



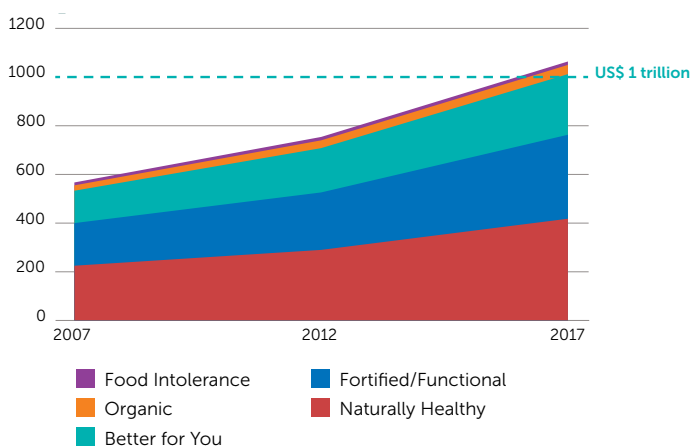
Health-food specialty products: a promising market for farmers from developing countries?

Introduction

There is a strong trend in the Western food market of rising interest in ingredients with specific healthy attributes. In 2012 it was predicted that the Health and Wellness food market would be worth more than 1 trillion US dollars (Figure 1; Euromonitor 2012). Food with particularly high levels of anti-oxidants, vitamins or vegetable protein or those with either a proven low glycaemic load or gluten-free products are meeting a fast growing market. This trend offers opportunities for new products in the food market.

Quinoa, for example, has gone from a little known product, to a novelty in Western diets, and is currently a mainstream product supplied through Western supermarkets, largely as a result of quinoa being labelled a “superfood” (CBI, 2016). This demonstrates that products from the South can become mainstream ingredients in Western kitchens. Especially when products can be promoted as healthy additions to Western diets, there seems to be an opportunity to take advantage of niche export markets.

Figure 1: Expected development of the Global Health and Wellness market, 2007-2017



Source: Euromonitor, 2012



Ready to be served Injera, the Ethiopian staple food prepared from teff flour

This paper does not assess the health claims made about different products, but looks into the difficulties and opportunities of investing in 'new' food for the Western market. In particular, the paper tries to assess what opportunities exist for Southern entrepreneurs and smallholder producers to benefit from health food trends in the West based on three examples of enterprises intervening in the health food sector.

Health food market

The health food market is difficult to define, as its boundaries are unclear. In this paper a loose definition is used as 'products marketed and consumed for their specific proven or perceived healthy attributes'. The health food market is subject to fast-changing fashions and trends, which makes it unpredictable and a challenge for entrepreneurs to respond to. At the same time, however, the health food market is an important source of food novelties. Many mainstream food trends have started in the health food sector. Simultaneously, the health food sector is gaining in importance as a result of ever rising consumer concerns about their diet. As such, the health food market forms an interesting niche within the food industry, where trends are born and novelties can be introduced.

The case of teff

The nature of the product defines the opportunity for small-holder producers. In the case of teff for example, it originates from Ethiopia and is strongly associated with Ethiopian culture and food habits. At the same time, however, the product can be grown relatively easily outside of its origin. It is being cultivated in the US, while South Africa is an important exporter of teff. It is even being cultivated in a temperate country as the Netherlands, although this is only done on a modest scale. The volumes currently demanded in the world market are still small compared with the volumes produced for internal consumption within Ethiopia, by far the largest producer of teff. However, by virtue of a ban on exports of non-processed teff from Ethiopia, effective from 2006 until 2015, the prospects for Ethiopian farmers to benefit from teff exports to serve the health food market have been limited. Still, according to Anne Hulst, director at Millets Place, teff sourced from Ethiopian smallholders would be a distinctive product to teff produced in other countries, with added value to consumers. This added value would not be a measurable quality aspect such as taste, nutritional composition and food applicability, but a 'feel-good' quality, of a product sourced from its traditional origin.

The fact that the volume of teff currently demanded in the high-end health food market remains relatively limited compared to the volume domestically produced and consumed, necessitates some realism with regards to the potential benefit for economic gain by smallholder farmers in Ethiopia. Current market demand in the international health food sector would only provide opportunity for a limited number of producers, who tailor (part of) their production to the specific demands of the high-end health food market. A more likely opportunity to bring revenue at scale to Ethiopian producers is the re-opening of teff export to neighbouring Eritrea, where there is a net deficit between production and consumption (Demeke & Marcan-tonio, 2013). Would teff become a global mainstream product, and as a result a globally traded commodity, a new situation will present itself offering opportunity for smallholder producers in the countries of origin Ethiopia and Eritrea.

However, conducive government policies would be needed to assure that additional revenues generated from teff exports would benefit smallholder producers. With the end of the export ban in 2015 opportunities to realise this could

be explored again. It is, nevertheless, a deliberate objective of the Ethiopian government to avoid a price increase of teff on the domestic market. Rather than fully re-opening the teff export market, Ethiopian policy seems to be focused on the production of specific export designated teff in licensed commercial farms, which would limit the possible impact to those associated with these farms. This is understandable from the point of view of food security for the non-farming Ethiopians. At the same time, this policy hampers the main mechanism by which smallholder producers could benefit from a growing demand, and the main driver for intensification of productivity.

It is worth mentioning that the international teff trade became the subject of a small trade conflict (Anderson & Winge, 2012). The strong ownership and cultural attachment of Ethiopia to teff makes that the transaction costs of negotiations and discussions are high compared to the actual and potential future trade value in the market. A doubtful patent on generic teff processing methods, awarded by the European Patent Office, remains to be the major source of contention.

Teff (Eragrostis tef)

Photo: Anne Hulst, Millets Place

Box 1: Millets Place

Millets Place is a Dutch company uniquely specialised in the international trade in teff grain, flakes and flour. Teff is the staple grain in Ethiopia, where it is mainly consumed in the form of injera, a flat pancake which forms the basis of most Ethiopian meals. Because of its properties as a gluten free grain, high in minerals and protein, teff has captured the market as an alternative for wheat flour in the USA and increasingly in Europe as well.

Mission

The mission of Millets Place is to contribute to the creation of healthy and tasteful food products for everyone, from sportsmen to gluten free food consumers. Its products can be used as major ingredients in daily food products for consumers who, through their food intake, pay extra attention to issues like health, wellness, and sport performance.

Market strategy

Millets Place is offering teff - in its crude form, as flakes, or as flour - as an ingredient to the bakery industry worldwide. The company distinguishes itself through consistent quality, consistent timely delivery and, in particular, product cleanliness.

Sourcing

Currently, Millets Place is sourcing its material almost entirely from growers in South Africa, while developing contract farming relations in Eastern Europe. Millets Place is monitoring opportunities to source teff from smallholder producers in Ethiopia, but for the moment this is restricted by Ethiopian government regulation.



The case of coffee flour

SANAM produces coffee flour as a health food ingredient. Director Juan David Salazar explains that, through a patented process, a powder with a high concentration of natural anti-oxidants is produced from coffee berry pulp and husks. The coffee flour provides a natural ingredient for health food products.

Coffee requires specific agro-ecological conditions, which limits production to humid tropical highlands and confines the potential benefits to farmers in tropical countries. At the same time, however, the volumes of coffee husk and pulp that SANAM currently requires, and even with potentially larger volumes in the future, remain relatively modest compared to the total volume of coffee produced. Market demand could also be satisfied through a single, or several, large coffee processors, making the business case for smallholder producers less certain. A specific smallholder sourcing strategy is required to assure that smallholder producers share in the benefits of the product.

The company's current strategy is to source materials through a processor associated with the company. SANAM confirms that the main societal benefit now remains environmental, through putting waste to good use and value. The sourcing is currently the processor's responsibility, as is the remuneration of its suppliers.

SANAM is, however, diversifying its sourcing strategy by getting directly involved in whole coffee berry sourcing from small-

Photo: Juan David Salazar, SANAM



Ground coffee husks, the raw material from which coffee flour is produced

holders, offering a premium compared to other buyers, as they are able to make use of both the bean and the pulp.

SANAM has a two-pronged marketing strategy. It is building its own brand of health food products based on the coffee flour. The company has its own packaging factory and is selling the product domestically, as well as exporting it. At present, agreements are being negotiated with international clients to retail the brand in different countries. SANAM realises that the health food market is changing quickly, and is continuously investing in product development. Simultaneously, SANAM is seeking opportunities to market its patented coffee flour as a food ingredient to large food processors. The Common Fund for Commodities is co-financing the activities of SANAM (project CFC-2016-08-0077FT).

Box 2: SANAM

SANAM is a Colombian company that has developed a patented process to process coffee husk and pulp into a nutritious flour, which can be used as an ingredient in health food products.

Mission

SANAM's mission is to develop a market for the waste by-product of the coffee industry. Currently coffee husk and pulp is not used, and as such, is of no value, it may even become an environmental concern when the waste piles up. Recognising its nutritive value, SANAM has developed technology to process the coffee waste into a nutritive

powder which can be used as a natural fortifying ingredient in health food products, such as sport drinks and energy bars.

Market strategy

SANAM pursues a double strategy of selling the product as an ingredient to the food industry, and at the same time, develops its own line of branded health food products for the domestic Colombian and international market.

Sourcing

SANAM currently sources part of its raw material from a coffee processor, who as a result can offer its associated farmers a better price, as it no longer has to invest in waste disposal. Additionally, some of SANAM's raw material comes from whole coffee berries sourced directly from smallholder producers, who receive a higher price for their coffee berries than they would receive for the coffee beans alone. In the future, SANAM wants to source whole berries exclusively from farmers, to have a stronger connection to the producers and more influence on pricing mechanisms.

After extracting the coffee bean from the coffee berry, the outer berry remains as a waste product

Photo: Juan David Salazar, SANAM



The case of baobab fruit powder

Aduna is marketing baobab fruit powder. The fruit powder is harvested from the dry pods of the baobab tree. According to Andrew Hunt, co-founder of Aduna, the baobab fruit is unique because the fruit matures and naturally dries on the tree. Other than opening the pods, separating the dry fruit pulp from the seeds, and sieving it, little processing is required. The fruit pulp has a light sour and sweet flavour, and is marketed for its high vitamin C and other nutrient content. In addition, there is emerging evidence that the product can reduce the glycaemic response in humans when mixed in food (Coe et al, 2013), which is important for consumers coping with type 2 diabetes.

The baobab fruit powder is sourced from north-east Ghana, where Aduna started by sourcing two communities, but has since scaled up to 20. The potential – at scale – is for thousands of communities to participate, creating a major new export for the region. The fruits do not have large-scale local use, making the proposition by Aduna to buy the fruits a truly additional income opportunity. Baobab trees are usually not deliberately planted, but protected where they emerge as a result of the natural spread of their seeds. Ownership and user rights of baobab trees are determined by local custom.

Aduna and its local partner are specifically targeting women with little income opportunity in the partner communities to engage as suppliers of baobab fruits. The harvest and sale of the

fruits is discussed with the local traditional leaders and women's cooperatives. For trees on communal land, the women thus obtain the right to harvest the fruits. Similarly fruits are currently harvested from baobab trees on private land. However, as the value of the fruits is changing, it may be needed in the future to re-discuss the user rights for fruits from private owned land.

Currently the baobab fruit powder is marketed as a "superfood" in the speciality health food market. It is retailed as powder for those wanting to use it as a pure ingredient to boost smoothies and juices or to lightly sweeten cereals, yoghurt or porridge. In this market the baobab fruit powder distinguishes itself for its sweet, citrusy taste, where many other natural food additives, such as for example moringa leaf powder, also marketed by Aduna, have a more savoury taste that needs to be masked in food.

Aduna's dream is to make baobab fruit powder a mainstream ingredient in the food industry, which represents both health and fair sourcing. According to Aduna the baobab value chain has the potential to include 10 million households in 32 African countries. The productive capacity of existing baobab stands can certainly support a further increase in the traded volumes of the product. To pre-empt an explosive growth in the market, Aduna and its local partner are experimenting with communities in Northern Ghana in the deliberate planting of baobab trees, in particular in areas not suitable for farming as a result of shallow soils. It remains to be seen how fast planted baobab trees will bear fruit, it has been known to take up to 16-23 years (Keyscience, 2017).

Box 3: Aduna

Activities / products

Aduna is an Africa-inspired, UK based, health food brand and social business. The company is processing baobab fruit pulp, cocoa and moringa leaves into "superfood powders", energy bars and other added-value food products, targeting the health food market, particularly in Europe and the United States.

Aduna's mission is to bring global consumers the natural vitality of Africa's ancient ingredients, while creating sustainable livelihoods for small-scale producers. A critical part of their business model is what they call "demand creation", the process by which new markets can be created for high-potential but currently unknown and underutilised ingredients. Aduna does so by creating finished products that appeal to early adopters, and then supporting this with intensive marketing activities, including PR, social media and sampling.

The sourcing strategy of Aduna is to deliberately seek to work directly with rural communities in Africa. This enables the company to ensure quality standards and assures direct control over pricing policies so that producers are paid a fair price for their goods.

Photo: Aduna

Aduna baobab fruit powder is prepared from the dried fruit pulp of the baobab fruit





Female workers processing baobab fruit

Opportunities for smallholders

When assessing the three cases for their current and potential opportunities for smallholder producers to benefit economically, a number of general aspects to consider can be deduced.

Competition from alternative products

The potential sustainable impact on the livelihoods of smallholder producers depends on the sustainability of the market for the product they supply. The health food industry is particularly prone to trends and there is a continuous search for new products, making it a volatile market. Where one particular product can be the 'craze of the day', by the time entrepreneurs and producers are able to respond to the opportunity, another product can come into fashion to replace it. In that regard, the uniqueness of the product in responding to a specific demand is important. One could argue that teff is responding to a unique demand for gluten-free grain, and it has specific nutritive values and taste. At the same time, however, millet and sorghum are also beginning to be marketed for the same gluten-free properties, and sorghum and millet productivity is potentially higher than teff productivity. Coffee flour and baobab fruit powder are both marketed for their high nutritive values. There are, however, many other products marketed for similar properties, originating from tropical as well as from temperate areas. Furthermore, in the food industry, the natural ingredients compete with synthetic food fortification.

Competition from large-scale producers

The possible sourcing strategy depends on the type of product. Teff can be grown in different agro-ecologies, even though it originates from Ethiopia, which makes it possible for larger growers in other countries to grow and supply teff for the international market. The same is possible in Ethiopia, a limited number of larger growers could come to satisfy the export demand. This was the approach propagated by the Ethiopian government after lifting the export ban to avoid price hikes in teff, which it was feared would have overarching consequences for food prices in general and, as a result, threaten national food security.

The coffee flour, made from coffee berry pulp, a waste product of coffee processing, can be sourced from larger processors with ease, without specifically sharing the benefit of additional value creation with smallholder producers. A deliberate choice has to be made to source from smallholders, it is not essential for processing the product. SANAM currently aims to ensure that coffee producers benefit from the value addition to the waste product, but if a competing company started producing a similar product, it would be more difficult to maintain this policy.

The baobab fruit powder has an intrinsic advantage in that there are no privately-owned baobab plantations. Furthermore, private ownership of baobab fruits is not customary, they are

therefore picked by anyone, even when the tree stands on private land. As a result, designated collectors of baobab fruits are needed and it is impossible for a single, or a very small number of large producers to satisfy the demand for this raw material. This, furthermore, allows Aduna to particularly target women, with few income earning opportunities, as business partners.

For both teff and coffee flour, the decision to source from smallholder producers has to be a deliberate decision and it is easier if the client perceives this to provide additional value. This may be the case for consumers buying a finished product, such as packaged and branded teff flour, or branded health food products. As an ingredient, however, in the case of teff in bakery products, or in the case of coffee flour in processed food, the origin of the product is of much less additional value to the consumer. Making additional efforts to source from smallholders will, in that case, be harder to realise for trading and processing enterprises.

Getting to scale

When assessing opportunities for smallholders, the size of the market for the product is important. The size of the market for teff is growing, but is still quite modest compared to domestic demand in Ethiopia. To have an impact on significant numbers of Ethiopian teff producers, the speciality health market may be too small, and the more mainstream use of teff as an ingredient in bakery products would make a far greater difference.

Similarly, for the baobab fruit powder and coffee flour, no mainstream market has yet been identified, and current use in the niche health food market is only in the early stages. According to Aduna, around 7,000 women are benefitting from the income opportunity offered through supplying baobab fruit powder to Aduna, or being involved in its processing. Aduna's current market is to supply the raw packaged ingredient to the speciality health food market. The dream is, however, to make baobab fruit powder a commodity that is internationally traded as a mainstream Fairtrade and healthy ingredient in the food industry. This can potentially have a significant impact on livelihoods, the future will tell whether this will materialise.

Similarly, for coffee flour, the ultimate impact on the life of smallholder coffee farmers will depend on the scale which the product can reach as an ingredient in the mainstream food market. In the current niche health food market there is a place for it, but the value added to the waste product is not yet fully transferred to the coffee smallholders. Once the product becomes a mainstream food ingredient this could change, as added value to the waste, and reduced costs in the processing chain, can be translated into higher prices for producers.

Conducive local and national policies

To assure benefits for smallholder producers, an international market outlet is not enough. In many cases, additional deliberate support by authorities is required. In the case of baobab fruit powder, the support of the traditional local authorities in the deliberate choice of less well-off women as business partners is essential. In the case of coffee flour, agreement is needed with intermediary processors on a sourcing and profit-sharing policy with smallholder producers to ensure they reap part of the benefits from the value addition. In the case of teff, for Ethiopian smallholder producers to benefit from increasing international demand, teff price increases need to be allowed, at least to an extent, by the Ethiopian government.

Conclusions

Based on these three examples, it can be concluded that the health food market does offer opportunities for smallholder producers. But for many products, specific efforts in relation to deliberate smallholder sourcing strategies need to be fulfilled. Furthermore, the volatile nature of the health food market, which is prone to changing trends, does not necessarily provide a sustainable and stable market.

The health food market does provide an entry point for novelty products, particularly because it is prone to fashions, and constantly looking for new, exciting products to try and possibly generate hype. As such the health food market can be considered a 'living laboratory' to experiment and assess market opportunities of novelty smallholder derived products. Depending on the response in the health food market niche, some of these products evolve from into main stream products.

In spite of the current significant size of the health food market, it is still the main stream market where larger scale impact on smallholder farmer livelihoods can materialise. The transition from the health food market to main stream market is not automatic. The transition can be assisted by marketing and promotion efforts. Provided deliberate effort are made to assure fair sourcing from smallholder producers, it can be justified and worthwhile to provide support to promote the mainstream use of products already successful in the 'living laboratory' of the health food market.

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Freshly harvested baobab fruits in Northern Ghana



Photo: Aduna