The Status of Organic Agriculture, Production and Trade in Kenya Report of the Initial Background Study of the National Integrated Assessment of Organic Agriculture Sector -Kenya Ms. Cecilia Kimemia Mr. Eric Oyare Bridge Africa, P.O. Box 8062-00300 Nairobi, TEL: 4451356, EMAIL: bridgeafrica@todays.co.ke January 2006

ACRONYMS

Association of Better Land Husbandry
Convention on Biological Diversity
Community Based Organisations
Capacity Building Task Force
Commission for Sustainable Development
Civil Society Organisation
Export Promotion of Organic Products from Africa
European Union
Food and Agriculture Organisation of the UN
Gross Domestic Product
Genetically Modified Organisms
Integrated Assessment Programme
International Centre for Insect Physiology and Ecology
International Federation of Organic Agriculture Movements
Kenya Institute of Organic Farmers
Kenya Organic Agriculture Network
Kenya Organic Farmers Association
Manor House Agricultural Centre
National Environmental Management Authority
Non Governmental Organisation
National Steering Committee
Organic Agriculture
Sustainable Agriculture Community Development Programme
Sustainable Agriculture Centre for Research and Development in Africa
Swedish International Development Agency
United Nations
United Nations Conference on Trade and Development
United Nations Environmental Programme-Environment & Trade Bureau
United Nations Educational and Social Cultural Organisation
United States Department of Agriculture – National Organic Programme

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Chapter One: Background

1.0 Introduction

Agriculture is important to humankind as it produces the food on which human life depends and has been fundamental to civilization in providing the foundation from which economic activity has developed.

Farming is part of every land. It produces the food on which human life depends and has been fundamental to civilization in providing the foundation from which economic activity has developed. With increasing urbanization, it is extremely important for us to remember this.

Majority of the world population are greatly concerned about the deterioration of the world's land resources and our capacity to produce food for the ever-increasing world population. It is in this context that the term sustainable (organic) agriculture has developed as a solution.

It is a product of economically-advanced countries which have, rather belatedly, recognized the serious degradation of soils and pollution of the environment caused by chemicallybased farming which was widely promoted in the Green Revolution in the 1960s. Largely for this reason sustainable agriculture has sought to distance itself from the earlier imperative of achieving maximum possible production.

Modern farming systems involves high inputs of synthetic fertilizers and pesticide to support high-yielding, hybrid varieties of crops have contributed to soil erosion, environmental pollution, loss of indigenous crop diversity and poorer health among rural people. Chemicals certainly provide a quick fix but are ultimately self-defeating, and whereas in temperate countries it has taken many years to see their ill-effects, in tropical countries with poorer soils the effects have been short-lived and the effects more damaging.

In addition, these methods have become too costly to operate, especially in poorer countries, because increasing quantities of chemicals have become necessary in order to achieve satisfactory yields of saleable produce. The increasing costs of the items that farmers have to buy coupled with the low prices which they earn mean that great numbers of rural people are trapped in a poverty caused by the system, its commercial pressures and marketing framework. As a result, the number of farmers in debt across the world has increased dramatically since the 1970s. Many have given up and moved to cities. The Gene Revolution no threatens a similar prospect for many who have so far survived the Green Revolution. Unless we prepare ourselves, the result will be a new wave of destitution and landlessness for poorer families and an increased concentration of land as wealthier farmers and speculators buy of bankrupted farms

Access to food continues to be insecure in Africa in particular, and the reasons are well known to be more often of social, economic, environmental and political in nature rather than a matter of not sufficient food being produced internally and at the global level. Organic agriculture both certified and non-certified, offers considerable potentials in developing countries. Small farming communities usually have limited access to external inputs, as these are often costly or not available, while their application needs training and information. Green Revolution crop varieties depend on agrochemicals, and their distribution is usually limited to areas with high agricultural potential. Farmers in marginal areas have rarely adopted Green Revolution production systems. Genetically modified crops are being pushed to Africa as a solution to hunger, while this risky, proprietary and expensive technology is very likely to deepen the Green Revolution failure.

Organic production apart from being suitable to marginal as well as productive areas, contributes to soil, water, and biodiversity conservation. It produces the diversity necessary for healthy nutrition, makes use of local resources and traditional knowledge and thus strengthens farming communities. Much farming in developing countries is de facto low or no chemical input farming but this does not mean it is "organic by default". Many farming technologies practiced by poor people are sustainable; others are definitely not and need improvement.

Organic agriculture in Africa has grown in the past years, to a point where it becomes visible and measurable. In about half of the African countries, a considerable numbers and variety of farmers, communities and organizations have gained experience both with certified and non-certified organic production, for overseas markets as well as for local food supply.

Organic agriculture includes all agricultural systems 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, it aims to optimize quality in all aspects of agriculture and the environment. Organic agriculture dramatically reduces external inputs by refraining from the use of chemosynthetic fertilizers, pesticides, and pharmaceuticals. Instead it allows the powerful laws of nature to increase both agricultural yields and disease resistance.

Organic agriculture adheres to globally accepted principles, which are implemented within local social-economic, climatic and cultural settings. As a logical consequence, IFOAM stresses and supports the development of self-supporting systems on local and regional levels." (IFOAM 2000)

Organic farming is a system that relies largely on locally available resources and is dependent up on maintaining ecological balances and developing biological processes to their optimum. By relying on the natural capacity of plants, animals and the landscape, organic systems aim to optimize quality of all aspects of agriculture and the environment. Reduced reliance on agrochemicals to control changes in soil conditions also means that production must be better adapted to local conditions. Organic systems thus encourage the expansion of varieties of crops grown, and the preservation of older, locally bred and indigenous varieties and breeds. Organic farming systems aim to increase this diversity of crops, in time (through three-to-four year-rotations) or in space (through intercropping or growing several species in the same season in different fields).

Practical experiences and farming systems especially in underdeveloped world show that organic agriculture is a system that involves underutilization of agrochemicals and instead the reliance on national biological products to sustain the lives of plants. Soil fertility is a critical issue achieved through organic farming by practicing crop rotation and other land use systems like composting (Richard T. 1999). Reliance on external inputs, whether chemical or organic, is reduced as far as possible. In many European countries for example, organic agriculture is known as ecological agriculture, reflecting this reliance on ecosystem management rather than external inputs, (Nicolas L. 1999). The objective of sustainability lies at the heart of organic farming and is one of the major factors determining the acceptability or otherwise of specific production practices.

1.1 Definition of Organic Agriculture

According to Kenyan Organic Agriculture Stakeholders steering the IAP project (NSC), Organic Farming is a farming system that respects the biological relationship that exists in nature thereby fostering natural resource and environmental conservation. Organically grown produce is therefore healthy as it is grown without use of any (or limited) chemical fertilizers and synthetic pesticides, additives and preservatives and without genetic manipulation of living organisms as happens with genetically modified foods. This definition has been derived from a critical look at the organic sector in Kenya and relating this organic farming system and practice to other internationally accepted definitions developed by such organisations like IFOAM.

1.1.1 Sample International Definitions of O.A.

- 1. Organic agriculture includes all agricultural systems 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, it aims to optimize quality in all aspects of agriculture and the environment. Organic agriculture dramatically reduces external inputs by refraining from the use of chemosynthetic fertilizers, pesticides, and pharmaceuticals. Instead it allows the powerful laws of nature to increase both agricultural yields and disease resistance.
- 2. Organic agriculture adheres to globally accepted principles, which are implemented within local social-economic, climatic and cultural settings. As a logical consequence, IFOAM stresses and supports the development of self-supporting systems on local and regional levels." (IFOAM 2000)
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1.1.2 The key characteristics of organic farming

- Protecting the long term fertility of soils by maintaining organic matter levels encouraging soil biological activity, and careful mechanical intervention
- Providing crop nutrients indirectly, using relatively insoluble nutrient sources which are made available to the plant by the action of soil microorganisms
- Nitrogen self sufficiency through the use of legumes and biological nitrogen fixation, as well as effective recycling of organic materials including crop residues and livestock manures
- Weed, disease and pest control recycling primarily on crop rotations, natural predators, diversity, organic manuring, resistant varieties and limited (preferably minimal) thermal, biological and chemical intervention.
- The extensive management of livestock, paying full regard to their evolutionary adaptations, behavioral needs and animal welfare issues with respect to nutrition, housing, health, breeding and rearing;
- Careful attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats.

1.1.3 Contemporary Definitions of Organic farming

Simplified meaning of Organic Agriculture locally and internationally:

1. Organic farming is reduced costs of inputs in agriculture use of composts, natural or botanical pesticides and other local inputs have reduced costs in farming and farmers see organic farming as a method that is affordable and manageable

- 2. It is re-cycling of organic matter, thus composting and use of composts, farm yard manure and other forms of organic fertilizers are important organic farming activities
- 3. Organic farming in Kenya is conservation of resources, thus soil and water conservation are essential using A-frame as a contouring device. Other activities include water harvesting, tree planting and mulching
- 4. Organic farming is improved soil medium. It is double digging, deep digging and other alternative soil cultivation methods
- 5. It is increased food production and poverty alleviation; thus kitchen gardening and botanical pest and disease control are essential
- 6. It is improved livestock production using balanced feeds, herbal treatment and keeping animals according to their nature
- 7. Organic farming is appropriate technology and home made, 'do it yourself' technologies that make the farmer self sufficient.

1.2 The Principle Aims of Organic Production and Processing

The International Federation of Organic Agriculture Movements (IFOAM) has published and continuously updates the IFOAM Basic Standards for Organic Agriculture and Processing. These standards have been adopted worldwide as the framework of guidelines for organic agriculture. The principle aims of organic agriculture as expressed in the most recent revision (IFOAM, 96) are presented below (Savala 2003):

- To produce food of high nutritional quality in sufficient quantities.
- To interact in a constructive and life-enhancing way with natural systems and cycles.
- To encourage and enhance biological cycles within the farming system, involving micro-organisms, soil flora and fauna, plants and animals.
- To maintain and increase long-term fertility of soils.
- To promote the healthy use and proper care of water, water resources and all life therein.
- To help in the conservation of soil and water
- To use as far as possible renewable resources in locally organized agricultural systems
- To work, as far as possible, within a closed system with regard to organic matter and nutrient elements
- To work, as far as possible, with materials and substances which can be reused or recycled, either on the farm or elsewhere
- To give all livestock conditions of life which allow them to perform the basic aspects of their innate behavior
- To minimize all forms of pollution that may result from agricultural practice
- To maintain the genetic diversity of the agricultural system and its surroundings, including the protection of plant and wildlife habitats.

1.3 Evolution of Organic Agriculture in Kenya

1.3.1 Background to Kenya's agriculture sector

Kenya comprises almost 600,000 sq. Km and has a population of more than 30 million (31,540,000 – by 2002 estimates) people, with a growth rate of 2.7%. Total land in Kenya is at 56,914,000ha, arable land stands at 4,600,000ha while irrigated land is at 90,000ha. It has one of the most developed and diversified economies in the Sub-Saharan Africa region based largely on agriculture. Kenya is home to a number of UN organisations, including UNEP, HABITAT and the regional UNESCO headquarters. There are also a number of international agricultural research institutes based in the country. Mombassa on the East Coast is one of the country's cities and is one of the East Africa's major ports and serves as a port of entry to Kenya's landlocked neighbours like Uganda, Rwanda. The GDP per capita is around \$ 300

Kenya is a major exporter of coffee and tea, for which it has a reputation for high quality, fruit, flowers and vegetables. Many exporters are plantation style farms, although smallholder exports are important, too. Agricultural products account for 65% of exports, with tea and coffee accounting for 42%.

Around 75% of Kenya's population is engaged in agriculture. Despite being a major exporter of cash crops Kenya is also a larger recipient of food aid in Africa (Arnold, 1997; Milestone and Lang, 2002)

According to local sources, the emphasis of the government agricultural extension services is primarily to meet food security needs, with export promotion and trade a secondary priority. The government of Kenya has along tradition of supporting soil and water conservation measures and since the start of the 1990's has moved towards whole riverbasin water catchment strategies, utilizing participatory techniques to engage the farming communities on their own terms. Moreover, the ministry of agriculture extension service includes organic farming messages in its training curriculum. Since 1998, some government programmes have been introduced to provide support for farmers reverting to organic management strategies. This includes the development of farmer extension workers whose plots have often served as demonstration farms. Thus the government position on organic agriculture appears to be moving from one of ignorance to one of support.

1.3.2 Introduction to Evolution of OA

For the past two decades, indigenous non-governmental organizations (NGOs) have been challenging high external input (or "Green Revolution") agriculture by offering more sustainable agricultural alternatives for the rural poor throughout Africa, Asia, and Latin America (Farrington et al. 1993; Wellard and Copestake 1993; Shrum 2000).

Kenya is no exception. National and local NGOs have played a significant role in organic agriculture promotion, training, research, and outreach since the 1980s. Organic agriculture

NGOs emerged because of widespread discontent with the research orientation, technology dissemination practices, and social/environmental externalities associated with the Green Revolution regime. Stories about the "failure" of the Green Revolution regime - part of the larger critique or "deconstruction" of formal agricultural techno-science - created space for new institutions (NGOs), new agricultural ideas (e.g., organic farming), new research methods (e.g., participatory adaptive approaches), and new information dissemination strategies (e.g., farmer-to-farmer training) (see Kloppenburg 1991; Shrum 2000).

Similar situations developed simultaneously in other parts of the world. To address these concerns, the Green Revolution (1960 – 1970) was designed to increase food production for the growing global population. The negative social, environmental and economic consequences that followed inspired a new search for alternative agriculture system to meet the food needs of the growing global population. Organic farming was one viable alternative.

The growth and development of organic agriculture (farming) in Kenya was initially an initiative of Non-Governmental Organisations (NGOs) and Private Organisations. These (a group of six organisations) included the Kenya Institute of Organic Farming (KIOF) formed in 1936; Manor House Agricultural Centre (formed in 1984); Sustainable Agriculture Community Development Programme (SACDEP formed in 1992); and the Association of Better Land Husbandry formed in 1994; Baraka Agricultural College and the Sustainable Agriculture Centre for Research and Development in Africa (SACRED).

These NGOs, relying on funding from foreign donors and collaborations with national and international research institutes and universities, have been instrumental in shaping and sharing organic agriculture knowledge with tens of thousands of smallholder farmers. In addition, they have engaged in participatory adaptive research, increased public awareness of the benefits of organic agriculture, and worked to establish national organic standards. The centrality of NGOs rather than an impassioned Kenyan citizenry (or organized social or political movement) suggests that organic agriculture in Kenya was experiencing "NGOnization" (Lang 1997).

These organisations were in their work targeting the small scale farmers who were the most affected by the Green Revolution. Their main work involved farmer training and extension. The main emphasis was the attainment of food security through a sustainable approach to agriculture. The government by then was taking organic agriculture in low esteem but appreciated its aspects such as organic matter management.

From the mid 1990s onward saw the growth of interest in organic farming in Kenya with many more NGOs and CBOs emerging to train farmers on the same. At this point the Ministry of Agriculture did not have the capacity (i.e. the extension staff were few and somehow demoralized).

As many players were getting interested in organic farming and farmers started realizing the benefit of organic farming, their priority started shifting from household food security to securing market for organic produce. Efforts were also shifting from isolated individual to collaborative. This saw the birth of organisations such as the Kenya Organic Farmers Association (KOFA), which was initiated by farmers participating in KIOF extension and training programme. The association published organic farming standards for members based on standards by IFOAM and EU (KOFA 2002). KOFA wanted particularly to develop a vibrant organic market both locally and internationally for their produce.

However, organic agriculture NGOs have not operated in isolation from the donor organizations and techno scientific agricultural institutions that were so central to the Green Revolution regime. Linkages between organic agriculture NGOs and donors, research institutes, universities, and public extension providers have been essential to the enduring success of Kenya's organic agriculture NGO sector. KOFA through KIOF approached a donor to help realize this goal. The donor's response was that first, all the players in organic farming in Kenya to be brought together to form a network for the organic sector in Kenya. The network was seen best placed to champion for organize farming in Kenya through synergy building. In early 2004 a workshop was organized after a series of consultations among the players at ICIPE. A wide range of participants were invited including government bodies, universities, farmers, marketers, certifiers, and strategic Kenyan line ministries.

The outcome was the formation of the Kenya Organic Agriculture Network (KOAN) The organisation was mandated to be the umbrella body representing all organic agriculture organisations in Kenya, to help organize the sector and champion its course. KOAN was to particularly help develop organic market as this would have an effect on other sectors such as training, advocacy and lobbying and standards development. With such initiative, the government of Kenya to appreciate the place of organic agriculture in the country and is participating in its development, though no policy framework has been developed

Kenyan universities are also taking organic agriculture seriously; agriculture and environmental or natural resource students are increasingly writing their thesis on aspects of organic agriculture. Currently, Egerton University is developing a curriculum for a course in organic agriculture. This shows the appreciation of organic agriculture in academic circles.

At the moment the Kenya Organic Sector is getting better organized with a wide participation and appreciation of its relevant to our economy, environmental conservation, especially in biodiversity and indigenous knowledge and social systems. Kenya must keep the synergy through KOAN and the government should develop a policy framework for organic agriculture – its lace is already defined.

1.3.3 Organic Production in Kenya

According to local sources (Mulangoli, pers. Comm.), the emphasis of the government agricultural extension service is primarily upon meeting food security needs, with export promotion a secondary priority. The government has a long tradition of supporting soil and

water conservation measures and since the start of 1990's has moved towards a whole river -basin catchment strategies, utilizing participatory techniques to engage the farming communities on their own terms (Pretty and Hine 2001). Moreover, the ministry of Agriculture's extension service includes organic farming messages in its training curriculum. Since the 1998, some government programmes have been introduced to provide support for farmers reverting to organic management strategies. This includes the development of "farmer extension workers" whose plots often serve as demonstration farms. Thus the government position on organic agriculture appears to be moving from one of hostility to one of support (Wachira 2000)

There are currently over 180,000 hectares of land under organic certification for export markets plus another 853 hectares in conversion. There is also a significant area soon to be in conversion for wild harvested products. There are five (5) international certifiers operating in Kenya. They are; the Soil Association (SA), Ecocert International, Institute for Market-ecology (IMO), the United States Department of Agriculture (USDA), National Organic Programme and Bio Suisse. Many of the exporters are large-scale farmers, already engaged in the export agriculture and horticulture that are diversifying into organic production to meet demand from their established customers. Certified organic produce includes French beans, runner beans, mange tout, salads and tea (for the UK), hibiscus tea and jam (for Japan and Austria) and macadamia nuts and oils (for Germany and Japan) (Walaga, 2003). There is a potential for producing organic coffee, which has not yet been realized because of the state control of coffee exports and marketing.

One of the organisations in the sector, KIOF has carried out a training programme for participants across East Africa on establishing organic guarantee systems, standard setting and accreditation certification. The Association for Better Land Husbandry has been developing a certification programme for Kenya This was initiated in partnership with Soil Association (UK) but is now being run with new partners, the Organic Food Federation (OFF), another UK-based organisation.

Regions	Non-certified organic products	Certified Organic Products
Nairobi	Processing of dried fruits	Processing of cold pressed oils
		Processing of vegetables
Central	Fruits – Avocados, mangoes, passion, apples, guava, pineapples, pawpaws. Coffee, vegetables (both exotic and indigenous), potatoes (Irish and sweet), water melon, sweet melon green peas, ginger, green pepper, okra	
Nyanza	Bananas, fruits, ground nuts, sesame, sugar cane, chilies, sorghum, millet	Birdseye chilies
Rift Valley	Honey, tea, fruits	Honey, black and herbal tea, dried culinary herbs and spices, essential oils, cold pressed oils, nutraceuticals, vegetables (baby vegetable and salad vegetable)
Eastern	Vegetables, fruits (mangoes, pawpaws and oranges), cassava, millet, sorghum, amaranth, medicinal plant products	
North Eastern		Essential oils
Western	Indigenous vegetables: amaranth, spider plant, saghert	Pineapples
Coast	Cashew nuts, ground nuts, tumeric, ginger, macadamia and coffee	Natural craft products as certified NTFP' by FSC

 Table 1: Some Organic Products being produced from Kenya
 Source: (Alistair, 2004)

1.4 Benefits of Organic Agriculture: Situational analysis of contribution of Organic Agriculture in Kenya

1.4.1 Soil Fertility Management in Organic Agriculture

Soil fertility management within organic farming systems in Kenya relies upon numerous, and often complex technologies. Recycling nutrients through composting is a central tenet in organic farming (KIOF, 1990). The basic advantages and disadvantages of composting remain the same between organic and conventional farms. Composting concentrates nutrients from a wide range of readily-available organic resources into organic fertilizers containing reduced populations of harmful organisms and weed seeds. This central advantage to composting may be offset by its large requirements of labor and water, and by the variable and often unknown nutrient content of the finished material (IIRR, 1998). Some restrictions are placed upon how, and how long "certified" composts are prepared. For example, European regulations require that composts prepared from plant materials that were sprayed with chemical pesticides, or manure from livestock receiving manufactured pharmaceuticals must be processed for at least six months before they may be applied to certifiable crops.

Some soil fertility management technologies acceptable to organic farmers are deeply rooted in traditional farming systems as practiced prior to European contact. Traditional crop mixtures that combine cereals, nitrogen-fixing legumes and other crops reduce farmers' risks, suppress weeds and pests and support soil fertility (IIRR, 1998). The addition of livestock manure to soils is a viable alternative to mineral fertilizers when the manure is available in sufficient quality and quantity (Lekasi *et al.*, 1998). Heavy mulches offer immediate benefit in terms of weed suppression, erosion control and greater moisture infiltration, and as these mulches decompose, nutrients are also released to the soil in a timed manner (Kanyanjua *et al.*, 2000). Other technologies are shared with conventional agriculture, particularly with those land managers practicing Integrated Nutrient Management. These overlapping technologies include crop rotation, green manures, improved fallows, cover crops, reduced tillage and the addition of raw agricultural minerals (Vanlauwe *et al.*, 2002) but not the addition of manufactured chemical fertilizers.

1.4.2 Cheap and Healthy food with environmental friendliness

A case study of Mirichi Organic Farmers Association found out among other things that organic farming is being a cheap option as farmers do not need to buy expensive synthetic external inputs but rather relies on local resources like compost that is made on the farm. Also organic farming yields healthy foods and is ecologically friendly. An assessment of some farms under the Association showed that the maize crops were able to withstand moisture stress more than those of conventional farmers. This was easily noted as the visit was done in December 2005, a year when the country experienced drought in most parts resulting in famine that has been declared a national disaster.

Organic farming is environmentally friendly. The group has a tree nursery for the supply of seedlings to the farmers. Some of the plants in the nursery include macadamia, grafted passion fruits, avocadoes, mangoes, oranges and agro forestry trees like *Grevillea robusta*. The farmers practice agro forestry and this is evident from the trees seen on the farms. Farmers are noted to go to the extent of fetching water from the rivers to water their young seedlings on the farms during the dry weather. Practices of soil and water conservation are also observed for example terraces.

There is the conversion of organic compost into organic farming by farmers, and therefore no losses are incurred in terms of managing compost waste.

1.4.3 Promotes and enhances family involvement in farming

The same case study mentioned above from Mirichi Farmers Association showed that organic farming involves the entire family. Children are more involved in raising small stock like rabbits and chicken while women work more on kitchen gardens. Other activities like horticulture are done in togetherness.

Figures from the agriculture sector indicate that conventional farming (or agriculture in general) attracts more than 75% of labour force from women, especially at the small scale level. Traditional behaviours dictate that women have access to land for the purposes of cultivation. Whatever incomes generated is always controlled by men.

A practice like organic agriculture that will not only ensure food security but also promote participation by all family members in production is most welcome.

1.4.4 Organic Farming and Kenyan Smallholders

The principles of organic farming and sustainable agriculture coincide, but they are not identical as the latter does not condemn chemical inputs. Sustainable agriculture is the management of agricultural resources and production to satisfy changing human needs while conserving the natural resources and maintaining the quality of the environment (Vukasin *et al.*, 1995). Conservation agriculture seeks to minimize the use of external chemical inputs in agricultural production in order to preserve the natural ecosystem.

Declining soil fertility resulting from continuous cultivation of small hold farms and the need to conserve and build natural resource capital and biodiversity has contributed to the interest in organic agriculture. The Organic Movement views itself as a better alternative to the Green Revolution, which relies heavily upon mineral fertilizers. Organic proponents argue that the application of chemical inputs causes environmental pollution in the soil through acidification and altered biological activities. Others cite the failure of chemical fertilizers to maintain soil structure and soil organic matter as inherently non-sustainable (Harris *et al.*, 1998). In contrast, the application of organic inputs supplies substrate to soil biological processes that in turn strengthens the resilience of soil to provide plant nutrients, maintain soil structure, retain water and detoxify agents harmful to plant roots

1.4.5 Promotes pest management in smallholder systems.

The work of ICIPE is explicitly focused on designing low-cost integrated pest management technology. It works closely with farmers to test and adapt technologies. One activity is investigating novel habitat management approaches to suppress cereal stem borer and Striga populations in maize and sorghum. This project is developing novel "push-pull" strategies to repel stem borers from the cereal crop and attract them to intercrop or barrier forage grasses. It has found extra-ordinary multi-functionality in a range of fodder grasses and legumes in cereal systems. The strategy involves trapping pests on highly susceptible trap plants (pull) and driving them away from the crop using a repellent intercrop (push):

In summary the following issues can be looked at as key benefits of organic agriculture in Kenya

- Protection of traditional Knowledge
- Food security and poverty reduction
- Cheap food production
- Produces healthy food for the population
- Ensures environmental conservation by limited/ non-use of agro-chemicals
- Well suited to small scale farming and can increase the yields and incomes of subsistence farmers in developing countries like Kenya Majority of whom (close to 70% are women)

Chapter Two: Institutional Framework

2.1 Institutional and Regulatory Framework

The Kenyan Agriculture sector where organic agriculture falls is regulated by policies developed by the government, led by the Ministry of Agriculture. Since independence, Kenya has seen evolution of agriculture policies which basically looked at the periods when there was a lot of government controls in agriculture to the phase where liberalization has reduced government intervention.

Policy reforms in Kenya have revolved around:

- Institutional frameworks
- Agricultural taxation
- Production and infrastructure
- Value addition
- Marketing

There has not been any deliberate attempt to analyze and present Kenyans with policy options around agricultural farming practices such as, conventional agriculture, genetic engineering and/or organic agriculture

There are no official policies for organic agriculture in Kenya, even though there is increasing public interest and recognition of organic agriculture. The organic sector has developed to date without any explicit official government policy support. Past attempts by the ABLH, KIOF and other interested parties to get the government to work on this issue has received a cold reception. Despite that, the sector has benefited directly from two main government policies: Firstly, the NGO Coordination Act (1990) which basically recognizes the work of NGOs as coworkers in the rural development arena and secondly, the economic liberalization policies of the late 1980s and early 1990s, which created an environment for free enterprise with minimum government intervention and controls in the agriculture sector. Indirectly, these created a favourable environment for the development of the organic industry and the sector has been able to exploit these policy opportunities.

Players in the sector believe that it cannot develop to its full potential without government support. Among the issues that require government support are curriculum development, harmonization, validation of organic research findings by the government research authorities, and mainstreaming of organic agriculture.

The government has for instance come up with the Strategy for Revitalizing Agriculture (SRA) and a draft of National Food and Nutrition Policy. In their objectives and scope, these tools do not give any mention to the direction the government wants to take on OA and its integration in the agriculture sector reforms. Operation in the OA is still left ungoverned with a lot of intervention coming from the CSOs which conduct research, training, certification promotion, marketing and lobbying and advocacy.

Currently, the agricultural sector in Kenya is governed by 131 pieces of legislation including legislation for supporting institutions. It's also affected by a myriad of by-laws made and implemented by the local authorities, and specific laws governing commodities that set out costly and separate institutional and management arrangements. This has led to increased costs to farmers, mismanagement, and confusion.

The principle Act governing the agriculture sector is the Agriculture Act Chapter 318. The Act does not give specific reference to OA while most provisions are not relevant to the current production trends. Examples are as below;

- Part VIII, Section 100. The Act ensured production of a sufficiency of food for the requirements of Kenya. The Minister shall declare essential crops necessary for good land management and for the requirements of Kenya or obligations to supply East Africa. Sub-section (3) states that scheduled crops include maize as defined in the maize marketing Act. Elsewhere in section 13 maize is defined by the National Cereals and Produce Board Act.
- Part XII, Section 184-Rules for the Preservation, Utilization and Development of Agricultural land. Reference is made to Good estate management, good husbandry, and reasonable standard of efficient production. Practices on land may also be covered by Subsidiary legislation, Section 48, The Agriculture (basic land usage) Rules.

No mention is referred to OA with regard to institutional or regulatory framework and presumption has been that Organic Agriculture is governed by the same legislation as conventional agriculture.

Organic Agriculture will in the foreseeable future be influenced by government driven reform initiatives in the agricultural sector as indicated below.

The large number of legislative Acts will be reduced to pave way for the development of an all-encompassing Act allowing for increased stakeholder self-regulation by sector players. This will be achieved by;-

- Review and harmonization of agricultural legislation. The objective is to have a single generic all encompassing Agriculture Act that will allow for expeditious policy changes as circumstances demand.
- Review and harmonization of agricultural legislation to empower farmers and farmer organization control production and marketing of their produce.
- Under the Privatization Bill, the role of the government in agriculture will be limited to an extent, regulation aimed at maintaining the accepted standards of safety while shedding off commercial functions.
- Merger of research institutions into one umbrella body.
- Facilitating the capacity building of farmers organizations take up regulatory roles for their commodities including aspects of inspection and quality control.
- Strengthening the capacity of parastals responsible for quality control.

• Reviewing and harmonizing legislation of collaborating ministries and institutions.

With regard to research;-

- Extension agents, farmers and civil society will be included in the planned National Forum for Agricultural Research.
- The Science and Technology Act, Cap 250 will be revised to allow for consolidation of publicly funded research organizations. This has to an extent impeded the growth of OA.
- A trust fund for strategic research and commercialization of excellent technology will be set up with funds from government grants, endowment grants, royalties or donor allocations.
- Increased budgetary support for research to reach 5% of agricultural GDP and up to 2% of the overall GDP by 2009/2010 in line with the commitment made by Heads of States under the New Partnership for African Development (NEPAD).

2.1.1 The Policy Framework and Small hold farmers

The liberalization of Kenya's agricultural sector in the early 1990s led to increased of prices of farm inputs as parastatal subsidies were withdrawn. This situation caused many smallholders to rethink their production strategies and question their need for fertilizers. Organic inputs were promoted as a replacement to fertilizer by emerging non-governmental organizations (NGOs), many of which developed sophisticated extension programs in organic agriculture designed to sustain small hold farms (Hamilton, 1997; Harris *et al.*, 1998). Civic organizations presented recommendations to this effect during the preparation of the country's Poverty Reduction Paper and the Rural Development Strategy in 2002.

Indeed there are no official policies for organic agriculture targeting small holder farmers in Kenya and the key challenge to recognition of Organic Agriculture and revitalization of the agricultural sector as a whole is the unfavourable policy environment. Revision of various pieces of legislation and related policies in the past has been sporadic and uncoordinated with passing of new legislation while leaving the old ones intact.

Granted that initiatives in the development and evolution of Organic Agriculture have mainly been private sector led, the sector is also expected to play a major role in influencing agricultural policy with regard to organic agriculture. A competitive agricultural sector changes faster than Parliament can amend legislation.

The Project on Promoting Production and Trading Opportunities in Kenya comes at an opportune time when the Government has started the process of reviewing the various policies and legal framework governing the agricultural sector among other government reform initiatives starting with the macroeconomic environment. Bold measures have been taken through the Finance Bill 2005 and the Privatization Bill 2005.Reforms in the Coffee sub sector for example; have been fastracked through the Finance Bill. Other key reforms regard the pyrethrum, sugar, and cotton sub-sectors.

While its worth appreciating that major reforms implemented by the Government have started to improve the welfare of farmers, more government/political will is desirable to complete the process and attain the noble aspirations/intentions espoused in the SRA, Sessional Paper No.2 of 1994 on National Food Policy, and the National Food and Nutrition Policy. Of importance is the strengthening of the private sector to take up the roles left by the Government, their subsequent participation in agricultural development and increased empowerment and efficiency of small-scale farmers¹.

2.1.2 What supportive domestic policy frameworks can be put in place in Kenya and other developing countries?

- 1. Introduction of organic farming and other farming systems in all educational levels primary to higher education institutions.
- 2. Increased research both at public, community and private institutions.
- 3. Development of local organic markets and consumer education.
- 4. Legislation in parliament
- 5. Policy guidelines from the Ministry of Agriculture favouring organic agriculture and other appropriate farming systems.
- 6. Setting up local organic certification.
- 7. Processes and alternative marketing procedures such as local or home processing and adding value to organic products in order to improve farmer income.

2.2 Players in the Organic Agriculture Sub sector in Kenya

Table: Stakeholder Analysis in Kenya.

Source: (Alistair, 2004)		
Stakeholder Category	Activity	Comments
1. Private Sector		
i) Self-Help Groups/ Producer Associations	Mostly involved in production of organic crops either for national or local markets or for subsistence	These include small farmers organisations (SFOs), Community Based Organisations (CBOs), Faith Based Organisations (FBOs) and other farmer Groups (FGs) Most of the training organizations mobilize farmers from the same area into FGs or Organic Farmer Groups (OFGs) Membership per group ranges between 20 to 30 farmers Conservative estimates put FGs at 35,000 spread countrywide Some farmers have organized themselves into marketing units
ii) Commercial Farmers	There are a growing number of organic certified companies/ operators who produce for both the national and international markets. Some companies are growing organic vegetables, fresh and dried fruits, dried herbs and spices and some have ventured into wild harvest products.	These are mainly business companies, large scale companies, certified organic and producing for export with certified out-growers. There are certified organic medium scale companies producing for export, some share overheads and management of exporting consignments together i.e. Kenya Organic Producers Association (KOPA). There are also a few certified organic farmer groups ho have formed companies and are now exporting. There are a number of small companies who are not currently certified and are producing for the local market. There are 12 certified producer companies and 4

Source: (Alistair, 2004)

		undergoing conversion, 15 small companies producing
		for the local market.
iii) Processors	There are organic certified companies extracting essential oils from herbs, spices and cold pressed oils from high value crops and tree seeds oils, drying and semi- processing herbs and nutraceutical plant products. Other certified organic companies are exporting retail packed vegetable (high-care), retail packed	In most cases, for certified organic operators, the same companies that produce the raw materials carried out their own processing accord with their buyers' requirements. However, there are companies, certified organic operators that buy raw materials directly from small-scale producers/out growers and carry out the processing prior to export. Non-certified organic operators, supplying national and
	macadamia coffee and tea. Non-certified organic producer organisations are drying fruits and processing dried fruit, juices, jams and chutney for national and regional markets	local markets, are mainly processing their own products on a small scale
iv) Traders and Retailers	Trade in both the local and export arenas others in trading of raw and semi – processed products from primary operators. There are also those who deal with input supplies.	Some national supermarkets have recently designated organic sections in their stores, (i.e. Uchumi Hyper and Nakumatt Supermarkets). All of these products carry organic labeling but not all are certified Some green grocers also stock organic products. They include Healthy U – Sarit Centre, Organic Green Grocers-Mobil Plaza, Zucchini – ABC Place among others. Natures organics together with a group of farmers have started Box Schemes in Nairobi and outskirts, Organic marketers Ltd, Natural Food Marketers and Findus in Africa, buy and sell organic products. EM (Effective Micro-organisms) supply EM products, BIOP Ltd is a company that supplies organic fertilizers and pest and disease control products, as does Saroneem Products. Minjingu Phosphate supply rock phosphate, other pesticide manufacturers produce biological controls. Some of these food and non food products carry organic labeling, although most are not certified.
v) Certifiers and Inspection agencies	Certification of organic products for regulated export markets. There is currently no certification facility for the national market – although this was expected to develop over the latter part of 2005.	There are five international certifiers that are operating in Kenya: IMO, BioSwiss, Ecocert, USDA N.O.P – National Organic Programme, and the Soil Association, mostly using nationally based inspectors. Africert and Encert are two national companies that have been formed over the last one year to start organic certification for the national market. Both partner with international accredited certification companies. They are developing their services to offer multiple certifications (Encert – organic, fair trade, sustainable wild harvest. Africert is already providing Eurepgap inspections and developing organic inspection services. Both companies are in early stages of development.
2. Civil Society Organisations i) Training and Research Institutions	Training in organic agriculture techniques Research for organic pest and disease controls	There are 30 organisations offering Organic Agriculture training; 2 offering Diploma courses; 4 offering certificate courses; the rest offer short courses. The diploma courses take two years; certificate one and a half years and short courses between one and two weeks. ICIPE (International Centre for Insect Physiology and Ecology) carries research on organic pest and disease remedies and, through BIOP Ltd, has developed a range of organic fertilizers and pesticides.
ii)Other Promoters	These promote organic agriculture in community mobilization, capacity building and networking.	These comprise NGO, and CBOs that have a component of organic agriculture in their programmes. The Environment Liaison Centre International – ELCI is hosting KOAN over its incubation period and is an advocate of organic farming and natural products development. It produces a quarterly periodical, Eco- forum, which promotes environmental (and organic) issues
3. Government		
i) Kenya Bureau of Standards (KEBS)	Development of the Kenya Guidelines for Organic Production, Processing and	The draft document was being updated by late 2005. To be approved on the 29 th November by the Agriculture

	Packaging	Industry Standards Committee and finally by Standards
	I ackaging	5
		Approval Council by end of Dec 2005.
ii) Ministry of Agriculture	The Ministry has made very little	Due to the lack f exposure to the benefits of Organic
	contribution to the development of	Agriculture and the commercial aspects of organic
	organic sector to-date	farming, government reception to the movement and the
		growing industry is currently lukewarm, as far as the
		ministry heads are concerned. However, the interest
		from the government extension service is overwhelming.
		At the district level there are increasing requests for
		organic training organisations to provide training in
		organic techniques, certification and marketing to
		extension officers partly due to the Kenya Organic
		Agriculture Project which is run through the MOA, but
		supported by FAO.
iii) Public Research Institutions	Training and Research on Organic	Egerton University has recently included an organic
and Universities	Agriculture	agriculture module in their agriculture diploma course
		curricula. Jomo Kenyatta University of Agriculture and
		Technology (JKUAT), in collaboration with KIOF and a
		university in UK, are developing a curriculum for a
		diploma and degree courses in Organic Agriculture.
		Kenya Agricultural Research Institute (KARI) has
		carried out research on green manure and compost
		analysis. The Kenya Tea Foundation and the Kenya
		Coffee Foundation have established field trials for both
		organic coffee and tea.
		The Kenya Pyrethrum Board, has received orders for
		organic pyrethrum and intend to begin conversion to
		organic certified status
4. Development Partners	Facilitate implementation of projects	Development partners who have recently or are
1	1 1 /	currently operating in Kenya include; Hivos, Miserio,
		SIDA, FAO, DFID, GTZ, Biovision, Rockfeller, UNDP,
		UNDP, CDE, CBI, and HDRA among others

3.1 Primary Production and Marketing of Organic Products in Kenya

There are several marketing initiatives to promote the development of the organic industry in Kenya; the main focal initiative is the Organic Marketing Assistance Programme, (OMAP), a facility developing within KOAN. The others are the Sustainable Agriculture Community Development Programme (SACDEP) – based in Thika with a lot of activities targeting farmers in the Central Kenya Region. The other is the Resource Oriented Development Initiative (RODI) which has instigated a market development component to their core organic products. The Catholic Diocese of Nakuru is currently setting an organic and Natural Products Unit to support the development of organic marketing within their project activities.

Further, the Centre for Development Enterprises (CDE) is providing small amounts of market development support for organic operators, while the International Trade Centre (ITC) has developed a website facility of Eastern and Southern Africa. The CDE is also supporting trade farm participation.

The Central, Western and Nyanza Provinces, together with some parts of Rift Valley, have higher potential for agricultural production and have a wider variety of crops compared to other regions like the North Eastern Province. While the Eastern parts of the Rift Valley and North Eastern Province have a higher potential of wild harvest, the Central Province has the most certified organic farms in terms of acreage. It is difficult to determine the extent of uncertified organic production in Kenya. A very high number of farmers have been trained in organic agriculture but the sector is largely informal and not certified. Most farmers in Kenya are producing crops under natural production methods, that is, not using artificial inputs due to economic conditions and cultural interests.

Kenya Resource Center for Indigenous Knowledge (KENRIK), a department at the National Museum of Kenya started looking into promoting indigenous food by 1989. They did a countrywide survey and found 850 indigenous food plants. The organisation, which deals with among other products indigenous vegetables, says the vegetables have no class barrier i.e. they are bought by the low, middle and upper classes of Nairobi. In terms of weight, these vegetables are more expensive than the exotic varieties such as "sukuma wiki" and cabbages. They further note that market is good and could do better if produce are organic

Among the organic produce in Kenya are French beans, cotton, runner beans, mange tout, salads, tea, hibiscus tea, jam, and macadamia nuts and oils. The best trade opportunities concern high value and value added products. These include: organic honey, coffee, nuts and oil seeds, fresh vegetables, herbs and spices, essential and pressed oils, indigenous plant materials and extracts for the flavouring, fragrance, and cosmetic/body care and nutricutical industries.

The opportunities for value and value added product market development are of particular relevance to producers in Kenya. It is also especially relevant as freight costs are comparatively high, on an international level, and labour costs are relatively low. Importance is also being attached by the development sector to high value crop production for small scale farmers and producer group operations due to the rising land pressure and numbers of single headed households as a result of escalating AIDS epidemic. These products which include ethno-botanicals, essential oils, herbs and spices, cosmetic and body product ingredients are now recorded as the fastest growing sector in the international organic market place.

There is growing number of certified organic producer-exporters that are now expanding into these high value and value added product sectors due to the unique opportunities they provide. Many of the companies have already reached an export position and the others have the capacity and quality to begin export development. It is therefore, important that the companies have a direct and sound understanding of the marketplace in order to tailor their exports to suit the exact requirements and trends. Producers also require technical support in product development, market information (market demand, prices and market characteristics) and sustainable, market linkages based on ethical-fair trade standards. KOAN through OMAP is currently developing these services.

International market price premiums, as compared to conventional products ranges between 15% of fresh organic certified vegetables, to 300 percent for some essential oils, cold pressed oils, honey and dried herbs and spices. Coffee and tea range between 25 and 30% premiums and confectionery nuts and fruits attract around 50 to 80 % premiums.

3.1.1 Main Production Constraints

1. *Conversion into organic agriculture:* Maintaining land as organic is an involving process because it requires that certain rules be adhered to. It requires keeping farm records, crop rotation that is in accordance to the Organic Standards. Such companies like Meru Herbs find it necessary gives incentives to Organic Farmers.

When under conversion, production initially goes down as the farm adjusts also labour goes up. There is resistance among workers as some of them do not want to change to the organic way of farming; they were used to chemicals and machines. Finally there is low or no premiums on prices of organic products compared to the conventional ones despite the tedious processes involved in production, but there is demand.

2. *High cost of certification.* The high cost of certification charged by foreign certifiers discriminate against small scale farmers who aspire to convert into organic agriculture. Some farmers groups like the Mirichi Farmers Association have tried to approach it as a group to reduce the costs. However it is a big challenge to smallholders, especially those whose main aim is food security not for commercial purposes.

- 3. *Low Price premiums.* Price premiums of organic produce are supposed to compensate farmers and producers for the extra cost of production e.g. to convert into organic production. A case study of James Finlay Tea showed that the price of organic tea needs to be at least three times that of conventional to return profits. The problem is that very few consumers are in a position offer such prices especially the low-income-earners.
- 4. *Low local consumers awareness.* Many consumers do not know the difference between organic and other conventional products. This has suffered a great deal due to government's lack of support for the sector. There is still wide policy gaps to enhance public awareness creation on the benefits of going organic in Kenya

3.1.2 What can be done to overcome constraints

- 1. Education and training of farmers in organic farming and other appropriate farming systems that guarantee sustainable production while protecting the environment.
- 2. Adoption of organic farming and other appropriate systems which will substantially reduce demand for external inputs.
- 3. There is need to create awareness on the environmental and economic benefits organic agriculture;
- 4. There is need to create awareness of the benefits of organic products with the aim of empowering local consumers, and thus opening up local demand
- 5. There is need for Kenya to set its own standards for organic certification rather than depend on organic production guidelines from either Europe or the United States. Plus, some of these standards can be modified to fit within Kenya's' environmental capacity and regulation procedures.
- 6. Organic products are still fetching very low prices. There is need to set good price premium to attract more entry into organic farming
- 7. Need for the government to develop an all inclusive policy on organic agriculture. For instance food supplied to schools must be organic like it has been done in the United States and United Kingdom
- 8. Revising the pricing for organic products like tea, macadamia nuts, coffee in the world market to ensure
- 9. Small farmers to partner with larger companies like James Finlay Kenya Limited so as to increase the volume of organic tea production
- 10.The government could borrow certification regulations from established traditions like Kenya Bureau of Standards.

3.2 Local Distribution and Processing

The Kenyan domestic organic market is expanding rapidly. Local distribution of organic produce in Kenya goes through the normal market chain. Farmers sell their produce in local markets where other conventionally produced agricultural products are sold. There are also a few retail shops in Nairobi and other major towns in the country selling OA products.

Agro-ecological organisations (e.g.) ICIPE have also started manufacturing herbal medicines and beauty products from such plants like neem. These products are sold in supermarket chains and pharmacies.

Currently there are ten retail outlets in Nairobi and others are scattered in the main towns in Kenya that are selling organic products. They include among others;

a) Healthy U at Sarit Centre started 15 years ago selling porridge oat, honey and sunflower. These products only constitute 1% of the stock; the others are imported from overseas markets mainly the UK. The local suppliers are Meru Herbs and ICIPE. According to the sources from the shop consumers of these organic products are expatriates working in the country. They are aware of the products in the market as compared to locals and are also in a position to settle higher price premiums (almost twice the conventional products) that come with the OA products ones. Consumers say they don't mind about the higher prices because the products are healthy as some of them even come with doctors' recommendations.

However it is still a challenge as majority of the consumers are not easily convinced about the price deviations. Another challenge especially is the inadequate product supplies especially with ICIPE whose products are really on high demand.

A recommendation from Healthy U was to create more awareness among consumers by writing in magazines about the organic agriculture products and local distribution channels

b) Zucchini Green Grocers at ABC place started a few years ago through the initiative of the suppliers who approached the owners to try venturing into organic products. The shop is selling organic salad vegetable (lettuce) in addition to other conventional products (green groceries)

According to the shop, consumers of the organic product are mainly the educated class in society who go for the products because they understand the health implications of consuming organic products.

Among the challenges in selling are unavailability and high prices (about 40% over normal conventional products prices) compared to conventional products. Suppliers are basically farmers who have been contracted by the shop owners. Consumer demands are in most cases not met due to lack of a full range of organic products according to their demands.

The shop owner recommended that there needs to be full support by the government to expand the organic sector.

c) Organic Green Grocers based at the Mobil Plaza started about 3 years ago selling salad vegetable in addition to other conventional green groceries. Consumers are mostly women from the well to do families. They are of European origin in the age bracket of 30 – 50 years. The reason behind their preference of the organic products is because of being healthy.

Challenges include product unavailability due to inconsistent and unreliable supplies (which also affects periodic sales turnover) and high price premiums (e.g. Kshs 10 over normal price) compared to similar conventional products of equal quantities. Suppliers include Natures Green at Kibagare Valley.

One of the supermarket chains – **Nakumatt**, has started recognizing organic products by placing organic fruits and vegetables on distinct stands within their fresh produce sections. There are also more than 50 herbal clinics scattered in the country which are also promoting healthy eating through organic dieting.

A survey by Agro Eco Consultancy of self-proclaimed organic retail outlets, showed the absence of certified organic products and most products labeled 'organic' informally. 'Certified organic products are usually few and most of them come from outside of the country, mainly from Europe. National price premiums do exist but lack of awareness of benefits of organic products and perceptional ignorance of the value of organic and the lack of certification and labeling influence local consumer preference. Price premiums at the national level come mainly as a result of better quality, improved presentation of a product rather and perceived positive health benefits of consuming organic products. The growing concern about health issues is influencing demand for organic products which are thought to have a positive impact on health.

Amongst the many initiatives in Kenya to develop organic farming, there are only a few that have focused their efforts on developing national markets. The following provides an indication of the main strategies in operation at this stage.

- Training of NGO and CBO staff in order to change their training approach from food security and kitchen gardening approach to organic farming for the market place.
- Facilitating organic certification for the local market by a local certifying body (Encert) through a pre-certification assessment of producers and producer groups, information dissemination, professional advice on production, pest and disease control and market development.
- Providing market linkages for producers and producer groups with retail outlets.
- Mapping out the organic farming opportunities and presenting the same to organic food marketers, retailers and the government.
- Streamlining and strengthening the Kenya Organic Farmers Association (KOFA) as a body representing smallholder organic farmers in Kenya
- Facilitating networking of all the producers, promoters, trainers, processors, marketers and retailers in order to streamline the organic sector and create linkages between all the players.

3.3 Organic Agriculture Exports from Kenya

Organic production in Kenya is perceived as a separate entity from normal agriculture representing an alternative practice in farming. Organic farmers have isolated themselves to some extent and this has affected public goodwill and hampered the lobbying for legislation. Even though the source of the organic producers is members of organizations such as the Fresh Produce Exporters Association of Kenya (FPEAK), Kenya Flower Council to mention a few, they have not benefited much from advocacy.

The Agricultural Act does not recognize organic agricultural producers, yet, there is increasing barriers to Kenya's fresh produce in the main export market that is the EU. There is very little data and information on organic production and export. Many of the exporters are large-scale farmers, already engaged in the export agriculture and horticulture that are diversifying into organic production to meet demand from their established customers e.g. Finlay Tea.

World trading system dictated by the WTO has also seen the third world faced with quite some some challenges. This has benefited a lot from the fact that organic agriculture is not so much entrenched in developing countries, but synergies and linkages to the issues of international trade and globalisation have to be established. The final outcome is a balance, equity and sequencing between and within the three pillars at the heart of global agriculture i.e Domestic Support (mainly focusing on government support in policy formulation targeting agriculture), Export Competition (targeting and focusing on the elimination of all forms of export subsidies particularly in developing countries and the promotion of export credits) and, Market Access (focusing on market access improvements and market entry, elimination and/or reduction of tariffs, environmental measures including standards, certification and eco-labeling requirements).

Organic farming vis a vis the environment needs particular mention. Environmental requirements present both challenges and opportunities to developing countries including Kenya. The need to address capacity and institutional constraints, application of sanitary and phytosanitary measures, standards and technical regulations, life-cycle analysis (production, product use and product disposal) in developing countries thereby allowing them to respond to environmental requirements in international markets and to take advantage of new production and export opportunities have been recognized as probable entry points that could revitalize organic agriculture farming. Formulation and implementation of correct policies targeting organic agriculture would go a long way in bringing synergies, linkages and the mutual supportiveness of trade, environment and development.

Currently some local producers have been identified and certified to produce various organic agricultural products for the European Market. These include: -

- Green Dreams Ltd certified by Organic Food Federation of the UK to produce salad lettuce
- Vita cress Ltd certified by the Soil Association (UK) to produce spring onions, salads and baby carrots.
- Kenya Nut Company certified to produce Macadamia nuts and Coffee
- Meru Herbs certified by Soil Association UK, exporting Carcade, Camomilla and Lemongrass to the European and Japanese markets

Other certified organic produce exported from Kenya includes French beans, runner beans, mango tout, salads and tea (for the UK), hibiscus tea and jam (for Japan and Austria) and macadamia nuts and oils (for Germany and Japan) (Walaga, 2003).

There is a potential for producing organic coffee, which has not yet been realized because of the state control of coffee exports and marketing.

A case study of Kigwa farm showed that the farm has a coffee factory where they add value to coffee up to the parchment stage. They produce between 30 and 50 tonnes of clean coffee per year. Their main problem has been with marketing their organic coffee. This has been due to the government policy, which has given coffee board of Kenya the monopoly in marketing Kenyan coffee through the auctioneering. The private entrepreneurs cannot therefore sell directly to the available export market. The farm owner remembered that when he went to Germany in 1998 for World Organic Food Fair, he got many inquiries even people prepared to pay in advance but the system has handicapped him.

Table: Organic Production and Export destination from Kenya. Source: Overview of the current status of OA in East Africa – Agro Eco Consultancy

Company	Products	Acreage	Acreage	Certifiers	Main	Employees	Out Growers
Name		(certified)	(conversion)		Markets		
Mr. Pineapple	Pineapples	80Ha	121Ha	IMO	Germany	Approx 120	60 (2-15 acres @)
Three Palm	Chilies	171Ha		BioSwiss	USA	3	40 Out growers
Garden							
Sunripe	Beans, Peas, Sweet	190Ha		Soil	UK and	1800	3 Commercial
	corn, Chilies,			Association	Europe		Farms, 45 Out
	Avocadoes, Passion			and Ecocert			growers
	Fruits, Rasperberries						
Vitacress	Salad and Baby	42Ha		Soil	UK	Over 700	None
	vegetable			Association			
Mt. Kenya	Ashgwanda,	8Ha		Ecocert	EU	40	
Herb	Astragalus, calendula,						
	Catnip, Red clover,						
	Valerian						
Meru Herbs	Chamomile, Carcade,	62Ha	120Ha	Soil	Belgium,	64	43 certified, 123
	Lemon Grass,			Association	Japan,		under
	(pawpaws, mangoes,				Austria,		conversion
	guava, sweet bananas –				Italy,		
	not for export)				Germany		
Cinnabar	Essential oils and dried	40Ha	12Ha	Ecocert	Germany,	37 permanent	55+ - Out
Green	herbs, Geranium oil,				England	20	growers
	Borage seeds, Lemon					contracted,	
	Grass, Rosemary,					60-80 casual	
	Coriander, Comin					employees	

	Pink, pepper					60-80	
						harvesters	
Africa	Leleshwa,	100,000Ha		Ecocert	Europe/US	23 Full time,	8-10 technicians,
Botanica	(Tachonanthus	for wild			А	70 part time	35 fulltime staff,
	camphorates), Aloe	harvest					70 additional
	secundra, pepper tree						women
	oil, lippia javanica						harvesters
Finlay	Теа	64Ha		Soil	UK	Approx 1,400	None
				Association			
Kisima (Other	Fresh vegetables, dried	80,070Ha		Ecocert	UK	70	150 wild honey
КОРА	herbs and spices	(42 Ha in				Permanent,	harvesters
certified	(Paprika) Birds eye	intensive				30 temporary	
members)	chilies, taegetes,	productio					
	Echinecea, Purpea,	n, rest is					
	coriander, calendula,	for honey					
	borage, safflower	productio					
		n)					
Kenya Nut	Ground nuts,	818Ha		Soil	2,500		10,000 Out
	Macadamia nuts,			Association			growers
	cashew nuts, tea,			, USDA -			
	coffee,			NOP			
Kigwa	Coffee	36Ha		Soil			None
				Association			
Arbor Oils	Gums and resins, tree		Conversion	Ecocert	Europe and	5 Full time	Over 5,000
	seed oils, cold pressed		starts by end of		the USA		
			2005 of over				
			1,500 Km2				
MOOF	Borage		400Ha (Plus 200	Ceres			400, plus another
			Ha in 6 months)				200 in 6 months
Earthoils -	Cold pressed oils	4Ha		Ecocert	Europe and	28 Full time	Over 2,000
Kenya Ltd					the USA		
Total Acreage		181,585Ha	853Ha				

The table below shows a trend analysis of crude organic materials exported from Kenya as a percentage of food and agriculture indicators. It shows that export volumes have been rising while that of tea has been falling.

Major exports (share in agriculture	UNIT	1979-1981	1989-1991	1999	2000	2001	2002
Теа	Percent	25.2	41.0	44.6	45.2	42.7	25.0
Crude Organic materials NES	Percent	5.3	6.8	10.6	11.8	16.7	23.4
Pineapples, canned	Percent	3.8	5.8	3.6	3.3	4.4	7.7

Table two: Crude organic materials export trends

Chapter Four: Quality Issues

4.1 Organic Agriculture Standards situation in Kenya

The Kenya Institute of Organic Farming (KIOF) developed a local organic standard for Kenya many years back and the standard was used to further develop a Kenyan Standard. During the year 2004 KOAN developed the KOAN Organic Standards. The Kenya Bureau of Standards (KEBS) being the mandated national standardization body entered into the arena and formed a "Technical Committee on Organic Foods". The role of this committee was to develop the Kenya Organic Standards. The KEBS is a statutory governmental body that develops standards on various issues like water, food and other products)

The KEBS Organic Standards had gone through a public review process (DKS 1928:2004) where the public were able to comment on the standards. The Standards were to be approved by the Agriculture and Industry Standardization Committee in November 2005 and finally by the Standards Approval Council by the end of December the same year

Internationally, Kenya is a member of IFOAM and complies with the Basic Standards. Kenyan certifiers are accredited by the International Organic Accreditation Service (IOAS)contracted by IFOAM, to these voluntary standards

4.2 Certification and Audits

External certification bodies, depending on the destined markets, do most of the certification for the export market. There are four international certification bodies that have penetrated Kenya, namely; Soil Association (UK) EcoCert, (France), IMO (Germany) and Bio Swiss (Switzerland), OFF (UK) did attempt to establish a foothold here through ABLH and looks like the attempt did not work out

The cost of certification remains one of the most contentious issues in the sector for both small scale Farmers (Ksh 300,000 per visit per year) and the commercial operators. (Kigwa coffee estate), while this has raised a lot of storm, the practice where by the donors shoulder the costs of certification esp. among the small scale producers, do at times gives a distorted market structure. The way the certification bodies work, or the varied standards do at times leaves their clients with more questions than answers. (The Kigwa coffee estate experience), the standards are not uniform across the board and in some quarters the integrity of some of the certification and inspection has been raised.

There have been local attempts to solve the problem, especially among the small holders. The first attempt by ABLH with the Soil Association, effort that did not work, as both had different views on how to handle the cost of certification among the small holders. The SA put a position that these must be at the commercial rates while ABLH put a position that it must be subsidizes if the Small farmers would benefit from certified organic farming. The

project fell out due to those differences. Further efforts to follow-up the issue with OFF did not materialise.

The role of Donors to start off local certification cannot be under estimated, esp. in providing seed money for start up of operations. Efforts by the CaToK, to set up an independent certification system locally did not work due to what was considered low business volumes, and the capital involved in setting up shop.

The latest attempt to still address the issue of local certification has been the setting up of AfriCert (2003). This is a business outfit with its eyes on profits making from certification. While the overall objective of this new organisation is in Euregap certification, it has expertise in organic certification. The quest for cheaper certification costs has not been solved even with the incorporation of AfriCert locally. They are not as affordable as was expected.

The country at the moment does not have the human capacity to run and conduct group certification. This refers to mainly the conducting of an Internal Control Systems (ICS). This capacity gap must be addressed.

Currently a new outfit has been formed by one of the freelance organic inspector. Mr. Musa Njoka who has incorporated ENCERT to carry out Local organic certification. Mr. Musa has a wide experience in matters of organic certification and has represented a number of international certification agents working locally .He is an expert in his field.

Chapter Five: Emerging Issues

5.1 Challenges

5.1.0 Introduction

The "Kitchen Garden" and "Food security" approach, and the fact that the main constituent of the organic agriculture is the NGOs world, has had a negative impact in the sectors development. From a marketing point of view, there have been limited commercial application (both for local and export market) and where commercial application has been feasible, lack of critical mass, economics of scale among other considerations have limited a strategic market development. It's only in the late 90s and early 2000s that within the NGO constituent, that pioneering organic marketing activity was undertaken by the NGOs. ABLH and Meru Herbs demonstrated the capacity of small holder farmers to be engaged in the production, processing and marketing of organic products both for the local and international markets. Both have had variable performance outputs with the latter successfully entering the international and local market with organic herbal teas, and the formers business in the local retail trade has stagnated due to many interrelated factors.

Marketing and access to markets has been identified by a number of organizations, donors and agencies as the missing dimension in our agricultural development, and should be the driving force in the movement forward of any agribusiness sector, Organic agriculture included.

5.1.1 Organic Commercialization

In the last couple of years marketing and the related trade has become an area of focus, with an increase in the production and export of organic/ natural products from Kenya to Europe and North America. New private sector initiatives for organic products have emerged on commercial basis, causing a lot of diversification in the sector.

We have 12 organic operators consisting of large scale farmers, processors, exporters and retailers involved in the marketing of both certified and non certified organic produce and products. Some are licensed and others are in various stages of conversion. A number of certification bodies are in operation in the country and the cost remains an important barrier to trade.

We are exporting French beans, mango tout, runner beans, and salads into the UK market, hibiscus teas and Jam into the Japanese and Austrian market, Macadamia nuts and essential oils into the German and Japanese markets

One disturbing development due to the increased demand for organic and natural products is the proliferation in the market of traders claiming to sell organic products, but uncertified, in effect undermining the sector and in effect cheating the consumers. This is bound to occur in the absence of national structures responsible for standards and coordination, consumer awareness and appropriate regulatory/legal framework.

Among the main market players are: Vitacress, Sunripe, Kisima Farm, (specialized vegetables for Export), Meru Herbs, Mt Kenya Herbs, Cinnabar greens (Herbs and Spices for export/local), Biop and Saroneem (Neem Based Products), Phytomedia, Phymix, Minjingu (Organic fertilizers), Brown Cheese, Pure Health (local processors), Arbor Oils, (essential oils for export), James Finlay Tea (organic tea for export market), Kenya Nuts (Macadamia Nuts), Dreamlands and Loresho organic, Organic Green Grocers-Mobil Plaza, Zucchini Green Grocers (Vegetables for the local market). Healthy U, Morning Dew, Musingi Health, Vibrant Health (health Shops selling organic products).

Conservative estimates indicate Kenya may be exporting slightly above 100 tons of organic products per year, in absence of any reliable data.

5.1.2 Low level of local consumer awareness

In a survey conducted by the Kenya Institute of Organic Farming (KIOF) to investigate the level of awareness of urban consumers on organic products, it was found out that the level of awareness on organic products vary from different income areas in the target area of Nairobi. The highest awareness was in high income areas with 52% of the respondents having knowledge on organic foods. In medium income areas, the level of awareness was 30%. Low income areas had the lowest awareness with only 15% of the respondents being aware.

It was however noted that differentiating organic products from those which are not organic is very difficult for the consumers. The consumers said that they depend to a great extent on the labels and trust on certain producers. Those who purchased products labeled as 'organically grown' were of the view that though the products may not be certified, the fact that they are organically grown is a move towards the right direction.

Although the awareness level is a contributing factor for the low demand of organic products in the low income areas, high price premiums was also cited as a factor diminishing the low-income-consumer preference. The high income in areas like Gigiri in Nairobi prefer organic products was highest at 79% and lowest at 19% in low income areas

5.1.4 Technology

The issue of technology is basically involved with the implications of genetic engineering in the lives of plants due to cross pollination. As you may be aware the Kenyan government is, through KARI test labs, testing the possibility of going GMO with an aim of combating food insecurity. Some initiatives have come up in Kenya to advocate against G.E. in plants e.g. KEGCO among others. The other issue which will be explored is tissue culture in the production of such crops like bananas

5.2 Organic Agriculture Research Gaps

A closer look at the situation on organic farms shows that there are still problems to be solved, that improvement of organic farming techniques is needed to preserve and develop biodiversity on the organically managed land. For example, the biodiversity of many grassland communities depends on extensive mowing or grazing systems that normally can not be reached just by converting to organic farming. There the cutting regime and frequency do not differ that much from management on conventional farms. Frequent cutting of field fodder (clover grass) keeps sky larks from successful breeding, and cutting grassland for silage in May prevents most plants from flowering and producing seeds, the number of plants species decreases.

Few organic farmers grow old varieties of crops or use old breeds of livestock. The tendency to large fields without special biotopes and with only a few structural elements doesn't differ that much from conventional farms-nowadays cultural landscapes do not develop just by conversion to an environmentally friendly management system. Also abandonment of marginal land cannot be stopped by conversion.

From the foregoing it is evident that a lot of past studies have concentrated at the farm level production technicalities. They have collected case studies to show the experiences of farmers with issues to do with contribution of OA to food security, marketing of OA produce and the comparisons with traditional/ conventional forms of agriculture. Majority of studies reviewed have in away ignored to incorporate the socio, economic and environmental linkages in organic production. Issues to do with international trade implications, policy environment, largely influenced by the governments, standardization and certification and the role of private and civil society in promoting growth of the sector, have been ignored in the case scenarios.

The emergence and development of organic agriculture in the developing countries have been uncoordinated, disjointed and without any legitimacy in the form of legal and regulatory frameworks to guide the sector and spur its integration in trade with the international world. Majority of Kenyan farmers, who are small scale in nature practice organic agriculture in one way or another without realizing it. The developed world has moved a head to establish certification and standardization bodies charged with the role of defining what entail basic organic agriculture practice. The challenge as it seems is more on the developing countries side than it is in the developed world. The world market has for instance regulated the nature of organic produce that can access international market. The impact of GMO trade and use on the environment vis a vis organic agriculture, agricultural biodiversity and food security are also important issues for the developing countries to address

To address the above concerns the following areas are critical for research initiatives

- How to support developing countries to integrate environmental and sustainable development considerations, including sustainable trade, into organic agriculture and food security;
- Supporting countries to translate findings from integrated assessments into practical policies that contribute to sustainable development in the OA sector that will entail standards and certification issues;
- Carry out policy advocacy initiatives and awareness creation around organic agriculture with developing countries government's and the farmer folk
- Promoting the use of integrated assessment methodologies by national governments, development organisations, and non-governmental organisations
- Promoting and refining analytical tools to support integrated assessment and policymaking, including economic valuation of the environment, integrated economic and environmental accounting, and lifecycle analysis;
- The gender issues in organic agriculture sector in relation to agriculture policies and more particularly on local and international trade, production, marketing and food security

5.3 Opportunities/ Prospects for Kenya

• The growth of organic products. There have been a number of attempts to pool all organics together after the NSAN experience in the mid and late 80s. In the 90s OMMN was formed and was spearheaded by ABLH. The experience was not very good and left many people involved in the network with bitter memories.

Three years ago, some small-scale organic farmers formed a national representative organisation, KOFA (Kenya Organic Farmers Association). Larger companies and commercial farmers who are already in the export market have organized themselves into KOPA (Kenya Organic Producers Association). Last year, stakeholders in organic agriculture in Kenya including KOPA, KOFA, formed an umbrella network KOAN (Kenya Organic Agriculture Network) to support the successful growth of the sector.

- Kenya has vast botanical richness, favourable climatic conditions and rich and diverse natural resources in Kenya and varied ecological conditions conducive for various crops, including vegetables, fruits, high value crops such as certain nutraceuticals, herbs and spices and essential oils.
- There are many institutions that train farmers on Organic Agriculture and thousands of farmers have been trained.
- Majority of organic farmers in Kenya are organized into groups with functional committees as such compliance to organic certification is easy.
- Three quarters of Kenya consist of arid and semi arid areas where majority of wild harvests of high quality products are viable alternatives to the livelihoods of people living there.

- Consumer trends: they are more concerned about their health and prefer organic products meaning that the potential for local markets for organic products is high.
- The opportunity presented by the coming together of the EAC and creation of the Common Market presents better trading opportunities for OA products bilaterally and multilaterally
- The major opportunity lies in the fact that most production in Kenya is traditional and complies more or less with the principles of organic agriculture as laid down in the IFOAM Basic Standards.
- Certification costs are reducing as local expertise in inspection is built by foreign certification bodies e.g. Ecocert and Africert
- Expertise in organic production and organisation of exports is building up as the organic market develops.
- National organic standards and certification systems are being developed.
- Technological advancement to foster extension and market information exchange

5.4 The way forward for Kenyan organic agriculture

Kenya needs to develop further in the following direction;

- **1.** Come up with policy decisions within the ministry of agriculture that favour organic farming.
- **2.** Develop and expand organic curriculum at all levels of the education system from primary level to colleges and university education.
- **3.** Enhance research in organic farming topics and support this with the necessary funding in order to facilitate dissemination of the funding to local users of the research information.
- **4.** Develop local markets in every part of Kenya and particularly urban areas, Kenya needs to have its supermarkets stocking organic products and its hotels, restaurants, schools and hospitals offering organic foods to Kenyans.
- **5.** Kenya needs to enact organic laws that favour organic agriculture thereby enabling Kenya to be included in the 3rd country list according to the requirements of EU regulation 2092/91. Thus will enable Kenyan organic export products to enter EU.
- **6.** The many NGOs currently involved in various organic farming training activities should develop further into marketing processing and inspection and certification of organic products. In this way Kenya will have its own organic market regulatory organizations rather than relying on European Certification bodies that are too expensive.
- 7. Lastly Kenya should initiate ways of home processing of organic products at farm level in order to add value and eliminate numerous middlemen who normally leave the producers with meager profits or sometimes non at all.

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ANNEX 1

1. REFORM INITIATIVES IN THE ERSWEC 2003-2007

Economic Recovery Strategy for Wealth and Employment Creation (ERS) – 2003 – 2007.

The Government accordingly formulated The Economic Recovery Strategy for Wealth and Employment Creation (ERS) – 2003 – 2007. This strategy identifies agriculture as a high priority sector that will spear head creation of wealth and employment.

Some of the key challenges that must be addressed to revitalize the agricultural sector are identified in the Strategy as follows:

- Improving governance in key agricultural institutions, particularly the cooperative societies and other farmer organizations.
- Developing comprehensive legal framework to guide formulation of consistent policies.
- Building the private sector institutional capacity to take over functions previously performed by the state after liberalization.
- Developing markets and strengthening marketing information systems.
- Making farm credit accessible and reducing the high cost of farm inputs.
- Raising the level of public funding to the sector; and
- High prevalence of HIV/AIDS affecting Labour for agricultural production and health resources.

Strategy for Revitalizing Agriculture (SRA) 2004-2014

In harmony with the ERS and in an effort to reverse the declining trend in the agricultural sector's performance, the Ministry of Agriculture and with the Ministry of Livestock and Fisheries Development have jointly formulated a Strategy for Revitalizing Agriculture (SRA).

The objective of the strategy is to provide a conducive policy and institutional environment for increasing agricultural productivity, promoting investment and for encouraging private sector involvement in agricultural enterprises and agribusiness in order to transform Kenya's agriculture into a profitable, commercially oriented and competitive economic activity that provides gainful employment to Kenyans.

The transformation of the sector will require radical changes in policy, institutional, legal and regulatory frameworks. The Strategy identifies priority activities that must be undertaken if the sector is to achieve the expected growth rate of 3.1%. These include;

- Reform the legal and regulatory framework governing agricultural operations.
- Promotion of research and technology development.

- Reform of the extensions service system to create a more effective linkage between research, extension and the farmers.
- Establishment and development of a market-based agricultural credit and inputs system.
- Promotion of domestic processing of agricultural produce in order to provide increased opportunities for value-addition, employment creation and foreign exchange earnings.
- Restructuring and privatization of non-core functions of the agricultural sector ministries.

To implement the SRA - a strategic plan has been prepared the implementation of which involves the participation of all stakeholders in decision-making and implementation.

ANNEX 2

KENYAN ORGANIC AGRICULTURE PRODUCERS AND EXPORTERS – THE CASE OF MERU HERBS

The project operates on 34 hectares producing a range of herbal teas which they process on the central handling facility at the Base Camp. All the herbs are grown by some farmers within the irrigation project in the Tharaka district. The producer group is selected mainly on the basis of their experience acquired by virtue of having worked with Meru Herbs since the beginning of the project in 1992 and having signed an agreement on organic farming. The enterprise has gained Fair Trade status and is enabling farmers to understand the importance of quality in all the processes right from the farm to final product. Meru Herbs also provide training to enable the farmer to understand the Organic Farming and the the importance of working in the natural systems of environment.

Meru Herbs office in Nairobi consists of the Project Coordinator, Logistic Manager, the financial controller and a local marketing coordinator. 10% of Meru Herbs total sales are marketed locally with the aim of earning some income to sustain the Nairobi Office. Meru Herbs has expanded by employment of more people of whom the bigger percentage are women.

The organic produce includes carcade, camomilla and lemongrass. Meru Herbs has a total of 167 farmers that by March will be fully certified organic. All produce carcade, camomila and lemongrass with an exception of only packaging material, are from Meru Herbs Certified farmers.

The employees involved in the actual processing of the raw material are from the local community. Most of the farmers within the project also provide either casual or permanent employees to the factory

The project aims at improving the living standards of the community around where it operates. Meru Herbs has improved the living standards by exporting organically produced and certified products through the fair-trade system and has employed more people of whom the bigger percentage are women.

- When the Project began there was only one shop and one or two primary schools and most people after completing their education and did not qualify to go to the university either farmed on their farms or went to seek employment in other peoples farms. Now there about 11 shops including a mini supermarket and more schools have sprung up.
- Farmers benefit by first producing organic products for Meru Herbs and then for the farmers most of their children (who have gone up to secondary level of education) or relatives work in the factory where they earn wages for services rendered.

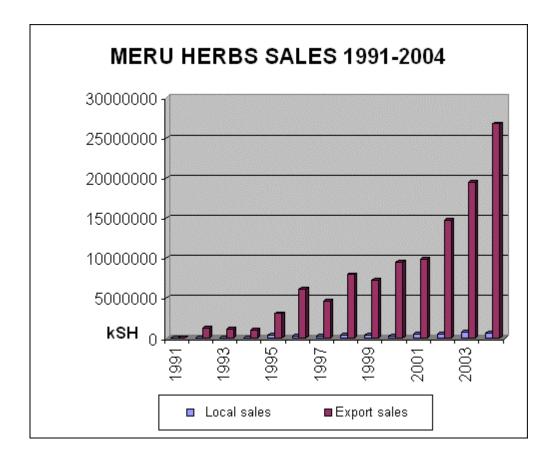
- The project has empowered women since they majority are the ones working in the factory hence giving them a source of income where they can buy various domestic appliances, can pay school fees for their children, buy clothes and feed their children.
- Meru Herbs has also undertaken a ladies bicycle project and solar panel project. Most of the women come from very far everyday to work at the factory and sometimes they return when its dark back home. So a bicycle project was began where Meru Herbs has collected funds, pays half the price of the bicycle and the ladies pay the other five. So far over 35 bicycles have been bought.
- The solar panel project is also being undertaken as an alternative of providing lighting since electricity is not readily available but so far only three people have been provided with the panels.
- Organic Farming has become more and more important for the farmers who grow our products. It is because of the Fair Trade market and the move by the consumer towards healthy organic foods that our farmers located in this remote area of Kenya have come to learn about organic farming.

The Products, Carcade, Camomilla and Lemongrass are marketed through the Fair Trade system to Europe and Japan

Volumes produced per year (see table and graph below)

Year	Local sales	Euro	annual %	Export sales	Euro	annual %
1991	2,030	20	increase	71,479	715	increase
1992	8,060	81	297%	1,271,073	12,711	1678%
1993	10,670	107	32%	1,183,537	11,835	-7%
1994	64,390	644	503%	1,057,405	10,574	-11%
1995	387,424	3,874	502%	3,106,858	31,069	194%
1996	265,723	2,657	-31%	6,130,753	61,308	97%
1997	320,511	3,205	21%	4,679,586	46,796	-24%
1998	377,063	3,771	18%	7,950,311	79,503	70%
1999	395,738	3,957	5%	7,245,420	72,454	-9%
2000	323,010	3,230	-18%	9,501,218	95,012	31%
2001	526,279	5,263	63%	9,880,680	98,807	4%
2002	520,000	5,200	-1%	14,791,608	147,916	50%
2003	750,000	7,500	44%	19,513,730	195,137	32%
2004	710,000	7,100	-5%	26,786,262	267,863	37%

MERU HERBS SALES IN KSH. And Euro



Meru Herbs is certified by Soil Association UK. We started with a group of 43 farmers who began the conversion process in 1996 and are now fully certified while the second group of about 124 farmers in conversion will be fully certified by March 2006

The process of certification: An application is made declaring the size of land you wish to convert to Organic land; details such as history of the land among other details are also given. An Inspection is then arranged at the convenience of the producer/farmers. Once the inspection has been conducted then a report of both the farm and the processing unit is prepared by the Inspector and is explained to the Farmers Group Coordinator. A compliance form and an annual questionnaire are filled and are supposed to be signed by the Group Coordinator. Before a certificate is issued, payment must be affected.

Challenges faced by farmers in conversion:

Maintaining land as organic is an involving process because it requires that certain rules be adhered to. It requires keeping farm records, crop rotation that is in accordance to the Organic Standards. Meru Herbs gives incentives to Organic Farmers.

Benefits derived from the OA enterprise and the beneficiaries

There is a great market for organically produced products. The consumer is becoming increasingly aware of the need to consume organically produced food because of their Health. The consumers are becoming more educated and conscious about the consumption habits and hence the increase in demand.

Meru Herbs is increasingly meeting the need for the consumers who would like organically produced Herbal Tea.

The Fair Trade system ensures that the farmers will benefit directly from their produce. It eliminates the "middle men" intermediaries hence making sure that the product do not get to the market at a high price but at a price that can move volumes of the product. The main interest here will be the price paid the farmer for their produce. This system ensures that the farmer will benefit from the sale.

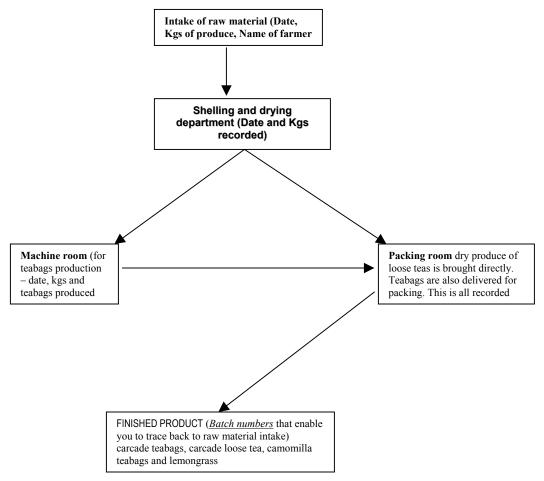
As stipulated in the Organic Standards all our activities are not detrimental to the environment hence no negative environmental implications

In terms of the people involved, specific roles, their numbers and where trained in OA; the company has a group coordinator who has under gone intensive on job training. One of our major weaknesses is training the personnel who are involved in organic farming. The company is looking into ways to overcome this together with our certifying body Soil Association of Kenya.

The following are some of the issues to be addressed to make the OA sector in Kenya more successful:

- The government needs to be involved. Right now there is no recognition from the government of organic farmers. We should have a body of organic farmers supported by the Government. This body can then come up with a national organic symbol which will be recognized by all consumers.
- The local consumers need to be educated about organic food consumption. We need to have a campaign in support of Organic Agriculture.
- We need institutes that can give training to Organic farmers that are in line with the International Organic Standards.

For the success of Organic Agriculture in Kenya, we need all the players to unite to establish a presence of Organic farmers. It will be difficult for one single player to create a presence but as group we can go much further. The method of production process and the steps involved.



NB: TRACEABILITY OF PACKED GOODS TO INTAKE OF RAW MATERIALS

- All organic raw materials are recorded on delivery by the certified farmers both in their record books at the office and in the individual farmers' book. The record includes date of delivery and quantity delivered among other details.
- The raw material is then handed over to the shelling department for carcade but camomilla and lemongrass is handed over to the drying department.
- From drying department the produce is handed over to packing room. Here it is recorded again including the date of delivery. These are then packed into finished products of which a batch number is included for trace ability.
- All produce is organic and is dried and stored together. SO it is possible to trace the products packed on a particular day to organic raw material delivered from the batch numbers.

Intake of raw material (Date, Kgs of produce, Name of farmer are recorded) Shelling and drying46 department (Date and Kgs recorded)

Packing room dry produce of loose teas is brought directly. Teabags are also delivered for packing. This is all recorded

Machine room (for teabags production – date, kgs and teabags produced are recorded among other records

FINISHED PRODUCT (*Batch numbers* that enable you to trace back to raw material intake) carcade teabags, carcade loose tea, camomilla teabags and lemongrass

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