

Ghana's Groundnuts

A study of the branding regulations and market traceability requirements





The Market Development Programme (MADE) for Northern Ghana is a seven-year DFID-funded programme promoting growth and poverty reduction in the 60 districts covered by the Northern Savannah Ecological Zone (NSEZ).

The MADE Groundnut Branding and Traceability Assessment

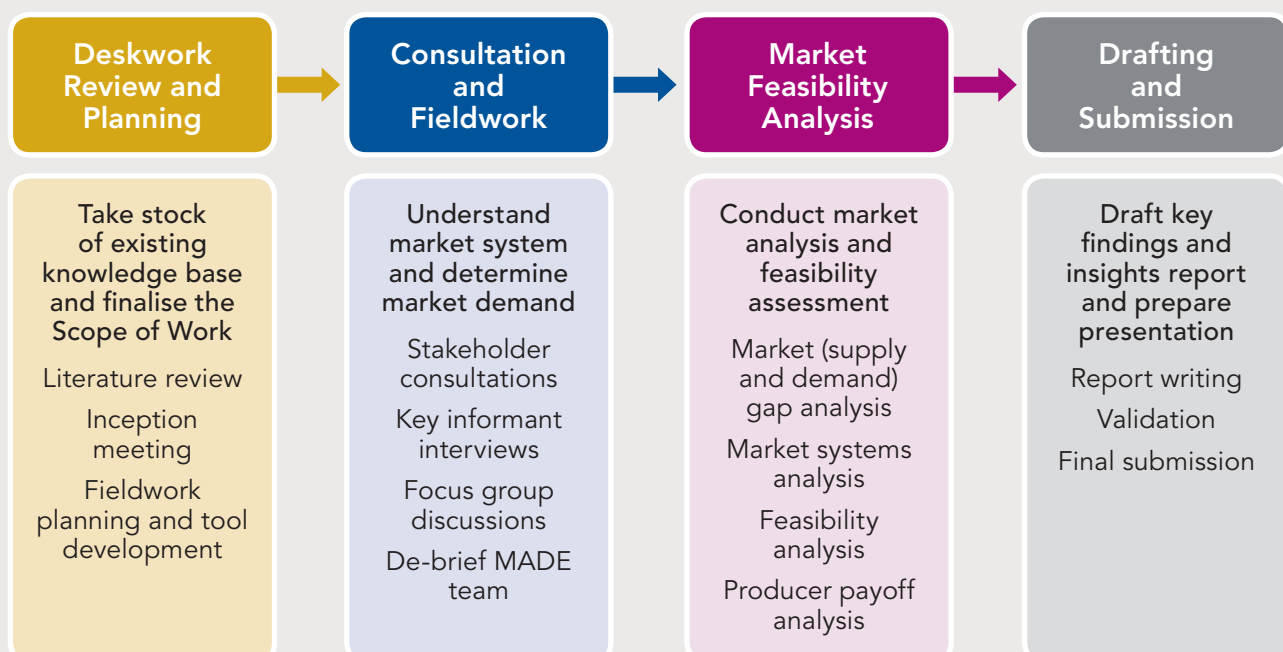
The FCDO-funded Market Development for Northern Ghana programme (MADE), which launched in March 2014, aims to increase the incomes and resilience of poor smallholder farmers (SHFs) and small-scale rural enterprises in the Northern Savannah Economic Zone (NSEZ). MADE has been tackling the constraints underlying the substantial variance in agricultural performance between Ghana's northern and southern regions. A key focus of the programme has been addressing constraints to smallholder farmer access to input supplies and services and aligning production and product quality to meet market demand. To understand better the constraints facing the small-scale producer to break into high quality, high value markets, MADE funded a study of the branding regulations and market traceability requirements of one of Northern Ghana's key crops – groundnuts (also

known as peanuts). The primary objective of this study was to:

- Outline the purchasing habits of consumers and end-buyers of groundnuts and processed groundnut products
- Look closely at trading arrangements and key actors in the groundnut value chain, supplying the end markets
- Develop a feasibility framework for the introduction of branded and traceable aflatoxin-free groundnuts from Northern Ghanaian suppliers.

The work was carried out by a team of four consultants led by The Fairtrade Foundation in partnership with Imani Development from July to September 2020. The field team used the following four-stage approach:

FIGURE 1. FOUR-STAGE STUDY APPROACH



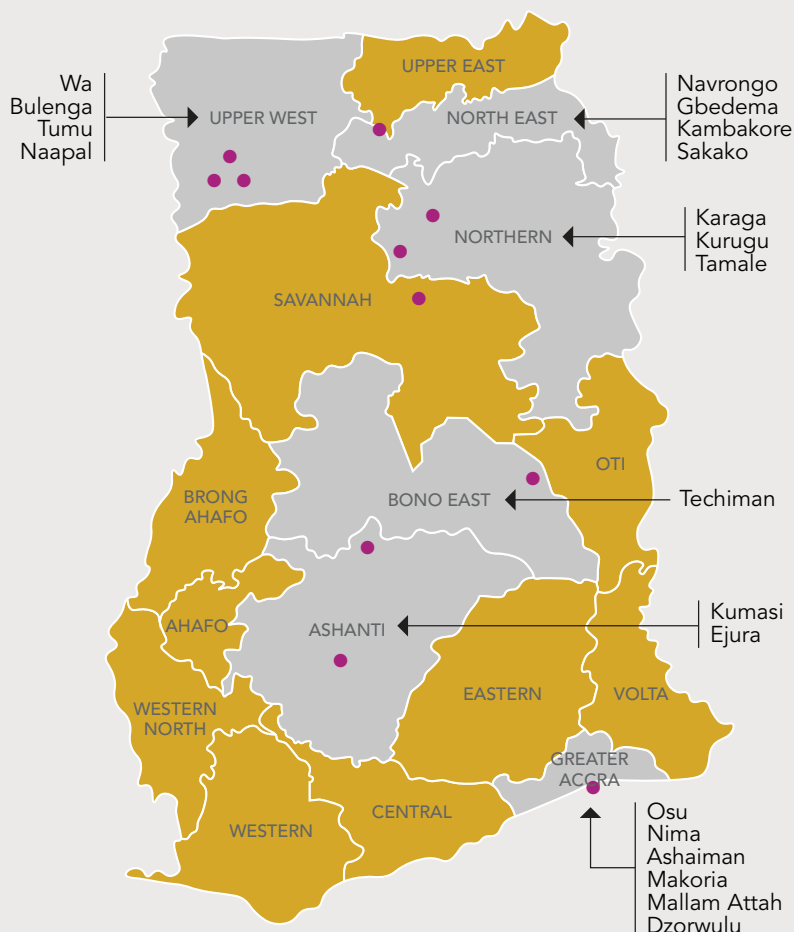
A key focus of the programme has been addressing constraints to smallholder farmer access to input supplies and services and aligning production and product quality to meet market demand.

Interviews were held with ten agribusinesses supported through MADE and with other important value chain stakeholders. The team consulted with a number of key institutional buyers to inform the findings of this study, including Nestle, Samba Foods and Project Peanut Butter, as well as the Ghana Commodity Exchange (GCX). Burger Industries, SAVNAB, Snappy and Premium Foods were not available for interview at short notice. While most businesses were very forthcoming about their commercial information, some were reluctant to share sensitive price data – even with non-industry consultants.

Finally, the team identified and tailored a feasibility framework to analyse the markets identified for the sale of aflatoxin-free groundnuts, assess the strength of the market to pay premium prices, and collate recommendations for the transformation of the sector and future donor-funded programmes working in this space.

There were some limitations to this study, largely because of the onset of the coronavirus pandemic in March 2020 that meant the team had to change both the timing and approach ultimately used for the research. For example, the planned market survey, involving many consumers in focus group discussions, became impossible due to concerns about large gatherings in the market centres. This was mitigated by the team directly approaching and conducting interviews with as many individuals and small numbers of consumers as possible, changing the methodology from a widespread quantitative analysis in select markets to assessing demand through in-depth qualitative interviews.

FIGURE 2. STUDY COVERAGE





Female farmers associated with POGNAA foods sorting groundnuts.

Context of groundnuts in Ghana

Groundnut (*Arachis hypogaea* L.) is one of the most important oilseed crops, by virtue of its contribution to satisfying the protein needs of many households who cannot afford animal protein. It is a staple food crop in Northern Ghana and is the core ingredient of many local food recipes. Groundnut cultivation is hampered by *Aspergillus Flavus* and *Aspergillus Parasiticus* fungi present in the soil which contaminate groundnuts and some other food crops with aflatoxins. Aflatoxins are associated with acute and chronic toxicities in humans and animals, leading to stunting, liver cirrhosis, tumours and immunosuppressive effects. Acute doses can result in death in humans and animals¹. Aflatoxin contamination normally happens before the crop is harvested. Rapid and proper grain drying, sorting and processing help limit aflatoxin build up post-harvest but in themselves cannot eradicate toxins already present.

MADE has encouraged its partner firms to lower the risk by introducing Aflasafe² as part of the bundle of input supplies and services offered

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to smallholder farmers. The product is applied once a cropping season, 2–3 weeks before crop flowering. It protects crops in the field with additional carry-over effect during storage. This has been successful, as demonstrated in the testing carried out with the IITA in 2019³. However, Aflasafe and the additional control and testing measures required to monitor levels at harvest and during storage come at a cost to both the farmers and the agribusinesses, which currently is not recoverable. In the absence of a quality premium, the continued investment by firms in Aflasafe is under considerable threat.

Domestic production and consumption

Production

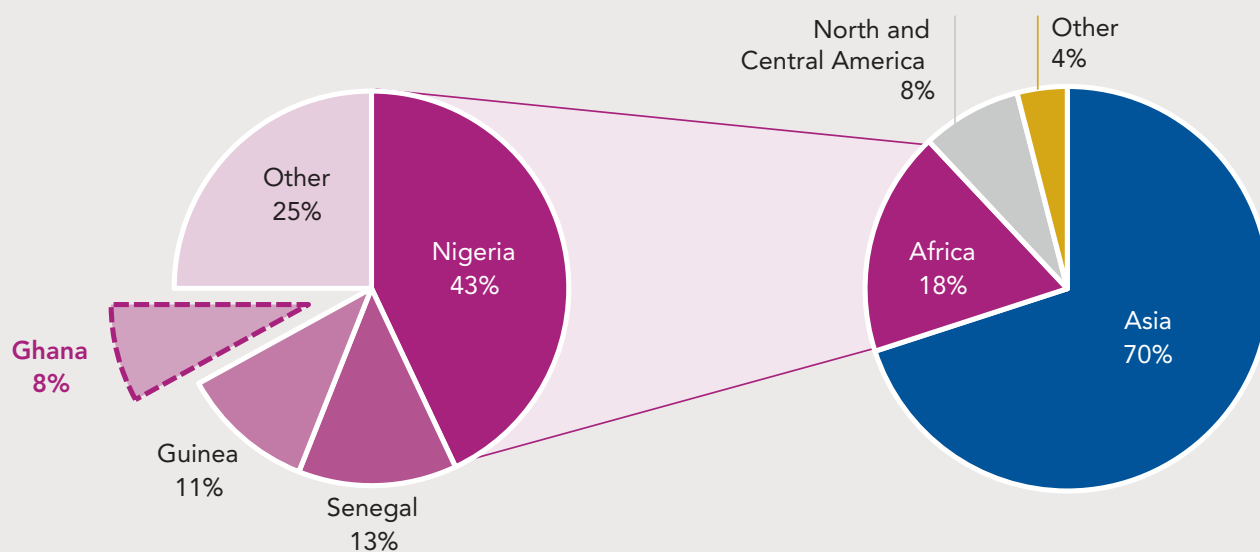
Ghana is a relatively minor player on the world stage with regards groundnut production, representing less than 2% of total production worldwide. India and China are the two major producers together representing over two-thirds of global output. Other important producers are Nigeria, Senegal, Sudan and Argentina.

Ghana produced 521,000MT of groundnuts in 2018, with production more than doubling since 2010 and with a 51% increase in the harvested area over the same time period.^{4 5}

Ghana's market for groundnuts is 99% domestic, and of the 1% that is exported (less than 3,500MT), 90% goes to Nigeria.⁶ Export restrictions on groundnut production are tight and onerous for producers, given the need to meet stringent international safety standards on aflatoxin levels. It is estimated that more than 70% of farmers in the Upper West, Upper East and North-East regions of Ghana cultivate groundnuts, accounting for over 90% of national output.⁷ Groundnuts are produced both for home consumption and for sale on the local market, with even the poorest farmers reporting that they grow groundnuts as a cash crop.⁸ In Ghana,

Unshelled groundnuts being organised.



FIGURE 3. PROPORTIONAL GLOBAL PRODUCTION OF GROUNDNUTS (2017)


as in the rest of West Africa, groundnut is often termed 'a woman's crop' due to the major role women play in its production, marketing and processing, working as farmers, traders and in some cases labourers in planting, harvesting and shelling.⁹ Yields typically range from 0.8 to 1.5MT per acre of shelled product, with the major production season taking place from April to July, and a minor season from August to September. Two groundnut varieties dominate the domestic market, Chinese (Brown) and Nkatie SARI (Red). The Chinese variety is preferred by consumers for roasted groundnuts and paste because of its low oil content. SARI is preferred by producers of groundnut oil.

Consumption

Per capita annual consumption of groundnuts in Ghana is high at approximately 12 kg per capita per year, compared to the US at 3 kg.¹⁰ It varies across the country, with populations in the north eating more than those in the south. 39% of those who consume groundnuts in Northern Ghana grow it themselves. Only 22% of consumers rely entirely on purchasing

groundnuts from the open market.¹¹ Groundnuts are a key source of nutrition for young people and infants, with many producers supplying government school feeding programmes.

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Groundnuts are overwhelmingly consumed as either unprocessed or simply processed products. Domestic trade includes both shelled and unshelled fresh nuts, cooked unshelled nuts, roasted shelled nuts, roasted and coated shelled nuts, paste, and other groundnut blends. The most commonly consumed product by far is groundnut soup, with between 39% and 60% of the population consuming this product.¹² Consumption trends differ depending on the wealth of the consumer.

The importance of grading, branding, and quality

Grading

Grading processes within local markets are based on whether the groundnut is whole (grade 1), split (grade 2) or broken (grade 3). Price differentials between the grades vary from GHS15 to 25.¹³ Similar grading systems were found in almost all the major market centres across the country.

The importance of grading varies by season and by the nature of the buyer. At the beginning of the season, when there is an abundance of groundnuts, suppliers are price takers, and

buyers do not pay more for higher grades. As groundnuts become scarce, suppliers gain more power in negotiations and are able to insist on higher prices for good grades, with market actors reporting prices rising by as much as 80% in scarce seasons countrywide. The most widely used quality specifications are physical attributes like colour, size, wholeness, and level of dryness.

Quality

A key risk to the spread of aflatoxin is that most lower grades end up being used for paste, soups and other processed products. Only a

Groundnut paste retailer with branded products.





Groundnut paste by POGNAA foods, label from Gifts.

few agribusinesses reported that they buy back from farmers according to grade. Occasionally, market women pay slightly more for higher quality product, but on most occasions they either meet the required quality or are rejected. Rejected product often ends up as animal feed or as groundnut soup.

Branding

There is some, isolated evidence that product branding, packaging and labelling commands a premium in the market. However, this is largely only found in high-end supermarkets and products for export. Branding is not a widespread practice and was not observed on the traditional market for shelled/unshelled groundnuts, which accounts for approximately 80 to 90% of total sales. Shelled groundnuts are largely sold without labels, except sometimes to institutional buyers, where agribusinesses simply mark the bags sold with the company name. Groundnut paste is largely not branded in the traditional market. However, consultants identified a small group of processors in Tamale who have had success targeting middle class consumers via an

online platform advertised through social media. Considerable customer loyalty was witnessed for such products.

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Branding is far more common for groundnut products exported to indigenous overseas markets and higher end supermarkets. The better the packaging and labelling, the higher the prices. Imported products seem to enjoy a premium and have the highest prices across all product categories. The greatest price mark-up is on flavoured groundnuts – probably because of the additional flavouring processes required. All products sold through supermarkets require FDA certification.

Feasibility frameworks

Production framework

MADE's "advanced model"¹⁴ has achieved success in introducing Aflasafe to the input supply bundles that farmers receive, with positive results in reducing aflatoxin levels below the permissible 10pb regulated by the Ghana Standards Authority.¹⁵ With farmers also being able to expand production in line with demand, the feasibility for farmers to meet the required quantities and quality from the market has been proven by the MADE programme, albeit only up to the point of harvest.

CROP PRIORITISATION

The consultants identified that farmers and agribusinesses prioritise other crops such as maize to sell on the market, contrary to previous analysis showing groundnuts to be one of the highest value crops to be produced by smallholder farmers.¹⁶ This is largely because of the volume of support farmers

receive for growing maize, soybean, rice and other crops. Both the agribusinesses and the farmers reported that the input subsidy support provided for maize and sorghum through the government's Planting for Food and Jobs flagship programme is far greater than that for groundnuts. This means that a farmer in northern Ghana is likely to sell maize and other cereals but hold on to groundnuts as a form of cash savings. Agribusinesses on the other hand, tend to not store groundnuts for sale in the off-season, as it would take up valuable storage space that can be used for other crops. Groundnut sales help agribusinesses with cash flow allowing them to offset interest payments on credit.

LOGISTICS

When it comes to logistical feasibility, there were mixed reports from agribusinesses and processors on issues of transportation. Some stated that there were no major challenges,



Antika's (farming and distribution of agro-input firm) warehouse storage for groundnuts in the Upper West Region.

FIGURE 4. GROUNDNUT BUYER TYPES

Market Queens

Market Queens are wholesalers of unshelled, shelled, roasted and paste groundnuts who sell on the open markets to retailers, food outlet operators, home consumers and in rare cases to foreign traders. Some wholesalers trade only in either unshelled or shelled nuts, others trade in all nut forms. In general, these traders have little knowledge about aflatoxins and no interest in traceability. Quality is ascertained through

physical examination for colour, moisture and maturity of pods and kernels. There is also no willingness to pay premium prices. Buyers in this category ranked price, quality (colour, absence of pest), oil content, reliability of supply, relationship to seller/supplier and ready access to product as the most important features for their buyers. Source of supply/traceability were not important.

Retailers

Retailers in this category rank price, quality (colour, absence of pest), oil content, appearance, size and reliability of supply as very important in their consideration from whom to buy. Source of supply/

traceability and packaging were less important. Additionally, poor quality nuts are those that have an uncharacteristic natural taste, visible mould or discolouration.

Institutional Buyers

Institutional buyers generally have knowledge about aflatoxin levels but accept varying levels of aflatoxin for their operations, from EU standards to lower standards, depending on their clients and the existing facilities to sort and eliminate nuts infected by aflatoxin. This buyer type requires some level of traceability and this needs to be at least down to the

community level. Institutional buyers supplying the export market and GCX must have permissible levels of aflatoxin of less than 10ppb. There is willingness to pay for higher or premium grades. Due to the high quality required, Samba, for instance, pays a higher premium, to compensate for the resources required to meet its target.

while others cited problems with the high cost of transportation and bad road networks, which affected their ability to access the southern markets. This confirms previous assessments that have placed the cost of distribution of groundnut products at almost 32% of the final price to consumers.¹⁷

In conclusion, in terms of production feasibility, the assessment found that by continuing to promote the use of Aflasafe amongst their out-growers and through controlled handling, warehousing and transport, agribusinesses have the capability of providing the market with aflatoxin-free and traceable groundnuts. The level of production rests on the contractual arrangements between producer and enterprise and the incentives received by farmers to

release their groundnuts through the controlled value chain rather than through the traditional market channels.

Sales framework

Household consumers account for over 90% of groundnuts produced in Northern Ghana. This buyer type does not check for the aflatoxin status of products before purchasing, nor do they worry about the source (traceability). The remaining 10% largely urban-based, college-educated consumers in Accra, Takoradi and Techiman are concerned about aflatoxin levels in groundnuts and are willing to pay more for higher quality products. The market for branded, high quality groundnuts depends on the willingness of buyers to pay more for a branded, aflatoxin-free groundnut.

In conclusion, there is very little knowledge of the risks of aflatoxin among the majority of buyers. Most are unaware of the issues of aflatoxin, and this is not a guiding aspect of purchasing decisions. Second only to price was the appearance of groundnuts in terms of the size of the kernel, colour, and the absence

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of pests. In terms of traceability, most buyers show little interest in the source of the produce, although the “reliability of supply” was cited as a key component for wholesalers and retailers when seeking to purchase groundnuts from farmers or agribusinesses.

Institutional buyers are the exception to this rule, with many, such as Nestle for maize and Samba Foods for groundnuts, tracing the source of production down to the community level. However, these larger institutional buyers purchase less than 10% of total production, so this is an exception rather than a rule. Unless traceability is demanded by regulators, most buyers do not place huge importance on it preferring to purchase groundnuts from the northern regions, which tend to harvest in the drier months, rather the southern regions, where effective drying becomes a challenge because of the comparatively higher rainfall.

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operators, unless there is greater public health awareness and consumers begin to demand aflatoxin-free groundnuts, or there is stricter enforcement of the regulations on aflatoxin.

Contractual protection

It is important to acknowledge the importance of payment terms for farmers and agribusinesses. Farmers place a high value on being able to store groundnuts as a form of commodity saving, so it is clear that there is a requirement for the price of branded, “aflatoxin-free” produce to at least match inter-season prices. If these terms are not met, there is no incentive to change practices to supply safe groundnuts. Any agreement made between traders, agribusinesses and farmers will need to fully reflect the additional costs associated with producing safe, high quality product.

Mutually attractive credit and payment terms need to be echoed in contractual agreements between agribusinesses and any buyers of safe and aflatoxin-free groundnuts. This has already been developed through the out-grower arrangements introduced through the MADE programme. Interviews also revealed a reluctance by agribusinesses to work with traders that stored produce in their warehouses until a buyer became available, since this led to delays in payment.

Secondly, fieldwork identified that contractual agreements surrounding the transparency and detail of testing requirements must also be agreed up front. Agreements between institutional buyers and agribusinesses that have previously supplied aflatoxin-free groundnuts have broken down due to unclear accountability over a contaminated batch. Clear testing procedures must be agreed at all points of risk.

Testing should also take place upon arrival of goods from the supplier, before it is moved into storage by the buyer, so as to clearly identify the accountable market actor and put in place the relevant protections. Further to this, disposal of batches of groundnuts that have not successfully

passed testing must be contractually disposed of through processing into oil, which removes the risk of aflatoxin contamination.¹⁸ In conclusion, contractual terms and transparency both for farmers and between agribusinesses and institutional buyers is critical to the successful launch of traceable and aflatoxin-free groundnuts.

Finally, with regard to the availability of investment and the importance of planning and management in the long term, it is clear in interviews with the agribusinesses that MADE has had a significant impact on how they operate

and plan their businesses, with great evidence of success once the model with farm enterprise advisors (FEAs) has been established¹⁹. Given the risk profile for agribusinesses entering this market, with potentially high legal fees for setting up formalised contracts, and the cost of reviewing appropriate testing infrastructure and ensuring both storage and transportation are up to standard, investment up front will be required.

With MADE closing in November 2020, it is important that support from future programmes continues to establish these relationships with

Melanie Amikiya, CEO of Noyine Maltinga with branded products in Upper East Region.



institutional buyers, help bring down the risk associated with entering the market and enable planning for the future. Once returns start to come back to the businesses, there is reason to believe that agribusinesses will be able to continue to source any needed investment and plan resources accordingly.

Management framework

A key aspect of introducing aflatoxin-free and traceable groundnuts are the testing costs, facilities and procedures required at all stages of the supply chain, and the contractual procedures involved. The fieldwork identified various options for testing that are available to agribusinesses, as shown below:

- **Send samples to KNUST in Kumasi** which costs GHS 45 (£6.15) per sample (3 samples per 100 bags). Agribusinesses reported doing this when required by buyers. Takes 1 day to turn around.
- **Purchase own equipment** which would incur a one-off cost of £5,000 for kit plus recurrent costs for consumables and reagents. No agribusinesses reported owning their own testing equipment.
- **Set up regional, accredited testing facility/ies** able to test consignments prior to despatch with the view to promoting produce from Northern Ghana, with initial investment met by Government.

ESTIMATED POTENTIAL RETURNS ON INVESTMENT

From information gathered from interviews, it is possible to construct a rudimentary model estimating potential returns on investment to agribusinesses investing in aflatoxin-free groundnuts. The scope, in the absence of regulation and enforcement, is only 5 to 10% of the market, predominantly focussed around a selection of institutional buyers and the supply of premium branded groundnuts to supermarkets. The model is based on the following assumptions:



Shelled groundnuts at Mallam Atta Market.

- Estimates based on the price for 100 bags of aflatoxin-free nuts given by Samba foods: GHS650 per bag, compared to GHS250 on the traditional market. This has not been verified with other buyers.
- Seasonal price increases in the off-season of 63% on the traditional market, with the institutional pricing remaining constant.
- Aflatoxin levels in batches can lead to a 30-40% failure rate, based on interviews with agribusinesses.²⁰ Compensation for failed batches priced in at this % chance of batches will then have to be diverted to the traditional market. This represents a high risk when supplying to institutional buyers.
- The cost of providing farmers with required inputs for groundnut production and payment for produce is 40% of the market price.²¹ For institutional buyers, an additional cost of GHS8 per bag is applied for the application of Aflasafe (4kgs of Aflasafe used on an acre costs GHS40).
- Farmers need to be paid for their groundnuts at off-season levels when providing to institutional buyers, to compensate for their lost chance to keep the groundnuts as savings.

- Testing costs are based on agribusinesses using KNUST sampling at GHS45 per bag, with three bags needing to be tested per 100 of each batch supplied to the institutional buyer.
- Transport and distribution costs are assumed as constant at 32% of pricing achieved on the traditional market.²²

When the risk of losing a batch of groundnuts is taken into consideration, the returns on investment when supplying to institutional buyers are not much greater than when selling to the traditional market in the off-season. This helps explain why some agribusinesses have not pursued relationships with institutional buyers and have let their commercial trading relationships elapse.

However, the return on investment of pursuing a relationship with an institutional buyer still has a potential to offer greater returns than supplying the traditional market in both peak and off-seasons, and with agribusinesses being able to secure a steady safe supply of produce, the risk of losing a batch to testing reduces substantially – allowing agribusinesses to make a significant margin once practices are tried and established.

It is possible to construct a rudimentary model estimating potential returns on investment to agribusinesses investing in aflatoxin-free groundnuts.

The market holds potential if a steady and safe supply of aflatoxin-free groundnuts can be provided, as some institutional buyers are currently underserved and actively seeking partnerships in this area.

It should also be noted that school feeding programmes widely source groundnuts as a key ingredient, funded by government and other local actors in a similar fashion to Project Peanut Butter²³. Fieldwork indicated there is little or no testing carried out on groundnuts being sourced by these actors, although Project Peanut Butter uses electronic sorting to reduce aflatoxin contamination to within “acceptable” limits (below 20ppb).

TABLE 1. ESTIMATED FINANCIAL MODEL INDICATING FEASIBILITY OF SUPPLYING INSTITUTIONAL BUYERS

		Traditional market: Peak season (GHS)	Traditional market: Off-season (GHS)	Institutional buyer (GHS)
Revenue	Price per 80kg bag	250.00	407.50	650.00
Costs	Failed batches	0.00	0.00	-163.00
	Payment to farmer and agricultural input costs	-100.00	-163.00	-171.00
	Transport costs	-80.00	-80.00	-80.00
	Cost of testing	0.00	0.00	-6.75
Revenue less costs		70.00	164.50	229.25



Farmers associated with Noyine Maltinga separating the husks from the kernels in Upper East

Looking ahead

There are early signs of growth potential that must be carefully considered alongside the presence of a much larger market that does not demand aflatoxin-free groundnuts and is comparatively easy for agribusinesses and farmers to sell into. Hence sector transformation will also need to target the demand of this much larger segment of the market, enhancing understanding and building demand for aflatoxin-free groundnuts gradually and over a much longer period. These opportunities are:

1 Pursue relationships with processors seeking to supply supermarkets and middle-class consumers through online platforms.

Small-scale processors are entering the market with branded groundnut paste products, both for sale in supermarkets and through retailers to reach a growing market of middle-class consumers concerned with the quality (adulteration). This group of consumers tend to order from credible processors so they can be sure their paste is pure; and they have paid prices up to 40% higher than market value to secure this unadulterated paste.

2 Replace imported products in supermarkets with branded products.

The fieldwork identified a huge price differential between imported branded products in supermarkets and locally produced brands. FDA certification would be required but the price differential represents an opportunity to pursue an end-market with a highly branded product by an established processor.

3 Supply the export market.

Europe remains the largest market internationally for groundnuts, and with the establishment of an aflatoxin-free supply chain, it may be possible for agribusinesses to

create links with export markets through the GCX.

Recommendations to achieve transformation in the groundnut sector

Overall, more work is required to build on the initial findings of this report especially around consumer demand and institutional commitment to the reduction of aflatoxin in foods that were limited in this study.

PROSPECTIVE MARKET

While this report has found that the majority of the market does not demand aflatoxin-free groundnuts, there is an important 5-10% of the market that can be pursued in itself, with premium pricing and the promise of expansion by substituting groundnuts imported from Burkina Faso and the US.

Immediate prospective partners would be the GCX and Samba Foods. We recommend that donor-led programmes work with these partners to develop a strong supply of aflatoxin-free groundnuts from smallholder farmers to supply this segment of the market. This intervention will require the development of formalised agreements, clear testing procedures, and commitment from a small group of agribusinesses willing to move into this space, along with a smaller and reliable group of smallholder farmers. Specific attention will be required on the following:

- Pricing for groundnuts will need to remain competitive against off-season pricing.
- Clear contractual agreements need to be in place surrounding the responsibility of testing.
- Timely payment is needed for the supply of groundnuts.
- Safe disposal of contaminated batches should be ensured.

EXPLORE A BRANDING PILOT WITH THE AGRIBUSINESSES FOR BRANDED TRACEABLE GROUNDNUTS

With a small segment of the market demanding aflatoxin-free groundnuts, and a key focus from consumers on higher quality groundnuts by size, shape and colour, there is an opportunity to work with agribusinesses to create branded groundnuts that can meet the needs of both institutional buyers and processors supplying to supermarkets with FDA certification. The target growth areas for this intervention would be to expand the market of the GCX and provide market linkages to processors which would then be enabled to achieve FDA certification for sale into supermarkets.

A key problem reported by agribusinesses and farmer groups is the lack of evidence of the success of producing aflatoxin-free groundnuts for the farmers themselves.

The fieldwork found that there are emerging innovators in the market, including processors that have identified a gap in the market for groundnuts of higher quality with middle-class consumers, using methods such as social media platforms. Such consumers are prepared to pay prices up to 40% higher.

The pilot would need to be carefully monitored to ensure that the cost of the introduction of a branded groundnut that is aflatoxin-free is not transferred directly to the consumer and does not have a negative effect on the sales of non-branded groundnuts. The intervention would also need to have a specific approach for ensuring the financial feasibility for the agribusinesses to invest in testing infrastructure.

INTRODUCING THE COMPULSORY APPLICATION OF AFLASAFE ALONGSIDE FERTILISER

A key problem reported by agribusinesses and farmer groups is the lack of evidence of the success of producing aflatoxin-free groundnuts for the farmers themselves. Unlike the application of fertiliser, farmers do not see an increased yield resulting from the application of Aflasafe, nor do they see returns on their investment of effort through increased price or by passing a testing procedure, at least until market linkages are established.

Future donor-led programmes can promote the combined provision of phosphate and Aflasafe to farmers as a bulk bundle from agribusinesses, so farmers can see immediate results from farming aflatoxin-free groundnuts. However, greater success can be achieved with regulatory commitment from the Government of Ghana, with the introduction of policies requiring fertiliser distributors to only sell fertiliser blends that include Aflasafe.

LAUNCH A WIDESPREAD PUBLIC HEALTH COMMUNICATIONS CAMPAIGN

Given the current lack of awareness and therefore the lack of concern among the majority of consumers about the dangers of aflatoxin, there is a need for a widespread public health communications campaign to build demand for safe groundnuts and to ensure the effectiveness of any future widespread interventions involving government-led testing.

These campaigns should be organised alongside state regulatory authorities and interested agencies, to ensure the direct connection with a government regulation body. Implementers could utilise the current focus on public health resulting from the Coronavirus pandemic to turn attention to this issue.

Endnotes

- 1 Standards for aflatoxins in food exist in most countries, including Ghana, to protect consumers from excess exposure but regulation and enforcement, particularly of local trade is often limited. The Ghana Standards Authority (GSA) sets the limit at 15 and 10ppb respectively for maize and groundnut.
- 2 Aflasafe is a biological pesticide for aflatoxin mitigation in maize, groundnut and sorghum. It contains harmless strains of *Aspergillus flavus* that can be found growing naturally in local soils but in very low concentrations. The product was cleared by the Environmental Protection Agency for commercial distribution in Ghana in April 2018.
- 3 Yeleviebayire, J. (2019)
- 4 SPRING, (2017) and Meng, T. et al (2017)
- 5 It should be noted that the literature identifies discrepancies in the data captured between FAOSTAT, MOFA and UNComtrade. Figures discussed here are in line with past analysis conducted by the MADE Programme using FAOSTAT.
- 6 FAOSTAT (2020)
- 7 TechnoServe (2009) and FCDO (2014)
- 8 SPRING (2017)
- 9 Dokurugu, Z. (2015)
- 10 FCDO (2014)
- 11 Ibid.
- 12 Ibid. and Jolly. M. et al (2008)
- 13 For example, on the Tamale market, the prices for the grades were grade (A): GHS14 – GHS16, (B): GHS13, (C): GHS9 whereas Navrongo market had grade (A) - GHS15, grade (B): GHS14, grade (C): GHS13.
- 14 <https://ghana-made.org>
- 15 Yeleviebayire, J. (2019)
- 16 FCDO (2014)
- 17 Ibid.
- 18 Flowkowski, W. J. and Kolavalli, S. (2013)
- 19 <https://ghana-made.org/rc/farm-enterprise-advisory-services-business-case/>
- 20 Interview with Farmer Pride, Gifts Kyortaare company ltd, Antika
- 21 SPRING (2017)
- 22 Ibid.
- 23 Project Peanut Butter seeks to advance the treatment of severe acute malnutrition, the single largest cause of child death in the world today, using effective, locally produced ready-to-use therapeutic foods. This non-profit is formed to provide needed nutritional and medical support primarily to children suffering from severe acute malnutrition in sub-Saharan Africa and beyond. We make our impact by producing ready to use therapeutic foods (RUTF) in factories located in Malawi, Sierra Leone, and Ghana.

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