

Project coordinator : Cirad www.after-fp7.eu





African Food Tradition rEvisited by Research FP7 n°245025

Start date of project: **01/09/2010**Duration: **45 months**

Deliverable number: D 5.1.1.1

Title of deliverable: Report on Marketing and Regulatory Opportunities for the

European Union for Group 1

Deliverable type (Report, Prototype, Demonstration, Other): Report

Dissemination level (PU, PP, RE, CO)*: PU

Contractual date of delivery: December 2012 (month 15)

Actual date of delivery: March 2012 (month 18)

Work-package contributing to the deliverable: WP 5

Organisation name of lead contractor for this deliverable: Natural Resources

Institute (NRI)

<u>Authors:</u> Ben Bennett, Victor Anihouvi, Laurent Adinsi, Joseph Hounhouigan, Charlotte Oduro-Yeboah, Mary Obodai, Hayford Ofori, George Anyebuno, Theophilus Annan, Charles Tortoe, Margaret Owusu and Wisdom Amoa-Awua and Habiba Hassan-Wassef

This document has been send to:

The coordinator by WP Leader	Date: July 2012
To the Commission by the Coordinator	Date: July 2012

^{*} PU: Public; PP: Restricted to other programme participants (including the Commission Services); RE: Restricted to a group specified by the consortium (including the Commission Services); CO: Confidential, only for members of the consortium (including the Commission Services)

Table of contents

Table of Contents

Summ	ary	3
1. I	ntroduction	5
1.1	Discussion of the challenges	6
1.2	Scope	6
Part A	: Regulation and Market Access	7
2. I	dentifying the regulatory landscape	7
2.1	Conclusions - regulations	10
3.	EU market rules	11
3.1	Public standards and the EU	11
3.2	Private standards	16
4.	Other trade issues	20
<i>5.</i>	The possibilities for compliance based re-engineering	21
5.1	Areas of certification	21
5.2	Summary of the potential for re-engineering through certification	24
6.	Summary, conclusions and recommendations – regulatory landscape	25
Part B	: Value chain analysis	27
<i>7.</i>	Introduction	27
8.	Product description	28
8.1	Group 1: grains	28
9.	Possible value chains	29
9.1	Existing diaspora markets	29
9.2	Non-diaspora market	29
9.2.	1 0	29
9.3	Possible value chains – conclusions	30
10.	Marketing mix	30
10.1	Marketing mix - Group 1: Akpan, Gowe, Kenkey, Kiskh Sa'eedi	31
10.4	5 7	31
11.	SWOT	32
11.1		32
<i>12.</i>	Summary, conclusions and recommendations – value chain analysis	33
Refere	ences	34

Summary

This report summarises research into the marketing and regulatory Opportunities and including value chains of a group of four grain-based traditional African foods, Akpan, Gowé, Kenkey and Ksikh Sa'eedi. It constitutes one of six reports that review the market for these traditional foods using value chain analysis as part of the European Union funded project the African Food Tradition Revisited by Research (AFTER).

The four products considered here are:

- Akpan, a yoghurt-like preparation from the Republic of Benin made from fermented maize;
- Gowé, a sweet paste, also from the Republic of Benin, made of malted (or non-malted) sorghum or maize flour and consumed as a beverage;
- Kenkey, a stiff dough, from Ghana, made from fermented, de-hulled, maize meal and consumed as a stiff porridge or a beverage.
- Kiskh Sa'eedi, a fermented snack and beverage from Egypt made from milk and wheat and consumed as a snack or beverage.

The purpose of this report is to understand all aspects of the marketing and regulatory Opportunities and including value chains for these food products and to use this information formulate marketing plans with a view to guiding efforts to re-engineer African foods.

This report focuses on the regulatory framework and value chains for AFTER Group 1 products in the European Union.

With respect to market access the key findings of the report were that no serious impediment exists for this group of products.

Some concerns exist with respect to these products complying with private standards or certification due to the high costs involved.

For Kiskh Sa'eedi a plan is needed to manage the unique intellectual property associated with its production and use prior to implementation of a market development programme.

The market for AFTER products in the EU can be broadly divided in to two submarkets: the African diaspora and regular, mainstream, food markets.

The diaspora market looks substantial, especially in France and the United Kingdom, but, in the long-term, the size of this market is expected to diminish.

AFTER (G.A n°245025) - Deliverable 5.1.1.1

Report on Marketing and Regulatory Opportunities for the European Union for Group 1

Review of similar products on the market to existing AFTER foods suggests that grains, particularly as a yoghurt ingredient, have parallel products available in the EU – mainly in specialist niche and gourmand market sectors.

Possible value chain for these products are described, through more detailed research and test marketing will be needed before products are 'launched' in the EU.

Analysis of the market mix for typical re-engineered AFTER products suggests starting price points for future product by product business analysis and points to major natural and organic food trade fairs as the key market entry point.

SWOT analysis of a range of AFTER re-engineered products shows that there are good market spaces available for many AFTER products.

Emergence of new grain based yogurt health drinks looks very promising for Groups 1.

1. Introduction

This report shows the domestic and international regulatory environment for a range of traditional food products produced and consumed in a selected group of African countries as outlined in Table 1 below. The products under investigation are Gowe, Akpan, Kenkey and Kiskh Sa'eedi which together form 'Group 1' of the range of African food products under investigation by the project. These products are being investigated as part of the European Union funded project "The African Food Tradition Revisited by Research" (AFTER).

Table 1: AFTER Group 1 product range

Product (local name)	Latin name	Raw material	Country
Gowe	n/a	Sorghum	Benin
		Maize	
Akpan	n/a	Maize	Benin
Kenkey	n/a	Maize	Ghana
Kiskh Sa'eedi	n/a	Milk, wheat and salt	Egypt

The purpose of this report is to indicate the market access barriers to trade for the range of products that the project is working on. These barriers include:

- formal and informal regulation
- public and private standards
- marketing norms and;
- codes.

This information is needed to guide the technology effort by the project to reengineer African foods in a way that conforms with market entry rules.

The research framework was two directional involving in-country research (interviews and literature searches) in the producing countries to identify the range of existing products, and, using these product categories, a review of existing market access barriers that might impact on export of these products to the European Union (EU). The focus on the EU is because of an expectation that 're-engineered' AFTER products will partly focus their marketing efforts on these markets. A series of country reports complement this work. The reports scope includes for example, private, public, standards, regulations, rules etc.

The report is laid out in two parts: Part A deals with regulation and market access, and Part B considers the possible value chains for AFTER products in the European Union. Part A broadly clarifies the regulatory landscape in the EU for the range of AFTER products, considers the public and private market rules that apply within the EU, reviews other trade issues including tariff and non-tariff barriers in the EU, looks at the potential for re-engineering based on compliance and, provides a summary and conclusions along with some recommendations relevant to AFTER project implementation.

Part B considers the possible value chains for AFTER products. The products are described, their potential value chains considered, aspects of their marketing

mix reviewed, 'Strength, Weakness, Opportunities and Threats' (SWOT) analysis completed, GAP analysis considered and conclusions drawn.

1.1 Discussion of the challenges

The product range under consideration is far from homogenous. It included a series of very different fermented mixed grain products (Akpan, Gowe, Kenkey and Kiskh Sa'eedi) which have a wide range of differing ingredients, manufacturing processes and end uses.

Most AFTER products do not currently trade formerly within the European Union so market research is unavailable. Many of these products have multiple uses and, therefore, could fall into many niche markets. This level of detail is beyond the scope and resources of this research.

1.2 Scope

The report concentrates on the market access for AFTER products in the form that they currently exist (e.g., the baseline case). At the time of writing it was not known what the new re-engineered products would be. New products from reengineering will have to be reviewed against regulations once they are conceptualized to ensure that project resources are optimally used.

Resources to appraise the many possible niche markets for AFTER products were not available to the research team, therefore the value chain section of this report is based on the authors general knowledge of these specialist markets.

Part A: Regulation and Market Access

2. Identifying the regulatory landscape

The food safety of the European citizen is the paramount objective of both public and private regulation and standard setting in the EU. It can be argued that some standards, particularly private ones, are unfair barriers to trade, the ability of producers to win such arguments is related to scale and there are almost no African products of sufficient market influence to impact on European standards setters. It is, therefore, our contention that, for the time being, AFTER products have to comply with existing market norms rather than attempt to address their 'fairness' through recourse to international trade bodies such as the World Trade Organisation.

At the simplest level, AFTER products have to be safe for European consumers and this has to be actively demonstrated (e.g., the onus is on the producer to prove that food is safe to eat and to maintain that safety in the chain).

The degree to which a particular market is regulated depends on a number of factors including: the nature of the product itself, the place where it is produced and the type of end market use that it or its derivatives might have. A further complication is that some value chains for the same product have more stringent rules or standards than others (for example, supermarkets in Europe apply their own standards which are usually more stringent that EU standards). Novelty is an issue that has also exercised regulators in recent years as new technologies emerge with new types of risks to the consumers. Finally, and increasingly, the method of production is becoming a regulatory issue.

a) The product

All AFTER products are foods, but some have the potential to enter specialist food markets such as health foods or supplements. There may be potential for some AFTER products to have medicinal properties. As more claims are made for food and food derivatives, regulation and compliance rules become more elaborate.

b) The place

Individual countries and groups of countries have differing trade relations with the EU and this is reflected in a range of tariffs and quotas for specific products. All of the AFTER countries are members of the African, Caribbean and Pacific (ACP) group of countries and have Least Developed Country Status. Therefore there are no tariff restrictions on any of the AFTER products. However, there are exceptions where the EU has particular commercial interests, such as in the meat and fisheries sectors. At present no restriction seems to be in place, but this needs to be regularly reviewed as the situation does change.

c) The end use

A challenge with many natural products is that they have the potential for multiple and diverse end uses and that the regulatory environment for these end uses is as diffuse as the end users themselves. Akpan, for example, can be an ingredient for a beverage, a snack or kind of porridge. Figure 1 below shows the range of possible end uses for Marula Fruit and illustrates that range of regulatory environments that might be addressed by end users including:

- Food for humans
- Feed for animals
- Pharmaceuticals
- Cosmetics
- Industrial chemicals
- Herbal remedies
- Food with special benefits (functional foods)
- Combinations of all the above

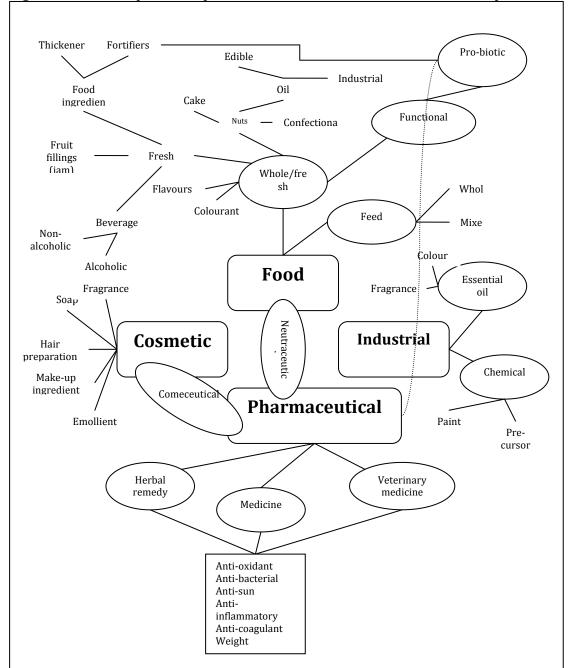


Figure 1: An example of the potential end uses of an individual natural product

(Bennett 2006:14)

d) Novelty

In recent times new production technologies have led to the emergence of novel foods and chemicals from natural sources. Specifically, the application of biotechnology meant that regulators needed new ways to manage the potential risks of new foods and food ingredients. Many traditional products have been captured by these regulations because they have not been formally tested. To address this, regulators have accepted evidence of a history of safe use of the product, but even this can be challenging and expensive to produce, particularly if the product is traded in very small quantities.

e) Method of production

Regulation within the EU is increasingly moving into the area of methods of production. For all products reaching the formal markets (e.g. supermarkets) in Europe, Good Agricultural Practices (e.g. treatment of farm workers, safe use of pesticides, sustainable production methods) are becoming the norm.

It is worth noting that for the diaspora market, these values are of less importance at present.

2.1 Conclusions - regulations

The EU regulatory framework is complex and diverse. The onus for mitigation of risk is on the importer to demonstrate product safety and freedom from materials that could harm EU consumers. Labeling and packaging must comply with standards of clarity and safety.

Having said this, the EU market us huge (the food manufacturing industry has a turnover of Euro 917 billion, agricultural exports are over Euro 90 billion and agricultural imports even higher than this) and potentially lucrative. Many thousands of African food businesses small and large successfully comply with the regulations and sell profitably to a range of different sectors in the EU. The import of fresh fruit and vegetables is a good example. However, examples of African processed foods being imported to the EU outside the diaspora market are far less common. The specific regulations relevant to AFTER products are considered in the next section.

3. EU market rules

This section is sub-divided into two main areas: public standards and private standards. Public standards are often mandatory whereas private standards are voluntary, and therefore not subject to the disciplines of the WTO. Finally, consideration is given to marketing 'norms' in the EU.

3.1 Public standards and the EU

To import products for human consumption into the EU the importer must comply with regulations on hygiene, safety, labeling and food composition. In addition you have to ensure that all the packaging complies with EU rules on packaging.¹.

The key laws, regulations and standards that might impact on market access for AFTER products in the EU are:

a) Environmental safety – sanitary and phytosanitary regulations

To prevent entry and spread of disease and pests into the EU importers have to comply with regulations to manage the associated risks. For the EU this means complying with the plant and animal health regulations and demonstrating this by issuance of a sanitary of phytosanitary certificate from the national Competent Authority.

See:

https://www.ippc.int/IPP/En/nppo.jsp

and

http://europa.eu.int/eur-lex/en/consleg/pdf/2000/en 2000L0029 do 001.pdf

You can find the content of a typical phytosanitary certificate on the IPPC website (www.ippc.ord)

b) EU General Food Law (EC 178/2002)

The general principals of the EU Food Law are that food must be proven **safe** for human consumption from the point of production to the point of consumption ("farm to fork"). The **labeling** and presentation of the food must not mislead the consumer. The food must be fully **traceable** from point of production, and, any food found to be unsafe must have a system for its **recall**.

Food can also be rejected if it is unfit. This means that it is unacceptable due to contamination, presence of foreign objects, odour, putrefaction or decomposition.

¹ The EU and UK Food Standards Agency websites have clear advice on how to comply

The EU regulation 178/2002 harmonizes all regulations for feed, food and food Specific regulations exist for food (852/2004), feed of animal origin. (183/2005), and food of animal origin (853/2004). The official control measures for food and food of animal origin are given in EC 2074/2005 and detail of the microbial limits can be found in EC 2073/2005. regulations of EU members are all harmonized with the EC regulations, but importers should be aware that differences do exist between the EC regulations and the way that individual EC members apply their national regulations (for example, some are more rigorous than others).

EC regulations focus on risks to the consumer. There are two main sources of these risks: contaminants entering the food chain and, even more powerfully. public concerns about safe food resulting from scares and outbreaks. These are summarized in Figure 2.

Figure 2: Drivers of EC Regulations

Contaminants

- Heavy metals
- •Plant constituents (e.g. poisons)
- Microbes (e.g. mycotoxins)
- •Man made (e.g. acrylamide)
- •Industrial (e.g. dioxine)
- Fertilizer
- Veterinary drugs

Public scares

- •GMOs in feeds
- •Feed additives (e.g. antibiotics)
- •Adulterants (e.g. melamine)
- •Contamination during storage, handling or transports

Source: Author

Issues to note:

- This applies to one-off sales and samples
- It applies to all scales of businesses (small and large)
- Problems with part of the batch apply to the whole shipment

Traceability under the EU General Food Law

- All food (and animal) suppliers must be identified
- All business to which products are supplied have to be identified
- All this information has to be produced to the Competent Authority on demand
- Nb: This does not include veterinary medicines, pesticides, fertilisers or seed (unless the seed is to be consumed directly)
- It has to be possible to recall all the product if necessary

- As a minimum, traceability records should include the address of the customer or supplier, nature and quantity of products, and the date of the transaction and delivery
- Also record the batch number or durability indication (where applicable).
- It is the information (records) that matters not the traceability system as such.

In addition there are specific rules/requirements for certain sectors

• Within a business cross-traceability is <u>not</u> required. So how batches are split and combined within the business to create the final product is not necessary.

Nb: See (UK 2007), "Guidance Notes for Food Business Operators on Food Safety, Traceability, Product Withdrawal and Recall" at http://www.food.gov.uk

Pesticide residues c)

Plants treated with pesticides for their protection from pest and plant diseases before and after harvest and subsequently included in food or feed must comply with Maximum Residue Levels (MRLs) set the EC. The relevant harmonized regulation is EC 396/2005. Only approved treatments can be used and updated list is on the Europa website.

Most small scale production related to AFTER products will be free of agricultural chemicals because small scale farmers cannot afford to use them. Nevertheless, the presence of chemical on farms or in households nearby and the unregulated sale of non-compliant chemicals is common.

The onus to prove the products comply with EU MRLs is on the importer.

Table 2: MRL risk and AFTER products

Product (local name)	Risk
Gowe, akpan, kenkey	Unregulated chemical use during production. Proximity to commercial farms using chemicals. Storage of grain near to household subject to anti-malarial spraying programmes. Re-use of bags or sacks.
Kiskh	Unregulated chemical use during production of ingredients. Proximity to commercial farms using chemicals. Storage of grain near to household subject to anti-malarial spraying programmes. Contamination with household chemicals. Re-use of bags or sacks.

Source: Author

f) Packaging (EC 1935/2004)

Three types of packaging are needed to ship food: transport packaging (the outer layer for protection during handling), outer packaging (the transit protection such as a box) and the sales packaging which surrounds the goods.

Aluminum is safe except for highly acid foods. Plastics have a limit of 10mg per square decimeter of plastic surface area or kg of food migration. Cellulose, ceramics, seals, coatings, and adhesives are also regulated.

Packaging must not allow constituents to migrate into the food in quantities that could harm human health.

Packaging is potentially an important part of AFTER re-engineering. The EC regulation will need to be taken into account when packaging is chosen if export to the EC is planned.

d) Labeling (Directive 2000/13/EC)

The EU requires certain information on food labels for pre-packed food (food in packaging and/or ready to sell to the consumer)

- A name
- A list of ingredients
- Allergen information
- If GMOs are included
- If irradiation has occurred
- The amount of certain ingredients
- A 'best before' or 'use by' date
- Conditions for storage and use (cooking instructions)
- Name and address of the manufacturer, packer or EC seller

Labeling must be clear and indelible and in the language of the country where the product is sold.

Nutrition information in voluntary unless certain claims are made (such as 'low fat)

e) High risk foods (EC 669/2009)

Certain products are consider to be a high risk to the public because of recent high profile food scares in the EC. These are products which might contain dangerous substances such as aflatoxin or salmonella. These products can only be imported through Designated Points of Entry (DPEs).

There is no particular evidence that any AFTER products fall into this category as yet.

Novel foods f)

Originally introduced to protect EU consumers from unregulated import of the product of biotechnology (e.g. Genetically Modified Organisms), the Novel Foods Regulation (EC 258/97) also 'captured' some traditional foods such as baobab and so has been the subject of a number of revisions. Companies wanting to import foods and food ingredients that have not previously been in common safe

use within the EU must apply for authorization and demonstrate safety through either science or by history of safe use. Application requires a professional dossier to be compiled. This can cost up to Euro 100,000 per application.

For some AFTER products that are considered to be Novel Foods may present a challenge. The fermented grain products have been in common use in the EU since long before the regulation came into force and probably do not need Novel Foods clearance unless they undergo substantial re-engineering. Whilst Kiskh Sa'eedi has been in use in Egypt for thousands of years, it is unknown in the EU. It is recommended that the relevant authorities in the EC are approached for clarity regarding the novelty of Kiskh Sa'eedi.

g) Aflatoxin limits (EC 1152/2009 and 165/2010)

Aflatoxin is a highly carcinogenic substance secreted by a mold. It is one of a number of dangerous mycotoxin that can be found in foods. Its presence in very small quantities is potentially lethal to human and animal health and therefore it is not tolerated in the EU. Aflatoxin limits and sampling arrangements depend on the product.

EU general aflatoxin limits for cereals are:

B1 2ppb B1 x B2 4ppb

Products from humid climates that are not dried quickly after harvest or which are stored poorly have a greater chance of aflatoxin contamination. Products that which are in contact with soil also have a greater susceptibility to aflatoxin contamination (e.g. groundnuts).

Exporters have to demonstrate absence of aflatoxin in their products before shipment. If the shipment arrives in the EU above the level, the exporter will have to pay for its destruction.

Table 3: Assessment of alfatoxin risk of AFTER products

AFTER Product	Ingredients	Discussion	Aflatoxin risk (low to high)
Akpan	Sorghum Maize	Aflatoxin common in dried grains	Medium
Gowe	Sorghum Maize	Aflatoxin common in dried grains	Medium
Kenkey	Sorghum Maize	Aflatoxin common in dried grains	Medium
Kishk Sa'eedi	Milk Wheat	Depends on the diet of the source dairy cattle	Medium

Source: Authors opinion

Aflatoxin (and other mycotoxins) are a concern for AFTER and will have to be controlled in finished products.

h) Other contaminants

There are numerous other EU Directive relating to a wide range of potential food contaminants. None of these are obviously relevant to AFTER products assuming that general food hygiene and handling practices are applied.

i) Traditional Herbal Remedy Directive and Dietary Supplements (2004/24/EC)

In order to sell traditional herbal remedies in the EU they have to be proven as safe. There are two routes for this: by showing evidence of common use in the EU before 30th April 2004; and, provision of scientific proof of safety and efficacy through testing. In both cases an elaborate dossier has to be prepared and approved. For a new product this can be expensive (from Euro 100,000 up).

For new dietary supplements approval must be sought for food supplements and food additives. This would apply to new pro-biotics for example especially if functional claims are to be made. Substances that were available in the EC before the 12 July 2004 are accepted. All other substances have to apply to be included in the safe list by provision of suitable scientific dossier. Pre-biotics, probiotics, yeast extracts botanical extracts and various other substances (such as glucosamine) fall into this category.

Total new food supplements, functional foods or remedies from AFTER products will have to be approved under these directives.

j) Customs clearance

All goods consigned to a country have to clear the local customs authorities. Within the EU arrangements vary from country to country. It involves the filling out of a forms and the payment of fees. Exporters normally use the services of a Shipping Agent to make this arrangement for which a single fee is payable. Failure to complete these requirements can lead to lengthy delays on arrival, a high risk for perishable products. To avoid delays, pre-clearance and payment before shipment is common.

See:

http://europa.eu.int/comm/taxation_customs/common/about/welcome/index_en.htm

3.2 Private standards

Private standards are those set by the buyer. They are not mandatory, but in some cases, these standards have become so pervasive in the EU that sales outside the standard can be difficult. Companies and individuals can set any

standard they want for private transactions – the seller is not obliged to sell at these standards.

With a great deal of value now concentrated in brand names of foods and supermarkets, companies set internal standards in order to protect this investment from the risk of a food scare. In recent years, reputations built up over many years have been lost as a result of contaminated ingredients. Firms manage risk by setting standards, often higher than public standards, for their To prevent high standards becoming a source of inter-firm competition, some sectors have combined to share private standards, notably the European food retail sector through EurepGap and now GlobalGap standards.

GlobalGap a)

GlobalGap is a private sector body, owned and operated by a consortium of global food retailers, that sets and certifies voluntary standards for a range of food including fresh food, grains, fish and meat. The standards are commonly higher than national (e.g. EU standards) and more comprehensive in that they include social, animal welfare and environmental elements not required by WTO member states. The standards are voluntary and therefore not subject to scientific scrutiny. The purpose of GlobalGap is to manage the risk to food retailers of food contamination and scares by applying standards. The cost of compliance is the responsibility of the producer. For small-scale producers, compliance with GlobalGap (including inspection and certification by a third party agent annually) usually renders trade uneconomic.

It is worth re-iterating that these standards are voluntary. When supermarkets want to buy a product they can easily waive the GlobalGap standard at their discretion.

If AFTER products are to be sold into a mass market in the EU, GlobalGap standards will apply. At the moment this does not seem likely, but it may become applicable after re-engineering.

b) EU marketing norms

EU buyers have certain expectations of the products they buy. An important issue is one of trust and meeting normal marketing practices. These are rather hard to define and highly variable. An example might be the use of recycled material (newspapers, previously used boxes) can be usual in some countries, but is unexpected and unacceptable to most EU buyers. What the buyer finds in the consignment is considered a general reflection of the cleanliness of the sellers premises, so any unexplained extraneous material is a source of concern.

Critically, promises in terms of quantities, qualities and timing of shipment are considered binding. Communication with the buyer is expected if any promise is to be broken.

Most EU importers set parameters for the products that they buy and these can vary substantially (different companies have different needs). Usually these are provided by the importer and the seller is expected to comply. An example of such a product standard for Hisbiscus calyx is given below:

Table 4: Import norms for dried H sabdariffa

Guidelines	Specifications
Description	Hibiscus sabdariffa
Packaging	Item must be packed in 50 lb. poly (or less) lined
	boxes or multi-walled sacks (adequately protecting
	product for shipment) with clear markings
	indicating the item contained. Shipment must be
	accompanied by packing list clearly indicating the
	consignment, weight and country of origin.
Raw ingredient sample:	
(a)Visual	Purple-red color.
(b)Aroma	Floral, berry-like aroma. Free from objectionable off
	odors.
(c)Texture	Lump free, free flowing particles
Prepared sample:	
(a)Visual	(a)Visual
(b)Aroma	Slight berry aroma.
(c)Flavor	A well balanced, tart and astringent flavor. Some
	cranberry notes as well as a slight drying effect. Not
	excessively tart, acidic or bitter. Should be free of
	off- flavors and other undesirable spice/botanical
	notes.
Test Units:	Specifications
(a) Free Flow Density	G/CC Minimum 0.45, Maximum 0.60
(b) Moisture	12%
(c) Total Ash	10%
(d) Acid Insoluble Ash	1.50%
(e) Sieve Analysis	Thru US#20 95.0%
5 Min Rotate	Thru US#60 5.0%
(f) Insect Fragments each	400
(g) Whole Insects	25/5
(field/storage) each	
(h) Salmonella	Negative
(i) Coliform	2 of 5 over 10 CFU, 0 of 5 over 100 CFU
(j) E. coli (MPN)	2 of 5 over 3 CFU, 0 of 5 over 20 CFU
(k) E. coli (Film)	0 of 5 over 10 CFU
(l) S. Aureus	1 of 5 over 100 CFU, 0 of 5 over 1000 CFU
(m) Standard Plate Count	0 of 5 over 1,000,000 CFU
(n) Yeast/Mold	0 of 5 over 10,000 CFU

Source: (Plotto 2004)

Nb: this example if for a US buyer

For new or re-engineered products these terms or standards will have to be negotiated between the seller and buyer.

c) Other issues – intellectual property

A cursory review of the patent activity on AFTER products is shown table 6 below.

Table 5: AFTER Patent Activity

	· · · · · · · · · · · · · · · · · · ·	
Product	No. of patents on WIPO	Example
Akpan	0	
Gowe	At least 1	Probiotic
Kenkey	11	Various foods and
		processes
Kishk Sa'eedi	0	

Source: WIPO

The substantial patent activity for Kenkey suggests that theis product has properties which are commercially interesting. Re-engineering will have to take into account existing intellectual property rights and establish freedom to operate.

4. Other trade issues

For each product or sub-product and derivative you need to answer the question: what forms and permits would I have to get to export a container of this product? Two sources of this information are: your national export promotion body which is usually in the Ministry of Trade, or simply talk to a freight forwarding company and ask them to give you a list of necessary documents for a shipment of the product. Other trade issues fall into two categories: tariff and non-tariffs issues.

a) Tariffs

Tariffs are payments that are made on imports from one country to another. All AFTER countries with product that could be exported to the EU are Least Developed Countries and therefore not subject to import tariffs.

b) Non-tariff issues

There are a large number of non-tariff issues that could impact on AFTER imports into the EU. The most important of these seem to be standards (covered elsewhere in this report) and administrative arrangements. For other exports to the EU, professional assistance from a freight forwarding company usually resolved these 'red tape' issues.

For some of the countries working with AFTER, challenging non-tariff issues may exist within their own borders. Sometimes this is unavoidable and so must be considered a cost of production.

In conclusion, tariffs and non-tariff barriers do not represent an insurmountable challenge for AFTER. It is more likely that pre and post border issues will be more difficult to overcome.

5. The possibilities for compliance based re-engineering

Increasingly, consumers seek reassurance of certain product qualities. In most cases (but not all) they are prepared to pay a premium price for these so-called 'embedded' qualities. A brief review is provided here.

5.1 Areas of certification

There are many potential areas of certification that could be used for reengineering. Some are considered here.

a) Fair trade

There has been a huge increase in interest by EU consumers in assuring that the producers of foods get paid a fair and reasonable proportion of the final on-shelf retail price for their products. A small number of consumers will only buy products with a fair trade label. The movement is stronger in some EU countries that others. For example, there fair trade movement has more market penetration in Germany than, say, Spain.

Fair trade certification requires third party inspection and may mean higher production costs. Premiums are usually in the 5-10% range. In order to have a fair trade certificate the Fair Trade Labelling Organisation (FLO)² has to have a fair trade standard available. There are currently no fair trade standards for any of the AFTER grain based products.

In order to get fair trade certification production has to be from recognized groups or cooperatives (not individual farms).

b) Organic certification

Organic foods do not use modern synthetic inputs such as inorganic fertilizer or pesticides. The organic movement is also interested in the environmental impact of food. To ensure compliance, the area of production has to be designated as free of non-accepted chemicals (this is called 'conversion') and products must be tested and inspected regularly. The cost of reduced productivity and lower quality is born by the producer in return for a premium. In recent years the demand for organic products has grown dramatically in the EU. However, the recent economic downturn has put pressure on premium products and the margin between premium and extra cost has declined.

Some market segments (e.g. health foods, traditional herbal remedies and food supplements) now expect organic certification.

In order to facilitate organic production some countries have developed national organic standards and regulations. As far as the author is aware, Ghana,

² See www.fairtrade.net

Cameroon, Senegal, Egypt and Madagascar have national organic regulations. The position of Benin is unknown.

Different countries, markets and products use different organic certification bodies. The range is large³. Not all these bodies have representatives in AFTER countries. If there is no local representative of the certification body required by your chosen market then you have to pay for them to fly out to certify your production.

Most AFTER products are currently produced organically because small-holders do not have access to expensive external inputs such as fertilizers. Nevertheless, conversion to organically certified production can still be very difficult and costly. Most small-scale producers struggle to find the cost of regular certification.

c) Appellations, geographical indicators and traditional knowledge

The area that a product is produced and the traditional knowhow that is used to make that product can be protected under various international agreements including appellation of origin (under the Lisbon Agreement of 1958), the World Trade Organisation Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) and, more recently, the Convention on Biological Diversity (CBD). All these agreements give protection to the intellectual property associated with However, application of these treaties and making traditional foods. beneficiating individual and group rights has proved challenging, especially in developing countries. The absence of organized production and associations of interest groups who protect food forms is a problem for traditional foods because no records of production locations or norms (e.g. recipes) exist. Also, without domestic legal infrastructure it is very hard for individuals and groups to apply their rights. Few countries in Africa have vet successfully passed and implemented the necessary laws that allow registration of domestic geographical indicators (GIs) or the mechanisms for protecting and sharing the benefits of traditional knowledge. Access and Benefit Sharing (ABS) legislation is in its infancy in much of Africa and successful stories limited so far. The Nagoya Protocol agreed in 2011 will increase the importance and strength of ABS legislation, but this in turn may discourage investment by third parties who are nervous about how their profits will be shared. A summary of the IP status of AFTER countries is given below in Table 6.

³ See http://www.organic.com.au/certify/

Table 6: IP status of AFTER countries

Country	Treaty, protocol or law							
	WIPO	Signatory	Signatory	ABS	GI law (and type))	
		of the	of	law	Sui	Trademarks	GIs	Certification
		CBD	Nagoya		generis			marks
			Protocol					
Benin	X	X					X	
Cameroon	X	X			X			
Egypt	X	X				X		
Ghana	X	X	X	X	X	X		
Madagascar	X	X				X		
Senegal	X	X					X	

Source: (O'Connor and Company undated)

The absence of GI or Sui generis protection in Egypt presents a risk for Kiskh. The only protection available is by Trademark, which does not help much for small producers making Kiskh Sa'eedi at home. Egypt should consider implementing the Sui generis system of protection as an interim measure.

Only Ghana has signed the Nagoya Protocol and has an extant ABS law. Only Benin and Senegal have laws in place for Geographical Indications.

e) Safety compliance standards

For food products exported to the EU some means of assuring safety is needed to comply with the General Food Law. One way for a producer to achieve this is to use a food safety certification system such as Hazard Analysis and Critical Control Point (HACCP) or ISO 22000, which is a food safety management standard. ISO 22000 incorporates HACCP and is becoming the food industry norm within the EC. The ISO standard requires third party inspection and is, therefore, relatively expensive.

Much food exported from AFTER countries to the EC is not produced using a food management standard. It is not a requirement for export, but a voluntary certification system provided by a private company. In countries with a significant tourism industry (e.g. Senegal and Egypt) more and more hotels and airlines are implementing food management standards to reduce the risk of loss of reputation.

If re-engineered AFTER products are to enter mainstream markets, food management certification may be necessary because it is demanded by customers.

f) Other product specific certification - The Slow Food Movement

New concepts to protect and promote traditional foods that are threatened by mass production methods are emerging. The Slow Food Movement is a good example. It combines a number of concepts discussed above such as environmentally friendly, fair trade and organic with the concept of local and

small-scale production⁴. Members exist in Benin, Cameroon, Egypt, Ghana and Senegal but not in Madagascar. Benefits seem to be conferred by mutual promotion among Slow Food aficionados.

Numerous other food promotion groups exist in Europe and could be beneficial for AFTER products which are safe to eat but not so re-engineered that they are no longer recognisibly connected with their traditional method of production.

5.2 Summary of the potential for re-engineering through certification

Table 7 below summarises the types of certificates that might be used by the products and considers whether the market either expects them for market entry or is prepared to pay a premium price if the certification is achieved.

Table 7: Assessment of certifications

Product	Type of certificate	Expected by markets	Will give premium
Akpan	Safety	No	No
Gowe	Safety	No	No
Kenkey	Safety	No	No
Kishk Sa'eedi	Appellation	No	Possibly

Source: Authors opinion

Most certificates require initial application followed by regular inspection by a third party. A typical third party inspection costs from Euro 2-3,000. Costs can be shared among a number of establishments. Where local certification bodies exist this can save costs. Different end EU markets expect different certification bodies - so this needs to be checked before you get the certification.

In summary, certification is not necessary for AFTER products, but in some cases, the market now expects it (e.g. environmental assurances for wild harvested products). In the case of Kiskh Sa'eedi, it is likely that certification will open new niche market opportunities. Normally, certifications can be combined. So wild harvesting, organic and fair trade certifications together are not much more expensive than one certificate on its own.

⁴ See http://www.slowfood.com

6. Summary, conclusions and recommendations - regulatory landscape

Summary

This report assesses the market access barriers to trade in four AFTER products: Akpan, Kenkey, Gowe, and Kiskh Sa'eedi. The aim was to identify formal and informal regulatory barriers to these products before and after re-engineering with a view to highlighting those products without market access to the European Union, those which have access challenges, and, those where reengineering might in itself include complying with regulations or standards.

Conclusions

The EU regulatory landscape is complex and diffuse for AFTER products. Amongst many factors, regulations and standards vary by product, location of sale, final end use, novelty and method of production. The EU public and private regulatory system is designed to be risk averse and to pass the responsibility for compliance onto the producer. Having said this, the regulations and standards are transparent and easy to discover, and the rewards available from export to the EU are substantial with large markets and high prices.

EU market rules are divided into two main categories: public regulations with which importers must comply and private voluntary standards set by buyers which are not mandatory (though necessary to affect sales). The key public standards effecting AFTER Group 1 products are sanitary and phytosanitary regulations and the EU General Food Law. Other regulations may also apply, such as limits on various contaminants in food and the food chain, packaging and labeling rules and controls on novel foods and food supplements. Products new to the EU usually need approval before sale.

Compliance with the EU General Food Law is possible for all AFTER products but clearly challenging. For example, traceability will be a key challenge for small-holder producers to gain market access for processed food products in the EU.

An area that has not yet been thoroughly reviewed by the AFTER team is management of intellectual property. A review of the existing patent landscape for AFTER products reveals a lot of activity in some product areas (e.g., Kenkey). More research into the intellectual property landscape to assess the potential for re-engineering is recommended.

Having complied with public regulations, importers are often then obliged to meet the private standards and norms set by buyers. This can include standards set by retailers (e.g. GlobalGap), and marketing norms (e.g. individual product standards set by buying agents and companies).

In other trade regulation areas tariff and non-tariff barriers were reviewed. No serious tariff barriers exist for AFTER Group 1 products. Some non-tariff barriers exist and it is recommended that these are reviewed ad hoc.

In the area of compliance based re-engineering many possibilities exist including fair trade, organic certification, wild harvesting standards, using intellectual property and 'terroir', and meeting food safety standards. The cost of compliance is often high for these standards. For some markets they are obligatory (e.g. wild harvesting and organic certification for herbal remedies), but for others it is recommended that a business case is prepared before an investment is made in compliance.

Recommendations

Existing Group 1 AFTER products only need to comply with current EU Food Safety Regulations.

Re-engineered products will need to check whether they need to prove safety and efficacy before sale.

For the diaspora market, compliance and re-engineering is probably not profitable because of the low value, short shelf-life and cost of transportation.

Kiskh Sa'eedi will need to comply with EU Food Safety Regulations. Niche markets are possible but Kiskh Sa'eedi faces a challenge to manage its intellectual property in the light of weak domestic Egyptian legislation. Kiskh may benefit from specialist compliance based re-engineering such as Slow Food registration.

Part B: Value chain analysis

7. Introduction

It is the aim of AFTER to re-engineer traditional African foods to a level where these are acceptable in the European market. This section considers in broad terms market potential and possible value chains for the three groups of AFTER products.

There are a number challenges faced by research on markets for African food and food ingredients. Firstly, potential markets for many of the AFTER products are fragmented (e.g. one product has many potential sub-markets and sectors that it can serve and numerous potential routes to market). Secondly, EU markets for African food and African food ingredients are not homogenous: they vary within and across the 27 EU member states substantially.

An important factor in the variance of demand for African Traditional foods is the presence of a recently arrived diaspora.

The EU African Diaspora – some key facts:

- 1.74 million migrants from sub-Saharan African in 2005⁵
- 763,000 (44%) were from West Africa; 500,000 (29%) were from East Africa, 284,000 (16%) from Central Africa, 138,000 (8%) from Southern Africa⁶
- The most important migrant sources are: Nigeria, Ghana, Senegal, Somalia and South Africa (7-9% each)
- Other significant groups (2-5% each) are from Cameroon, DR Congo, Zimbabwe, Cote d'Ivoire, Angola, Mauritius, Cape Verde, Congo, Mali and Ethiopia.
- UK and France have over half a million migrants from sub-Saharan Africa each
- Other important destinations are Italy, German and Portugal.

Possible entry points into the Diaspora market include:

- Diaspora associations
- Faith based diaspora organizations (churches)
- Diaspora based social media

Beyond the narrow (but not insubstantial) confines of the EU African diaspora, re-engineered AFTER products have the potential to reach a massive, and

⁵ see World Bank, (2007) 'Concept Note: Mobilising the African Diaspora for Development, at

http://siteresources.worldbank.org/INTDIASPORA/General/21686696/concept note.pdf

⁶ Following figures from IOM (various years)

somewhat bewildering, range of possible sub-sectors. This report will attempt to narrow the focus as far as the EU is concerned, but until the re-engineered products emerge from the AFTER process it will not be possible to analyse specific market in detail. This text, therefore, is meant as a broad overview and guide only.

8. **Product description**

At this stage, AFTER is researching 10 traditional food products in three Groups. These products are briefly described below with the form that they are currently offered for export to the EU.

8.1 **Group 1: grains**

Akpan, a yoghurt-like preparation from the Republic of Benin made from fermented maize.

There is currently no trade (formal or informal) in Akpan to the EU.

Gowé, a sweet paste, also from the Republic of Benin, made of malted (or nonmalted) sorghum or maize flour and consumed as a beverage.

There is currently no trade (formal or informal) in Gowé to the EU.

Kenkey, a stiff dough, from Ghana, made from fermented, de-hulled, maize meal and consumed as a stiff porridge or a beverage.

Some preprepared Kenkey is being produced in the UK, but there does not seem to be any trade in Kenkey from Ghana to the EC.

Kiskh Sa'eedi, a fermented snack and beverage from Egypt made from milk and wheat and consumed as a snack or beverage.

Minimal trade in Kiskh Sa'eedi takes place within Egypt. Export to the EC is only in the form of gifts.

9. Possible value chains

Since most of the AFTER products are not currently traded in the EU it has not been possible to prepare value chains continuing on from those done for the products within their African setting. Therefore, a series of 'proxy' value chains are suggested split into two groups: existing diaspora markets and possible new market segments.

9.1 Existing diaspora markets

The key actors in the EU diaspora goods markets are:

Table 8: Typology of actors: diaspora market

Actor	Role
Diaspora goods importer/wholesaler	Brings bulk African food product into
	the EU and sells to wholesalers
Diaspora goods specialist importers	Brings certain specialist African
	products into EC (e.g. baobab powder)
Diaspora restaurant/catering suppliers	Buy catering ingredients from
	wholesalers and specialist importers
	and sells to restaurants
African restaurants	Buys African ingredients and sells
	meals to the diaspora and others
Diaspora specialist retailers	Buys a range of African foods and sells
	to the diaspora market
On-line diaspora retailers	Buys a range of African foods and sells
	to the diaspora market
Diaspora consumers	Buys African foods
Non-diaspora consumers	Buys African foods – often
	characterized by having lived in Africa
	and returned to the EC

9.2 Non-diaspora market

9.2.1 Group 1: grains

Akpan, Gowe

The main market for grain-based drinks is the specialist health food sector. There is increasing interest in the health benefits of whole grains (e.g. oats for management of prostrate cancer in men) and grain-based drinks as part of a healthy diet. Recent research has demonstrated positive health impact from increased and regular fibre intake allied to greatly increased fresh fruit and vegetable consumption. These life and health enhancing properties are driving demand for new grain-based products. Niche markets include: vegetarianism, gluten-free, diabetic and pro-allergenic.

Kenkey

Kenkey in its present form does not really fit into any existing food category or sector. An instant Kenkey product might sit in the breakfast cereal or muesli market.

Kiskh Sa'eedi

There is no similar product to Kiskh Sa'eedi currently sold in the EU. Recent growth in interest in Mediterranean food as a result of Northern Europeans bringing back culinary experience from vacations has resulted in many new restaurants, and cuisine 'packages' in supermarkets (e.g., ranges of food packaged together so that consumers can make 'meals' from, say, Mexico, or India). So far, there is not much evidence of an Egyptian food movement, but Kiskh Sa'eedi could be a starting point.

9.3 Possible value chains - conclusions

Review of the possible EU value chains for AFTER products suggests:

- The diaspora market is more promising for 'improved' products, but has a limited scale and scope
- Of the grain products, Kiskh Sa'eedi looks most promising, but needs to be developed within the 'context' of an Egyptian cuisine offer.

10. Marketing mix

The marketing mix is a framework for trying to understand the key element of a potential market offer. In this case, each AFTER product is reviewed against a series of criteria. Product defines what possible products are being considered in the analysis. Price looks at the likely sales price of the product compared with possible competitors in this market space. Place suggests where in the market consumers from that market segment might want to buy the product. Promotion suggests how that consumer profile might want to learn about the product. Finally, 'people' suggests the likely consumer profile for that product. When launching a new product, it is theorized that a firm has a choice of investing in setting a lower price than the competition, heavily promoting the product, making the product better than the competition or trying to get the product into a particular market place that is attractive to the sort of people interested to consume that product.

Price in this analysis is 'point of sale' price. A general rule of thumb is that the point of sale price of a product is x2 the wholesale price, which in turn is likely to be 30% higher than the landed export price. These high margins reflect 'normal' overhead costs incurred in wholesaling and retailing in the EU. They can be avoided with direct markets methods.

This analysis sets aside the diaspora market. As discussed above, the diaspora market is of quite limited scope and has relatively few barriers to access. Here we focus more on the possibility of re-engineered products.

10.1 Marketing mix - Group 1: Akpan, Gowe, Kenkey, Kiskh Sa'eedi

Figure 3: Marketing mix - Group 1

rigure 5: Marketing mix – Group 1				
<u>Product</u>	<u>Price</u>			
a) Akpan, Gowe and Kenkey sold as 'instant flour'	a) Compares with organic cassava flour at €3/kg			
b) Akpan, Gowe and Kiskh Sa'eedi sold as a pro-biotic drink	b) Kefir grains (milk based grain probiotic from Turkey) sells for between €4-7/kg on the internet			
c) Kiskh Sa'eedi sold as a novel 'Mediterranean' food.	c) No comparable product, but typically sells in vacuum packs at about €2/100g			
Place	Promotion			
a) Health food stores and online	a) Start at specialist organic and natural trade fairs			
b) Health foods stores and online	b) Start at specialist organic and natural trade fairs			
	c) Through catering suppliers and trade			
c) Heath food restaurants, specialist Mediterranean restaurants, health food stores and online	fairs as above.			

<u>People</u>

The market for specialist health food products addresses the needs of market sectors with specific health needs and is, therefore, largely unrelated to income. Increasingly, however, those with higher incomes in the EC are interested in buying health and wellbeing through diet and are prepared to pay for this, so the most promising market for these products is among higher income earners.

10.4 Summary of the marketing mix

Basic marketing mix analysis shows that there are more promising market possibilities for re-engineered AFTER products than might be expected. Key findings are:

- Presentation to specialist food fairs of ready to launch re-engineered AFTER foods is the most important market entry point.
- Relatively high prices are available to the 'exotic' food market
- Novelty and function are important in this consumer segment

11. **SWOT**

The purpose of SWOT analysis it to assess products against their likely competitors. The SWOTs chosen are taken from the marketing mix analysis in the previous section. For each group a SWOT for a diaspora product and one for a possible re-engineered product has been done.

11.1 SWOT - Group 1: Akpan, Gowe, Kenkey, Kiskh Sa'eedi

Figure 4: SWOT of Group 1 – diaspora product

Strengths	Weaknesses
a) Akpan, Gowe and Kenkey	
Large potential markets: Benin diaspora in Paris and Kenkey in London/UK	Migrants tend to loose the taste for traditional foods over time
b) Kiskh Sa'eedi	
Diaspora Egyptian communities in all major EU cities	
Opportunities	Threats
 Diaspora restaurants and specialist outlets (200+ in UK and France) Online sales 	Diaspora products made within the EU

Figure 5: SWOT of Group 1 - Probiotic drinks

Strengths	Weaknesses
 Novelty 	 'African' foods not fully trusted as safe
 Functionality 	
Grain based product with good health	
associations	
Opportunities	Threats
• Fast growing speciality health probiotic	Kefir grain
grain drink market not very mature (so not	
a lot of competition)	

In summary, the SWOT analyses show that there is real potential for developing re-engineered AFTER products despite considerable evidence of competition. Novelty, functionality and health benefits seem to be the key to successfully finding markets.

12. Summary, conclusions and recommendations – value chain analysis

Summary

The aim of the value chain analysis was to develop theoretical market access chains for the EU market. These theoretical access ideas can form the basis for re-engineering concepts and later market development and business plans to take those concepts into production and consumption.

Conclusions

The market for AFTER products in the EU can be broadly divided in to two submarkets: the African diaspora and regular, main-stream, food markets.

The diaspora market looks substantial, especially in France and the United Kingdom, but, in the long-term, the size of this market is expected to diminish.

Review of similar products on the market to existing AFTER foods suggests that grains, particularly as a yoghurt ingredients have parallel products available in the EU – mainly in specialist niche and gourmand market sectors.

Recommendations

Possible value chain for these products are described, through more detailed research and test marketing will be needed before products are 'launched' in the EU.

Analysis of the market mix for typical re-engineered AFTER products suggests starting price points for future product by product business analysis and points to major natural and organic food trade fairs as the key market entry point.

SWOT analysis of a range of AFTER re-engineered products shows that there are good market spaces available for many AFTER products.

Emergence of new grain based yogurt health drinks looks very promising for Groups 1.

References

Bennett, B. (2006). Trade and Natural Products: how big is Southern Africa's natural product opportunity and what trade issues impede sectoral development, Regional Trade Facilitation Programme.

EU (2006). "Guidance document on certain key questions related to import requirements and the new rules on food hygiene and on official food controls." Retrieved 13/9/11, 2011, from http://ec.europa.eu/food/international/trade/interpretation imports.pdf.

IOM (2005), World Migration Report, 2005, International Organisation for Migration, Paris.

O'Connor and Company (undated). Geographical indications and TRIPs: 10 Years Later... A roadmap for EU GI holders to get protection in other WTO Members. Brussels, European Commission.

UK, F. S. A. (2007). Guidance Notes for Food Business Operators on Food Safety, Traceability, Product Withdrawal and Recall. London, Food Standards Agency.

World Bank, (2007) 'Concept Note: Mobilising the African Diaspora for Development, at http://siteresources.worldbank.org/INTDIASPORA/General/21686696/concept note.pdf