

# Essential Oils: Export Market opportunity

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#### INTRODUCTION

The centrality of agriculture to raise living standards of indigent communities in the developing world is beyond dispute. Not only does it and related industries contribute significantly towards GDP but agriculture is also a major employer in most of the developing world. Recently, the trend has been to focus on high value added agricultural products and within this paradigm, essential oils have emerged as a sub sector with the potential to transform the agricultural landscape in significant ways.

Essential oils have been used for more than 5000 years and can be traced back to the ancient civilisations of Mesopotamia, eventually spreading to Egypt, India, Greece and Rome. According to the United Nations Comtrade (2011) statistics, the essential oil fragrance and flavour market is estimated at US\$24 billion growing at an annual rate of 10%. However, despite the fact that Africa is both a producer and consumer of essential oils<sup>1</sup>, it has failed to be recognised as a major player in this sector due to inherent weaknesses of the value chain and supply. However, there are encouraging signs that through increased market opportunities and trade agreements, better opportunities exist for SADC countries to export to the world's more lucrative markets and through this market access leverage investment opportunities for the blighted agricultural sectors in many of its member states.

Essential oils are naturally occurring high value, low volume aromatic oils that are normally extracted from plants through steam distillation of the volatile aromatic oils. They are aromatic, evaporate easily and occur in small quantities in a plant, typically less than 2% of the dry weight of the plant material when distilled (DST:4). While the majority of oils are obtained from agricultural plants, a large number are derived from wild sources including trees. The crops can be harvested as either plants or seeds. In order to produce the oil, it is important that its nature and composition remain unchanged by the process of extracting it and consequently steam distillation is regarded as an appropriate method of extraction which allows the market to accept this as normal oil.

#### WHY ESSENTIAL OILS

For farmers wanting to diversify and particularly for those interested in establishing valueadded component to their portfolio, essential oils offers numerous possibilities. Essential oils offer higher profit margins per hectare and have an excellent export potential. The crops are perennial often lasting five years and consequently reduce input costs and because the final product fetches high prices at low volumes, it is easily and readily transportable across vast distances for sale anywhere in the world. Essential Oils are also part of the Agro-Processing and biotechnology focus of the broader manufacturing sector and provide opportunities for small, emerging farmers to obtain a sustainable foothold on the commercial sector of agriculture.

<sup>&</sup>lt;sup>1</sup> DAFF, 2010:25 While essential oils are derived from true plants, perfume oils are artificially created fragrances with limited therapeutic benefits.

Favourable shifts in consumer demand and market expansion have helped the Essential Oil Manufacturing industry thrive in the five years to 2015. Despite sharp declines prior to 2010, disposable income has increased each year since and this has contributed to growth in demand from several key industries, including soap manufacturers, cosmetic and beauty product manufacturers and cleaning product manufacturers. In the coming years, the industry is expected to grow steadily. Key downstream markets are expected to continue to demand industry products, while operators seek to establish a presence in the medical and homeopathic markets

Similarly, there are many reasons why essential oils have found favour as a potential tradable commodity especially within the developing world, and more specifically in the SADC region. Firstly, essential oils farming is a labour intensive process and the low cost of production (i.e. labour costs) within the developing world is seen by many competitor nations in the developed world as a major threat to their domestic essential oil industry. Secondly, it provides opportunities for rural communities to generate incomes and is regarded as a profitable enterprise for small scale production and processing and these enterprises specifically those with a high value and a low weight, provide the perfect vehicle for women to predominate. Another reason for its popularity is the tropical climate found in the SADC region particularly its combination of cool nights and hot clear days which favours the cultivation of most essential oils plants, and which produce world class quality oil. Some of the niche industries and off shoots of essential oils, such as aromatherapy, benefit from the fact that many multinational subsidiaries involved in that sector and which are located here, would prefer to source their oils domestically to reduce procurement and logistics costs. Finally, essential oils allows SADC countries to diversify their export portfolio and enter the high value added segment of the agricultural value chain while also attracting FDI in sectors which use essential oils as an input in the production process.

## MAJOR CONSUMERS

The HS classification system lists 14 essential oil sub categories. They have a variety of uses including cooking, potpourri, crafting, massage, aromatherapy and are also used in various insect repellent applications. The major consumers in the global essential oils market are the United States (40%), Western Europe (30%) and Japan (7%) and trade in essential oils has been increasing at about 10% per year. Essential oil products are used for flavour, fragrance and therapeutic purposes and account for 78% of total world consumption. There are various factors which influence the demand for essential oils and can be roughly summarised as follows:

- Fashion-high demand in the developed world for essential oils used in the cosmetic industry
- Aromatherapy-used in massage, bath, inhalation, burners and perfume
- Health food and organic food- this is linked to consumers' affinity with a healthier lifestyle and corresponding consumption linkages are forged with essential oil applications. The soft drink and processed food industry has recently witnessed a spike in the demand for flavour oils.
- Personal care-the increased demand in essential oils is often associated with the demand for fragrances in personal care products. Western Europe accounts for 31% of the global cosmetics and toiletries market, followed by North America and the Asia Pacific. Western Europe is both a very large consumer and producer

of cosmetic products. Furthermore, the green awareness movement of the 1990s stimulated an interest in and a demand for, products that contained bio active oils and also medicinal oils. Examples of this includes the emergence of Australian tea tree oil in the 1980s which was initially employed as an atmospheric bactericide.

### **PRODUCTION AND VALUE CHAIN**

Globally there are over 3000 plants that are suitable for the extraction of essential oils and currently only 10% are harvested for this purpose. Of these only about 15 of these plants are cultivated and grown commercially in South Africa. The top 10 crops in terms of production account for about 80% of the total world market for essential oils. <sup>2</sup> However, despite the fact that same plants that are grown here comprise the bulk of the global essential oil production, the country nevertheless remains a small player in what has become a fast growing farming and industrial activity. This is exemplified in the table below which details the output of the major producer countries and the most utilised oils that are currently in production.

The most utilised essential oils and major producers			
Product	Country		
Orange	Australia, Brazil, Dominican Republic, Israel, Italy and USA.		
Cornmint	Brazil, China, India, Japan, N. Korea, Paraguay, Taiwan and Thailand.		
Eucalyptus (cineole-type)	Australia, Austria, Brazil, China, India, Paraguay, Portugal, South Africa and Spain.		
Citronella	China, India and Vietnam.		
Peppermint	Australia, China, Italy, Japan and USA.		
Lemon	Argentina, Australia, Brazil, Greece, Spain, Italy, USA and Peru.		
Eucalyptus (citronellal-type)	Australia, Austria, Brazil, China, India, Paraguay, Portugal, South Africa and Spain.		
Clove leaf	Brazil, Indonesia, Madagascar, Sri Lanka and Tanzania.		
Cedarwood (U.S.)	USA		
Litsea cubeba	China		
Sassafras	Brazil and the USA		
Lime	Brazil, China, Cuba, Ghana, Haiti, Ivory Coast, Jamaica, Mexico and Peru.		
Spearmint	Argentina, Australia, Brazil, Bulgaria, China, Egypt, France, Hungary, Japan, Korea, Morocco, New Zea- land, Paraguay, Romania, Russia, Taiwan, the UK, the USA and Yugoslavia.		
Cedarwood	China		

Table 1 The most utilised essential oils and the major producers

TIPS 11, reprinted from http://www.hort.purdue.edu/newcrop/proceedings1993/v2-620.html

Discrepancies in the value chain at farm gate and wholesale levels, makes it difficult to develop a stylised value chain. Nevertheless, the value chain in essential oils can be broadly summarised as including:

- crop selection-knowledge about local soil, climate and potential markets
- crop cultivation-sourcing of plant material
- primary processing-drying, distillation, crop management and harvesting
- further beneficiation-rectification and formulations
- sales and marketing-market knowledge and access

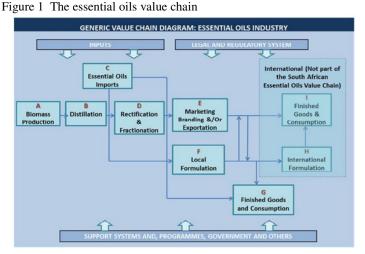
<sup>&</sup>lt;sup>2</sup> DAFF, 2010:6

There are various costs associated with the entire endeavour and these can be estimated as follows:

- Harvesting
- Pest and disease management
- Nutrition (irrigation/fertilizer) •
- Extraction costs

10-35% of farm gate costs

- 11-37%
- 10% of grower costs
- 60-75% of processor costs



Fridge essential oils executive report (2011) p5

#### PRODUCTION

The major essential oil producers are Brazil, China, Egypt, India, Mexico, Guatamala, Morocco and Indonesia, with the latter being the only one that is not typified as low cost, developing country. Close onto 65% of world production emanates from developing countries and the top 10 crops in terms of production account for 80% of the total world market of essential oils (Tips, 10) Although the EU dominates the world trade of essential oil (including imports and exports) there is no individual country from this union that is identified as a major producer.

Table 2 Production of Essential oils ('000 tonnes)

	1999	2000	2001	2002
World	22,166	25,177	28,277	28,209
China	15,119	16,138	16,150	16,650
Iran	50	2,000	5,000	5,000
USA	4,530	4,140	4,140	3,970
Lebanon	1,628	2,074	2,062	1,631
Greece	232	210	270	301
Guatemala	215	230	245	250

TIPS 12, reprinted from FAO (2004)

Globally the essential oils market generate US\$18 billion per annum but Africa (mainly Egypt and Morocco) and some of the Indian Ocean Islands (Madagascar and Reunion) are responsible for a miniscule amount, barely in excess of 2% of the global figure.

#### **PRODUCTION ISSUES**

There are numerous hurdles and obstacles that need to be overcome before an essential oils programme can reap any tangible rewards. A successful essential oils programme is dependent on highly focused farm practices that guarantee a high quality yield. Furthermore, it requires technical support including production inputs and effective plant material for new plants. Finally, high entry barriers need to be surmounted and these include fencing, cuttings, distillation plants and land preparation, which, although time consuming and costly, are vital prerequisites for a sustainable, enduring, and globally competitive enterprise.

This sector's marketing structure is no different from any other product and typically begins with the producer who sells to the flavour and fragrance industries. Fragrance houses could either embark on a value addition process before selling it on to the end users. One of the much quoted difficulties in entering the essential oils market relates to the fact that once end users have developed a product using a specific oil, they are loathe to change either the oil or the supplier as this may compromise quality. Nevertheless smaller players can enter the market in niche industries such as aromatherapy and massage. Another potential barrier to entry relates to quality as some of the lucrative industries at the top end of the essential oil spectrum which features Rose and Boronia have rigid quality standards which invariably require sophisticated equipment to extract the oils, and this in turn increases the production costs, in some cases making entry for small, or new players prohibitive. For those wishing to export flavour raw materials, especially to the US and UK markets, kosher and halal certificates are required. Buyers also require:

- Material safety data sheet
- Technical data sheet
- Pesticide residue analysis
- GMO free declaration
- Declaration of non animal product derivatives <sup>3</sup>

# WORLD TRADE IN ESSENTIAL OILS

The World trade structure for essential oils and oleoresins is described in the ITC market study on essential oils and oleoresins published in 1986. The primary conduit is via dealers/merchants who purchase the products in producing countries from the producers/collectors and then export them to the processing or compounding houses or sometimes directly to the end-product manufacturers in importing countries. From the processing or compounding houses the products finally reach finally the end-product manufacturers. Countries such as Singapore, Hong Kong and the Netherlands frequently import more than they consume and conduct re-export trade with or without processing. Most essential oils are traded on the futures or spot market.

<sup>&</sup>lt;sup>3</sup> TIPS page 16

There has been an exponential increase in the world trade of essential oils. On average exports grew at an annual compounded rate of 49% between 1990 and 2005, while imports grew at 38%. In 1990 total world imports were US\$706 million and in 2005 this figure had risen to US\$1.9 billion. During the same period, exports amounted to US\$233 million (1990) and US1.7 billion  $(2005)^4$ . The value of the global trade of essential oils, perfumes, cosmetics and toiletries exports in 2009 was US\$75 billion. The value of world exports in the broader category of HS 33 essential oils products increased at an average rate of 6% annually between 2005 and 2009 and at an even higher rate of 7% pa between 2008 and 2009. The value of the narrowly defined essential oils was US\$2.5 billion in 2009 and US\$1.8 billion. The table below provides a snapshot the global trade world which puts some of this into perspective.

Table 3 Snapshot of world exports

World Exports Total for HS 33 All Industries	Exports in value	Exports as a share of world exports (%)	Growth of exports in value (% p.a.)	Growth of exports in volume (% p.a.)
3300 All industries in sector 33	75 512 433	0.64	7.0	2.0
3304 Beauty, make-up & skin-care preparations; sunscreens, manicure or pedicure	23 060 607	0.19	8.0	1.0
3302 Odoriferous mixtures as raw materials for industry	16 656 984	0.14	6.0	1.0
3303 Perfumes and toilet waters	11 559 904	0.1	6.0	1.0
3305 Hair preparations	9 527 316	0.08	9.0	4.0
3307 Personal toilet preparations shaving preparations, deodorants etc.	8 613 421	0.07	6.0	2.0
3306 Oral & dental hygiene preparations	3 677 228	0.03	10.0	2.0
3301 Essential oils; resinoids; terpenic by- products etc.	2 416 973	0.02	7.0	0.0

Source: Fridge:Essential Oils report (2011)

Most of the trade in essential oils occurs in the European Union (EU), in North and South America and East Asia. The past two decades has witnessed an increase of world trade in essential oils from US\$616 million in 1990 to more than US\$4.9 billion in 2009. Hardly any trade happens in Africa or the SADC region. Table (NUMBER) provides a snapshot of the 17 most important import and export countries with respect to the essential oils market.

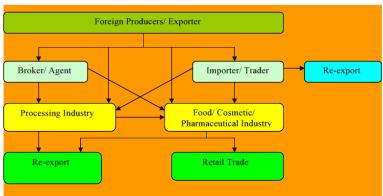
## **DISTRIBUTION CHANNELS**

There are currently numerous bodies which monitor product quality and trading procedures and who are responsible for drawing up specifications for individual products. The most widely recognised standards for essential oils and spices are those set by International Organization for Standards (ISO). In many instances, standards are established by various national pharmacopoeias. The general interests of traders and users are served by trade associations such as Flavour and Extract Manufacturers Association (FEMA) in the USA. Furthermore, the Geneva-based International Federation of Essential oils and Aroma Traders (IFEAT), is responsible for monitoring toxicological and other hazardous aspects of various raw materials used in perfume compounds.

The international trade for the bulk essential oils occurs on a large scale. Often shipments are diverted to neighbouring countries which in turn necessitates a substantial re-export business. This is useful and can reduce the effect of supply irregularities and domestic imbalances in supply and demand that are attributed to poor climate, crop disease, inadvertent overstocking

<sup>&</sup>lt;sup>4</sup> TIPS, 20

or unexpected peaks in demand. Invariably, the sheer scale of the operation means that many leading traders in the EU supply many countries. Often some producers will negotiate directly with major end-users while other producers utilise independent traders (importers) or sales agents



#### Figure 2 Essential oil-global distribution channels

Source: DAFF 2010 p33

It should be noted that while the trade structure (above) changes constantly, close onto 60-80% of the essential oil trade goes directly from producers or exporters to processing importers such as flavour houses which in turn facilitates co-operation with end product manufacturers in the food or cosmetic industries. Many end product manufacturers do not purchase essential oils directly from producers. The end user market for essential oils is divided into the following categories

- Aromatherapy
- Natural personal

care

- Pharmaceutical
- Flavour and
  - fragrance
- Cosmetics
- Beverages

#### MARKET ACCESS AND TARIFFS

Tariffs are designed to protect domestic primary industries. In many instances, developing countries bear the brunt of these, especially tariff escalation clauses, imposed by the developed world, and which impels poorer countries to export primary commodities in their raw form. This makes it difficult for developing countries to export processed agricultural products. These tariff barriers are principally enforced by the EU and the US who, through sheer scale of their purchasing power, are the world's biggest economies and are able to protect their domestic economies. The table below provides some indication of the sorts of tariffs applicable

Table 4	Global	essential	oils	tariffs

	Terpeneless oils of	Preferential tariff	0.00%	0.00%
	clove, niaouli & ylang- ylang, incl concretes & absolutes.	for South Africa		
	concretes.	(Applied)		
China	Ess oils, whether or not terpeneless, incl concretes.	MFN duties (Applied)	20.00%	20.00%
China	Ess oils, whether or not terpeneless, incl concretes(excl. those of citrus fruit & mint)	MFN duties (Applied)	15.00%	15.00%
France	Terpenic oils of clove, niaouli & ylang-ylang, incl concretes & absolutes.	MFN duties (Applied)	0.00%	0.00%
	Terpenic oils of clove, niaouli & ylang-ylang, incl concretes & absolutes.	Preferential tariff for South Africa	0.00%	0.00%
Germany	Terpeneless oils of clove, niaouli & ylang- ylang, incl concretes & absolutes.	Preferential tariff for South Africa	0.00%	0.00%
India	Ess olls (terpencless or not), including concretes & absolutes, resinoids, extracted oleoresins, concentrates of ess oils in fats.	MFN duties (Applied)	20.00%	20.00%
Spain	Terpencless oils of clove, niaouli & ylang- ylang, incl concretes & absolutes.	Preferential tariff for South Africa	0.00%	0.00%
United Kingdom	Terpeneless oils of clove, niaouli & ylang- ylang, incl concretes & absolutes.	MFN duties (Applied)	2.30%	2.30%

Source: DAFF 2010, 35

The EU and Japan do not apply tariffs to essential oils from SADC or from other developing countries and neither does NAFTA nor the US. There are no quota restrictions on imports of essential oils into the EU. The only issue though is that the shipment must be accompanied by the requisite certificate of origin. Tariff information for prospective importers is readily available on EU websites. China, on the other hand imposes tariffs of 20% for those countries that are eligible for Most Favoured Nation status or 80% which is their general tariff rate, while in India the tariff is 25%, though it has been noted that this figure increases on certain products. This situation is compounded by the fact that unlike the EU, there is no single official publication of tariff regarding these two countries which makes it difficult for those countries that intend exporting their product.

Despite this seemingly liberal attitude towards tariffs, the developed world uses other mechanisms to block imports into their countries and these refer to sanitary and phytosanitary (SPS) measures for animal and plant health and technical barriers to trade (TBT) to inhibit agricultural imports. Between 1995 and 2003 there were 48 TBT and SPS disputes concerning agricultural products among WTO members. Developed countries have also enhanced their quarantine measures for food, animal and plant products. They also keep updating quality inspection standards which insist on more labelling and packaging procedures, and which, while necessary, become onerous and expensive burdens on

importing countries, specifically from the developing world. Despite their apparently relaxed attitude towards tariffs, the US, EU and Japan are the countries which enforce the most technical barriers.

# **REGIONAL TRADE**

To get a clearer picture of the trade in essential oils it is necessary to look at how this plays out on a regional basis.

## The EU

With a population of 456million people and per capita GDP of  $\in$  22.300, the European Union was, during this period the primary site for essential oil trade, contributing in excess of 62% to the world trade in essential oils. In 2009 exports of essential oils in the EU amounted to US%51.5 billion, representing as it does an annualised growth of 5% pa (FRIDGE, 2011:27). The major export markets for essential oils in the region are France, Germany, Belgium, Ireland, the Netherlands and the UK. The significance of this for SADC exporters is that these countries are also major importers of essential oils across all categories. Not only is France a major trader but is also a net exporter due to the value adding that occurs in cosmetic and toiletry processed essential oils. In 2003 these markets accounted for 80.7% of the total cosmetic and toiletry market in the EU.

The rise in world income over the past six decades has spurred the demand for essential oil products, in particular there has over this period been a marked demand for flavouring, perfumery and aromatherapy materials. A significant development within the EU market recently has been the rapid growth in consumer awareness of ingredients, performance and health benefits of 'natural products' which in turn has elicited tremendous demand for essential oils. Consequently, this has heralded a change in the personal care and cosmetic industry with the trend moving away from synthetic products with limited biological effects towards therapeutic products that could possibly repair damaged tissues, provide protection from the sun and which has a moisturising effect.

## South Asia

In 2005 exports from South Asia amounted to US\$35 million while imports were US\$165 million making that region a significant player in this market. India, which was not greatly affected by the Asian crisis and whose economy has produced 200m Indians with annual incomes comparable to that of North America, has a large appetite for all categories of essential oils, irrespective of whether they are locally produced or imported, and is a market that has continued to show promise.

## East Asia

China's rapid transition to a market economy has had a significant effect on its consumer product market and the sale of fragrance products increased by 15% annually in the early 1990's. Consequently it has huge growth potential as an essential oils market. As early as 2006, the country had 150 000 people worth \$5million with a seemingly insatiable demand for luxury goods. As indicated previously, the biggest consumer of essential oils in this region continues to be Japan and overall the region's imports in 2005 were \$250 million.

#### **South America**

The effect of trade liberalisation here also resulted in significant growth opportunities for the essential oil market, particularly in the Mercosur Economic Community of South America. Interestingly here, the domestically produced essential oils in some countries declined as many domestic flavour and fragrance manufacturers were replaced by multinationals who sourced product from foreign-based subsidiaries. With a population of more than 300 million and a substantial middle class, especially in Brazil and Argentina, there is huge potential for an essential oil market gaining further ground there.

#### The Middle East

The demand for essential oils in the Middle East centres around fragrance oils often in precompound form and flavour oils which is largely found in the soft drinks sector. This region represents about 2.65% (imports) and 2.55% (exports) of the world market and while quite small, has demonstrated a potential for future growth.

#### Sub-Saharan Africa including SADC

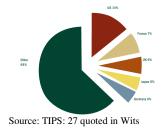
This region due to its low buying power as measured by per capita income, does not feature significantly in any of the regional tables for overall demand for essential oils. Despite this, some demand has been registered for inexpensive fragrance oils, specifically citronella, has made it at 1300 tons per annum, the world's largest consumer of that particular product. The essential oils sourced from Africa are usually linked to a very small number of aromatic plants that are indigenous to the continent. South Africa continues to dominate the region as the largest consumer of essential oils.

Within this global picture, the South African Development Community emerges as a relatively insignificant player in the essential oils world market. Its share of world trade, exports and imports is less than 1%. Despite the difficulty in obtaining accurate and up to date trade data for the region, it is nevertheless possible to glean from available stats that the SADC market is dominated by South Africa which is at least 60% of the regions total trade in terms of value. The value of South African exports decreased significantly between 2005 and 2009 from US\$26.3 million to US\$21.2 million (FRIDGE, 28).

#### **MAJOR IMPORTING COUNTRIES**

The world's import market is dominated by quite a few countries; in particular the US (14%) which leads followed by France the UK and Germany from the EU and then Japan. Interestingly these countries source their oils from different trading blocs; Brazil, Germany and the US source their oils from the EU while Japan and the UK import mainly from NAFTA . In 2005, the EU provided 42% of Germany's essential oils (\$48.7m) while Japan's imports from NAFTA during the same period amounted to \$70m or roughly 46% of that country's total import bill. It is interesting to note that the leading five importers of essential oils derive less than 1% of their imports from the SADC countries; to whit, the UK imports 3% from SADC, while for Germany and the US, it is 2% and for Japan and Brazil it is less than 0.5% of their total imports.

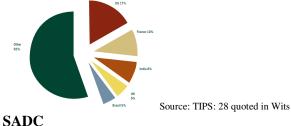
Graph 1 Top five importers share of world essential oils exports (2005)



## MAJOR EXPORTERS

The leading five exporters cumulatively exported just under a \$1 billion, representing 40% of world exports with the US, whose 17% share of the world total, makes it a significant player in this regard. The leading export destination of for three of the five countries (UK, France, USA) is the EU while Brazil and India export mainly to NAFTA with 43% (\$45.3m) and 32% (\$53.1m) respectively. The SADC countries export less than 1% to these countries

Graph 2 Top five Exporters share of major essential oils exports (2005)



SADC

As stated previously the SADC is a relatively minor player in the world market for essential oils with its share in world trade being 1% amounting to \$25.8m (exports) and \$15.4m (imports). South Africa's dominance in this area (slightly less than 50% -\$16.3m- of the total import bill for SADC) pivots on the fact that many multinationals that use essential oil as an input into the industrial process have subsidiaries located there and these include Unilever, Procter and Gamble, LÓreal, Colgate-Palmolive, GlaxoSmithKline and Pfizer

## **ESSENTIAL OILS: SOUTH AFRICA**

South Africa is well positioned to take advantage of the recent global surge in interest in the essential oils market. Not only does the country have climatic diversity, it also has the support of a globally recognised state funded scientific institute that has foregrounded numerous successful pilot projects throughout the country, often done in conjunction with the National Department of Science and Technology. Finally the country boasts a mature farming community with an established history of being commercially grounded and easily able to assimilate new technology.

Southern Africa's Essential oil production focuses on eucalyptus, citrus, geranium, lavender, bhuchu and khakibos, all of which are popular on the global market. Many local producers have their own distilleries, most of which were designed and manufactured locally. Furthermore, the country also has many smaller boutique operators who grow and distil their own oils. Many of South Africa's essential oil farming operation comprises a small part of much larger agricultural business but which nevertheless has the potential to be the most profitable section of any diversified operation relative to the land that it occupies.

Although the financial returns for an essential oil operation are good, it is important to note that most crops will be small for the first two to four years with below average quality and yield. Thereafter, following a period of careful modifications, it is possible that product could be developed that would meet internationally acceptable standards. However, one does not need to be in a far flung rural area in order to be an essential oil producer. A recent proposal looked at the possibility of housing an essential oil production facility at the Dube Trade Port to complement its specialise agri-zone and processing facility and which will benefit from its air connectivity to global destinations without incurring unnecessary logistics costs.

Various government departments, mindful of the country's anti-poverty strategy as encapsulated in the Micro-Economic Reform Strategy (MERS), began to focus their attention on Agro-processing as a means to promote opportunities for disadvantaged communities in order that they become active participants in the economy. This sector has been identified by government as having strong potential for growth, employment creation and value addition and a particular focus of the Departments of Science and Technology as well as the Centre for Scientific and Industrial Research (CSIR) has been to look at post harvest production of finished value-added products in areas where remote location is not a hindrance or presented as a logistical or financial disadvantage. These products would need to be high value goods in a market where the natural resources are granted a competitive advantage. It is within this context that the essential oils sector has been earmarked for assistance with a series of pilot studies and assistance programmes throughout the country.

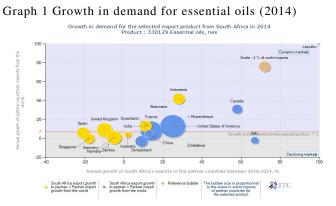
The table below shows projected (2010) hectares under essential oil crops per province. As can be seen, it was predicted that KZN had the second largest projected land allocation (422 hectares) and similarly it was projected to be the major producer of more kinds of essential oils species than any other province. In the intervening years this has not materialised as predicted but the province has made some strides to become a significant player in this sector. Table 5 Provincial Essential Oil Output

Province	Species	TOTAL ha
Mpumalanga	Vetiver, Citronella, Lippia, Eucalyptus, Artemisia, Rosemary, Geranium, Lemon grass	943
Free State	Tagete, Artemisia, Lavendin	70
Northern Cape	Marjoram, Rosemary, Lavendin	45
North West	Geranium, Rosemary, Lavendin, Chamomile	40
Eastern Cape	Geranium, Rosemary, Lavender	200
Western Cape	Eriocephalus, Lavender, Lavandin, Buchu, Rosemary	77
Limpopo & Machado	Lippia, Geranium, Rosemary, Lavendin, Tea tree	91
Gauteng	Lavendin, Rosemary, Artemisia	82
KZN	Lavendin, Rosemary Eucalyptus, Geranium, Tea tree, Lemon tea tree, Spear Mint, Lemon grass, Artemisia, Melissa, Thyme	422
TOTAL		1970
These estimate	es exclude wild harvesting and community projects in pro	gress

Source: DAFF, 2010:4

The graph below provides an illustration of the bigger players were with regards the market for South Africa's exports of essential oils. The dominant countries in 2014 were the USA, Germany and France. The table also shows the growth in demand for essential oil exports during the period and how countries such as as Indonesia and

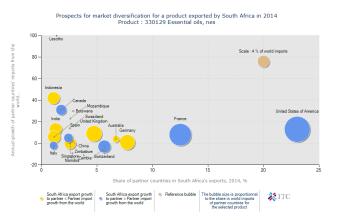
Zambia also increased their share of essential oils imports to the total South Africa's export growth but that their annual growth of imports from the world decreased.



Source: Trademap Source: <u>http://www.trademap.org/Country\_SelProductCountry\_Graph.aspx</u>

Another graph shows the diversification in the markets for essential oils exported by South Africa in 2014. It also shows that the USA, Germany and France were the main markets for essential oils exported by South Africa and that Germany, France and the USA held the majority shares of SA's exports in 2014.

Graph 2 Diversification in essential oils market (2014)



Source: <u>http://www.trademap.org/Country\_SelProductCountry\_Graph.aspx</u>

#### CONCLUSION

There is very little to indicate that consumption for essential oils in the EU, NAFTA and Japan will decline. These are mature markets which have essential oils embedded in their culture. Similarly some countries within the developing world, such as India and China have, through current trade, indicated a huge demand for these oils. There are also huge opportunities for the SADC countries to enter this through the aromatherapy market especially huge appetite which the USA and Germany have for these products.

Possibly the biggest challenge for SADC, and by implication South Africa will come from low-cost producing Asian countries. Another problem facing South Africa is the long distance between it and the markets of the US, EU and Japan. Other problems include lack of capital for investment in agro-processing, logistics problems in timely shipping against time-bound contracts and the limited experience of local producers with regards the production, quality control and international trading of essential oils. Another major concern is that many new ventures fail due to poor marketing performance or an inadequate market structure. Any export strategy for local producers would need to exploit the huge growth potential of India and China, and the lucrative EU-market particularly countries such as Ireland, Belgium, Germany, the Netherlands and the UK which are net importers of all types of essential oils.

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