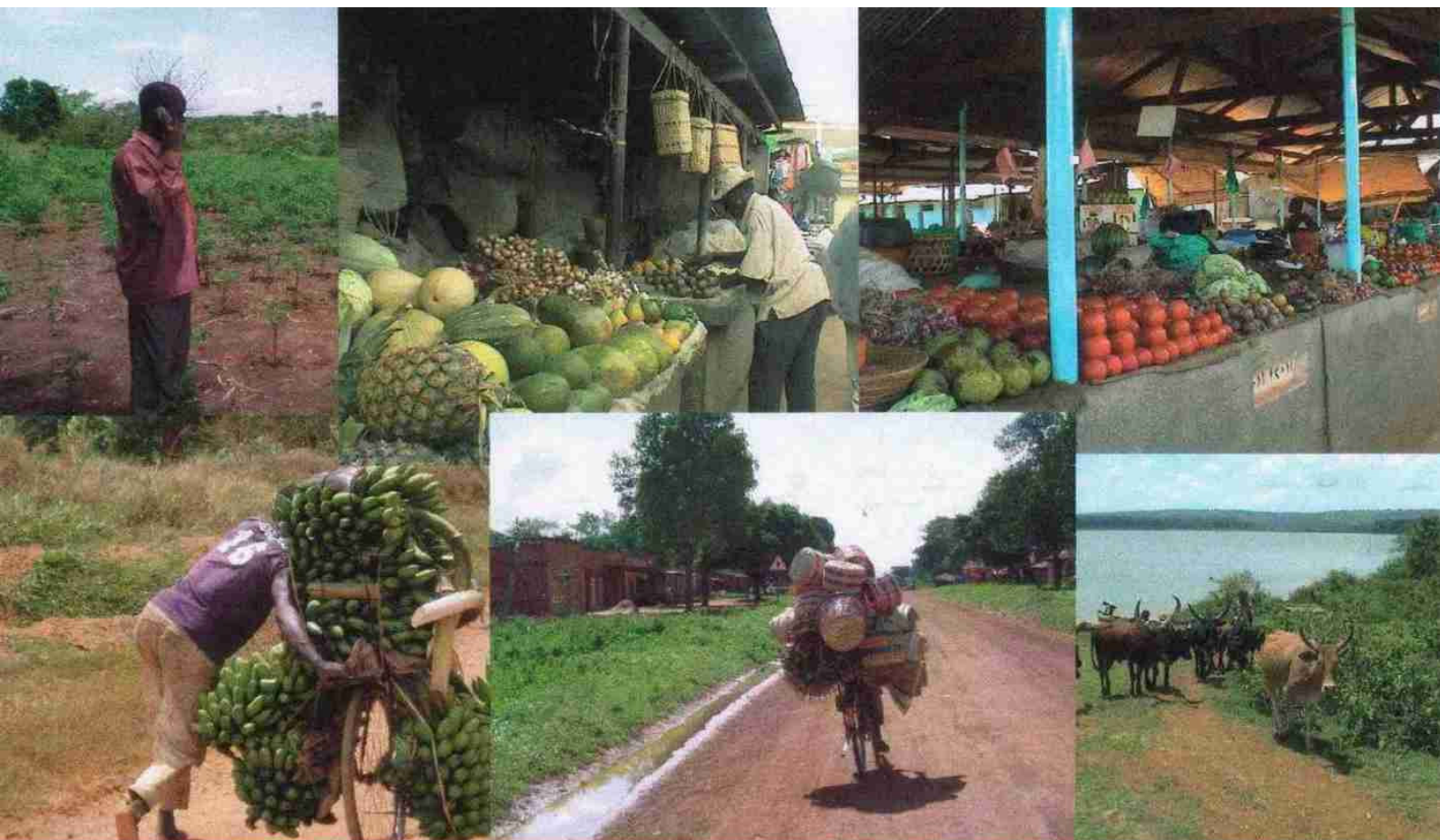


# Successful Supply Chains in Uganda

## A study of three successful chains in the coffee, dried fruit and fresh vegetables sectors

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The views in this paper are either the authors' or derived from interviews with key informants and stakeholders and are not necessarily endorsed or shared by the International Labour Organisation (ILO) or the British Department For International Development (DFID) as donor.

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## ACRONYMS

APEP .....	Agricultural Production Enhancement Programme
ASPS .....	Agricultural Sector Programme Support
BCU.....	Bugisu Co-operative Union
BRC.....	British Retailers Code
DANIDA .....	Danish International Development Agency
DFID .....	Department for International Development
EAFCA.....	Eastern African Fine Coffees Association
EDF .....	European Development Fund
EPADU .....	Export Policy Analysis and Development Unit
EPOPA .....	Export Promotion of Organic Products from Africa
EU .....	European Union
EUREP-GAP...	European Retailer Group Good Agricultural Practices protocol
FFV .....	Fresh Fruit and Vegetables
FLO .....	Fair Trade Labelling Organizations International
GCCE .....	Gumutindo Coffee Cooperative Enterprise
HACCP .....	Hazard Analysis at Critical Control Points
IFOAM.....	International Federation of Organic Agriculture Movements
ILO .....	International Labour Organisation
JIT .....	Just In Time
MAAIF .....	Ministry of Agriculture, Animal Industries and Fisheries
MTCS.....	Medium-Term Competitive Strategy
NAADS .....	National Agricultural Advisory Services
NGO .....	Non-Governmental Organisation
NOGAMU.....	National Organic Agriculture Movement Uganda
PMA .....	Plan for Modernization of Agriculture
SCOPE .....	Strengthening Competitiveness of Private Enterprises
SIDA .....	Swedish International Development Agency
UCA .....	Uganda Co-operative Alliance
UCDA .....	Uganda Coffee Development Authority
UNEX.....	Union Export Services Limited
UNFA.....	Uganda National Farmers Association
USAID.....	United States Agency for International Development
USDA.....	United States Department of Agriculture

## PREFACE

In this study we analyse three successful supply chains in Uganda:

1. The fresh vegetables supply chain, with Mairye Estates Ltd. as the lead firm;
2. The dried fruits supply chain, with Fruits of the Nile as the lead firm;
3. The coffee supply chain, with Gumutindo Coffee Cooperative Enterprise as the lead firm.

These chains have been chosen based on their importance for the Ugandan economy within the specific sub-sector, the degree of vertical integration present in the chain, the availability of information on the different actors in the chain and the level of support the chain has received over the years. In addition, supply chains were selected that are essentially different in a number of respects, so that the conclusions would not be pre-determined by the choice of the sub-sector.

The coffee chain represents the most important traditional export product of Uganda, whereas fresh vegetables and dried fruit are both high value non-traditional export products. Fresh vegetables are the least processed product and dried fruit the most processed, with green coffee somewhere in between. The annual sales turnovers of the three lead firms are more or less in the same range (US\$ 250,000-750,000). All three operate in high value<sup>1</sup>, quality-sensitive export markets and they have all had varying degrees of external support at different stages of their development.

In view of the large number of donor-funded development projects, it is practically impossible to find a supply chain in Uganda that has been set up without any donor intervention. This is not surprising if we consider the state in which Uganda was in 1986, after 15 years of civil strife and military rule. The extreme poverty and poor state of the economy more than justify the support the country has received in the past two decades. However, these donor interventions were not always well-directed, nor did they always support the development of a strong, sustainable private sector.

In this study we look at what the driving forces were in the establishment of these supply chains and how they developed over time. What were the problems they confronted and how were these problems solved? Which problems still exist and how can they be tackled? What support did they receive from development projects and donor agencies and in what way did this support contribute to the success of the chains? Finally, we draw some conclusions on the future prospects and the sustainability of each of the supply chains.

The preliminary findings of the study were presented in two sessions at the end of March 2005, one with the private sector (representatives of the lead firms and others from the selected sectors) and the other with the support sector (donor agencies, development programmes, NGOs and government representatives). The feedback that we received was incorporated in this report. However, the conclusions are the responsibility of the consultants.

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<sup>1</sup> Though coffee is a traditional Uganda export and not generally viewed as a high value export, the supply chain selected for this study sells a high quality Bugisu Arabica to the fairtrade market at a price that is usually higher than prevailing market levels.

# 1 INTRODUCTION TO SUPPLY CHAINS

Globalisation of trade flows is an ongoing process all over the world and is having far-reaching effects on the agricultural economies of developing countries. The growing importance of export-oriented business has made integration into the global economy virtually synonymous with development.

In recent years there has been a growing body of work analysing globalisation processes from the perspective of supply chains. This approach is based on the notion that international trade in goods and services is often conducted within multinational enterprises or systems of vertically integrated firms in a variety of sourcing and contracting arrangements. Such a system is called a supply chain<sup>2</sup>.

There are many definitions for supply chains, but we used the following working definition:

*A vertically integrated supply chain is a set of sequential, inter-related value-adding activities, carried out by a number of independent but inter-related business actors and governed by a lead firm, to achieve a flow of products and services from the producer to the final consumer.*

This definition already introduces a number of key characteristics of supply chains. For instance, the fact that each of the activities carried out by the different actors in the chain adds value to the final product is an important element. This implicitly suggests that all actors should benefit to some extent from the business relationship. It also opens up the possibility of *upgrading* in the supply chain.

We can distinguish two types of upgrading: product upgrading and process upgrading. The former refers to ensuring the provision of a high quality product on the market, by applying the right production, processing and selection methods. The latter refers to introducing more capital-intensive production systems, e.g. irrigation or mechanized harvesting. Both types of upgrading can contribute to the success of supply chains.

The main characteristic we would like to highlight in this definition is the fact that most vertically integrated supply chains<sup>3</sup> are governed by a *lead firm*. In the case of agricultural commodities this is nearly always a company located in a developed country, as most supply chains in primary products are *buyer-driven*. The buyer, usually the importer or in some cases even the retailer determines what, how much, when, where and at what price he wants to buy, and the producer or seller has little choice but to accept the conditions imposed by the buyer.

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<sup>2</sup> The term supply chain is used in this context instead of synonymous concepts such as value chains, commodity chains or production chains. The definition is adapted from Sturgeon (2001).

<sup>3</sup> When we talk about *vertically integrated supply chains* in this study we use the qualification vertical integration in a loose way as in vertical co-ordination. Strictly speaking vertical integration only occurs when a single firm owns several stages in the supply chain.

In reality there are lead firms at different levels, and in developing countries the exporter is usually the lead firm in a given supply chain. After all, it is the exporter who has access to the foreign market and can transmit the requirements that the buyer imposes on him down the chain to his suppliers. The lead firm co-ordinates the activities at different levels in the chain, increasing sales and reducing costs and risks, while increasing the speed and reliability of supply. Thus the lead firm is responsible for both product and process upgrading.

Since chain co-ordination leads to an increase in efficiency and cost-reduction, it also offers a means of avoiding a situation in which profits are derived at the expense of all subordinate agents in a chain. Instead, efficiently organised supply chains can lead to win-win situations where all actors benefit from their integration into the supply chain. The lead firm plays a crucial role in this process.

The lead firm is crucial mainly because it provides access to a market. However, access to a market is directly linked with the ability of the lead firm to organise his supply, thus co-ordinate (or govern) the supply chain, in an efficient and effective way so as to be able to compete with other supply chains and comply with the ever-increasing quality standards that apply in international trade, in particular for foodstuffs. These standards go from JIT procedures to HACCP, EUREP-GAP, BRC or company-specific requirements<sup>4</sup>.

Entry barriers to the export market are growing higher and higher, leading to an ever-increasing concentration of lead firms worldwide, where selection criteria include capital, accumulated market knowledge and certain intangibles such as reputation or brand name. Chains which once started with smallholder producers in Africa are now supplied by large-scale farms with on-site pack-houses, under direct control of export companies. The three top Kenyan horticultural exporters accounted for 45% of total exports in 1996<sup>5</sup>. Likewise, the upgrading process which takes place when *out-growers* or other suppliers are vertically integrated in the supply chain is at the same time a process of differentiation, where the upgrading of some tends to be exclusion of others.

There are a number of driving forces that make it necessary for supply chain partners to work together. First and foremost are the strict quality standards, which are primarily determined by *food safety and health considerations*, dictated by consumers and retailers in developed countries. Care for environment, social and labour conditions, and in general, sustainable production methods are the key. Compliance with these quality requirements can only be assured if traceability of products is possible. This in turn can only be guaranteed if the different chain partners work together closely.

Secondly, another driving force for co-operation between chain partners is simply to obtain *economies of scale*. This argument is reinforced by the previous one as increased quality requirements are costly and can only be implemented in a cost-effective way if the sales volume is sufficiently high to offset the certification cost and change management that is necessary to pass all the certification tests. In other words, for smallholder farmers their only hope of gaining access to the export (or high value segment of the domestic) market is by forming part of a supply chain.

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<sup>4</sup> JIT = Just-in-Time; HACCP = Hazard Analysis at Critical Control Points; EUREP-GAP = European Union Retail Producers – Good Agricultural Practices; BRC = British Retailers Code.

<sup>5</sup> Peter Gibbon (2001b), p.349.

Finally co-operation in the supply chain is necessary to respond to the changing and strongly *segmented market demand*, which offers new opportunities to African agricultural producers and exporters. We can mention the organic, the fair-trade or health food niche markets as examples. This development offers a challenge to producers and exporters to link up with importers and retailers that cater to a particular market segment. Once again this argument is reinforced by the previous, as each specific market segment has its own quality and production requirements, and in order to be able to meet these standards a certain minimum scale is necessary.

The strength of a supply chain is determined by the lead firm, which acts as the supply chain manager. A well managed supply chain can react swiftly to changing market demands, reducing transaction costs and loss of product in transport and storage, increasing sales volume and value, improving the quality of the production processes as well as the products themselves, and better overall performance of the chain partners in all senses. In an increasingly competitive global agri-food environment, businesses that are able to meet the needs of consumers – as translated in retailers' requirements – will survive and grow.

But a lead firm cannot create a successful supply chain on its own; it needs the commitment and trust of both its suppliers and its buyers. Suppliers must understand the rationale for the partnership and share the objectives of the lead firm. This will be easier to achieve if the suppliers can see clear benefits from their involvement in the chain, preferably in the form of higher monetary returns. However, this is not always sufficient for a supply chain to be successful. The lead firm will usually also have to make an effort to promote transparency and mutual accountability of the chain partners.

The lead firm is the face of the supply chain to the outside world, so to speak. It is responsible for organising the timely delivery of the required products and meeting the quality standards and volume requirements of the buyers. Elements of chain management may include strategic planning, quality promotion and monitoring, training and technical assistance. All these elements are present to some extent in the three supply chains that were analysed in this study.

## 2 THE AGRICULTURAL SECTOR IN UGANDA

Uganda is a predominantly rural economy with nearly 90% of its population living in rural areas. The country is well endowed with natural resources, such as rivers, lakes and fertile soil. As a result of its situation on the equator and the fact that most of the country is at an elevation of 900-1500 metres above sea level, it enjoys a pleasant tropical climate, with ample sunshine and adequate rainfall. Hence the country has excellent conditions for agricultural production. Some 18 million hectares are available for cultivation, but less than one third is currently being used. Thus there is a huge potential for expansion.

The dominant mode of agriculture is smallholder farming with just a few larger commercial plantations. However, none of these is on a scale comparable to Kenyan plantations. The smallholder farmers own an average of three acres of land and use traditional production methods, without mechanisation. There is very little irrigation or use of fertilizers and pesticides, leading to relatively low yields of naturally produced agricultural products.

Main food crops include banana (*matooke*), beans, sweet potatoes, ground nuts, cassava, maize and Irish potatoes. Traditional cash crops include coffee, tea, tobacco and cotton. In addition, horticulture provides some extra income for smallholders, who produce cabbages, tomatoes, onions, spinach, carrots, eggplants, greens and mushrooms among other crops. But most of the fruit and vegetables are produced for own consumption and the local market.

Coffee is by far the largest export crop in Uganda, even with prices as low as they have been in the last 4 years. During the 1990s coffee accounted for over 70% of Uganda's agricultural exports, with other traditional exports - cotton, tea and tobacco - lagging far behind. In recent years, a new export category has come up: the non-traditional exports. In 1995 they represented less than 5% of agricultural exports, but in 2003 their export value was about as high as coffee, with flowers, maize and vanilla as the main products. On the whole, agriculture contributes 40% of Uganda's total GDP and about 75% of total exports. Thus, agriculture is the "backbone" of Uganda's economy.

**Table 2.1: Major Agricultural Exports of Uganda (in US\$ millions)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Coffee</b>	382.9	396.1	309.7	295.2	275.3	125.4	104.8*	83.9*	(100)
<b>Cotton</b>	3.6	7.5	30.2	7.7	17.8	19.0	n.a.	n.a.	n.a.
<b>Tea</b>	8.0	10.6	12.9	28.2	21.5	27.5	n.a.	n.a.	n.a.
<b>Tobacco</b>	9.5	4.9	12.8	22.5	14.7	24.9	n.a.	n.a.	n.a.
<b>Maize**</b>	7.3	7.5	11.0	10.7	14.8	11.8	10.4	7.3	25.5
<b>Beans**</b>	4.1	4.9	5.0	5.7	6.2	8.8	4.3	7.9	9.2
<b>Flowers**</b>	3.6	6.2	9.8	10.0	13.5	14.6	15.9	21.1	26.5
<b>Vanilla**</b>	0.0	0.5	0.6	0.8	1.9	2.0	6.6	9.4	24.8
<b>Vegetables**</b>	0.6	1.4	2.1	2.3	3.3	3.7	3.6	4.4	5.3

Source: Bank of Uganda, unless marked with (\*) UCDA or (\*\*) IDEA

Export earnings from traditional export crops have fallen drastically over the last decade in Uganda, mainly as a result of falling coffee and cotton prices. In some supply chain studies this is referred to as *immiserising growth*, which is defined as what happens when overall economic activity increases, but returns to this activity fall due to lower export prices<sup>6</sup>. This has prompted both the development of new (non-traditional) export products, as well as differentiated, processed products, instead of undifferentiated, unprocessed commodities.

The Government of Uganda, under the Poverty Eradication Action Plan (PEAP), is currently modernizing Uganda's agriculture through the Plan for Modernization of Agriculture (PMA). Several other government programmes are also focusing on agriculture, e.g. the Medium-Term Competitiveness Strategy (MTCS), the Marketing and Agro-Processing Strategy (MAPS) and the National Agricultural Advisory Services (NAADS). Most of these programmes are co-financed by donors.

At the same time there are a great number of development projects funded by donor agencies, which address different issues in the field of agriculture. For instance, there are several programmes funded by USAID (APEP, SCOPE, PRIME West and Rural SPEED), by DANIDA (ASPS), by SIDA (EPOPA), by DFID (ILO-BSMD) and the EU (PMA), just to name a few. Then there are Ugandan NGOs, some of which evolved from development projects, such as AT-Uganda or NOGAMU, farmers associations, research institutes (e.g. CIAT or IITA), all of which support agricultural development.

There are many examples of supply chains in the Ugandan agri-business sector. These vary from traditional supply chains with little or no vertical integration to export market-oriented supply chains with a high degree of vertical integration. Examples of the first type prevail in low value agricultural products which are sold on the local market, e.g. *matooke*. Examples of the second type are the coffee and cotton supply chains. For the purpose of this study we have selected three successful supply chains, which will be described in detail in the following chapters.

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<sup>6</sup> See Kaplinsky & Morris "Handbook for Value Chain Research" (2002).

### 3 MAIRYE ESTATES / FARM FRESH

#### 3.1 Fresh Vegetables in Uganda's economy

Commercial vegetable production in Uganda was introduced in the early 1990s following implementation of the Structural Adjustment Programmes by the Government of Uganda. Initial vegetable trials received technical support from the IDEA project, funded by USAID. Commercial vegetable production is still at a low level and dominated by smallholder production. In terms of market outlets, there is a very limited internal market due to low purchasing power and the fact that the majority of the population lives in rural areas where each household produces for its own requirements.

**Table 3.1: Uganda Exports of Fresh Fruit and Vegetables**

(Value in US \$ 1,000 and Volume in metric tons)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Value</b>	630	1,420	2,050	2,300	3,280	3,650	3,561	4,437	5,327
<b>Volume</b>	792	1,518	2,153	2,874	3,280	3,500	4,528	6,083	10,043

Source: IDEA Project Final Report

As we can see in the table, fresh fruit and vegetable (FFV) exports have shown steady growth, however the total value was still relatively small in 2003. Uganda remains an insignificant supplier on the world market, with the EU as the main export destination. For instance, in the year 2000, Uganda was ranked 21<sup>st</sup> on the list of ACP suppliers of FFV into the EU. In that same year Kenya's FFV exports to the EU were valued at US \$130 million, nearly 40 times as much as Uganda<sup>7</sup>.

There are indications from interviews with exporters and secondary sources that there is a growth potential in the EU-market, but Uganda lacks consistent supplies both in quantity and quality. Uganda's soil and climate is suitable for certain types of vegetable production, including different types of chilli, hot pepper, okra and various Asian vegetables. Baby vegetables, such as baby courgette, baby maize and baby squash, also appear to be promising. However, for Uganda to succeed in expanding its market share, private-public sector interventions should concentrate on increasing production and ensuring stable and high quality supplies.

The main barriers that exist for expanding FFV exports relate to inefficiencies in production systems, which limit the quality, consistency and reliability of products being offered. Other constraints are related to lack of adequate infrastructure - mainly roads and efficient rail transport - and relatively high airfreight, as compared to Kenya and Ethiopia, for example.

#### 3.2 History of the Mairye Estates Supply Chain

Mairye Estates is a family business owned by the Hudda family, Ugandans of Asian origin. The farm is located in Ntinda village near the hill of Mairye in Wakiso district. The farm was established in 1952 on a 600-acre piece of land, growing coffee and

<sup>7</sup> Source: Eurostat / IDEA-project Final Report.

sugarcane and buying coffee from nearby smallholder farmers. The Hudda family like all Ugandans of Asian origin fled the country in 1972 following Idi Amin's declaration of economic war. The family returned to Uganda in the late 1980s and repossessed their property to resume the farming business. In the early 1990s coffee prices were very low on the world market, which prompted the Huddas to phase out coffee and sugarcane in favour of vegetables and flowers (horticulture) for the export market.

Initial trials in horticulture started in 1994, with French beans, asparagus, courgette, chilli and Limonium flowers, but finally zeroed in on roses and three vegetables - courgette, chilli and okra. Currently, the farm is still owned by the family, cultivating about 50 hectares of the total land, 30 of which are dedicated to vegetables. In 1996 Mairye Estates started exporting vegetables from its own production. The farm employs a total of 700 people of which 120 are involved in vegetable production, 100 in chrysanthemums cuttings, and 480 in roses.

In 2004 Mairye Estates established a subsidiary, Farm Fresh. Mairye Estates currently owns 99% of Farm Fresh with 1% reserved for the out-grower farmers. The goal is for out-grower farmers to own 40% of the shares in the future. Farm Fresh works with 200 smallholder farmers located within a radius of about 10km from Mairye Estates, and intends to include another 100 smallholders next year. The farmers are divided into two groups that have been registered with the district authorities as Community-Based Organisations. Two new groups are in the process of being organised.

In the supply chain partnership Farm Fresh is responsible for organising and coordinating smallholder farmers to produce chilli under a buy-back arrangement. Besides organising the farmers, Farm Fresh also provides inputs (on credit), technical assistance and training, and sells the vegetables to Mairye Estates. Mairye Estates is responsible for the export and quality control, and as such has obtained certification for HACCP, EUREP-GAP and ISO-9002.

**Figure 3.1: The Mairye Estates Supply Chain**

<i>Actor/level</i>	<i>Specification</i>	<i>Main Activities</i>	<i>Support organizations &amp; vertical integration</i>
<i>Out-growers</i>	<i>200 smallholder farmers</i>	<i>Organizing community-based organizations</i>	<i>Support from FarmFresh and farmers association (?)</i>
		<i>Renting/clearing the land</i>	
		<i>Ploughing/sowing seeds</i>	<i>Assistance from FarmFresh</i>
		<i>Fertilizer/pesticide/etc.</i>	<i>Provision by FarmFresh (on credit)</i>
		<i>Harvesting the crop</i>	
<b><i>Farm Fresh</i></b>	<i>JV between Mairye Estates and out-growers (CBOs)</i>	<i>Drawing up contracts with out-growers and providing them with necessary inputs</i>	<i>Training received from AMA (fin. By CordAid)</i>
		<i>Procurement of inputs (seed, chemicals, tractor, etc.)</i>	<i>Mairye Estates</i>
		<i>Providing technical assistance to out-growers</i>	<i>Training received from AMA (fin. By CordAid)</i>
		<i>Quality control and advice on use of chemicals</i>	<i>Training received from PIP</i>
		<i>Transport to Mairye Estates</i>	<i>Mairye Estates</i>

<b>Mairye Estates</b>	<i>Exporter / lead firm</i>	<i>Certification of out-growers and responsible for all related administration</i>	<i>Support from IDEA during initial stages</i>
		<i>Drawing up production plans for out-growers</i>	
		<i>Buying produce from out-growers and paying farmers</i>	
		<i>Own vegetable production (okra, chillies, courgettes)</i>	<i>Support from IDEA during initial stages</i>
		<i>Processing, packing and cold storage</i>	
		<i>Transport to Entebbe and cold storage at airport</i>	<i>Fresh Handling (set up by IDEA-project)</i>
		<i>Handling export procedures</i>	
		<i>Dealing with importers and identifying new markets</i>	<i>Saturnalia (importer in UK)</i>

### 3.3 Processes within the Supply chain

#### Production

Mairye Estates is able to maintain its production throughout the year because it uses irrigation. Irrigation is too expensive for smallholders and this limits their production during the dry season. None of the out-growers uses irrigation. Mairye Estates compensates reduced smallholder production by increasing its own production.

Smallholder farmers also lack production skills. A combination of poor production skills and lack of irrigation results in low productivity of smallholder farmers. Mairye Estates has invested in skills development for the farmers, with the support of various development programmes and donor agencies. The contractual arrangement between Mairye Estates and the farmers is partly to ensure that the investment in skills development is recouped through buying back of the produce.

Chemical use and traceability requirements are difficult to comply with for the smallholder farmers. Mairye Estates purchases chemicals in bulk, which it distributes to out-grower farmers through Farm Fresh. This approach shortens the input-traceability chain and ensures that smallholder production meets certification regimes' requirements like the EUREP-GAP, HACCP and others. Smallholder farmers would not fill these requirements on their own. All of Mairye Estates' out-grower farmers must secure their chemical and seed requirements from Farm Fresh.

#### Marketing

The Farm Fresh out-grower scheme works on a buy-back basis with Farm Fresh buying from farmers and Mairye Estates performing the export function. There is no domestic market for products that do not meet the export quality standards. The export function is still limited to Mairye Estates because the company has a secure market and has been certified for EUREP-GAP, ISO 9002, HACCP and TESCO's Nature of Choice. TESCO carries out periodic field and pack house visits to ascertain that all the quality requirements are adhered to. Mairye Estates' vegetables are currently being exported to TESCO in the UK through Saturnalia and to High-Low in the Netherlands.

Figure 3.2 shows a matrix of the supply chain problems and the solutions adopted by the partner.

**Figure 3.2: Main Problems of the Mairye Estates Supply Chain**

Level	Problem	Reason	Adopted /possible solution	Solution provided by
Farmers	Lack of land	Land around Mairye Estates owned by big landlords	Out-growers rent land from landlords	Out-growers themselves
	Low productivity	Poor production skills	1. Training in production skills by ME and AMA 2. Provision of technical assistance by Farm Fresh	Mairye Estates, with the support of CordAid
		Lack of irrigation facilities	Remains a challenge	??
Farm Fresh	Use of wrong chemicals by out-growers	Farmers did not know the right chemicals to use and where to source them from	Mairye Estates buys chemicals and distributes them to out-growers through Farm Fresh	Mairye Estate
Mairye Estates	Lack of / poor quality produce from smallholder farmers during dry seasons.	Low production and poor quality produce by smallholder farmers during the dry seasons due to lack of irrigation system	Mairye increases its own production during dry seasons	Mairye Estates
	Difficult to organize out-growers	No tradition of commercial farming	Mairye Estates formed Farm Fresh to organize and co-ordinate out-growers	Mairye Estates
	High airfreight costs	High taxes on aviation fuel??	Still pending	Government of Uganda
Mairye Estates / Farmers	Low labour productivity	1. Lack of mechanisation of production methods 2. Lack of agric. know-how and access to inputs 3. Lack of market incentives to increase production 4. Most farmers do not think in an entrepreneurial way	1. Monetary and non-monetary production incentives have been offered to all workers at Mairye 2. Out-growers can double their cash income by taking part in the supply chain 3. Training and agric. inputs	Mairye Estates
All levels	EU certification requirements	1 Changes in market entry requirements by the EU 2. High certification costs	1. Reduction of individual farmer requirements by centralizing input purchases and record-keeping 2. Mairye Estates pays for certification	Mairye Estates, with assistance from CBI

### 3.4 Support System

The supply chain for fresh vegetable exports set up by the lead firm Mairye Estates Ltd. can only function adequately thanks to the support system, which has been created to organise and strengthen the chain. We can distinguish two types of support: internal and external. An internal support system has been set up by Mairye Estates and is mainly focused on meeting production requirements set by the export market. This internal system has been described in the previous section and includes production planning, input supply, technical assistance, training and guaranteed market access based on a quality control system. These are elements of vertical integration in the supply chain.

The Mairye Estates supply chain and its internal support system have received different kinds of external support, varying from specific tailor-made technical assistance to donor funding for training and certification procedures. This external support includes:

- The USAID funded Export Policy Analysis and Development Unit (EPADU) - support for initial vegetable and flower trials.
- The USAID funded IDEA project – development activities following from EPADU trials
- A loan from CordAid for the development of physical infrastructure in the field (Collection sheds etc.) and part of certification costs at an interest rate of 6% p.a.
- A 50-50 matching grant from Cord Aid for training smallholder farmers and organizing them into productive units

Mairye Estates developed all the systems in a comprehensive way, implementing what was required for business growth. The systems meet market requirements. Mairye Estates has already been certified for EUREP-GAP, TESCO's Nature of Choice, HACCP, ISO 9002 and is applying for BRC certification. The following systems are currently in place:

- An out-grower's skills development and technical support system, to ensure farmers are able to improve on their quality to meet export requirements
- A records system on traceability based on EUREP-GAP
- A production plan that involves 50 of the 200 out-growers at any time
- A good agricultural practices (GAP) system that ensures quality of the products demanded by the market
- An inputs purchase and distribution system that guarantees out-growers an access of all the inputs that they require
- A produce collection and delivery system that is able to collect all the out-grower's produce and package it for the export market

### **3.5 Current Situation and Future Prospects**

#### **3.5.1 Expansion Plans and Growth Potential**

Presently Mairye Estates is shipping 5-6 tonnes of fresh vegetables per week, which is well below their available market of 10-12 tons per week. The main reason is the low number of out-growers and lack of continuous supply due to unstable production levels. Mairye Estates' annual turnover in fresh vegetables is in the region of US \$ 500,000-600,000 with plans to increase exports to 25 tonnes per week during 2006/07. However, this will depend on the degree to which they are able to increase both their own production and the supply of fresh vegetables from out-growers.

Eventually Mairye Estates would like to purchase 80% of its vegetables from smallholders. However, because of smallholders' inability to ensure a consistent supply, the short-term plan is to purchase 60% from out-growers during the wet season and 20% during the dry season. The preferred option of outsourcing most of its sales will only be possible if out-growers improve the reliability of their supply. This would be much easier to ensure if they had access to irrigation.

Mairye Estates is currently building a new pack-house – partially financed by a grant from the Dutch PSOM programme – which will increase their production capacity considerably as of next year. They are also looking at new export opportunities in the UK and the Netherlands, mainly focusing on different types of baby vegetables, pre-packed and labelled for the retailer. This will probably generate more employment and possibly lead to higher farm gate prices for new vegetable varieties.

### 3.5.2 New Market Opportunities

Mairye Estates has formed an alliance with a South African vegetable exporter to supply TESCO in the UK. This way the importer in the UK can ensure an all-year round consistent supply by buying more from South Africa or in Uganda depending on where the supply is bigger. For Mairye Estates this has the added advantage that they have been able to penetrate the relatively large domestic market in South Africa and are now supplying Woolworth's.

According to the managing director of Mairye Estates, there is a potential to supply the US market with baby vegetables. This is based on the high labour costs involved in harvesting baby vegetables, which could give Uganda a competitive advantage over other countries. However, the import restrictions and quality requirements in the US are even stricter than in Europe, so that this will not be easy to achieve.

Currently the United States Department of Agriculture has an expert in East Africa who is analysing market opportunities of fresh fruit and vegetables in the US, with regard to the food safety requirements that apply. Despite the fact that Uganda already exports fresh fruit and vegetables to the EU, a recent report still notes some minor phytosanitary problems and expresses doubts about the country's ability to meet quantity requirements vis-à-vis the US market<sup>8</sup>. Provided these constraints can be overcome, the report sees opportunities for chillies, okra, passion fruit, banana (*matooke*, *ndizi*) and dried fruit.

Market diversification and creation of horizontal linkages with similar companies both in Uganda and in other African countries (e.g. Kenya or South Africa) are two growth strategies, which Mairye Estates can implement to reduce its excessive dependency on the EU market and benefit from economies of scale. Especially the Kenyan option seems promising, taking into account the much larger scale of some of the major Kenyan exporters, and their wider access to different markets.

Another option which should be looked into is the domestic market. At present, Mairye Estates is only focusing on the export market and as a result when production exceeds the demand from their importers they have no alternative outlet for these products. Admittedly the domestic market is quite small for the kind of vegetables Mairye Estates produces, particularly chillies, but this may change as supermarkets, hotels and restaurants that cater to consumers with above average purchasing power increase their market share. This would however also require more product diversification by Mairye Estates to be effective.

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<sup>8</sup> Corning, Husnik & Picha "Opening the Gate to US Markets for African Fresh Horticultural Exports" (2004).

### 3.5.3 Benefits for the Smallholder Farmers

Based on an interview with one of the farmers producing chillies for Mairye Estates, it appears that the out-growers can increase their income considerably by cooperating with Farm Fresh. The following information applies to one acre of chilli production.

**Table 3.2: Estimated production costs for chilli out-grower**

Production stage	Costs	Paid/advance by:
Land rental	60,000	Paid by farmer
Land clearing	40,000	Paid by farmer
Seeds	-	Provided by Mairye Estates
Ploughing	25,000	Provided by Mairye Estates on credit
Fertilizers	15,000	Provided by Mairye Estates on credit
Pesticides/insecticides	30,000	Provided by Mairye Estates on credit
Weeding	75,000	Paid by farmer
Harvesting	80,000	Paid by farmer
Transport to Mairye Estates	-	Provided by Mairye Estates
<b>Total costs</b>	<b>325,000</b>	

Each harvest has an average yield of 1,000 kg. per acre, which means 2,000 kg. per acre based on two harvests per year. At Ush 500/kg this gives a revenue of Ush 1,000,000 per acre. The production costs would be no more than Ush 550,000, as the rent and land clearing costs only apply once a year. This gives a gross margin of Ush 450,000 per acre. The farmer has rented about 2 acres, which means that he can expect a gross profit of Ush 900,000 over a period of 9 months, in other words Ush 100,000 per month<sup>9</sup>. This is more or less equivalent to his monthly salary as a schoolteacher.

It would be interesting to carry out a gross margin/cost-benefit analysis of out-growers taking part in the Mairye Estates supply chain and compare their financial benefits with farmers in the same area but operating outside the supply chain. Such a quantitative analysis was not within the scope of this study.

Other benefits that smallholder farmers can obtain from co-operating in the supply chain are access to training and pre-financing. Furthermore, a better understanding of sustainable agricultural production, quality requirements and the whole way the supply chain is structured, creates awareness among farmers that they have to adapt to be competitive. In the long run this can help change their mindset from subsistence farmers to entrepreneurs.

### 3.5.4 Sustainability of the Supply Chain

As stated in paragraph 3.2, Mairye Estates started producing and exporting vegetables in the mid 1990s, as a response to the low prices of coffee and sugar on the world market. The support they received from the EPADU and IDEA projects was no doubt an important factor in this decision. The fact that they started working with out-growers and set up Farm Fresh in 2004 indicates that they are satisfied with the return on their investment so far and optimistic about the future prospects.

<sup>9</sup> Most smallholder farmers lack irrigation and thus can only produce during 9 months of the year.

However, at present their annual turnover is too small relative to the costs of the certification and the related changes in their internal work procedures. According to information from the farm manager these costs are at present nearly 10% of their turnover. Their plans to increase their export volume to 25 tonnes per week in the next 2 years will significantly improve the cost-benefit ratio of their quality system.

This increase in their sales volume is partly made possible by a contribution from the Dutch government (in the PSOM-programme) in the investment costs of setting up a new pack-house. At the moment, training of the out-growers is co-financed by CordAid. However, once the pack-house is built and the farmers are trained, the supply chain should be sustainable without external support. A crucial aspect in the success of the expansion plans will be the ability to increase the number of out-growers without sacrificing quality. Future training costs should be borne by Farm Fresh.

The benefits for the out-growers are quite clear and at present there appears to be a strong interest from other farmers to enter into the Farm Fresh arrangement. However, Mairye Estates is quite cautious about expanding the number of out-growers too quickly because of the risks involved. The main constraints from the side of the farmers are financial, organizational and entrepreneurial.

1. Lack of financial means is a problem, despite access to pre-financed inputs from Mairye Estates, most farmers do not have access to irrigation, which limits their year-round production capacity.
2. Organisation is necessary to reduce co-ordination costs and risks in the supply chain. Mairye Estates prefers working with out-growers who are organised as Community-Based Organisations and this usually calls for external support.
3. In general, Ugandan smallholder farmers do not have an entrepreneurial attitude. They tend to produce for their daily needs and not plan for the future. The co-operation with Mairye Estates requires extra effort and some initial investment as well as risk-taking on the part of the out-growers, which does not come naturally to most farmers.

Thus, despite the clear benefits for out-growers there are also risks for them – for instance, when their harvest fails due to lack of rain – but the risk (and potential gains) for Mairye Estates is much bigger. As a result, the stakes are higher for Mairye Estates and thus their commitment to the success of the supply chain is stronger. The challenge for Mairye Estates is to strengthen the commitment of the out-growers over time.

## **4 FRUITS OF THE NILE**

### **4.1 The Dried Fruit Sector in Uganda**

In the Ugandan context, the dried fruit sub-sector falls within the horticultural sector. This sector is now seen as important contributor to the Ugandan economy. Exporters of dried fruits from Uganda are still limited in number, with most of them undertaking their own processing leading to very short marketing chains. Exporters who outsource the production usually work with small-scale producers and processors.

There are no reliable official statistics relating to the production and export of dried fruit from Uganda. The two major exporters of dried fruit from Uganda are Fruits of the Nile and Amfri Farms, who exported 70 and 4.3 tonnes respectively in 2004. Private sector sources have also indicated that dried fruit exports from Uganda did not exceed 90 tonnes in 2004. This information could not be verified with any official source.

Fruits of the Nile enjoys a large share of the dried fruit market along with Amfri Farms, although the two sell to different market segments as Amfri concentrates on the organic sector with very little of its product being exported under the natural label. Other players in the Ugandan dried fruit export market include Masaka Organic Producers, Tropical Ecological Foods Uganda, Flona Commodities, Uganda Marketing Services, Sulma Foods and new entrants like Envalert Limited.

During discussions held with both Fruits of the Nile and Amfri Farms, both firms indicated that they were unable to meet current demand and are in the process of undertaking activities to increase their supply base. Amfri Farms is looking at the option of outsourcing some of its fruit-drying activities to mango producers in the West Nile region, with the support of SNV.

### **4.2 History of the Fruits of the Nile Supply Chain<sup>10</sup>**

Fruits of the Nile was founded by the two directors Adam Brett and Angello Ndyaguma and began its trading activities in the early 1990s. The company was established to take advantage of the trading opportunities between the ACP and EEC countries due to tax incentives and reduced or no tariffs in the EU market. Operations are carried out from their office in Najjanakumbi, a suburb of Kampala.

The initiators prepared a business plan and carried out a survey of the market for dried fruit in the UK and found consumption to be on the rise. This provided them with the incentive to focus on a product that was already widely produced and could be processed in Uganda, as well as being relatively easy to ship overseas.

Pineapple and apple bananas (ndizi) were the first fruits to be processed. The initial shipments were air freighted to the UK. The company later found shipping by sea to be more cost-effective. Fruits of the Nile currently exports mainly dried apple banana and pineapple, which account for 85% of their total sales while the rest is made up of

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<sup>10</sup> This section and the rest of this case description is based on interviews with Angello Ndyaguma, Paddy Mwesigwa and Sam Mugisha (the latter two both dried fruit suppliers of Fruits of the Nile). Additional information was sourced from the Tropical Wholefoods website and a study by Blowfield & Malins of NRI.

Cavendish bananas (bogoya), papaya and chilli peppers and oyster mushrooms. Sales have shown a slow but steady growth from 25 tonnes in 1995 to 40 tonnes in 2000 and to a volume of 70 tonnes in 2004.

Initially their products were mainly sold from market stalls in the UK. In due course, with active promotion from Brett and his wife, some retailers, mainly health food stores and Oxfam fairtrade shops, picked up interest in the dried fruit supplied by Fruits of the Nile. However, the hope that UK importers and wholesalers would be willing to buy their product in bulk was not confirmed, mainly due to their relatively high price, as well as problems in packaging and quality control. This prompted Brett to form Tropical Wholefoods, to act as the UK buyer of Fruits of the Nile-products.

Tropical Wholefoods was based in the United Kingdom and registered as a fairtrade buyer. About 40% of Fruits of the Nile products are still sold through the fairtrade network. In 2001, Tropical Wholefoods merged with FM Foods, a food processing and distribution company in the UK, with which Tropical Wholefoods had already collaborated since 1995. This raised the quality standards for Fruits of the Nile, as FM Foods has both HACCP and BRC certification. It also increased the demand for products from Fruits of the Nile.

**Figure 4.1: Description of the Fruits of the Nile Supply Chain**

<i>Actor/Level</i>	<i>Specification</i>	<i>Main Activities</i>	<i>Support Organisations &amp; Vertical Integration</i>
<i>Fruit Producers (not integrated in the supply chain)</i>	<i>Unspecified</i>	<i>Planting, crop husbandry and harvesting</i>	<i>NAADS and others</i>
<i>Fruit Producers &amp; Dryers</i>	<i>110 individuals in 85 sites, some formed in groups</i>	<i>Fruit production</i>	<i>Fruits of the Nile Training</i>  <i>Organic production and certification (Shell Fund)</i>
		<i>Fruit procurement</i>	<i>Fruits of the Nile Training</i>
		<i>Preparation of fruit</i>	<i>Fruits of the Nile Training</i>
		<i>Construction of solar drying equipment</i>	<i>Technical assistance and basic materials from Fruits of the Nile</i>
		<i>Drying of fruit</i>	<i>Fruits of the Nile Training and Pre-finance of solar dryers</i>  <i>AVSI, EDF, ACORD – drying equipment and group formation</i>
		<i>Bulk Packaging</i>	<i>Fruits of the Nile Training, Supply</i>
		<i>Transportation</i>	<i>Fruits of the Nile Training</i>
<i>Maintenance of dryers</i>	<i>Fruits of the Nile Technical Assistance</i>		

<i>Actor/Level</i>	<i>Specification</i>	<i>Main Activities</i>	<i>Support Organisations &amp; Vertical Integration</i>
<i>Exporter</i>	<i>Fruits of the Nile</i>	<i>Buying of dried fruit</i>	<i>NRI, EPADU, IDEA – Development of drying technology</i>  <i>Gatsby Trust Fund – Funding for new plant</i>  <i>Production Planning with FM Foods</i>
		<i>Sorting &amp; Grading</i>	
		<i>Payments to dryers</i>	
		<i>Repackaging</i>	
		<i>Shipping to UK buyer</i>	
<i>Importer</i>	<i>FM Foods (UK)</i>	<i>Import</i>	<i>Promotion through the fairtrade Network.</i>  <i>Advice on quality control and packaging.</i>  <i>Certification – HACCP, EUREP-GAP, BRC</i>  <i>Production Planning</i>
		<i>Buying Plans</i>	
		<i>Grading &amp; Sorting</i>	
		<i>Retail packaging</i>	
		<i>Distribution to retailers</i>	
<i>Retailers (UK)</i>	<i>Mainly health food and fairtrade shops</i>	<i>Retail sales</i>	<i>Promotion of dried fruit consumption.</i>

### 4.3 Processes within the Supply Chain

#### Fruit Production

The supply of sufficient fresh fruit is a weak link in the supply chain. Most dryers have their own plots of land where they produce bananas and in some cases also pineapples, papaya or mangoes. However, they are all to some extent dependent on supply from other farmers, which is always unstable, often unreliable and in some cases expensive.

This aspect has not had much attention from Fruits of the Nile, under the assumption that there is adequate fruit production in Uganda. Although this is no doubt true, that is not always the case for each of solar processing units, in any location or at any time. A case in point is the women's group set up by ACORD in Kyeirumba (Mbarara), which at present has to buy fruit from across the border in Tanzania to meet its requirements. Besides increasing the cost, this has implications for the quality of the fruit.

At the level of Fruits of the Nile the obvious solution seems to be expanding their supply base by including new suppliers. However, this requires careful selection, training and support to set up new solar dryers, which cannot be done indiscriminately. Another option would be to include some kind of technical assistance in the supply chain to stimulate fruit production or cost-effective sourcing by their suppliers from other fruit producers.

## **Fruit Drying**

Fruits of the Nile does not have its own drying capacity. All the dried fruit is procured from its suppliers who are either groups or individuals owning drying equipment. The suppliers are selected on the basis of their willingness to invest in the drying and production equipment, profitability of the enterprise in relation to others, availability of fresh fruit in the vicinity and willingness to act as supplier to Fruits of the Nile.

Once the two parties agree to work together, Fruits of the Nile supports the supplier in the construction of a solar dryer. This support is usually in the form of materials such as plastic sheeting and mesh. This material is supplied on credit and costs are deducted by Fruits of the Nile from future payments. Fruits of the Nile also provides the services of an experienced technician for the actual construction of the dryers.

The producers are trained by Fruits of the Nile in all aspects of fruit drying, including selection and preparation of fruit, quality control and hygiene systems. Once the fruit is dried, the producer sorts and packs the fruit in bulk packages, which are then transported either by the individual processor or by the group leader. The dried fruit is received by Fruits of the Nile at their premises in Kampala. Fruit is sorted based on standards set by Fruits of the Nile. Rejects are returned to the supplier and payment is only made for product that meets the minimum quality standards.

Fruits of the Nile sorts the dried fruit and re-packs it in smaller plastic packages, which in turn are packed in carton boxes. These cartons are put in 20 ft. containers for shipment by sea via Mombassa. Due to the amount of empty space in the boxes, each container only takes about 6 metric tonnes of dried fruit.

## **Marketing**

Fruits of the Nile sells its dried fruit exclusively to Tropical Wholefoods, which later merged with FM Foods, a processing and distribution company based in Sunderland. After initially selling directly to consumers at street markets and festivals, Tropical Wholefoods began to sell wholesale to health food shops and later also fairtrade shops. Marketing in the UK market is currently done by FM Foods. The dried fruit is repacked to the requirements of the retailers and sold to consumers through health food and fair-trade shops, supermarkets and other small independent retail outlets.

Despite the attention Fruits of the Nile and Tropical Wholefoods attracted right from the start, marketing and product promotion was not easy. NGO and donor support was focused mainly on production, i.e. the drying of the fruit, and not so much on the marketing side. As a result Fruits of the Nile has not been very successful in penetrating the mainstream (super) market. This may change now that Tropical Wholefoods has merged with FM Foods and Fruits of the Nile are gearing up to move to their new packing and handling plant near Jinja.

The main bottlenecks and solutions to these problems that occur in the Fruits of the Nile supply chain are shown in the table on the following page.

**Figure 4.2: Problem-Solution Matrix of the Supply Chain**

<i>Level</i>	<i>Problem</i>	<i>Reason</i>	<i>Possible Solution</i>	<i>Fruits of the Nile Approach</i>
<i>Farmer (Production)</i>	<i>Low yields</i>	<i>Weather patterns, disease (e.g. banana wilt)</i>	<i>Production planning</i>  <i>Use of better varieties if available</i>	<i>Training in better husbandry, production planning. Liaise with research institutions.</i>
		<i>Lack of inputs, cost of inputs</i>	<i>More appropriate inputs</i>	<i>Cost benefit analysis - demonstration</i>
	<i>Low quality</i>	<i>Lack of proper maintenance</i>	<i>Better maintenance, promote better quality production</i>	<i>Training and constant monitoring by Fruits of the Nile staff</i>
		<i>Lack of awareness</i>	<i>Increase awareness</i>	
<i>Dryer (Processing)</i>	<i>Low quality</i>	<i>Poor quality control and hygiene, damaged raw material</i>	<i>Improved quality control and product procurement. More importance to hygiene.</i>	<i>Constant monitoring by staff, and graphic description of quality control and hygiene systems if required (Posters)</i>
	<i>Low Productivity</i>	<i>Unplanned production activities</i>	<i>More integrated planning with Fruits of the Nile</i>	<i>Increase involvement of producers in planning process.</i>
<i>Exporter (Grading, packaging &amp; shipping)</i>	<i>Inability to meet growing demand</i>	<i>Low supplier base. Lack of adequate pack house facilities</i>	<i>Increase supplier base, pack house under construction</i>	<i>Scout for other possible suppliers. Horizontal integration with other exporters or processors</i>
	<i>Quality issues</i>	<i>Inability of suppliers to meet quality standards</i>	<i>Training of suppliers, more monitoring</i>	<i>Training and monitoring</i>
	<i>Costs of air shipments</i>	<i>High level of taxation on aviation fuel</i>	<i>Lobbying with Government of Uganda along with other exporters</i>	
	<i>Highly dependent on sole buyer</i>	<i>No active plans to widen markets</i>	<i>Actively seek out other market opportunities, organic certification will widen market opportunities</i>	<i>Prepare a marketing strategy</i>
<i>Importer (FM Foods)</i>	<i>Lack of adequate supply</i>	<i>Small exporter supplier base</i>	<i>Support exporter in increasing supplier base.</i>	<i>Liaise with buyer to plan increase in supplier base</i>
<i>Retailer</i>	<i>Lack of adequate supply</i>	<i>??</i>	<i>??</i>	<i>??</i>

## **4.4 Support System**

### **Organization of the Suppliers**

Fruits of the Nile has received quite a lot of support along the way, though only after the initial stages of experimentation with solar dryers and markets. When they were ready to start production, several development agencies (ACORD, AVSI and EDF) provided support to cover start-up costs, as well as helping to organize farmer groups. Of these farmer groups only the one set up with the help of ACORD in Kyeirumba (Mbarara) has survived. In general, their experience with groups has not been very good.

The focus is now more on so-called progressive farmers, in some cases with a group of related farmers that co-operate for the sake of increasing their sales volume. However, in these cases Fruits of the Nile only deals with the lead farmer. Such is the case of the Rwentobo Solar Fruit Drying Group near Mbarara, which consists of 16 farmers all located within 10 km around the lead farmer.

### **Appropriate Technology and Quality Control**

Over the years Fruits of the Nile received technical assistance from different quarters to find the appropriate technology for their suppliers. In 1995 two technicians were funded by NRI (National Research Institute) to assess and improve the solar drying process. They organized several training seminars on solar drying, together with the Ugandan agricultural research institute KARI.

In 1997, they received technical assistance from the USAID-funded EPADU (Export Promotion and Development Unit), but the equipment they designed did not turn out to be an improvement on what they were already using. EPADU also introduced chilli peppers as a new product in the Fruits of the Nile product range, which they continued to produce and export till 2003, when they had to stop due to quality problems.

In 2000, the training process was deepened through an EU-sponsored food safety and quality control programme, which was carried out by a South African agency, CSIR-Foodtek. Fruits of the Nile staff and selected fruit processors were trained in HACCP management. Oxfam Trading supported this process financially.

### **Production of Dried Fruit**

All the dried fruit producers have received initial and refresher training courses on solar drying. Most of the training was provided directly by Fruits of the Nile staff members. Some dried fruit suppliers received training from other sources. For instance, farmers in the Mbarara area were trained in drying mushrooms by the Uganda National Farmers Association (financed by TRIAS). However, due to lack of water and market outlets this activity was not successful and they have since abandoned it.

The lack of supply of fresh fruit at certain periods of the year is a clear constraint, both for the producers and for Fruits of the Nile. None of the producers in the Mbarara area have received any technical assistance aimed at increasing their production. Thus, a programme aimed at increasing the fruit production in those areas where it has potential could strengthen the supply base of the fruit dryers and hence Fruits of the Nile.

Fruits of the Nile can also increase its supply base by increasing the number of suppliers from which it buys fruit. In this respect they are competing with other dried fruit exporters, in particular Amfri Farms. The two firms have a gentleman's agreement not to poach each others suppliers, however as yet they are not collaborating directly. This may be an interesting opportunity for them to join forces and present a joint action plan to a support agency, to promote fruit production and processing in remote areas<sup>11</sup>.

## **Marketing**

Although Fruits of the Nile has increased its exports constantly, this has not been easy. Donor support has concentrated on the dried fruit processing, i.e. the solar dryers. The marketing of the dried fruit was left to Tropical Wholefoods, which was often strapped for cash to expand their promotion activities. The main support they received in this sense was in obtaining access to the fair-trade market, at least in the UK and Ireland.

At present, Fruits of the Nile has an excellent relationship with FM Foods in the UK, whose representative undertakes several visits to Uganda each year. Similarly, Fruits of the Nile maintains a good relationship with their suppliers by making regular visits to each of the drying sites. Fruits of the Nile is now in the process of training their producers in organic production and processing and will eventually have them certified.

## **4.5 Current Situation and Future Prospects**

### **4.5.1 A Success Story with Growth Potential**

Since it started in 1992, Fruits of the Nile has been able to increase its export volume from 5 tonnes to about 70 tonnes last year. At a sales price of about US\$ 4,000 per tonne that represents an annual turnover of US\$ 280,000. With the new pack-house they are building in Jinja, their handling capacity will increase to 200 metric tonnes. This building has been financed with a grant from the Gatsby Trust Fund, however they still need some additional financing to be able to finish the construction.

They are currently working with 110 solar dryers located at 85 different sites, most of them in Mbarara and Kayunga. They would like to expand their supply base in order to increase their export volume, but are wary of allowing in any new applicants. Experience has taught them to be selective in going into business with new suppliers of dried fruit, as this involves quite an investment in money and time.

The drying technology promoted by Fruits of the Nile is basic and has been adapted to suit the needs and conditions of their suppliers. At this point in time it still serves its purpose, but in the future it may have to be adapted again to meet the standards of importing countries. A specific option that they are looking into is the possibility of introducing more sophisticated solar dryers with fans that are powered by solar energy, to speed up the drying process.

The major area of concern for Fruits of the Nile is the quality of the produce they receive. Inconsistent quality forces them to reject some of the produce, which has a negative effect on the income and motivation of the suppliers. Though suppliers have

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<sup>11</sup> Amfri Farms is already discussing such a public-private partnership to promote solar drying of mangoes in the West Nile region, with the support of SNV and the National Farmers Association.

received training in quality control and hygiene, this requires constant follow-up. Inability to meet the growing demand from their buyer is another area that needs attention. Fruits of the Nile are constantly identifying new suppliers.

The fact that Fruits of the Nile does not have its own production capacity makes it vulnerable to unpredictable fluctuation in supplies, leading to shortfalls in the volume and quality of the produce they can procure. This may be an issue that Fruits of the Nile will have to tackle head-on if they want to continue increasing their output as they have been doing over the years. To start off with, they will need to improve their production planning and monitoring system, involving the dryers in the process.

This may also be an area where the different dried fruit exporters in Uganda may be able to work together to get government support for providing much-needed technical assistance to farmers, e.g. through NAADS. Donor support should focus on promoting an entrepreneurial attitude among farmers by taking an example from those ('progressive') farmers that are already operating their farms as a business, as well as access to finance for obtaining the necessary inputs.

#### **4.5.2 New Market Opportunities**

Fruits of the Nile's activities in the areas of organic certification and construction of a new pack-house near Jinja focus on future market requirements. The new pack-house will provide them with the necessary quality and hygiene requirements to meet the fast changing standards of their markets. Organic certification of production will enable them to access previously unexplored markets. At present practically all the fruit is produced without using chemical inputs, but neither the farmers nor the solar dryers have as yet been organically certified.

The fact that FM Foods and is currently sourcing dried fruit from other countries such as Pakistan (apricots) and Burkina Faso (mangos and tomatoes), is a clear indication that there is still potential to increase sales volume. However, at the same time the production, transport and handling costs of dried fruit from Uganda is quite high, as mentioned on the website of FM Foods. This may eventually lead them to focus more on West Africa where for instance transport costs are much lower.

Thus, while looking for ways to increase production and reduce costs through economies of scale and to improve product quality, new market opportunities should also be looked into. At present, Fruits of the Nile is selling exclusively to FM Foods, which concentrates mainly on the UK, and to a lesser extent, the EU market. Other interesting markets may include the Middle East or South Africa. These can either be accessed through importers in the relevant countries or exporters with access to markets in those countries (which may include FM Foods).

#### **4.5.3 Benefits for the Fruit Producers**

Despite the limited scale of the operations of Fruits of the Nile, it has definitely had a positive impact on all those involved in the supply chain, from the fruit producer, via the solar dryer, to the people involved at the packaging and export level. Probably the most favoured group in this case are the solar dryers who can increase their cash income, as well as providing opportunities for capacity building and work satisfaction.

Assuming that each individual solar dryer provides work to about 5 adults, this implies that about 550 people are directly involved at this stage. This obviously does not take into account the increased demand for fruit as a result of the solar drying activities. However, in view of the relatively small volumes of fruit that they process currently, the impact on fruit production is probably not very big, although it may have led to some additional on-farm investment.

According to a Natural Resources Institute case study, a group member processing apple bananas can earn about US\$ 250 per year net, while returns on pineapple and papaya are slightly higher<sup>12</sup>. If the processors can produce the fresh fruit on their own farm the profit is even higher. Our own estimate for a progressive farmer with four solar dryers in the Mbarara-region, suggests that his gross profit may be as high as US\$ 325 per month, provided that he produces all year round. As most of the labour is provided by his own family members, who would otherwise be unemployed, his effective increase in cash income would not be much less than that<sup>13</sup>.

At the level of Fruits of the Nile, the supply chain has also created some employment for women who repack the dried fruit at their Kampala based collection centre. Last but not least, the director of Fruits of the Nile and his assistant have obviously benefited from the success of the supply chain, to the extent that they have also been involved in other consultancy activities. Thus, the intangible gains from the Fruits of the Nile experience, in terms of accumulated knowledge and experience, may actually outweigh the monetary gains of all those involved.

#### **4.5.4 Sustainability of the Supply Chain**

In view of the above and taking into account the expansion plans that Fruits of the Nile together with their importer in the UK have embarked on, the future prospects seem quite positive. A crucial pre-condition however, is their ability to increase their supply base to meet the increased demand and take advantage of the increased capacity of their new packing facility in Jinja. This is easier said than done and will require a concerted effort on the part of Fruits of the Nile management. The same applies to their efforts to achieve organic certification of their suppliers. Especially in the initial stages they may require some support in this respect, similar to the support Amfri Farms has received.

In terms of benefits for the suppliers, availability of natural resources and environmental impact, the Fruits of the Nile supply chain definitely seems to be sustainable. The benefits for suppliers are clearly positive, as explained above, and demonstrated by the interest from other farmers to become suppliers as well. The availability of fruit should not be a problem on a national scale, though the harnessing of this resource base to Fruits of the Nile's dried fruit operations is still a challenge. Finally, by using solar power, Fruits of the Nile has introduced the local community to a renewable energy technology, at a very low cost with no negative impact on the environment.

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<sup>12</sup> M. Blowfield & A. Malins *Ethical Trade and sustainable Rural Livelihoods*, NRI (year?).

<sup>13</sup> Based on the following assumptions: Monthly production of 500 kg @ Ush. 2000/kg = Ush 1 mln. Purchasing price of 250 bunches of bananas @ Ush 1250 = Ush 312,500. Transport to Kampala = Ush 82,500. Depreciation costs (for 4 solar dryers) = Ush 50,000. => Gross profit = Ush 555,000/month.

## 5 GUMUTINDO COFFEE COOPERATIVE ENTERPRISE

### 5.1 The Coffee Sector in Uganda

Between 500,000 and 600,000 smallholders produce coffee in Uganda. In general, plots are very small, no more than 1 hectare per farmer and often less. Production is estimated at about 300 kg per farmer. Yields have been reduced due to lack of maintenance and renovation of coffee plants, as well as the negative effects of the *coffee wilt disease*. Intercropping is the rule among smallholder coffee farmers. Coffee is the primary source of income for around 2.5 million people in Uganda (10% of the population)<sup>14</sup>.

Coffee is still the most important export crop in Uganda, although its contribution to total export earnings has declined dramatically in recent years due to the price slump. From 1994-95, with 2.8 million bags generating US\$ 433 million in export earnings, exports increased to 4.2 million bags in 1996-97. Subsequently both export volume and earnings have declined to 2.6 million bags and less than US\$ 100 million in 2003/2004. This explains why the coffee industry in Uganda is now trying to develop niches that could fetch better prices and thus improve export earnings<sup>15</sup>.

**Table 5.1: Uganda Exports of Coffee**

COFFEE SEASON	QUANTITY (60 kg bags)	VALUE (US \$)
1990/91	2,085,004	121,343,113
1991/92	2,030,829	101,442,768
1992/93	2,088,642	108,873,991
1993/94	3,005,205	273,651,851
1994/95	2,792,753	432,651,033
1995/96	4,147,603	388,916,157
1996/97	4,237,114	355,126,641
1997/98	3,032,338	276,474,233
1998/99	3,647,989	283,010,348
1999/00	2,917,257	164,749,915
2000/01	3,074,773	104,776,424
2001/02	3,146,381	83,936,952

Source: Uganda Coffee Development Authority

Uganda exports primarily *robusta* coffee, but also some *mild arabica*. Ugandan *robusta* is important in the global market for its volume and because of its neutral flavour. There seems to be a slight trend towards more arabica and less robusta exports, due to a mixture of weak prices and the effects of *coffee wilt* on robusta output. Most robusta coffee is grown around Lake Victoria, between Masaka and Jinja, and on the lower Ruwenzori slopes. Arabica coffee is produced mainly on the slopes of Mt. Elgon, but also in the highlands of the West Nile, and in the mountain ranges of the western and south-western parts of the country.

<sup>14</sup> Most of the data in section 5.1 comes from Ponte & Kawuma (2003). Other sources include the COMPETE Project (2002) and Tallontire et. al. (2001).

<sup>15</sup> Although coffee prices have shown signs of recovery since the beginning of 2005, it is still too early to say whether prices will stabilize at these higher levels.

The European Union is the traditional market of Uganda coffee. In 2001/02, it accounted for 86% of total imports from Uganda. In that same year less than 1% of total exports were destined for the US market. When considering the market prospects for certified coffee, the European market would be the obvious target. Nevertheless, there may also be some potential for growth in the US as well emerging markets in the Middle and Far East.

The total world market of **organic coffee** in 2003 is estimated at around 26,400 tonnes<sup>16</sup>. Growth projections have been around 15% a year. Organic coffee exports are a relatively new phenomenon in Uganda. The first projects started in 1998. There are now five smallholder-based organic coffee projects, with a total of over 12,000 farmers. In the 2002/03, an estimated 2,240 tonnes were bought from farmers as organic coffee (29% *robusta*). Out of the total coffee procured as organic, 900 tonnes were exported as such (400 tonnes of which *robusta*, or 44%). In Uganda, prices of organic coffees are between 17-35% higher than regular coffee – both at the export and farm levels.

In 2003, some 20,000 tons of coffee was sold as fairtrade worldwide. The global market share of fairtrade coffee is still small (less than 1% in value, no more than 0.5% by volume). The estimated production capacity of the cooperatives and farmer organisations in the coffee fairtrade register may be as high as 100,000 tonnes. This could be interpreted as a large over-supply situation. However, some observers argue that having many cooperatives from a number of origins is actually good for fairtrade importers. In this way, they can choose among many different kinds of coffees and can be more demanding on quality. This is one of the reasons the overall quality of fairtrade coffee has improved in recent years.

In Uganda, two kinds of organisations are registered with FLO<sup>17</sup>. One is Gumutindo Coffee Cooperative Enterprise, which is supported by Twin Trading and handles only fairtrade *arabica* coffee from Mt. Elgon. The second group of organisations that are registered with FLO are 11 cooperative societies from the former Banyankole Kweterana Co-operative Union (BKCUC). These are located in the Southwest of the country, mostly in Bushenyi district. Their relations with fairtrade importers are coordinated by UNEX – a co-operative owned exporter. fairtrade exports from Uganda have been steadily increasing in the last three seasons, with 420 tonnes in the 2003/04 season (240 tonnes of which *robusta*).

## 5.2 Gumutindo Coffee Cooperative Enterprise (GCCE)

The Gumutindo coffee project was set up in 1998 by TWIN Trading, in partnership with BCU (Bugisu Coop. Union). The word *gumutindo* means ‘excellent quality’ in the local language. The project was formed in response to a decline in the quality of Ugandan *arabica* coffee in the wake of the liberalisation of the coffee trade. TWIN had been purchasing coffee from BCU since the early 1990s, but as of 1998 only buys from Gumutindo. As a result BCU has now lost its access to the fairtrade market<sup>18</sup>.

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<sup>16</sup> Coffee volumes are generally measured in bags of 60 kg or metric tonnes (1,000 kg).

<sup>17</sup> FLO is the Fairtrade Labelling Organisation, which is the umbrella organisation of the 20 National Labelling Organisations, responsible for the certification of fairtrade producers.

<sup>18</sup> BCU also used to sell to EZA in Austria, but it had already lost a lot of good will and hence sales in the fairtrade market by the time Gumutindo was created. Source: Tallontire et.al. (2001).

The aims of the Gumutindo project are:

- a) To ensure a reliable supply of the highest quality Mount Elgon coffee;
- b) To improve the reputation of Bugisu *arabica* coffee on the world market;
- c) To ensure that farmers are rewarded financially for their extra efforts.

To qualify for the project, farmers must have their own plot of land and demonstrate willingness to improve the quality of their coffee by practising traditional methods of cultivation and processing. In return for producing high quality coffee farmers are paid a higher price, based on the fair trade, and increasingly, on the organic premium.

GCCE started off with 50 individual farmers, as they were the most motivated at the time. Later two primary societies (PS) joined, which although they were producing without chemical inputs were not yet organically certified<sup>19</sup>. The two initial PS were Buginyanya and Busamaga. In 2003 two other PS joined: Bumayoga and Nasufwa, followed by Peace Kawomera in 2004 and just recently, the 6<sup>th</sup> PS came on board: Konokoi. Altogether they represent some 3,200 farmers, about half of which are organically certified and the rest are in transition.

Although GCCE is an independent company, they do not have their own processing facility, nor do they have their own export licence. Thus, they rent the dry processing facility of BCU and export through UNEX, but under their own name. Initially, Gumutindo exported coffee to TWIN Trading under BCU's FLO (Fair Trade Labelling Organisation) registration, but now they themselves are certified, so they can sell their coffee directly to TWIN or any other fairtrade buyer.

GCCE has steadily increased its sales volume year after year. In its first year (1998-99) they sold 1.5 containers to TWIN, two years later they were exporting 4 containers, and last year they exported 10 containers, including one to GEPA in Germany. This year they expect to export as much as 15 containers, including 3 to GEPA and one to Thanksgiving Coffee in the USA. However, in terms of quantities purchased, TWIN Trading is still by far the biggest.

So far GCCE has always paid a higher price to the PS than other buyers. They can afford this thanks to the fairtrade and organic premium they receive. The payment system is two-tiered, with a first cash payment upon receipt of the coffee, which is usually about Ush 200 above the price they could get from other buyers and a second payment at the end of the season, based on the net result of GCCE. The final payment is like an extra dividend, which takes into account the fairtrade-premium earmarked for social projects and a capital reserve for GCCE. The proposed distribution of the net result has to be ratified by the General Assembly.

The main actors at the different levels in the Gumutindo supply chain, their activities and the support they receive both from within and from outside the chain are shown in the matrix on the following page.

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<sup>19</sup> A primary (co-operative) society is the term which is used in East Africa

Figure 5.2: The Gumutindo Supply Chain

Actor/level	Specification	Main Activities	Support organisations & Vertical integration
<b>Individual farmers</b>	3000 farmers	Planting and pruning	UCDA (seedlings?)
		Compost preparation	GCCE-training
		Coffee production	
		Wet processing	GCCE-training
<b>Contact farmers at village level</b>	5-12 villages per primary society	Monitoring of organic production	GCCE-training & basic equipment provision
<b>Primary societies</b>	1. Buginyanya 2. Busamaga 3. Bumayoga 4. Nasufwa 5. Kawomera 6. Konokoi	Monitoring of organic production by field officers	GCCE-field officers and central supervision
		Buying and moisture control of coffee	GCCE-training & basic equipment provision
		Storing of coffee	
		Selling of coffee	Price information and cost structure training (GCCE)
<b>Cooperative enterprise</b>	Gumutindo Coffee Coop. Enterprise	Production planning (together with PS)	TWIN Trading (and other potential buyers)
		Buying of coffee	Price information (Twin)
		Supervision of dry processing by BCU	<i>Future plans for own dry processing plant</i>
		Grading of coffee	Conveyor belts(Agrilink)
		Marketing of coffee	TA from TWIN
		Facilitate fairtrade certification as a PO / producer organisation	1.Certification by FLO-Cert inspector in Uganda 2.Support from FLO-PSN liaison officer in Tanzania
		Organic certification	Certification by Eco-Cert
		Transport to port	
<b>Processor</b>	BCU	Dry processing	Supervision by GCCE
<b>Exporter</b>	UNEX	Paperwork	
<b>Importers</b>	TWIN GEPA InterAmerican	Buying of coffee at fairtrade prices and with organic premium	1. Transparent price info from fairtrade importer 2. Monitoring of importers by FLO (and IFOAM?)
<b>Roaster</b>	CafeDirect Thanksgiving	Roasting, blending, branding, packaging and marketing	Promotion of coffee by Fairtrade Foundation-UK as well as fairtrade Brands
<b>Retailers</b>	TESCO Oxfam Shops? Equal Exchange?	Selling the final product to consumers	Promotion of coffee by FT National Initiatives, as well as fairtrade brands
<b>Consumers</b>	In the UK, US and Germany	Buying coffee based on conscious choice	Promotion of FT coffee in general (by FT National Initiatives and other actors)

## **5.3 Processes within the Supply Chain**

### **Production**

The 6 primary societies that are currently supplying Gumutindo with parchment coffee have over 3,000 members, but only about half are organically certified. Two PS, with over a thousand affiliated farmers, are currently in transition and will soon be certified as well. The main problem however, is the low yield of most farmers. This is due to the age of the coffee plants, the lack of maintenance and intercropping. Some renovation of plantations has been going on, stimulated by the UCDA, but there is still a serious lack of seedlings and probably also awareness of the need to renovate.

Proper maintenance, including regular pruning, use of organic compost and weeding, is being stimulated by GCCE through a network of field officers who liaise with contact farmers. The contact farmers are responsible for advising and monitoring farmers in each of the villages that make up a PS on (organic) production methods. Contract farmer are not paid, but get some farm implements free of charge, such as pruning shears and boots. Gumutindo promotes alternative methods of pest control, such as the use of cow urine and natural herbs.

GCCE has set up a system of production planning in co-ordination with the primary societies, in which specific targets are set for each of the PS, from month to month. These targets are based on the contracts with buyers, expected output of the PS in each month of the harvest period, the time required for collecting, milling, sorting and shipping the coffee to its destination.

### **Processing**

An important factor in achieving high quality coffee is the processing. Over-fermentation due to untimely or imperfect wet processing, contamination of the parchment coffee by drying on the ground and other complications can seriously affect the quality and thus reduce the price or even make it unacceptable for the (high quality) market. GCCE has tackled this problem by providing training, assisted by TWIN, but there are still some problems in this respect. A limiting factor is the fact that all the wet processing is currently done by individual farmers and this leads to disparity in the quality level. Thus, GCCE would like to set up a wet processing plants at the level of the PS, in order to be able to exert more control over the process.

At the central level, dry processing of Gumutindo coffee now takes place separately from other coffee at the BCU mill. Although this seems to be an effective arrangement for the time being, it may pose a risk in the future. It makes GCCE dependent on BCU and as GCCE's financial situation improves while BCU's position deteriorates or stays the same, this could give rise to tension between the 'father' and 'son', so to speak. Therefore, GCCE would like to acquire its own dry processing plant in the medium-term, so as to be independent of BCU and ensure a high quality product.

### **Marketing**

At the marketing stage, GCCE is currently very dependent on TWIN Trading which buys about 70% of all its coffee. This is by all accounts a very advantageous

relationship for GCCE as all the coffee is sold at fairtrade premium price and about 40% with an organic premium on top of that. However, it does imply a risk if TWIN Trading should suddenly reduce its demand for some reason. Hence the fact that they are now also selling to other buyers in Germany and the USA is a positive development.

Another risk and self-imposed constraint at present is the exclusive dependence on fairtrade buyers. Although this has so far undoubtedly been to the advantage of all the actors in the supply chain, and very much so as a result of the low prices that have prevailed on the world market in recent years, this may not always be the case. This year world market prices seem to be on the rise, which challenges GCCE's operating efficiency, while at the same time offering new marketing opportunities. Considering the limited demand from the fairtrade market, in particular for organic coffee, a move towards other (niche) markets seems appropriate.

The main problems that exist at different levels are shown in the following diagram:

**Figure 5.3: Main Constraints in the Gumutindo Supply Chain**

Level	Problem / challenge	Reason	Possible solution	Gumutindo approach
Production (farmer)	Low yields	Age of plants	Renovation of plants	Stimulate creation of nurseries at PS-level
		Lack of maintenance	Better maintenance	Training and monitoring by contact farmers and GCCE-field officers
		Lack of fertilizer and other inputs	More inputs	Promotion of compost use and alternative methods of pest control
	Low quality	Use of wrong chemicals	Replace chemicals with other inputs	Encourage farmers to use organic farming methods
Processing (farmer)	Low quality	Disregard for basic rules during wet processing stage	Training of farmers in wet processing and drying on platforms	Some extension services through contact farmers and field officers
		Lack of proper equipment at the producer level	1. Ensuring use of proper equipment at the producer level 2. Wet processing at PS or GCCE-level	Setting up wet processing facility at the PS-level (future aim)
Buying coffee from farmers (PS)	Discussions about weight and quality	Insufficient awareness of moisture and quality issues	Promoting awareness of quality aspects and training on how to improve quality.	1. Use of calibrated scales and moisture meters 2. Briefing/training on quality issues
Buying coffee from PS (GCCE)	Changing prices on the local market	Changing prices on the world market	Being transparent on pricing and payment system and training on cost structure.	1. Close monitoring of world market 2. Providing insight into cost / price structure
	Insufficient capacity to buy more	Lack of working capital to increase pre-finance to PS	1. Increase rotation speed of capital 2. Access new source of finance	Pre-financing from TWIN and GEPA, and new loan from Ecologic Finance.
Processing (GCCE)	Cost of dry processing:	Dependence on external (BCU) processing plant	Acquisition or construction of own processing plant	Future project, depending on financial situation (low priority at present)
	Improving coffee quality and working conditions	Manual selection and grading	Improve grading procedures with modern equipment	Conveyor belts have been acquired from AgriLink

Exporting	High costs of export	Cost of UNEX services	Get export licence / do own paperwork	??
		Cost of transport to Mombasa	??	??
Selling to fairtrade importers and other (specialty) coffee buyers	FT price is just slightly higher than elsewhere	High <i>arabica</i> price on world market	Increase efficiency so as to reduce overhead costs	??
	Limited organic premium	Saturation on the fairtrade organic market	Look for other organic markets	??
	Limited scope to increase sales volume	High dependency on fairtrade buyers	Look for other buyers (e.g. specialty coffee)	??

## 5.4 Support System

As mentioned above, GCCE was set up by TWIN Trading in partnership with BCU. The fact that TWIN could guarantee purchase of their green coffee at the fairtrade minimum price, at a time that the world market price was falling (and remained low till the end of last year) was an important advantage for Gumutindo. TWIN provided them with technical assistance in order to improve their quality and to convert to organic farming methods.

TWIN also linked them up with AgriLink, a Ugandan consultancy firm specialised in providing technical advice and tailor-made technology to the coffee and tea sector. AgriLink designed and produced mobile conveyor belts to improve the grading of the green coffee after the final dry processing at BCU. Although this equipment still requires some adjusting, it has greatly improved both the working conditions and the quality of the grading process.

Thanks to their success in improving quality, obtaining organic certification and steadily increasing their sales to TWIN, they have now also been able to expand their market to Germany (GEPA) and the US (Thanksgiving Coffee). They also recently had talks with Ecologic Finance to see if they could get a credit facility from them to pre-finance the harvest and purchase of coffee from their members.

Other support initiatives that were encountered during interviews with primary societies are the AMCE (Area Marketing Cooperating Enterprise), set up by UCA (Ugandan Cooperative Alliance) to promote the marketing of agricultural products in the Mount Elgon region. Eight primary societies are involved, including Busamaga PS. The AMCE carried out a study two years ago into the profitability of different crops, which showed that bananas were more profitable than coffee. However, this did not take into account the higher price paid by GCCE and as one of the coffee farmers said: “Coffee has the advantage that it can be stored, whereas bananas have to be sold immediately.”

The UCA used to have a trainer who visited Busamaga PS every month, focusing on production issues, bookkeeping and cost calculation, but now he only comes upon request. They also receive support from Agro-Eco, as part of the EPOPA programme, to assist them in the organic production. This is co-ordinated with TWIN and GCCE.

## **5.5 Current Situation and Future Prospects**

### **5.5.1 Gumutindo: a Successful Supply Chain**

Gumutindo can be considered a success story so far, in as much as it has been able to create a new dynamic supply chain out of the crumbling structure of BCU, which had become very detached from its primary societies and suffered from financial problems as well as declining coffee quality. The setting up of the Gumutindo project within BCU, now operating independently as the Gumutindo Coffee Co-operative Enterprise, managed to break the vicious circle of bad payments, declining membership, defaults on loans and low quality coffee. Starting from zero, they slowly built up confidence and mutual trust again between the farmers and Gumutindo management.

Their results in the first 7 years have been really impressive. Starting out with 27 tonnes in 1998-99, they increased their sales by the same amount the next three years and expect to sell 270 tonnes in 2004-05. In other words they are now exporting 10 times as much as in their first year. All of this coffee goes to the fairtrade market and about 40% is sold with an organic premium. Till 2003 their sole buyer was TWIN Trading, last year they started selling to GEPA in Germany and this year they will sell their first container to Thanksgiving Coffee in the USA.

At the level of the Cooperative Enterprise there is a growing awareness of the need to centralize the wet processing at the level of the Primary Societies, so as to be able to ensure a standard, high quality of the parchment coffee. In the future they would also like to have their own dry processing facility, so as to no longer be dependent on the services of BCU. Considering the investment that this would imply and their present financial situation, this does not seem a top priority.

### **5.5.2 New Market Opportunities**

If GCCE wants to continue to increase its turnover at the same rate as they have in the past, they will need to obtain more pre-financing loans from their buyers, Ecologic Finance (EF) or other sources. This year they will be exporting 15 containers (900 metric tonnes) to the fairtrade market, which adds up to a turnover of about US\$ 750,000 – 800,000. But they started the harvest season with cash reserves of only US\$ 165,000, just enough to buy coffee to fill 4 containers and cover their operating costs. TWIN pre-financed another 2 containers and GEPA provided pre-finance for 3 more. With the payment they received from the sale of the first 7 containers they could buy more coffee and so on and so forth.

There is still some potential to increase their market share in both the fairtrade and the organic markets, however this will require pro-active marketing to find new buyers in these niche markets. At present GCCE is highly dependent on TWIN Trading. Only recently have they started selling to GEPA and Thanksgiving Coffee. Access to new fairtrade importers will not be easy as this market is not growing very much anymore and there are plenty alternatives for good quality *arabica* coffee in the fairtrade sector.

Last year only about 40% of their coffee, which is all organically certified, was actually sold as organic coffee with the corresponding organic premium. This suggests that a move into the non-fair Trade organic market should be considered in order to expand their options and enable them to obtain higher benefits from their organic coffee. This

would not have been worthwhile at last year's low prices on the world market, but now that prices are rising again and the difference between conventional and fairtrade prices is down to 5 cents a pound, it makes good business sense.

More in general, GCCE, while recognising that it owes its existence to the support from TWIN, should slowly but surely start to reduce its dependency on TWIN and develop its own marketing capacity. This does not necessarily mean a move away from the fairtrade market or TWIN Trading for that matter, but a degree of diversification into new markets seems appropriate if only to increase their total sales volume<sup>20</sup>.

Another reason for looking for new markets is that if world market prices remain above the minimum price set by the Fairtrade Labelling Organisation, the fairtrade premium alone will not be enough to ensure steady deliveries from primary societies and their members. GCCE will have to be able to do a better marketing job than their competitors on the conventional market as well. This will be the true sign of success.

### 5.5.3 Benefits for Coffee Farmers

It is clear that the farmers and their primary societies have benefited greatly from their involvement in the Gumutindo supply chain. As a result of the extremely world market price, the fairtrade minimum price enabled GCCE to pay a substantially higher price to the PS, and they in turn to the farmers. The average price difference has been about Ush 400 per kg between what GCCE pays and what private traders pay. For a typical farmer with an acre of coffee planted and a yield of 500 kg/acre this means an additional income of Ush 200,000 per annum, about US\$ 120 at the current exchange rate<sup>21</sup>.

#### *An example of a Primary Society*

*Busamaga PS (BPS) was one of the first to take part in the Gumutindo project. It was set up in the 1950s and immediately linked up to BCU. When things started to go downhill with BCU, this also affected BPS negatively. However, thanks to Gumutindo things have picked up. BPS currently has 365 members, including 91 women and 45 youngsters. Most of the farmers are organically certified. In 2003-04 BPS sold about 72 m.t. of coffee: 70% to GCCE, 29% to BCU and 1% to Mbale Coffee. So far this season they have sold about 60 m.t., 99% to GCCE and the rest to BCU. Recently GCCE requested another container from them. Since GCCE holds the organic certificate, they cannot sell organic coffee at premium price to other potential buyers.*

Other benefits for the farmers include the training they receive to improve the coffee quality, assistance to convert to organic production, access to transparent market information and exposure to new market opportunities through GCCE. Thanks to the relatively small scale of the supply chain, compared with that of BCU in the past, the farmers are more involved in the whole operation and there is a higher degree of mutual trust and commitment. This is an important factor towards the success of the chain.

Problems still exist at the level of the farmers whose yields are relatively low, due to the age of their plants and the lack of maintenance. Together with the shrinking size of their plots, as a result of land being subdivided from generation to generation, this leads to a relatively small impact of the fairtrade premium on each individual farmer.

<sup>20</sup> Expanding into new markets may also be a way of strengthening their link with the primary societies.

<sup>21</sup> Based on information from the Board members of Busamaga PS, interviewed in March 2005.

Furthermore, not all members of the primary societies are organically certified as yet, although very few if any use chemicals.

#### **5.5.4 Sustainability of the Supply Chain**

There are a number of factors that have been very important for the success of the Gumutindo supply chain. The main ones are:

- The access to a high value, preferential market such as the fairtrade market;
- Strong vertical linkages between GCCE, the primary societies and the farmers;
- High degree of transparency and accountability at the GCCE and PS-levels;
- High level of mutual commitment and trust between the chain partners;
- Shared objectives and understanding of the rationale for the partnership.

As long as these factors continue to apply it is likely that the supply chain will continue to be mutually beneficial to all partners. Two elements give cause for concern in this respect. First of all, what will happen as the number of primary societies and farmers involved in the supply chain continues to increase? Will this affect the high level of mutual trust and commitment? The second concern has to do with the role of the fairtrade market. As world market prices increase, will GCCE be able to continue to pay a higher price than other traders?

More in general, the relationship with BCU is a cause for concern as Gumutindo is currently dependent on BCU for office space, storage and dry processing of the parchment coffee. Besides potentially leading to risks in quality control, this is already causing friction due to the much better performance of GCCE. Hence, for the sake of autonomy and transparency, some kind of physical separation between GCCE and BCU would seem recommendable. The first step for GCCE could be to find another office, away from the BCU premises. As for the storage and dry processing, this would require a more thorough cost-benefit analysis. For the time being the present arrangement seems to be the best option, provided GCCE can maintain its high quality standards.

## 6 GENERAL OBSERVATIONS: SIMILARITIES AND DIFFERENCES

### 6.1 Success Factors

On the basis of the analysis of the three supply chains presented in the previous three chapters we can draw some general conclusions. We first listed all the strengths and opportunities versus the weaknesses and threats of each of the chains. These combined SWOT-analyses are presented in the appendix. Next we identified the main success factors that came out of the case studies. Based on this analysis we matched these success factors with the three supply chains.

**Table 6.1: Common Success Factors for the Supply Chains**

Success Factor	Mairye Estates	Fruits of the Nile	Gumutindo CCE
<b>Access to high value market</b>	TESCO (UK) High-Low (Netherlands)	FM Foods (UK)	TWIN / Café Direct (fair trade market)
<b>Direct link to buyer abroad</b>	Through the UK importer (Saturnalia)	FM Foods (formerly Tropical Wholefoods) is on the Board	TWIN helped set up Gumutindo so there it are close links
<b>Inside knowledge of foreign markets</b>	Mairye Estates seems to be well-informed	Through FM Foods	Through TWIN
<b>Expanding market opportunities</b>	Big expectations, based on new pack-house; focus on baby vegetables	Big expectations, based on new pack-house and organic certification	Fairtrade market outside the UK; non-fairtrade organic market; specialty coffees
<b>Own Production</b>	Mairye Estates has its own farm	No	Indirectly, through the PS
<b>Quality standards</b>	HACCP and EUREP-GAP already in place; BRC expected	Organic conversion planned; fairtrade certification requested	PS either organically certified or in process + fairtrade certification
<b>Strong vertical linkages w/suppliers</b>	Out-grower scheme coordinated by Mairye Estates	Solar dryers installed with help from Fruits of the Nile	PS own GCCE and are represented on Board
<b>Technical assistance and other support for suppliers</b>	Training by AMA in production according to EUREP-GAP	Training by Fruits of the Nile-staff on solar drying and product quality	Field officers and contact farmers
<b>Pre-financing of suppliers</b>	Yes, only some inputs (seeds are free, provided the farmer sells to Mairye Estates)	Yes, part of material for solar dryers	Yes, to PS to buy the coffee from farmers
<b>Long-term relationship with suppliers</b>	No, only since 2 years but clear intention to prolong the relationship.	Yes, nearly 10 years (with oldest suppliers)	More or less, since 1998 for some
<b>High degree of transparency and accountability</b>	Production plans and clear explanation how payments take place and prices are determined	Clear explanation of how payments take place and prices	Production plans, cost structure and sales strategy discussed with Board members
<b>High level of mutual commitment and trust between the partners</b>	Fluctuating, needs to be strengthened on basis of proven mutual interest	Suppliers appear to be very loyal despite attempts at poaching	At this moment very high thanks to good results and high fairtrade price
<b>Shared objectives and understanding of rationale for partnership</b>	Objectives are set by Mairye Estates and out-growers are informed	Objectives are set by Fruits of the Nile and suppliers are informed	Production plans are discussed with and approved by Board
<b>Close relationship with local community</b>	Close relationship with community that extends beyond duty	Only with suppliers	Primary societies play this role in their own local communities

From this matrix it is clear that most success factors apply to all three supply chains, although there are some differences. For instance, Mairye Estates' formal relationship

with out-growers only started in 2004 with the creation of Farm Fresh. This implies that it is really too early to say whether it will prove to be stable. At the moment though, the out-growers and Mairye Estates seem to be very happy about how things are going and farmers are queuing up to join Farm Fresh.

Both Mairye Estates and Gumutindo (through its members) have their own production capacity, so that they are not too dependent on suppliers whom they do not control. In the case of Gumutindo, the PS are not obliged to sell them all their coffee, but as members and shareholders of GCCE it is in their interest to strengthen the enterprise. This is not the case for Fruits of the Nile and may eventually be a disadvantage when they want to increase their supply base to meet the demand from their buyers. It is also a liability where organic certification is concerned.

Of the three lead firms Gumutindo seems to have the closest relationship with their suppliers, as the Primary Societies are represented on the Board and thus take part in strategic decisions. Fruits of the Nile also has a close relationship based on personal trust and loyalty, but its suppliers have no say in Fruits of the Nile's decisions. The same applies to Mairye Estates. On the other hand the number of farmers involved in Gumutindo's supply chain is much higher than that of Fruits of the Nile and Mairye Estates, so that their level of participation may not be the same.

Finally, Mairye Estates and Gumutindo both have a clear geographical focus, which is concentrated around their farm and those of its members respectively. This is not the case for Fruits of the Nile, which sources dried fruits wherever it can, although at present there seems to be concentration of its suppliers in Mbarara, Mpigi and Luwero. However, the numbers are still quite small, so the impact on local communities is too.

If we were to select the three most important success factors they would be:

1. the access to high value markets, which provide high returns and thus financial incentives to all the supply chain partners,
2. the strong vertical linkages in the supply chain and
3. the high level of mutual trust and commitment between the partners.

Of course, the pre-financing that the lead firms provide is also important, but without trust, adequate use of these funds and inputs or access to markets it would be wasted. Technical assistance provided to suppliers both by the lead firm and by third parties are also very important, both for their direct effect and because they strengthen the vertical linkages and commitment between the chain partners. Likewise a clear understanding of the rationale for the partnership is essential for mutual trust and commitment.

## **6.2 Problems and Risks**

Nevertheless, there are still a lot of problems to be solved and risks to be avoided in order for the supply chains to achieve their full potential. The success factors are not a given, but require constant attention and monitoring by the lead firm. Other factors may pose a threat to the long term success of the supply chain.

In the table below we present the main problems and risks that we encountered during our talks with the chain partners.

<b>Problem/risk</b>	<b>Mairye Estates</b>	<b>Fruits of the Nile</b>	<b>Gumutindo CCE</b>
<b>Small scale of the business</b>	Small compared to Kenyan exporters, plans to expand by 2006-07	Small initially for lack of market access and now due to supply base	Not so small for the fairtrade market, but in general
<b>High costs of quality standards on export markets</b>	These costs are high compared to current sales volume	At present these costs are not high, because they are not certified	fair trade costs are not very high; organic certification facilitated by donors (EPOPA)
<b>Risks related to outsourcing</b>	A clear risk that limits Mairye Estates's capacity to expand its supply base	Quality control, lack of transport means and inadequate packaging	Quality control through field officers and contact farmers
<b>High dependence on limited number of buyers</b>	Mainly TESCO and High-Low, but new market in South Africa	Sole buyer FM Foods	Main buyer is TWIN, but only fair trade
<b>Small domestic market</b>	This makes it difficult to find a market outlet for lower grade produce	Tiny market, not worth the investment	Too expensive for the domestic market
<b>Lack of prestige of Ugandan products</b>	Kenya has a better reputation for fresh vegetables because of their market share	Not clear whether this plays a role	Kenyan arabica has a higher price differential
<b>Irregular supply and low productivity of agriculture</b>	Lack of irrigation and use of proper production methods by out-growers	Lack of fruit is sometimes a problem	Coffee yields are low for several reasons
<b>Competition from other countries</b>	Mainly Kenya and South Africa	Mainly West-Africa	Kenya, Tanzania, Rwanda and Ethiopia
<b>Lack of infrastructure</b>	Plans to build a new pack-house in 2006	At present very cramped premises, hope to finish new pack-house in 2005	Renting office space and milling capacity from BCU
<b>Lack of capital and access to finance</b>	This does not yet seem to be a big problem; have obtained grant from PSOM to build pack-house	Despite grant from Gatsby Trust and loan from DFCU they have not yet covered the full cost of the pack-house	This is a major problem both for working capital (to buy coffee) and for investment in milling capacity
<b>High freight costs</b>	Lower airfreight costs from Kenya	Lower freight costs from West-Africa	Not clear whether this plays a role

The main problems seem to be the relatively small scale of operations compared to the costs of managing the supply chain and meeting all the quality requirements. At the same time the risk involved in expanding the supply base by working with more out-growers (Mairye Estates), solar dryers (Fruits of the Nile) or primary societies (GCCE) should not be underestimated. It is better to grow slowly but surely, as all three supply chains have done, than to expand quickly.

Despite the fact that agriculture is the main activity in the country and that fruit and vegetable farming is widespread, there is not a constant supply of FFV all-year round for the two relevant supply chains in our study. This has different reasons. In the first place some of the crops are seasonal and only produce in the rainy or dry season. Storage of FFV is not easy. Lack of irrigation makes it difficult for smallholder farmers to maintain production levels in the dry season. But more importantly, most FFV producers are not market-oriented and hence they only produce what they need for their own consumption and sell what is left.

Thus, in order to increase the production of FFV it is necessary to change the mindset of farmers. The most obvious way of doing this is by offering them monetary incentives, in other words paying better prices for a consistent supply of high quality products. However, this is easier said than done, and in most cases requires some complementary

action in the form of training, technical assistance and provision of inputs. That is exactly what Mairye Estates is doing with its out-growers.

An easier, more short-term solution to the problem is to source the products from different parts of the country, taking advantage of different climatic conditions and harvest patterns. This seems to be the strategy that Fruits of the Nile is following, albeit not in a very forceful way as yet. Most of their dried fruit producers are located within a radius of 80 km around Kampala, except those in the Mbarara district.

In the case of Gumutindo the problem is twofold. The main concern of GCCE is to have a constant supply of high quality, organic coffee to be able to meet the demand from their foreign buyers. This requires constant monitoring and extension services to ensure that the farmers do things right. For the farmers the main concern is to be able to increase the production so as to achieve higher returns from their coffee plots. This is no easy task considering the small size of the plots, the high average age of coffee plants and the lack of proper maintenance. GCCE is assisting them in renovating their plantations by providing seedlings and advising them on maintenance.

### **6.3 Recommendations**

Based on the identification of the success factors and the main problems and risks facing the supply chains we have drawn up the following recommendations for the private sector, the government and the support agencies.

#### **Private sector**

- Maintain a strong focus on high value exports.
- Carry out a careful selection of business partners, according to a set of criteria that is based on experience.
- Nurture long-term relationships throughout the chain, built on mutual trust and transparency, and ensure that all businesses in the chain understand each other's tasks and responsibilities and the implied interdependency.
- Lead firms should invest in building a close relationship with suppliers and vice-versa. For instance, lead firms can assist farmers to access extension services, develop and implement a quality management system with clear and measurable standards, and develop an effective communication system. Suppliers should provide reliable information about production capacities and inform their buyers about possible changes that could effect their operations.
- Promote a business attitude among farmers based on contracts, purchase orders, and production and quality targets, by engaging farmers in the production monitoring system and administrative systems, by sharing information about market requirements, by training and by savings mobilization.
- Draw up and agree upon a code of practice to establish clear trading rules e.g. to counteract 'poaching' of goods between competing companies.
- Look for strategic alliances with other exporters, both at home and abroad (like in the case of Mairye Estates and their partners in South Africa).

#### **Government of Uganda**

- Improve the effectiveness of extension services in the agricultural sector. For example by promoting the establishment of supply chains and targeting farmers

that are part of a supply chain in a systematic way, instead of individual farmers that are not linked to a supply chain.

- Low level of education of farmers is a problem, this suggests a need for vocational training not only to improve farming skills, but also entrepreneurial skills and to raise the status of farming as a profession.
- Stimulate private-private partnerships, by removing bureaucratic barriers and providing fiscal incentives to new supply chain initiatives.
- Stimulate the involvement of specific government agencies in the development of supply chains, e.g. the role of KARI in the initial stages of Fruits of the Nile.
- Stimulate practical research activities aimed at supply chain development.
- Organize platforms for public and private actors to discuss problems in the private sector and find common solutions.
- Invest in basic infrastructure (roads, railways, telecommunication, electricity).
- Offer fiscal incentives for sustainable use of natural resources.
- Offer fiscal incentives for innovative or high-risk investments.
- Establish a commercial code that includes property rights and fair judicial processes.

### **Support agencies**

- Facilitate the linking of local businesses with national, regional and foreign companies, to build up trade relations or set up joint ventures.
- Facilitate the development of training and technical assistance to farmers to help them improve their performance and entrepreneurial development.
- Reduce the amount of paperwork involved in support to private sector as the costs in time and money spent on proposals and reports, can be quite high and is generally not covered by the donor agency.
- Be more business-like in the support to the private sector, by focusing on those farmers that show potential, by charging clients for services and by setting targets that can be objectively measured.
- Avoid market distortion which may result from subsidizing certain producers at the expense of other producers.
- Support the initial start-up or experimentation costs of a new supply chain, only in certain specific cases where these activities would otherwise not take place and with a clear exit strategy within a limited time-frame.
- Facilitate the certification of producers and related conversion processes by promoting the development of a more competitive market for service providers and more cost-efficient certification procedures.
- Continue research into successful supply chains to learn from experience within private sector and stimulate replication of successful cases.

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## ANNEX 2: LIST OF PERSONS INTERVIEWED

Place	Name	Organisation
Kampala	Marshall Bear Richard Goldman	Private Consultants
	Chira Schouten	FLO-Producers Support Network
Kampala	Amin Shivji	Director-owner, Amfri Farms
	Moses Muwanga	Coordinator, NOGAMU
	Ronald Byamakah	Private trader in fruit & vegetables
Kampala	Jaap Blom	Team Leader, ASPS-Danida
	Alastair Taylor	Country Manager - Uganda, EPOPA
	Clive Drew	Managing Director, APEP
Kampala	Martin Fowler	Senior Advisor, MAAIF
Mairye	Jabber Abdul Godfrey Seruwe	Farm Manager and Production Manager, Mairye Estates Ltd.
Kampala	Angello Ndyaguma	Managing Director, Fruits of the Nile
	Mr. Abainenamar	General Manager, UNEX
	Paul Mugambwa	Chairman UCDA & Victoria Coffees Limited
Ishaka	John Muwagoba	Field Officer, UNEX
Katenga	Eliabu Ngambe Kyohairwe Jassy	Katenga Omunjoki Growers Coop.Soc.
Rugando	Paddy Mwesigwa	Rwentobo Solar Fruit Drying Group
Kyeirumba	Sam Mugisha	Kyeirumba Womens Group
Arua	Prossy Musoke	PSD Advisor SNV West-Nile region
Kampala	Fritz Plattner	Founder of Amfri & coffee farmer
	Jeffrey Levine	Private sector officer USAID
	Reint Bakema	Programme officer, European Union
Kampala	John Engle	Managing Director, SCOPE
	Rita Laker-Ojok	Exec. Director, AT-Uganda
	Shaun Ferris	Coordinator CIAT in Uganda
Mbale	Willington Wamayeye	General Manager, Gumutindo CCE
Mbale	Mercy Nagudi Sarah Nambozo	Field Supervisor & Coffeebuyer GCCE
Kawomera	Stanley Madoi	Peace Kawomera Primary Society
Busamaga	Sam W. Magona	Chairman GCCE & Busamaga P.S.
Palissa	Chris Mutome	Reg. coordinator FADEP
Kiyunga	George Mpata	Chairman of BANDERA 2000
Kampala	Stephan Duyck	Private Sector Expert MTCS
	Chris von Zastrow	Coffee Specialist, RATES/EAFCA
	Inge Barmentlo	Eastern & Southern Africa - CordAid
	Florence Kabugo	NAADS
	Umran Kaggwa	Director AMA Consultants
Kampala	Mr. Kutty	AgriLink (U) Ltd.
	Lloyd Garcia	Senior Technical Advisor USDA
Kampala	Amin Shivji	Director-owner, Amfri Farms
	Dr. Jim Seyler	Managing Director, PRIME West
	Fred Kawuma	CEO Aclaim Africa Ltd.
	Mahmood Hudda	Director-owner, Mairye Estates

## ANNEX 3: SWOT-ANALYSIS OF SELECTED CHAINS

### Mairye Estates (fresh vegetables)

Strengths / opportunities	Weaknesses / threats
<ul style="list-style-type: none"> <li>• Own land (nucleus) land on good location</li> <li>• Traceability of products</li> <li>• Extension services to out-growers</li> <li>• Access to market – UK, NL</li> <li>• Contracts with out-growers</li> <li>• Long experience in farming / export business</li> <li>• Strong support from EPADU, IDEA in trials of new product varieties</li> <li>• Access to capital</li> <li>• Partnership with Dutch flower producers</li> <li>• Business acumen of owner</li> <li>• Family business (as well as part of Indian/Ismaili Community)</li> <li>• Inside knowledge of foreign markets</li> <li>• Committed key staff</li> <li>• Good relationships with local community</li> <li>• Low labour costs</li> <li>• Worker incentive salary system</li> <li>• Expanding market for baby vegetables and pre-packed FFV</li> <li>• New packing plant is planned</li> <li>• Potential for cooperation with other supply chains e.g. Amfri Farms / Mubuku Farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Small scale of operation (FFV)</li> <li>• High airfreight costs</li> <li>• Difficult to comply to high quality requirements of EU/UK markets, especially for out-growers</li> <li>• Lack of prestige of Uganda FFV on the world market</li> <li>• Competition from Kenya</li> <li>• Low labour productivity</li> <li>• Lack of sufficient high quality supply of FFV on local market (especially required products and varieties for export market)</li> <li>• Lack of generally accepted quality standards for Ugandan FFV producers</li> <li>• Small domestic market due to lack of purchasing power and exotic varieties</li> <li>• Limited no. of buyers (high dependency)</li> <li>• Risk related to working with out-growers (volume, quality)</li> </ul>

### Fruits of the Nile (dried fruit)

Strengths / opportunities	Weaknesses / threats
<ul style="list-style-type: none"> <li>• Largest dried fruits exporter in Uganda</li> <li>• Steady market demand (from the UK) with a tendency to increase</li> <li>• Long relationships with same buyer</li> <li>• Link with progressive farmers (Mbarara)</li> <li>• Use of low cost technology</li> <li>• Sufficient availability of fresh fruit during most of the year</li> <li>• Natural production (converting to organic)</li> <li>• Strong personal relationship with suppliers</li> <li>• High commitment of key actors</li> <li>• Strong affinity /understanding of local farmers</li> <li>• Co finance and provide TA for the driers</li> <li>• Training of suppliers in solar drying</li> <li>• Packaging problems have been overcome</li> <li>• Opportunity for upgrading packaging (packaging for consumer/retail)</li> <li>• Own pack-house under construction</li> </ul>	<ul style="list-style-type: none"> <li>• Limited market access</li> <li>• High dependency on one buyer</li> <li>• Limited availability of product</li> <li>• Occasional problems with hygiene (due to simple technology)</li> <li>• Transport costs and damage caused to dried fruit in transit</li> <li>• No own production capacity of fresh/dried fruits</li> <li>• Simple packaging wholesale packaging</li> <li>• No contracts with farmers</li> <li>• Weak infrastructure</li> <li>• Difficult to comply to quality requirements in the UK (not as high as FFV)</li> <li>• Unreliable supply due to mixed composition of small scale suppliers</li> <li>• High shipping costs</li> </ul>

### Gumutindo Coffee Cooperative Enterprise

Strengths / opportunities	Weaknesses / threats
<ul style="list-style-type: none"> <li>• Support from TWIN</li> <li>• Support from FLO</li> <li>• Market access through TWIN Trading</li> <li>• Organic Certification</li> <li>• Traceability system</li> <li>• Fair trade certificate</li> <li>• Close relationship with primary societies</li> <li>• Commitment of affiliated farmers</li> <li>• High prices, thanks to preferential buyers</li> <li>• Organizational structure (field officers/contact farmers) for extension services to farmers</li> <li>• Rising coffee prices</li> <li>• Low overhead costs??</li> <li>• Potential for benefiting from Mt. Elgon branding</li> <li>• Access to pre-shipment finance</li> <li>• Grading system</li> <li>• Business link with UNEX</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of own processing facility (dependence on external processing)</li> <li>• High dependence on TWIN fairtrade market</li> <li>• Quality cannot always be ensured due to wet processing by farmers by farmers, dry processing by BCU</li> <li>• Rising coffee prices (poaching by other buyers)</li> <li>• Low yields of coffee plants</li> <li>• Small plots of land</li> <li>• Relatively low status of Ugandan Arabica on world market (low price differentials)</li> </ul>

### Common Denominators for the Supply Chains

Positive	Negative
Traceability (all 3)	High freight costs (except GCCE)
Extension services (all 3)	High dependence on limited number of buyers
Partnership with other private actors (mainly Mairye Estates and Gumutindo)	Small scale of the business
Direct link to buyers (access to market)	High quality standards on export markets
Long experience in the sector	Lack of prestige of Ugandan products
Long term relationships with suppliers (farmers – except for Mairye Estates)	Risks related to outsourcing
Expanding market opportunities (except perhaps for fairtrade organic coffee from Gumutindo)	Small domestic market
Inside knowledge of foreign markets	Low productivity of agriculture
Close relationships with local communities (except Fruits of the Nile)	Competition from other countries
Own direct source of supply (Mairye Estates and GCCE)	Lack of infrastructure
Support from third parties	
Dynamic leadership	

