

Certification Mapping for Uganda

By

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Acronyms

BSMD.....	Business Services Market Development Project
CBI	Centre for Promotion of Imports from Developing Countries.
CP	Cleaner Production
DENIVA	Development Network of Indigenous Voluntary Associations
EPOPA	Export Promotion of Organic Products from Africa
EU	European Union
EUREPGAP ..	Euro Retail Produce Working Group Good Agriculture Practice
FAO	Food and Agricultural Organization of the United Nations
FLO.....	Fairtrade Labelling Organization International
DFID.....	Department of Foreign International Development
DIC	Documentation and Information Centre of UNBS
GMP	Good Manufacturing Practice
HACCP.....	Hazard Analysis Critical Control Point
HCE	Hygiene Conscious Establishment
ICS	Internal Control System
IFOAM	International Federation of Organic Agriculture Movements.
ILO	International Labour Organization
IMO	Institute of Market-ecology
ISO.....	International Organization for Standardization
MSS	Mandatory Standards Scheme
NEMA	National Environment Management Authority
NOGAMU	National Organic Agriculture Movement of Uganda
PMA	Plan for Modernization of Agriculture
OA	Organic Agriculture
SGC	Smallholder Group Certification
SQF.....	Safe Quality Food
UCPC.....	Uganda Cleaner Production Centre
UFPEA	Uganda Fish Processors and Exporters Association
UMA.....	Uganda Manufacturers Association
UNBS	United Nations Bureau of Standards
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
US	Uganda Standards
USAID.....	United States Agency for International Development
WHO.....	World Health Organization of United Nations

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Executive Summary

This study was undertaken to map the different types of certifications, their relevance and requirements, to identify the providers of certification services in the country and to establish the possible interventions areas for the BSMD project. Certification is a system that guarantees to the consumer that a product or service has been produced according to some specified standards and is of a certain quality. Standards may be management, primary production, and manufacturing and/or product quality standards. Standards are either set by government, civil society, professional bodies, producers or service providers in response to consumer demands, to protect public health or to protect the public and other producers from substandard goods and services.

Production and product standards and certification have increasingly become important requirements for accessing international and regional markets and, in some cases, have become major technical barriers to trade. The major certifications being accessed by Uganda based businesses have been identified and are summarized in table 1. The most important international certifications for Uganda are ISO 9000 for the fish processors and exporters and organic agriculture certification for agriculture produce processors and exporters. In addition to the ISO 19000 for the fish processors and exporters, the development and implementation of a Hazard and Critical Control Point plan is the foundation of their ISO 9000 certification. These certifications have, in most cases, been accessed and implemented in response to market demands in the importing countries (European Union, North America and Japan). The fisheries and organic agriculture sub-sectors support the livelihoods of millions of Ugandans. Acquisition of these certifications is however a costly investment and has, in most cases, only been made possible through the financial assistance of donors like USAID for the Fish processors and SIDA for organic agriculture. The ISO 9000 and organic certification services are all offered by foreign owned and based companies due to lack of local certification organizations. Efforts to establish a national organic agriculture certification service in Uganda are in advanced stages. The major impediments to ISO 9000 certification and organic agriculture certification have been identified as: high certification costs, lack of technical skills in establishing internal control systems and the numerous standards that have to be met to access the markets. The organic agriculture sub-sector is further complicated by the ever-changing standards in the European Union, which is Uganda's main export market. The support of BSMD to overcome these impediments and to the establishment of new initiatives in these sub-sectors is recommended.

Other important certifications include the Uganda coffee regulations, Uganda health and hygiene Standards, numerous mandatory standards enforced by the Uganda National Bureau of standards, carbon sequestration and offset certification under the Kyoto Protocol and Bee product certification. All these have varying potential benefits for low resource endowed small holder farmers and rural communities through increasing of market opportunities for their produce. A summary of the certification map for Uganda is given in the table below.

Summary certification map for Uganda

Type of certification	Sector	Benefits	Service providers
1. Organic Agriculture Certification	Horticulture Agriculture Fisheries Honey	<ul style="list-style-type: none"> • Environmental sustainability of farming systems • Access to a larger market for many farmers (local and external) • Access to a growing market niche (increasing market opportunities in addition to the present mass market) • Premium price • Added value due to processing (solar dried fruits) • Economic equity for farmers 	*KRAV *Soil Association *IMO Control *SGS, *ECOCERT
2. EUREP GAP	Horticulture (fruits and vegetables)	<ul style="list-style-type: none"> • Meet minimum European market access requirements • Social aspects • Economic aspects • Environmental benefits 	*SGS
3. Fair Trade Certification	Agriculture (coffee, bananas, cocoa, vanilla)	<ul style="list-style-type: none"> • Access to a growing market niche • Premium price • Most ideal economic and social equity for farmers 	*FLO
4. Good Agriculture Practice (GAP) and Hazard Analysis Critical Control Point (HACCP)	Food sector (production and processing, solar dried fruits)	<ul style="list-style-type: none"> • Food safety • Respectability in food importing markets 	*SGS *Chemiphar ^UMA (for HACCP)
5. Coffee Regulations	Coffee processors and exporters	<ul style="list-style-type: none"> • Minimum marketing requirements 	*^UCDA
6. Eco Benefits Programme: Cleaner Production	Manufacturing	<ul style="list-style-type: none"> • Meet minimum environmental standards • Save costs through more efficient use of energy, waste and water use (more efficient production) 	*^Cleaner Production Centre
7. ISO 9000	All Manufacturing	<ul style="list-style-type: none"> • International market acceptability of products and service • Continuous product and or service improvement 	^EMKA ^Total Quality Management Consultants *OQS Certification and Evaluation Ltd. ^UMA *BVQI

Type of certification	Sector	Benefits	Service providers
8. ISO 14000	All Manufacturing	<ul style="list-style-type: none"> • Respectability of products in international markets 	*SGS ^EMKA, ^Total Quality Management Consultants ^UMA *OQS Certification and Evaluation Ltd. *BVQI
9. Forest Certification	Forestry timber and None timber products, Carbon sequestration	<ul style="list-style-type: none"> • Access to sustainable forest product markets • Higher prices • New business line 	*SGS
10. Branding	Coffee, vanilla,	<ul style="list-style-type: none"> • Market monopoly for product 	No specialized institution
11. Uganda Standard	All sectors but more relevant for the Fruit juice, food and Dairy processors in the context of BSMD	<ul style="list-style-type: none"> • Local and Regional market access products • Spring board for meeting international standards hence access to international markets 	*^Uganda National Bureau of Standards
12. Dairy Regulations	Dairy sector	<ul style="list-style-type: none"> • Access to formal local and regional markets 	*^Dairy Development Authority *^Uganda National Bureau of Standards

* Only certification services

^ Only certification training services

*^ Both training and certification services

A summary of recommendations for potential certifications is given in table 1.

1 Introduction

1.1 Background

The Business Services Market Development Project (BSMD) is an umbrella project that is managed by ILO on DFID's behalf. The project is highly responsive and flexible to pro-actively try to develop market-based solutions to key business constraints at the micro- and sectoral-level. In doing so, it is addressing the core economic problem of weak linkages and helping to embed the poor within - rather than excluded from - markets. Its main mechanisms are therefore to support private sector actors to respond to specific constraints as service opportunities. The private sector actors to be supported are likely, but not necessarily, medium and large-scale businesses. The services being provided by such businesses should however be targeted or reaching the micro and small businesses in order for them to be able to enhance their business performances.

Among the different sectors BSMD will operate in, the Agro sector is the most important one. An essential aspect of this sector, and particularly for export oriented businesses, is certification of production processes and products. However, no concise information about this topic has been found yet. Before the project starts any activity in this area, it is necessary to have a good overview of the different certificates, their importance, their requirements, the certification bodies, the costs involved, etc. BSMD has therefore fielded a study to map the certification landscape in Uganda including present and potential certifications.

1.2 Research Objectives

The objectives of this research are:

- i. To map the different certifications, their relevance, the different requirements, the certification bodies, the costs involved, and other important aspects related to certification.
- ii. To identify private and public organizations that provide certification services in Uganda, their clients and inventory of constraints, if any, and possible solutions.

The mapping of the certification was to be done in the context of Uganda's economic sectors and their actual or potential importance to the livelihood of a significant proportion of the population.

1.3 Research Methodology

The research has been carried out as follows:

- i. Discussions were conducted with BSMD staff to gain a full understanding of the project's background, objectives and foreseen type of activities.
- ii. Literature review and consultations with the Uganda Bureau of Standards were made. This resulted in initial list of six most important certifications (details in annexed weekly memo of 14th March 2003). This list was discussed with BSMD staff in order to select the four most important certifications to be researched in more depth. Discussions with BSMD staff came to the conclusion that these criteria should also have a sector and specific product and service focus based on the

importance and potential benefits of such a product and/or sector to a bigger section of the population of Uganda.

- iii. A tool for use in conducting in-depth interviews with the informers was prepared (Annex v.).
- iv. In-depth interviews with key informants were conducted and information on certification systems, their importance, their requirements, certification bodies, costs involved and constraints was collected. This tool enabled the collection of information on current development status, developments planned for the near future and possible intervention opportunities for BSMD to contribute to improvements. More information was collected through internet searches, telephone discussions and e-mail correspondences with important international and national players in certification.
- v. Data collected was collated and a concise research report mapping out the different certificates and recommendations for BSMD prepared.
- vi. BSMD staffs were periodically briefed on the progress of the research through e-mail messages, telephone, memos and discussions.
- vii. A draft report was submitted to BSMD
- viii. The final research report was prepared incorporating comments made by BSMD.

2 Certification

Certification is a system that guarantees to the consumer that a product (or a service) has been produced according to some specified standards and/or that it is of the specified quality. Quality is defined as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" or simply "fitness for use, customer satisfaction" (CBI 1999). Standards may be management, primary production, and manufacturing or product quality standards. Standards assure the consumer of safety, consistency and value for money. The genesis of standards can be traced to the need to satisfy the market demand for quality and safety as in the construction and automobile industries, human health as in the food and pharmaceutical industries, ecological safety, environmental safety, social equity and child protection. Globalizations in the realm of trade across borders and information flow and the accompanying increase in environmental awareness and concern for health and social equity have catalyzed the growing demand among consumers for products and services that meet specific minimum standards. Thus, whereas under restricted trade, consumers were assured of the quality of products from known home industries due to their proximity and intimate knowledge of such industries and production lines. With goods now coming on to local markets from so many diverse and far off regions, consumers need a guarantee that such goods meet some specified standards. In the service sector, consumers increasingly demand that what they are paying for meets certain expected minimum standard since, in most cases payments are made before the service is accessed. In a Globalizing context, standardization and certifications are important tools for promoting marketing as they break barriers to markets by making products and services uniform and of assured quality. In another context, standards and certification can also present serious barriers (none tariff barriers) to markets for the less endowed

producers who are unable to meet specified standards and the required certification systems.

The private sector, professional bodies, international agencies or governments have all been prime movers in setting standards and mechanisms for verification and enforcement often in response to consumer demands or as an effort by governments to protect public health. In many cases, governments have coded standards set by the private sector, civil society and professional bodies in an effort to give them legal effect to protect society from misrepresentation. In such cases governments become important players in ensuring compliance and the penalties for breach of such government coded standards are more severe ranging from banning of the marketing of such product and service to fines or even jail. For coded standards, consumers also have a right to sue for damages if injury is caused by none compliance to standards.

Developed countries have well developed regulatory frameworks for development and enforcement of standards. In addition, the population in the developed countries is also highly educated and demanding of quality. Consequently many of the quality standards have been in response to consumer demands. The position of the consumers in developed countries has been enhanced by state laws on product liability. Under the product liability laws, the producer of a product is responsible for the product. He can be held liable for compensation of damage to person and property, caused by a product which turns out not to be as safe as expected. This has greatly contributed to Developed Country importers' insistence on imported products that meet the standards and regulations in their countries hence making certification an important marketing tool.

This study documents the present standards and certifications in Uganda and identifies sectors in which additional certification efforts can yield significant benefits to a large section of the population through increased marketing. The study also identifies areas in which BSMD could render support to expand the benefits of certification to many more Ugandans.

3 Agriculture and Certification

Agriculture is the main stay of Uganda's economy. It alone employs more than 80% of the employed population and contributes about 45% of the GDP. Agricultural production in Uganda is based on small holder production with about 3.0 million households cultivating less than 2 hectares each. Over half of the total agricultural GDP (56%) is subsistence production for household consumption. The agriculture export sector (coffee, tobacco, tea, flowers, maize, fruits and vegetables, beans and sesame) is the most important foreign exchange earners and a major source of income for the rural population (coffee alone accounts for 30% of total export earnings). Most of the agriculture exports are of raw agriculture produce with little or no processing to the final product. However the agriculture export sector has suffered greatly due to declining world prices of coffee and cotton which constitute the most important export crops (coffee sector alone employs 2.5 million people which are 12% of the total population). This translates into declining incomes for the majority of the small holder farmers who earn their income from production of these export crops. The government has developed the Plan for Modernization of Agriculture (PMA) whose vision is "Poverty eradication through a profitable, competitive, sustainable and dynamic agricultural and Agro based-

industrial sector”. The mission is the “Eradication of poverty by transforming subsistence agriculture to commercial agriculture”.

The UNCTAD considers international trade in food and agricultural products to offer significant export opportunities to developing countries though success is not easy. World markets are increasingly becoming competitive and demanding, with a multitude of standards, restrictions and subsidies making agriculture the last bastion of protectionism. Skills required in both production and trade have also become more complex. The international agriculture market is increasingly becoming competitive with growing demands for products that are of high quality, have been produced in an environmentally friendly manner, that are safe to human health and where returns along the production chain are socially and economically equitable. Consequently niche markets are developing due to the growing demand for products that comply with all or some of the above concerns. Standards to address the above concerns have been developed and many others are in the process of being developed in different countries. In order for Uganda to maintain and/or increase its earnings from the marketing of agriculture products, it will have to comply with two types of standards.

- i. **Mandatory standards:** These are minimum standards that have been coded by a state requiring the specified product and service to meet those standards before it can be sold on the market in that state. Ugandan producers are therefore required to meet these standards if they are to gain access to the local, regional and international markets. These standards are either already stringent enough to bar Ugandan products from accessing the market as in the case of the European beef standards. Or are increasingly being made stringent in the major European and North American countries where Uganda exports most of its agriculture products, as is the case of the USA's Sanitary and Phyto-Sanitary Regulations.
- ii. **Voluntary standards:** These are standards usually set by consumers or traders or professionals separately or in partnership and sometimes by government standard setting organization, for products and often result into the creation of a specific market (niche market). They may or may not be coded by the state. Voluntary standards are often more stringent in their specifications than those that operate for products sold in the mass market resulting into the creation of niche markets offering a premium price to those involved in the production chain.

The present and potential certification map for agriculture is presented below. The standards and certifications are those that have a potential to provide new business opportunities (access to new markets) or expansion of market share within existing markets and/or retention of present market share.

3.1 Organic Certification

3.1.1 Organic Agriculture (OA)

OA is defined by the FAO/WHO Codex Alimentarius Commission as "a holistic production management system, which promotes and enhances Agro-ecosystem health, including bio-diversity, biological cycles and soil biological activity. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system" (FAO/WHO 1999.). Organic agriculture includes all agricultural systems like

permaculture, biodynamic farming, etc. that promote the environmentally, socially and economically sound production of food and fibres. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, they aim to optimize quality in all aspects of agriculture and the environment. Organic agriculture adheres to globally accepted principles, which are implemented within local social-economic, climate and cultural settings (IFOAM 2000). Among consumers, organic products are in more simple words known as products produced without synthetic pesticides and inorganic chemical fertilizers, and without the use of antibiotics for livestock. The world market for organic produce is considered to be growing at about 20% per annum. However, this does not apply for all organic produce. For example, the market for Organic Coffee is considered to have levelled off. Considering the growing world organic market for other products, Uganda is particularly suited to exploit the growing demand in Western Europe, Japan and North America for organic exports of *Sesame*, fresh and dried pineapples, sweet bananas and mangoes, cocoa, vanilla, chillies, apiary products, fruit concentrates, oils and fish products.

3.1.2 Organic Agriculture in Uganda

Uganda is already accessing the international organic market through export of coffee, vanilla, ginger and cotton and to a small extent solar dried sweet bananas, mangoes and pineapples with significant impacts on poverty reduction among participating farmers principally due to the reliability of the market and the price premium (15% - 30% of conventional market prices) which farmers obtain for Organic produce (Grolink 2002)¹. This has been a result of the efforts of the private sector and NGOs with the support of Donors like SIDA through its 'Export Promotion of Organic Products from Africa' (EPOPA) programme (Forss K and Sterky E. 2000). Details of on going organic projects in Uganda are given in annex i. Traditional farming practices in Uganda are considered to be much easier to transform into organic agriculture as compared to conventional agriculture farms in Europe and north America and in many other African Countries. What is required is the organizing of small holder farmers for organic agriculture (awareness raising, documentation, establishing internal control systems), organic certification and continued technical advancement of production technologies and practices. Uganda can therefore be considered to posse comparative advantages for organic agriculture compared to many other countries in the world. However, in spite of this advantage and its potential economic and environmental benefits to the country, especially for the small holder farmers, there has not been any technical and financial support from Government or from its research and training institutions to develop the sector.

3.1.3 Organic Standards

Uganda has no organic agriculture standards of its own but efforts are currently underway by NOGAMU and other stakeholders to develop national organic standards. The organic standards currently in use in Uganda are those of the European Union (Council Regulation 2092/91²) and those of the individual countries where the export product enters the European Union. The production must also meet the organic standards of the Certifying Body which are often more stringent than those of the

¹ Elsewhere, premiums are reported to range from 10 to 200 percent (FAO 2002)

² This EU regulation of 1991 is for only food products and does not include products like cotton.

European Union and/or the importing country in the union. In addition Japan, Switzerland, the US, Canada have own national Organic Standards which the exporter must comply with. In these cases, either the Government of the importing country approves the exporting country's regulations as equivalent to its own or the organic production has to be recertified by a certifier registered in the importing country. The multitude of standards that a product has to meet before accessing the organic markets in these developed countries present a serious barrier to trade in organic products and makes organic agriculture the most comprehensively regulated farming system in the world.

3.1.4 Organic Certification systems for Uganda

Because of the predominance of small holder farming systems in the country almost all organic agriculture export projects are based on the "Small holder Group Certification" (SGC) system. In this system numerous small holders are certified together as a "Small holder group". A group of small holders is defined by the following criteria: The cost of (individual farms) certification would be disproportionately high in relation to the sales value of the product sold, the farm units are mainly managed by family labour, there is homogeneity of members in terms of geographical location, production system, size of the holding and marketing system. The group must be large enough to sustain a viable "Internal Control System", minimum of about 30 farmers.

SGC Certification is based on a viable "Internal Control System" (ICS). An ICS is a documented quality assurance system that allows the external certification body to delegate the annual inspections of individual group members to an identified body or unit within the certified operator. As a consequence, the main task of the certification body is to evaluate the proper working of the ICS (Rieks, G. and Bo van Alzakker 2002). The operator is the actor who signs the contract with the certification body and is responsible for maintaining the ICS. The operator should have a legal form and structure. Exporting companies are the main operators in Uganda (Annex i.). Cost estimates for certification are given in annex ii. It is difficult getting actual figures from certification organizations as these are based on private negotiations and depend on the source of funds for the certification. In other cases, Certification Organizations insist that charges are privileged information between them and their client. KRAV of Sweden is the main Organic Certification Organization operating in Uganda. Others include ECOCERT, IMO and Soil Association. SGS has an office in Uganda and has own Organic Agriculture Standards but has not yet got any Organic-certifying job in the country.

Uganda has only one farm (Kahangi Estate, 56 acres located in Kabarole District) certified as an individual farm. The farm pays around US\$ 1.200 for certification (this farm reports no transaction cost as no exports are planned in the near future). This is considered to be very high when compared to similar farms in Sweden which pay between US\$ 400 - 500 for the same service and from the same certifier. AMFRI farms in Luweero district with a central farm of about 50 acres and 60 contracted small holder farmers and a solar fruit drying operation in its project incurs the following certification investment costs to IMO: US\$ 10.000 inspection and certification fees per year and US\$ 30 transaction costs for each shipment (which amounts to about US\$ 6.000 per year for all its shipments). Again, this also differs from the KRAV fees which amount to about US\$ 1.600 for a similar project in Masaka district with about 30 small holder

growers. What emerges is that different certifiers charge different fees and the fee is negotiable.

Processing units like coffee processing factories, cotton ginneries, solar drying units and associated storages are inspected and certified separately or together with the farm production. Actually costs could not be obtained due company regulations but players estimate the average certification fee in the region of 3.4% of turnover (The Organic Standard Issue 7 of November 2001). Some estimates are given in Annex ii.

3.1.5 Agriculture products with potential for Organic Certification

- Sesame, coffee, vanilla, cotton, pineapples, ginger, mangoes and sweet bananas are crops that are already being exported as organic. These crops are grown by many small holder farmers and there is potential to bring many more farmers of these crops into the organic sector.
- Peanuts, shea butter oil, soya, passion fruits, mushrooms, and fish from Lake Victoria and fish farming, mushrooms, edible oils are some of the products with the highest potential for the international organic marketing.
- Organic certification also covers wild extraction like wild fish (fish from natural water bodies), wild herbs, and wild mushrooms. Efforts are underway by the EPOPA programme to facilitate the organic certification of the Lake Albert fishery. (Lake Victoria Fishery can not be certified under the Marine Stewardship Council due to the presence of an introduced fish species, the Nile Perch. Standards for sustainable fish production being developed by certification bodies like KRAV will allow for certification of fisheries like that of Lake Victoria)
- Bee Products (honey, royal jelly, propolis and pollen): This is one of the high potential areas for Uganda' rural population because of the availability of the necessary natural resource. What is required is the development of technical expertise in production of adequate quantities of organic or wild or natural bee products that meet the quality requirements of the high value markets in Europe. Presently production is low with very little quantities being exported to low value markets in neighbouring Kenya and the Middle East. While there are several attempts by UNIDO and Government to develop the Bee sector, the stakeholders contacted are of the view that there has not been focus in many of these efforts. Many of the initiatives are considered academic and opportunistic and have not involved the local stakeholders. As such, no marketing break through has been made for this sector.

3.1.6 Main Challenges and Constraints for Organic Certification

- i. Mobilizing, organizing and establishing an "Internal Control System" is a costly undertaking and depends on the number of farmers required for a viable export project. Most of the big projects (cotton, coffee and sesame) involving hundreds and thousands of farmers have relied on donor funding to meet these initial costs. This is the greatest barrier to organic certification for the above mass crops that have the highest potential to benefit the biggest number of small holder farmers.

- ii. High certification costs. This is because certification is done by foreign based (mostly European³) certifying organizations; the costs involved contain foreign elements (European staff time costs and air travels). This is aggravated by the copious documentation that is required due to the numerous standards that are certified against (EU, Country and certifying body). The recruitment of locally based inspectors somewhat reduces on costs. As a rule, the bigger the number of projects a certifying organization certifies in the country the less the unit cost as some of the costs, like travel costs of the international inspectors, are shared.
- iii. Lack of national or local organic standards means that certification in Uganda is based on European organic standards. In several instances some of the standards are not relevant to Ugandan conditions. For example the European standards effective 2003 require a three year conversion period for agriculture farms. This is an increase from the previous one year period. This requirement is based on conversion of the conventional European farms due to the historic use of high quantities of synthetic inputs. Traditional farming systems with low or none use of synthetic Agro chemicals are also required to observe the same requirement. While there are exemptions, this is no guarantee; as such exemptions require a documented record of farm inputs, which many small holder farmers do not keep. Whatever the length of the conversion period, the conversion period has to be inspected and as such a certifying organization will levy charges for the service as if the products were being exported. Exporters are reluctant to incur such costs as agriculture markets are considered unpredictable over such long periods of time
- iv. Lack of a local market for organic produce means that all organic produce has to be exported. This means that lower quality grades and any other excess quantities that are not taken up by the international organic market can only be sold at the prevailing prices on the local mass market or even dumped for products with no local market.

3.1.7 Developments in organic certification

There are several international and national initiatives to reduce on the certification costs and related documentation.

- i. The IFOAM and EU initiative to develop an internationally recognized "Smallholder Group Certification" scheme.
- ii. The IFOAM initiative to standardize organic agriculture standards worldwide.
- iii. Recruitment and training of Ugandan based inspectors by foreign based inspection bodies reduces on the cost of using inspectors from the north.
- iv. The NOGAMU (National Organization of Agriculture Movement of Uganda) is presently developing national organic agriculture standards, a local certifying organization and a local organic market (initiative supported by Hivos and Sida).

³ Organic exports to the European Union have to be certified by an EU-approved inspection body (EN45011).

3.2 EUREP GAP Certification

EUREP GAP standards were set up in 1997 by major European super markets for fruits and vegetables (Horticulture) and flowers (Floriculture) under the Euro Retailers Produce Working Group. EUREP GAP standards describe the essential elements and best practices for global production of fresh produce and horticultural products covering criteria for site management, harvesting, post harvesting and workers health and safety. It demonstrates to customers a company's commitment and ability to produce safe and clean food, under an exhaustive system verified by an internationally recognized independent third party. Its basic elements are integrated crop management, integrated pest management practices to reduce the harmful effects of synthetic agrochemicals on human health and socially equitable working conditions for farm workers. The Ugandan floriculture industry is not considered further in this study as it does not fit in the objectives of the BSMD project. The horticulture industry is considered because of its potential to benefit many small holder farmers. The EUREP GAP standards are now setting the pace for the quality requirements for fruits, vegetables and flowers in the European market and have been accredited under the European Standards EN 45011. These standards have started to bite the local horticulture sector. AMFRI farm reports stoppage of its export of fresh red Chillies as the European customer detected pesticide levels above permitted levels in the product. This was a weekly export of 800 - 1,000 kg of red chillies. Incidentally, other exporters buying from the same farmers in Mpigi district have not yet been stopped. The view is that it is just a matter of time before the situation catches up with them if action is not taken to assist farmers attain EUREP GAP certification. This could wipe out all those small holders who have been depending on red chillies and other horticulture produce.

Requirements:

The Ugandan export horticulture sector is still small but growing and has a high potential to benefit many small holder farmers. What is immediately required is the training of farmers in integrated pest management, handling of pesticides including use and rest period before harvest, and in the general HACCP principles (HACCP is a major component of EUROPE GAP). The farmers can then be organized into producer groups that can access the EUROPE GAP certification directly as a group or indirectly through an exporter. The costs given for Organic certification can be taken as indicative for EUREP GAP certification.

3.3 Fair Trade Certification

"International Fair Trade Standards" are a set of standards for socially responsible production and trade. Besides the minimum standards for socially responsive production and trade, Fair Trade Certification guarantees a fair price, environmental development and socio-economic development of disadvantaged producers. These standards have to be met by producers, traders, processors, wholesalers and retailers. There are two sets of generic producer standards, one for small farmers which applies to smallholders organized in cooperatives or other organizations with democratic, participative structures. The second set is for workers on plantations and factories who are organized and whose employers pay decent wages, guarantee the right to join trade unions and provide good housing where relevant. Trading standards stipulate that traders must pay a price to producers that covers the costs of sustainable production and living, pay a premium that producers can invest in development, make partial advance payments

when requested by producers and sign long term buying contracts with farmers which enables them to plan production over a long-term. On plantations and in factories, minimum health and safety as well as environmental standards must be complied with, and child or forced labour is not permitted. There are also product-specific Fairtrade standards for each product that determine such things as minimum quality, price and processing requirements that have to be complied with. The Fairtrade Labelling Organization International (FLO) is the worldwide Fairtrade Standard setting and certification organization. An autonomous Unit within FLO International runs the Fairtrade certification. This unit coordinates all tasks and processes all information related to inspections of producers, trade auditing and certification. It follows the ISO Standards for Certification Bodies (ISO 65). Starting 2003, there is only one label for fair traded products. There are about 3000 producer organizations in over 40 countries in Africa, Asia and Latin America, embracing around 800,000 families of farmers and workers. Products traded as Fairtrade include coffee, tea, cocoa, drinking Chocolate, Chocolate bars, orange juice, tea, rice, honey, sugar, mangoes and bananas. There are Fair Trade products in 14 European Countries and 3 countries (USA, Canada and Japan) outside Europe. Fair Traded coffee has a market share of 2.7%, bananas 7% and cocoa less than 1%. CBI considers the market for fair traded products to be still growing

There are two fair trade projects in Uganda, Gumuntindo Arabica Coffee Project in Mbale District being run by Twin Trading, and the Lango Organic Cotton Project being run by the Lango Organic Farming Project. These two are also certified organic projects. There is potential for Uganda to increase its participation in fair trading for the above fair traded products grown by small holder farmers.

3.4 GMP and HACCP

Good Manufacturing Practice (GMP) is minimum common sense sanitary and processing requirements, which apply to all food establishments. It generally relates to good house keeping practices concerning food safety and quality and provides the basic foundation for the development of an effective food safety and quality management system. It is usually implemented as the foundation upon which other food and safety quality management systems such as HACCP, ISO 9000 and/or SQF 2000^{cm} are developed and implemented.

Hazard Analysis and Critical Control Points (HACCP) is a management system in which food safety is addressed through analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. The system works to minimize physical, chemical and biological contamination of food products in all process steps. It applies to companies that process, treat, pack, transport, distribute or trade foodstuffs. It is a preventive risk management technique designed to provide increased control and monitoring during critical stages of the food processing chain. HACCP guidelines are provided under the World Trade Organization Codex Alimentarius Commission Guidelines for application of HACCP, ensuring international standardization and recognition. It has become important as the European Union Directive on Hygiene for Foodstuffs (93/43/EC) stipulates that "foodstuff companies shall identify each aspect of their activities which has a bearing on the safety of foodstuffs and ensure that suitable safety procedures are established, applied, maintained and revised on the basis of the HACCP system". The HACCP regulation is

of importance for Ugandan exporters because importers of food products in the European Union are legally held responsible and are therefore likely to be reluctant to do business with food processing companies in Uganda that do not have a HACCP system in place. HACCP is now a legal requirement for fish exporters to the European Union (Directive 91/493/EEC and Directive 91/492/EEC). For the fisheries sector a testing institution authorized by the European Commission carries out the inspection of the fish processing companies. In Uganda it is only Chemiphar (U) Ltd that is authorized by the European Commission to carry out inspections of the fish processing companies.

The brewing companies like Uganda Breweries Ltd. and the fish processing companies have acquired this system. The horticulture processing and exporting companies have not yet acquired this standard and are likely to face increasing constraints in maintaining and/or increasing their market penetration in the European Union countries.

Other related certifications which are likely to become important in the food sector associated with the tourism sector include:

- i. The "Safe Quality Food" (SQF 2000^{cm}) which is a HACCP based global food safety and quality code specifically designed and developed for the Agri-food industry. It is compatible with ISO 9000. The code includes the rural production, processing, transport, storages, and catering and hospitality sectors.
- ii. The SGS "Hygiene Conscious Establishment" (HCE). A management tool providing regular audits, swab, water and food sampling for laboratory analysis, certification and training. HCE certified establishments assure customers that the highest standards of food hygiene are being practiced. This standard is particularly useful for the food and hospitality establishments. Uganda's hotel industry could benefit from such a standard. However, it appears that the competition in the industry is not adequate enough to stimulate a need for such standards.

These standards are relevant for the Uganda exporters of raw and processed food products in that they assure the importers and consumers of the quality of the product. None of the exporters of raw and processed agriculture products (except the breweries and fish processors) follows these standards because of the costs involved in acquiring the certification and probably because the importers have not yet demanded for compliance.

3.5 Coffee Regulations

The coffee sector follows the standards set in the detailed Coffee Regulations, 1994 that are enforced by the Uganda Coffee Development Authority (UCDA) which is a statutory body. The standards cover the internal marketing of coffee, processing of coffee cherries, grading, packaging and export. Coffee for export is first inspected by UCDA and quality certificates are issued per export consignment. These standards and the regulatory functions of the UCDA have ensured that Uganda's coffee is among the top quality conventional coffees on the world market. This system is considered adequate for maintaining the quality of the coffee as the regulatory system is self financing from the fees collected by UCDA for its services. Ugandan organic coffee is also subject to these regulations and organic standards are only considered an addition with respect to farm production, processing and packaging. However, it is considered

that in addition to the organic coffee niche, Uganda can draw significant benefits through branding of Uganda's coffee and promoting it as a specialty product. Presently UCDA certifies two improved grades of coffee: The "Specialty Coffee" which is washed Arabica coffee from a particular location and of moisture content not more than 12% and heavy solid beans of good appearance and good flavour evaluated at above zero on established chart values. The second one is "Washed Robusta" which is washed Robusta of moisture content not exceeding 12% and of clean beans of good appearance with flavour evaluated at above minus sixty on established chart. Promoting coffee brand requires the developments of strong networks with rosters and retailers in the developed country markets and entails significant resources in advertising and promotions to build a customer base. Much more remains to be done in developing these two Ugandan coffee specialties.

In conclusion, environment, human health and equity concerns and animal welfare concerns among consumers with respect to the way food is produced are increasing. Manufacturers and retailers are responding to these concerns, which are giving rise to a number of production systems and product standards, certifications and labels. Compliance with these demands will in future determine who is able to access the international market.

4 Fish Certification

The fish sector has risen to become the second largest export sector with a total value of exported fish is estimated at US\$ 81 – 90 million in 2002. Varieties exported: Nile perch, *Tilapia* and African cat fish. The industry employs directly and indirectly 2.5 million people. Main export markets are the EU, North America and South East Asia, mostly Japan. The present annual average production of fish from the main natural water bodies of Uganda appears to have stabilized at about 220.000 to 230.000 tons. The prospects for any significant increases are unlikely in the foreseeable future without endangering sustainable stock levels. The goal of the Government of Uganda is to increase local fish production to 300.000 to 350.000 tons by 2006 with at least 10% of this total from commercial fish farming industry. Commercial fish farming is considered by the Uganda Fish Processors and Exporters Association to have a significant potential to generate income for small holder farmers if developed further because of its ability to regulate size and yield and increase supply which are now emerging as serious constraints to further growth of the fish exports.

There are 12 fish exporters (one is not a member of the Uganda Fish Processors and Exporters Association). Western Europe (main), Japan, USA, South America, Austria, Middle East, the Far East, Israel and Egypt are the main export markets for Uganda's fish. The 12 companies have all achieved the ISO 9000-2000 Quality Certificate (Effective date: March 6th 2003). Advantages of the certification include improvement in international competitiveness and increased value of fish in the export market place. It certifies to buyers in the international market that Uganda's processors and exporters of fish comply with the latest international standards at all levels of supply, production, and marketing chains. ISO 9001-2000 certification does not guarantee markets but puts Uganda's fish exports on a level playing field with fish exported to these markets from other exporting countries. It also provides a competitive advantage for Uganda in the market place against those countries whose fish processors and exporters are not certified to this ISO Standard.

Certification for the fish industry for the ISO 9000-2000 was done by BVQI, which has branch offices in Nairobi, Kenya. The training for ISO 9000-2000 was provided by Total Quality Management Consultants Limited which has a branch office in Uganda. The total investment cost for the certification (training and auditing) for the 10 companies was 100.000 US\$. USAID through the SPEED project (implemented by Chemonics) provided US\$ 50.000 as grant and the fish processors contributed a total of US\$ 50,000. Each company contributed US\$ 6.000 for the ISO 9000-20000 (training in implementing the ISO 9000-2000, establishing and documenting the ICS and its evaluation) and US\$ 3.000 for the certification fees (inspection, audit and certificate).

Other standards aspired for: “Hazard Analysis Critical Control Points (HACCAP), Cleaner Production Certification, ISO 14000 Certification and the review of their Good Manufacturing Practice (GMP) which was attained as part of the ISO 9000-2000 standard. The cost per company for Cleaner Production Certification and ISO 14000 Certification is estimated by UFPEA at US\$ 3.800 each.

Future certification plans for the fisheries sector include organic certification of fish for export and plans are underway by Agro Eco to develop organic fish certification for the Lake Albert fishery as soon as the government puts in place a more controlled lake management system. At the moment it is considered not feasible until access to the lake for fishing is regulated as opposed to the present common resource management regime. The government is in the process of setting up Beach management committees that will increase control of fishing activities. This will make it feasible for the development of certified organic wild fish production.

At the fishing level, the Fish processors indicated that quality is still poor due to poor handling and storage resulting into loss of fish for export. Exporters have no role at this level as they are prohibited from fishing. A recent study by DENIVA has identified lack of awareness of standards and participation in enforcement, lack of skills and poor storage facilities among the fisher folk as being the major constraints to compliance with EU fish standards.

5 Livestock and Dairy Product Certification

5.1 Livestock

Uganda has a potential to export livestock and meat as it used to in the 1960s. Recent attempts to revive livestock exports have involved export of live goats to the Middle East. The local market for livestock products is considered to be growing as the country’s middle class grows. However, the quality of the livestock products on the market is considered to be narrow dominated by “meat on the born” and of poor quality. Major constraints to the sector include:

- i. Low production caused by civil strife that decimated the national herd in the major cattle producing areas of the north and north east of the country and the continued insecurity in those areas that has prevented the restocking of the national herd. The remaining livestock production areas can not sustain a livestock or meat export operation.
- ii. Poor quality products due to inadequate processing skills and facilities.

- iii. Stringent health and sanitary requirements related to the requirements for free "Foot and Mouth Disease" regimes in importing countries. Uganda is still a foot and moth disease zone.

In the medium term, Uganda's opportunities in the meat and livestock export sector lie in the supplying the regional market. However this will depend on its ability to resolve conflict in the productions areas of the north and northeast, restocking of livestock in those areas and production of high value breeds (cattle, sheep and goats) and products that can meet the requirements in those regional markets. For the time being, only skins and hides will continue being the major livestock product exported to the international markets.

5.2 Dairy

According to 2001 figures from the Dairy Development Authority, annual milk production is estimated at 1000 million litres of which 50% reaches the market. Farmers' earnings from milk sells is estimated at Shs 90 billion (selling at Shs 200 per litre). Milk and dairy products are exported to Kenya, Sudan, Tanzania, Rwanda and Democratic Republic of Congo, with other markets being explored in Nigeria. In 2001, export of milk and milk products are estimated at US\$ 3 million. The plan is to increase milk production to 1.4 billion litres by 2006. Of which, 1 billion will be consumed locally and 400 million litres to be exported generating US\$ 120 million annually.

Uganda's dairy sector is supposed to be regulated by the Dairy Development Authority (DDA) following mandatory regulations in the Public Health Act and in the Uganda Standards. All exports of milk and dairy products are regulated by the Uganda National Bureau of Standards (UNBS) with respect to quality. UNBS issues a quality certificate for all exports. The requirements for the local marketing are similar to those for the export market. However, due to the serious institutional weaknesses and the entrenched nature of the informal dairy sector, the sector is week on standards and as such most of the milk (90%) passes through the informal sector while only 10% passes through the formal sector that follows the regulations. The DDA is a young institution that is still building up capacity to enforce regulations and is currently developing standards and a code of conduct for the sector. Its recent efforts have been in enforcing regulations for transportation of milk and educating informal milk dealers and handlers on handling and processing standards.

One of the identified weaknesses in the sector that negatively impacts on small holder dairy producers is the lack of grading in raw milk purchase by the big processors. All milk is bought at the same rates, a situation that disadvantages many small holder farmers that are able to produce high quality milk with high fat content. This is partly responsible for most of the milk passing through the informal sector where there is better "Quality Price Parity". Capacity utilization in the large processing plant is estimated at only 30 - 45% of installed capacity. BSMD may wish to consider facilitating the development of "Quality Price Parity" business arrangements between the small holder farmers with the large dairy processors that will encourage the small-scale producers to channel their milk through the formal market. BSMD should also consider facilitating the large processors to establish milk collection infrastructure in the poorly served milk production centres in the middle north (Luweero, Nakasongola and Masindi Districts) and in mid western (Mubende, Kyenjonjo, Kamwenge and Kabarole Districts).

6 Other Certifications

6.1 Uganda Standards

Uganda National Bureau of Standards (UNBS) is the government agency responsible for the development and implementation of National Uganda Standards. A Ugandan standard is either a specifications, a code of practice or specification aspects such as terms and definitions, symbols, sampling and test methods and quality systems. UNBS formulates standards and provides services in:

- **Uganda Standards Development.** There is a detailed Uganda Standards 2002 Catalogue of standards (UNBS 2002). Of relevance here are the standards for Food Technology that covers processes in the food industry. These include code for hygiene in the food and drink manufacturing industry (US 28:1993) which is already compulsory, Requirements for establishing HACCP for food processing establishments (US 130:1999), Fish and Fishery products for determination of the concentration of Total Volatile Basic Nitrogen (US 131:1999) and the code of hygiene practice for milk and milk products (US 163:2000). Plans are underway to make this compulsory. In addition, there are a series of specific compulsory and voluntary processing standards for milk and milk products, fruit and vegetable products, Cereals, pulses and derived products, alcoholic beverages, fish and fishery products and meat and meat products, non-alcoholic beverages, animal and vegetable fats and oils, spices and condiments, food additives, pre-packaged and prepared foods.
- **Quality Management Systems Certification.** US ISO 9000. This is an adopted ISO 9000 Quality Management and Quality Assurance Series of the International Standards.
- **Training and Technical Advisory Services**
- **Inspection Schemes**
- **Product Certification:** UNBS's Product Certification Scheme promotes production of quality products and assists consumers in identifying products conforming to Uganda Standards. Under this scheme, a permit to use the Uganda Standards (US) Certification Mark (the quality mark) is granted to manufacturers whose products consistently conform to the relevant Uganda standards. The fee for the mark is Shs 800.000 per annum. The investment costs for attaining the mark depend on the type of product being certified. Theoretically, the benefit derived from this certification is that the product can access international markets since the Ugandan Standards are based on international standards.
- **UNBS implements Mandatory Standards Scheme (MSS)** for products that fall under the Mandatory National Standards (as declared by the Minister under Clause 17 of the UNBS Act). These are products that have an effect on the health and safety of the consumer, public or the environment. Manufacturers in this category are required to submit to UNBS on a monthly basis samples of finished products for analysis. They are also required to put in place a basic quality control system that ensures that products consistently conform to the relevant mandatory National Standards. UNBS conducts factory inspections to check on compliance.

- **Product Testing:** UNBS also conducts domestic and imported product testing for conformity to Uganda Standards and other specifications.
- **Calibration and Verification Services (Industrial and Legal Metrology).** Traders and industrialists are required by law to have their equipment verified for accuracy at least once a year. UNBS verifies equipment such as commercial weights, weighing scales textile meters, petroleum sticks, fuel pumps, milk can, etc.
- **Information and Documentation Advisory Services.** The UNBS Documentation and Information Centre (DIC) provides technical information services in the field of standards, technical regulations, conformity assessment procedures and SPS measures. The DIC is the national enquiry point for the World Trade Organization Technical Barriers to Trade and Sanitary and Phytosanitary Measures.

6.2 Eco-Benefits Programme/Cleaner Production

Cleaner Production (CP) is a comprehensive continuous approach, which deals with those challenges that industries face. It enables businesses to maximize economic gains while at the same time minimizing negative environmental impacts. It is based on six major principles:

- i. Aiming to avoid the generation of waste at each stage of production or service process.
- ii. Conservation of raw materials, water and energy through improved process efficiency.
- iii. Substitution of toxic and dangerous materials (e.g. raw materials, housekeeping or cleaning reagents).
- iv. Reduction of level of toxicity of all emissions and effluents at the source during production.
- v. To recover, recycle and re-use by-products and wastes as much as possible in order to turn waste into profits.
- vi. Reduction of the environmental, health and safety impacts of products over their entire life cycles.

CP enables companies to achieve environmental compliance as stipulated in Regulation 5 of the National Environment Waste Management Regulation (1999) of the National Environment Statute (1995) and requires enterprises to practice cleaner production. CP leads to increased efficiency and competitiveness through better use of materials, water and energy in companies. It also creates in-house CP expertise that enables the company to improve continuously. CP is also a good basis for the implementation of Environmental Management System and ISO 14000 series. For example, Kakira Sugar Factory has reduced water use by 43% thus saving US\$ 33.950 per year and through saving on waste water generation, has led to recovery of US\$ 26.256 per year after sugar sells. For MAKSS Packaging Industries Ltd, the programme has resulted into reduction of water consumption by US\$ 243 per year, savings of raw materials (starch) by US\$ 65 per year, consumption of furnace oil by US\$ 565 per year, reduction of electricity consumption by US\$ 2.400 per year and consumption of paper reduced by

US\$ 5.640 per year. Twelve companies have achieved CP: Kakira Sugar Works Ltd, Kakira Sugar Factory, Kakira Sweets factory, Makss Packaging Industries Ltd., Ngege Ltd., Uganda Fish Packers Ltd, Uganda Batteries, Masese Fish Packers, Gomba Fishing Industries, Uganda Fish Skin Leather Tannery, GBK Dairy and White Nile dairy.

The Uganda Cleaner Production Centre (UCPC) set up initially as a project by UNIDO with funding from the Austrian Government and now a registered company offers CP services. It is one of 30 established National Cleaner Production Centres worldwide. Companies that have successfully completed the 10 months Eco-Benefits Programme receive a certificate (with annual extensions), site specific national label, as well as a special promotion through the UCPC brochure that is distributed widely. The CP is much sought after by the Fish Processors and the Uganda Fish Processors and Exporters Association has drawn up a programme to enable its members to access the service. They consider its importance to be in improving the efficient use of materials, water and energy, a cleaner environment and as a preparatory stage for ISO 14000 certification.

Challenges:

- The concept of Cleaner Production is not yet widely known in Uganda.
- The requirements of Regulation 5 of the National Environment Waste Management Regulation (1999) of the National Environment Statute (1995) requiring enterprises to practice cleaner production is, not widely known among manufacturers and is not strictly enforced by NEMA.
- The investment cost of achieving cleaner production.

6.3 ISO 9000 and ISO 14000

6.3.1 ISO 9000 Series of Standards

ISO 9000 standards are quality management standards for company management systems covering manufacturing and service industries. The essence of the ISO quality system is all about "Tell what you are doing, do what you are telling and prove that you have done what you have told". Consequently documentation and audit are major activities of the ISO quality standard (more detailed information about the ISO 9000 series of standards is given in annex iv.). The ISO 9000 standard is used to improve efficiency as well as quality of product within the organization. Some buyers will only buy from ISO-certified suppliers. ISO 9000 Certification is now a prerequisite for a company to compete in the international market. The Uganda Manufacturers Association (UMA) recognizes the growing importance of ISO 9000 in international trade and now provides technical support to its members in developing ISO quality systems. UMA employs a full time ISO quality and standards expert for this purpose.

In Uganda certified companies include the fish processors and exporting companies and Multi-Konsults, a local engineering firm that is soliciting for business in the eastern and southern African region. In 1999, the "Uganda Integrated Programme for Micro and Small Enterprises Component" of UNIDO in cooperation with the "Uganda National Bureau of Standards" conducted an awareness seminar on Benefits of Applying ISO Quality Management Systems and its Integration into SME Operations. According to the Executive Secretary of the Uganda Small Scale Industries Association, more than two years after the training no small scale industry has registered for the certification

because the local market to which the small scale industries market their products is not very demanding of quality, the certification is very expensive and the regulatory framework is weak. There is therefore no incentive (market or regulatory) for adoption of the ISO Quality Management Standards. The few standards that are adopted are those which are mandatory and where the regulatory institutions are able to enforce. This is mostly Calibration and verification which is required by law and which UNBS tries to enforce to a certain extent.

6.3.2 ISO 14000 Series of Standards

ISO 14000 standards are environment management standards for achieving environmental compliance to legal requirements, pollution prevention and improve environmental compliance. ISO 14000 standards are still voluntary standards essentially to enable international recognition of an individual company's management system as being environmentally conscious. Considering the consumer pressure that was responsible for making ISO 9001 and ISO 9002 necessary for doing business around the world, it is expected that, with time, consumer pressure for the environment will also make ISO 14000 necessary for doing business around the world.

6.4 Forest Certification

There are two types of forest certification

- i. Sustainable Forest Certification for products that are harvested from sustainable managed forest. This certification under the Forest Steward Council would have been useful for export of timber. But Uganda banned the export of timber. The only benefit that can be derived from this certification is when the country lifts the export ban. In this case Uganda's timber exports would return to the international market as being from sustainable managed natural Forests.
- ii. Carbon sequestration and offset certification under the Kyoto Protocol of the United Framework Convention on Climate Change: The present carbon dioxide sequestration projects in Mt. Elgon National Park and Kibale National Park funded by the FACE Foundation of the Netherlands provide labour for hundreds of local people who are employed in reforestation under the scheme. SGS provides audit and certification services for forest certification under the Forest Steward Council system. Currently there is no small holder certification system for carbon sequestration despite its potential to generate income to thousands of small holders. There is need to facilitate the development of small holder certification systems similar to the "Plan VIVO"⁴ to enable small holder farmers benefit from the growing trees on their individual farms for carbon offsets and sequestration. Development of such systems also requires the linking of small holder farmers and buyers of carbon credits in the developed countries.

Currently the Forest Resources Research Institute of the National Research Organization in collaboration with ETC East Africa, GTZ and Kenya Agriculture Research Institute are in the early stages of developing an east African Forest Certification Programme. The work is externally funded by BMZ (Germany), DFID (UK) and the EU.

⁴ "Plan Vivo" is a carbon sequestration and offset certification system which was developed to benefit specific smallholder farmers in Costa Rica.

6.5 Branding

Creation of new niche markets can be achieved through branding that differentiates the product from all others present on the market. Branding may be based on the production process or geographical areas of origin of the product. The success of 'Gourmet Coffee' illustrates the point that psychological attributes can be used to create a specific market niche even among the bulk products. Niche markets that do not have an element of branding tend to become regularized (commodification) with time as production is adopted by other producers resulting into mass production hence over supply. The Kiwi Fruit is given as a typical example. Once a niche market product, it become regularized when supply to the market expanded. Branding of a product to create a specific and exclusive market for a given product can protect against the commodification as the product is given an exclusive identification, either by the geographical area of origin or by the production process or both. BSMD could explore opportunities in facilitating brand development for some of Uganda's products like the already graded coffees. Others could be honey, which could enter the international market as a branded honey.

7 Organizations involved in Certification in Uganda.

- i. SGS is the biggest and best established International Certification Organization with offices in Uganda and the East African Region. Certification services provided include ISO 9000, ISO 14000, GMP and HACCP, Organic Agriculture, SQF 2000^{cm}, Forest Certification, Tourism, EUREP GAP
- ii. KRAV. Swedish based with Uganda based inspectors. Biggest organic certification organization in Uganda.
- iii. Institute for Market-ecology (IMO Control) based in Switzerland but with locally based inspectors in Uganda. Organic certification only
- iv. ECOCERT for organic certification.
- v. Soil Association. UK based with inspectors in Kenya for organic certification only.
- vi. EMKA Local offices for ISO 9000 and ISO 14000 certification.
- vii. Total Quality Management Ltd. With local offices for ISO 9000-12000 and EUREP GAP Certification.
- viii. OQS Certification and Evaluation Ltd. Based in Austria. (ISO 19000 and ISO 14000 certification). Providers of ISO 14000 certification to UMA members.
- ix. BVQI for ISO Certification
- x. Cleaner Production Centre for cleaner production
- xi. Chemiphar (U) Ltd for HACCP
- xii. Uganda Manufacturers Association (UMA) has standards training unit that prepares members for these standards (including ISO, HACCP and CP). It does not certify but trains members in the requirements for these certifications. The training services are also available to none members and a fee.

- xiii. Other Associations like the Uganda Fish Processors and Exporters Association have quality development for members as a priority objective and therefore raise awareness on quality issues and facilitate the joint accessing of standards and certification services for members.
- xiv. Uganda Small Scale Industries Association facilitates members to improve their management and product standards through raising awareness about standards and training for improved standards of production and product.

8 Conclusions

- i. Production processes and products that meet internationally recognized standards are a prerequisite for successful penetration of international markets, expansion of market segments and/or even retaining market access. Due to globalization and the increasing trade across borders, certification of compliance with standards by third party technical bodies has become an important marketing tool. Standards are increasingly being made more stringent as more knowledge and understanding is generated and as states and economic regional blocks increase their regulation of the quality of products and services accessing their markets.
- ii. The certification services for the most important standards for Ugandan producers, manufactures and traders are available in the country but expensive as the providers are international European based organizations and levy charges that are largely based on costs in their home countries.
- iii. Certification as a marketing tool means that the standards to follow in production and the type of certification to access by an interested party are determined by the specific market requirements and the acceptability and recognition of the certifier in that specific market. Importers are the most knowledgeable source for such information and will always specify their standards and certification requirements to their suppliers. Once the certification requirements are established, most international certifiers are able to provide the necessary certification requirements. Where such a certifier does not operate in that market, it is still possible to arrange cross certification with other certifiers who operate and are recognized in such markets.
- iv. While most certifications are necessary to meet market requirements, a few certifications like cleaner production confer higher benefits in improving production efficiency through reduction of waste in the production system than in facilitating market penetration.
- v. The exact costs of organic certification are varied and difficult to establish as certification organization are unwilling to reveal the fees. It appears that the source of funds for certification is a major factor in determining the fee. Donors have supported most organic projects and the certifying organization for every project comes from the donor country as part of the project package. Fees and costs of the certification are negotiated at project development.
- vi. The local market is not very demanding of standards and quality and the civil society consumer rights movement is still very weak. The national regulatory framework for the mandatory standards is too weak to enforce compliance among

the producers and traders. Many small scale industries do not even consider standards relevant to them as they produce for the local market that makes choices based on try and error.

- vii. Uganda National Bureau of Standards plans to introduce mandatory standards for the food and beverage industry that are based on international standards. If this is done abruptly without a preparatory phase, there is bound to be a disruption of the local small-scale manufacturers and processors, as many of them do not meet the international standards for food and beverages. However, the UNBS may introduce them but fail to raise awareness about them and also fail to enforce them as is the case for many other mandatory standards, in this case they will have no effect on the producers and the market.
- viii. Producers and manufacturers associations like the Uganda Manufacturers Association, the Uganda Fish Processors and Exporters Association, National Organic Agriculture Movement of Uganda have developed programmes to facilitate members to achieve the desired production standards and certifications. This is done with the assistance of donors and foreign expertise from international certification companies, mostly based in Europe.
- ix. There are initiatives to establish Ugandan certification organizations. The Clean Production Centre has been established, first as a government UNIDO project and now a company, with the financial assistance of the Austrian Government and technical assistance of UNIDO. This centre is providing training and certification services for CP and will, in due course, develop to provide certification services for other standards like ISO 14000. The National Organic Agriculture Movement of Uganda is also being assisted by Grolink AB and SIDA to establish Organic Agriculture Standards and a certification Organization. These developments are likely to have the effect of bringing down the certification investment costs.
- x. Niche markets tend to become regularized (commodification) with time as more producers shift to producing the product. Branding of a product gives it an exclusive identity and results into creation of a specific and exclusive niche market for a given product and protects against the danger of regularization (commodification) of a niche market
- xi. The bee sector has a potential to benefit many rural households. However there has not been adequate support to address the critical production and quality and certification constraints that confront the sector.

9 Recommendations for BSMD

- i. Meeting production standards and certification are important requirements in international marketing and a prerequisite for better participation in global value chains, and will increasingly become so for the local market. However, the high cost of certification, weak national enforcement systems and/or lack of awareness about standards by local producers and local consumers are a deterrent to the adoption of standards by producers. BSMD should consider facilitating the raising of awareness among producers on the value of standards and certification. This is better done in partnership with the producers, processors and consumer associations.

- ii. The Ugandan initiatives to establish standards and certification companies need technical, financial and moral support to develop. They can play a very important role in sensitizing producers and consumers on standards and providing certification services at affordable rates. Of particular importance is the development of a national organic agriculture certification infrastructure (National Organic Standards, Regulatory Framework, Certification organization, international accreditation, technical capacity in developing organic projects for small holder farmers, etc.). BSMD could consider providing support to the development of the national organic agriculture certification infrastructure. The specific niche for BSMD support could be in technical capacity building in developing internal control systems for groups of farmers. The second area of support would be in facilitating the establishment of business partnerships between such farmers and exporters, especially horticultural crop exporters.
- iii. Organic agriculture offers the best opportunity for improving the incomes of the majority of the population as the country has a comparative advantage for organic agriculture than many other countries. Critical technical and financial support is needed in mobilizing farmers into production units that can sustain an export operation, establishing internal control systems and meeting the investment costs of certification during the conversion period. These are costs that deter traders and exporters from joining the sector in spite of the growing demand for organic produce. Already many service NGOs like Africa 2000 Network, IRDI, JESE and NOGAMU that are providing agriculture extension services in organic agriculture are working with hundreds of farmers but with no organic marketing linkages. BSMD could facilitate the establishment of business linkages between these farmers, their extension NGOs and exporters. Such linkages will also involve the technical capacity building in developing internal control systems for groups of farmers and developing contractual relationships between the farmers groups and NGOs, on one hand, and the exporters.
- iv. The emerging horticulture export sector faces the threat of exclusion from the main European Market due to the EU regulation on agrochemical use. There is an urgent need to support farmers to comply with these requirements. The support needed is mostly technical in the use of agro-chemicals, implementation of HACCP and EUREP GAP standards and certification. BSMD could consider assisting exporters in the capacity building of farmers for HACCP and EUREP GAP.
- v. Support the branding and marketing of some selected coffee types (and other commodities) preferably in roasted form ready for consumption. This could use brand names like "Nile coffee", "Elgon Coffee", "Rwenzori Coffee", "Victoria Coffee", etc. Branding requires international registration of brand names and production processes which in turn requires the overcoming of the requirements for intellectual property rights, establishment of market outlets (in this case in the international market outlets) and considerable advertisement to attract international consumer interest. This requires considerable amounts of technical and financial resources. Considering the numerous projects in support of business development, that are being implemented in the country, support to the development of Ugandan brands could be a BSMD niche.

- vi. BSMD should consider providing support to selected local processors of agriculture produce like fruit juices and concentrates and vegetables to meet both the national mandatory standards as part of strategy to penetrate and/or enlarging the segment of the regional market in Africa and, to meet the international standards as a strategy to access the overseas international markets. Growing processors include Delight Uganda Ltd., SESACO Food Processing Ltd., RECO Industries Ltd. and House of Eden Ltd.
- vii. Standards are dynamic. They are continuously changing due to advances that are continuously being made by research. BSMD can assist farmers, processors and traders to keep track of and to comply with ever changing standards by working with their associations like NOGAMU to acquire the required technical expertise and networking infrastructure to keep track of new developments and to actively participate in influencing the development of both national and international standards.
- viii. Uganda's bee products are organic or natural and production does not involve use of Chloramphenicol that has led to the banning of the import of China bee products. China is the largest producer and exporter of bee products in the world and the banning of its bee products from the European Market, which is the largest bee product importer in the world, presents an opportunity for Uganda to establish itself on this market with its organic or natural honey products. The sector has a high potential to benefit many rural communities but is presently beset by confusion and unfocussed efforts. The BSMD project could take up one or two Bee Keeping Associations and provide focused support to address the production, quality standards and other marketing constraints in the sector.
- ix. Livestock sector: BSMD support could be in the area of quality improvement with two or more meat processors
- x. Dairy sector: Recommended support is assistance to large processors to develop “Quality Price Parity” systems with producers, and establishing business partnerships between producers in areas with poor milk collection infrastructure (e.g., areas of Luweero, Nakasongola, Mubende, Kyenjonjo, Kibale districts) and the processors.

A summary of recommendations for the different certifications is given in table 1.

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Tel/Fax: 041-347835, e-mail: ufpea@infocom.co.ug, www.lakevictoriafish.com
2. Mr. Andrew Kiri, Chairman of the Quality Committee of the Uganda Fish Processors and Exporters Association (UFPEA), Room 7, 1st Floor, Agip House, Plot 9, Kampala Road, P.O. Box 24576, Kampala, Uganda
Tel/Fax: 041-347835, e-mail: ufpea@infocom.co.ug, www.lakevictoriafish.com
3. Dr. Ferdinand Bitanihirwe, Agriculture Services Manager, SGS Uganda Limited, Plot 34B Kyadondo Road, Kampala, Uganda
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Tel: 041-222367/505995, e-mail: unbs@afsat.com
5. Mr. George Opiyo, Information Officer, Uganda National Bureau of Standards, P.O. Box 6329, Kampala, Uganda
Tel: 041-222367/505995, e-mail: george.opiyo@unbs.org
6. Uganda Cleaner Production Centre 2003, Cleaner Production in Uganda, The Eco-Benefits Programme, P.O. Box 7184, Kampala, Uganda.
ucp@ucp.co.ug
7. Ms. A van Beuzekom, Project Manager, Market Information and Trade Intermediary Section, CBI, Centre for the Promotion of Imports from Developing Countries, P.O. Box 30009, 3001 DA Rotterdam, The Netherlands
accessguide@cbi.nl
8. Ms. Sonia, AMFRI FARMS, Kampala, Uganda
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9. Mr. Vincent Senyondo, Executive Secretary, Uganda Small Scale Industries Association, P.O. Box 7725, Kampala, Uganda
Tel: 077-430864, e-mail: ussia@starcom.co.ug
10. Mr. Lawrence Muwesi, Proprietor, Bawesi Company, P.O. Box 815, Masaka, Uganda
Tel: 077-991257
11. Ms. Nalongo Semwogerere, Chairperson, and Mr. Adams Chabdia, Member, Bulemezi Bee Keepers Association, Uganda
Tel: 041-610189
12. Ms. Sarah Nalumansi, Director, Training and Quality Development, Uganda Manufacturer Association, Uganda

13. Mr. Galiwango, Land O' Lakes, Uganda
14. Alastair Taylor, Chairman, NOGAMU, P.O. Box 70071, Kampala, Uganda
e-mail: nogamu@utlonline.co.ug
15. Chemiphar (U) Ltd., P.O. Box 25525, Kampala, Uganda
e-mail: chemiph@infocom.co.ug
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 - Consumer Choice Council (Earth Friendly Coffee) www.consumerscouncil.org
 - USDA Standards at www.ams.usda.gov/nop/index.htm
 - www.organics.com
 - Regulations for organic cosmetics controlled by BDIH www.kontrollierte_naturkosmetik.de/en/index.htm
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 - Transfer USA for Fair Trade Certified Chocolate www.aitnb.com/hr3.e.tm
 - www.fairtrade.org.uk
 - SGS. www.sgs.co.uk
 - Forest certification www.nfn.org.au/sfm/sc3.html also www.iprolink.ch/~fitbb/industrial_Dept/seminar_forest_certif_98.h
 - Benefits of Certification. www.cert_id.com/industry_benefits.htm
 - Industrial Certification training Programme. www.vw.vccs.edu/pages/BREW/certification.html
 - ISO www.150.ch/cate/cat.html www.nlc-bcn.ca/iso/tc46sc9/standards/690-2c.htm www.praxiom.com www.iso.com
 - EUREP GAP. www.eurep.org
 - EHI- Euro Handels Institute (Accreditation Body for EUREP GAP). www.ehi.org

Table 1. Summary of Certifications and Recommendations

Type of certification	Sector	Benefits	Service providers	Recommendations for BSMD project
1. Organic Agriculture Certification	Horticulture Agriculture Fisheries Honey	<ul style="list-style-type: none"> • Environmental sustainability of farming systems • Access to a larger market for many farmers (local and external) • Access to a growing market niche (increasing market opportunities in addition to the present mass market) • Premium price • Added value due to processing (solar dried fruits) • Economic equity for farmers 	KRAV Soil Association IMO Control SGS, ECOCERT	<ul style="list-style-type: none"> • Provide assistance in development of ICS for small holder farmers • Provide assistance in meeting initial certification costs • Provide assistance to the development of national certification programme in the area of operational facilities and accreditation.
2. EUREP GAP	Horticulture (fruits and vegetables)	<ul style="list-style-type: none"> • Meet minimum European market access requirements 	SGS	<ul style="list-style-type: none"> • Provide technical assistance in meeting EUREP GAP standards
3. Fair Trade Certification	Agriculture (coffee, bananas, cocoa, vanilla)	<ul style="list-style-type: none"> • Access to a growing market niche • Premium price • Economic and social equity for farmers hence poverty alleviation 	FLO	<ul style="list-style-type: none"> • Assistance in developing farmer groups and projects. • Assistance in obtaining fair trade certification
4. Good Manufacturing Practice (GAP) and Hazard Analysis Critical Control Point (HACCP)	Food sector (production and processing, solar dried fruits)	<ul style="list-style-type: none"> • Food safety • Respectability in food importing markets 	SGS Chemiphar	<ul style="list-style-type: none"> • Assist in meeting technical costs of initial assessment, establishment of HACCP systems and training
5. Coffee Regulations	Coffee processors and exporters	<ul style="list-style-type: none"> • Minimum marketing requirements 	UCDA	<ul style="list-style-type: none"> • None
6. Eco Benefits Programme: Cleaner Production	Manufacturing	<ul style="list-style-type: none"> • Meet minimum environmental standards • Save costs through more efficient use of energy, waste and water use (more efficient production) 	Cleaner Production Centre	<ul style="list-style-type: none"> • Assist factorize and industries to cover initial technical and training costs

Type of certification	Sector	Benefits	Service providers	Recommendations for BSMD project
7. ISO 9001	All	<ul style="list-style-type: none"> International market acceptability of products and service Continuous product and or service improvement 	EMKA Total Quality Management	<ul style="list-style-type: none"> Assist in meeting technical costs for establishing ISO 9000
8. ISO 14000	All	<ul style="list-style-type: none"> Respectability of products in international markets 	SGS EMKA, Total Quality Management	<ul style="list-style-type: none"> Assistance in achieving “cleaner production” certification by the UCPC would prepare the companies for ISO 14000
9. Forest Certification	Forestry timber None timber products Carbon sequestration	<ul style="list-style-type: none"> Access to sustainable forest product markets 	SGS	<ul style="list-style-type: none"> Facilitate development of forest certification systems
10. Branding	Coffee, vanilla,	<ul style="list-style-type: none"> Market monopoly for product 		<ul style="list-style-type: none"> Facilitate development of product brands and their marketing. (Like Lake Victoria Nile Perch, Elgon Coffee, Rwenzori vanilla, etc.)
11. Uganda Standard	Fruit juice and food processors Diary processors	<ul style="list-style-type: none"> Local and Regional market access for processed products Spring board for meeting international standards hence international markets 	Uganda National Bureau of Standards	<ul style="list-style-type: none"> Facilitate food processors to meet hygiene standards
12. Dairy Regulations	Dairy sector	<ul style="list-style-type: none"> Access to formal local and regional markets 	Dairy Development Authority Uganda National Bureau of Standards	<ul style="list-style-type: none"> Facilitate dairy processors to develop quality based milk payment schemes for producers. Facilitate small holders to form production and marketing groups

Annex i. Current Known Organic Agriculture Export Projects Running in Uganda

Company Name	Project started	Region/District	Exported 2000/01	Expected Export 2001/02	Number of Certified Farmers	Certifier	Project Supported By
Lango Union	1994	Lira and Apach	240 tons lint cotton	140 tons Sesame	12,000	SKAL	Bo weevil BV and HIVOS
Kawcom (U) Ltd	1998	Nebbi	400 tons ArabicFAQ	500 tons Arabica FAQ	6,000	KRAV	Private
Outspan Enterprises Ltd	1998	Soroti/Apach/Kaberamaido	460 tons sesame 22 tons Lint cotton	500 tons sesame 200 tons lint cotton	5,800	KRAV	Private
Kawacom (U) Ltd	1998	Bushenyi	600 tons Robusta	800 tons Robusta	5,200	KRAV	Sida
Suntrade/African organic	1993	Luweero/Mukono/Rakai/Masaka Mpigi/Mubende/Mbarara.	356.6 tons fresh fruits & vegetables 3.8 tons Dried fruits	500 tons fresh fruits & vegetables. 10 tons Dried fruits.	62	IMO-CONTROL	Private
ESCO (U)	2001	Bundibugyo	N/A	Vanilla	150	KRAV	Sida
Gumutindo Project	2001	Mbale	Fair-Trade Arabica	100 tons FT Arabica	Targeting 2,000	KRAV	Café Direct/Twin Trading Bugisu Union
Kawacom (U) Ltd	2000	Kapchwora	250 tons Arabica FAQ	500 tons Arabica FAQ	4,500	KRAV	Private
Ibero (u) Ltd	2001	Luweero	Robusta	50 tons Robusta	Targeting 200	KRAV	GTZ
ESCO (U)	2001	Bundibugyo	N/A	200 tons organic cocoa 500Kg organic vanilla	Expecting 2,000		Sida
Kahangi Estate	2001	Kabarole	N/A	Passion fruit, Tea, Coffee	One 56 acre estate		Private
TEFU	2001	Mubende		Dry Sweet bananas, pineapples	40 farmers (3ha")	KRAV	Utrekom (Denmark)
MOP	2001	Masaka/Kyotera		Dry Sweet bananas, pineapples and mangoes	20 farmers (60 ha ")	KRAV	Utrekom (Denmark)
AMFRI FARMS	2000	Luweero/Mpigi	NA	Ginger, dry sweet bananas, pineapples	80 farmers (320 ha)	IMO	Private

Annex ii. Estimated certification costs structures

a) For small holder Group Certification (about 500 farmers)

Description	Cost	
Constants and basis for costs		
Inspector's fee	USD 80.-	per day
fee per day for cert	USD 120.-	per day
Fee structure		
<i>Application fee</i>	USD 50.-	for individual units
	USD 200.-	for projects
<i>Annual fees</i>	USD 100.-	for individual units (farms)
	USD 100.-	for small processor
	USD 250.-	for large processor
	USD 250.-	for projects with organized farmers
	USD 50.-	per unit in such project
	USD 1,000.-	for projects with ICS
	USD 10.-	per farmer in small projects with ICS
<i>Travel and accommodation costs during inspections</i>	at costs	
<i>Other fees</i>		e.g. Transaction certificates
<i>Product approval</i>	USD 60.-	per product, applies to processed products
<i>Export Certificate</i>	USD 5.-	per cert
<i>Extra inspections</i>	at cost	
Sampling and laboratory analysis	at cost	

b) For Processing Units:

Description	Cost	
Processing large	USD 6,000.- or 3.5% of turnover	e.g. coffee processors and exporters
Processing units small	USD 3,000.- or 3.5% of turnover	e.g. solar drying units

Annex iii. Benefiting Fish Companies for ISO 9001-2000

Below is a list of benefiting Fish Processing and Exporting Companies that are for ISO 9001-2000 Quality Certification:

1. Byansi Fisheries Co. Ltd. P.O. Box 156, Masaka, Kalisizo
Tel: 256 481 22062. Fax: 256 481 120 388/256 77 280 741
e-mail: byansifi@africaonline.co.ug and byansifishery@yahoo.co.uk
2. Tropical Fish Industries. Plot 40-41 sir Apollo Kagwa Rd. P.O. Box 10702 Kampala
Tel: 256 41 254984/256 041 344237. Fax: 256 41 233829
e-mail: begumisa@spacenetuganda.com
3. Gomba Fishing Industry Limited. P. Box 4903, Kampala
Tel: 256 043 107/8. Fax: 256 041 343066/234335
e-mail: gomba@infocom.co.ug
4. Greenfields Uganda Limited. P.O. Box 1931, Kampala
Tel: 256 41 320 716/256 41 321 141. Fax: 256 41 321 386/256 41 320 591
e-mail: gul@infocom.co.ug
5. Hwan Sung Ltd. P.O. Box 7628, Kampala
Tel: 256 41 285 684/256 41 2555 357. Fax: 256 41 286 389
e-mail: hwansungltd@hotmail.com
6. Marine & Agro Export Processing Ltd. Plot 96 Nyanza Road Jinja. P.O. Box 2070, Kampala
Tel: 256 41 258 860. Fax: 256 41 343112
e-mail; marine@starcom.co.ug
7. MGE -GE Limited. Plot 38/40 Old Port Bell Road. P.O. Box 20028, Kampala
Tel: 256 41 221362/256 41 220413. Fax: 256 41 221361
e-mail: ngege@imul.com
8. Masese Fish Packers Ltd. P.O. Box 7409, Jinja
Tel: 256 43 122111/2/3. Fax: 256 43 122 110
e-mail: mfpuganda@spacenet.co.ug
9. Uganda Fish Packers Ltd. P.O. Box 7409, Kampala
Tel: 256 41 287970/256 41 287957. Fax: 256 41 505990
e-mail: ufp@alphakampala.com
10. Uganda Marine Products Ltd. P.O. Box 2965, Kampala
Tel: 256 41 531 695. Fax: 256 041 533 112
e-mail: ump@infocom.co.ug

Annex iv. ISO 9000 Series

Rational of the ISO 9000 Series

Initially, quality was guaranteed by segregating badly from good (inspection). However because such a system did not improve quality, there was a shift to upstream processes of production to prevent production of defectives by improving and controlling the process. This was the beginning of quality control which then progressed to quality assurance. Quality assurance dealt with planning of actions to ensure quality. This again was based on assuring quality specification of the product. The method involved specifying the quality parameters to the last detail and then controlling the process to achieve equivalent quality. This also became outdated as industry found itself hard pressed since fast changes in technology make it difficult to depict the full requirements of quality by way of laying down product specifications. For example, each new item in some of the industries (e.g. electronic items) becomes outdated the moment it is made. This led to evolution of the concept of "Quality Management Systems" which focus on consistent and continuously improved quality of products and services.

A properly functioning quality management system requires consistent implementation, careful auditing and total commitment of the whole organization, beginning with the top-most level of management. Only then will it help to reduce costs, improve the quality of products and establish confidence and a good image in the minds of customers and public. To provide the required assurance to the purchaser, it is necessary that the quality system is assessed and certified by an independent third party certification body, which meets the requirements of a nominated internationally accepted standard on quality management.

The ISO 9000 series of standards (consisting of five standards: ISO 9000 to ISO 9004) provide a framework and guidelines for the formulation of Quality Management Systems. ISO 9000 system of standards is a comprehensive quality assurance system that encompasses quality in all functions such as marketing, design, purchase, manufacture, assembly, testing, packaging, shipping, installation, commissioning, after-sales service, recycling and all other activities of an organization. ISO 9000 series was developed by "International Organization of Standards" (ISO) to serve trade. ISO is a non-governmental organization and therefore has no powers to enforce them. ISO 9000 system, though voluntary and not obligatory, has become accepted worldwide as a good quality guarantee system and has in turn become an important tool for international marketing.

Key Concepts

ISO 8402 defines "Quality" as the "Totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs". There are five core concepts of the ISO 9000 - 9004 norms.

- **Quality management:** The objectives of the organization in relation to quality, as well as the ways and means which lead to the realization of these objectives, are formally expressed in a statement by the management of the organization.
- **Quality care:** The aspect of the entire way the management functions, which determines the establishment and implementation of the quality management.

- Quality system: The organizational structure, responsibility, procedures, processes and arrangements for the implementation of quality care.
- Quality control: The operational techniques and activities that are utilized so as to ensure that the quality demands are fulfilled.
- Quality assurance: The entirety of all planned and systematic actions necessary to instil sufficient confidence that a product or service conforms to the set quality demands.

The five ISO 9000 Series (or Norms)

- i. ISO 9000: It is generally used as a description of the Quality Systems Standards, it in fact a document that only guides the selection and use of the appropriate part of the ISO 9000 Series which should be chosen by the company seeking certification. It is a road map to use to find a way to the other standards in the series.
- ii. ISO 9001: Covers the quality Systems which apply to a company whose activities include the design and development, production, installation and servicing of products, when the requirements for how those products must perform are specified by the customer and then fulfilled by the supplier. This norm establishes the demands made on the quality system when the contract requires that the supplier have to demonstrate his competence to design and deliver the specified products.
- iii. ISO 9002: This is the most commonly applied ISO norm. It establishes the demands set on the quality system, if the contract requires that the supplier has to demonstrate his competence to control the process, which determines the delivery of good products. It is mostly used where a company is manufacturing goods to specifications which they publish as part of their technical information and data service, or where they manufacture goods to a customer's specification but where no significant element of specific design is included in meeting these specifications.
- iv. ISO 9003: This standard or norm specifies a Quality System which only applies to final inspection and testing procedures for finished goods. It establishes the demands made on quality system, if the contract requires that the supplier demonstrates his competence for tracing and controlling each defect of the product during the final approval and testing. It is of limited application and only suitable for those companies that do not have a manufacturing system of their own, but which handle finished products in some way.
- v. ISO 9004: This norm describes a number of basic elements, which can be used to develop, and implement quality care systems. It contains all the elements to achieve a "Total Quality Management" (TQM) system applicable to the company. This norm gives the elements only. Companies cannot be certified against it.

Why implement ISO 9000

- ISO 9000 has an almost worldwide acceptance as the normal Quality System standard for all industries. This means that having ISO 9000 certification is guarantee to a trading partner anywhere that a company has achieved an internationally recognized standard in managing a quality programme.

- Many major purchasers, multinational producers, large distribution chains and government agencies are now insisting that their suppliers have ISO 9000 registration before they will even consider doing business with them.
- There is growing perception that, in industries where product certification is common practice, regulatory agencies will require the adoption of approved Quality Management System before granting product certification.
- Many countries, including Uganda, are in the process of strengthening their legislation, particularly in relation to safety and environmental issues. A major element in the legislation is based on ISO 9000 standards.

Benefits of adoption of ISO 9000 Standards

- Customer Orientation: ISO 9000 meets the customer requirements by providing quality products or services to satisfy the customer's needs.
- Marketing advantage: ISO 9000 certified companies are accepted by all customers which helps improve marketability of company's products and services in both national and international markets places.
- Recognition: ISO 9000 certification gives special recognition to company, which repositions the buyer perception at a higher level. Recognition develops a sense of pride in employees.
- Confidence creation: ISO 9000 creates confidence in management to deliver the quality products and confidence in the customer about the capability of the company. It improves the morale of employees, because they are deeply involved.
- Consistency in quality: ISO 9000 helps to maintain consistency in quality of products or services, any non-conformity or deviation is immediately identified and appropriate corrective action can be taken.
- Legal aspects: It is legally accepted by several countries. It eliminates product liability disputes by ensuring the delivery of only conforming products from the factory premises.
- Productivity improvement: ISO 9000 results in improvement of productivity of the organization by effective utilization of material, technical and human resources.
- Improves financial performance: By reducing the costs and improving productivity, financial performance of the company improves. A better return on investment is achieved.
- Reduction of rejects: By using ISO 9000 system, the chance of products being rejected by importers decreases. This means that the costs will be lower, which results in an immediate profit for the company.
- Creates an effective QMS: ISO 9000 helps in organization of Quality Management System, thus ensuring an effective quality system in the organization.
- ISO 9000 brings clarity: It defines the job specification, delegates authority, identifies responsibilities of each employee, which brings clarity in working.

- **Traceability:** Materials can be traced at any stage, right from procurement to every stage of processing and final delivery to the customer
- **Documentation:** The ISO 9000 system ensures complete documentation of products, materials, activities and system operations. Documentation helps in identification, review and improvement of product or services.
- **Demonstrability:** ISO 9000 system demonstrates the capability of the organization to achieve specified quality. It makes visible the quality management system to the purchaser, like an open book.
- **Human resources development:** Adoption of ISO 9000 ensures regular training and development of manpower, which helps in overall cultural improvement of the organization.
- **Monitoring:** The ISO 9000 quality system helps in regular monitoring of all the organization's activities, in identification of problems and in taking appropriate timely corrective action.
- **Increases export potential:** International trading organizations prefer to do business with ISO 9000 certified suppliers. Several nations are making it compulsory to have ISO 9000 certificate to become an exporter to their country.
- **Innovation and improvement:** ISO 9000 standards provide for continuous improvement in quality and innovation of new produce, to meet the dynamically changing needs of customers and remain a market leader.

Annex v. Data Collection Tools

Checklist for interviews with informers.

A. For producing and trading companies (including Uganda Bee Keepers Association (UBKA))

1. Name of Organization, type of business, type of product, types and source of raw materials, marketing outlets.
2. Type of Certification presently being used and/or planning to be used and what are the benefits of the certification.
3. How did you come to know about this certification?
4. Certification body/organization offering certification services
5. How is the certification organized (steps in the process, type of inspectors : local or foreign based)
6. Costs of certification
7. Standards being followed and reasons. Type of capacity building (technical and operational) undertaken to achieve the standard, by who, at what cost and how was this financed.
8. What are the constraints in acquiring the certification?
9. What are the benefits since certification was obtained/or hope to get when certification is obtained?
10. Do you know of other competitors who have the same certification and/or in the process of acquiring it?
11. Is there any other certification that you would want to obtain
(If answer is yes then the above questioning is followed again)

B. For Certification Organizations (including Uganda Bureau of Standards (UBS))

1. Name of Organization, addresses, etc
2. Types of certifications offered and standards followed, accreditation,
3. Value/usefulness/benefits/purpose of each type of certifications, in which countries is the certification useful as a marketing tool?
4. What are the requirements and procedures for acquiring each type of certification (how the certification is obtained)
5. Personnel involved in the certification (local based or foreign based)
6. Costs
7. What companies have or are in the process of acquiring each of the certifications from your organization or other certification organizations that you know of.

8. What is the outlook/potential for each type of certification in Uganda (Describe which businesses can benefit from which type of certification and for which market)

C. For Uganda Export Promotion Council (UEPC)

1. List of types of certifications that are known by UEPC to be in use by Uganda based companies, types of products or management systems involved and market where they operate and the certification organizations involved.
2. List of other types of certifications (and certifying organization) that UEPC thinks can be useful for Ugandan based businesses and how?
3. Known constraints to obtaining certification by Ugandan based businesses and suggestions on how to address them.
4. What role does UEPC play in promoting certifications?
5. What other organizations, programmes/projects are facilitating the acquisition of certification?

E. Associations (Uganda Manufacturers Association, Uganda Fish Processors and Exporters Association, etc.)

The questions for UMA will depend on whether it is involved in facilitating certifications for members of the Association.

1. Do you know the types of certifications that any of its members have? If yes, which ones, which members, and who is providing the certification services?
2. Do you facilitate members in acquiring certification? If yes, which certifications and what type of facilitation is (was) provided?
3. What are the future plans of your association in the field of certification and standards?
4. What is the outlook for certification of Uganda based businesses?