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Harnessing the Power of Africa's Sun to Produce Healthy Products for International Markets: The Case of Fruits of the Nile (FON), Uganda

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Abstract

FON is a Ugandan company which trains farmers to cultivate Fair trade and grow organic fresh fruits. They developed a simple low-tech solar drying technology and sell dried fruits internationally, and in doing so have improved skills and incomes along the supply chain. Annual exports amount to 100 tones bought from 120 primary producer groups, grown by about 700 farmers. Producer groups are given hygiene, drying and business training, and farmers are given cultivation training. The company's current challenge is to improve production quality in the context of ever rising competition and requirements from European buyers.

Keywords: solar technology, producer cooperatives, healthy dried fruits, strategic partnerships, international markets

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Introduction

By adopting solar drying as a key element of its competitive strategy FON has been able to penetrate the international market with dried fruits. Current annual exports amount to 100 tonnes bought from 120 primary producer groups, grown by about 700 farmers. The company's success is attributed to strong customer focus, external support, adopting relevant quality standards and the strategic partnership with Fullwell Mill (FM). This comes across in how FON trains farmers to cultivate Fair trade and organic fresh fruits using a simple low-tech solar drying technology and then sells the dried fruits internationally. In doing so, the company has helped improve skills and incomes along the supply chain. The company's current challenge is to improve production quality in the context of ever rising competition and requirements from European buyers.

Company Background

In 1991 FON began production and export of a wholly innovative non-traditional export from Uganda: naturally dried fruits, and using a decentralized production model. Small farmers were encouraged and trained to process and dry the products, and a central buying point was created in Kampala to manage quality control, sorting, packing and export. FON believed that solar drying was an affordable way for farmers to preserve their fruits and add value to them. In addition, solar drying had minimal environmental impact using renewable energy, retained waste at the point where fruit was grown, and minimized transport costs by transporting fruit only when it had been dried - and in bulk. The fruits were 100% natural dried fruits, produced without any added preservatives or added sugars. FON took the role of a training organization and buyer/exporter, and was a wholly privately funded business with initial capital of £25,000.

Beyond the initial seed capital invested by two of its current owners Adam Brett and Kate Sebag, FON has employed a combination of limited profits and grant funds to expand the business. Presently, FON buys Fair trade and organic sun dried pineapple and banana from five farmers groups in Southern and Central Uganda which together forms the Fruits of the Nile Growers Association (FONA). FONA has about 700 members, about a third of whom are pineapple farmers and two -thirds of whom are banana farmers. About 120 of these farmers also run small businesses solar drying their fresh fruits, as well as those of other farmers in FONA. Producer groups are given hygiene, drying and business training, and farmers are given cultivation training. FONA sells its solar dried fruits to FON who grades and packs all fruit ready for export at a factory built for this purpose in Njeru, near Jinja in Uganda.

Most of the driers are simple, timber-framed cabinets, covered in standard UV-stabilized agricultural polythene. The cabinet is raised off the ground using wooden legs, which rest on stones for stability and to reduce insect attack. Inside the drier is a rack to support the plastic mesh trays on which the fruit is laid out. Fresh fruit is collected from the



producer's own land or bought from approved local farmers. When it has reached the appropriate ripeness, it is sliced by hand, and laid out on the plastic mesh trays and dried. The dried fruit is packed and sent to the FON factory where it is sorted, bagged and labelled, and then packed into boxes for export.

To ensure quality, each drier is built on site by a FON carpenter. Driers last for about five years if well maintained, although the polythene sheet has to be replaced every three to five seasons depending on how carefully it is looked after. FON has also constructed a number of larger driers, built on the ground with a concrete slab base to store heat. These increase the air flow by solar powered fans to force convection. These driers are more efficient and have been adopted by a number of larger producers, but they cost about six times as much as a cabinet drier and as a result are too expensive for producers when they are starting out.

A drier costs about \$500,000 USD. They are paid for in a number of ways: outright by producers if they have the capital; paid in part or even full by NGOs; or partially financed by FON itself. In this latter case, producers will normally contribute about two-thirds of the cost by buying the timber, nails and some other materials locally. FON supplies the UV protected polythene sheet, plastic mesh and the labor to construct the driers. This contribution is made available to the producer as an interest-free loan. Individual producers and producer groups own an average of five driers each.

Current Management Structure

FON is a private limited, Ugandan company. It is co-owned by Angello Ndyaguma, Adam Brett, Kate Sebag, and a 20% share-holding is held in a trust which is used to distribute dividends across FON's employees. Practical day-to-day management of the business is carried out by Angello Ndyaguma, with some steering and advisory input from Adam Brett and Kate Sebag. Adam Brett is Co-owner of FON and a director of Fullwell Mill. He has a lot of experience in of health food retailing chain. Adam has worked in the development of fair trade food businesses as an entrepreneur in Uganda, Burkina Faso, Pakistan, Zanzibar and Zambia, Guyana, Pakistan, India since 1990. All businesses he is associated with stress ethical and Fair trade focus in food or branded commodity sectors. Adam has experience in business planning, modelling and execution, financial requirements, budgeting and strategic development for SMEs.

Kate Sebag, is also a Co-owner of FON and marketing director of Fullwell Mill. She has worked in the development of Fair trade food businesses in Uganda and Burkina Faso, and extensively in the development of the Tropical Wholefoods mainstream food marketing effort since 1991. Her skills and experiences center on sales and marketing, development education, office management and product research and development, specializing in ethnic, ethical and organic products sourced from the Third World. The five farmer organizations under FON also take part in decision making.

Key Success Factors

The salient success factors of success for FON include the provision of ensuring a guaranteed buyer for all FON's products through the strategic partnership with FM, pursuing a customer focused strategy, obtaining and maintain high quality standards and accessing external support where feasible.

Strategic Partnership/Interdependence

FON has always sold all of its products to FM. FM is a UK based fair-trade company of good standing, also co-founded and directed by Adam Brett and Kate Sebag, which has made a long-term commitment to buy from

FON. FM is wholly dependent on FON for supply of its dried pineapple and bananas, and the two companies see this relationship as a positive dependency, as through Fairtrade it enables a very close relationship between them coupled with extensive communication of information on market and production. The fact that both companies view their dependency on each other as a positive thing may seem paradoxical when viewed from the outside by conventional business analysts, but in the context of Fairtrade it is perfectly rational. By relying on FM to market its products FON is able to reduce its sales, marketing and advertising budgets to zero, thus saving huge amounts of money when compared to its non-Fairtrade competitors. It is also able to plan for future production on the basis of clear production targets from FM, which greatly reduces the complexity of its stock, inventory and production systems. Additionally FM provides FON with detailed information and IT systems to help it to manage its own business effectively. These include: 1) Information about changes in the UK market, quality requirements etc, to enable the FON product to serve the changing market demand, and 2) Information Technology systems to manage FON's traceability, auditing and financial systems.

FM and FON have a natural history and a strong relationship, which naturally helps with communication. FM and FON have complementary database systems, which has been specifically designed for processing businesses across Africa, Asia and beyond. This allows for relatively seamless information sharing, with commonly agreed KPIs and other data being able to be exported from FON's database and shared with FM as and when required. A good portion of products and ingredients used by FM more widely come from FON, and so there is a regular dialogue between FON and FM on a range of issues including quantity, quality and shipment of product. FM tends to visit FON at least once a year also.

Retail prices of FON products vary based on which business retails them, that is, they are not all sold on a retail basis by FM. Retail prices also depend on what the end products are: for example, dried fruit, snack bars, etc., and size of packets. For instance, FM's own brand, Tropical Wholefoods (TW) retails dried banana and pineapple at £1.20-1.30 for 100-150g bags. Farmer pricing is discussed, negotiated and agreed between FON, FON and FM on an annual/as required basis. FM always considers FON's operating costs as well as fair prices for farmers in these negotiations, rather than imposing a top-down price based on its own interests, as is more conventional. Since all products are sold on Fairtrade terms, minimum prices cannot fall below a certain level, and a premium is paid for farmers to use as their organizations decide for developing their livelihoods and communities. Producers are paid 3,500 USH/kg for dried banana and 6,500 USH/kg for dried pineapple. Each time a producer delivers dried fruit to the factory, payment is made for the weight of accepted fruit which has been delivered, less a deduction for any fruit from the previous delivery which was subsequently rejected during sorting. A small repayment for any outstanding loan is also deducted.

Quality and Standards

FON has penetrated the highest levels of the UK food market, selling to major supermarkets and high-value premium food stores. However, these markets are very demanding, and the profits that can be made in this trade are less than many people might imagine. Indeed, FON competes with competitors across the world to produce dried bananas and pineapples to the highest standards, whose costs of production and transportation can be far lower than in Uganda.

Uganda is not the cheapest source of agricultural product but FON's processing and transportation strategies makes it a sustainable business. FON's business model has focused more on product quality, product differentiation, and tapping niche markets for organic and Fair trade products. This has allowed it to absorb the relatively high costs of production in Uganda, whilst still operating and growing the business.

Also, once a market is gained, it is not a given that it will always be there; rather it must be continuously renewed by improving and upgrading the quality of a business's products. For FON this has also meant achieving internationally recognized standards of HACCP, Fairtrade and organic, which have all been challenging and required significant investments.

Marketing Efforts

As part of the benefits that FON derives from the interdependent relationship with FM, the former relies on FM to carry-out marketing activities to boost sales. Had it not been for the marketing efforts of FM, then not only would sales of dried pineapple and banana products never have taken off the ground in the first place, but they would also not have grown over the years as they have. Some of the marketing communication activities carried out to support FON's products include promotions on social media, using online shopping outlets (including www.tropicalwholefoods.com, and brand wholly owned by FM), and entering retailing relationships with Oxfam and Health Food outlets such as Holland & Barrett.

FM manufactures snack bars both for its tropical wholefood range and for a range of other businesses. For its own range the country of origin is identified as it a critical part of 'the story', which is highly important at the dark green end of ethical business. For many of FM's contract customers, however, the country of origin is rarely a factor, whereas the Fairtrade mark is essential.

External Supports

While FON did not rely on external support to establish itself or grow in the early years, it has benefited fairly significantly from a number of external supports in the form of financial and technical assistance. On the technical side, a team of excellent scientists from the Natural Resources Institute in the UK helped FON to make further key developments to its solar drying technology, as well as to underlying processes at farmer level. On the financial side, grant funding and access to debt financing was provided by the Shell Foundation,



which enabled factory development, equipment purchase and some certification. Further grant funding was provided by Comic Relief to complete certification work, and subsidy funding has been provided by the UK's Department for International Development's (DFID) and Food Retail Industry Challenge (FRICH) Fund to pilot the introduction of cultivation and drying of berry fruits in FON's supply chain.

A combination of the above mentioned factors have contributed substantially to the success of FON, and it is important to acknowledge that part of the success story may have resulted from good luck. In fact, at the time FON was established, the dried fruit products that it produced did not have an identified market in the UK, and so a market had to be created. The fact that sales of dried pineapple and banana products took off, confirming that product selection had been successful, was at least as much luck as good judgment.

Strategic Issues

Opportunities and plans for the future lie in the areas of diversification and carrying out extra processing, such as the development of a simple, semi-automated snack-bar bakery business, modelled on FM's factory in Sunderland, UK, to produce snack-bar products appropriate for local and regional markets. To some extent this has started with a project supported by FRICH to introduce the cultivation and drying of a range of berry products into FON's supply chain. Whilst this has not been on the whole successful as yet at least, it has resulted in some regular sales of dried berries to FM, which were introduced into a number of snack bars that it manufactures. Additionally, and interestingly, the project has led to an unexpected local market for fresh berries in Uganda, which some farmers serving are benefiting from on a small scale. The business model employed by FON has huge social and environmental impacts and fits perfectly well into the ethos of sustainable consumption and development.

FON strongly encourages its farmers to support their children's education, and provides them with the security of price and demand that allows them to do this. All or at least most children of all of FON's 700 farmers are in school, and a number have now gone on to university. Whilst Fair Trade plays a part in such social outcomes, it is at least as much to do with the broader, underlying nature of the relationship along the supply-chain, between buyers and sellers, all the way up to FM.

The FON model provides environmental benefits that come from drying, on farm and using the sun's natural heat – drying reduces weight and volume of product requiring transportation, and since this is done on the farm these benefits are immediate following harvesting (i.e. occurring between farmers and FON); and drying using the sun's natural energy of course uses no non-renewable resources. The reduced transportation costs that come with dried product continue on to FM and beyond, and shipping dried fruits by sea to FM minimizes environmental impact of exporting overseas.

Looking Ahead

There is every hope that once demonstrated on a smaller-scale to be successful the FON model can be replicated on a larger scale. However, it is very clear that the role of FM has been critical to the success of this model. This points to the fact that North-South collaborations can still work but this will require a lot of trust and commitment to create shared value for all. As inferred above, the market for dried fruit is not as large and well-developed as many of the major commodities. This does not make it insignificant or unimportant, however, though it does mean that it has its limits. FON has been able to enjoy a fairly healthy growth curve during at least a significant portion of its existence, and there is scope for expansion into other international and the local premium markets. The caution here is that any attempt at scaling up in the international market should remain cognizant of FM's capacity and what the market is able and willing to absorb to avoid losses to stakeholders, not least the small farmers at the base of the supply chain.

The strategic outlook for FON reflects international market expansion driven by expanded production and increased sales and marketing investment. Meanwhile, dried fruit is not a product like coffee for which there is a well-developed international market. To expand sales outlays implies expansion of production, which ought to be linked to marketing and sales expenditure. Furthermore, existing sales must be maintained, which is not a given, and proving very challenging when dealing with increasingly stringent buyers such as supermarkets, and in increasingly demanding regulatory environments such as Europe. The goalposts set by such customers and trade regulations are constantly changing in an ever more demanding direction. In some cases, given the

small-scale, manual and natural nature of production processes and the end product, customer expectations around issues such as color, consistency and texture can even be unrealistic.

Despite grappling with all these critical issues, management plans on maintaining FON's international market position and expanding, since the story so far confirms that harnessing the power of Africa's sun to produce healthy products for international markets, remains a viable enterprise. However, management appreciates the current challenge for further improving the quality of production because of the ever rising levels of competition and requirements from European buyers.

