

Business opportunities in the Ethiopian fruit and vegetable sector

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Within four years the floriculture sector in Ethiopia has developed from almost nothing to a sector with 1,000ha and more than 80 farms. This can be attributed to the favourable climate, an attractive investment package and a pro active and supportive government. The export of fruit and vegetables is, compared to flowers, still small. However, the good growing conditions and the strong support of the government makes investing in fruit and vegetables in Ethiopia an option more than worthwhile to look at.

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Preface

Ethiopia's favourable climate, an attractive investment package and a pro-active and supportive government have boosted the development of the Ethiopian horticultural sector and in particular stimulated the export of flowers. Although there are growth opportunities for the fruit and vegetable sector as well, the export of fruit and vegetables is still limited.

The Ministry of Agriculture, Nature and Food Quality in the Netherlands and the agricultural office in Addis Ababa asked Wageningen University and Research Centre to conduct an analysis on the business opportunities in the Ethiopian horticultural sector. Dutch companies in particular would benefit from having basic background information on the present situation and the potential of the Ethiopian fruit and vegetable sector.

The facilitating conditions in Ethiopia are not yet optimal but are improving. Together with the good climate conditions, investing in fruit and vegetables in Ethiopia, especially for export to Middle East and Europe, is an interesting option for (Dutch) investors. Crucial elements in the investing decisions are the selection of the production location, the organisation of the logistical supply chain and the establishment of good relationships in Ethiopia (with growers, service providers etc.).



Prof Dr R.B.M. Huirne
General Director
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Executive summary

The horticultural sector in Ethiopia is growing strongly. Major part of this growth is created by investments in the floriculture sector. Recently more and more interest from the Dutch private sector is shown in the Ethiopian fruits and vegetable sector.

Export of fruit and vegetables has been limited but is now growing strongly with new investors coming in. Both in Europe and in the Middle East there is a growing interest for products from Ethiopia. Presently, the main export products are fresh beans, strawberries, tomatoes, courgettes, peppers and fresh herbs. A potential new crop is table grapes. The Government of Ethiopia gives high priority to the development of the horticulture sector and in 2008 the Horticultural Development Agency has been established with a specific focus to promote and support the further development of the horticulture sector.

SWOT summary	
<p>Strengths</p> <ul style="list-style-type: none"> - Climate - Facilitating government policies - Costs of production - Geographical location - Security - Private sector service provision - New initiatives - Potentials for irrigation - Transport - Code of Practice in floriculture sector 	<p>Weaknesses</p> <ul style="list-style-type: none"> - Constant high quality supply in sufficient quantities/lack of critical mass - Crop varieties - Packaging - Cold Storage/logistics - Technical Know-How - Research and extension - Input supply - Land Tenure - Market Information - Domestic market - Banking - Bureaucracy - Communication
<p>Opportunities</p> <ul style="list-style-type: none"> - Demand in Europe and Middle East - Demand for processed fruits and vegetables - Ecological and fair trade production 	<p>Threats</p> <ul style="list-style-type: none"> - Increased competition in European and Middle East Markets - Regional politics - Stringent requirements on food safety and sustainability standard

It is concluded that the further development of the fruit and vegetable sector in Ethiopia for export to Europe and the Middle East has good perspectives and provides interesting opportunities for foreign investors. The sector is however still in its infant stage. Facilitating conditions for doing business are not yet optimal, but are expected to improve in the near future. For growers who consider starting operations in Ethiopia it is important to carefully select a location and ensure getting the logistical and cool chain well organised beforehand.

For companies considering sourcing from Ethiopia it is important to build good relations with the potential growers, provide hands-on guidance and training and invest in organising the logistical supply chain well.

1 Introduction

The horticultural sector in Ethiopia is growing strongly. A major part of this growth is created by investments in the floriculture sector. Recently more and more interest from the Dutch private sector has been shown in the Ethiopian fruits and vegetable sector.

The Ethiopian government, sector organisations (EPHEA) and donors (USAID, SNV, CFC) have identified potentials for the further development of fruits and vegetable sector in Ethiopia both for the domestic and export market. Also in the Ethiopian-Netherlands Horticultural Partnership Programme, technical support to the development of the fruits and vegetable sector has been prioritised. A number of actors and donors have already started activities in the area of technical production assistance, post-harvest handling and compliance to international standards.

This report is based on experiences gathered during missions to Ethiopia, literature research and interviews with Ethiopian and Dutch companies on their experiences and ideas about opportunities for the Dutch private sector in the Ethiopian fruit and vegetable sector.

This report provides information about the Ethiopian horticultural sector for the Dutch private sector, including growers, traders, retailers and service providers. The aim of this study is to explore business opportunities for Dutch entrepreneurs. These opportunities have been highlighted at the end of report.

2 Country profile

Ethiopia harbours an extraordinarily rich agro-biodiversity resulting from its geography, climatic differences, ethnic diversity and strong food culture. Unique is the great variation in climates, due to the great variation in altitude ranging from sea level up to 4,500m. Altitudes between 500m (normally warm) and 2,600m (cool nights and mild day temperatures), and all altitudes in between, are common. Together with ample possibilities for irrigation, this makes it possible that a large variety of crops can be grown. The hot lowlands are suitable for crops like sugarcane, palm oil, maize, cotton and sesame. On the higher altitudes crops like coffee, tea, teff and roses can be grown and on even higher altitudes wheat, barley and linseed. The variation in climate also makes it possible to grow all types of fruits, vegetables and flowers.

Besides the climatic conditions also the investment conditions in Ethiopia are important. The Government of Ethiopia is giving priority to the horticultural sector and other export products like leather, oilseeds and coffee, and as a result the investment package offered is attractive. It includes amongst others a tax holiday and favourable financing possibilities and active assistance for obtaining land. Land can be leased on long-term at very favourable conditions, labour is cheap and loans can be obtained at advantageous terms. Other important advantages of Ethiopia are the personal safety and the fact that government offices work according to procedures. This results in a relatively low level of corruption compared to other African countries.

The floriculture sector has grown within 5 year from almost nothing to more than 1,000ha at the end of 2008. At the moment mostly roses are grown but summer flowers show a rapid growth. Recently also lilies and freesias are being cultivated. In addition, the climatic conditions are ideal for the production of plant cuttings; at the moment (2008) 5 international companies have such an operation in Ethiopia.

Export of fruit and vegetables has been limited but is now growing strongly with new investors coming in. Both in Europe and the Middle East there is a growing interest for products from Ethiopia. Presently, the main export products are fresh beans, strawberries, tomatoes, courgettes, peppers and fresh herbs. A potential new crop is table grapes. Almost all types of Fruits & Vegetables can be grown in Ethiopia. The Government of Ethiopia gives high priority to the development of the horticulture sector and in 2008 the Horticultural Development

Agency has been established with a specific focus to promote and support the further development of the horticulture sector.

Other fast growing export sectors are oilseeds and dry beans. Of course coffee remains important, with Ethiopia being the motherland of coffee. Furthermore, the meat and leather sectors are developing rapidly.

The demand for dairy and poultry products in the local market is growing and there are good business opportunities in these sectors. Other sectors, like sugar, tea and biofuel enjoy growing interest from foreign investors.

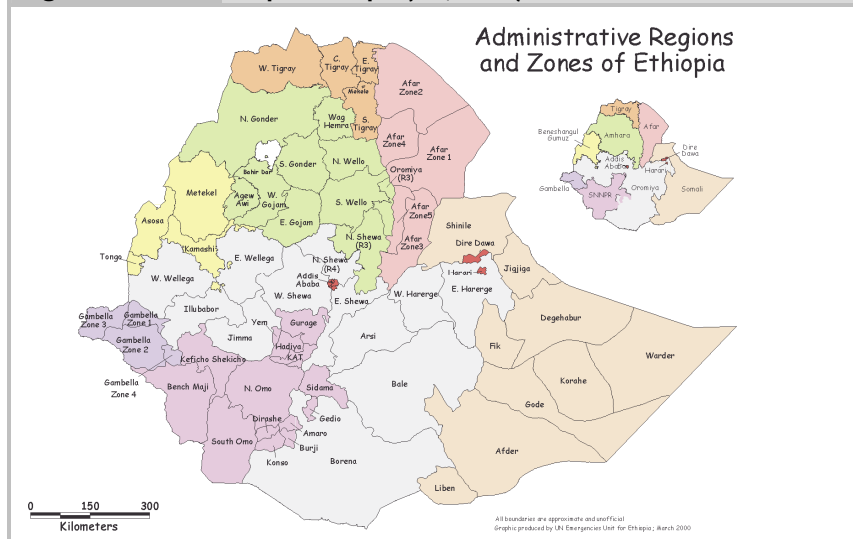
Country facts

- Full name: Federal Democratic Republic of Ethiopia.
- Population: 83.1 million.
- Capital: Addis Ababa.
- Area: 1.13 million sq km (437,794 sq miles).
- Major languages: Amharic, Oromo, Tigrinya, Somali.
- Major religions: Christianity, Islam.
- Life expectancy: 52 years (men), 54 years (women).
- Adult literacy rate: 36%.
- Monetary unit: 1 Birr = 100 cents.
- Main exports: Coffee, hides, oilseeds.
- Major trading partners: Saudi Arabia, Djibouti, US, Germany, China, Japan, Italy and India.
- GDP per capita: USD600 (at PPP).
- Internet domain: .et.
- International dialling code: +251.
- Standard Time +0300 UTC.
- Calendar: Julian (day, time and year is different than the Western Gregorian).

Geography

Ethiopia is twice the size of France and shares borders with Djibouti, Eritrea, Kenya, Somalia and Sudan. It is landlocked. Ethiopia is divided into 9 ethnic-based regions plus the capital, Addis Ababa and the city administration of Dire Dawa. Map 1 shows Ethiopia with its administrative regions and zones.

Figure 2.1 **Map of Ethiopia (UN, 2000)**



Ethiopia is a country of great geographical diversity. The topographical differences result in different climatic zones which make Ethiopia an attractive country for different kinds of agricultural production systems. About 60% of the surface is suitable for agriculture. Also the amount of land which can be irrigated is large, but at the moment only a small part is actually used.

The geographical differences result in three climatic zones:

- cool zone, above 2,400m, temperature range from freezing to 16°C;
- temperate zone, 1,500-2,400m, temperature from 16-30°C;
- hot zone, below 1,500m, temperature ranges above 27°C.

Ethiopia usually has two different rainy seasons. The long rainy season, Kiremt, takes place from mid-June to mid-September. During February to March some regions have a short rainy season, the Belg. The remaining months are mostly dry.

Politics

Ethiopia is a federal parliamentary republic with executive powers vested in the Prime Minister (Meles Zenawi). The Head of state, a largely ceremonial role, is President Girma Wolde-Giorgis. Elections in 1995 and 2000 gave the Ethiopian People's Revolutionary Democratic Front (EPRDF) an overwhelming majority of seats in the national parliament. General elections held in 2005 revealed a sharp

increase in public support for opposition parties, but the EPRDF retained power. Next elections are scheduled for 2010. The environment for opposition parties and civil society will remain challenging due to stricter laws covering media and non-governmental organisations. Ethiopia's relations with Eritrea will continue to dominate the foreign policy agenda. Although there are risks of a new conflict, a continued stalemate is still the most likely scenario. Somalia will remain a source of tension in the Horn of Africa, and Ethiopia will continue to be involved in order to protect its regional interests and domestic security.

Human rights

The 1994 Ethiopian Constitution and many other laws offer strong protection for human rights, but these rights do not always translate into practice. Since the controversial multi-party elections of 2005, respect of human rights in Ethiopia has deteriorated.

Poverty

Ethiopia is one of the poorest countries in the world. Ethiopia ranks 170 out of 177 countries in the 2006 United Nations Human Development Report and 31 million people live on less than half a dollar a day. Food security is a major challenge in the more marginal parts of the country every year: 15 million people are at risk from food insecurity, and over 8 million people are classed as chronically food insecure. In recent years, however economic growth has been well above population growth, which may lead to reduction in poverty. The Government of Ethiopia is implementing a plan for accelerated and sustained development to end poverty (PASDEP) assisted by donors and which is based upon Ethiopia's strategy of agriculture-led industrialisation.

Economy

Ethiopia is experiencing a remarkable economic growth. Ethiopia's economy had a average annual growth of 11% over the last four years and a 8.5% growth in 2007/08 is forecasted. Growth benefited from public investments in infrastructure, supported by donor funding. Ethiopia remains highly vulnerable to droughts, but resilience is growing over time, assisted by institutional reform and ongoing extension of roads and markets. However, inflation has been in double digit figures for the last three years, with increased food prices. Inflation is now being driven by fuel prices, currency devaluation, the spillover from the construction boom and (during 2008 in particular), rapidly rising food prices. Over the longer term, sustained growth will require enhanced efforts to

strengthen agricultural productivity and improve the climate for private investment.

Ethiopian government strongly promotes domestic and foreign investment in the horticulture sector and is working hard to further improve the enabling environment. Table 1 shows the business climate of Ethiopia compared to other nearby African countries.

	Overall ease of business (rank out of 155)	Starting a business Time (days)	Rigidity of labour laws index (0-100) a)	Trading across borders Average time for exports (days)	Enforcing contracts Time (days)	Protecting investors index (0-10) b)	Registering property Time (days)	Paying taxes % of gross profit
Kenya	68	54	28	45	360	5.3	73	68
Uganda	72	36	13	58	209	5.3	48	43
Ethiopia	101	32	41	46	420	2.7	56	44
Tanzania	140	35	69	30	242	2.0	61	51
World average	-	47	41	31	393	5.1	85	46

a) 0 - minimum rigidity, 100 - maximum rigidity; b) 0 - minimum protection, 10 - maximum protection.
Source: World Bank. Doing business in 2006.

Agriculture accounts for nearly half the country's GDP, 60% of its exports and 80% of total employment. Livelihoods are predominantly based on agriculture, which accounts for 45% of national income and over 90% of export earnings. The agricultural sector accounts for 55% to the Gross Domestic Product. Ethiopia produces mainly a variety of cereals, pulses, oilseeds, and coffee. Grains are the most important field crops and the main element in the Ethiopian diet followed by pulses. Vegetable and fruit production and consumption is relatively limited. Small-scale farmers, who account for 90% of the agricultural output, cultivate an estimated 96% of total cropped land.

3 Institutional environment

Production and processing of horticultural crops, vegetables and fruits have been placed by the Government of Ethiopia in the list of high priority areas and various incentives have been provided for investors investing in this sub-sector. Incentives for investors engaged in new enterprises and expansions are available both to foreign and domestic investors. The type of incentives that are available both to foreign and domestic investors are the following (www.investethiopia.org).

Customs Duty Exemption

- A 100% exemption from the payment of import customs duty and other taxes levied on imports is granted to investment capital goods and construction materials necessary for the establishment of a new enterprise or for the expansion or upgrading of an existing enterprise as well as spare parts worth up to 15% of the value of the imported capital goods.
- Investment capital goods imported without the payment of import customs duties and other taxes levied on imports may be transferred to investors enjoying similar privileges.
- Exemptions from customs duties or other taxes levied on imports are granted for raw materials and packing materials necessary for the production of export goods. Taxes and duties paid on raw materials and packaging materials are drawn back at the time of exports of finished products. The voucher system and bonded manufacturing warehouse facilities are also in place.
- All goods and services destined for export are exempted from any export and other taxes levied on exports.

Income Tax Exemption and Loss Carry forward

- Any income derived from an approved new manufacturing, agro-industrial or agricultural investment is exempted from the payment of income tax ranging from 2-8 years depending up on the area of investment, the volume of export and the location in which the investment is undertaken.
- Income derived from an expansion or upgrading of an existing manufacturing, agro-industrial or agricultural enterprise is exempted from income tax for a period of two years if it exports at least 50% of its products and increases, in value, its production by 25%.

Business enterprises that suffer losses during the tax holiday period can carry forward such losses for half of the income tax exemption period, after the expiry of such period.

Remittance of Funds and Investment Guarantee and Protection

Foreign investors are entitled to make the remittances out of Ethiopia (from e.g. profits, interests and proceeds from sale of an enterprise) in convertible foreign currency at the prevailing rate of exchange on the date of remittance. In Ethiopia both the Constitution and the investment Code protect private property. Ethiopia is also a member of MIGA (Multilateral Investment Guarantee Agency), which issues guarantees against non-commercial risks to enterprises that invest in signatory countries. Besides, Ethiopia has signed bilateral investment promotion and protection treaties BITs (Bilateral Investment Treaties) with a number of countries.

Horticultural Development Agency

To boost the horticultural sector further The Ethiopian Horticulture Development Agency has been established 6 June 2008, as an autonomous Federal Government Agency under the Ministry of Agriculture. Its objectives are:

1. to ensure the fast and sustainable growth of horticultural production and productivity;
2. to facilitate the export of diversified horticulture products which meet internal food safety standards; and
3. to coordinate the development of supporting services.

Ethiopia Horticulture Producers and Exporters Association

The Ethiopia Horticulture Producers and Exporters Association (EHPEA) was established in 2002 to facilitate the private sector horticultural exports. At the moment there are more than 60 members. It is a legally registered organisation. EHPEA's financial resources are made up of the contribution of members, and national and international donors. It represents the horticulture sector in the country as well as internationally and it also organises trade fairs. EHPEA is implementing in close consultation with the Government of Ethiopia and other stakeholders a Code of Practice for the floriculture. This code of practice provides an excellent basis for establishment of a sustainable fruit and vegetable sector (www.ehpea.org.et).

Government Agencies

A number of agencies within the Ministry of Industry and Trade (MoTI) are relevant for further development of the fruit and vegetable sector:

- export Promotion Department (EPD).
Major mandate is to promote Ethiopian exports and include services such as training for exporters, conducting studies, collecting and dissemination of market information, etc. CBI has been assisting the EPD among others in programs for the floriculture and vegetable sectors;
- Ethiopian Investment Authority (EIA);
serves as a one-stop-shop for investors and has played a major role in facilitating foreign investments in the horticulture sector;
- Ethiopian Quality and Standard Authority (QSAE);
the QSAE is responsible for the formulation of national standards and undertake activities such as promoting and assisting in quality management practices, co-ordination of standardisation, promoting reliability of testing laboratories, etc.

Banking

The Ethiopian Development Bank (EDB) is the key institution financing the expansion of the floriculture sector. The loans have favourable conditions compared to the general commercial loans, with a grace period and at relatively low interest rates. The debt:equity ratio for these loans is 70:30 for start ups and 60:40 for expansion of existing projects. This loan facility, which has been instrumental in the quick development of the floriculture sector, till date has hardly been used by investors in the fruit and vegetable sector.

Different financial institutions in Ethiopia provide short, medium and long-term development credits. For more information, please refer to the Guide 'Investing in the agricultural sector of Ethiopia', to be published by EIA supported by the Netherlands Ministry of Agriculture, Nature and Food Quality.

The regulation of the banking system presents a major constraint. There is no free exchange of Foreign exchange, which hampers international financial transactions. The lack of domestic and foreign finance was perceived as a constraint on the development of the sector. Domestic banks have shown a reluctance to invest in the sector, in part due to a lack of sector knowledge and the perceived high risks involved, and foreign banks are currently not permitted to operate in Ethiopia. Dutch importers have also underlined the problem of banking.

Private Sector Support Services

Due to the rapid growth of the floricultural, the number of private sector support services relevant to the fruit and vegetable sector have increased in recent years: horticulture input suppliers, cold storage technology services, fertigation inputs and technology, greenhouse construction, horticulture consultancy services, etc.

Knowledge, skills and entrepreneurship

The fruit and vegetable sector lags behind compared to most producing countries in its agronomic practices. In part, this is because both state farms and private sector operations do not give sufficient attention in getting the right technology and expertise required. Further, there has been very little formal research to overcome problems of low genetic potential, an absence of quality selection to overcome the lack of high-yielding and high-quality cultivars, inappropriate disease and insect pest control measures, and a lack of quality seed supply.

Producers and exporters have complained of a lack of know-how in activities throughout the supply chain, including knowledge of production planning, post-harvesting handling and processing practices. Low-level technology, knowledge of specifications and codes of practice, knowledge of markets and marketing and lack of promotion activities are additional limitations. Understanding of the supply chain functioning, the involved actors, activities and responsibilities is lacking. Next to lack of know-how on both production and marketing aspects, importers complain about the low level of services.

The current mentality of doing business and the labour ethos does not live up to the expectations of the importers. In general the level of entrepreneurship is low. Importers indicate that they find it difficult to find the right partners in Ethiopia. On the other hand it is observed that in general Ethiopian supervisory and management staff is eager to learn and works accurately.

A major effort is being undertaken to improve the knowledge and skills in the coming years. Jimma University, jointly with PTC+ (Practical Training Centre) and Wageningen University and Research Centre in The Netherlands is bringing the Horticulture Education in line with the requirements of a competitive export sector. Next to that, the EHPEA has started with practical training courses for existing farm staff and has plans to start with a Horticulture Practical Training Centre.

Communication

The communication system is relatively poor. The mobile phone network is overstressed and e-mail/internet connections slow. This is considered to be a serious constraint on doing business in Ethiopia.

Land

In Ethiopia, land is public property and belongs to the State. It cannot be bought but it can be leased for a certain number of years. The lease time differs between the different regional states. By international standards land cost of lease are very low.

Land availability and security of tenure are perceived as major constraints to the development of horticultural production. Several private investors have experienced concern with delays in acquiring land leases, the length of the lease period, the lack of an efficient land market and the unwillingness of banks to accept land as collateral. Protracted land negotiations following the initial company registration means that money is tied up and is not generating a return.

Market information

Information about export markets is currently limited. There are a number of key requirements relating to markets, market evaluation, promotion, and quality management that must be carefully looked at before starting a business. In general there is little experience in producing on basis of 'programmes' in a 'in co-partnership with foreign wholesale organisations and/or supermarkets. There is a need to undertake market studies and discuss intensively with potential buyers. This in order to get a clear picture of the range of products in demand in the target markets; issues to be addressed include volumes, varieties, seasonality, quality requirements, and most importantly competitiveness of Ethiopia. Without continued access to relevant market information it will be very difficult for Ethiopia to compete.

The performance of the smaller scale fruit and vegetable growers and exporters in the supply chains aimed at the lower value markets in Djibouti, Yemen and elsewhere in the Middle East is not always easy to assess. Lack of market transparency combined with buyers' concentration at the importers' side are hampering further growth and development of the sector. The current transaction costs are high and handling, packing and transport of the produce create considerable losses during the post-harvest process.

Foreign investments

The favourable investment conditions and incentives provided by the Ethiopian government have been an important factor in attracting both foreign and domestic investors to the export horticulture. However, this has so far been mainly limited to the increased investment levels in the floriculture sub-sector. So far only a small number of entrepreneurs have made investments in the fruit and vegetable sub-sectors for the development of export production for the high quality markets in Europe, North America and Japan.

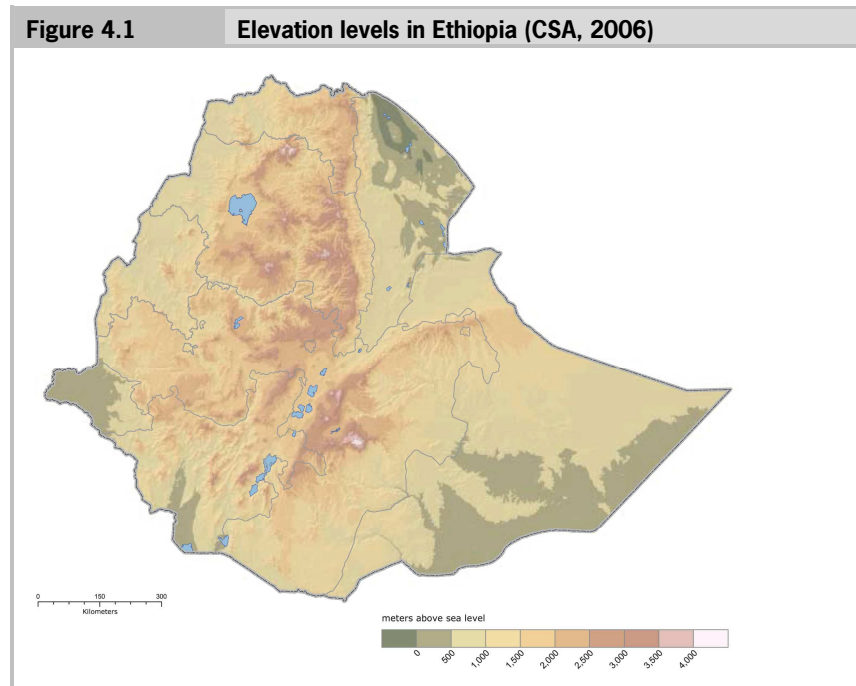
Although food safety standards are currently considered to be 'license to produce', it may be expected that more stringent requirements by supermarkets in terms of quality and safety compliance, traceability and consistency of contracted supplies and sustainability (food miles) can form a barrier for a newcomer into the high value fruit and vegetable markets.

Furthermore levels of competition from existing exporting countries (Morocco, South Africa, Kenya, Egypt, etc.) are high. Successful development of the export-oriented fruit and vegetable sub-sectors aimed at the high value markets in Europe and elsewhere thus will require additional efforts from the sector to raise the competitiveness of the sector and create market entry.

4 Ethiopian fruit and vegetable production

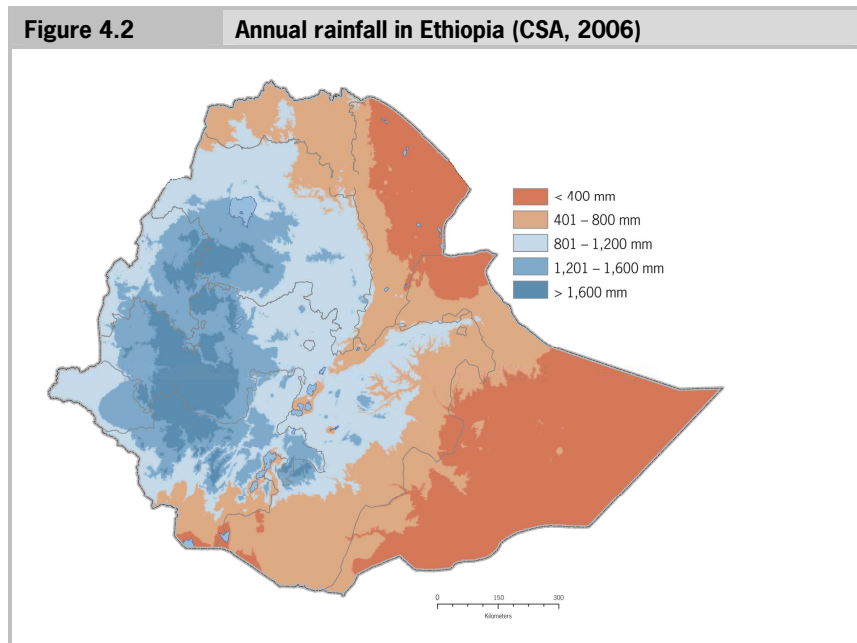
4.1 Cultivation zones

The elevation levels in Ethiopia are diverse (see figure below). Addis Ababa is located at approximately 2,300m.a.s.l. Variation in temperature is driven mostly by elevation. Because of Ethiopia's location near the equator, seasonal changes in day length and incoming solar radiation are minimal and, consequently, have little impact on average temperatures.



Rainfall varies throughout the country, not only spatially but also temporally. Some parts of the western highlands experience rainfall for most of the year (March-October), while most of the rest of the country experiences rainfall within either the main rainy season (roughly July through September) and possibly also the short rains (roughly March through May). The western highlands have particularly high rainfall, averaging over 1,200 millimetres annually in many areas.

Rainfall is lower with decreasing elevation, especially towards the East. Most of the eastern lowland areas are unsuitable for crop production because of lack of rainfall. Figure 2 shows the average annual rainfall over the past 35 years.

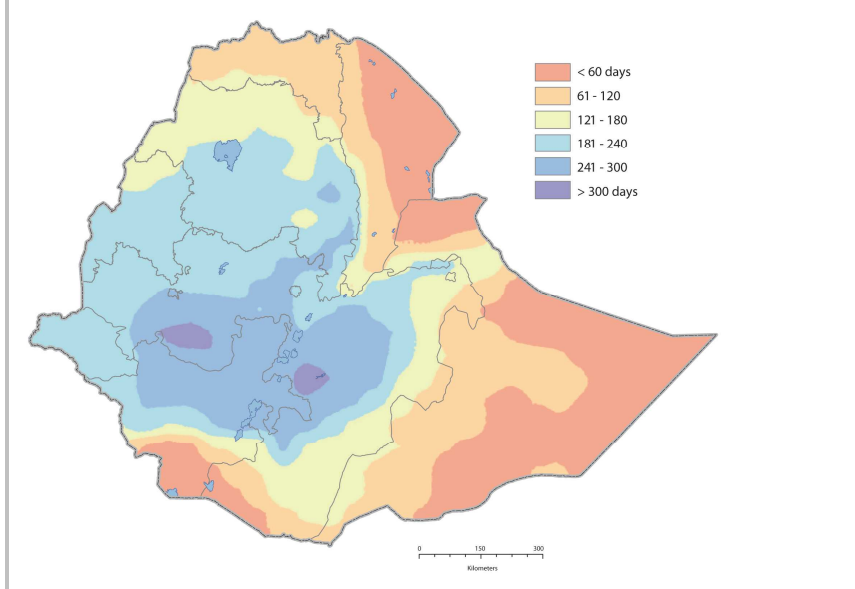


The major growing seasons in Ethiopia are associated with annual rainfall patterns. Most areas in the country experience both the long and short rains with the exception of some areas in the northwest. In the north, long rains tend to fall earlier, around the end of June, while in the south, they start as late as October. Although most crop production in the highlands is associated with the long rains, many communities depend on the short season to meet their food needs. The south western highlands get more than seven months of heavy rainfall, while the eastern lowlands get less than two months.

The length of growing period is based on the number of days with a mean daily temperature above 5°C and with available water (from precipitation or stored soil moisture) in excess of half the potential evapotranspiration. It is important to note, however, that the potential for irrigated agriculture is not reflected here. Also, even within areas with long growing periods, other characteristics - such as steep hillsides, nutrient-poor soils, or crop pests and diseases - may mitigate against successful production.

Vegetables for export are in general grown under irrigation with the main crop being produced in the dry season which starts in September-October and last until March. This coincides with the winter in Europe and which gives Ethiopia an attractive competitive position.

Figure 4.3 Length of growing period per year in Ethiopia (CSA, 2006)



The Leptosol soils (29.8% of total land area) are mostly found in the north, are very shallow (< 30 cm), and have somewhat limited agricultural potential. Nitosols (12.5%) are mostly found in the west and are deep, well-drained soils. Despite low pH and low levels of phosphorus, they have relatively good agricultural potential. Vertisols (10%) have wider distribution; are heavy, black clay soils that are difficult to work; and have poor drainage. Although they have good chemical properties, their use is limited due to water-logging. Gypsisols (7.6%) in the eastern lowlands have limited agricultural potential.

Due to Ethiopia's good agro-climatic circumstances it is able to produce fruits and vegetables throughout the year. Both the lowland and highland areas offer good opportunities. The major fruits and vegetables growing areas of the country are summarised as follows:

- East Hararghe (eastern part of the country) with vegetables dominating;

- East Shewa (Central Ethiopia in Oromia Regional State) produces both fruits and vegetables including tomato, green beans, orange, mandarin, papaya;
- West Shewa (central Ethiopia in Oromia Regional State) which is good for producing tomato and mango fruits;
- Arsi (central Ethiopia in Oromia Regional State), particularly in the Awash River basin which is known for its various types of fruits and vegetables;
- Gamo Goffa (Southern Nations, Nationalities and Peoples Regional State), particularly Woliata and Sidama zones, are good producers of banana, avocado, pineapple, papaya in various districts;
- Dire Dawa and Harari (eastern Ethiopia) are also well known production and supply areas of both fruits and vegetables;
- Tigary and Amhara regions.

The Ethiopian government has selected four priority areas for further development of the horticultural sector. These four areas are Tana Beles, Rift Valley, Dedessa valley and Dire Dawa.

4.2 Production

The number of small-scale producers involved in horticulture is estimated at 5.7 million farmers. Few smallholder farmers are engaged in out-growers arrangements and some farmers association unions have been established.

The past five years have seen a major change in Government policies towards the horticultural sector, reflecting efforts to redirect the economy away from centralised planning to a more liberalised economy. The Government of Ethiopia increasingly considers the private sector as the engine of economic growth and the catalyst for employment creation and export expansion. As a result private companies were allowed and facilitated with an array of incentives to engage in the sector. In the fruits and vegetable sector, exports are however still dominated by the two state farm operations, namely Upper Awash Agro-Industry Enterprise (UAAIE) and Horticulture Development Enterprise (HDE), both currently in the process of being privatised. Alongside the state companies a number of private sector companies are involved in relatively small-scale production, processing and export of vegetable products. Major crops in fruits and vegetables and their production trend are presented in appendix 3.

Vegetables

Small-scale farmers produce 2.1 million tonnes of vegetables from 260 thousand ha while the State Farms produce 18 thousand tonnes from 880ha. The supply of vegetables for the European market comprises predominantly green 'bobby' beans. There are two private exporters cultivating around 225ha of green beans each with outgrowing arrangements with a limited number of farmers in their vicinity. The production of green beans relies on surface or furrow irrigation, which is a cheap but very labour intensive and water inefficient method. Moreover, it requires machinery for proper levelling of the fields. A joint venture near Koka was the first to make the considerable investment in drip irrigation. Van Oers Import and Ethio-Flora have been granted PSOM contribution in 2004 to set up the production, processing and packing of green beans for export to the Netherlands. The state farms have reduced their produce range significantly over the past years and big chunks of its land near Ziway have been leased out for floriculture or are for sale. Increasing number of investments and experiments are undertaken by private companies to produce peas, mangetouts, cherry tomatoes and asparagus for export to the EU market. Growers in Southern Ethiopia have also successfully started herb production, partly in greenhouses. Also a Dutch grower has already two years experience growing a wide range of vegetables of excellent quality in greenhouses

Fruits

Total fruit production is almost 500 thousand tonnes, of which the State Farms account for approximately 10% of production. The main fruits produced and exported are bananas, citrus, grapefruit, mangoes, papaya and avocados. The main export markets for these Ethiopian fruits are Djibouti, Saudi Arabia, Yemen and Sudan. The majority of citrus production is still largely confined to state farms, but the productivity of their orchards is on the decline. The production of mangoes is to a large extent scattered and unprofessional; the varieties and quality tend to be not as good in quality as those produce in competing countries and are usually unfit for further processing. Upper Awash has a plantation of mangos, mainly for export and produces mango seedlings for sale. The company Green Focus allocated 270ha for mango production in Wollega and planned to cultivate 2,000ha more of it in the coming three years and planned to build an agro-processing plant. However 500 farmers from seven kebeles resettled on the same farmland, halting Green Focus' plans. A national committee was established to look into the case and come up with the possible solution.

In the Chenchu highland apples have been grown for decades by small farmers. Apple production is expected to go up as the State of Oromia ordered 70,000 apple tree seedlings from Spain. Pineapple production is also scattered and has been unstable over the past years, which caused a pineapple drying plant near Nazareth to function below its production capacity for years in a row.

In addition to the export of relatively low value fruits, recently a number of trials are undertaken to produce more high value crops for export and to access new or more attractive fruits markets (i.e. grapes, avocado, passion fruit). A foreign strawberry grower ventured into the drip irrigated production of this fruit in Ethiopia mainly for the fresh export to the EU market. The Netherlands is now successfully importing strawberries from Ethiopia. The fruits have a high brix level and are harvested 7 days a week. Table grape production has started around Mojo and plans exist to expand to areas in the North of the country. Foreign investors have also come to Ethiopia to start with avocado and passion fruit production and processing, mainly on former state owned plantations.

5 Post harvest

Packaging

Available packing material in Ethiopia does not yet meet the required high standards. Therefore most vegetable export growers import their packing material from Netherlands or Israel. A project to improve the quality of packing material is presently carried out by the International Trade Centre (ITC) in Geneva and CBI from the Netherlands. Also it is encouraging to note that several new companies have started producing packing material.

Cold storage

Foreign companies have offices (consulting) in Ethiopia and are able to install cold storage facilities and provide maintenance and repair services.

In the fruits and vegetables sector, there are two privately owned cold stores in Ethiopia, namely the Ethio-flora and Tippu Valley cold stores at Ziway. In the public sector, Efruit and the two state enterprises have cold store operations. The stores are not designed to rapidly reduce field heat and are not of a sufficiently high standard.

There is only one private cold store at Bole airport. The facility has three separately controlled chill chambers plus a larger chilled handling area and a non-chilled dry goods area. The store was built and equipped to a very high standard and is customs bonded. However, usage costs are high, and so the space is under-used.

Fresh Consolidation Centres

Different organisations or institutions in Ethiopia are considering big(ger) central placed facilities where activities like sorting, grading, packaging, pre cooling, storage, palletizing and loading of containers can be organised by combining different flows of products from different origin and growers. Logistic organisations like Ethiopian Shipping Lines and Maersk are considering this option, but also organisations like OASIS and a Group of investors called Ethiopian Perishable Logistics. In addition Ethiopian Airlines is planning to start constructing a complete new 'state-of-the-art' perishable cargo centre at the airport in 2009.

Processing

In Ethiopia, the number of fruits and vegetables processing industries is limited. Currently, there are only 5 fruits and vegetables processing plants in the country. These plants presently process a limited variety of products: tomato paste, orange marmalade, vegetable soup, frozen vegetables and wine. Currently most processed products are geared to domestic markets.

The Merti Fruits and Vegetable Processing plant (HACCP certified) has a total processing capacity that could reach 5,000 tons per year. However, it has on average been utilizing only about 50% of this capacity. Green Star is a privately foreign owned enterprise focusing on food processing operations. The factory is working at low capacity due to lack of sufficient and regular supply of fruit and vegetables. The factory is in the process of HACPP certification.

The Dutch company Africa Juice is planning to start processing passion fruit into export quality juices, concentrates and purees. The company sees good opportunities in growing passion fruit in Ethiopia due to its relatively uniform climate and noticed an increased market demand for passion fruit juice. The first juice delivery is planned for the end of 2009. Mango juice is being produced in Sabeeta. The used mango concentrate and flesh parts are however imported from India.

The company Ecological Products of Ethiopia (Ecopia) produces, processes and markets fruits (mango, pineapple, strawberry) into jams and juices and also dries fruits. Their major markets are local supermarkets and hotels.

Phytosanitary inspection and custom control

In total there are five quarantine stations, at Bole International Airport (near Addis Ababa), Dire Dawa, Moyale, Nazaret and in Metema. Ethiopian phytosanitary services are understaffed and lack essential equipment and facilities.

The quarantine regulation in Ethiopia states that plants and plant products exported from the country have to be inspected and accompanied by a phytosanitary certificate. The production of horticultural products are inspected during the growing stage rather than the actual export consignments themselves. Visiting all export growers on a regular basis to ensure compliance with international phytosanitary standards and regulations is too time consuming for the Plant Quarantine Team of the Animal and Plant Health Regulatory Department (APHRD). Checks are done at random at the farms and the farmer is doing the inspection him/herself, based on information received from the Ministry of Agriculture.

Each inspection visit is concluded with an inspection report. Most exporters employ handling officers who ensures that the export consignments are send with the proper documentation, airway bill and phytosanitary certificate. The phytosanitary certificate is prepared on the basis of specifications of the consignment phoned to the handling officer from the grower's production place. Customs control can be done at the farm by customs officers. The container can therefore be sealed at the farm. Ethiopia doesn't levy export tax for horticultural products.

6 Transportation

Air

Bole Airport is the only airport in Ethiopia that handles international flights. Bahir Dar, Dire Dawa, Gondor, Mekele, and Arbaminch have airports capable of handling international traffic but, as yet, no international flights use these destinations. Ethiopian airlines had a good cargo facility with a cooling facility for cargo pallets. A constraint at the moment is the building of pallets, regularly causing long queues of trucks waiting to be off loaded. As mentioned earlier Ethiopian Airlines will start building a new Cargo Centre at Bole airport in 2009.

In Ethiopia the prices of air freight to Europe are more or less comparable to Kenya, ranging from USD1.90 to USD2.05 per kg. Air freight rates to the Middle East average between USD0.65 to USD0.75 per kg. Prices for to the Middle East are considered attractive, mainly due to overcapacity.

Ethiopian Airlines operates full freighters to Liege, Belgium. In the coming 2008-2009 high season (November - March) Ethiopian Airlines plans to operate a Boeing 747 and they have purchased two MD-11 aircraft expected to start operating in the near future. Space is available on commercial passenger flights is available and growing (KLM, Ethiopian Airlines, BA, Lufthansa, Egypt Air, Emirates).

There are good number of forwarding companies providing services in booking and arranging cargo-space, one company also offers 'pick up' service from the farm. The Government of Ethiopia has an 'open skies' policy regarding to cargo.

Sea

The development of a refrigerated cool chain for relatively nearby markets such as the Middle-East and Europe, could improve the competitive position of Ethiopia in the field of fruits and vegetables. Many private entrepreneurs have expressed interest in exploring this option.

For export from Ethiopia by sea only the port of Djibouti is a real option. Distance from Addis Ababa to Djibouti is more than 900km through transport by road. In Ethiopia the railroads are out of date and cannot be used for high-quality export products.

Maersk opened an office in Addis Ababa in March 2007 and provides a weekly feeder service at Djibouti, transporting cargo to Salalah in Oman, from where cargo is transported to major destinations in the world. Djibouti port is no transshipment port. The consequence is that the transshipment times can take very long. Djibouti is planning to become a transshipment harbour and is preparing itself for receiving the biggest container vessels available.

Reefer transport costs per kg will depend on the type of product and destination. Current reefer costs for vegetables to the Middle East are estimated as being similar to air freight costs, given the high cost of inland transport charges. A detailed understanding of the Reefer costs and logistics options for fresh fruit is becoming more important given the development of the fruit industry. To build a reefer chain for fruit and vegetable export will not face major physical problems.

Road

The internal major roads from Addis to far corners of the country are of excellent quality. Major constraint is the quality of the minor and feeder roads connecting to the major roads, although huge investments in road construction are taking place throughout the country.

7 Markets

General

Export of fruit and vegetables from Ethiopia can be categorised into three types. First, export of relatively high value perishable produce to Europe. Second, the export of low value produce cultivated predominantly in Eastern Ethiopia around Dire Dawa, to regional markets (mostly Djibouti) and, third, some processed and fresh produce to Middle East countries. General export trends are presented in appendix 4.

The horticulture sector's contribution to Ethiopia's export earnings is still relatively small but increasing rapidly. The fast growth of the floriculture sector in the period 2001-2008 has considerably increased the contribution of horticulture in the Ethiopian export. Current export consist of mainly green beans and flowers (roses) exported to northern Europe and a number of vegetables as potatoes, tomatoes and onions to Djibouti.

The beans are predominantly exported to Europe, while the other vegetables are mostly exported to Djibouti. The fruits are all exported to Djibouti as well, with some avocados going to India. The group of vegetables which are not further specified is extremely large. These products are exported to both Djibouti and Somali and probably consist of the mentioned vegetables as well.

Djibouti has for a long time been the main export country for Ethiopian vegetables. Only in 2003 they have suddenly been overtaken by Sudan. Export to Sudan is still increasing. Europe has become the second most important export destination importing USD11.7 million worth of vegetables (of which 6.0 by the Netherlands) while Sudan imports USD15.5 and Djibouti USD3.0 million in 2006.

In the case of fruits, Ethiopia is practically only exporting to Djibouti but export increases to other markets are already visible in the statistical databases.

Domestic market

The size of the domestic market for fruit and vegetables is very limited and not diverse. Fruits are hardly found at all and within the group of vegetables mostly potatoes, onions and tomatoes are sold. Fruit and vegetables are not common items in the Ethiopian diet.

Main fruit and vegetables markets in Addis Ababa are Piazza, Mercato and Mesalumia Fahil berenda. These markets have a variety of clients: wholesalers, retailers and consumers are sourcing their fruit and vegetables at these markets. Approximately 50% of the supply originates from smallholder producers or

farmers' cooperatives. Produce comes from all over the country, but mostly from the Rift valley.

In general the development of the domestic fruit and vegetable market will be a long-term process depending on aspects as economic development, urbanisation and possibly related change in consumer behaviour. In the short-term however there is a potential for import substitution of processed fruits, mainly soft drink concentrates and fruit juices. The available processing plants have the potential to produce high quality products for the top segment market in Ethiopia.

Regional markets

Djibouti is the largest fruit and vegetable regional export market for Ethiopia. With an increased expatriate and military presence in Djibouti there appears to be opportunities for supplying this community with higher-value (and higher quality) niche vegetables, especially leafy greens. The poor export logistics into Djibouti (handling, packing, storage, train infrastructure, etc.) means that Ethiopian produce is now only sold in the lower value market. The conflict with Eritrea resulted in complete stop of once a major export flow of fruits and vegetables to that country. A final solution of this conflict over time could result in a re-emerging export to Eritrea.

The low-value export sector of a wide variety of fruits and vegetables to Djibouti and Sudan are an important segment of the sector. Efforts to further professionalise this sector through improved chain integration, logistic arrangements, packaging, market information, etc. can add substantial value to this export channel. Given its geographical location and production circumstances, Ethiopia has a competitive advantage in these markets for a wide variety of products.

Middle East Market

The markets with the highest potential for fruit and vegetable exports in the Middle East are United Arab Emirates (Dubai and Abu Dhabi), Saudi Arabia and Yemen. Three big importers dominate the Saudi trade. The present vegetable imports are onions, tomatoes and potatoes. Some exotic fruits and vegetables are shipped by air as organic pineapples and green beans. UAE and Saudi Arabia currently import hardly any fruits and vegetables from Ethiopia, but mainly from Egypt and South Africa. Ethiopia is competing on this market with other countries as Egypt, Jordan and Kenya with a relatively well-established fruit and vegetable export sector.

As is happening internationally, there is a definite consolidation in the food retail business in the Gulf. In the UAE, it is reported that nearly 50% of total retail sales is concentrated within hypermarkets, superstores and supermarkets despite their limited number. The remaining 50% is conducted through smaller-sized groceries and convenience stores. The major food companies own modern warehousing facilities which are equipped with fleets of dry and refrigerated trucks and run organised food distribution. Another trend is growing consumer interest in healthy eating. Although currently there are barely inspections on residues, the Government of Ethiopia aims to have a law and inspection system installed within a few years to guarantee food safety.

Although there are no clearly defined buying seasons, it is advisable not to conduct business in general during the two main Islamic religious holidays, the Eid al-Fitr holiday and the Eid al-Adha. Demand for fruits and vegetables is increasing enormously during the Hajj because of the huge increase of consumers. It is generally best to avoid visiting Saudi Arabia in July and August (when many Saudi businessmen are out of the Kingdom) and during the two Eid Festivals. Visitors during Ramadan need to be prepared to do business outside western hours.

Till date limited market information about the Middle East countries is available. The Saudi Arabian Ministry of Agriculture has realised this lack of information and has started to elaborate its website with more market information in Arabic. Experience of traders trying to access the Middle East markets also show the cultural differences and the importance to have good relationships with local people. An often heard complaint is that payments are late.

In the regional markets and Middle East markets in particular, demand for both fresh and processed fruit and vegetables is increasing. Producers in the Eastern region have good possibilities to export cabbage, Irish potato, white onion, leek, eggplant and okra to Djibouti and Somaliland. Besides vegetables, mango has good potential to be exported to Yemen and Somaliland. The planted area with mango is already growing.

Demand for tomato concentrate in the Middle East and Sudan is increasing. Saudi Arabia is now importing processed products from China, a real competitor for Ethiopia due to its low costs of production.

Green house vegetables receive a lot of interest from current producers and investors and trade with the Middle East has started which is hopeful.

European market

Ethiopia's vegetable exports to Europe represent only a very small fraction of total exports from leading African producers such as Kenya. EU import figures for green beans in 2002 show total imports from Kenya of 21,700 tonnes compared with 1,920 tonnes from Ethiopia. For Ethiopia, EU is the biggest export market for beans (about 25%), followed by Yemen and India. Within the EU market, France is the largest importer of green beans (34%) followed by the UK (22%), The Netherlands (17%) and Spain (11%). Total consumption of green beans in the EU continues to grow with 9% per annum and although Morocco and Egypt have been the beneficiary of much of this growth there remain good prospects for high quality supply particularly in January and February. However, Ethiopia has to compete with Kenya, Senegal, Tanzania, Egypt and Morocco. Compared to Ethiopia Senegal and Egypt have lower transport cost by air and have already a well developed reefer transport system. Morocco has the advantage that products are trucked to Europe, giving a big advantage in transport cost.

All the fresh products currently exported to Europe are highly perishable and return a high value per kg. The only means of export appropriate for these products is air freight which forms the major cost of supply. Production costs in competitor countries and in particular those in Africa, such as Kenya, Zambia and Zimbabwe, are broadly similar to Ethiopia so air freight cost can be the major point of difference.

In the EU there is a growing demand for as well. A range of vegetable products from Ethiopia have a potential in EU markets but need to be timed to fit specific marketing windows to ensure economic returns. This range includes avocado, strawberry, grapes, mango, sugar snaps, asparagus, baby corn, sugar snap, okra and other Asian vegetables.

Demand in the European market for ecological and fair trade products is increasing. Also major retailers like the UK based TESCO is demanding high social standards of their imported products. Ethiopia offers good scope for ecological and fair trade production. Some companies have already started to implement the fair trade concept and for example Africa Juice want to become a premier supplier of Fair Trade juice to the European market.

As mentioned earlier, the requirements for delivery according to contract, food safety and environmentally friendly production standard are high and are expected to further increase. Therefore high technical and organisational skills are essential. In recent years the supermarkets in Europe have become more strict on MRL's (Maximum Residue Levels of pesticide residues). It is foreseen that norms will become stricter and evolve towards 'zero tolerance'.

The impacts of climate change are expected to receive more public and political attention in the coming years. See for instance the UK supermarkets providing information on 'food miles' on the product label. This upcoming issue has to be taken into account when developing your medium and long term strategy.

8 Recent developments

Besides green bean production, foreign investors have now also entered Ethiopia to start making use of other potentials. A wide range of vegetable products have been successfully produced on larger farms including cherry tomatoes, courgettes, lettuce, broccoli, asparagus, capsicum, okra and snow peas. An Israeli investor started strawberry production in 2003 and exports fresh strawberries to the Middle East and since this year to The Netherlands as well. Frozen strawberries are also being exported to the European Union. A Dutch investor has started to grow various high value vegetables produced in greenhouse for the Middle East market, with European market potential as well. Other recent initiatives are mango plantations in the Western region by Indian investors, dried mango exports, sundried tomatoes export, passion fruit planting and processing for export by a Dutch investor, avocado production on state-farm land with long-term options for out-growers arrangements by a South African company. An initiative to export (processed) pineapple has not been able to push through due to limited pineapple production because of land shortage. In Awassa a new initiative has started to produce pineapple juice which will likely also face production shortages. Table grape production has started around Mojo and plans exist to expand to areas in the North of the country. BGI-Ethiopia has planted 125ha of grapes for wine production and has plans to expand to 400ha. Besides fruit and vegetables there have been some successful initiatives in herb production and export. Some companies have already started to implement the fair trade concept and for example Africa Juice want to become a premier supplier of Fair Trade juice to the European market.

In Ethiopia a large number of public and NGO projects relevant for the fruit and vegetable development are on-going:

- SNV has programs to assist pineapple, mango and apple production and processing;
- USAID/Fintrac is working in the horticulture sector at smallholder level and interested in looking at support to the larger commercial exporting sector. Among others medium-sized commercial farms are supported with technical assistance and linking them to markets in the UK. A training plan is being developed for arriving at GLOBALGAP certification. In the long-term out-growers schemes around these farms could be developed;

- MoTI and UNIDO have started to develop a 5-year masterplan for the food processing sector. Although specific product groups need to be selected, it is almost certain that fruit and vegetable processing will form a main component of this activity;
- through the Embassy of Israel a project is initiated to support fruit tree nursery developments in mango, avocado and some other fruits in the Southern part of Ethiopia;
- the Ethiopian-Dutch Horticultural Partnership has been established to improve the horticultural sector and to ensure sustainable developments;
- IDE (an American based NGO) is starting a project in the Rift Valley aiming at introducing improved irrigation and farm management techniques to smallholder producers and at the same facilitate establishment of market linkages;
- the Ethiopian government has plans for the developments of building a dry-dock for refrigerated containers and start a pilot with refrigerated containers for meat;
- CFC jointly with EHPEA will start this year with a project linking smallholders to exporters for green beans in the Rift Valley. This project will include construction of cold stores and packing houses.

Some private companies have started to produce vegetable seed production as Segal and Genesis in Debre Zeit. HZPC (Dutch seed potato company) and SolaGrow (agribusiness company in Ethiopia) have granted a PSOM project (funded by EVD) to set up a seed potato production system and demonstration facilities in order to improve potato production.

9 SWOT analysis Ethiopian fruit and vegetable business

Strengths

Climate

Ethiopia has a beneficial climate for growing a wide range of fruits and vegetables throughout the year. The good soil and water conditions are enabling the agricultural potential further.

Facilitating government policies

Investments are encouraged by the Government of Ethiopia through several incentives for example through beneficial tax schemes for export investments. Government offices work according to procedures resulting in a relatively low level of corruption compared to other African countries.

Costs of production

Land lease costs are low and labour is relatively inexpensive and productive.

Geographical location

Ethiopia has a favourable *geographical location* as it is in particularly very close to Djibouti and the Middle Eastern markets.

Security

Compared to other countries in the region Ethiopia security situation is very favourable.

Private sector service provision

The rapid growth of the floriculture sector leads to a growing critical mass of service provision level by private sector parties also relevant for the fruit and vegetable sector.

New initiatives

A broad interest from private sector parties and public organisations and NGO's to enter into the fruit and vegetable sector as a potential for economic development in Ethiopia.

Potentials for irrigation

Potentials for irrigated production with improved water-saving techniques (drip-irrigation) are high.

Transport

Although land locked a good internal major road network exists between major fruit and vegetable production centres and Addis; airfreight is available and capacity constantly increasing.

Code of Practice in floriculture sector

Experiences gained in the development of a Code of Practice by the floriculture sector will benefit the Fruits and Vegetable sector.

Weaknesses

Constant high quality supply in sufficient quantities

Apart from beans, a fragmented and non-constant supply of fruit and vegetable with limited quantities and high variation in quality, leads to a weak position compared to competitors as Kenya; Ethiopia yet lacks the critical mass and reputation of a high potential source of fruit and vegetable.

Varieties

Limited knowledge and availability of the proper varieties with respect to local climatic conditions and consumer demand.

Packaging

Low quality of locally produced packaging material.

Cold Storage

Limited capacity of appropriate cold storage capacity.

Technical Know-How

Limited technical know-how for production and handling high quality fruit and vegetable for export markets.

Research and extension

Limited research and extension programs focused on the export-oriented fruit and vegetable sector.

Input supply

Problems in sourcing appropriate types of fertilisers and pesticides.

Land Tenure

Insecurity due to lack of land tenure causes constraints for investments.

Market Information

Information about export markets, especially Middle East, is limited.

Domestic market

Very low consumption rates of fruits and vegetables give little options for selling non-export grades.

Banking

The regulation of the banking system is a major constraint. There is no free exchange for foreign exchange, which hampers international financial transactions.

Bureaucracy

Government procedures (including customs, repayment of VAT, etc.) are sometimes slow and unclear and require regular follow-up.

Communication

The mobile phone network is over-stressed and e-mail/internet connections slow.

Opportunities

Demand in Europe and Middle East

In both Europe as in the Middle East there is a high and growing demand for fruits and vegetables. The objective of importers to diversify sourcing from main suppliers like Kenya, provides an opportunity for Ethiopia. For European importers Ethiopia is very interesting in order to have a year round delivery of fruits and vegetables.

A range of vegetable products have a potential in EU markets but need to be timed to fit specific marketing windows to ensure economic returns. This range includes asparagus, baby corn, snow peas, sugar snap, okra and other Asian vegetables.

In the Middle East market demand for both fresh and processed fruit and vegetables is increasing. Green house vegetables receive a lot of interest from current producers and investors and trade with the Middle East has started which is hopeful.

The low-value regional export sector can have potential with efforts to further professionalise this sector through improved chain integration, logistic arrangements, packaging, market information, etc. can add substantial value to this export channel.

Demand for processed fruits and vegetables

Processed fruits and vegetables have a high demand in Europe and Middle East markets; also import substitution in the domestic market provide opportunities. Demand for tomato concentrate in the Middle East and Sudan is increasing.

Ecological and fair trade production

Demand in the European market for ecological and fair trade products is increasing. Also major retailers like the UK based TESCO is demanding high social standards of their imported products. Ethiopia offers good scope for ecological and fair trade production.

Threats

Increased competition in European and Middle East Market

High competition of countries with already a strong position (e.g. Kenya in the European market) and countries with a growing position (Marocco, Egypt in Europe; Turkey, Jordan in Middle East). China may also become real competitor for processed products.

Regional politics

Political insecurity due to possible escalating conflicts with Somalia and Eritrea and internal tensions e.g. in the Ogaden region.

Stringent requirements on food safety and sustainability standard

Although food safety standards are currently considered to be 'license to produce', it may be expected that more stringent requirements by supermarkets in terms of quality and safety compliance, traceability and consistency of contracted supplies and sustainability (food miles) can form a barrier for a newcomer into the high value fruit and vegetable markets.

9.5 Conclusion

It is concluded that the further development of the fruits and vegetable sector in Ethiopia for export to Europe and the Middle East has good perspectives and provides interesting opportunities for foreign investors. The sector is however still in its infant stage. Facilitating conditions for doing business are not yet optimal, but are expected to improve in the near future.

For growers who consider starting operations in Ethiopia it is important to carefully select a location and ensure to get the logistical and cool chain well organised on beforehand.

For companies who consider sourcing from Ethiopia it is important to build good relations with the potential growers, provide hands-on guidance and training and invest in organising the logistical supply chain well.

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Appendix 1

Useful addresses

In Ethiopia

Ethiopian Horticulture Development Agency

P.O. Box 43450

Addis Ababa

Ethiopia

Phone: 00251-(0)11-5502483/5513881

Fax: 00251-(0)115537448

Ethiopian Horticulture

Producer-Exporters Association (EHPEA)

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Fax: 00251-(0)11-6636753

Email: ehpea@ethionet.et

Website: www.ehpea.org.et

Embassy of the Kingdom of the Netherlands

Old Airport Zone

P.O. Box 1241

Addis Ababa

Ethiopia

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Email: add-lnv@minbuza.nl

Website: www.netherlandsembassyethiopia.org

USAID

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For more useful addresses, please refer to the Guide 'Investing in the agricultural sector of Ethiopia', to be published by EIA supported by the Netherlands Ministry of Agriculture, Nature and Food Quality.

Appendix 2

Production trends

Table A2.1 Fruit and vegetable production trend					
Fruits and vegetables	Quantity produced (1,000 tonnes)				
	2002	2003	2004	2005	2006
Avocados	80	81	82	83	83
Bananas	82	175	182	211	211
Beans, dry	101	117	175	176	176
Beans, green	3	3	3	3	3
Broad beans, horse beans, dry	453	430	552	516	599
Cabbages and other brassicas	150	152	164	174	174
Carrots and turnips	15	10	18	7	7
Chick peas	187	136	163	217	125
Chillies and peppers, green	78	67	72	79	79
Fruit, nec	145	160	160	160	160
Garlic	70	71	79	86	86
Grapes	7	7	8	8	8
Guavas, mangoes, mangosteens	160	163	174	182	182
Leguminous vegetables, nec	3	3	3	3	3
Lentils	38	35	55	63	65
Onions (inc. shallots), green	19	20	20	20	20
Onions, dry	140	217	230	176	176
Oranges	15	13	17	16	16
Papayas	226	231	247	259	259
Peas, dry	200	170	230	197	209
Potatoes	385	510	510	450	450
Sweet potatoes	339	497	452	409	409
Tangerines, mandarins, clem.	8	9	9	9	9
Tomatoes	55	55	36	35	35
Vegetables, nec	420	430	430	440	440
Fruits total	729	845	884	934	934
Vegetables total	957	1,031	1,060	1,029	1,029

Source: FAOSTAT I © FAO Statistics Division (2008).

Appendix 3

Export trends

Table A3.1 Trend in Ethiopian export of fruits and vegetables							
Fruit and vegetables	Ethiopian export of fruits and vegetables (USD1,000)						
	2000	2001	2002	2003	2004	2005	2006
<i>Vegetables, roots and tubers</i>	12,386	27,613	38,663	25,090	37,016	38,466	56,365
Potatoes	770	1,462	967	1,242	1,376	12	6
Peas	23	18	6	17	287		26
Chickpeas	59	9,298	14,672	777	12,850	28,417	36,475
Kidney and white pea beans	8,671	10,890	14,119	12,045			
Lentils	69	324	559	329	436	3,024	161
Broad and horse bean	58	65	1,054	5,297	3,694	311	5,955
Tomatoes	420	847	792	941	996	41	52
Onions, shallots	492	783	881	967	791	16	400
Garlic, leek	67	259	188	236	86	123	205
Cabbage		94	78	85	69	1	809
Lettuce		163	129	179	59	1	
Edible roots		191	171	214	140	1	1
Cucumbers	34	47	66	55	41		
Leguminous vegetables	1,394	1,075	1,936	1,257	1,521	135	34
<i>Vegetables frozen</i>	1	1,802	2,820	1,229	2,233	2,628	4,516
<i>Fruit, nuts excl. oil nuts</i>	1,072	1,429	2,519	1,615	1,985	2,070	2,030
Oranges	408	755	609	715	814	15	240
Mandarins	18	63	865	42	31	1	7
Lemons, limes	418	105	71	87			
Bananas	100	191	167	329	294	2	108
Avocado, guava, mango	102	220	675	285	268	3	
Strawberries			2			22	349

Source: Comtrade/HS data (2008).

Table A3.2 Trading countries for Ethiopian vegetables							
Country of destination	Ethiopian export of vegetables (USD1,000)						
	2000	2001	2002	2003	2004	2005	2006
World	12,389	27,614	38,666	25,090	37,017	38,465	56,363
Belgium/Luxembourg	109	502	615	660	532	1,600	218
Djibouti	2,565	4,641	4,063	5,745	4,901	978	3,054
Germany	1,743	1,716	2,115	731	858	756	864
Italy	672	620	939	511	1,350	1,587	2,041
Morocco	1,240	1,547	1,191	738	651	278	943
Netherlands	1,922	2,717	1,725	1,832	3,916	4,579	6,040
Pakistan		772	13,575	786	1,268	1,212	6,192
India		5,961	2,263	2,152	1,619	1,506	2,256
Sudan	104	280	1,998	6,124	8,505	9,615	15,489
United Arab Emirates		1,517	951	106	869	2,059	5,399
United Kingdom	13	797	1,127	837	2,205	3,264	1,752
Yemen	2,159	1,941	2,048	2,873	3,044	2,636	3,951

Source: Comtrade/HS data (2008).

Table A3.3 Trading countries for Ethiopian fruits							
Country of destination	Ethiopian export of fruits (USD1,000)						
	2000	2001	2002	2003	2004	2005	2006
World	1,073	1,446	2,533	1,626	1,985	2,070	2,030
France			1	28			
Netherlands	2					6	78
United Kingdom				10	32	16	31
Japan				52			
India				74			
Djibouti	1,059	1,416	2,484	1,451	1,896	1,976	1,528
Yemen	10	21	42	4	24		
Saudi Arabia	1	6		2	2	14	108
Sudan					30	56	73
United Arab Emirates						1	209

Source: Comtrade/HS data (2008).

Table A3.4		Ethiopian export of fruits and vegetables (USD1,000) to the EU					
Fruit and vegetables	Ethiopian export of fruits and vegetables (USD1,000) to the EU						
	2000	2001	2002	2003	2004	2005	2006
<i>Vegetables, roots and tubers</i>	5,115	7,072	7,388	5,147	10,017	12,798	11,974
Cabbage, cauliflower, kohlrabi & kale				1	1		808
Beans		1,431	2,080	1,079	2,193	2,627	2,955
Chickpeas	1		25		3,288	8,152	7,117
Kidney beans and white pea beans	3,727	5,276	5,078	3,663	3,952	1,736	1,010
<i>Fruit, nuts</i>	2		5	41	32	22	109
Strawberries						22	109

Source: Comtrade/HS data (2008)