vitamins in than another that sold for less?*

yes
 no

In the following list which type of produce do you prefer,

Cookies*
 local

imported
same

Rice*

local
imported
same

Corn*

local
imported
same

Juice*

local
imported
same

A couple quick questions more, *

ok

Do you have children of your own?*

yes

no

A couple more quick questions*

ok

Do you eat popcorn? * Required

yes

no

How often?*

All the time

Every_day

2_3_times_per_week

Every_week

Every_2_to_3_weeks

Once_per_month

Less_than_monthly

How much do you pay (goud)?*

Do you usually buy more than you eat?*

yes

no

What flavor?*

salty

sweet

spicy

nothing

Other

Do you like millet?*

yes

no

Have you ever had popped millet?*

yes

no

Vitamins and Pregnancy:

For mother: When you were pregnant last, did you take vitamins?*

No

Sometimes

Most the time

All the time

Do_not_know

For Fathers: The mother of your last child, did she take vitamins while she was pregnant?*

No

Sometimes

Most the time

All the time

Do_not_know

For men and women who have not had children yet: The last child that your mother bore did she take vitamins?*

No

Sometimes

Most the time

All the time

Do_not_know

Take a GPS reading*

GPS coordinates can only be collected when outside.

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)

Boutik (neighborhood store) Questionnaire

Enumerators initials*

Location-

PAP

Gonaives

Okap

other

Neighborhood*Number of Sample Cluster*

Hi. My name is_____. We are conducting a survey about foods, particularly snack foods and fortified foods. The information you share with us is confidential. We will not share your name with anyone. Do you consent to respond to the questions?*

Required
refuse

accept

absent

Respondent's name*Sex*

female

male

Does the boutique have a name?*

yes

no

do you own the business?*

yes

no

Telephone numbers

What kind of drink to they most buy?

Regarding snacks that you sell, do clients more often buy something to drink or a snack?*

Snack

Drink

Same

Tell me 5 non staple foods that you sell most frequently?*

(PRODUCT LIST)

Now I would like to ask you some questions about snacks that are good for people, that have vitamins, that are good for the health*

Ok

Tell me three things that you sell that are most fortifying for babies*

(PRODUCT LIST)

Tell me three things that you sell that are most fortifying for children?*

(PRODUCT LIST)

Tell me three things that you sell that are most fortifying for adults?*

(PRODUCT LIST)

Tell me three things that you sell that are most fortifying for pregnant women?*

(PRODUCT LIST)

do you sell raw peanuts?*

yes

no

do you sell roasted peanuts?*

yes

no

do you sell peanut butter?*

yes

no

do you sell peanut clusters?*

yes

no

tell me all the foods you sell that have peanuts in them*Do you give clients credit?*

yes

no

When purchasing a food, what is the most important to your customers?*

price

quality

healthfulness

familiarity

prestige

other

Do you more often go and purchase or do distributors bring goods to you?*

I go purchase

Distributor delivers

Equal

How many times per month do you purchase?*

1 time or more per week

1 time per week

every 2 weeks, more or less

every 3 weeks, more or less

once per month, more or less

less than 1 time per month

may I take a photo of your goods?*

yes

no

May I take a picture of you?*

yes

no

Pran koodone GPS*

GPS coordinates can only be collected when outside.

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)

Distributor and Redistrutor Questionnaire

Department*

Commune?*

Enumerator name*

Respondent's name

Last Name*

First Name*

Non Biznes*

Telephone number

Sex of respondent*

male

female

Hello. My name is _____. I am working for a company that is studying foods. We would like to ask you some questions and share some snacks with you. After we share the snacks we would like to know what you think of them, if they are tasty... Do you agree to respond to the questions?*

ok

And you, do you think that could resell this product?*

Sell_fast

Hot

Sell_fast

Not_sell

No_sell_at_all

If you bought it, how much would you want to pay?*

And how much would you resell if for?*

And how many bags would you like to see in a case?*

konbyen ou tap pran nan primye kou?*better to go get it than have it delivered...*

Delivre

Pickup

most your stock or is it delivered*

Delivre

Pickup

Al cheche I

preferred distributor/source*

Ti_Tony

Stanco

Other

Type of promotion they want to see for pitimi*

how many bags would they like to see given per so many given for so many sold

Do you get merchanzies on credit

yes

no

do you give credit to you clients*

yes

no

do you give promotion in the sense of some many free units for so many units sold*

yes

no

3 best sellers cookies*

3 best sellers crackers*

Best sellers in cheekos*

Best seller overall*

Estimated market reception of peanut butter sachets...*

Sell_fast

Hot

Sell_fast

Not_sell

No_sell_at_all

Turnover Rate Survey Questionnaire (telephone)

ID of respondent*

Name of surveyor*

What cookie sells the best?*

Salix

Casino

Tempo

Columbina

Maxi

Anika

Other

How often do you restock them?*

How many packs/cases do you usually buy?*

How many in a pack/case?*

What cracker sells the best?*

Bongou

Coctel

Fiesta

Diana

Mariela

Guarina

Other

How often do you restock them?*

How many packs/cases do you usually buy?*

How many in a pack/case?*

What cheeze puff snack sells the best?*

Mini_jumbo

Chiritos

Cheeco

Bingo

Titato

Chiko_Popkorn

Arlequin

Other

How often do you restock them?*

How many packs/cases do you usually buy?*

How many in a pack/case?*

WORKS CITED

- Alvarez and Murray, 1981 Alvarez, M.D. Murray, G.F. Socialization for scarcity: Child feeding beliefs and practices in a Haitian village. United States Agency for International Development
- Bailey, M., 2006 “Analysis of Market in Haiti for PL480 Title II Packaged Vegetable Oil” USAID Purchase No. 521-O-00-06-00079, August 2006
- Bastien, Remy. 1961. Haitian rural family organization. *Social and Economic Studies* 10(4):478–510.
- Beghin, I, Fougere, W., King, K.W. (1970), *L’Alimentation et la Nutrition en Haiti*”, publication de L’I.E.D.E.S., Presses Universitaires de France, 108, Blvd. Saint-Germain, Paris.
- Berggren et al. 1984; King et al. 1968; 1978; Berggren 1971, Beaudry-Darismé 1971; Beaudry-Darismé and Latham 1973; Berggren et al. 1985; Mduduzi N.N. 2013; Dornemann and Kelly 2013; Schwartz 2009
- Berggren, Gretchen, Nirmala Murthy, and Stephen J Williams. 1974. Rural Haitian women: An analysis of fertility rates. *Social Biology* 21:368–78.
- CARE 2012 Gender Survey CARE HAITI HEALTH SECTOR Life Saving Interventions for Women and Girl in Haiti Conducted in Communes of Leogane and Carrefour, Haiti
- CFSVA (Comprehensive Food security and Vulnerability Analysis) – 2007/2008. Overseen by WFP (World Food Program) and CNSA (Coordination Nationale de la Sécurité Alimentaire)
- CIAT 2015 AgroSalud Project (www.AgroSalud.org)
- CNSA (Coordination Nationale de la Sécurité Alimentaire), 2014 Beneficiary Targeting in Haiti :Detection Strategies, by Timothy Schwartz
- CNSA (Coordination Nationale de la Sécurité Alimentaire), 2014 Beneficiary Targeting in Haiti :Detection Strategies, by Timothy Schwartz
- CNSA and WFP’s 2007 Analyse Compréhensive de la Sécurité Alimentaire et de la Vulnérabilité (CFSVA) Written by Timothy Schwartz
- CNSA’s 2011 Enquête Nationale de la Sécurité Alimentaire (ENSA),
- Demographic Health Surveys (DHS or EMMUS) from the year 1995 (N=4,944 households), year 2000 (N=9,595 households), year 2005 (N=9,998 households), and year 2012 (N=13,181 households)
- DeWind, Josh and David H. Kinley, 1988 Aiding Migration: The Impact Of International Development Assistance On Haiti 3rd
- EarthTech 2014 Lafiteau Social Impact Assessment on behlf of GB Group
- Echevin, Damien 2011 Vulnerability before and after the Earthquake. World Bank Policy Research Working Paper 5850.
- <http://www.worldbank.org/en/topic/communitydrivendevelopment/brief/cdd-targeting-selection>.

EMMUS 2012 Enquête mortalité, morbidité et utilisation des services, Haïti 2000 (EMMUS-II). Cayemittes, Michel, Haiti

EMMUS-I. 1994/1995. Enquete Mortalite, Morbidite et Utilisation des Services (EMMUS-I). eds. Michel Cayemittes, Antonio Rival, Bernard Barrere, Gerald Lerebours, Michaele Amedee Gedeon. Haiti, Institut Haitien de L'Enfance Petionville and Calverton, MD: Macro International.

EMMUS-II. 2000. Enquête Mortalité, Morbidité et Utilisation des Services, Haiti 2000 (EMMUS-II). Cayemittes, Michel, Florence Placide, Bernard Barrère, Soumaila Mariko, Blaise Sévère. Haiti: Institut Haitien de L'Enfance Petionville and Calverton, MD: Macro International.

EMMUS-III. 2005/2006. Enquête mortalité, morbidité et utilisation des services, Haiti 2000 (EMMUS-II). Cayemittes, Michel, Haiti: Institut Haitien de L'Enfance Petionville and Calverton, MD : Macro International.

FAFO 2001 Enquête Sur Les Conditions De Vie En Haïti ECVH – 2001 Volume II

FAFO 2003 Enquête Sur Les Conditions De Vie En Haïti ECVH – 2001 Volume I

FAO Stat 2000

Farmer, Paul, 1988Bad Blood,Spoiled Milk: Bodily Fluids as Moral Barometers in Rural Haiti (1988)

Gardella, Alexis 2006 Gender Assessment for USAID Assessment Country Strategy

HarvestPlus 2013 Prioritizing Countries for Biofortification Interventions Using Country-Level Data HarvestPlus Working Paper | authors, Dorene Asare-Marfo Ekin Birol Carolina Gonzalez Mourad Moursi Salomon Perez Jana Schwarz and Manfred Zeller

Hinds, . M.J. M. Jolly, R.C. Nelson", Y. Donis", and E. Prophete"

IDB 1999 see Gardella, Alexis,

International Monetary Fund (IMF) 2015 HAITI SELECTED ISSUES Prepared By Lawrence Norton, Joseph Ntamungiro, Daniela Cortez, Gabriel Di Bella (all WHD), Emine Hanedar (FAD), and Anta Ndoye (SPR) Approved By The Western Hemisphere Department

Institute Haitien de L'enfance et al (2000),

Inter-American Development Bank (1999). Facing up to Inequality. Washington D.C.: Inter-American Development Bank.

IRIN 2010 Haiti: US Remittances Keep the Homeland Afloat. UN Office for the Coordination of Humanitarian Affairs <http://www.irinnews.org/report/88397/haiti-us-remittances-keep-the-homeland-afloat>

Jensen, Helen 1990 Food consumption patterns in Haiti Center for Agriculture and Rural Development. Iowa State University Staff Report 90-SR 50

Jolly and Prophete, 1999

- Katherine Harmon Courage | July 2, 2011 | <http://blogs.scientificamerican.com/observations/2011/07/02/whats-in-your-wiener-hot-dog-ingredients-explained/>
- King, K.W. Fougere, W., and Beghin, I. (1966) Un Melange de proteines vegetales (Ak-1000) pour les enfants haitiens. *Ann Soc. Belge Med. Trop.* Vol 46, 6, pp 751-754.
- King, K.W., Fougere, William, Foucaud, J., Dominique, G., and Beghin, I (1966) Response of [preschool children to high intakes of Haitian cereal-bean mixtures. *Archivos Latinoamericanos de Nutricion* 16:1. pp 53-64.
- Leyburn, James G. 1966 (originally 1941) *The Haitian People*. New Haven: Yale University Press.
- Lowenthal, Ira 1984. Labor, sexuality and the conjugal contract. In *Haiti: Today and tomorrow*, ed. Charles R. Foster and Albert Valman. Lanham, MD: University Press of America.
- Lowenthal, Ira. 1987. *Marriage is 20, children are 21: The cultural construction of conjugality in rural Haiti*. Dissertation, Johns Hopkins University.
- Lundahl, Mats 1983 *The Haitian Economy: Man, Land, and Markets*. New York: St. Martins Press.
- Metraux, Rhoda 1951 *Kith and kin : a study of Creole social structure in Marbial, Haiti*. PhD Dissertation: Columbia University.
- Mintz, Sidney 1974. *Caribbean transformations*. Chicago: Aldine.
- Moreau, St Mery 1797 *Description de la Partie Francaise de Saint-Domingue* Paris: Societe de l'Histoire de Colonies Francaises, 1958 v. 2
- Murray Gerald F. 1972. *The economic context of fertility patterns in a rural Haitian community*. Report submitted to the International Institute for the Study of Human Reproduction. New York: Columbia University.
- Murray, Gerald F. 1977 *The Evolution of Haitian Peasant Land Tenure: Agrarian Adaptation to Population Growth*. PhD Dissertation: Columbia University
- Murray, Gerald 1977 *The evolution of Haitian peasant land tenure: A case study in agrarian adaptation to population growth*. Ph.D. dissertation, Columbia University, Department of Anthropology.
- Nicholls, David. 1974. *Economic dependence and political autonomy: The Haitian experience*. Occasional Paper Series No. 9. Montreal: McGill University, Center for Developing-Area Studies
- ORE Organization For The Rehabilitation Of The Environment *Biofortified staple food to help reduce malnutrition*
- PAM/CNSA 2007 *l'Analyse Compréhensive De La Sécurité Alimentaire Et De La Vulnérabilité*

Richman, Karen E. 2003. Miami money and the home gal. *Anthropology and Humanism* 27(2): 119–32.

Roman S.B. (2007). Exclusive Breastfeeding Practices in Rural Haitian Women. UCHC Graduate School Masters Theses 2003–2010. Paper 141.

Schwartz, Timothy. 1992. Haitian migration: System laborization. Unpublished master's thesis, University of Florida, Gainesville.

———. 1998. NHADS survey: Nutritional, health, agricultural, demographic and socio-economic survey: Jean Rabel, Haiti, June 1, 1997–June 11, 1998. Unpublished report, on behalf of PISANO, Agro Action Allemande and Initiative Development. Hamburg, Germany.

———. 2000. “Children are the wealth of the poor:” High fertility and the organization of labor in the rural economy of Jean Rabel, Haiti. Dissertation, University of Florida, Gainesville.

———. 2004. “Children are the wealth of the poor”: Pronatalism and the economic utility of children in Jean Rabel, Haiti. *Research in Anthropology* 22:62–105.

———. 2009 *Fewer Men, More Babies: Sex, family and fertility in Haiti*. Lexington Press. USA

———. 2011 *Fair Wage in Haiti: Assessment Report*. International Trade Center's Ethical Fashion Initiative. Unpublished Report

Simpson, George Eaton

1942 Sexual and Family Institutions in Northern, Haiti. *American Anthropologist* 44:655-674.

Sletten, Pål and Willy Egset. “Poverty in Haiti.” Fafopaper, 2004.

Smith, Jennie M. 1998. Family planning initiatives and Kalfouno peasants: What's going wrong? Occasional paper/University of Kansas Institute of Haitian Studies, no. 13. Lawrence: Institute of Haitian Studies, University of Kansas.

Smucker, Glenn Richard 1983 *Peasants and Development Politics: A Study in Class and Culture* Ph.D. dissertation, New School for Social Research.

Society for Nutrition Education July 25th, 2010 Danielle Dalheim, RD http://www.sneb.org/conference/documents/Frito-Lay_Coffee_And.pdf

Stam, Talitha 2012, From Gardens to Markets Rural women on the move to urban markets, Route Seguin Haiti A Madam Sara Perspective Commissioned by CORDAID for the IS ACADEMY Human Security in Fragile States

Technoserve 2012 HAITIAN PEANUT SECTOR ASSESSMENT Strategic Industry and Value Chain Analysis (Haiti)

Kurlansky, Mark 1999 *The Fish That Changed the World*

The Guardian 2015. The west's peanut butter bias chokes Haiti's attempts to feed itself *Guardian Global development* <http://www.theguardian.com/global-development/2014/jul/10/haiti-peanut-butter-food-aid-malnutrition> Accessed, 1/03/15

USDA 2005 Dietary Guidelines for Americans Chapter 6. (Accessed 18/12/09)
(<http://www.health.gov/DIETARYGUIDELINES/dga2005/document/html/chapter6.htm>)

Verner 2008: 201, using HLCS 2001

WHO (2009) World Health Organization, Global and regional food consumption patterns and trends http://www.who.int/nutrition/topics/3_foodconsumption/en/index3.html

NOTES

ⁱ It should be noted that there are also region differences in time consumption patterns. In Port-au-Prince, peanuts are most commonly eaten in the morning; in Cape Haitian they are most commonly eaten in the afternoon. In explaining these patterns the best place to begin is with patterns of cost, conservative, storage, availability and the market, factors examined in greater detail below. Thus, Cape Haitian is a peanut growing region where Port-au-Prince is not. But peanut butter is in high demand, fetches a high price, is readily stored and shipped. In Gonaives, an area near to the Artibonite, where much local rice is produced, rice and beans is a common morning street food. Both are fresh, and hence easier to cook. But would be thought as peculiar in Port-au-Prince or Cape Haitian where beans and rice are almost exclusively and afternoon meal...

ⁱⁱ For E332 and E339 see Cure Zone Guide to Food Additives <http://www.curezone.org/foods/ennumbers.asp>

For E407 See Food Additives Guide (400-495) at <http://mbm.net.au/health/>

ⁱⁱⁱ For E332 and E339 see Cure Zone Guide to Food Additives <http://www.curezone.org/foods/ennumbers.asp>

For E407 See Food Additives Guide (400-495) at <http://mbm.net.au/health/>

^{iv} Consumer Acceptability and Physicochemical Properties of Haitian Peanut Butter-Type Products (Mambas) Compared with u.s. Peanut Butter M.J. Hinds", C.M. Jolly, R.C. Nelson", Y. Donis", and E. Prophete"

^v Peanuts not being mentioned in the 'most nutritious foods' list may have something to do with them not being consumed in association with the main meal and a consequence of them being so commonly consumed that respondents simple took them from granted:

^{vi} At the time of the Haitian Revolution over 50% of the slaves had been born in Africa.

^{vii} Because cassava bread is a major product in the North of Haiti and a common street food—vs. Port-au-Prince and Gonaives where it is seldom even seen on the street--we expected that more people would consume it with peanut butter than in other parts of the country. We did not find this to be the case.

An analysis of individual food items showed that a relatively small number of foods made up a large share of household purchases when ranked by frequency and share of expenditures. The most important individual food items ranked by frequency of purchase were cooking oil, bread, rice, brown sugar, green bananas, dried peas, and tomato paste. Among those ranked by expenditure, the most important were rice, dried peas, cooking oil, green bananas, bread, goat, yams, and chicken. Rice, bread, green bananas, dried peas, and cooking oil ranked consistently among the most important items by expenditures throughout all seasons.

It is especially important to note that among the most frequently acquired foods, bread ranked in the top five in Port-au-Prince, other urban areas, and in rural areas (Tables 53 through 55). During a week, on average, more than 90 percent of households in urban areas and 86 percent of households in rural areas purchased bread products. Since almost all wheat and wheat flour is imported, this

^{viii} indicates a significant contribution of imported food to the diets throughout Haiti.