Oilseeds business opportunities in Ethiopia

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Commissioned by
Ministry of Agriculture, Nature and Food Quality, the Netherlands

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The Hague
May 2007

Foreword

Oilseeds are a mainstay of the rural and national economy in Ethiopia. After coffee oilseeds are the second largest export earner for the country and already more than 3 million smallholders are involved in its production. Exports actually consist of sesame and niger seed, for which there is a growing demand in the world market. But also castor, linseed and safflower have good export potential. The growing demand in the world market for these specialty products and the available capacity to expand production could make oilseeds turn into one of the engines of economic growth of Ethiopia. The Netherlands is the largest importer and processor of edible oils in Europe. It markets a broad range of oils products, not only for the food industry, but also for cosmetics and industrial purposes. The edible oils cluster in the Netherlands harnesses a lot of embedded technical, organizational and market knowledge. And in addition to processing, it offers a wide range of supporting services. This leading position makes the Netherlands an interesting partner in realizing further growth and development of the Ethiopian oilseeds sector.

The main purpose of this market study is to provide Dutch companies with information on the state of the art of the Ethiopian oilseeds sector and to put forward suggestions for both Dutch and Ethiopian businesses on possible areas for cooperation. The Ethiopian Pulses, Oilseeds and Spices Processors Association and the Netherlands' Product Board for Margarine, Fats and Oils (MVO) have been actively involved in carrying out this market study. The study must be considered as a first initiative in assisting Dutch and Ethiopian companies in exploring business opportunities. The next step is the agro-mission to Ethiopia from September 24 to 28, 2007. This mission will have a special program on oil(seeds). Moreover Mr. Jaap Biersteker is available as a consultant to assist companies in exploring how to make business options more concrete (contact details in this report). Financial support for this study came from the Department of Trade and Industry and the International Research Programme of the Netherlands ministry of Agriculture, Nature and Food Quality, and from the Ethiopian Program on Support to Business Organizations and their Access to Markets, supported by the Netherlands, which makes also the services of Mr. Biersteker available. I trust this study will contribute to further develop the oilseeds sector to the benefit of Ethiopia and the Netherlands.

Geert Westenbrink
Counsellor Agriculture, Nature and Food Quality,
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Executive summary

In this study the business opportunities for Dutch companies in the Ethiopian oilseeds sector are explored. Opportunities for setting up sustainable export chains should mutually benefit Dutch companies as well as the Ethiopian oilseeds sector in particular and the Ethiopian society in general.

Ethiopia has an attractive portfolio of high value specialty oilseeds for export markets. It is in the top 5 producing countries for sesame seed, linseed and niger seed. In addition, specialty seeds like safflower seed and castor beans are grown in Ethiopia. Most other oilseeds produced in Ethiopia (soybeans, cotton seed, rapeseed etc.) are commodities. For these commodities it will be difficult for Ethiopia to compete on the world market due to its relatively low volumes, low quality and high handling and transport costs. These oilseeds are important for local consumption.

Oilseeds are the second export earner of Ethiopia. Growth and improvement of the oilseed sector can substantially contribute to the economic development at national, regional level and at family level. Oilseeds are considered as high value export products by the Ethiopian government. The government enhances the oilseeds sector by investment incentives (e.g. duty and tax income exemptions from 2 to 8 years for foreign investments).

Many smallholders and a limited number of large farms grow oilseeds. Oilseeds are cash crops on subsistence farms. Production is characterised as labour intensive, low-input and rain-fed. The potentials to increase the production are huge. Productivity per ha for most oilseeds can be doubled with higher input levels and improved technologies and seeds. New virgin areas are fertile and offer good opportunities for organic and sustainable oilseeds production. Opportunities for oilseed export are not fully exploited yet because of inefficient marketing, improper cleaning and sometimes poor contract discipline. The attractive portfolio of specialty oilseeds offers business opportunities for both the Netherlands and Ethiopia especially in the following areas:

Investments in cleaning facilities for sesame seed

Ethiopia has sesame seed varieties that are suitable for a wide range of applications. Highly developed consumer markets in Europe and elsewhere demand high purity levels (>99.5%) for bakery applications. Up-to-date cleaning machines are available in Ethiopia, but still have a very limited capacity.

Investments in hulling facilities for sesame seed

Sesame seed hulling is aimed at raw materials for the bakery industry. The value added of hulled sesame seed compared to untreated seeds is USD180-200/ton. At the moment no hulling facilities exist in Ethiopia.

Organizing local crush and bottling of sesame oil.

European crushing of sesame seed is limited. It is likely that the European sesame oil demand will grow, especially for use as 'wok' oil. Volumes are small but highly profitable. Mostly sesame oil is sold in 250g-bottles for households and some in larger packaging to caterers. Transport from Ethiopia can be organized via IBCs for Europe and other destinations

Setting up organic chains

Due to the low levels of inputs and the use of virgin new areas, oilseed production in Ethiopia is near organic standards. The potential of exporting sesame seed under the organic farming label to Europe is seen as a prospect by many stakeholders in Ethiopia. Thanks to coffee basic knowledge and experience on organic production and certification is available. Some Dutch companies are already active in this field and public private cooperation for organic oilseeds could play a role in accelerating the development of this niche market.

Exploration of opportunities for linseed and safflower seed

Linseed is mainly used for domestic consumption in Ethiopia. Linseed is of increasing importance for the food industry in highly developed consumer markets due to the specific non-saturated fatty acids. As Ethiopia is the 5th world producer of linseed, export opportunities should be further explored. Safflower can be a dual-purpose crop: seeds as oil crop and the petals for extracting dyes. If high in linoleic (C18:2) setting up a supply chain to European users might be possible.

1 Introduction

The aim of this study is to explore the business opportunities for Dutch companies in the Ethiopian oilseeds sector. Opportunities for setting up sustainable export chains should benefit Dutch companies as well as the Ethiopian oilseeds sector in particular and the Ethiopian society in general.

The findings of an extensive desk research of the Ethiopian oilseeds sector were checked and fine-tuned by field research in Ethiopia in February 2007. Important actors in the oilseeds chain, warehouses, seed cleaning facilities and oilseed crushing and refining plants were visited. In addition, stakeholders from the institutional environment were consulted. Furthermore, Dutch companies importing oilseeds from Ethiopia were interviewed by telephone in order to map their experiences and ideas about prospective opportunities for the Ethiopian oilseeds sector.

Report structure

Chapter 2 provides general background information on Ethiopia. Chapter 3 describes the Ethiopian oilseeds chain from cultivation, collection and trade to oilseed crushing and refining. In addition, organisation and structure of the chain are discussed. Chapter 4 deals with the Ethiopian oilseed markets, growth opportunities for specific oilseeds and the institutional environment. Based on the information of chaper 3 and 4 the strengths, weaknesses, opportunities and threats (SWOT analysis) of the Ethiopian oilseeds chain are analysed in chapter 5. Conclusions and recommendations for enhancing business opportunities for the Ethiopian oilseeds sector in general and between Ethiopia and The Netherlands specifically are the subject of chapter 6.

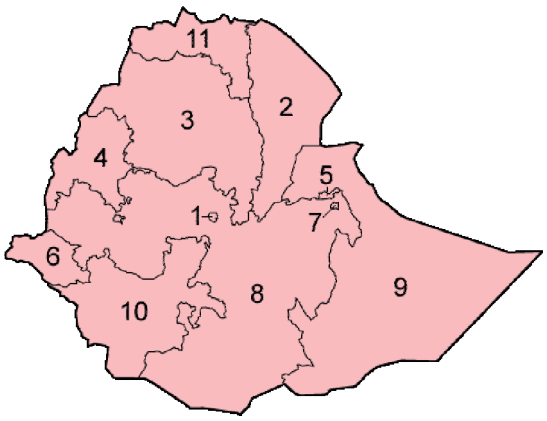
2 Country profile of Ethiopia

2.1 General

Key Figures	
Population:	79.4 million. Growth rate 2.5% (2006).
Capital:	Addis Ababa, 2.4 million inhabitants
Land Area:	113 million ha, 27 times the Netherlands (2006)
Agricultural land:	20% of the land is cultivated as agricultural land.
GDP:	11.8 USD billion (EVD, 2006)
GDP-growth:	9% in 2004/2006 and 5% (2000-2005)
Origin GDP:	Agriculture 42%, Industry, 11% and services 47%.
GDP per head:	112 USD; Sudan 434 USD; Kenya 427 USD; The Netherlands 23,300 USD (2004)
Literacy:	male 45%, female 35% (2003)
Inflation:	12% (2005-2006)
Main exports:	Coffee, oilseeds, chat, pulses
Export destinations:	Djibouti (14%), Germany (12%), China (9%) Japan (8%) (2005)
Main imports from:	Saudi Arabia (27%), US (14%), China (8%); Italy (5%) (2005)

Source: CIA, CSA, 2007 and EVD, 2007

Regions of Ethiopia



1 Addis Ababa (city);
2 Afar;
3 Amhara;
4 Benishangul-Gumaz;
5 Dire Dawa (city;)
6 Gambela;
7 Harari;
8 Oromia;
9 Somali;
10 Southern Nations, Nationalities and People's Region and
11 Tigray

Ethiopia's politics takes place within the framework of a federal parliamentary republic. Federal legislative power is vested in both the government and the two chambers of parliament. The Ethiopian People's Revolutionary Democratic Front (EPRDF) is the main party in the government. In the election of 2005 the EPRDF got almost 60% of the seats in the parliament, despite the loss of 150 seats to the opposition.

Ethiopia has a good main road infrastructure, although with 21 to 31 km per 100,000 ha the road density is quite low considering the African average is 50 km per 100,000 ha. The main roads converge on Addis Ababa. In recent years, telecommunication and information technologies have dramatically improved. Large investments are made to improve further road, rail and ICT infrastructure. The bulk (98%) of international trade is handled by Djibouti.

Ethiopia has started negotiations to join WTO. This liberalises the economy and improves the international business climate. Table 2.1 provides some information on doing business in Ethiopia, compared to the neighbouring countries and Egypt. Kenya performs slightly better, but Ethiopia performs better than Sudan and Egypt. Dutch entrepreneurs active in Ethiopia indicate that, although procedures are quite bureaucratic, they do function.
In case of problems, higher governmental officials are always willing to assist in solving unforeseen problems.
In general the government is very keen on economic growth and welcomes foreign investments. The package for foreign investors is quite attractive (see paragraph 4.4). Furthermore Ethiopia is actively working on further improvement of the business climate.

Table 2.1 Selected business indicators in 2006: Ranking out of 175 countries

Indicator	Ethiopia	Kenya	Sudan	Egypt
Overall ease of business	97	83	154	164
Starting a Business	59	24	92	169
Dealing with licenses	79	68	164	144
Employing workers	146	115	29	141
Registering property	83	33	143	159
Getting credit	118	60	142	118
Protecting investors	31	127	93	144
Paying taxes	149	145	165	83
Trading across borders	79	67	158	157
Enforcing contracts	55	120	151	120

Source: World Bank. Doing Business in 2006

2.2 Agriculture

Agriculture employs 80% of the labour force and accounts for 42% of the GDP, mainly at smallholdings. The highlands are highly fertile, but are threatened by overpopulation causing deforestation and erosion. Most of the farming is rainfed and droughts might cause famine.

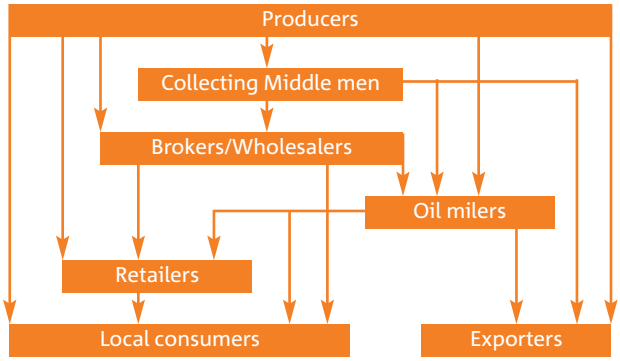
Coffee, oilseeds, chat, and pulses are the main export products. The export based flower industry is booming. Good growing conditions, low costs and government investment incentives attract Ethiopian growers as well as those from other countries such as the Netherlands, Israel and India. The Ethiopian government has indicated that the oilseeds sesame seed, niger seed, and safflower seed are high-priority export crops.

3 The Ethiopian oilseeds chain

3.1 Introduction

This chapter describes the Ethiopian oilseeds chain. Figure 3.1 presents the Ethiopian oilseeds chain. Section 3.2 discusses the Ethiopian oilseeds cultivation (types, quantity, geographical dispersion, yields and use of inputs). Section 3.3 deals with collection and trade and role of cooperatives. In section 3.4 the oilseed crushing and refining industry is analysed (quantities, quality, food safety aspects). Section 3.5 describes the organisation and structure of the Ethiopian oilseeds chain. Section 3.6 provides information on investment(plans) in the Ethiopian oilseeds sector. Paragraph 3.7 discusses price formation.

Figure 3.1 Oilseeds and oil chain



3.2 Cultivation of oilseeds

Ethiopia has altitudes from below sea level up to more than 4,500m above sea level with very different climates. This enables Ethiopia to grow a wide range of oilseeds, in which it has a long tradition. It ranks among the top 5 world producers of sesame seed and linseed and is an important producer of niger seed. Groundnuts, safflower, rapeseed and many other oilseeds are produced on a limited scale.

The production of oilseeds is presented in table 3.1. The production of sesame seed, niger seed (also known as noug or neug) and linseed was much higher in 2004/5 and 2005/6 than in previous years thanks to favourable weather conditions.

Table 3.1 Production of oilseeds (1,000 tons)

	00/01	1/2	02/03	03/04	04/05	05/06
Linseed	6	51	43	77	152	126
Niger seed	12	84	85	119	187	147
Sesame	19	39	36	61	115	149
Groundnuts	2	13	11	21	29	34
Saffflower	6	4	2	5	7	6
Rapeseed	15	17	20	29	36	24
Total (above)	**60**	**208**	**197**	**313**	**526**	**486**
Cottonseed	26	26	37	37	N.A.	N.A.
Soybeans	26	27	27	27	125	146

Source: CSA; Cottonseed and soybeans FAOstat

Oilseed production regions

The production regions of oilseeds are summarised in table 3.2. The main production regions are Tigray, Amhara and Oromia and Beneshangul

Table 3.2 Regional production of oilseeds in 2005/06 (x 1000 tons)

Regions	Nigerseed	Linseed	Groundnuts	Safflower	Sesame	Rapeseed	Soybeans
Tigray	4	5	0	0	49	0	0
Amhara	60	19	1	5	49	18	0
Oromia	73	100	25	0	37	6	3
Beneshangul	7	0	6	0	13	0	0
Others	3	2	2	1	1	0	1
Ethiopia (total)	**147**	**126**	**34**	**6**	**149**	**24**	**4**

Source: CSA Agricultural Sample Survey, 2006

Yields

In figure 3.2. yields (in tons per ha) are presented for several oilseed crops For most crops yields are below 1 ton /ha, except for soybeans. For linseed, rapeseed and sesame seed an indication of the potential yields according to FAO is given. These higher yields can be achieved with improved farm practices on smallholder level. Improvement means better seeds, fertilisers, crop protection and farm management in general.

In the Plan for Accelerated and Sustained Development to end Poverty (PASDEP) the Ethiopian government aims at doubling the oilseed production between 2005 and 2010. The growth should be achieved mainly by higher yields per hectare. Until now farmers have practiced a low input, rainfed agriculture. Most of them do not use any fertiliser. The average fertiliser consumption is only 7 kilograms per ha. Also the use of improved seeds is very limited. Due to deforestation in some areas use of manure as fuel is causing 'soil mining'. In the lowland areas in the North West and South West, oilseeds are cultivated on virgin land and there seems to be less need for fertilisers.
Due to the low input levels, oilseed production in Ethiopia is near organic standards. This is the case for most smallholders and large commercial farms.
Discussions with farmers revealed that the use of fertiliser is hampered by availability, lack of credit facilities, uncertainty about economic returns and risks. In some cases there is also the belief that fertiliser use will damage the soil in the longer term. An extensive programme with on-farm trials, demonstrations and training is required. The farm school programme in which farmers themselves play an active role in testing and demonstration is worthwhile to consider in this respect.

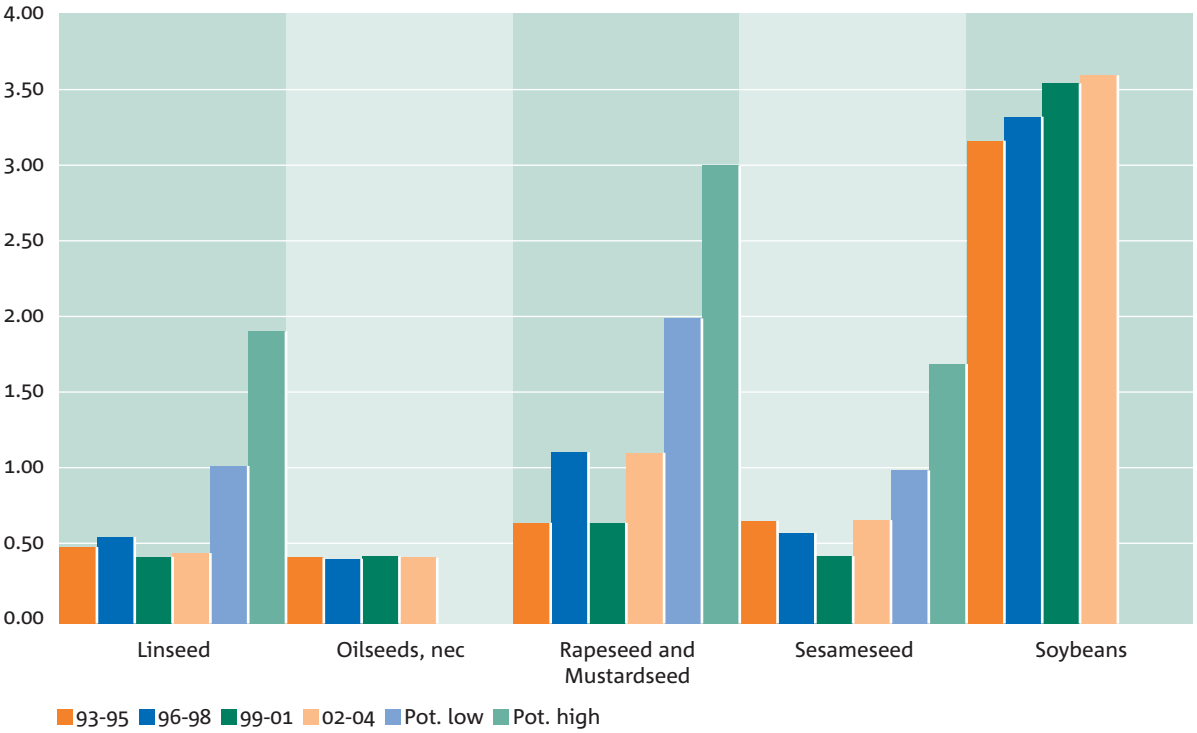
Holdings with 2-5 ha cultivate more than 50% of the oilseeds area; Holdings with 1-2 ha almost 30%. Besides smallholders there are a limited number of large commercial farmers (> 100 ha). The share of the latter is less than 2%. About 3 million farmers in Ethiopia are involved in oilseeds cultivation. Total oilseeds production is 500,000 - 600,000 tons. Total oilseeds area is estimated at 800,000 ha. Virgin lowland areas in the North West and South West offer opportunities for expanding production.

3.3 *Collection and trade*

On local level small villager traders, cooperatives or agents are involved in collection and trade. On regional and national level, also NGOs and the State are engaged in this process. A market study from 1998 indicated that approximately one third of the grains (including oilseeds) are sold directly to the consumers by the farmers, 60% of the oilseeds are traded by 10% of the largest traders and 80% of the small traders have a share of 20%. The big estates and commercial farmers seldom practice direct marketing to consumers. Their buyers are exporters and/or processors.

Cooperatives seem to work well in the coffee sector. Several times that raised the question whether cooperatives might work in the oilseed sector. Cooperative members need a shared strategy, higher benefits than without a cooperative, willingness to share power and the avoidance of opportunism. The latter means that irrespective of the market price, especially in the case of higher prices, all of the products have to be handled by the cooperative. During the fact finding mission we got the impression that opportunism of

Figure 3.2 Oilseeds, yield per ha



Source: FAOstat

several actors in the chain is hampering cooperatives. The government's involvement in present cooperatives is not seen as favourable.

In a 2006 survey by SNV the number of traders and wholesalers in 10 market towns were estimated. The major market for oilseeds is Addis Ababa, with approximately 50 main traders and over 300 wholesalers. This is 3 to 4 times as much as in the other 9 cities.

3.4 Oilseed crushing and oil refining

Most of the oilseeds are crushed locally, without any refining. In rural areas crude oil is preferred for cooking purposes. The number of processors of refined oil was estimated by the visited industry at 9. The production of refined oil in Ethiopia is very limited (about 20,000 tons).

More than 1,000 small crushers (mostly with Chinese/ Indian machines) are operational on village level. These local crushers, with a very limited capacity, have low hygiene standards and high risks of contamination with mineral oil. The working environment is far from ideal. Safety risks (e.g. slippery floors, no protection on belts etc.) for employees have been observed at most of these establishments during the fact finding mission.

Only a few larger crushing or refining companies seem to have adequate safety and hygiene standards compared to European industry standards. One refiner, Addis Modjo, is working on a long term project of continuous improvements. Addis Modjo is HACCP certified and expects to be ISO certified by late 2007 for its refinery plant. This company says its crushing unit in Bahar Dar also meets high standards.

The crushing or refinery unit of MULAT was also visited. Given the available equipment good products are manufactured, although mineral oil contamination is possible. This risk can be reduced by investments. The refinery processes semi-refined products for the local markets. The refinery unit was in an acceptable condition.

The larger crushing or refinery companies might have potentials for European buyers of oils. The smaller crushing plants do not meet the European standard of refined oil and their technologies need improvements.

The implementation of BRC procedures is still a long way off in Ethiopia at present.
BRC demands among others:

- a fully implemented HACCP system
- a written BRC statement understood by company employees
- full commitment by the company board
- regular updates on quality reporting to board
- specification procedures (raw materials and end products)
- internal audits (planning and execution)
- traceability and recall procedures.

Some of the visited companies showed a willingness to improve quality standards. However, lack of finance, little demand for high quality in the domestic market and the costs of quality systems hamper developments.

3.5 Organisation and structure of the chain

During the fact finding mission interviews were held with sesame seed traders/brokers in the Gondar and Addis Ababa region. From the discussions it became clear that small farmers are generally in a weak position. They only have very small volumes - a few hundred kilos - , are fully dependent on traders and mostly sell immediately after harvesting, which is when the supply is abundant and consequently the prices are relatively low.

Many commercial farmers with large areas of land deliver directly to the cleaning or exporting companies, due to their volume. At the start of the season farmers and traders agree on bonuses above the market price. These bonuses depend on the volume, quality and purity of the seeds.

However, many smallholders in the Ethiopian oilseeds chain depend on middlemen, due to the small quantities involved. This complicates tracking out the origin of the product and meeting the requirements of highly developed consumer markets. Europe and other highly developed consumer markets increasingly demand more information on production, origin, storage and quality aspects. This requires professionally managed supply chains with tracking and tracing systems.

Seed cleaning and information on origin are of great importance for sesame seed production. Farmers and traders blend different seed types, such as Humera, Gondar, and Wellega, with particular qualities. This decreases the overall value of the seeds: tracking the origin of the product and matching the particular qualities of the seeds with the specific requirements of the end users are hampered.
Cleaners remove impurities such as straw, dead seeds, soil and pods, resulting in up to 99% or 99.5% purity. Up-to-date cleaning machines capable of 99.5% purity are available (e.g. at Ambasel), but the total capacity is limited and does not meet European demand. We have seen Austrian cleaning machines and understood that some others use Swedish equipment. Machines with lower cleaning results, below 99.0% purity, are often locally made.

Transport of oilseeds from the producing region to the port of export, mostly Djibouti, is mainly done by truck. Several of the visited exporting companies have well

maintained or new IVECO trucks. The distance between the production regions and Djibouti is about 1,000km: for instance, the distance from Bahir Dar in the Amhara region is just above 1,000km and from Addis Ababa between 910 and 950km. Although road density is very low in Ethiopia, most of the main roads are in good condition. Transport costs to Djibouti port are indicated as USD35 per ton. During the discussions in Ethiopia several times levels of USD20 per ton for transport were mentioned.

Refining capacities are heavily under-utilised, mostly only 30 to 40% of the full capacity. The oil refining industry is confronted with competitive imports of refined oils: palm oil from Malaysia and soybean oil, often donated as food aid.

3.6 Investments in the oilseeds chain

During the mission investment possibilities for hulling, organic and better cleaning facilities for sesame were mentioned. Some smaller crushers are considering to improve or even build new facilities. One Ethiopian company wants to invest in a new crushing and refinery facility. They have approached banks with a business plan and are now in process of obtaining land.
Potential European customers mentioned the lack of good cleaning facilities (although a few units of excellent standards exist). Hulling is another issue, as this cannot be done in Ethiopia at present. Clearly both improved and enlarged cleaning and hulling facilities (for European investors as well as Ethiopian entrepreneurs) should be considered, and a few are already looking into this in more depth as an opportunity.

Investment in chain organisation is inevitable to gain higher prices for the oilseeds. Almost all buyers of the high income countries demand tracking and tracing systems. Some stakeholders are developing a certified chain in organic sesame seed. This demands a system to guarantee the organic production method.

3.7 Price formation

Little on the marketing costs was mentioned during the fact finding mission. Transaction costs in the Ethiopian oilseeds chain are generally high due to:

- The large number of suppliers and buyers. Producers (farmers) sell to a local collector, this collector in general sells to another larger broker and this process is repeated a few times
- Finding information on quantities and prices.
- Negotiating on contractual agreements (price, purity, quantity, delivery time).

For export products world market prices are in general leading. Ethiopia has to compete on the world market with a number of other suppliers (see chapter 4).
The world market prices are therefore the starting point in price formation. Each link in the chain has costs and will lower the return for the previous link in the chain. The price of oilseeds at farm gate will be the end result. Low world market prices will result in very low farm prices. In appendix 1 an estimate of the cost structure of the sesame seed chain can be found, adopted from Seifu in 2004.

Until now market orientation in Ethiopia is weakly developed. Market studies on the Ethiopian oilseeds sector are scarce. A better knowledge of applications by buyers and end-users would benefit the chain. Selected seed varieties can be grown, answering specific demands for selected purposes. Characteristics such as colour, oil content, fatty acid composition, taste and so on, are hardly known. Too often, oilseeds are still handled as a commodity.
The chain organisation can definitely be improved. Traceability, sufficient high quality seed cleaning capacity, hulling facilities and quality-certified processing and refinery plants are important in this respect.

4 Oilseed markets

4.1 Introduction

In this chapter the Ethiopian oilseed market will be discussed. Growth opportunities for specific oilseeds are dealt with extensively in paragraph 4.2. The institutional environment is discussed in paragraph 4.3. Information on opportunities for production growth is given in paragraph 4.5.

4.2 Domestic use and import and export

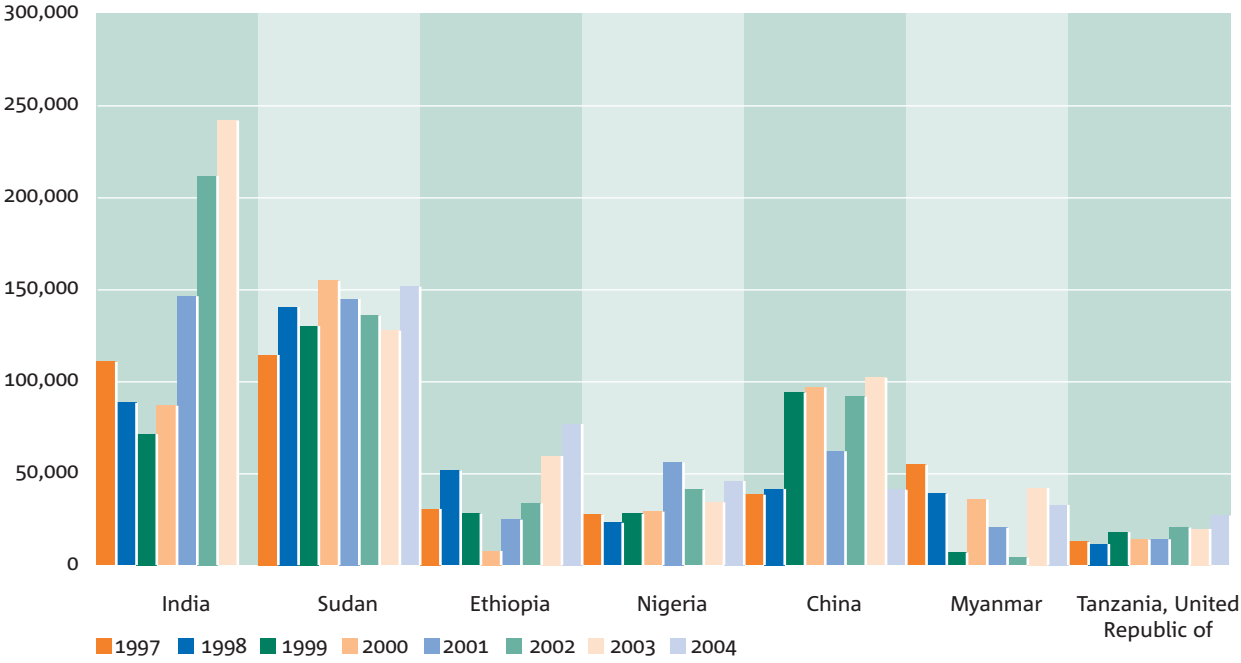
Oilseeds are the second Ethiopian export product. Sesame seed is the main oilseed export product. Niger seed, as second, is exported mainly to the US as bird seed. All other oilseed crops (soybeans, groundnuts, cottonseed etc.) grown in Ethiopia are almost entirely used domestically. Reliable figures of domestic use are not available.
The oilseed crushing and refining industry produces for the domestic market. Most of the oil is consumed as crude oil. Ethiopia is a net importer of refined oil, mainly refined soybean and palm oil. Table 4.1 provides detailed information. Refined oil is mainly used in the urban regions. Palm oil is mainly imported from Malaysia, Singapore and the United Arab Emirates. Italy is the major supplier (75%) of soybean oil, followed by Turkey (10%). The peak in 2003 is the result of food aid.

Table 4.1 Import (tons) of edible oil by Ethiopia

	1997	1998	1999	2000	2001	2002	2003
Soya bean oil,refined	39	4	1,050	6,582	815	1,507	74,240
Groundnut oil,refined	*	*	*	*	40	*	*
Virgin olive oil	2	7	*	30	21	40	64
Other olive oil,fractions	17	23	*	16	110	93	65
Oil from olives	1	89	29,895	432	334	466	253
Sun-,safflower oil,refined	*	360	1,410	1,315	774	260	36
Maize oil, refined,fract	55	*	244	78	22	112	410
Rape,colza etc.oil,crude	*	*	*	*	*	*	1
Rape,colza oil,refined	*	421	*	200	199	17	*
Sesame oil, fractions	*	*	*	2	78	10	*
Linseed oil,refined.frct	1,542	3,928	6,088	4,885	6,144	684	4,906
Palm oil, crude	*	*	*	*	500	500	*
Palm oil,refined,fractns	1,126	*	1,162	4,776	4,644	5,610	26,937
Coconut oil, refined	1,062	112	33	52	533	534	728
Palm kernel oil, crude	*	*	*	76	*	*	36
Palm kernel oil,refnd,	*	*	*	37	542	*	28
Castor oil, fractions	*	*	*	4	*	7	4
Fixed veg.fats,oils, other	303	10	455	499	10,507	5,285	2,297
Total	**4,147**	**4,954**	**40,337**	**18,984**	**25,263**	**15,125**	**110,005**

Source: ITC/WTO

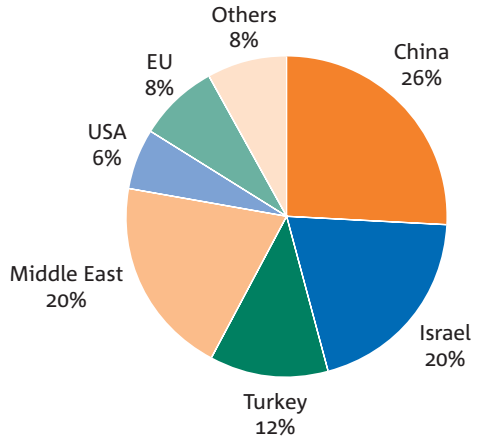
Figure 4.1 Major exporting countries of sesame seeds (in tons)



Source: ITC/WTO database

Figure 4.1 shows that Ethiopia is an important sesame seed exporter on the world market. In 2005 and 2006 Ethiopian exports further increased, whereby China came up as a new market. Export of sesame seed has grown in double digits each year from 1998 to 2006: 50,000 tons in 1998 and more than 100,000 tons in 2006. In the second half of 2006 the main export markets for Ethiopian sesame seed were China, Israel and other countries in the Middle East and Turkey. The EU had a market share of 8%.

Figure 4.2. Ethiopian exports (quantity) of sesame seed in the second half of 2006



Since recently China does not produce enough sesame seeds to meet its own demand. This has led to a strong increase in Ethiopian sesame seed exports to this country in the past 2 years. Ethiopia is the main supplier of sesame seeds to Israel with with a market share of around two thirds. On the Turkish market the Ethiopian share is around 20%. In the past years Ethiopia gained market share in the Middle East (especially Yemen) at the cost of Sudan. In the Middle East sesame seeds are used for topping on breads and baked goods and in ethnic dishes as well, such as tahini paste, halvah and oil. They mainly use mixed coloured sesame seed which they clean and put in mixed form on their bakery products or for the production of oil.

The major importers of Ethiopian sesame seed in the EU are Greece, Germany, the Netherlands and the UK. In Europe several trading houses purchase sesame seeds and resell the seeds to buyers all over the world. When the trading houses doubt the quality, they first transport the seeds to Europe, clean them and often sort them by colour.

Japan is the biggest world importer of sesame seed. Sesame oil, particularly from roasted seed, is an important component of Japanese cooking and traditionally this is the principal use of the seed. Japanese are very critical of quality. Many traders in Japan have their own cleaning installations where they also separate the sesame seed by colour. Because of quality problems in the past, Ethiopia is not an important exporter for Japan. However, it seems that via China the volume of Ethiopian oilseeds exported to Japan is increasing.

4.3 *Ethiopian opportunities for specialty oilseeds*

Most oilseed crops - soybeans, cotton seed, rapeseed etc. - grown in Ethiopia are also grown in many other countries in large volumes, where they are called commodities.
For these commodities, it will be very difficult for Ethiopia to compete on the world market due to its relatively low volumes and high handling and transport costs.
The Ethiopian production for these crops is mostly less than 0.1% of the world production. To achieve a beneficial market position on the world market huge efforts are required, which will be out of scope for Ethiopia in the near future. These crops, however, can be of high importance for the domestic market, as food crop.
The focus of this paragraph is on the potential of specialty oilseeds for export markets. Most potential for the Ethiopian oilseeds sector concerns the following specialty oilseeds: sesame seed, safflower seed, linseed, niger seed and castor beans. These crops will be discussed below.
As sesame seed is by far the most important Ethiopian export oilseed crop, it will be discussed most extensively.
The market value of these different crops is primarily determined by their applications, which will be discussed in detail.

Sesame seed

Sesame is used in a wide range of applications. The most important are:

1. Edible oil. The oil is almost odourless with a distinctive nutty sweet flavour. Roasted sesame oil resists rancidity due to the antioxidants formed during seed roasting. Sesame oil is especially important in the Far Eastern cuisine, mainly Japan and China.
2. Confectionary, biscuit and bakery industry. Mostly hulled clear white sesame is required for bakery products. Hulled sesame sticks to the bread or roll, while maintaining the white colour after baking. Roasted sesame has a nutty taste.
3. Tahini industry. Tahini, a traditional Middle Eastern paste, is made from hulled sesame seed and is rich in protein .
4. Halva industry. Halva is a sweet made of 50% tahini, boiled sugar and some other ingredients.
5. Sesame flour and sesame seed sprouts.
6. Pharmaceutical ingredients.

The main Ethiopian sesame seed production regions are situated in the North West and South West. The North West regions have the highest yields per ha. More than 600,000 farmers with an average acreage of 0,3 ha are involved in sesame seed production. This results in many collectors gathering quantities suitable for trading.

Table 4.2 Ethiopian production regions of sesame seed (2005/2006)

	Farms (number)	Area		Production		Yield (kg/ha)
	ha	ton	%	ton	%	
Tigray	104,680	60,148	0.29	49,215	0.33	818
Amhara	210,344	62,279	0.30	48,970	0.33	786
Oromia	210,010	57,745	0.28	36,998	0.25	641
Beneshangul	66,446	23280	0.11	13,131	0.09	564
Others	9,749	1,701	0.01	547	0.00	322
Ethiopia	**601,229**	**205,153**	**100**	**148,861**	**100**	**726**

Source: CSA Agricultural Sample Survey, 2006

Characteristics Ethiopian sesame seeds

In Ethiopia a large number of sesame seed varieties exists. Three varieties are well known: Humera, Gondor and Wellega. The characteristics of the three main export varieties are mentioned in table 4.3. The Humera variety is appreciated world wide for its aroma and sweet taste.

The Humera type has good uniform white seeds, which are quite large. This makes it very suitable for bakery products. The Gondor type is also suitable for the bakery market. For this market a high level of seed purity is demanded, which has sometimes proven to be problematic for Ethiopia. The major competitive advantage of the Wellega type is its high oil content. Type and quality are very important. White seeds, with a white to golden colour, are mainly used in raw form because of their aesthetic value and are mostly priced higher than mixed seeds (yellow to dark brown) which are generally crushed into oil. The oil content in sesame seed varies between 40-52%.

The buying price of sesame for export is largely determined by the evenness of colour, taste, dryness and purity. These are important purchasing criteria for traders. Hulled seeds and bleached hulled seeds have a higher market value than untreated seeds. The purity of the sesame seed is specified in terms such as 99-1. The 99 in the figure means that in each 100 grams of sesame seed, no more than 1% contains impurities such as dirt, branches, stones etc. The 1 indicates that no more than 1% are black seeds.

Growth opportunities for export to Europe

Europe is a large user of sesame seed for bakery applications. If Ethiopian farmers and traders manage to prevent blending of different types with the mentioned distinct Humera, Gondar or Wellega qualities and provide adequate seed cleaning up to 99.0 -99.5%, sales to Europe could significantly increase. As mentioned in the previous chapter, up-to-date cleaning machines are available in Ethiopia, but still have a very limited capacity.

Sesame seed hulling is aimed at raw materials for the bakery industry. During the fact finding mission several stakeholders mentioned investment plans in hulling (see also previous chapter). In this case it is important that high food safety standards are assured. The value added of hulled sesame seed compared to untreated seeds is USD180-200/ton.

Europe imports sesame seed mainly from India thanks to attractive pricing, better cleaning facilities, hulling and better general trading terms. With better basic quality seeds Ethiopia has strong possibilities in entering this market. If Ethiopia wants to be a major player in Europe further investments in more advanced cleaning facilities and hulling operations will be required.

European crushing of sesame seed is limited. It is likely that the European sesame oil demand will grow, especially for use as 'wok' oil. Volumes are small but highly profitable. Mostly sesame oil is sold in 250g-bottles for households and some in larger packaging to caterers. It is understood that one processor in Ethiopia, Addis Modjo, might be able to deliver products suitable for European customers. A local crusher in Bahar Dar might offer opportunities as well. Exports could be considered in 1 ton packaging for redistribution in Europe.

Due to the low levels of inputs and the use of virgin new areas, oilseed production in Ethiopia is near organic standards. The potential of exporting sesame seed under the organic farming label to Europe is seen as a prospect by many stakeholders in Ethiopia. As far as the mission knows there is now only one exporter of certified organic sesame seed. The higher prices at several markets are indeed challenging. Thanks to coffee basic knowledge and experience on organic production and certification is available. Further growth of organic chains might have prospects. Some Dutch companies are already active in this field and public private cooperation could play a role in accelerating the development of this niche market.

Next to this it is worthwhile to explore possibilities of demand driven certified chains production for other niche markets, e.g. ingredient markets for bakeries.

Linseed

Linseed is mainly used for domestic consumption in Ethiopia. Linseed is of increasing importance for the food industry in highly developed consumer markets due to the specific non-saturated fatty acids.

Table 4.3 Main export types of Ethiopian sesame seeds

Varieties	Local name	Market name	Characteristics	Main applications
t-85	Hair hair	Humera	Whitish larger seed	Bakery
			Sweet taste, sweet aroma	Tahini
			48-50 % oil content	Confectionary
			High productivity	
			High possibility of shattering losses	
kelafo-74	Delello	Gondor	White, good uniformity of seed	Bakery
Mehado 80	Wollega	Wellega	Small seed	
			High oil content 49-56%	
			Not so sweet	Oil

Table 4.4 Main characteristics of linseed

Oilseed	Ingredients	Application	Producers
Linseed	Drying oil		
	32-43% fat	Used mainly in making paints, varnishes, linoleum, soft soap and printer's ink. Increasing interest as ingredient in edible oil for human consumption.	World production 2.9 million tons. Canada (38%), USA (17%), China (17%). Ethiopia is the 5th world producer with 125,000 tons (4%).

Table 4.5 Main characteristics of safflower

Safflower	Drying oil
Seeds: 32-40% oil	Contains a higher percentage of essential unsaturated fatty acids and a lower percentage of saturated fatty acids than most other edible seed oils. Used in salad and cooking oils, margarines, liqueurs, candles, and as a drying oil in paints, linoleum, varnishes and wax cloths. The flowers are a source of yellow and red natural dyes.

As Ethiopia is the 5th world producer of linseed, export opportunities should be further explored. Major importers of linseed are Belgium, Germany and US.

Linseed oil is applied in larger volumes within Europe, and this trend is likely to continue.
Little is known about the varieties grown nor about the chemical structure of Ethiopian linseed. If the fatty acid profile meets buyers requirements, a supply chain could be set up. Crushing of seed to oil can be considered in the Netherlands, Germany or Belgium.

Safflower

Safflower can be a dual-purpose crop: seeds as oil crop and the petals for extracting dyes. SNV is presently involved in an Ethiopian safflower project. The petals can be picked some weeks before harvesting the seeds. Furthermore, the crop can be grown after cereals, as a second crop. The major exporters of safflower seeds are: USA, Australia, China and India. The top 3 importers are Japan, the Netherlands and Belgium.
To judge the application possibilities in Europe, the exact chemical composition must be established. If high in linoleic (C18:2) a supply chain might be possible to European users. Safflower primarily competes with sunflower seed oil, which is widely used in European edible products (margarine, frying, cooking oil etc). Samples need to be tested to verify the application potential and value of product to European buyers.

Niger seed (noug, neug)

Niger seed exports have since 2002 passed coffee exports to the US and counts for a third of Ethiopia's American exports. Ethiopia uses the niger seed for oil extraction for human consumption (as a cooking oil). A few years ago traders from Singapore, the US and Europe discovered niger seed and started to buy from Ethiopian exporters and ship it to the US. The US is a major market for niger seed and buys almost 60% of the world production.
The market value as ingredient for the edible oil industry is unknown.
Niger seed is being investigated in Europe now to explore the opportunities for applications in food products.

Castor beans

Castor beans are collected from areas in Ethiopia where they grow naturally or without being managed. The leaf of the castor plant is identified as one of the best for silk worms. The oil is rich in ricinoleic acid and is a highly valued oil for a wide range of technical uses. Castor oil is also being studied for use as a potential treatment for cancer. Further research will be needed to identify the export potential of castor beans from Ethiopia.

Castor oil is primarily imported from India and distributed via Rotterdam for European customers. In Europe over 100,000 tons are used annually, making this an interesting prospect for Ethiopian production. Logistics in Ethiopia, and distribution via IBC Intermediate Bulk Containers of 1 ton might offer potential. Local Ethiopian production must be set up for this. As castor beans are a ´wild crop´, collection and production in Ethiopia need more study. Apart from the ´wild crop´, the question of cultivation needs to be investigated.

Table 4.6 Main characteristics of niger seed

Niger seed	Drying oil	
30% oil	Higher grades have a pleasant aromatic odour and are used for food. There has never been a widespread use of this oil in the Western Hemisphere.	Extensively grown in India and Ethiopia.

Table 4.7 Main characteristics of castor beans

Oilseed	Ingredients	Application	Producers
Castor Beans	Nondrying oil, 35-55% oil	In the past medicine, acts purgative. Now industrial, water resistant, for coverings of airplanes, food container, insulations, high performing engines (Castrol oil). Quick drying oil, if dehydrated, for paints and varnishes.	World production about 1.2 million tons. Main producers are India and Brazil. Ethiopian production unknown.

4.4 Institutional environment

The Government started economic restructuring, invests in road, telephone and railway infrastructure and wants to become a member of WTO. Land is state owned and can be leased from the government. To encourage private investment, the Ethiopian Government has developed a package of incentives under Regulations No.84/2003 for domestic and foreign investors engaged in new enterprises and expansions, across a range of sectors. The incentives that are available both to foreign and domestic investors are mentioned below.

Customs Duty Exemption

A 100% exemption from the payment of import customs duty and other taxes levied on imports is granted to investments in 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. Such investment capital goods 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. All other 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 on area of investment, export volume 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 a 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.

Ethiopian Exporters Association

All major Ethiopian oilseed exporters are member of the Ethiopian Pulses, Oilseeds and Spices Processors Exporters Association. This association is working hard, supported by SNV, to improve its market information systems.
The association also organises workshops together with SNV to share knowledge within the supply chain in order to better anticipate on critical market issues.

4.5 Opportunities for production growth

Sesame seed and to a lesser extent niger seed are cash crops for subsistence farms. There is a good potential for increasing the cultivation area. New areas are virgin, fertile and offer good opportunities for expansion,d. Most new areas are in the lowlands. . A bottleneck seem to be that the new areas less attractive for settlement . The main challenge for new areas is to grow products with an increased added value, which can cover the additional cost of development and logistics.. In those new areas organic farming of oilseeds is a major possibility.

5 SWOT analysis of the Ethiopian oilseeds business

In this chapter an analysis is given of the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the Ethiopian oilseeds sector. This SWOT analysis focuses on business opportunities with the Netherlands.

The Dutch are buying oilseeds and oils and fats in highly competitive world markets, based on trade and quality standards of highly developed consumer markets. Therefore the benchmark for the SWOT analysis of the Ethiopian oilseeds sector is its position on the world market. In chapter 6 conclusions and recommendations will be given - derived from this SWOT analysis - for enhancing business opportunities for the Ethiopian oilseeds sector in general and with the Netherlands in particular.

Strengths

Diversity of rather unique oilseed crops

Ethiopia has altitudes from below sea level up to 4,500 meter above sea level with very different climate zones. This enables Ethiopia to grow a wide variety of oilseed crops. Several oilseeds are grown in Ethiopia which can be considered as specialty high value seeds on the international market (sesame seed, safflower, linseed, niger seed and castor beans). These oilseeds provide a good base for acquiring or expanding a profitable position on the world market. Other oilseed crops (soybeans, cotton seed, rapeseed etc.) grown in Ethiopia are commodities. For these commodities it will be very difficult for Ethiopia to compete on the world market due to its relatively low volumes and high handling and transport costs. These oilseeds are important for local consumption.

High quality of sesame seed

Ethiopia has high quality sesame seed varieties that are suitable for a wide range of applications. The Humera variety e.g. is appreciated worldwide for its aroma and sweet taste. If Ethiopian farmers and traders manage to prevent blending of different types with distinct qualities and provide adequate seed cleaning up to 99.0-99.5% more added value in export markets can be realized and new markets can be created.

Yields at a good level

Despite the traditional way of farming with low inputs, yield levels for oilseeds as sesame seed are on the same level as other producing countries (and in some cases even higher). From FAO and other studies it is identified that with transfer of new technologies and providing inputs productivity of the sector can be strongly increased.

Entrepreneurship and ambitious oilseeds exporters association

During the mission in all different links of the oilseeds chain real entrepreneurship was identified. Although market orientation needs to be improved, many ambitious entrepreneurs are anxious to intensify business relations with market parties abroad. EPOSPEA, the Ethiopian Pulses, Oilseeds and Spices Processors Exporters Association is working hard, supported by SNV, to improve its market information systems.

Available land and labour

Virgin fertile new areas are available and can meet organic certification standards. These new areas can be cultivated on a large scale. Labour is cheap and abundantly available. However, new areas seem to be less attractive for settlement. Most new areas are in the lowlands. The government is very supportive in issuing land to investors.

Attractive Investment Package

Oilseeds are priority export products. The government enhances investments in the oilseeds sector with an extended package of investment incentives.

Weaknesses

Lacking international market orientation

International market orientation is insufficient.
Little information from the interviewed stakeholders is retrieved on the requirement of final customers in highly developed export markets. Only with a stronger market orientation, a clear strategy to attain access and growth of specific target markets can be realised.

High transaction costs

The oilseeds chain starts with a very large number of smallholders, each producing a very limited quantity. This requires additional efforts from middlemen, brokers and traders to collect sufficient large quantities, meeting the required export volumes. Costs are involved in each transaction, lowering the price for the farmers.

Contract discipline and reconsideration of payment by l/c

Doing international business means complying with international trade rules on contract discipline and quality. Ethiopia has to regain name as reliable exporters in this

field. Some Dutch importers have had problems on contracts executions, once the markets increased in value. It is important to realise 'contract is contract' for creating a sustainable business environment with European partners. The demand of payment by l/c (letter of credit) is only hampering business. This should be reconsidered. Other payment guarantees can be developed, which are much easier for all involved in the chain.

Farm production technologies and inputs

Availability of inputs like quality seeds, fertilisers and other complementary inputs and credit facilities is limited. The aim should be enhancing an efficient and effective input market system. Seeds are traditionally selected and sometimes mixed. It is unclear whether new varieties (bred or imported) are suited for the growing conditions in Ethiopia. The low levels of fertiliser use might result in soil degradation and unsustainable farming systems in the long run.

Storage facilities

Storage facilities need to be improved in most cases. Creating a demand driven supply chain for high demanding markets requires storage capacity which complies with quality assurance systems. Vulnerability of storage to pest, moisture or rodents should be banned out.

Most oilseed crushing and refining plants do not meet European quality standards

Most processors do not meet the European quality standards on safety and hygiene. The industry is confronted with high imports on refined oils for use in urban areas (palm oil from Malaysia and soybean oil often donated as food aid). These imports cause large problems to local refineries. Refining capacities are heavily under-utilised. In urban areas consumers prefer imported packaged, refined edible oil for prices not outrageously higher than local bulk oil.

Opportunities

Economic restructuring

The Government started economic restructuring, invests in infrastructure (road, telephone and railway) and planned to start WTO-membership negotiations. The latter means a more open economy, which might attract foreign investors. At this moment several economic incentives are already available for sectors producing export priority products. Oilseeds are among them.

Increase in demand

Economic development of China and other emerging countries will increase the demand for edible oils and oilseeds on the world market. The increasing use of oils and fats for the production of bio energy also leads to higher demand. For these reasons, in the medium and longer term relatively high prices for oilseeds and oils and fats can be foreseen.

Healthy fatty acids

Ethiopia may respond to the demand for healthy oils with high levels of unsaturated fatty acids by producing these types of oilseeds. Several oilseed crops in Ethiopia match the demand for healthy oils.

Demand for organic products

Due to the low levels of inputs and the use of virgin new areas, oilseed production in Ethiopia is near organic standards. Because the international market for organic products is growing, real opportunities can be identified. Some Dutch companies are already investigating the possibilities for setting up an organic chain. Public-private partnerships could play a role in accelerating these plans and initiatives in Ethiopia.

Threats

Consumer preference on local markets poorly developed

The Ethiopian consumer markets are still in the infant stage. This results in general in poorly developed quality standards and thus in products not suited to developed high income export markets. Specific chains aiming at specific export market should therefore be further developed, to acquire more export market power. Revenues of these exports can be used for further rural development. It means that the Ethiopian oil seeds sector - especially the refineries - needs to understand the quality requirements of the end users, which differ considerably from the domestic user.

Availability of capital

Land is state owned and farming is largely based on manual labour. Collaterals at farms are therefore almost not available. A well functioning credit system would enhance the production of cash crops: to buy improved seeds and other inputs.

Subsistence farming

Many smallholders are still focused on food security. Oilseeds as one of the cash crops are generally grown only to have enough capital to buy some necessities of life. Food security needs to be enhanced, so that growers feel more comfortable growing oilseeds.

6 Conclusions and recommendations

In this chapter conclusions and recommendations are given for enhancing business opportunities for the Ethiopian oilseeds sector in general and between Ethiopia and the Netherlands in particular, derived from the SWOT analysis in chapter 5.

Conclusions

- Ethiopia has an attractive portfolio of specialty oilseeds for export markets. It is in the top 5 producing countries for sesame seed, linseed and niger seed
- Opportunities for export are not fully exploited because little is known about the characteristics of the Ethiopian oilseeds in relation to high demanding export markets.
- Blending, inefficient marketing, improper cleaning and sometimes poor contract discipline complicates further exploiting market opportunities.
- Oilseeds are the second export earner of Ethiopia. Smallholders in remote areas mostly grow oilseeds. Growth and improvement of the oilseed sector can substantially contribute to the economic development at national, regional level and family level.
- The oilseeds chain is fragmented and many smallholders and middlemen are involved, decreasing efficiency and chain responsiveness.

Recommendations

In order to create high value export chains, it is strongly recommended to focus on the speciality oilseed products. Recommendations for the Ethiopian oilseeds sector in more detail are:

- Improve market intelligence: competitive power can be increased by knowing the markets: the buyers as well as the competitors.
- Improve the knowledge about the product characteristics of the different oilseeds. Characteristics as colour, oil content, fatty acid composition, taste etc. determine the applications. These characteristics should be matched by final consumer products, such as the increasing demand for healthy fatty acids. By knowing this, it is possible to create more added value.
- By investment in advances technologies and by implementing codes of conducts (e.g. BRC) and food safety standard more added value can be generated.
- Prevent blending of different types of sesame seed with distinct qualities and provide adequate seed cleaning up to 99.0-99.5% in order to create more added value in export markets.
- Support and facilitate organic oilseeds. The benefits of lacking inputs can be exploited for high value export markets.
- To be able to realize sales of vegetable oils to highly developed consumer markets major investment in quality, hygiene and food safety measures are needed.
- Work on more advanced production methods at farm level. Field experiments and dissemination should be enhanced. The risk of soil degradation in the long run has to be avoided. The focus on high priorities oilseed crops of the Ethiopian Institute of Agricultural Research should be on a par with export market opportunities.
- Work on better contract discipline. Doing international business means complying with international trade rules on contract discipline and quality. Ethiopia has to regain name as reliable exporter in this field. It is important to realise 'contract is contract' for creating a sustainable business environment with European partners.
- Reconsider payment by l/c. The demand of payment by l/c only will be hampering business. It should be considered to readdress this. Other payment guarantees can be developed which are much easier for all involved in the chain.

Business opportunities with the Netherlands

The oilseeds and oils and fats industry in the Netherlands can be considered as the gateway to Europe and many other destinations. Intensifying business with Ethiopia is beneficial for Dutch traders and investors in the field of specialty oilseeds. Investments in the following product-market combinations could be of interest.

Product	Market	Opportunity
Sesame seed with higher purity level (99.5+ %)	Bakery applications	Investment in cleaning facilities
Hulled sesame seed	Bakery applications	Investment in hulling facilities
Specially flavoured sesame seed oil (e.g humera type)	Different food purposes (e.g. 'wok' oil)	Organizing local crush and bottling. Transport via IBCs for Europe and other destinations
Organic sesame seed	Organic food applications	Organizing organic chains from farmer to end user
Linseed with high omega 3 and 6 fatty acids	Applications in specific healthy food products	Identify specific varieties with highest amounts of omega 3 and 6. Setting up export chains
Castorbeans	Wide variety of technical applications	Identify opportunities for organizing collection. Identify main characteristics. If cost competitive with India, setting up export chains to Europe and other destinations
Safflower seed	Applications in specific healthy food products	If high C18:2 level, identify opportunities for organizing export chains

Acknowledgements

During our fact finding mission in Ethiopia we met numerous Ethiopian entrepreneurs, government officials and representatives of non profit organizations. Important parts of this study could not have been done without their cooperation. We would like to thank them for their time and inspiring input.

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References

Abate, T., editor, (2006a). Successes with value chain. Ethiopian Institute of Agricultural Research, Addis Ababa.

Abate, T. (2006b). Focusing Agricultural Research to Address Development Needs: the way I see it. In Abate, T. (2006a). P1-20

Bennett, M. (2004). Sesame. In: Salvin. S., M. Bourke and T. Byrne (2004) The New Crop Industries Handbook. Australian Government. RIRDC publication 04/125. p214-220.

Chamber of Commerce (2005). The immediate and long-term impact of monetization of food aids on private sector development in Ethiopia: the case of the edible oil industry. Addis Ababa, Chamber of Commerce.

Debomy, Daniel, 2005. The Europeans and Sustainable food - Qualitative study in 15 European countries - Pan-European report. King Baudouin Foundation, Brussels.

Dessalegn, G., T.S. Jayne and J.D. Shaffer (1998). Market structure, conduct and performance. Constraints on performance of Ethiopian grain markets. Grain Market Research Project, Addis Ababa, Ministry of economic Development and Cooperation. Working Paper 8.

Economist (2006). Ethiopia, Country Profile2006. Economist Intelligence Unit, London.

EEPA (2004). Ethiopia: land of crops diversity: Ethiopian Oilseeds Profile. Ethiopian Export Promotion Agency. Product Development & Market Research Directorate.

EIA (2006). Investment opportunity profile for edible oil production from maize in Ethiopia. Ethiopian Investment Agency, Adis Ababa.

EVD (2007) Online landenpublicatie Ethiopië. EVD, Den Haag. www. evd.nl.
Ienica (2007). Castor. Retrieved 4 April 2007: http://www.ienica.net/crops/castor.htm

MoFed (2006). Ethiopia: Building on Progress. A plan for accelerated and sustain Development to End Poverty (PASDEP). Volume 1: Main text. Ministry of finance and Economic Development (MoFED), Addis Ababa.

Morris, J.B.(2002) Food, industrial, and pharmaceutical uses of sesame genetic resources. In Janick J. and A. Whipkey (eds) (2002) Trends in new crops and new uses. ASHS Press, Alexandria (US), p153-156

PPI (2005). Ethiopia Exported 27,000 Tons Of Birdseed To The United States Last Year. Trade Fact of the Week | February 16, 2005. Retrieved 2 March 2007 http://www.ppionline.org/ndol/print.cfm?contentid=253177

Purdue, (2007). The New Crop Resource Online Program. http://www.hort.purdue.edu/newcrop/ retrieved 22-01-2007

Seifu, Demelash (2004) Amhara national regional state agricultural commodity marketing system study project. Sesame marketing system. Bahar Dar (Ethiopia). Unpublished draft

SNV (2006). Standards, price incentives, input supply, and regulatory mechanism to improve the supply and quality of oilseeds. Addis Ababa, Bactec.

Trichopoulou, A., K. Katsouyanni, S. Stuver, L. Tzala, C. Gnardellis, E. Rimm, D. Trichopoulos, 1995. Consumption of Olive Oil and Specific Food Groups in Relation to Breast Cancer Risk in Greece. In: Journal of the National Cancer Institute, vol. 87, No. 2, pp. 110-116.

UCR (2007). Fatty oils and waxes. http://www.faculty.ucr.edu/~legneref/botany/oilwax.htm Retrieved 22 January 2007.

Wikipedia (2007). Ethiopia. http://en.wikipedia.org/wiki/Ethiopia, retrieved January 22nd 2007.

Willett W.C., and A. Ascherio, 1994. Trans fatty acids: are the effects only marginal? In: American Journal of Public Health, May, 84(5), 722-4.

List of companies/organisations/ spots visited on fact finding mission

- Mr. Itana Ayana - ITAB
- Ethiopian Pulses, Oilseeds & Spices Processors Exporters Association, Mr. Genetti
- Ambasel - mr Solomon a.o.
- Ali ABdul ALi Import Export
- Commercial farmers supplying Ambasel
- Visit trading market in Gondar with brokers
- Adjo Modjo
- Mulat Abegaz Gen. Export enterprise.
- Alpha Tradin Partners - mr. Tewodros Yilma
- Ethiopian Grain Trade Ent. mr Biru Lede
- Min. of Agriculture - mr Assefa Mullugeta
- Investment authority- mr Mohamed Seid
- US AID – mr Humphreys and Sherry a.o.
- 2 small local crushers near Nazareth
- Gonda Import Export Enterprise
- Dutch Embassy
- SNV
- Ethiopian Institute of Agriculutural Research,
  Director General
- Meeting with members of Ethiopian Pulses, Oilseeds & Spices Processors Exporters Association

Appendix 1 Costs of the sesame value chain

Seifu (2004) made an estimate for export of sesame seeds, which is presented in the table below:

	birr/ha	birr/quintal (= 100kg)	
Type of costs		High market price	Low market price
Land clearing	150	21.43	21.43
Weeding	420	60.00	60.00
Harvesting	360	51.43	51.43
Trashing and packing	36	5.14	5.14
Seeding, spraying, guarding,	30	4.29	4.29
Land preparation (tractor rent)	140	20.00	20.00
Local seed 4 Kg/ha	15	2.14	2.14
Chemicals	180	25.71	25.71
Bags 100 kg	45	6.43	6.43
Loading and unloading	42	6.00	6.00
Store rent (1 birr/qt per month)	14	2.00	2.00
Food expenses for labourers	150	21.43	21.43
Transport expense from farm to Village market	91	13.00	13.00
Land rent	29	4.14	4.14
Salary expense	240	34.29	34.29
Total cost	1942	277.43	277.43
Farmers margin (depends on world market price)	1500	214.29	13
Producer price		491.71	290.43
Packing		1.00	1.00
Loading and unloading		5.00	5.00
Store rent		3.00	3.00
Storage loss (2%)		9.83	5.81
Loss in transportation& handling (1%)		4.92	2.90
Assemblers margin		15.69	15.69
Assembler Wholesale Price		531.16	323.83
Municipality fee		0.68	0.68
Loading and unloading		4.00	4.00
Transport		15.00	15.00
Seed cleaning (input 95% purity)		7.60	7.60
Bag		6.18	6.18
Miscellanous and cost impurity		13.28	8.10
Store rent (0.43*three month)		1.23	1.23
Transport: Gondar-Djibouti		40.38	40.38
Standard fee		2.38	2.38
Forwarding		23.75	23.75
Interest (7.5%, three months)		12.11	8.12
Exporter's margin		10.14	10.14
FOB Price (100 kg)		703.02	475.13

Source: adapted from Seifu, 2004

Appendix 2 Additional fact and figures

Export (tons) of oilseed by Ethiopia

	1997	1998	1999	2000	2001	2002	2003
Groundnuts, in shell	*	*	*	*	*	*	104
Groundnuts, shelled	79	69	4	30	65	110	109
Soya beans	*	*	*	*	*	182	71
Cotton seeds	*	*	*	*	3063	1244	60
Sunflower seeds	*	*	*	1	13	1	115
Sesame seeds	49,373	49,147	28,227	31,044	42,992	68,620	71,345
Rape or colza seeds	*	*	*	60	19	2	119
Mustard seeds	*	*	160	130	180	240	162
Safflower seeds	*	*	*	1	*	*	2
Linseed	*	*	*	*	5	2	3
Castor oil seeds	*	179	*	*	40	3	*
Oilseeds other	1,919	4,429	11,135	11,252	29,079	19,939	23,137
Total	**51,371**	**53,824**	**39,526**	**42,518**	**75,456**	**90,343**	**95,227**

Source: ITC/WTO

Export (tons) of sesame seed by Ethiopia

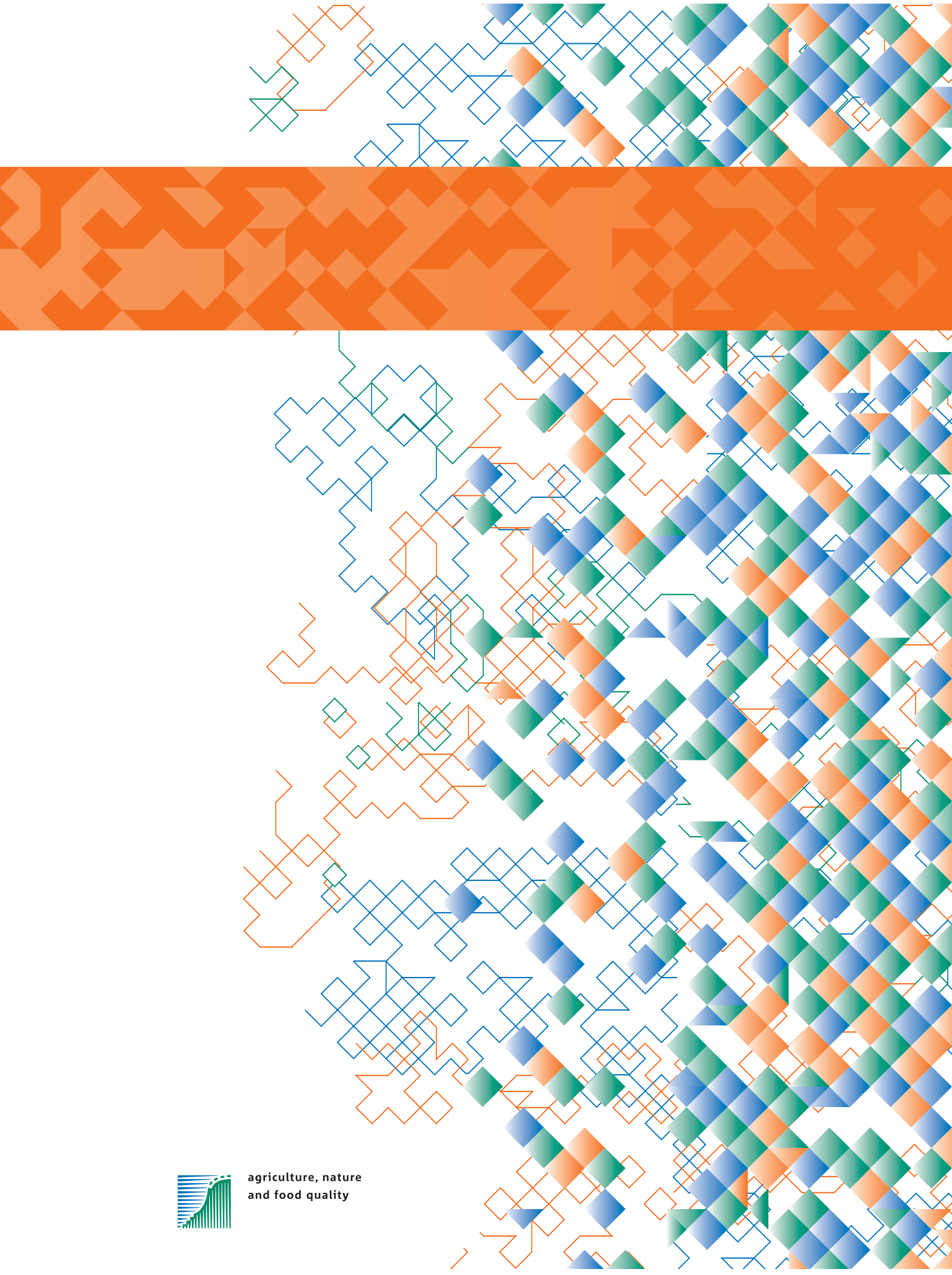
	1998	2001	2002	2003
Israel	5180	16976	17290	14150
Turkey		143	10546	11514
Yemen	2069	5749	6960	9859
Egypt	17606	3577	9247	2587
Japan	6180	3802	3241	3886
Jordan	807	1993	2029	5822
Greece	4,083	1,369	5,311	2,993
Saudi Arabia	1301	1159	1552	5426
Switzerland	1592	1953	3206	2973
Netherlands	1205	518	1454	1599
Others	4951	5753	7784	10536
Total	**49147**	**42992**	**68620**	**71345**

Source: Adapted from ITC/WTO

World imports of sesame seed

	2001	2002	2003	2004	Share 02-04	Growth 97-04 (%)
Japan	80209	94320	90225	66478	0.16	-0.8
Korea	71248	64510	67582	43607	0.11	3.2
Us	51599	45044	34707	39168	0.08	7.3
Turkey	29219	48456	23421	16153	0.06	10.5
Taiwan (Province of China)	27742	13566	25323	26084	0.04	-1.6
Germany	21168	21493	19929	21099	0.04	8.1
China	4457	5470	45149	10710	0.04	44.1
Egypt	67789	39989	13866	3445	0.04	-15.4
Netherlands	35475	15948	16901	17601	0.03	-4.7
Israel	22504	22166	20312	4570	0.03	8.0
Greece	19529	19777	12205	9780	0.03	-5.6
Mexico	23175	9905	17121	13629	0.03	8.9
Syrian Arab Republic	21365	31962	1731	4557	0.02	2.4
Saudi Arabia	29035	17671	10880	3720	0.02	12.4
Yemen	8545	10374	9977		0.02	22.4

Source: ITC/WTO



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