



International Trade Centre
UNCTAD/WTO



**The Food and Agricultural Organization
of the United Nations**

Trade Opportunity Scan for the Southern Africa ACP group of countries

May 2008



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Preface

This report is an output of a collaborative effort between the Market Analysis & Research Section of ITC and the Trade and Markets Division of FAO. The report was prepared by Michael Freudenberg, Thierry Paulmier, Takako Ikezuki and Kerfalla Conté (ITC), Jamie Morrison, Amir Kassam, Eric Kueneman and Peter Griffee (FAO). The authors would like to thank Ian Sayers, Owen Skae, Hernan Manson, Antony Sandana (ITC), Julie Claro, Isabelle Verbeke and Freddy Nachtergaele (FAO) for fruitful discussions, assistance and suggestions. For further details on the present study, please contact Michael Freudenberg (email: freudenberg@intracen.org).

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Executive summary

Rationale and main objectives

The objective of the EC All ACP Agricultural Commodities Programme is to strengthen stakeholders capacities to develop and implement sustainable commodity strategies, to improve the incomes and livelihoods of producers of traditional or other agricultural commodities and reduce vulnerability at both producer and macro levels. A core component of the initial phase of the All ACP Agricultural Commodities Programme is the identification of broad agricultural product sectors of development focus and the development priorities for each of those sectors.

To assist in facilitating this process, the International Trade Centre (ITC) and the Food and Agriculture Organization of the United Nations (FAO) have developed a methodology to rank 78 agricultural products for the group of 16 Southern African countries according to their potential for growth. This methodology is based on a combination of indicators relative to current production and export performance, import dependency and world market trends.

This report gives a quantitative ranking that can be used as a preliminary indication of the product groupings having a potential of import substitution and/or export development. It is intended to provide insight for ACP country decision makers who need to select sectors of development focus.

Major findings and interpretation

ITC and FAO have developed a potential ranking based on a set of indices reflecting the relative performance of products, aggregated at the regional level, in terms of their capacity and efficiency in production (*Production index*); their current export performance (*Export index*); the regional reliance on imports of the product (*Import index*); and on identified opportunities for trade on the basis of world market conditions (*World Market index*).

Table 1 presents the top 20 products for each of the four indices, grouped by broad product sectors:

- The top five products in terms of *proven supply capacity and efficiency (Production Index)* are Cassava, Other roots and tubers, Other pulses, Millet and Dry beans.
- The top five products in terms of *proven export performance (Export Index)* are Seed cotton, Green coffee, Grapes, Grapefruit and pomelos, and Oranges.
- The top five products in terms of the relative *importance of imported products (Import Index)* are Maize, Sorghum, Oil palm fruit, Dry cow peas, and Dry beans.
- The top five products in terms of high and accessible international demand (*World Market Index*) are Maize, Oil palm fruit, Green coffee, Wheat, and Soybeans.

Table 1: Top 20 products for Southern African countries according to each of four indices

Product sectors	Production Index	Export Index	Import Index	World Market Index
Overall	<ol style="list-style-type: none"> 1. Cassava 2. Other roots and tubers 3. Other pulses 4. Millet 5. Beans, dry 6. Citrus fruit nes 7. Wheat 7. Other fruits 7. Pineapples 10. Groundnuts in shell 11. Tea 12. Grapefruit and pomelos green 13. Other vegetables 14. Sweet potatoes 15. Sorghum 16. Bananas, plantains 17. Avocados 17. Pepper, white/long/black 19. Artichokes 19. Barley 	<ol style="list-style-type: none"> 1. Seed cotton 2. Coffee, green 3. Grapes 4. Grapefruit and pomelos 5. Oranges 6. Maize 6. Other vegetables 8. Peas, green 9. Tea 9. Mushrooms 11. Chillies & peppers, green 12. Soybeans 13. Avocados 14. Lemon and limes 15. Pimento, allspice 16. Beans 17. Tang. mand. clement. satsma 17. Citrus fruit nes 19. Apples 19. Wheat 19. Dates 19. Other nuts 	<ol style="list-style-type: none"> 1. Maize 2. Sorghum 3. Oil palm fruit 4. Cow peas, dry 5. Beans, dry 6. Peas, dry 7. Seed cotton 8. Wheat 9. Soybeans 10. Potatoes 11. Apples 12. Tea 13. Onions 14. Groundnuts in shell 15. Other spices 16. Pineapples 17. Plums 17. Sisal and other textile fibres of agave 19. Chick-peas 20. Grapes 20. Other vegetables 	<ol style="list-style-type: none"> 1. Maize 2. Oil palm fruit 3. Coffee, green 4. Wheat 5. Soybeans 6. Bananas, plantains 7. Seed cotton 8. Cocoa beans 9. Grapes 10. Barley 10. Tomatoes 10. Sesame seed 13. Cucumbers and gherkins 14. Chillies & peppers, green 14. Other vegetables 14. Pineapples 17. Avocados 17. Tang. mand. clement. satsma 17. Garlic 20. Beans 20. Cashew nuts
Cereals, grains, beans, peas and pulses	<ol style="list-style-type: none"> 3. Other pulses 4. Millet 5. Beans, dry 7. Wheat 15. Sorghum 19. Barley 	<ol style="list-style-type: none"> 6. Maize 19. Wheat 	<ol style="list-style-type: none"> 1. Maize 2. Sorghum 4. Cow peas, dry 5. Beans, dry 6. Peas, dry 8. Wheat 19. Chick-peas 	<ol style="list-style-type: none"> 1. Maize 4. Wheat 10. Barley
Coffee, cocoa, tea	<ol style="list-style-type: none"> 11. Tea 	<ol style="list-style-type: none"> 2. Coffee, green 9. Tea 	<ol style="list-style-type: none"> 12. Tea 	<ol style="list-style-type: none"> 3. Coffee, green 8. Cocoa beans
Cotton		<ol style="list-style-type: none"> 1. Seed cotton 	<ol style="list-style-type: none"> 7. Seed cotton 	<ol style="list-style-type: none"> 7. Seed cotton
Fibre crops			<ol style="list-style-type: none"> 17. Sisal and other textile fibres of agave 	
Fruits and vegetables	<ol style="list-style-type: none"> 6. Citrus fruit nes 7. Other fruits 7. Pineapples 12. Grapefruit and pomelos 13. Other vegetables 16. Bananas, plantains 17. Avocados 19. Artichokes 	<ol style="list-style-type: none"> 3. Grapes 4. Grapefruit and pomelos 5. Oranges 6. Other vegetables 8. Peas, green 9. Mushrooms 11. Chillies & peppers, green 13. Avocados 14. Lemon and limes 16. Beans 17. Tang. mand. clement. satsma 17. Citrus fruit nes 19. Apples 19. Dates 19. Other nuts 	<ol style="list-style-type: none"> 11. Apples 13. Onions 16. Pineapples 17. Plums 20. Grapes 20. Other vegetables 	<ol style="list-style-type: none"> 6. Bananas, plantains 9. Grapes 10. Tomatoes 13. Cucumbers and gherkins 14. Chillies & peppers, green 14. Other vegetables 14. Pineapples 17. Avocados 17. Tang. mand. clement. satsma 17. Garlic 20. Beans
Nuts		<ol style="list-style-type: none"> 19. Other nuts 		<ol style="list-style-type: none"> 20. Cashew nuts
Oil crops	<ol style="list-style-type: none"> 10. Groundnuts in shell 	<ol style="list-style-type: none"> 12. Soybeans 	<ol style="list-style-type: none"> 3. Oil palm fruit 9. Soybeans 14. Groundnuts in shell 	<ol style="list-style-type: none"> 2. Oil palm fruit 5. Soybeans 10. Sesame seed
Roots and tubers	<ol style="list-style-type: none"> 1. Cassava 2. Other roots and tubers 14. Sweet potatoes 		<ol style="list-style-type: none"> 10. Potatoes 	
Spices, pyrethrum and peppermint	<ol style="list-style-type: none"> 17. Pepper, white/long/black 	<ol style="list-style-type: none"> 15. Pimento, allspice 	<ol style="list-style-type: none"> 15. Other spices 	

Source: FAOSTAT, ITCs TradeMap and Market Access Map.
For full details, see Table 14, Table 20, Table 25, Table 30, Table 31.
The numbers represent a product's rank within each index.

The potential for sector development has been analysed according to four possible strategic responses.

- *Import substitution and export development*: Products that rank highly in the Import index and in the Export and/or World Market Indices.
- *Export development only*: Products that rank highly in the Export and/or World Market Indices.
- *Import substitution only*: Products that rank highly in the Import index.
- *No apparent potential*: Products that rank low across all indices.

The possible responses above have then been analysed separately for products that are among the 20 best performers in the Production Index (Table 2) and those that are not (Table 3). Products shown in Table 3 may justify an increase in production to take advantage of these possible strategic responses. In both tables, products emanating from the region are grouped into broad agricultural product sectors.

Table 2: Southern African countries: Potential strategic responses for products with high production index rankings

Product sectors	Potential strategic responses			
	Import substitution and Export development	Export development	Import substitution	No apparent potential
	High rank in Import and Export or World Market indices	High rank in Export or World Market indices	High rank in Import index	High rank only in Production index
Cereals, grains, beans, peas and pulses	Wheat (7)	Barley (3)	Beans, dry (4) Sorghum (6)	Millet (5) Other pulses (5)
Coffee, cocoa, tea	Tea (2)			
Fruits and vegetables	Pineapples (3) Other vegetables (7)	Avocados (2) Bananas, plantains (4) Citrus fruit nes (3) Grapefruit and pomelos (2)		Artichokes (2) Other fruits (7)
Oil crops			Groundnuts in shell (6)	
Roots and tubers				Sweet potatoes (4) Cassava (3) Other roots and tubers (4)
Spices, pyrethrum and peppermint				Pepper, white/long/black (2)

Note: The number in parentheses indicates the number of producing countries in the region.

Table 3: Southern African countries: Potential strategic responses for products with low production index rankings

Product sectors	Potential strategic responses			
	Import substitution and Export development <i>High rank in Import and Export or World Market indices</i>	Export development <i>High rank in Export or World Market indices</i>	Import substitution <i>High rank in Import index</i>	No apparent potential <i>No high ranks</i>
Cereals, grains, beans, peas and pulses	Maize (6)		Chick-peas (1) Cow peas, dry (1) Peas, dry (1)	Oats (1) Other cereals (2) Rice, paddy (4)
Coffee, cocoa, tea		Coffee, green (3) Cocoa beans (1)		
Cotton	Seed cotton (6)			
Fibre crops			Sisal and other textile fibres of agave (1)	Jute and other bast fibres (2)
Fruits and vegetables	Apples (1) Grapes (3)	Tang. mand. clement. satsma (2) Beans (1) Chillies & peppers, green (1) Tomatoes (5) Cucumbers and gherkins (1) Garlic (1) Lemon and limes (2) Dates (2) Mushrooms (1) Oranges (4) Peas, green (1)	Onions (4) Plums (2)	Apricots (1) Asparagus (1) Strawberries (1) Watermelons (1) Broad beans, green (1) Cabbages (1) Cantaloupes & other melons (2) Carrots (1) Cauliflower (1) Currants and gooseberries (1) Lettuce (1) Mangoes (2) Papayas (1) Peaches and nectarines (1) Pears and quinces (1) Raspberries (1)
Nuts		Cashew nuts (1) Other nuts (1)		Almonds (1) Chestnuts (1)
Oil crops	Oil palm fruit (1) Soybeans (2)	Sesame seed (1)		Sunflower seed (5) Castor beans (1) Other oil crops (1)
Roots and tubers			Potatoes (5)	
Spices, pyrethrum and peppermint		Pimento, allspice (2)	Other spices (2)	Anise, badian, fennel (1) Vanilla (1)

Note: The number in parentheses indicates the number of producing countries in the region.

FAO's agro-ecological crop suitability assessment.

Based on the FAO's agro-ecological crop suitability assessment information and expert agronomic knowledge, Table 4 provides an idea of the regional level agro-ecological potential of crops for further discussion at the Kick Off Workshop in Dar Es Salaam. The agro-ecological suitability of crops takes account of the agronomic potential and prospect for yield improvement and area expansion within farming system contexts at the country and regional levels. Indices for area expansion potentials and yield intensification potentials were estimated for each crop at the country and regional levels, and compared with current country as well as regional land use to guide the determination of country and regional level agro-ecological potentials of crops in terms of three broad categories -- low, medium and high. Table 4 provides the information of the regional level agro-ecological potential.

Crops that are combined into unspecified groups such as other pulses, other cereals, other fruits & vegetables, other oil crops etc are not included in Table 4 as it is not possible to make any useful comments on them. However, 'Other roots and tubers' as a crop group is included because it includes yams, and so is 'Jute like fibres' included as a crop group because it includes kenaf and roselle. Similarly, 'Plants & parts of plants' as a crop group is included because of pyrethrum and neem.

In general, crops that have a **high** regional agro-ecological and agronomic potential are:

- *Cereals and pulses sector* -- maize, millet, rice, sorghum, beans (dry), broad beans (dry), chick peas, cowpeas (dry), peas (dry)
- *Coffee, cocoa, tea sector* -- coffee
- *Cotton sector* -- cotton
- *Fibre crops sector* -- sisal & other gawe fibres
- *Fruits & vegetables sector* -- bananas & plantains, chillies & peppers, garlic, grapes, mangoes, pineapples, tomatoes
- *Nuts sector* -- cashew nuts
- *Oil crops sector* -- castor beans, groundnuts, sesame, soybeans
- *Roots & tubers sector* -- cassava, sweet potatoes, potatoes
- *Spices, pyrethrum, peppermint sector* -- cloves, pimento & allspice

In general, crops that have a **medium** regional agro-ecological and agronomic potential are:

- *Cereals and pulses sector* -- wheat, barley, oats, lentils
- *Coffee, cocoa, tea sector* -- tea
- *Fibre crops sector* -- jute like fibres (kenaf, roselle)
- *Fruits & vegetables sector* -- apples, apricots, avocados, beans (green), cantaloupes & other melons, dates, eggplants, grapefruit & pomelos, lemons & limes, lettuce, oranges, peaches & nectarines, pears, peas (green), strawberries, tangerines, mandarins & clementines, watermelons
- *Oil crops sector* -- linseed, coconut, sunflower
- *Roots & tubers sector* -- roots & tubers (yams)
- *Spices, pyrethrum, peppermint sector* -- ginger, nutmeg, mace & cardamoms, pepper (white/long/black), plants and parts of plants (pyrethrum, neem), vanilla

Information in Table 4 provides a means to 'filter' the trade opportunity scan information in Table 2 and Table 3 for their agro-ecological and agronomic potential in the region. This has been done with explanatory comments in the main report.

Nearly all the above crops in all the countries in the region where they are grown have relatively low yields, and there is good to very good agro-ecological potential to improve crop yields. However, the region has a diverse range of agricultural environments from the semi-arid to sub-humid to humid ecologies in the lowlands as well as in the highlands. Bimodal rainfall patterns and year-to-year variations in rainfall distribution add further spatial and temporal heterogeneity to regional agro-ecological conditions. In the lowland ecologies, farming systems include cereals-legumes-oilseeds-cotton crops in the moist savanna and semi-arid ecologies, and root crops with perennial tree crops in the more humid ecologies. In the highland ecologies, perennial tree crops and temperate fruits and vegetables are dominant together with temperate cereals and highland maize and sorghum.

There is room for area expansion with most crops in the region, and with Good Agricultural Practices (GAP) crop yields can be improved significantly. For example, with Conservation Agriculture (CA), energy and environmental costs can be kept to a minimum while achieving enhanced yields and factor productivities. In the case of legumes and cotton crops, integrated pest management (IPM) and integrated production and pest management (IPPM) approaches provide a solid basis for efficient production expansion, relying more on natural enemies, crop diversification, minimum tillage and judicious use of inorganic and organic fertilizers to harness greater on-farm production competitiveness.

Table 4: Southern African countries: Regional level agro-ecological potential

Product sectors	Regional level agro-ecological potential		
	Low	Medium	High
Cereals, grains, beans, peas and pulses		Barley (4) Oats (3) Rye (1) Cowpeas, dry (3) Chick peas (1) Peas, dry (2)	Maize (8) Millet (6) Rice, paddy (5) Sorghum (7) Wheat (8) Beans, dry (5)
Coffee, cocoa, tea	Cocoa beans (1)	Tea (3)	Coffee, green (3)
Cotton			Cotton (7)
Fibre crops		Jute like fibres (3) (kenaf, roselle) Sisal & other agave fibres (1)	
Fruits and vegetables	Asparagus (1) Artichokes (2) Cabbages (2) Cantaloupes & other melons(1) Carrots (1) Cauliflower (1) Cherries (1) Currants & gooseberries (1) Figs (1) Grapefruit & pomelos (3) Lemons & limes (2) Lettuce (2) Papayas (2) Tang. mand. clement. satsma (3)	Apples (2) Apricots (2) Avocados (3) Beans, green (1) Broad beans, green (1) Chillies & peppers, green (1) Cucumbers and gherkins (2) Dates (2) Garlic (1) Grapes (3) Mangoes (2) Onions & shallots (1) Oranges (5) Peaches & nectarines (2) Pears (2) Peas, green (3) Pineapples (4) Plums (3) Raspberries (2) Strawberries (2) Watermelons (2)	Bananas & plantains(5) Tomatoes (5)
Nuts	Cashew nuts (1) Almonds (1) Chestnuts (1)		
Oil crops	Oil palm (2)	Sesame seed (1)	Castor beans (2) Groundnuts in shell (7) Sunflower (6) Soybeans (3)
Roots and tubers	Roots & tubers nes (4) (yams)	Potatoes (6)	Cassava (3) Sweet potatoes (5)
Spices, pyrethrum, peppermint	Anise, badian, fennel (1) Vanilla (1)	Pepper, white/long/black (2)	Pimento, allspice (3)

In light of the above agro-ecological and agronomic comments based on the information provided in Table 4, an expanded interpretation of the trade opportunity scan results would certainly benefit from further discussions at the Kick Off Workshop. Possible response strategies could be better defined by taking into account country specific agro-ecological and farming systems conditions as well as any 'new' ecologically sound crop commodity and agronomic practice that could be harnessed by the countries of the region in response to specific export opportunity or import situation, as well as domestic and regional trade.

What are the next steps?

The Trade Opportunity Scan is one component of the ACP Programmes Baseline Information Screening for sectors of development focus, based upon quantitative data available through global databases developed by ITC and by FAO. The results are discussed in light of FAO's agro-ecological crop suitability assessment and expert agronomic knowledge, but require further validation against other expert knowledge or qualitative information. Inputs from countries will also be essential for drawing valid conclusions.

In parallel with the Trade Opportunity Scan, each country in the region has been asked to contribute to a Country Information Questionnaire that was circulated by the EC Coordinating Unit in December 2007. This questionnaire requests information on five key qualitative aspects: country/sector information, institutional factors, competitiveness factors, development factors and perceived market potential.

Countries will have the opportunity to make comments and other inputs during a Regional Kick-off Workshop that will take place between 17 and 21 June 2008 in Dar Es Salaam, Tanzania. A representative cross-section of regional stakeholders, sector and country specialists has been invited to take part. Workshop participants may use the baseline information as they work together through a series of practical exercises to determine the sectors of development focus and development priorities that may be addressed under the Programme.

Introduction

The objective of the All ACP Agricultural Commodities Programme is to strengthen stakeholders capacities to develop and implement sustainable commodity strategies to improve the incomes and livelihoods of people that rely on agricultural commodities for their livelihoods and reduce their vulnerability at both producer and macro levels. A key activity of the first phase of the All ACP Agricultural Commodities Programme is the collection of information and analyses for use by stakeholders to determine the sectors of development focus and the development priorities for those sectors under the Programme.

It was agreed at the first Programme Steering Committee to identify a small number of broad product sectors in which the key beneficiary countries are engaged and where international organizations interventions may be expected to yield the highest positive impact on farmers livelihoods, trade or value addition.

ITC, together with FAO, has developed a methodology to evaluate, on a regional basis, agricultural products for their performance in terms of production and exports, their import dependency and the world market trends.

This report gives a quantitative ranking that can be used as a preliminary indication of the product groupings having a potential of import substitution and/or export development. It provides insight for ACP country decision makers who need to select sectors that could be the focus of appropriate development strategies or other development activities.

The structure of the study is as follows

- *Chapter 1 (Methodology)* provides an explanation of the methodological approach of the Trade Opportunity Scan. It discusses the conceptual framework, the definition of the relevant indicators, and the limitations of the method. It also discusses how the underlying indicators are transformed so that they can be compared.
- *Chapter 2 (Major findings)* shows tabular representations of the results, and an indication as to how these results should be interpreted in the context of the All ACP Agricultural Commodities Programme, notably by taking into account FAO's assessment of the agroecological potential.

Finally, the *annex* provides information on the definition of the products and potential products for diversification.

1. Methodology

Conceptual framework

We aim to evaluate commodities according to four major criteria: (1) their supply capacity and efficiency in production, (2) their export performance, (3) the extent to which the region is dependent on imports, and (4) the existence of high and accessible international demand. To do so, various indicators are calculated on the basis of each of these criteria. Then we convert these indicators into indices (Box 1). Finally, the indicators are aggregated into composite indices [\(receiving the same weighting\)](#) as follows:

- *Supply capacity and production efficiency.* The production index aims measuring the production capacity and efficiency of the commodities: the capacity takes into account four dimensions: “size” (share of the region in world production), “dynamism” (production growth rate), “producer diversification” (number of significant producing countries in the region and share of the top producing country in the region), and “yield” (relative efficiency evaluated by the ratio of the regions yield to world yield).
- *Products with performing exports.* The export Index aims measuring the export performance of the regions commodities by taking into account four dimensions: “size” (the export value and its share in world exports), “dynamism” (absolute change in regions export value and the regions export growth rate to the world over the period 2001-05), “exporter diversification” (number of significant exporting countries in the region and share of the top exporting country of the region) and “trade balance” (in absolute and relative terms).
- *Reliance on imports.* The import index aims measuring the significance of imports by taking into account three dimensions: “size” (import value and its share in world imports), “dynamism” (absolute change in regions import value and regions’ import growth rate over the period 2001-05), and “importer diversification” (number of significant importing countries in the region and the share of the top one importing country of the region).
- *Products with high and accessible international demand.* The world markets index aims measuring world market trends of the products by taking into account three dimensions of the market demand: “size” (value of world imports and share of regional imports in world imports), “dynamism” (absolute change in world imports and the growth of world imports over the period 2001-05), and “market access conditions” (applied tariff to the region and the tariff differential between the region and the MFN regime).

[Some additional filters need to be taken into account for the selection of the sectors such as the socio economic impact \(especially in terms of employment creation\), the current level of technical assistance as well as the number of Southern Africa countries involved in the production.](#) Table 5 [summarizes the conceptual framework.](#)

Table 5: Underlying indicators for the composite indices

Deleted: at industry level

Composite Indices	Dimension	Indicators
Production index	Size	Share of region in world production
	Dynamism	Growth of regional production
	Production diversification	Number of producing countries in the region Share of top producing country in the region
	Yield	Ratio of regional yield to world yield
Export index	Size	Regions exports to world Share of region in world exports
	Dynamism	Growth of regions exports to world Absolute change in regions exports
	Export diversification	Number of exporting countries in the region Share of top exporting country in the region
	Trade balance	Absolute trade balance Relative trade balance
Import index	Size	Regions imports from world Share of region in world imports
	Dynamism	Growth of regional imports from the world Absolute change in regions imports
	Import diversification	Number of importing countries in the region Share of top importing country in the region
World market index	Size	World imports
	Dynamism	Growth of world imports Absolute change in world imports
	Market Access	Tariff applied to the region Preferential tariff advantage

Note: Indicators within a given index have the same weight.

Box 1. Methodology to convert indicators into indices

The method used here to convert indicators into indices transforms each indicator into a range of 0 (weak performance) and 100 (best performance). It gives 0 (100) points to products with values below (above) a certain threshold value, and points between 0 and 100 depending on the distance between these two thresholds. The *values of the thresholds* (i.e. the lower and upper limits) are defined through an analysis of the dispersion of the sectors. The 5% best performing products define the upper threshold, the 5% weakest performing products define the lower threshold. The following formula is applied:

$$100 * \frac{\text{Value} - \text{Lower limit}}{\text{Upper limit} - \text{Lower limit}}$$

7 Southern African countries

We analysed 7 Southern African countries, for which Table 6 provides some background information.

Table 6. Southern African countries

	WTO Member	LDC Status	Rank in Human development index	Population	GDP per capita (PPP US\$)	Exports (USD million)	Growth of exports (% p.a.)	Share of top 3 export products (%)	Share of top 3 export markets (%)
Angola	Yes	Yes	162	16,391,382	1,044	31,839	44	99	78
Botswana	Yes	No	124	1,757,885	4,770	3,337	22	87	88
Lesotho	Yes	Yes	138	1,788,978	564	529	10	58	98
Namibia	Yes	No	125	2,050,821	2,172	3,375	30	47	57
Swaziland	Yes	No	141	1,126,159	1,416	779	16	32	40
Zambia	Yes	Yes	165	11,862,035	365	3,770	40	75	59
Zimbabwe	Yes	No	151	13,086,316	409	2,047	6	35	47

Source: ITCs TradeMap and Trade Competitiveness Map, World Bank Development Report, United National Development Report 2005, CIA World Factbook 2007.
The data refer to 2005, growth rates to 2001-05.

78 agricultural commodities

We examined 78 agricultural commodities produced in the region. The definition of the commodities is based on a FAO nomenclature (See Annex 1).

Data sources

We used the following databases:

- Production data are from FAOSTAT (<http://faostat.fao.org>).
- Trade data come from ITCs Trade Map, which is an online database of global trade flows and market access barriers for international business development and trade promotion, providing detailed export and import profiles and trends for over 5,300 products in 200 countries and territories. It includes official data reported by countries to the UNSD (Comtrade) and, for countries that did not report trade data, is completed by mirror statistics based on partners data.
- For market access conditions, tariff data are from ITCs *Market Access Map* database. Both ITC databases are available free of charge for developing countries (see www.intracen.org/mat).

Caveats

Some limitations need to be borne in mind when interpreting the results.

- The most recent year for which internationally comparable indicators are available is 2005 and may thus not reflect the importance of recently emerging products. Trends for production and trade are backwards looking, in as far they are generally based on the period 2001 to 2005. Trade data include intra-regional trade, which outweighs trade to and from the region for a number of products, as for example, some countries may play an important role as a natural trading hub due to their geographic location.
- The reader needs to be cautious in the interpretation of indices as they provide only a basic measure of the performance of sectors. The composite indices are sensitive to the choice and weight of the underlying indicators. The resulting product rankings should thus be interpreted with caution, especially when absolute differences are small, since many indicators lack precision. The distinction whether a product is among the “top” performers is necessarily arbitrary, and we use here whether they are among the top 20 best performers or not. Any other threshold (top 15, top 25, etc) would of course have modified the overall results.
- The methodology seeks to identify potentials for the region as a whole rather than country by country. However, we also examine the performance and the competition at the country level. This information may provide a useful input to identifying products with potential that are of relevance to the key beneficiary countries.

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Table 7. Examined agricultural commodities

Cereals, grains, beans, peas and pulses	Fruits and vegetables
Barley	Apples
Beans, dry	Apricots
Chick-peas	Artichokes
Cow peas, dry	Asparagus
Maize	Avocados
Millet	Bananas, plantains
Oats	Beans
Other cereals	Broad beans, green
Other pulses	Cabbages
Peas, dry	Cantaloupes & other melons
Rice, paddy	Carrots
Sorghum	Cauliflower
Wheat	Chillies & peppers, green
Coffee, cocoa, tea	Citrus fruit nes
Cocoa beans	Cucumbers and gherkins
Coffee, green	Currants and gooseberries
Tea	Dates
Cotton	Garlic
Seed cotton	Grapefruit and pomelos
Fibre crops	Grapes
Jute and other bast fibres	Lemon and limes
Sisal and other textile fibres of agave	Lettuce
Nuts	Mangoes
Almonds	Mushrooms
Cashew nuts	Onions
Chestnuts	Oranges
Other nuts	Other fruits
Oil crops	Other vegetables
Castor beans	Papayas
Groundnuts in shell	Peaches and nectarines
Oil palm fruit	Pears and quinces
Other oil crops	Peas, green
Sesame seed	Pineapples
Soybeans	Plums
Sunflower seed	Raspberries
Spices, pyrethrum and peppermint	Strawberries
Anise, badian, fennel	Tang. mand. clement. satsma
Other spices	Tomatoes
Pepper, white/long/black	Watermelons
Pimento, allspice	Roots and tubers
Vanilla	Cassava
	Other roots and tubers
	Potatoes
	Sweet potatoes

2. Major findings

Index 1 : Production

The Production Index for the Southern Africa region aims measuring the production efficiency of the products by taking into account four dimensions of production: “size”, “dynamism”, “diversification” and “relative yield”. For illustrative purposes, only the top ten products under each index are presented. A complete list on products_production indicators is given in Table 14. As will be detailed now, the major performing products in terms of proven supply capacity and efficiency are Cassava, Other roots and tubers, Other pulses, Millet, Dry beans, Citrus fruit, Wheat, Pineapples, Other fruits, and Groundnuts in shell.

Size of production

Products in which the region has a higher share of world production relative to other products produced in the region are considered to have already proven their production capacity. The “size” index is measured as the share of the region in world production.

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The major products in terms of production size are: Cassava, Citrus fruit, Grapefruit and pomelos, Millet, and Dry beans.

Table 8. Production index: Top ten products for “size”

Top 10 products	For information: Production	Share of Southern Africa in world production	
	MT	%	Index
1. Cassava	9,746,210	5	100
1. Citrus fruit nes	78,580	1	100
1. Grapefruit and pomelos	45,300	1	100
1. Millet	275,964	1	100
5. Beans, dry	169,316	1	88
6. Other roots and tubers	435,000	1	75
7. Groundnuts in shell	262,911	1	73
8. Tea	22,750	1	66
9. Other pulses	47,600	1	63
10. Pimento, allspice	13,900	1	56

Source: FAOSTAT, see Table 14.

Notes: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Dynamism of production

We evaluate the “*dynamism*” of products by the average annual growth rate of the regions production over 5 years. Products with rapid production growth in volume terms suggest that the country is productive. Stagnant or declining growth rates indicate the opposite.

The major products in terms of dynamism are: Beans (with an average annual growth rate of 17% between 2001 and 2005), Sweet potatoes (+15%), Sweet potatoes, Green chillies&peppers, and Cassava.

Table 9. Production index: Top ten products for growth

Top 10 products	Growth of Southern Africa production	
	% p.a.	Index
1. Beans	17	100
1. Sweet potatoes	15	100
1. Potatoes	11	100
1. Chillies & peppers, green	11	100
1. Cassava	11	100
6. Avocados	10	97
7. Other nuts	8	88
8. Grapes	7	84
9. Mushrooms	6	82
10. Oats	6	81

Source: FAOSTAT, see Table 14.

Notes: All indices range from 0 (lowest) to 100 (best performance). Growth rates refer to 2001-05.

Diversification of production

The “*producer diversification*” indicates how numerous producing countries of the region are in each product. We appraise the regions production diversification index of the products by calculating a simple average of two indices: (1) the number of producing countries in the region (the higher the better) and (2) the share of the top one producing country of the region in a particular product, which is used as an indicator of production concentration (the lower the better). We assume that the more diversified production for a particular product is across the region, the more appropriate interventions to assist in sectoral development will be.

The major products in terms of producer diversification are: Other vegetables, Wheat, Sorghum, Maize, Other pulses, and Sunflower seed.

Table 10. Production index: Top ten products for “diversification”

Top 10 products	Number of producing countries in Southern Africa		Share of top producer in Southern Africa's production		Average index
	1 to 7	Index	% (top producer)	Index	
1. Other vegetables	7	100	38 (Angola)	100	100
1. Wheat	7	100	41 (Zimbabwe)	100	100
3. Sorghum	6	100	44 (Zimbabwe)	96	98
4. Maize	6	100	48 (Zimbabwe)	89	94
5. Other pulses	5	80	37 (Botswana)	100	90
5. Sunflower seed	5	80	33 (Angola)	100	90
7. Other fruits	7	100	56 (Zambia)	75	88
7. Tomatoes	5	80	44 (Zambia)	96	88
9. Groundnuts in shell	6	100	57 (Zimbabwe)	73	87
10. Millet	5	80	50 (Angola)	85	83

Source: FAOSTAT, see Table 14.

Notes: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Yield

The “yield” dimension reveals how efficient the production of commodities is. We estimate the yield index of the products by calculating the ratio of the regions yield to world yield.

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The major products in terms of yield relative to the world are: Tea, Cauliflower, Barley, Sisal and other textile fibres of agave, and Vanilla.

Table 11. Production index: Top ten products for “relative yield”

Top 10 products	Ratio of Southern Africa's yield and world yield	
	Ratio	Index
1. Tea	2.62	100
1. Cauliflower	2.05	100
1. Barley	1.35	100
1. Sisal and other textile fibres of agave	1.26	100
5. Vanilla	1.24	98
6. Plums	1.22	96
7. Wheat	1.21	95
8. Cow peas, dry	1.16	91
9. Artichokes	1.15	89
10. Oats	1.08	83

Source: FAOSTAT, see Table 14.

Notes: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Overall production index

In total, the top products in terms of production capacity and efficiency (that score high in terms of size, dynamism, production diversification and yield) are: Cassava, Other roots and tubers, Other pulses, Millet, and Dry beans.

Table 12. Production index for Southern African countries

	Rank size	Rank dynamism	Rank diversification	Rank relative yield
1. Cassava	1	1	29	15
2. Other roots and tubers	6	17	17	12
3. Other pulses	9	22	5	23
4. Millet	1	64	10	41
5. Beans, dry	5	13	14	34
6. Citrus fruit nes	1	24	35	14
7. Wheat	34	70	1	7
7. Pineapples	13	15	16	13
7. Other fruits	15	21	7	19
10. Groundnuts in shell	7	17	9	54

Source: FAOSTAT, see Table 14.

Notes: All indices range from 0 (lowest) to 100 (best performance). Products are ranked according to the Production Index. Data refer to 2005 and growth rates to 2001-05.

Do the producing countries export only, import only, both export and import, or do not trade at all?

Table 13 shows which Southern African countries trade the top five commodities in terms of the Production Index. It distinguishes between countries that both export and import the commodities, those that only export them or only import them, and the producers that do not trade at all. Annex Table 38 shows the results for all products.

- For example, one of the seven dry beans producers in Southern Africa export the commodity: Swaziland (which is ranked 105th among all countries in the world in terms of the Production Index for countries, see Annex Table 37). Zimbabwe exports and imports dry beans. In addition, three non-producing countries (marked with *) also engage in trade: Botswana and Namibia imported cocoa beans in 2005.

Table 13. Top five commodities in terms of the Production Index: Do the producing countries export only, import only, both export and import, or do not trade at all?

Products (rank in region's production index)	Producers that do not trade	Producers (and non-producers*) that import only	Producers (and non-producers*) that export only	Producers (and non-producers*) that export and import
<i>(The number in parentheses is the countries' world rank in the Production Index)</i>				
Cassava (1)	Zambia (71) Zimbabwe (80)	Angola (4)		
Other roots and tubers (2)	Namibia (30) Botswana (53) Swaziland (66) Zimbabwe (88)	Zambia *		
Other pulses (3)	Namibia (49) Swaziland (67) Botswana (78)	Zimbabwe (99) Angola *		Zambia (78)
Millet (4)	Zambia (59) Namibia (68) Zimbabwe (68) Botswana (71)	Angola (67)		
Beans, dry (5)	Lesotho (85)	Angola (69) Botswana * Namibia *	Swaziland (105)	Zimbabwe (69) Zambia *

* Countries that do *not* produce.

Source: ITCs TradeMap and Market Access Map, FAOSTAT.

Table 14. Production index for Southern African countries and underlying indicators

Rank in production index and product labels	Size			Dynamism		Diversification			Yield		Production index	
	For information: Production	Share of Southern Africa in world production		Growth of Southern Africa's production		Number of producing countries in Southern Africa		Share of top producer in Southern Africa's production		Ratio of Southern Africa's yield and world yield		
		MT	%	Index	% p.a.	Index	1 to 7	Index	Index	Index		Ratio	Index
1. Cassava	9,746,210	5	100	11	100	3	40	88 (Angola)	20	30	0.94	70
2. Other roots and tubers	435,000	1	75	2	62	4	60	68 (Namibia)	55	57	1.02	78
3. Other pulses	47,600	1	63	0	56	5	80	37 (Botswana)	100	90	0.76	53
4. Millet	275,964	1	100	-2	49	5	80	50 (Angola)	85	83	0.49	29
5. Beans, dry	169,316	1	88	3	70	4	60	64 (Angola)	62	61	0.54	34
6. Citrus fruit nes	78,580	1	100	0	55	3	40	99 (Angola)	1	21	0.95	71
7. Wheat	338,850	0	5	-3	44	7	100	41 (Zimbabwe)	100	100	1.21	95
7. Pineapples	72,120	0	45	3	66	3	40	56 (Angola)	76	58	1.00	75
7. Other fruits	173,350	0	39	0	57	7	100	56 (Zambia)	75	88	0.84	61
10. Groundnuts in shell	262,911	1	73	2	62	6	100	57 (Zimbabwe)	73	87	0.32	13
11. Tea	22,750	1	66	0	54	2	20	97 (Zimbabwe)	6	13	2.62	100
12. Grapefruit and pomelos	45,300	1	100	0	55	2	20	82 (Swaziland)	31	26	0.65	44
13. Other vegetables	651,300	0	22	0	56	7	100	38 (Angola)	100	100	0.65	44
14. Sweet potatoes	716,451	1	55	15	100	4	60	92 (Zimbabwe)	14	37	0.32	13
15. Sorghum	183,600	0	31	-2	49	6	100	44 (Zimbabwe)	96	98	0.42	22
16. Bananas, plantains	386,200	0	36	0	55	4	60	78 (Angola)	38	49	0.73	50
17. Pepper, white/long/black	1,785	0	43	3	70	2	20	97 (Zimbabwe)	6	13	0.87	64
17. Avocados	1,450	0	4	10	97	2	20	76 (Zimbabwe)	41	31	0.77	54
19. Barley	27,400	0	2	0	55	3	40	91 (Zimbabwe)	15	27	1.35	100
19. Artichokes	570	0	5	0	54	2	20	70 (Zambia)	51	35	1.15	89
21. Seed cotton	351,100	1	52	-4	37	6	100	76 (Zimbabwe)	42	71	0.41	21
21. Potatoes	449,296	0	14	11	100	5	80	68 (Angola)	54	67	0.19	1
23. Pimento, allspice	13,900	1	56	1	60	2	20	94 (Zimbabwe)	11	16	0.67	45
24. Maize	1,883,275	0	36	-3	41	6	100	48 (Zimbabwe)	89	94	0.14	0
25. Sisal and other textile fibres of agave	500	0	13	0	55	1	0	100 (Angola)	0	0	1.26	100
25. Vanilla	10	0	13	0	55	1	0	100 (Zimbabwe)	0	0	1.24	98
27. Oats	700	0	0	6	81	1	0	100 (Zimbabwe)	0	0	1.08	83
28. Cauliflower	300	0	0	0	55	1	0	100 (Zimbabwe)	0	0	2.05	100
28. Grapes	11,250	0	2	7	84	3	40	76 (Namibia)	42	41	0.52	31
30. Other nuts	1,350	0	8	8	88	1	0	100 (Zimbabwe)	0	0	0.78	56
30. Other spices	3,900	0	20	5	77	2	20	82 (Zambia)	31	25	0.52	31
30. Tomatoes	56,900	0	4	0	54	5	80	44 (Zambia)	96	88	0.24	5
33. Cow peas, dry	700	0	2	0	55	1	0	100 (Swaziland)	0	0	1.16	91
33. Oranges	133,100	0	22	1	58	4	60	70 (Zimbabwe)	51	56	0.33	14
33. Rice, paddy	21,420	0	0	5	75	4	60	56 (Zambia)	75	67	0.23	5
36. Oil palm fruit	280,000	0	16	0	55	1	0	100 (Angola)	0	0	0.88	65

Rank in production index and product labels	Size		Dynamism		Diversification			Yield		Production index			
	For information: Production	Share of Southern Africa in world production	Growth of Southern Africa's production	Number of producing countries in Southern Africa	Share of top producer in Southern Africa's production	Average index	Ratio of Southern Africa's yield and world yield						
							%	Index	% p.a.		Index	Index	Ratio	Index
36. Beans	1,500	0	2	17	100	1	0	100 (Zimbabwe)	0	0	..	..	34
38. Chillies & peppers, green	600	0	0	11	100	1	0	100 (Zimbabwe)	0	0	..	..	33
39. Plums	1,000	0	1	-16	0	2	20	80 (Swaziland)	34	27	1.22	96	31
39. Mangoes	1,112	0	0	0	55	2	20	90 (Zimbabwe)	17	19	0.72	50	31
39. Cantaloupes & other melons	730	0	0	0	55	2	20	69 (Namibia)	54	37	0.5	30	31
39. Sunflower seed	33,048	0	11	-13	0	5	80	33 (Angola)	100	90	0.43	23	31
39. Jute and other bast fibres	2,500	0	8	0	55	2	20	60 (Zimbabwe)	68	44	0.38	19	31
39. Coffee, green	15,350	0	20	-2	47	3	40	65 (Zimbabwe)	59	50	0.28	9	31
39. Onions	42,800	0	7	0	54	4	60	63 (Zambia)	63	61	0.16	0	31
46. Chick-peas	250	0	0	0	55	1	0	100 (Zimbabwe)	0	0	0.87	64	30
46. Apples	7,000	0	1	2	63	1	0	100 (Zimbabwe)	0	0	0.77	54	30
48. Mushrooms	320	0	1	6	82	1	0	100 (Zimbabwe)	0	0	..	..	28
49. Anise, badian, fennel	100	0	2	0	55	1	0	100 (Zimbabwe)	0	0	0.75	52	27
50. Tang, mand. clement. satsuma	9,650	0	4	0	55	2	20	98 (Zimbabwe)	3	11	0.52	32	26
51. Sesame seed	1,700	0	5	0	55	1	0	100 (Angola)	0	0	0.6	39	25
51. Other cereals	2,600	0	1	-7	25	2	20	62 (Botswana)	66	43	0.51	30	25
51. Lemon and limes	12,000	0	12	-1	49	2	20	96 (Zimbabwe)	7	14	0.46	26	25
54. Asparagus	190	0	0	0	55	1	0	100 (Zimbabwe)	0	0	0.62	41	24
54. Other oil crops	10,000	0	27	0	55	1	0	100 (Zimbabwe)	0	0	0.34	15	24
56. Cucumbers and gherkins	400	0	0	-1	53	1	0	100 (Zimbabwe)	0	0	0.59	38	23
56. Cashew nuts	1,100	0	5	0	55	1	0	100 (Angola)	0	0	0.52	31	23
58. Castor beans	3,500	0	25	0	55	1	0	100 (Angola)	0	0	0.26	8	22
59. Almonds	480	0	3	-27	0	1	0	100 (Swaziland)	0	0	1.07	82	21
60. Watermelons	1,500	0	0	0	55	1	0	100 (Namibia)	0	0	0.45	25	20
60. Peas, green	5,000	0	5	0	55	1	0	100 (Zimbabwe)	0	0	..	..	20
62. Cabbages	240	0	0	-1	51	1	0	100 (Zimbabwe)	0	0	0.46	26	19
62. Peas, dry	3,400	0	3	-2	47	1	0	100 (Lesotho)	0	0	0.45	25	19
62. Peaches and nectarines	800	0	0	0	55	1	0	100 (Zimbabwe)	0	0	0.38	19	19
62. Currants and gooseberries	290	0	3	0	55	1	0	100 (Zimbabwe)	0	0	..	..	19
62. Chestnuts	40	0	0	0	55	1	0	100 (Zimbabwe)	0	0	..	..	19
67. Garlic	140	0	0	0	55	1	0	100 (Zimbabwe)	0	0	..	..	18
67. Carrots	115	0	0	0	55	1	0	100 (Zimbabwe)	0	0	..	..	18
69. Lettuce	180	0	0	0	55	1	0	100 (Zimbabwe)	0	0	0.33	13	17
69. Raspberries	80	0	2	0	55	1	0	100 (Zimbabwe)	0	0	0.31	12	17
69. Apricots	40	0	0	0	55	1	0	100 (Zimbabwe)	0	0	0.31	12	17
69. Broad beans, green	400	0	4	-2	48	1	0	100 (Zimbabwe)	0	0	..	..	17
73. Soybeans	99,000	0	5	-14	0	2	20	85 (Zimbabwe)	26	23	0.57	36	16

Rank in production index and product labels	Size		Dynamism		Diversification			Yield		Production index		
	For information: Production MT	Share of Southern Africa in world production	Growth of Southern Africa's production	Number of producing countries in Southern Africa	Share of top producer in Southern Africa's production	Average index	Ratio of Southern Africa's yield and world yield					
		%					Index	% p.a.	Index		1 to 7	Index
73. Dates	700	0	1	3	2	20	71 (Namibia)	49	34	0.46	26	16
75. Strawberries	200	0	0	-1	1	0	100 (Zimbabwe)	0	0	0.27	9	15
75. Papayas	30	0	0	0	1	0	100 (Zimbabwe)	0	0	0.25	6	15
77. Pears and quinces	270	0	0	0	1	0	100 (Zimbabwe)	0	0	0.18	0	14
77. Cocoa beans	200	0	0	0	1	0	100 (Angola)	0	0	0.16	0	14

Source: FAOSTAT.

Notes: All indices range from 0 (lowest) to 100 (best performance). Products are ranked according to the Production Index. Data refer to 2005 and growth rates to 2001-05.

Index 2 : Export

The Export Performance Index for the Southern Africa region aims measuring the export performance of the regions products by taking into account four dimensions: size, dynamism, exporter diversification, and trade balance. As will be detailed now, the major products in terms of proven export performance are Seed cotton, Green coffee, Grapes, Grapefruit and pomelos, Oranges, Other vegetables, Maize, Green peas, Tea and Mushrooms.

Size of exports

The “size” dimension indicates the magnitude of the respective product exports in absolute and relative terms. We measure *the size* index of the products by calculating a simple average of two indices: (1) the value of Southern Africa’s exports to the world and (2) the share of Southern Africa in world exports. Products, which register already high export values and in which Southern Africa manages to capture a high world market share are considered to have already proven their export capacity and to thus have a high potential for future exports.

The major products in terms of export size are: Seed cotton, Grapefruit and pomelos, Oranges, Grapes, and Green peas.

Table 15. Export index: Top ten products for “size”

Top 10 products	Southern Africa exports to world		Share of Southern Africa in world exports		Average Index
	USD 1,000	Index	%	Index	
1. Seed cotton	210,974	100	2	100	100
2. Grapefruit and pomelos	15,322	52	2	100	76
3. Oranges	29,478	100	1	49	74
4. Grapes	34,945	100	1	40	70
5. Peas, green	6,693	23	3	100	61
6. Coffee, green	22,015	75	0	10	43
7. Maize	20,897	71	0	9	40
8. Tea	14,743	50	0	20	35
9. Pimento, allspice	5,689	19	1	44	32
10. Beans	4,770	16	1	41	29

Source: ITCs TradeMap and Market Access Map, see Table 20.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005. The trade balance excludes intra-Southern Africa trade.

Dynamism of exports

The “*dynamism*” dimension shows how dynamic the products are. We evaluate the dynamism index of the products by calculating a simple average of two indices: (1) the absolute change in regions export value over the period 2001-05 and (2) the regions export growth rate to the world. Products with rapid export growth in value terms suggest that the country is competitive in the world markets. Stagnant or declining growth rates indicate the opposite. Everything else being equal, products which record fast growing exports over the last period are likely to experience the same trend if there is no major change in the world markets such as new competitors, new products, new technologies or fall in demand.

The major products in terms of export dynamism are Grapes, Maize, Seed cotton, Wheat, and Soybeans.

Table 16. Export index: Top ten products for “dynamism”

Top 10 products	Growth of Southern Africa exports to world		Absolute change in Southern Africa exports		Average Index
	% p.a	Index	USD 1,000	Index	
1. Grapes	51	100	28,178	100	100
1. Maize	62	100	14,660	100	100
3. Seed cotton	7	49	50,774	100	74
4. Wheat	123	100	5,772	45	72
5. Soybeans*	High	100	840	14	57
6. Citrus fruit nes*	High	100	73	9	55
6. Dates	166	100	245	10	55
6. Chick-peas*	High	100	125	10	55
6. Cucumbers and gherkins*	High	100	41	9	55
6. Other pulses*	High	100	16	9	55

Source: ITCs TradeMap and Market Access Map, see Table 20.

Note: All indices range from 0 (lowest) to 100 (best performance). Growth rates and absolute changes refer to 2001-05. The trade balance excludes intra-Southern Africa trade. Products marked with * were not exported in 2001, thus growth rates between 2001 and 2005 are infinite; consequently, they [get 100 points](#).

Diversification of exports

The “*exporter diversification*” points out how numerous exporting countries of the region are in each product. We appraise the regions exporter diversification index of the products by calculating a simple average of two indices: (1) the number of significant exporting countries in the region (the higher the better) and (2) the share of the top exporting country of the region in a particular product, which is used as an indicator of export concentration (the lower the better). We assume that the more diversified the region is across its countries, the better it is.

The main products in terms of exporter diversification are Green coffee, Seed cotton, Apples, Soybeans, and Mushrooms.

Table 17. Export index: Top ten products for diversification

Top 10 products	Number of exporting countries		Share of top exporter in Southern Africa exports		Average Index
	1 to 7	Index	% (top exporter)	Index	
1. Coffee, green	4	100	60 (Zambia)	88	94
2. Seed cotton	5	100	68 (Zimbabwe)	70	85
3. Apples	3	67	42 (Namibia)	100	83
4. Soybeans	3	67	56 (Swaziland)	97	82
5. Mushrooms	3	67	56 (Zimbabwe)	96	81
6. Chillies & peppers, green	3	67	64 (Zimbabwe)	79	73
7. Other vegetables	4	100	80 (Zambia)	44	72
7. Beans, dry	3	67	64 (Zambia)	78	72
9. Maize	4	100	82 (Zambia)	40	70
10. Avocados	2	33	54 (Zimbabwe)	100	67
10. Peas, dry	3	67	69 (Swaziland)	68	67
10. Potatoes	2	33	54 (Zimbabwe)	100	67

Source: ITCs TradeMap and Market Access Map, see Table 20.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005. The trade balance excludes intra-Southern Africa trade.

Trade balance

The “*trade balance*” reveals if the products prove to be net exporters or net importers. We measure the trade surplus index of the products by calculating a simple average of two indices: (1) the net trade balance, which is equal to exports minus imports, and (2) the relative trade balance, which is the ratio between the net exports (exports minus imports) and the total trade (exports plus imports). This reduces bias against large

products, which tend to have either higher deficits or surpluses. Both exclude intra-regional trade. They show whether a country is a net exporter or a net importer in absolute and relative terms respectively. In other words, they reveal whether the national production outweighs the national consumption or not. This index shows how the region performs *on average* in the world. It allows us to rank products according to their respective export performance index.

The main products in terms of trade balance are Seed cotton, Oranges, Grapes, Green coffee, and Grapefruit and pomelos.

Table 18. Export index: Top ten products for trade balance

Top 10 products	Absolute trade balance		Relative trade balance		Average Index
	USD 1,000	Index	%	Index	
1. Seed cotton	200,754	100	97	99	99
1. Oranges	26,753	100	95	97	99
1. Grapes	33,981	100	95	97	99
4. Coffee, green	20,312	84	86	93	88
5. Grapefruit and pomelos	15,282	71	100	100	85
6. Other vegetables	8,607	54	89	94	74
6. Peas, green	6,611	49	98	99	74
8. Tea	11,222	61	66	83	72
8. Pimento, allspice	5,598	46	97	98	72
8. Beans	4,730	44	98	99	72

Source: ITCs TradeMap and Market Access Map, see Table 20.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005 and growth rates to 2001-05. The trade balance excludes intra-Southern Africa trade.

Overall Export index

The top products in terms of Southern Africa export performance are Seed cotton, Green coffee, Grapes, Grapefruit and pomelos, and Oranges.

Table 19. Export index for Southern African countries

	Rank size	Rank dynamism	Rank diversification	Rank trade balance
1. Seed cotton	1	3	2	1
2. Coffee, green	6	17	1	4
3. Grapes	4	1	22	1
4. Grapefruit and pomelos	2	23	14	5
5. Oranges	3	39	17	1
6. Other vegetables	11	20	7	6
6. Maize	7	1	9	49
8. Peas, green	5	24	21	6
9. Tea	8	37	15	8
9. Mushrooms	23	19	5	21

Source: ITCs TradeMap and Market Access Map, see Table 20.

Table 20. Export index for Southern African countries and underlying indicators

Products	Size			Dynamism			Diversification			Trade balance			Export index								
	Southern Africa exports to world		Index	Share of Southern African world exports		Average Index	Growth of Southern Africa exports to world		Absolute change in Southern Africa exports	Number of exporting countries		Share of top exporter in Southern Africa exports		Average Index							
	USD 1,000	Index		%	%		Index	%		p.a	Index			USD 1,000	Index	1 to 7	%	(top exporter)	Index		
			USD 1,000			Index			USD 1,000			Index								USD 1,000	Index
1. Seed cotton	210,974	100	2	100	100	7	49	50,774	100	74	5	100	68 (Zimbabwe)	70	85	200,754	100	97	99	99	90
2. Coffee, green	22,015	75	0	10	43	11	52	7,286	54	53	4	100	60 (Zambia)	88	94	20,312	84	86	93	88	70
3. Grapes	34,945	100	1	40	70	51	100	28,178	100	100	1	0	100 (Namibia)	0	0	33,981	100	95	97	99	67
4. Grapefruit and pomeles	15,322	52	2	100	76	5	46	2,827	26	36	2	33	63 (Swaziland)	82	57	15,282	71	100	100	85	64
5. Oranges	29,478	100	1	49	74	-5	34	-6,024	0	17	2	33	80 (Zimbabwe)	44	39	26,753	100	95	97	99	57
6. Other vegetables	9,158	31	0	17	24	10	52	3,001	28	40	4	100	80 (Zambia)	44	72	8,607	54	89	94	74	53
6. Maize	20,897	71	0	9	40	62	100	14,660	100	100	4	100	82 (Zambia)	40	70	-155,747	0	-87	7	3	53
8. Peas, green	6,693	23	3	100	61	7	48	1,567	19	33	2	33	100 (Zimbabwe)	1	17	6,611	49	98	99	74	46
9. Tea	14,743	50	0	20	35	-2	37	-1,436	0	18	5	100	94 (Zimbabwe)	12	56	11,222	61	66	83	72	45
9. Mushrooms	534	2	0	2	2	27	72	326	11	41	3	67	56 (Zimbabwe)	96	81	386	33	57	78	56	45
11. Chillies & peppers, green	1,311	4	0	2	3	21	65	695	13	39	3	67	64 (Zimbabwe)	79	73	971	35	59	79	57	43
12. Soybeans	2,032	7	0	1	4	100	100	840	14	57	3	67	56 (Swaziland)	97	82	-2,215	27	-48	26	26	42
13. Avocados	625	2	0	3	3	9	51	187	10	31	2	33	54 (Zimbabwe)	100	67	612	34	96	98	66	41
14. Lemon and limes	825	3	0	3	3	13	56	325	11	33	2	33	60 (Zimbabwe)	88	61	425	33	35	67	50	37
15. Pimento, allspice	5,689	19	1	44	32	-6	32	-1,673	0	16	2	33	96 (Zimbabwe)	8	21	5,598	46	97	98	72	35
16. Beans	4,770	16	1	41	29	3	44	591	13	28	1	0	100 (Zimbabwe)	0	0	4,730	44	98	99	72	32
17. Citrus fruit nes	73	0	0	8	4	100	100	73	9	55	1	0	100 (Zimbabwe)	0	0	64	32	78	89	61	30
17. Tang, mand. clement.	644	2	0	1	2	-9	28	-314	7	18	2	33	67 (Zimbabwe)	72	53	197	33	24	62	47	30
19. Dates	250	1	0	3	2	166	100	245	10	55	1	0	100 (Namibia)	0	0	210	33	72	86	59	29
19. Other nuts	1,726	6	0	11	9	36	84	1,227	17	50	1	0	100 (Zimbabwe)	0	0	1,319	36	62	81	58	29
19. Apples	76	0	0	0	0	3	43	7	9	26	3	67	42 (Namibia)	100	83	-6,530	16	-98	1	8	29
19. Wheat	6,017	20	0	2	11	123	100	5,772	45	72	2	33	92 (Swaziland)	17	25	-24,428	0	-69	16	8	29
23. Beans, dry	351	1	0	2	1	11	53	114	10	31	3	67	64 (Zambia)	78	72	-10,127	6	-97	1	4	27
24. Cucumbers and gherkins	41	0	0	0	0	100	100	41	9	55	1	0	100 (Zambia)	0	0	17	32	26	63	48	26
24. Peas, dry	750	3	0	4	3	-13	24	-179	8	16	3	67	69 (Swaziland)	68	67	-4,390	21	-80	10	16	26
26. Other oil crops	731	2	0	19	11	2	42	41	9	26	1	0	100 (Zimbabwe)	0	0	689	34	89	95	64	25
27. Other pulses	16	0	0	0	0	100	100	16	9	55	1	0	100 (Zambia)	0	0	0	32	0	50	41	24
27. Sorghum	12	0	0	0	0	100	100	12	9	54	1	0	100 (Botswana)	0	0	0	32	0	50	41	24
29. Papayas	44	0	0	1	1	3	43	5	9	26	1	0	100 (Zimbabwe)	0	0	44	32	100	100	66	23
30. Cocoa beans	18	0	0	0	0						1	0	100 (Namibia)	0	0	18	32	100	100	66	22
30. Other fruits	1,823	6	0	10	8	-11	26	-1,113	2	14	1	0	100 (Zimbabwe)	0	0	1,669	36	84	92	64	22
32. Other cereals	271	1	0	8	4	21	65	143	10	37	1	0	100 (Zimbabwe)	0	0	0	32	0	50	41	21
33. Chick-peas	125	0	0	1	1	100	100	125	10	55	1	0	100 (Zambia)	0	0	-588	31	-70	15	23	20

Products	Size				Dynamism				Diversification				Trade balance				Export index				
	Southern Africa exports to world		Share of Southern African world exports		Growth of Southern Africa exports to world		Absolute change in Southern Africa exports		Number of exporting countries		Share of top exporter in Southern Africa exports		Absolute		Relative			Average Index			
	Index	%	Index	%	% p.a	Index	USD 1,000	Index	1 to 7	% (top exporter)	Index	USD 1,000	Index	%	Index						
	USD 1,000																				
34. Currants & gooseberries	7	0	0	1	0	-32	2	-25	9	5	1	0	100 (Zimbabwe)	0	0	7	32	100	66	18	
34. Onions	74	0	0	0	0	13	55	28	9	32	1	0	100 (Zimbabwe)	0	0	0	32	0	50	41	18
34. Tomatoes	12	0	0	0	0	100	12	9	54	54	1	0	100 (Namibia)	0	0	-172	32	-88	6	19	18
34. Groundnuts in shell	13	0	0	0	0	60	100	11	9	54	1	0	100 (Zambia)	0	0	-190	32	-88	6	19	18
34. Lettuce	10	0	0	0	0	100	10	9	54	54	1	0	100 (Swaziland)	0	0	-121	32	-86	7	19	18
34. Cauliflower	3	0	0	0	0	100	3	9	54	54	1	0	100 (Zimbabwe)	0	0	-55	32	-90	5	18	18
34. Pineapples	1	0	0	0	0	100	1	9	54	54	1	0	100 (Zimbabwe)	0	0	-48	32	-96	2	17	18
34. Potatoes	72	0	0	0	0	-44	0	-675	5	2	2	33	54 (Zimbabwe)	100	67	-9,114	9	-99	0	5	18
42. Plums	128	0	0	1	1	2	42	11	9	26	1	0	100 (Zimbabwe)	0	0	-32	32	-11	44	38	16
43. Pepper, white/long/black	202	1	0	2	1	-31	2	-712	4	3	2	33	95 (Zimbabwe)	12	23	-221	32	-36	32	32	15
44. Garlic	195	1	0	1	1	11	53	68	9	31	1	0	100 (Zimbabwe)	0	0	-1,035	30	-73	14	22	13
45. Peaches and nectarines	70	0	0	0	0	-13	24	-55	9	16	1	0	100 (Zimbabwe)	0	0	-190	32	-58	21	26	11
46. Mangoes	40	0	0	0	0	-9	29	-19	9	19	1	0	100 (Zimbabwe)	0	0	-164	32	-76	12	22	10
47. Other spices	112	0	0	1	1	-5	34	-26	9	21	1	0	100 (Zimbabwe)	0	0	-1,325	29	-100	0	15	9
48. Bananas, plantains	240	1	0	0	0	-29	4	-731	4	4	1	0	100 (Zimbabwe)	0	0	-168	32	-54	23	27	8
49. Broad beans, green	4	0	0	0	0	-37	0	-22	9	4	1	0	100 (Zimbabwe)	0	0	-109	32	-93	3	18	6
50. Cow peas, dry	30	0	0	0	0	-43	0	-245	7	4	1	0	100 (Zimbabwe)	0	0	-12,688	0	-100	0	0	1

Source: ITCs TradeMap and Market Access Map.
Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005 and growth rates to 2001-05. The trade balance excludes intra-Southern Africa trade. Products marked with * were not exported in 2001, thus growth rates between 2001 and 2005 are infinite; consequently, they get 100 points.

Index 3: Import

The Import Index for the Southern Africa region aims measuring the current regional reliance on imports of the products by taking into account three dimensions of the import: size, dynamism, and diversification. As will be detailed now, the major products in terms of high regional demand for imports are Maize, Sorghum, Oil palm fruit, Dry cow peas, Dry beans, Dry peas, Seed cotton, Wheat, Soybeans, and Potatoes.

Size of imports

We measure the “size” index of the products by the share of the region in world imports. The main products in terms of import size are Maize, Dry cow peas, Dry beans, Sorghum, and Oil palm fruit.

Table 21. Import index: Top ten products for “size”

Top 10 products	Southern Africa imports from world		Share of Southern Africa in world imports		Average Index
	USD 1,000	Index	%	Index	
1. Maize	176,644	100	1	100	100
1. Cow peas, dry	12,718	100	4	100	100
3. Beans, dry	10,478	82	1	100	91
4. Sorghum	7,796	61	1	100	81
5. Oil palm fruit	44,999	100	0	42	71
6. Potatoes	9,186	72	0	43	58
7. Wheat	30,445	100	0	14	57
8. Peas, dry	5,140	40	1	57	49
9. Seed cotton	10,220	80	0	10	45
10. Onions	4,966	39	0	31	35

Source: ITCs TradeMap and Market Access Map, see Table 25.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Dynamism of imports

The “dynamism” dimension shows how dynamic the regional market is. We evaluate the dynamism index of the products by calculating the regions import growth rate. The major products in terms of import dynamism are Maize, Sorghum, Oil palm fruit, Dry peas, and Soybeans.

Table 22. Import index: Top ten products for “dynamism”

Top 10 products	Growth of Southern Africa imports from world		Absolute change in Southern Africa imports		Average Index
	% p.a	Index	USD 1,000	Index	
1. Maize	125	100	169,006	100	100
1. Sorghum	179	100	7,668	100	100
3. Oil palm fruit	45	94	34,874	100	97
4. Peas, dry	80	100	4,653	61	81
5. Soybeans	172	100	4,169	55	78
6. Wheat	18	55	14,647	100	77
7. Cow peas, dry	20	58	6,580	86	72
7. Seed cotton	29	70	5,706	75	72
9. Beans, dry	20	57	5,308	70	63
10. Potatoes	17	54	4,359	58	56

Source: ITCs TradeMap and Market Access Map, see Table 25.

Note: All indices range from 0 (lowest) to 100 (best performance). Growth rates refer and absolute changes to 2001-05. Products marked with * were not imported in 2001, thus growth rates between 2001 and 2005 are infinite.

Diversification of imports

The “*importer diversification*” indicates how numerous producing countries of the region are in each commodity. We appraise *the regions production diversification* index of the products by calculating a simple average of two indices: (1) the number of significant producing countries in the region (the higher the better) and (2) the share of the top one producing country of the region in a particular product, which is used as an indicator of production concentration (the lower the better). We assume that the more diversified the region is across its countries, the more appropriate will be interventions under the Programme.

The major products in terms of importer diversification are Dry peas, Tea, Seed cotton, Sorghum, and Other vegetables.

Table 23. Import index: Top ten products for “diversification”

Top 10 products	Number of importing countries in Southern Africa		Share of top importer in Southern Africa exports		Average Index
	1 to 7	Index	% (top importer)	Index	
1. Peas, dry	6	100	65 (Angola)	69	85
2. Tea	4	60	46 (Angola)	100	80
3. Seed cotton	6	100	71 (Zambia)	59	79
4. Sorghum	4	60	52 (Zambia)	95	78
5. Other vegetables	4	60	58 (Angola)	85	73
6. Oil palm fruit	4	60	60 (Angola)	81	71
7. Soybeans	3	40	50 (Zimbabwe)	100	70
7. Pineapples	3	40	49 (Zimbabwe)	100	70
7. Other spices	4	60	60 (Zambia)	80	70
7. Other fruits	3	40	50 (Swaziland)	100	70

Source: ITCs TradeMap and Market Access Map, see Table 25.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Overall Import index

The top products in terms of Southern Africa import index are Maize, Sorghum, Oil palm fruit, Dry cow peas, and Dry beans.

Table 24. Import index for Southern African countries

	Rank size	Rank growth	Rank diversification
1. Maize	1	1	15
2. Sorghum	4	1	4
3. Oil palm fruit	5	3	6
4. Cow peas, dry	1	7	11
5. Beans, dry	3	9	13
6. Peas, dry	8	4	1
7. Seed cotton	9	7	3
8. Wheat	7	6	23
9. Soybeans	14	5	7
10. Potatoes	6	10	39

Source: ITCs TradeMap and Market Access Map, see Table 25.

Table 25. Import index for Southern African countries and underlying indicators

Products	Size			Dynamism			Diversification			Average Index	Import Index		
	Southern Africa imports from world		Share of Southern Africa in world imports (%)	Growth of Southern Africa imports		Absolute change in Southern Africa imports	Number of importing countries in Southern Africa		Share of top Southern Africa importer				
	USD 1,000	Index	%	% p.a	Index	USD 1,000	Index	Index	% (top importer)			Index	
1. Maize	176,644	100	1	125	100	169,006	100	6	100	88 (Zimbabwe)	25	62	87
2. Sorghum	7,796	61	1	179	100	7,668	100	4	60	52 (Zambia)	95	78	86
3. Oil palm fruit	44,999	100	0	45	94	34,874	100	4	60	60 (Angola)	81	71	80
4. Cow peas, dry	12,718	100	4	20	58	6,580	86	6	100	83 (Angola)	33	67	79
5. Beans, dry	10,478	82	1	20	57	5,308	70	5	80	75 (Angola)	49	65	73
6. Peas, dry	5,140	40	1	80	100	4,853	61	6	100	65 (Angola)	69	85	71
7. Seed cotton	10,220	80	0	29	70	5,706	75	6	100	71 (Zambia)	59	79	66
8. Wheat	30,445	100	0	18	55	14,647	100	4	60	75 (Zambia)	51	55	63
9. Soybeans	4,247	33	0	172	100	4,169	55	3	40	50 (Zimbabwe)	100	70	55
10. Potatoes	9,186	72	0	17	54	4,359	58	3	40	88 (Angola)	24	32	49
11. Apples	6,606	52	0	13	48	2,562	35	3	40	59 (Angola)	82	61	45
12. Tea	3,521	28	0	12	47	1,005	15	4	60	46 (Angola)	100	80	43
13. Onions	4,966	39	0	23	62	2,800	38	3	40	82 (Angola)	36	38	41
14. Groundnuts in shell	203	2	0	11	100	203	4	3	40	65 (Zimbabwe)	71	56	38
15. Other spices	1,437	11	0	9	42	420	7	4	60	60 (Zambia)	80	70	37
16. Pineapples	49	0	0	27	67	30	2	3	40	49 (Zimbabwe)	100	70	35
17. Plums	160	1	0	46	95	125	3	3	40	68 (Angola)	64	52	34
17. Sisal & other textile fibres of agave	29	0	0	95	100	27	2	2	20	62 (Zambia)	76	48	34
19. Chick-peas	713	6	0	29	71	457	8	2	20	59 (Angola)	82	51	33
20. Other vegetables	551	4	0	7	39	101	3	4	60	58 (Angola)	85	73	32
20. Grapes	964	7	0	21	58	507	8	3	40	61 (Angola)	77	59	32
22. Cantaloupes & other melons	65	0	0	27	68	40	2	2	20	54 (Angola)	92	56	31
23. Grapefruit and pomelos	40	0	0	24	63	23	2	2	20	53 (Zambia)	95	58	30
23. Oranges	2,725	21	0	22	60	1,471	21	2	20	75 (Zambia)	50	35	30
25. Peaches and nectarines	260	2	0	15	50	109	3	3	40	62 (Angola)	76	58	29
26. Pepper, white/long/black	423	3	0	11	45	66	3	3	40	65 (Zimbabwe)	70	55	28
26. Millet	499	4	1	59	100	499	8	1	0	100 (Angola)	0	0	28
28. Dates	40	0	0	5	36	7	2	3	40	58 (Angola)	85	63	27
28. Oats	68	0	0	14	49	28	2	3	40	66 (Zimbabwe)	68	54	27
28. Rice, paddy	156	1	0	28	68	97	3	3	40	76 (Zambia)	48	44	27
31. Pears and quinces	887	7	0	15	51	388	7	3	40	77 (Angola)	47	43	26
31. Cauliflower	58	0	0	42	89	34	2	2	20	78 (Angola)	45	32	26
31. Mangoes	204	2	0	69	100	179	4	2	20	87 (Angola)	27	23	26
34. Other fruits	154	1	0	-17	6	-165	0	3	40	50 (Swaziland)	100	70	25
34. Coffee, green	1,703	13	0	2	33	74	3	5	80	91 (Swaziland)	18	49	25

Products	Southern Africa imports from world			Size		Dynamism			Diversification			Import Index				
	USD 1,000	Index	Index	Share of Southern Africa in world imports (%)		Growth of Southern Africa imports		Absolute change in Southern Africa imports		Number of importing countries in Southern Africa			Average Index			
				%	Index	% p.a	Index	USD 1,000	Index	1 to 7	Index			% (top importer)	Index	
36. Bananas, plantains	408	3	0	0	2	-17	6	-449	0	3	40	54 (Zimbabwe)	92	66	24	
36. Pimento, allspice	91	1	0	1	1	-3	25	-6	2	13	3	40	64 (Zimbabwe)	73	56	24
36. Mushrooms	148	1	0	1	1	8	41	41	2	22	3	40	70 (Zambia)	61	50	24
36. Tang, mand. clement.	447	3	0	2	3	12	46	157	4	25	2	20	64 (Angola)	72	46	24
36. Carrots	464	4	0	7	5	15	50	195	4	27	3	40	80 (Angola)	40	40	24
36. Garlic	1,230	10	0	14	12	23	63	701	11	37	3	40	97 (Angola)	6	23	24
36. Broad beans, green	113	1	0	22	12	34	78	78	3	40	2	20	88 (Zimbabwe)	23	22	24
43. Barley	291	2	0	1	1	100	100	291	6	53	2	20	96 (Swaziland)	8	14	23
44. Other cereals	333	3	0	28	15	0	30	2	2	16	3	40	84 (Zambia)	31	36	22
44. Sunflower seed	376	3	0	3	3	90	100	347	6	53	2	20	99 (Zimbabwe)	2	11	22
44. Castor beans	12	0	0	31	16	100	100	12	2	51	1	0	100 (Zimbabwe)	0	0	22
47. Jute and other bast fibres	212	2	0	17	9	221	100	210	4	52	1	0	100 (Zambia)	0	0	21
48. Lemon and limes	400	3	0	3	3	25	64	235	5	35	2	20	94 (Angola)	13	16	18
48. Other nuts	407	3	0	4	4	27	67	249	5	36	2	20	96 (Angola)	8	14	18
48. Peas, green	82	1	0	3	2	153	100	80	3	51	1	0	100 (Angola)	0	0	18
51. Lettuce	131	1	0	1	1	21	59	70	3	31	2	20	91 (Angola)	18	19	17
51. Cassava	59	0	0	1	1	100	100	59	3	51	1	0	100 (Angola)	0	0	17
51. Other oil crops	42	0	0	1	1	100	100	42	2	51	1	0	100 (Angola)	0	0	17
51. Other roots and tubers	25	0	0	1	1	100	100	25	2	51	1	0	100 (Zambia)	0	0	17
51. Apricots	16	0	0	0	0	100	100	16	2	51	1	0	100 (Angola)	0	0	17
56. Sesame seed	7	0	0	0	0	37	81	5	2	42	1	0	100 (Zimbabwe)	0	0	14
57. Other pulses	37	0	0	1	1	-32	0	-141	0	0	3	40	84 (Zimbabwe)	32	36	12
58. Strawberries	19	0	0	0	0	24	64	11	2	33	1	0	100 (Angola)	0	0	11
59. Beans	40	0	0	0	0	-39	0	-248	0	0	2	20	80 (Angola)	40	30	10
59. Cucumbers and gherkins	24	0	0	0	0	-5	22	-6	2	12	2	20	92 (Angola)	17	18	10
59. Chestnuts	41	0	0	2	1	20	57	21	2	30	1	0	100 (Angola)	0	0	10
59. Watermelons	10	0	0	0	0	19	56	5	2	29	1	0	100 (Angola)	0	0	10
59. Cabbages	131	1	0	1	1	17	53	60	3	28	1	0	100 (Angola)	0	0	10
64. Avocados	13	0	0	0	0	17	53	6	2	27	1	0	100 (Angola)	0	0	9
64. Cashew nuts	45	0	0	0	0	14	49	18	2	25	1	0	100 (Angola)	0	0	9
66. Citrus fruit nes	9	0	0	3	1	-21	0	-14	2	1	2	20	89 (Zambia)	22	21	8
67. Tomatoes	184	1	0	0	1	3	34	23	2	18	1	0	100 (Angola)	0	0	6
68. Chillies & peppers, green	340	3	0	1	2	-27	0	-83	1	0	2	20	96 (Zimbabwe)	8	14	5
69. Almonds	14	0	0	0	0	-7	19	-5	2	10	1	0	100 (Angola)	0	0	4

Source: ITCs TradeMap and Market Access Map.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005 and growth rates to 2001-05. Products marked with * were not imported in 2001, thus growth rates between 2001 and 2005 are infinite; consequently, they get 100 points.

Index 4 : World market

The World market index aims measuring world market trends of the products by taking into account three dimensions of the market demand: size, dynamism and the market access of Southern African countries. As will be detailed now, the major products in terms of high and accessible international demand are Maize, Oil palm fruit, Green coffee, Wheat, Soybeans, Bananas, plantains, Seed cotton, Cocoa beans, Grapes, Sesame seed, Barley, and Tomatoes

Size of world markets

We estimate *the size* of the products by calculating a simple average of two indices:(1) the value of world imports and (2) the share of regional imports in world imports. All things being equal, products which already register a large international demand are more promising for future export growth. The major products in terms of world import size are Wheat, Soybeans, Maize, Oil palm fruit, and Green coffee.

Table 26. World market index: Top ten products for “size”

Top 10 products	World imports	
	USD million	Index
1. Wheat	21,381	100
1. Soybeans	18,916	100
1. Maize	13,250	100
1. Oil palm fruit	10,441	100
5. Coffee, green	10,154	97
6. Seed cotton	9,922	95
7. Bananas, plantains	8,743	84
8. Tomatoes	5,253	50
9. Grapes	4,913	47
10. Cocoa beans	4,745	45

Source: ITCs TradeMap and Market Access Map, see Table 30.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005.

Dynamism of world markets

We evaluate *the dynamism* of the products by calculating a simple average of (1) the absolute change in world imports and (2) the growth of world imports. Fast growing global markets are more likely to produce net gains for an exporting country/region than slow growing, stagnant or declining markets. All things being equal, the more dynamic world imports are, the higher the probability of future export growth is. The dynamism of international demand for each product is measured by the world import growth rate between 2001 and 2005.

The main products in terms of world import dynamism are Oil palm fruit, Wheat, Green coffee, Soybeans, Maize, Cocoa beans.

Table 27. World market index: Top ten products for “dynamism”

Top 10 products	Growth of world imports		Absolute change in world imports		Average Index
	% p.a	Index	USD million	Index	
1. Oil palm fruit	24	100	5,952	100	100
2. Wheat	13	57	8,080	100	79
2. Coffee, green	13	58	3,950	100	79
4. Soybeans	13	56	7,202	100	78
5. Maize	8	39	3,586	91	65
5. Cocoa beans	17	74	2,234	57	65
7. Bananas, plantains	10	47	2,831	72	59
7. Tomatoes	14	62	2,174	55	59
9. Cashew nuts	22	90	1,012	26	58
10. Avocados	24	100	578	15	57

Source: ITCs TradeMap and Market Access Map, see Table 30.

Note: All indices range from 0 (lowest) to 100 (best performance). Growth rates and absolute changes refer to 2001-05.

Market access

We assess the market access conditions of the products by calculating a simple average of two indices: (1) the applied tariff to the region, and (2) the tariff differential between the region and the MFN regime. All things being equal, products that enjoy open markets and preferential access are more promising for future export growth.

The top in terms of market access are Maize, Sesame seed, Cassava, Cucumbers and gherkins, and Garlic.

Table 28. World market index: Top ten products for “market access”

Top 10 products	Tariff applied to Southern Africa		Tariff advantage for Southern Africa		Average Index
	%	Index	%	Index	
1. Maize	6	81	36	100	91
1. Sesame seed	6	81	62	100	91
3. Cassava	8	74	45	100	87
4. Cucumbers and gherkins	1	97	20	67	82
5. Garlic	10	67	25	83	75
6. Apricots	4	87	17	56	72
7. Peaches and nectarines	2	93	12	42	67
8. Pimento, allspice	5	82	13	44	63
9. Asparagus	2	92	10	32	62
10. Beans	2	95	8	28	61
10. Cantaloupes & other melons	1	97	8	26	61

Source: ITCs TradeMap and Market Access Map, see Table 30.

Notes: All indices range from 0 (lowest) to 100 (best performance). The preferential tariff advantage is calculated as the difference between the MFN rate (applied to WTO members) and the rate applied to Southern African countries.

Overall World Market index

The top products in terms of the World market index are Maize, Oil palm fruit, Green coffee, Wheat, and Soybeans.

Table 29. World market index

	Rank size	Rank growth	Rank Market access conditions
1. Maize	1	5	1
2. Oil palm fruit	1	1	70
3. Coffee, green	5	2	36
4. Wheat	1	2	58
5. Soybeans	1	4	77
6. Bananas, plantains	7	7	61
7. Seed cotton	6	12	71
8. Cocoa beans	10	5	33
9. Grapes	9	11	51
10. Sesame seed	35	31	1
10. Barley	12	14	54
10. Tomatoes	8	7	71

Source: ITCs TradeMap and Market Access Map, see Table 30.

Table 30. World market index and underlying indicators

Products	Size		Dynamism				Market access				World Market Index	
	World imports		Growth of world imports		Absolute change of world imports		Tariff applied to the Southern Africa		Tariff advantage*			Average Index
	USD million	Index	% p.a.	Index	USD millions	Index	%	Index	%	Index		
1. Maize	13,250	100	8	39	3,586	91	6	81	36	100	91	85
2. Oil palm fruit	10,441	100	24	100	5,952	100	14	55	1	4	29	76
3. Coffee, green	10,154	97	13	58	3,950	100	79	1	96	0	1	48
4. Wheat	21,381	100	13	57	8,080	100	79	11	62	6	19	41
5. Soybeans	18,916	100	13	56	7,202	100	78	18	41	0	0	21
6. Bananas, plantains	8,743	84	10	47	2,831	72	59	11	64	5	16	40
7. Seed cotton	9,922	95	9	41	2,756	70	55	15	51	0	0	26
8. Cocoa beans	4,745	45	17	74	2,234	57	65	1	97	0	0	49
9. Grapes	4,913	47	14	61	2,008	51	56	7	78	3	9	43
10. Sesame seed	835	8	14	62	343	9	36	6	81	62	100	45
10. Barley	4,119	39	14	62	1,693	43	53	15	51	10	34	42
10. Tomatoes	5,253	50	14	62	2,174	55	59	16	47	1	5	26
13. Cucumbers and gherkins	1,434	13	13	58	560	14	36	1	97	20	67	82
14. Other vegetables	2,470	23	11	50	852	22	36	2	93	8	28	60
14. Chillies & peppers, green	2,866	27	12	52	1,029	26	39	1	97	3	10	54
14. Pineapples	1,497	14	20	83	772	20	52	2	94	4	12	53
17. Garlic	848	8	14	61	350	9	35	10	67	25	83	75
17. Tang, mand. clement. satsuma	2,408	23	13	58	938	24	41	6	79	9	29	54
17. Avocados	996	9	24	100	578	15	57	2	92	3	11	52
20. Beans	661	6	19	82	336	9	45	2	95	8	28	61
20. Cashew nuts	1,874	18	22	90	1,012	26	58	9	70	0	0	35
22. Cassava	574	5	6	30	119	3	17	8	74	45	100	87
22. Peaches and nectarines	1,421	13	9	42	415	11	26	2	93	12	42	67
22. Sweet potatoes	97	0	25	100	57	2	51	2	94	5	17	56
22. Raspberries	318	3	28	100	198	5	53	2	93	3	11	52
22. Apples	4,237	40	11	51	1,487	38	44	17	44	2	5	24
27. Strawberries	1,338	12	16	69	599	15	42	5	83	6	19	51
27. Oranges	3,161	30	9	41	907	23	32	10	67	6	20	44
27. Other nuts	911	8	23	96	506	13	55	6	81	1	3	42
30. Apricots	264	2	11	49	89	3	26	4	87	17	56	72
30. Cantaloupes & other melons	1,253	12	10	45	388	10	27	1	97	8	26	61
30. Sunflower seed	1,264	12	17	73	594	15	44	4	87	0	1	44
30. Tea	3,440	33	6	31	680	17	24	6	81	1	3	42
34. Pimento, allspice	644	6	11	49	217	6	27	5	82	13	44	63
34. Peas, green	254	2	17	72	117	3	38	1	95	6	19	57
34. Potatoes	2,091	20	8	38	547	14	26	7	75	8	28	52

Products	Size			Dynamism				Market access				World Market Index	
	World imports		Index	Growth of world imports		Absolute change of world imports		Tariff applied to the Southern Africa		Tariff advantage*			Average Index
	USD million	Index		% p.a.	Index	USD millions	Index	%	Index	%	Index		
34. Pears and quinces	1,716	16	13	56	653	17	36	9	71	6	19	45	32
34. Lemon and limes	1,389	13	14	62	575	15	39	6	79	3	9	44	32
34. Lettuce	1,860	17	15	63	784	20	42	11	63	4	12	38	32
40. Asparagus	781	7	9	44	237	6	25	2	92	10	32	62	31
40. Watermelons	657	6	12	53	237	6	30	2	93	7	23	58	31
40. Other cereals	116	1	21	88	61	2	45	9	70	7	24	47	31
43. Mushrooms	1,224	11	10	44	374	10	27	4	86	5	17	52	30
43. Mangoes	944	9	12	54	342	9	31	2	95	1	4	49	30
43. Other fruits	1,085	10	13	56	410	11	33	6	81	4	14	47	30
46. Broad beans, green	50	0	12	54	18	1	27	2	95	8	25	60	29
46. Other spices	666	6	13	58	260	7	33	3	90	1	4	47	29
46. Other oil crops	264	2	17	72	121	3	38	3	91	0	0	46	29
46. Onions	1,581	15	10	47	509	13	30	7	76	2	7	41	29
50. Plums	559	5	9	42	162	4	23	3	92	5	18	55	28
50. Millet	84	0	13	56	31	1	29	4	86	7	22	54	28
50. Cabbages	820	7	10	46	260	7	26	5	85	6	19	52	28
50. Sisal and other textile fibres of agave	70	0	18	77	32	1	39	3	88	0	2	45	28
54. Carrots	666	6	9	43	197	5	24	6	81	6	21	51	27
54. Cauliflower	637	6	14	61	258	7	34	8	74	3	11	43	27
56. Papayas	222	2	10	44	68	2	23	0	98	2	8	53	26
56. Artichokes	68	0	15	64	29	1	32	10	68	6	21	45	26
58. Oats	440	4	9	40	122	3	22	7	78	7	24	51	25
58. Groundnuts in shell	185	1	12	53	67	2	27	3	88	0	1	45	25
58. Rice, paddy	459	4	15	65	193	5	35	11	62	2	7	35	25
61. Grapefruit and pomelos	778	7	6	32	172	5	18	3	89	1	3	46	24
61. Dates	404	3	12	54	144	4	29	10	67	4	12	40	24
63. Beans, dry	1,035	9	7	35	250	7	21	13	58	6	21	39	23
64. Almonds	215	2	27	100	133	4	52	24	22	0	1	11	22
65. Other roots and tubers	235	2	4	23	35	1	12	5	84	4	13	49	21
65. Jute and other bast fibres	122	1	9	41	22	1	21	6	79	0	0	40	21
67. Vanilla	131	1	-13	0	-99	0	0	1	98	3	9	53	18
67. Citrus fruit nes	33	0	-8	0	-12	0	0	3	88	5	17	53	18
69. Sorghum	747	7	-2	1	-54	0	0	5	83	2	5	44	17
69. Chestnuts	209	2	2	17	19	1	9	8	73	3	9	41	17
69. Anise, badian, fennel	247	2	4	21	31	1	11	7	77	1	2	39	17
69. Peas, dry	890	8	7	34	206	6	20	16	46	0	2	24	17
73. Currants and gooseberries	30	0	-1	3	-1	0	2	5	82	3	11	46	16

Products	Size		Dynamism				Market access				World Market Index	
	World imports		Growth of world imports		Absolute change of world imports		Tariff applied to the Southern Africa		Tariff advantage*			Average Index
	USD million	Index	% p.a.	Index	USD millions	Index	%	Index	%	Index		
73. Pepper, white/long/black	517	4	-2	0	-40	0	6	80	2	6	43	16
75. Cow peas, dry	306	2	7	35	70	2	20	32	5	16	24	15
76. Castor beans	4	0	-15	0	-3	0	5	85	0	0	42	14
77. Chick-peas	472	4	0	8	3	0	11	64	0	1	32	13
78. Other pulses	344	3	3	18	33	1	17	43	1	5	24	12

Source: ITCs TradeMap and Market Access Map.

Notes: All indices range from 0 (lowest) to 100 (best performance). Products are ranked according to the world market index. * The preferential tariff advantage is calculated as the difference between the MFN rate (applied to WTO members) and the rate applied to Southern African countries.

Comparing products along the four indices

So far, we have examined the product rankings for individual indices (Table 31). We now combine the four indices, and distinguish whether a product is ranked among the top 20 products for each dimension or whether it is not. We can identify 16 possible combinations on the basis of the composite indices (Table 32). For simplicity's sake, we use the following colour scheme that for four possible strategic responses of the potential for sector development:

- *Green: Import substitution and export development:* Products that rank highly in the Import index and in the Export and/or World Market Indices.
- *Yellow: Export development only:* Products that rank highly in the Export and/or World Market Indices.
- *Orange: Import substitution only:* Products that rank highly in the Import index.
- *Red: No apparent potential:* Products that rank low across all indices.

The possible strategic responses are analysed separately for products that are among the 20 best performers in the Production Index (Table 33) and those that are not (Table 34). Products shown in may justify an increase in production to take advantage of these possible strategic responses. In both tables, products emanating from the region are grouped into broad agricultural product sectors.

Products with high ranks in production are produced, efficiently in relatively large quantities and for which there is a potential for import substitution and/or export development (Table 33).

- A potential for *export development and import substitution* appears for Wheat, Tea, Pineapples, and Other vegetables.
- A potential for *export development only* appears for Barley, and several fruits and vegetables (Avocadoes, Bananas, plantains, Citrus fruit, Grapefruits and pomelos).
- A potential for *import substitution only* appears for Dry beans, Sorghum, and Groundnuts in shell.
- *No apparent potential* appears for Millet, Other pulses, Artichokes, Other fruits, Sweet potatoes, Cassava, Other roots and tubers, and Pepper, white/long/black.

Products with low ranks in production are produced inefficiently or in relatively small quantities but for which there is a potential for significant production capacity development prior to taking advantage of identified import substitution and/or export development (Table 34).

- A potential for *capacity development for import substitution and export development* appears for Maize, Seed cotton, Apples, Grapes, Oil palm fruit, and Soybeans lie in this subcategory.
- A potential for *capacity development for export development only* appears for Green coffee, Cocoa beans, fruits and vegetables (Tang.mand.clement.satsma, Beans, Green chillies&peppers, Tomatoes, Cucumbers and gherkins, Garlic, Lemon and limes, Datas, Mushrooms, Oranges, and Green peas), Cashew nuts, Other nuts, Sesame seed, and Pimento, allspice.
- A potential for *capacity development for Import substitution only* appears for Chick-peas, Dry cow peas, Dry peas, Sisal and other textile fibres of agave, Onions, Plums, Potatoes, and Other spices.
- The remaining products have a low regional and world market demand, implying little market opportunities to expand production.

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Table 31: Top 20 products for Southern African countries in the four indices

	Production index	Export index	Import index	World market index
Top 20 products	1. Cassava	1. Seed cotton	1. Maize	1. Maize
	2. Other roots and tubers	2. Coffee, green	2. Sorghum	2. Oil palm fruit
	3. Other pulses	3. Grapes	3. Oil palm fruit	3. Coffee, green
	4. Millet	4. Grapefruit and pomelos	4. Cow peas, dry	4. Wheat
	5. Beans, dry	5. Oranges	5. Beans, dry	5. Soybeans
	6. Citrus fruit nes	6. Maize	6. Peas, dry	6. Bananas, plantains
	7. Wheat	6. Other vegetables	7. Seed cotton	7. Seed cotton
	7. Other fruits	8. Peas, green	8. Wheat	8. Cocoa beans
	7. Pineapples	9. Tea	9. Soybeans	9. Grapes
	10. Groundnuts in shell	9. Mushrooms	10. Potatoes	10. Barley
	11. Tea	11. Chillies & peppers, green	11. Apples	10. Tomatoes
	12. Grapefruit and pomelos	12. Soybeans	12. Tea	10. Sesame seed
	13. Other vegetables	13. Avocados	13. Onions	13. Cucumbers and gherkins
	14. Sweet potatoes	14. Lemon and limes	14. Groundnuts in shell	14. Chillies & peppers, green
	15. Sorghum	15. Pimento, allspice	15. Other spices	14. Other vegetables
	16. Bananas, plantains	16. Beans	16. Pineapples	14. Pineapples
	17. Avocados	17. Tang. mand. clement. satsma	17. Sisal and other textile fibres of agave	17. Avocados
	17. Pepper, white/long/black	17. Citrus fruit nes	17. Plums	17. Tang. mand. clement. satsma
	19. Barley	19. Wheat	19. Chick-peas	17. Garlic
	19. Artichokes	19. Apples	20. Grapes	20. Beans
	19. Dates	20. Other vegetables	20. Cashew nuts	
	19. Other nuts			
Other products	21. Potatoes	23. Beans, dry	22. Cantaloupes & other melons	22. Apples
	21. Seed cotton	24. Cucumbers and gherkins	23. Grapefruit and pomelos	22. Sweet potatoes
	23. Pimento, allspice	24. Peas, dry	23. Oranges	22. Cassava
	24. Maize	26. Other oil crops	25. Peaches and nectarines	22. Peaches and nectarines
	25. Vanilla	27. Other pulses	26. Millet	22. Raspberries
	25. Sisal and other textile fibres of agave	27. Sorghum	26. Pepper, white/long/black	27. Strawberries
	27. Oats	29. Papayas	28. Dates	27. Oranges
	28. Cauliflower	30. Cocoa beans	28. Oats	27. Other nuts
	28. Grapes	30. Other fruits	28. Rice, paddy	30. Apricots
	30. Tomatoes	32. Other cereals	31. Cauliflower	30. Sunflower seed
	30. Other nuts	33. Chick-peas	31. Mangoes	30. Tea
	30. Other spices	34. Tomatoes	31. Pears and quinces	30. Cantaloupes & other melons
	33. Cow peas, dry	34. Cauliflower	31. Peas and quinces	34. Lemon and limes
	33. Oranges	34. Currants and gooseberries	34. Coffee, green	34. Lettuce
	33. Rice, paddy	34. Groundnuts in shell	34. Other fruits	34. Pears and quinces
	36. Beans	34. Lettuce	36. Bananas, plantains	34. Peas, green
	36. Oil palm fruit	34. Onions	36. Tang. mand. clement. satsma	34. Pimento, allspice
	38. Chillies & peppers, green	34. Pineapples	36. Broad beans, green	34. Potatoes
	39. Sunflower seed	34. Potatoes	36. Carrots	40. Asparagus
	39. Cantaloupes & other melons	42. Plums	36. Garlic	40. Watermelons
	39. Coffee, green	43. Pepper, white/long/black	36. Mushrooms	40. Other cereals
	39. Jute and other bast fibres	44. Garlic	36. Pimento, allspice	43. Mangoes
	39. Mangoes	45. Peaches and nectarines	43. Barley	43. Mushrooms
	39. Onions	46. Mangoes	44. Sunflower seed	43. Other fruits
	39. Plums	47. Other spices	44. Castor beans	46. Broad beans, green
	46. Apples	48. Bananas, plantains	44. Other cereals	46. Onions
	46. Chick-peas	49. Broad beans, green	47. Jute and other bast fibres	46. Other oil crops
	48. Mushrooms	50. Cow peas, dry	48. Lemon and limes	46. Other spices
	49. Anise, badian, fennel		48. Other nuts	50. Cabbages
	50. Tang. mand. clement. satsma		48. Peas, green	50. Millet
	51. Lemon and limes		51. Apricots	50. Plums
	51. Other cereals		51. Cassava	50. Sisal and other textile fibres of agave
	51. Sesame seed		51. Lettuce	54. Carrots
	54. Asparagus		51. Other oil crops	54. Cauliflower
	54. Other oil crops		51. Other roots and tubers	56. Artichokes
	56. Cashew nuts		56. Sesame seed	56. Papayas
	56. Cucumbers and gherkins		57. Other pulses	58. Groundnuts in shell
	58. Castor beans		58. Strawberries	58. Oats
	59. Almonds		59. Beans	58. Rice, paddy
	60. Watermelons		59. Watermelons	61. Dates
		59. Cabbages	61. Grapefruit and pomelos	
		59. Chestnuts	63. Beans, dry	

60. Peas, green	59. Cucumbers and gherkins	64. Almonds
62. Cabbages	64. Avocados	65. Jute and other bast fibres
62. Chestnuts	64. Cashew nuts	65. Other roots and tubers
62. Currants and gooseberries	66. Citrus fruit nes	67. Vanilla
62. Peaches and nectarines	67. Tomatoes	67. Citrus fruit nes
62. Peas, dry	68. Chillies & peppers, green	69. Anise, badian, fennel
67. Carrots	69. Almonds	69. Chestnuts
67. Garlic		69. Peas, dry
69. Apricots		69. Sorghum
69. Broad beans, green		73. Currants and gooseberries
69. Lettuce		73. Pepper, white/long/black
69. Raspberries		75. Cow peas, dry
73. Soybeans		76. Castor beans
73. Dates		77. Chick-peas
75. Strawberries		78. Other pulses
75. Papayas		
77. Cocoa beans		
77. Pears and quinces		

Source: FAOSTAT, ITCs TradeMap and Market Access Map, Table 14, Table 20, Table 25, Table 30.

Table 32: Top 20 products for Southern African countries in the four indices – synthetic view

	Low ranks in Production and World markets	Low ranks in Production, High ranks in World markets	High ranks in Production, Low ranks in World markets	High ranks in Production and World markets
High ranks in Exports and Imports	<p>High ranks in Exports and Imports:</p> <p>Apples (46,19,11, 22)</p>	<p>High ranks in Exports, Imports and World Markets:</p> <p>Maize (24,6,1, 1) Soybeans (73,12,9, 5) Seed cotton (21,1, 7, 7) Grapes (28,3, 20, 9)</p>	<p>High ranks in Production, Exports and Imports:</p> <p>Tea (11,9, 12, 30)</p>	<p>High ranks in Production, Exports, Imports and World Markets:</p> <p>Wheat (7, 19,8, 4) Other vegetables (13,6, 20, 14)</p>
High ranks in Exports	<p>High ranks in Exports:</p> <p>Oranges (33,5, 23, 27) Other nuts (30,19,48, 27) Pimento, allspice (23,15,36, 34) Peas, green (60,8, 48, 34) Lemon and limes (51,14,48, 34) Mushrooms (48,9, 36, 43) Dates (73,19,28, 61)</p>	<p>High ranks in Exports and World Markets:</p> <p>Coffee, green (39,2, 34, 3) Chillies & peppers, green (38,11,68, 14) Tang, mand. clement. (50,17,36, 17) Beans (36,16,59, 20)</p>	<p>High ranks in Production and Exports:</p> <p>Grapefruit and pomeles (12,4, 23, 61) Citrus fruit nes (6, 17,66, 67)</p>	<p>High ranks in Production, Exports and World Markets:</p> <p>Avocados (17,13,64, 17)</p>
Low ranks in Imports	<p>High ranks in Imports:</p> <p>Potatoes (21,34,10, 34) Onions (39,34,13, 46) Other spices (30,47,15, 46) Plums (39,42, 17, 50) Sisal and other textile fibres of agave (25,-- ,17, 50) Peas, dry (62,24,6, 69) Cow peas, dry (33,50,4, 75) Chick-peas (46,33,19, 77)</p>	<p>High ranks in Imports and World Markets:</p> <p>Oil palm fruit (36,-- ,3, 2)</p>	<p>High ranks in Production and Imports:</p> <p>Groundnuts in shell (10,34,14, 58) Beans, dry (5, 23,5, 63) Sorghum (15,27,2, 69)</p>	<p>High ranks in Production, Imports and World Markets:</p> <p>Pineapples (7, 34,16, 14)</p>
High ranks in Imports	<p>Low ranks everywhere:</p> <p>Peaches and nectarines (62,45,25, 22) Raspberries (69,-- ,-- , 22) Strawberries (75,-- ,58, 27) Cantaloupes & other melons (39,-- ,22, 30) Sunflower seed (39,-- ,44, 30) Apricots (69,-- ,51, 30) Pears and quinces (77,-- ,31, 34) Lettuce (69,34,51, 34) Other cereals (51,32,44, 40) Watermelons (60,-- ,59, 40) Asparagus (54,-- ,-- , 40) Mangoes (39,46,31, 43) Broad beans, green (69,49,36, 46) Other oil crops (54,26,51, 46) Cabbages (62,-- ,59, 50) Cauliflower (28,34,31, 54) Carrots (67,-- ,36, 54) Papayas (75,29,-- , 56) Oats (27,-- ,28, 58) Rice, paddy (33,-- ,28, 58)</p>	<p>High ranks in World Markets:</p> <p>Cocoa beans (77,30,-- , 8) Sesame seed (51,-- ,56, 10) Tomatoes (30,34,67, 10) Cucumbers and gherkins (56,24,59, 13) Garlic (67,44,36, 17) Cashew nuts (56,-- ,64, 20)</p>	<p>High ranks in Production:</p> <p>Cassava (1,-- ,51, 22) Sweet potatoes (14,-- ,-- , 22) Other fruits (7, 30,34, 43) Millet (4,-- ,26, 50) Artichokes (19,-- ,-- , 56) Other roots and tubers (2,-- ,51, 65) Pepper, white/long/black (17,43,26, 73) Other pulses (3, 27,57, 76)</p>	<p>High ranks in Production and World Markets:</p> <p>Bananas, plantains (16,48,36, 6) Barley (19,-- ,43, 10)</p>

	Low ranks in Production and World markets	Low ranks in Production, High ranks in World markets	High ranks in Production, Low ranks in World markets	High ranks in Production and World markets
	Almonds (59,-- ,69, 64) Jute and other bast fibres (39,-- ,47, 65) Vanilla (25,-- ,-- , 67) Chestnuts (62,-- ,-- ,59, 69) Anise, badian, fennel (49,-- ,-- , 69) Currants and gooseberries (62,34,-- , 73) Castor beans (58,-- , 44, 76)			

Source: FAOSTAT, ITCs TradeMap and Market Access Map, Table 14, Table 20, Table 25, Table 30.

The numbers in parentheses indicate the products rank among all products in 1. production index, 2. export index, and 4. world market index.

Colour codes: Number of dimensions for which the product is among the top 20 products for the region: Dark red (0), red (1), yellow (2), green (3), dark green (4).

Table 33: Southern African countries: Products with *high* ranks in production for import substitution and/or export development opportunity

Product sectors	No apparent potential (low rank in World Markets, imports and Exports)	Import substitution		Export development		Import substitution and Export development		
		High rank in Imports (low rank in exports and world markets)	High rank in World Markets and Exports (low rank in imports)	High rank in World Markets (low rank in imports and exports)	High rank in Exports (low rank in imports and world markets)	High rank in Imports and Exports (low rank in world markets)	High rank in Imports and World Markets (low rank in exports)	High rank in World Markets, Imports and Exports
Cereals, grains, beans, peas and pulses	Millet (5) Other pulses (5)	Beans, dry (4) Sorghum (6)		Barley (3)				Wheat (7)
Coffee, cocoa, tea					Tea (2)			
Fruits and vegetables	Artichokes (2) Other fruits (7)		Avocados (2)	Bananas, plantains (4)	Citrus fruit nes (3) Grapefruit and pomeios (2)		Pineapples (3)	Other vegetables (7)
Oil crops		Groundnuts in shell (6)						
Roots and tubers	Sweet potatoes (4) Cassava (3) Other roots and tubers (4)							
Spices, pyrethrum and peppermint	Pepper, white/long/black (2)							

Note: "High" rank means that the product is among the top 20 products for the dimension. The number in parentheses indicates the number of producing countries in the region.

Table 34: Southern African countries: Products with low ranks in production for production capacity development and opportunities

Product sectors	No apparent potential (low rank in World Markets, imports and Exports)	Capacity development for Import substitution			Capacity development for Export			Capacity development for Import substitution and Export development		
		High rank in Imports (low rank in exports and world markets)	High rank in World Markets and Exports (low rank in imports)	High rank in World Markets (low rank in imports and exports)	High rank in Exports (low rank in imports and world markets)	High rank in Imports and Exports (low rank in world markets)	High rank in Imports and Exports (low rank in exports)	High rank in World Markets, Imports and Exports		
Cereals, grains, beans, peas and pulses	Oats (1) Other cereals (2) Rice, paddy (4)	Chick-peas (1) Cow peas, dry (1) Peas, dry (1)		Cocoa beans (1)				Maize (6)		
Coffee, cocoa			Coffee, green (3)					Seed cotton (6)		
Cotton										
Fibre crops	Jute and other bast fibres (2)	Sisal and other textile fibres of agave (1)								
Fruits and vegetables	Apricots (1) Asparagus (1) Strawberries (1) Watermelons (1) Broad beans, green (1) Cabbages (1) Cantaloupes & other melons (2) Carrots (1) Cauliflower (1) Currants & gooseberries (1) Lettuce (1) Mangoes (2) Papayas (1) Peaches & nectarines (1) Pears and quinces (1) Raspberries (1)	Onions (4) Plums (2)	Tang. mand. clement. satsuma (2) Beans (1) Chillies & peppers, green (1)	Tomatoes (5) Cucumbers and gherkins (1) Garlic (1)	Lemon and limes (2) Dates (2) Mushrooms (1) Oranges (4) Peas, green (1)	Apples (1)	Grapes (3)			
Nuts	Almonds (1) Chestnuts (1)			Cashew nuts (1)		Other nuts (1)				
Oil crops	Sunflower seed (5) Castor beans (1) Other oil crops (1)			Sesame seed (1)			Oil palm fruit (1)	Soybeans (2)		
Roots and tubers		Potatoes (5)								
Spices, pyrethrum and peppermint	Anise, badian, fennel (1) Vanilla (1)	Other spices (2)				Pimento, allspice (2)				

Note: "High" rank means that the product is among the top 20 products for the dimension. The number in parentheses indicates the number of producing countries in the region.

FAO's agro-ecological crop suitability assessment

Based on the FAO's agro-ecological crop suitability assessment information and expert agronomic knowledge, Table 35 provides an idea of the regional level agro-ecological potential of crops for further discussion at the Kick Off Workshop in Dar Es Salaam. The agro-ecological suitability of crops takes account of the agronomic potential and prospect for yield improvement and area expansion within farming system contexts at the country and regional levels. Indices for area expansion potentials and yield intensification potentials were estimated for each crop¹ at the country and regional levels, and compared with current country as well as regional land use to guide the determination of country and regional level agro-ecological potentials of crops in terms of three broad categories -- low, medium and high. Table 35 provides the information of the regional level agro-ecological potential.

Crops that are combined into unspecified groups such as other pulses, other cereals, other fruits & vegetables, other oil crops etc are not included in Table 35 as it is not possible to make any useful comments on them. However, 'Other roots and tubers' as a crop group is included because it includes yams, and so is 'Jute like fibres' included as a crop group because it includes kenaf and roselle.

In general, crops that have a **high** regional agro-ecological and agronomic potential are:

- *Cereals and pulses sector* -- maize, millet, rice, sorghum, wheat, beans (dry)
- *Coffee, cocoa, tea sector* -- coffee
- *Cotton sector* -- cotton
- *Fruits & vegetables sector* -- bananas & plantains, tomatoes
- *Oil crops sector* -- castor beans, groundnuts, soybeans, sunflower
- *Roots & tubers sector* -- cassava, sweet potatoes
- *Spices, pyrethrum, peppermint sector* -- pimento & allspice

In general, crops that have a **medium** regional agro-ecological and agronomic potential are:

- *Cereals and pulses sector* -- barley, oats, rye, cowpeas (dry), chick peas, peas (dry)
- *Coffee, cocoa, tea sector* -- tea
- *Fibre crops sector* -- jute like fibres (kenaf, roselle), sisal & other agave fibres
- *Fruits & vegetables sector* -- apples, apricots, avocados, beans (green), broad beans (green), chillies & peppers (green), cucumbers & gherkins, dates, garlic, grapes, mangoes, onions & shallots, oranges, peaches & nectarines, pears, peas (green), pineapples, plums, raspberries, strawberries, watermelons
- *Oil crops sector* -- sesame
- *Roots & tubers sector* -- potatoes
- *Spices, pyrethrum, peppermint sector* -- pepper (white/long/black)

Nearly all the above crops in all the countries in the region, except South Africa, have relatively low yields, and there is good to very good agro-ecological potential to improve crop yields. However, the Southern Africa region as a whole is generally drier compared with the Eastern Africa region and comprises tropical environments with summer rainfall as well as subtropical environments with summer rainfall or winter rainfall (Mediterranean-type environment), most of the latter located in South Africa. Thus, the region has a very diverse range of tropical and

¹ See Annex table in the companion document: Good Agricultural Practices: Opportunities for the ACP Southern Africa Group of Countries. May 2008, AGP, FAO.

subtropical agricultural environments from the semi-arid to sub-humid ecologies in the lowlands and in the highlands. However, there is little truly humid environment in the region and most of the semi-arid rainfed ecology with less than 180 day of rainfed growing season is suitable for 'dryland' agriculture only because on average rainfall does not exceed potential evapotranspiration during the growing season.

In the lowland sub-humid moist savanna and semi-arid tropical ecologies, farming systems include cereals-legumes-oilseeds-cotton crops. In the more humid ecologies, farming systems include root crops, vegetables and perennial tree crops (beverages, fruits and nuts). In the tropical and subtropical highland ecologies, perennial tree crops and temperate fruits and vegetables are dominant together with temperate cereals. In the subtropical winter rainfall environments, Mediterranean type farming systems include temperate fruits and vegetables, and cereals-legumes-oilseeds crops.

There is room for area expansion with most crops in the region, and with Good Agricultural Practices (GAP)² crop yields can be improved significantly. For example, with Conservation Agriculture (CA), energy and environmental costs can be kept to a minimum while achieving enhanced yields and factor productivities. In the case of legumes and cotton crops, integrated pest management (IPM) and integrated production and pest management (IPPM) approaches provide a solid basis for efficient production expansion, relying more on natural enemies, crop diversification, minimum tillage and judicious use of inorganic and organic fertilizers to harness greater on-farm production competitiveness.

Information in Table 35 provides a means to 'filter' the trade opportunity scan results in Table 33 and Table 34 as described in the previous sections.

For products with high ranks in production (Table 33):

- *The potential for export development and import substitution* for wheat, tea, pineapples appears sound. Wheat has a high regional agro-ecological potential and tea and pineapple have a medium potential. All countries in the region produce wheat, with South Africa producing the bulk of the total. Tea is suited to the humid highland conditions and pineapples require long and warmer growing conditions. Such conditions for tea and pineapple exist only in some parts of the region in South Africa, Swaziland, Angola, Zambia and Zimbabwe.
- *A potential for export development only* for barley, avocados, and bananas & plantains appears sound, with South Africa producing the bulk of the barley and the avocado crops, while bananas are largely produced by South Africa, Angola and Zimbabwe. However, the regional potential for grapefruit & pomelos is perhaps on the low side at present, and the crop is currently grown mainly in South Africa with some minor production in Swaziland and Zimbabwe.
- *A potential for important substitution only* for beans (dry), sorghum and groundnuts appears sound, as the regional agro-ecological potential of these crops is high. Beans (dry)³ combine well with cereal-based farming systems, particularly with maize and sorghum, together with other legume crops such as soybeans and groundnuts. However, sorghum and groundnuts are produced during the rainy season under 'dryland' farming and yields are often sub-optimal. In the lowlands, rainfed cotton is an important crop in the cereal-based systems, and so are sweet potatoes. In addition, sweet sorghum has a reasonable potential as a bioenergy crop in the wetter parts of the savanna ecologies although currently sorghum is grown for grain in the semi-arid ecologies. The countries in the region that are importing beans, sorghum grain and groundnuts do so from within the region or from the

² See companion document: Good Agricultural Practices: Opportunities for the ACP Southern Africa Group of Countries. May 2008, AGP, FAO.

³ Dry beans are susceptible to a number of diseases, so they are often best grown in drier ecologies under irrigation using "clean seed". Special opportunity also exists for irrigated production of such clean seed crops on a commercial basis.

neighbouring region, but there is good agro-ecological potential for the region to become self-sufficient in these crops.

- *No apparent potential due to low rank in world markets, imports and exports* for artichokes and other roots & tubers appears sound as there is perhaps marginal agro-ecological potential for these crops in the region generally. However, millet, sweet potatoes, cassava, and pepper (white/long/black) have medium to high agro-ecological potential, and are important products in the domestic and regional markets. Millet has a high regional agro-ecological potential and is an important crop for food security in some of the countries in the region particularly Namibia, Zambia and Zimbabwe. Similarly, sweet potatoes and cassava are important food security crops particularly in Angola, Zambia and South Africa, and are potential feed and bioenergy crops.

For products with low ranks in production (Table 34):

- The potential for *capacity development for import substitutions and export development* for maize, cotton, apples, grapes and soybeans is sound as these crops have medium to high regional agro-ecological potential. In particular, maize, cotton and soybeans have a high regional agro-ecological potential, and the development potential for maize goes beyond grain into fresh maize products such as maize on-the-cob, or sweet corn and baby corn as vegetables. Apples and grapes are currently produced very largely in South Africa, but there is medium agro-ecological potential in several countries of the region. In the case of oil palm, the regional agro-ecological potential for significant expansion is very low, and lower still compared with Central and West Africa, or even Eastern Africa region. Angola is the only country which appears to have some good agro-ecological potential, and South Africa has a small but undeveloped potential.
- It would seem appropriate to include rice in this strategic response group because of the growing domestic, regional and international demand for rice and of the moderately high regional agro-ecological potential for rice, particularly in Zambia, Angola and South Africa. In addition, integrated rice production system such as the 'System of Rice Intensification' (SRI), assembled in Madagascar over 20-year period and gaining application internationally since 2000 including in Southern African region, for example in Zambia, enables resource poor farmers to raise 'wetland' rice production substantially, just by making changes in their management practices rather than by increasing inputs, which means even greater competitiveness and profitability.
- *A potential for capacity development for export development only* for coffee, beans (green), chillies & peppers (green), tomatoes, cucumbers & gherkins, garlic, dates, oranges, peas (green), sesame seeds, and pimento, allspice appears sound as there is medium to high regional agro-ecological potential for these crops (Table 34). Crops such as coffee, tomatoes, and pimento, allspice have a high regional potential and could justify investment if the return is attractive. However, the regional agro-ecological potential for cocoa and cashew nuts is very low, except perhaps for Angola which has a moderate potential and produces a small amount. Similarly, the regional agro-ecological potential for tangerines, mandarins, clementines & satsumas, and lemons & limes is on the low side, with the bulk of production being located in South Africa.
- *A potential for capacity development for import substitution only* for chick peas, cowpeas (dry), peas (dry), sisal & other agave fibres, onions, plums, and potatoes appears reasonable as all these crops have medium regional agro-ecological potential. The potential for cowpeas and sisal is in the warm lowlands whereas for the rest, it is in the cooler higher altitude ecologies or during the cool dry season under irrigation. Potatoes for fresh market and some processed products for urban populations could be expanded but investment for clean seed and storage would be substantial.

- *No apparent potential due to low rank in world markets, imports and exports* for asparagus, cabbages, carrots, currants & gooseberries, lettuce, papayas, almonds, chestnuts, anise, badian & fennel, and vanilla seems sound as the regional agro-ecological potentials for these crops are relatively low or confined to certain limited ecologies in certain countries. However, for cabbages, carrots, currants & gooseberries, lettuce and anise & fennel there can be moderately good agro-ecological potential for rainfed production in the cooler highland areas, and during the cooler dry season under irrigation. For oats, rice, jute like fibres (kenaf, roselle), apricots, broad beans (green), mangoes, peaches & nectarines, pears & quinces, raspberries, strawberries, and watermelons have a medium regional agro-ecological potential, and sunflower and castor beans have a high regional agro-ecological potential. With kenaf and roselle, water supply for retting can be a serious constraint in drier ecologies. Sunflower is an established region-wide crop grown in all the countries of the region except Swaziland and Lesotho. Castor beans, currently produced only in Angola and South Africa, may have scope and could be tested as a potential bioenergy crop in remote villages in the semi-arid agro-ecologies; new work in the NE of Brazil provides insights on how this might work.

Table 35: Southern African countries: Regional level agro-ecological potential

Product sectors	Regional level agro-ecological potential		
	Low	Medium	High
Cereals, grains, beans, peas and pulses		Barley (4) Oats (3) Rye (1) Cowpeas, dry (3) Chick peas (1) Peas, dry (2)	Maize (8) Millet (6) Rice, paddy (5) Sorghum (7) Wheat (8) Beans, dry (5)
Coffee, cocoa, tea	Cocoa beans (1)	Tea (3)	Coffee, green (3)
Cotton			Cotton (7)
Fibre crops		Jute like fibres (3) (kenaf, roselle) Sisal & other agave fibres (1)	
Fruits and vegetables	Asparagus (1) Artichokes (2) Cabbages (2) Cantaloupes & other melons(1) Carrots (1) Cauliflower (1) Cherries (1) Currants & gooseberries (1) Figs (1) Grapefruit & pomelos (3) Lemons & limes (2) Lettuce (2) Papayas (2) Tang. mand. clement. satsma (3)	Apples (2) Apricots (2) Avocados (3) Beans, green (1) Broad beans, green (1) Chillies & peppers, green (1) Cucumbers and gherkins (2) Dates (2) Garlic (1) Grapes (3) Mangoes (2) Onions & shallots (1) Oranges (5) Peaches & nectarines (2) Pears (2) Peas, green (3) Pineapples (4) Plums (3) Raspberries (2) Strawberries (2) Watermelons (2)	Bananas & plantains (5) Tomatoes (5)
Nuts	Cashew nuts (1) Almonds (1) Chestnuts (1)		
Oil crops	Oil palm (2)	Sesame seed (1)	Castor beans (2) Groundnuts in shell (7) Sunflower (6) Soybeans (3)
Roots and tubers	Roots & tubers nes (4) (yams)	Potatoes (6)	Cassava (3) Sweet potatoes (5)
Spices, pyrethrum, peppermint	Anise, badian, fennel (1) Vanilla (1)	Pepper, white/long/black (2)	Pimento, allspice (3)

In light of the above agro-ecological and agronomic comments based on the information provided in Table 35, an expanded interpretation of the trade opportunity scan results in Table 33 and Table 34 would certainly benefit from further discussions at the Kick Off Workshop. Response strategies could be better defined by taking into account country specific agro-ecological and farming systems conditions as well as any 'new' ecologically sound crop commodity and agronomic practice that could be harnessed by the countries of the region in response to specific export opportunity or import situation, as well as domestic and regional trade.

Annex

Table 36. Definition of products and sectors in terms of the Harmonised System

Broad sectors	FAO products	HS6 rev1	HS 6 rev1 description
Cereals, grains, beans, peas and pulses	Barley	100300	Barley
	Beans, dry	071331	Dried, shelled beans of species "Vigna mungo (L.) Hepper or Vigna radiata (L.) Wilczek", whether or not skinned or split
		071332	Dried, shelled small red "Adzuki" beans "Phaseolus or Vigna angularis", whether or not skinned or split
		071333	Dried, shelled kidney beans "Phaseolus vulgaris", whether or not skinned or split
	Chick-peas	071320	Dried, shelled chickpeas "garbanzos", whether or not skinned or split
	Cow peas, dry	071339	Dried, shelled beans "Vigna and Phaseolus", whether or not skinned or split (excl. beans of species "Vigna mungo (L.) Hepper or Vigna radiata (L.) Wilczek", small red "Adzuki" beans and kidney beans)
	Maize	100510	Maize seed
		100590	Maize (excl. seed)
	Millet	100820	Millet (excl. grain sorghum)
	Oats	100400	Oats
	Other cereals	100890	Cereals (excl. wheat and meslin, rye, barley, oats, maize, rice, buckwheat, millet, canary seed and grain sorghum)
	Other pulses	071390	Dried, shelled leguminous vegetables, whether or not skinned or split (excl. peas, chickpeas, beans, lentils, broad beans and horse beans)
	Peas, dry	071310	Dried, shelled peas "Pisum sativum", whether or not skinned or split
	Rice, paddy	100610	Rice in the husk, "paddy" or rough
	Sorghum	100700	Grain sorghum
Wheat	100110	Durum wheat	
	100190	Wheat and meslin (excl. durum wheat)	
Coffee, cocoa, tea	Cocoa beans	180100	Cocoa beans, whole or broken, raw or roasted
	Coffee, green	090111	Coffee (excl. roasted and decaffeinated)
		090112	Decaffeinated coffee (excl. roasted)
	Tea	090210	Green tea in immediate packings of <= 3 kg
		090220	Green tea in immediate packings of > 3 kg
		090230	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings of <= 3 kg
090240		Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings of > 3 kg	
Cotton	Seed cotton	120720	Cotton seeds, whether or not broken
		520100	Cotton, neither carded nor combed
Fibre crops	Jute and other bast fibres	530310	Jute and other textile bast fibres, raw or retted (excl. flax, true hemp and ramie)
		530390	Jute and other textile bast fibres, processed but not spun; tow and waste of such fibres, incl. yarn waste and garnetted stock (excl. retted fibres of this kind, flax, true hemp and ramie)
	Sisal and other textile fibres of agave	530410	Sisal and other textile fibres of the genus Agave, raw
		530490	Sisal and other textile fibres of the genus Agave, processed but not spun; tow and waste of such fibres, incl. yarn waste and garnetted stock
Fruits and vegetables	Apples	080810	Fresh apples
	Apricots	080910	Fresh apricots
	Artichokes	070910	Fresh or chilled globe artichokes
	Asparagus	070920	Fresh or chilled asparagus
	Avocados	080440	Fresh or dried avocados
	Bananas, plantains	080300	Bananas, incl. plantains, fresh or dried
	Beans	070820	Fresh or chilled beans "Vigna spp., Phaseolus spp.", shelled or unshelled
	Broad beans, green	070890	Fresh or chilled leguminous vegetables, shelled or unshelled (excl. peas "Pisum sativum" and beans "Vigna spp., Phaseolus spp.")

Broad sectors	FAO products	HS6 rev1	HS 6 rev1 description
	Cabbages	070490	Fresh or chilled cabbages, kohlrabi, kale and similar edible brassicas (excl. cauliflowers, headed broccoli and Brussels sprouts)
	Cantaloupes & other melons	080719	Fresh melons (excl. watermelons)
	Carrots	070610	Fresh or chilled carrots and turnips
	Cauliflower	070410	Fresh or chilled cauliflowers and headed broccoli
	Chillies & peppers, green	070960	Fresh or chilled fruits of the genus Capsicum or Pimenta
	Citrus fruit nes	080590	Fresh or dried citrus fruit (excl. oranges, lemons, grapefruit, mandarins, incl. tangerines and satsumas, clementines, wilkings and similar citrus hybrids)
	Cucumbers and gherkins	070700	Cucumbers and gherkins, fresh or chilled
	Currants and gooseberries	081030	Fresh black, white or red currants and gooseberries
	Dates	080410	Fresh or dried dates
	Garlic	070320	Garlic, fresh or chilled
	Grapefruit and pomelos	080540	Fresh or dried grapefruit
	Grapes	080610	Fresh grapes
	Lemon and limes	080530	Fresh or dried lemons "Citrus limon, Citrus limonum" and limes "Citrus aurantifolia"
	Lettuce	070511	Fresh or chilled cabbage lettuce
		070519	Fresh or chilled lettuce (excl. cabbage lettuce)
		070521	Fresh or chilled witloof chicory
		070529	Fresh or chilled chicory (excl. witloof chicory)
	Mangoes	080450	Fresh or dried guavas, mangoes and mangosteens
	Mushrooms	070951	Fresh or chilled mushrooms
		070952	Fresh or chilled truffles
	Onions	070310	Fresh or chilled onions and shallots
	Oranges	080510	Fresh or dried oranges
	Other fruits	081090	Fresh tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, pitahaya and other edible fruit (excl. nuts, bananas, dates, figs, pineapples, avocados, guavas, mangoes, mangosteens, papaws "papayas", citrus fruit, grapes,
	Other vegetables	070690	Fresh or chilled salad beetroot, salsify, celeriac, radishes and similar edible roots (excl. carrots and turnips)
		070940	Fresh or chilled celery (excl. celeriac)
		070990	Fresh or chilled vegetables (excl. potatoes, tomatoes, vegetables of the Allium spp., cabbages of the genus Brassica, lettuces of the species Lactuca sativa and Cichorium, carrots, turnips, salad beetroot, salsify, celeriac, radishes and similar edible ro
	Papayas	080720	Fresh papaws "papayas"
	Peaches and nectarines	080930	Fresh peaches, incl. nectarines
	Pears and quinces	080820	Fresh pears and quinces
	Peas, green	070810	Fresh or chilled peas "Pisum sativum", shelled or unshelled
	Pineapples	080430	Fresh or dried pineapples
	Plums	080940	Fresh plums and sloes
	Raspberries	081020	Fresh raspberries, blackberries, mulberries and loganberries
	Strawberries	081010	Fresh strawberries
	Tang. mand. clement. satsma	080520	Fresh or dried mandarins incl. tangerines and satsumas, clementines, wilkings and similar citrus hybrids
	Tomatoes	070200	Tomatoes, fresh or chilled
	Watermelons	080711	Fresh watermelons
Nuts	Almonds	080211	Fresh or dried almonds in shell
	Cashew nuts	080131	Fresh or dried cashew nuts, in shell
		080132	Fresh or dried cashew nuts, shelled
	Chestnuts	080240	Fresh or dried chestnuts "Castanea spp.", whether or not shelled or peeled

Broad sectors	FAO products	HS6 rev1	HS 6 rev1 description
	Other nuts	080290	Nuts, fresh or dried, whether or not shelled or peeled (excl. coconuts, Brazil nuts, cashew nuts, almonds, hazelnuts, walnuts, chestnuts "Castania spp." and pistachios)
Oil crops	Castor beans	120730	Castor oil seeds, whether or not broken
	Groundnuts in shell	120210	Ground-nuts in shell, not roasted or otherwise cooked
	Oil palm fruit	120710	Palm nuts and kernels, whether or not broken
		151110	Crude palm oil
		151190	Palm oil and its fractions, whether or not refined (excl. chemically modified and crude)
	Other oil crops	120792	Shea nuts "karite nuts", whether or not broken
		120799	Oil seeds and oleaginous fruits, whether or not broken (excl. edible nuts, olives, soya beans, ground-nuts, copra, linseed, rape or colza seeds, sunflower seeds, palm nuts and kernels, cotton, castor oil, sesamum, mustard, safflower and poppy seeds, and s
	Sesame seed	120740	Sesamum seeds, whether or not broken
Soybeans	120100	Soya beans, whether or not broken	
Sunflower seed	120600	Sunflower seeds, whether or not broken	
Roots and tubers	Cassava	071410	Fresh, chilled, frozen or dried roots and tubers of manioc "cassava", whether or not sliced or in the form of pellets
	Other roots and tubers	071490	Roots and tubers of arrowroot, salep, Jerusalem artichokes and similar roots and tubers with high starch or inulin content, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets and sago pith (excl. manioc "cassava" and sweet po
	Potatoes	070110	Seed potatoes
		070190	Fresh or chilled potatoes (excl. seed)
	Sweet potatoes	071420	Sweet potatoes, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets
Spices, pyrethrum and peppermint	Anise, badian, fennel	090910	Seeds of anise or badian
		090920	Coriander seeds
		090930	Cumin seeds
		090940	Caraway seeds
		090950	Seeds of fennel; juniper berries
	Other spices	091020	Saffron
		091030	Turmeric "curcuma"
		091040	Thyme and bay leaves
		091050	Curry
		091091	Mixtures of different types of spices
	Pepper, white/long/black	091099	Spices (excl. pepper of the genus Piper, fruit of the genus Capsicum or of the genus Pimenta, vanilla, cinnamon, cinnamontree flowers, clove "wholefruit", clove stems, nutmeg, mace, cardamoms, seeds of anise, badian, fennel, coriander, cumin and caraway,
		090411	Pepper of the genus Piper, neither crushed nor ground
	Pimento, allspice	090412	Pepper of the genus Piper, crushed or ground
		090420	Fruits of the genus Capsicum or of the genus Pimenta, dried or crushed or ground
	Vanilla	090500	Vanilla

Table 37: Underlying indicators for the composite indices at country level

Composite Indices	Dimension	Indicators
Production index	Size	Share of country in world production
	Dynamism	Growth of country's production
	Yield	Ratio of regional yield to world yield
Export index	Size	Share of country in world exports
	Dynamism	Growth of country's exports to world Absolute change in country's exports
	Trade balance	Net exports Relative trade balance (net exports / total trade)
Market index	Size	Share of country in world imports
	Dynamism	Growth of country's imports Absolute change in country's imports
	Market Access	Tariff applied to the country Preferential tariff advantage

Note: Indicators within a given index have the same weight.

Table 38. Do the producing countries export only, import only, both export and import, or do not trade at all?

Sectors	Products (rank in region's production index)	Producers that do not trade	Producers (and non-producers*) that import only	Producers (and non-producers*) that export only	Producers (and non-producers*) that export and import
		<i>(The number in parentheses is the countries' world rank in the Production Index)</i>			
Cereals, grains, beans, peas and pulses	Barley (19)	Zambia (78) Lesotho (91)	Zimbabwe (24) Swaziland *		
	Beans, dry (5)	Lesotho (85)	Angola (69) Botswana * Namibia *	Swaziland (105)	Zimbabwe (69) Zambia *
	Chick-peas (46)	Zimbabwe (34)	Angola *		Zambia *
	Cow peas, dry (33)	Swaziland (26)	Angola * Botswana * Lesotho * Namibia * Zambia *		Zimbabwe *
	Maize (24)	Lesotho (140)	Angola (66) Namibia (109)		Botswana (80) Swaziland (134) Zimbabwe (145) Zambia *
	Millet (4)	Zambia (59) Namibia (68) Zimbabwe (68) Botswana (71)	Angola (67)		
	Oats (27)		Zimbabwe (35) Angola * Zambia *		
	Other cereals (51)	Botswana (65)	Angola * Zambia *		Zimbabwe (15)
	Other pulses (3)	Namibia (49) Swaziland (67) Botswana (78)	Zimbabwe (99) Angola *		Zambia (78)
	Peas, dry (62)		Lesotho (73) Botswana * Zambia *		Angola * Zimbabwe * Swaziland *
	Rice, paddy (33)	Swaziland (63)	Angola (76) Zimbabwe (81) Zambia (100)		
	Sorghum (15)	Swaziland (86) Namibia (94)	Zambia (73) Lesotho (77) Zimbabwe (94) Angola *	Botswana (58)	
	Wheat (7)	Lesotho (73) Botswana (94)	Zambia (17) Namibia (18) Angola (94)	Swaziland (97)	Zimbabwe (82)
Coffee, cocoa, tea	Cocoa beans (77)	Angola (54)		Namibia *	
	Coffee, green (39)		Swaziland *		Zimbabwe (7) Zambia (13) Angola (74) Namibia *
	Tea (11)		Angola * Botswana *	Lesotho * Namibia * Swaziland *	Zimbabwe (10) Zambia (21)
Cotton	Seed cotton (21)	Botswana (29)	Namibia (44)		Zambia (54) Angola (58) Zimbabwe (66) Swaziland (83) Lesotho *
Fibre crops	Jute and other bast fibres (39)	Angola (16) Zimbabwe (22)	Zambia *		
	Sisal and other textile fibres of agave (25)		Angola (12) Zambia *		
Fruits and vegetables	Apples (46)		Angola * Zambia *	Namibia * Swaziland *	Zimbabwe (60)
	Apricots (69)	Zimbabwe (58)	Angola *		

Sectors	Products (rank in region's production index)	Producers that do not trade	Producers (and non-producers*) that import only	Producers (and non-producers*) that export only	Producers (and non-producers*) that export and import
<i>(The number in parentheses is the countries' world rank in the Production Index)</i>					
	Artichokes (19)	Zimbabwe (17) Zambia (18)			
	Asparagus (54)	Zimbabwe (30)			
	Avocados (17)		Angola *	Swaziland (23) Zimbabwe (28)	
	Bananas, plantains (16)	Swaziland (114)	Angola (75) Zambia (118)		Zimbabwe (105)
	Beans (36)		Angola *		Zimbabwe (37)
	Broad beans, green (69)		Angola *		Zimbabwe (45)
	Cabbages (62)	Zimbabwe (114)	Angola *		
	Cantaloupes & other melons (39)	Zimbabwe (54) Namibia (56)	Angola * Zambia *		
	Carrots (67)		Zimbabwe (87) Angola * Zambia *		
	Cauliflower (28)		Angola *		Zimbabwe (12)
	Chillies & peppers, green (38)		Angola *	Namibia * Swaziland *	Zimbabwe (46)
	Citrus fruit nes (6)	Swaziland (62)	Angola (22) Zambia *	Zimbabwe (49)	
	Cucumbers and gherkins (56)	Zimbabwe (94)	Angola *		Zambia *
	Currants and gooseberries (62)			Zimbabwe (11)	
	Dates (73)	Swaziland (34)	Angola * Zimbabwe * Zambia *	Namibia (31)	
	Garlic (67)		Angola * Zambia *		Zimbabwe (53)
	Grapefruit and pomelos (12)		Angola * Zambia *	Swaziland (38) Zimbabwe (51)	
	Grapes (28)	Swaziland (66)	Zimbabwe (49) Angola * Zambia *	Namibia (47)	
	Lemon and limes (51)		Angola * Zambia *	Zimbabwe (45) Swaziland (80)	
	Lettuce (69)	Zimbabwe (73)	Angola * Namibia *	Swaziland *	
	Mangoes (39)	Swaziland (51)	Angola * Zambia *	Zimbabwe (66)	
	Mushrooms (48)		Angola *	Swaziland *	Zimbabwe (26) Zambia *
	Onions (39)	Botswana (117)	Zambia (94) Angola (136)		Zimbabwe (94)
	Oranges (33)	Botswana (98)	Zambia (98) Angola *	Zimbabwe (71) Swaziland (80)	
	Other fruits (7)	Namibia (52) Botswana (134) Lesotho (145)	Zambia (83) Swaziland (124) Angola (134)	Zimbabwe (111)	
	Other vegetables (13)	Lesotho (143) Botswana (174)	Angola (116)	Namibia (135)	Swaziland (128) Zimbabwe (135) Zambia (135)
	Papayas (75)			Zimbabwe (52)	
	Peaches and nectarines (62)		Angola * Zambia *		Zimbabwe (59)
	Pears and quinces (77)		Zimbabwe (76) Angola * Zambia *		

Sectors	Products (rank in region's production index)	Producers that do not trade	Producers (and non-producers*) that import only	Producers (and non-producers*) that export only	Producers (and non-producers*) that export and import
<i>(The number in parentheses is the countries' world rank in the Production Index)</i>					
	Peas, green (60)		Angola *	Zimbabwe (50) Swaziland *	
	Pineapples (7)	Swaziland (14)	Angola (51) Zambia *		Zimbabwe (62)
	Plums (39)	Swaziland (69)	Angola * Zambia *		Zimbabwe (61)
	Raspberries (69)	Zimbabwe (32)			
	Strawberries (75)	Zimbabwe (57)	Angola *		
	Tang. mand. clement. satsma (50)		Angola * Zambia *	Zimbabwe (46) Swaziland (54)	
	Tomatoes (30)	Swaziland (116) Zambia (116) Zimbabwe (147)	Angola (131)	Namibia (131)	
	Watermelons (60)	Namibia (79)	Angola *		
Nuts	Almonds (59)	Swaziland (43)	Angola *		
	Cashew nuts (56)		Angola (22)		
	Chestnuts (62)	Zimbabwe (19)	Angola *		
	Other nuts (30)		Angola *		Zimbabwe (41)
Oil crops	Castor beans (58)	Angola (27)	Zimbabwe *		
	Groundnuts in shell (10)	Swaziland (85) Namibia (104)	Angola (37) Zimbabwe (95) Botswana (107)	Zambia (92)	
	Oil palm fruit (36)		Angola (25) Namibia * Zimbabwe * Zambia *		
	Other oil crops (54)		Angola *	Zimbabwe (45)	
	Sesame seed (51)	Angola (60)	Zimbabwe *		
	Soybeans (73)		Angola *	Swaziland *	Zambia (40) Zimbabwe (62)
	Sunflower seed (39)	Botswana (46) Angola (56) Namibia (63)	Zambia (57) Zimbabwe (67)		
Roots and tubers	Cassava (1)	Zambia (71) Zimbabwe (80)	Angola (4)		
	Other roots and tubers (2)	Namibia (30) Botswana (53) Swaziland (66) Zimbabwe (88)	Zambia *		
	Potatoes (21)	Lesotho (83) Swaziland (146)	Angola (83)		Zimbabwe (83) Zambia (118)
	Sweet potatoes (14)	Angola (8) Zambia (40) Zimbabwe (96) Swaziland (99)			
Spices, pyrethrum and peppermint	Anise, badian, fennel (49)	Zimbabwe (25)			
	Other spices (30)		Zambia (15) Angola * Namibia *		Zimbabwe (45)
	Pepper, white/long/black (17)		Angola *		Zimbabwe (13) Zambia (19)
	Pimento, allspice (23)		Angola *		Zambia (21) Zimbabwe (39)
	Vanilla (25)	Zimbabwe (9)			

Source: ITCs TradeMap and Market Access Map, FAOSTAT.

Table 39: Top 10 producers, exporters and markets in the world and in the Southern Africa region

Sector	Industry	Top 10 producers:		Top 10 exporters:		Top 10 markets:	
		Countries with the highest rank in the production index...	... in the region	Countries with the highest rank in the export index...	... in the region	Countries with the highest rank in the market index...	... in the region
Cereals, grains, beans, peas and pulses	Barley	France (1)	Ukraine (1)	Ukraine (1)	Area Nes (1)	Swaziland (28)	
		Canada (2)	Australia (1)	Australia (1)	Spain (2)	Zimbabwe (71)	
		Turkey (3)	France (3)	France (3)	Saudi Arabia (3)		
		Germany (4)	Germany (4)	Germany (4)	Belgium (4)		
		United Kingdom (5)	Canada (5)	Canada (5)	China (5)		
		Denmark (5)	Russian Federation (6)	Russian Federation (6)	Iran (5)		
		China (5)	Czech Republic (7)	Czech Republic (7)	Syrian Arab Republic (7)		
		New Zealand (8)	United Kingdom (8)	United Kingdom (8)	Netherlands (8)		
		Czech Republic (9)	Lithuania (9)	Lithuania (9)	Italy (9)		
		Switzerland (9)	Turkey (10)	Turkey (10)	Jordan (10)		
Beans, dry		United States (1)	Myanmar (1)	Swaziland (28)	United States (1)	Botswana (30)	
		China (2)	China (2)	China (2)	United Kingdom (2)	Namibia (30)	
		Belarus (3)	Canada (3)	Canada (3)	France (3)	Zambia (41)	
		Myanmar (4)	Nicaragua (4)	Nicaragua (4)	Cuba (4)	Angola (42)	
		Mexico (4)	United States (5)	United States (5)	South Africa (4)	Angola (42)	
		Brazil (4)	Netherlands (6)	Netherlands (6)	Italy (6)	Zimbabwe (98)	
		India (7)	Ethiopia (7)	Ethiopia (7)	Spain (7)		
		Serbia and Montenegro (8)	Argentina (8)	Argentina (8)	India (8)		
		Latvia (9)	Egypt (9)	Egypt (9)	Algeria (9)		
		Ireland (10)	Kyrgyzstan (10)	Kyrgyzstan (10)	Belgium (10)		
Chick-peas		Pakistan (1)	Turkey (1)	Turkey (1)	Bangladesh (1)	Zambia (20)	
		India (2)	Pakistan (2)	Pakistan (2)	United Kingdom (1)	Angola (89)	
		Turkey (3)	Iran (2)	Iran (2)	Italy (1)		
		China (4)	Australia (2)	Australia (2)	Spain (4)		
		Myanmar (5)	Mexico (5)	Mexico (5)	Algeria (5)		
		Kazakhstan (6)	India (6)	India (6)	Iraq (6)		
		Bosnia and Herzegovina (6)	Tanzania, United Rep. of (7)	Tanzania, United Rep. of (7)	Portugal (7)		
		Russian Federation (8)	Canada (8)	Canada (8)	Norway (8)		
		Sudan (9)	Myanmar (9)	Myanmar (9)	Afghanistan (9)		
		Iran (10)	Kazakhstan (10)	Kazakhstan (10)	Sudan (10)		
Cow peas, dry		Niger (1)	Myanmar (1)	Myanmar (1)	Canada (1)	Angola (6)	
		Nigeria (2)	Pakistan (2)	Pakistan (2)	United States (1)	Zambia (15)	
		Palestine (3)	Canada (3)	Canada (3)	Malaysia (3)	Lesotho (18)	
		TFYR of Macedonia (4)	Peru (4)	Peru (4)	Kenya (3)	Namibia (24)	
		Croatia (4)	Australia (5)	Australia (5)	Sudan (5)	Zimbabwe (39)	
		Trinidad and Tobago (6)	United States (6)	United States (6)	Uganda (6)	Botswana (72)	
		United States (7)	Thailand (7)	Thailand (7)	Angola (6)		
		Cameroon (8)	China (8)	China (8)	Dominican Republic (8)		
		Egypt (9)	Tanzania, United Rep. of (9)	Tanzania, United Rep. of (9)	India (9)		
		Myanmar (10)	Uganda (10)	Uganda (10)	South Africa (9)		

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Maize		United States (1)	Angola (66)	Ukraine (1)	Zambia (21)	Rep. of Korea (1)	Zimbabwe (8)
		Argentina (2)	Botswana (80)	South Africa (2)	Swaziland (32)	Spain (2)	Zambia (22)
Millet		Hungary (3)	Namibia (109)	China (3)	Botswana (45)	Germany (3)	Botswana (38)
		Italy (3)	Swaziland (134)	Argentina (4)	Zimbabwe (107)	Malaysia (4)	Namibia (38)
		South Africa (5)	Lesotho (140)	France (5)		Taiwan (Prov. of China) (5)	Swaziland (46)
		Indonesia (6)	Zimbabwe (145)	United States (6)		Netherlands (5)	Angola (79)
		Ukraine (7)		Hungary (7)		Iran (5)	
		Chile (8)		Serbia and Montenegro (8)		Zimbabwe (8)	
		Egypt (9)		India (9)		Japan (9)	
		India (10)		Bulgaria (10)		Italy (10)	
		China (1)	Zambia (59)	India (1)		Belgium (1)	Angola (19)
		Nigeria (2)	Angola (67)	France (2)		Germany (2)	
France (3)	Namibia (68)	China (3)		Sudan (3)			
Ukraine (4)	Zimbabwe (68)	United States (3)		Rep. of Korea (4)			
Spain (5)	Botswana (71)	Ukraine (5)		United Kingdom (5)			
Uganda (6)		Austria (6)		Italy (6)			
Serbia and Montenegro (7)		Egypt (7)		South Africa (7)			
Croatia (8)		Bulgaria (8)		Netherlands (8)			
Mali (9)		Hungary (9)		Switzerland (9)			
India (10)		Slovakia (10)		Philippines (9)			
Oats		Canada (1)	Zimbabwe (35)	Canada (1)		Area Nes (1)	Zimbabwe (60)
		Belarus (2)		Australia (2)		Spain (2)	Zambia (65)
		Poland (3)		Sweden (3)		United States (3)	Angola (82)
		Denmark (4)		Poland (4)		Germany (4)	
		Finland (5)		Finland (4)		South Africa (5)	
		France (5)		France (6)		Denmark (6)	
		United States (5)		Czech Republic (7)		Japan (7)	
		Germany (8)		Germany (8)		Colombia (8)	
		United Kingdom (8)		Estonia (9)		Belgium (9)	
		Chile (10)		Chile (10)		Switzerland (10)	
Other cereals		France (1)	Zimbabwe (15)	China (1)	Zimbabwe (31)	Spain (1)	Zambia (23)
		China (2)	Botswana (65)	Poland (2)		Portugal (2)	Angola (79)
		Belarus (3)		Germany (3)		Netherlands (3)	Zimbabwe (98)
		Poland (4)		France (4)		Thailand (4)	
		Germany (5)		United States (5)		Germany (4)	
		Sweden (6)		Hungary (6)		United Kingdom (6)	
		Belgium (7)		Bolivia (7)		France (6)	
		Hungary (8)		Lao People's Dem. Rep. (8)		Sudan (6)	
		Czech Republic (9)		Thailand (9)		Italy (9)	
		Netherlands (9)		Czech Republic (10)		Rep. of Korea (10)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Other pulses		Poland (1)	Namibia (49)	United Kingdom (1)	Zambia (17)	Sudan (1)	Zimbabwe (65)
		China (2)	Swaziland (67)	Pakistan (2)		China (2)	Zambia (82)
Peas, dry		Myanmar (3)		Myanmar (3)		Egypt (3)	Angola (100)
		Tajikistan (3)		Australia (4)		United Arab Emirates (4)	
		United Kingdom (5)		India (5)		United States (4)	
		India (6)		Area Nes (6)		Nepal (6)	
		Iran (7)		Madagascar (7)		United Kingdom (6)	
		Denmark (8)		Malawi (8)		Pakistan (8)	
		Spain (9)		Uganda (9)		Malaysia (9)	
		Kenya (9)		Ukraine (9)		Turkey (10)	
		Canada (1)	Lesotho (73)	United States (1)	Swaziland (32)	Spain (1)	Swaziland (18)
		United States (2)		Canada (2)	Angola (49)	Italy (2)	Botswana (18)
France (3)		France (3)	Zimbabwe (59)	United States (2)	Lesotho (18)		
China (4)		Ukraine (4)		United Kingdom (2)	Zambia (23)		
India (5)		Tanzania, United Rep. of (5)		Netherlands (5)	Angola (25)		
Germany (6)		Germany (6)		China (5)	Zimbabwe (72)		
Ireland (6)		Australia (7)		Canada (7)			
Switzerland (8)		Russian Federation (8)		Belgium (8)			
Netherlands (9)		New Zealand (9)		Uganda (8)			
Italy (10)		Hungary (10)		United Arab Emirates (10)			
Rice, paddy		China (1)	Swaziland (63)	United States (1)		Guatemala (1)	Zambia (25)
		Viet Nam (2)	Angola (76)	China (2)		Saudi Arabia (2)	Zimbabwe (67)
		Indonesia (3)	Zimbabwe (81)	Paraguay (3)		Honduras (3)	Angola (90)
		Bangladesh (4)	Zambia (100)	Egypt (4)		Mexico (4)	
		Myanmar (5)		India (5)		Costa Rica (5)	
		Egypt (6)		France (6)		El Salvador (6)	
		Brazil (7)		Russian Federation (6)		Gambia (7)	
		United States (8)		Italy (8)		Panama (8)	
		Iran (9)		Tanzania, United Rep. of (9)		South Africa (9)	
		Philippines (10)		TFYR of Macedonia (10)		Turkey (10)	
Sorghum		Argentina (1)	Botswana (58)	India (1)	Botswana (14)	Sudan (1)	Zambia (6)
		United States (2)	Zambia (73)	Australia (2)		Taiwan (Prov. of China) (2)	Zimbabwe (15)
		Egypt (3)	Lesotho (77)	Argentina (3)		Brazil (3)	Angola (28)
		Nigeria (3)	Swaziland (86)	United States (3)		Spain (4)	Lesotho (28)
		India (5)	Namibia (94)	France (5)		Uganda (5)	
		Jordan (5)	Zimbabwe (94)	Ukraine (6)		Zambia (6)	
		Palestine (7)		China (7)		Japan (7)	
		Mexico (8)		Egypt (8)		Eritrea (8)	
		Israel (9)		South Africa (9)		Niger (9)	
		China (10)		Myanmar (9)		Mexico (10)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index....		Top 10 exporters: Countries with the highest rank in the export index....		Top 10 markets: Countries with the highest rank in the market index....	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Wheat	France (1) United Kingdom (2) Germany (3) China (4) Canada (5) United States (6) India (7) Egypt (8) Pakistan (8) Turkey (10)	Zambia (17) Namibia (18) Lesotho (73) Zimbabwe (82) Angola (94) Botswana (94) Swaziland (97)	Australia (1) Russian Federation (2) France (3) United States (3) Argentina (5) Canada (6) Ukraine (7) Czech Republic (8) Germany (9) Bulgaria (10)	Swaziland (15) Zimbabwe (35)	Area Nes (1) Spain (2) Indonesia (3) Algeria (4) Egypt (4) Japan (6) Italy (6) China (8) Nigeria (9) Belgium (9)	Angola (54) Zambia (54) Namibia (119) Zimbabwe (158)
	Cocoa beans, cocoa, tea	Indonesia (1) Ghana (2) Côte d'Ivoire (3) Ecuador (4) Cameroon (5) Grenada (6) Nigeria (7) Solomon Is (7) El Salvador (9) Madagascar (10)	Angola (54)	Ghana (1) Nigeria (1) Indonesia (3) Côte d'Ivoire (3) Cameroon (5) Belgium (6) Ecuador (7) Papua New Guinea (8) Guinea (9) Togo (10)	Namibia (32)	Malaysia (1) Germany (2) United States (3) Netherlands (4) Belgium (5) France (6) Spain (7) Turkey (7) Italy (9) Singapore (9)	
	Coffee, green	Viet Nam (1) Colombia (2) Brazil (3) Indonesia (4) China (5) Ethiopia (6) Zimbabwe (7) Belize (8) Tonga (8) Mexico (10)	Zimbabwe (7) Zambia (13) Angola (74)	Indonesia (1) Ethiopia (1) Brazil (3) Viet Nam (4) Colombia (4) Honduras (6) Guatemala (7) Peru (8) Costa Rica (9) India (10)	Zambia (29) Namibia (43) Zimbabwe (51) Angola (87)	United States (1) Belgium (1) Germany (1) Japan (1) Spain (1) Italy (6) Netherlands (6) Sweden (8) Canada (9) France (10)	Zambia (22) Namibia (28) Swaziland (93) Angola (134) Zimbabwe (149)
	Tea	Turkey (1) China (2) Kenya (3) Sri Lanka (4) India (5) Malawi (6) Japan (7) Viet Nam (8) Indonesia (9) Zimbabwe (10)	Zimbabwe (10) Zambia (21)	China (1) Sri Lanka (2) Kenya (3) India (4) Indonesia (5) Germany (6) United Arab Emirates (7) United Kingdom (8) Viet Nam (9) Malawi (10)	Namibia (17) Lesotho (22) Swaziland (22) Zimbabwe (34) Zambia (95)	France (1) Canada (1) United States (1) Russian Federation (4) Germany (4) United Arab Emirates (4) Saudi Arabia (7) Kenya (8) Australia (9) Ukraine (10)	Zambia (28) Botswana (37) Angola (107) Zimbabwe (168)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Cotton	Seed cotton	China (1)	Botswana (29)	India (1)	Zambia (14)	Thailand (1)	Swaziland (14)
		Brazil (2)	Namibia (44)	Brazil (2)	Zimbabwe (21)	Pakistan (2)	Lesotho (15)
Fibre crops	Jute and other bast fibres	Pakistan (3)	Zambia (54)	United States (3)	Swaziland (34)	Turkey (2)	Zambia (22)
		United States (4)	Angola (58)	Greece (4)	Angola (43)	China (4)	Namibia (27)
		Uzbekistan (5)	Zimbabwe (66)	Burkina Faso (5)	Lesotho (103)	Taiwan (Prov. of China) (5)	Zimbabwe (50)
		India (6)	Swaziland (83)	Mali (6)		Egypt (6)	Angola (111)
		Turkey (7)		Uzbekistan (7)		Rep. of Korea (7)	
		Syrian Arab Republic (8)		Australia (8)		Tokelau (8)	
		Australia (9)		Kazakhstan (9)		Mexico (9)	
		Israel (10)		Benin (10)		South Africa (10)	
		India (1)	Angola (16)	Bangladesh (1)		China (1)	Zambia (11)
		Bhutan (2)	Zimbabwe (22)	Israel (1)		Côte d'Ivoire (2)	
Uzbekistan (3)		Myanmar (3)		United States (3)			
Bangladesh (4)		Belgium (4)		India (4)			
Viet Nam (5)		Mozambique (5)		Saudi Arabia (5)			
China (5)		Viet Nam (6)		Rep. of Korea (6)			
Russian Federation (7)		India (7)		Philippines (7)			
Peru (8)		France (8)		Nepal (7)			
Cambodia (9)		South Africa (9)		Pakistan (9)			
Egypt (10)		Lao People's Dem. Rep. (9)		Malaysia (10)			
Sisal and other textile fibres of agave		Kenya (1)	Angola (12)	Brazil (1)		China (1)	Zambia (14)
		Brazil (2)		Kenya (2)		Mexico (2)	Angola (35)
		Colombia (3)		Tanzania, United Rep. of (3)		Spain (3)	
		China (4)		Madagascar (4)		Saudi Arabia (4)	
		Ecuador (5)		Germany (5)		Belgium (5)	
		Mexico (7)		El Salvador (6)		Morocco (6)	
		Cuba (8)		Mozambique (7)		India (7)	
		Indonesia (9)		Fiji (8)		Cuba (7)	
		Tanzania, United Rep. of (10)		Bangladesh (8)		Indonesia (9)	
				Belgium (10)		Netherlands (10)	
Fruits and vegetables	Apples	Chile (1)	Zimbabwe (60)	China (1)	Namibia (16)	Area Nes (1)	Zambia (29)
		Slovenia (2)		New Zealand (2)	Swaziland (23)	Canada (2)	Angola (99)
		China (3)		Italy (3)	Zimbabwe (84)	Russian Federation (3)	Zimbabwe (137)
		South Africa (3)		United States (4)		France (4)	
		Turkey (3)		France (6)		Netherlands (5)	
		Italy (6)		South Africa (7)		Saudi Arabia (5)	
		United States (7)		Poland (8)		Spain (5)	
		France (7)		Netherlands (9)		United Kingdom (8)	
		Iran (9)		Japan (10)		Norway (8)	
		Russian Federation (9)				Germany (10)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Apricots	France (1) Italy (1) Pakistan (3) Ukraine (4) Serbia and Montenegro (5) South Africa (6) Iran (6) Syrian Arab Republic (8) Slovenia (9) Switzerland (10)	Zimbabwe (58)	France (1) Greece (1) Uzbekistan (3) Turkey (4) Spain (5) Italy (6) South Africa (7) United States (8) Netherlands (9) Belgium (10)	United Kingdom (1) Germany (2) Austria (3) Netherlands (4) Russian Federation (4) Belgium (6) Czech Republic (7) Poland (8) Italy (8) Switzerland (10)	Angola (36)	
	Artichokes	Egypt (1) Argentina (1) Lebanon (3) Morocco (4) Peru (5) Cyprus (5) Italy (7) Spain (8) Turkey (9) China (10)	Zimbabwe (17) Zambia (18)	Egypt (1) Spain (2) Ireland (3) Netherlands (4) United States (5) Morocco (6) Argentina (7) Peru (8) China (8) France (8)	Italy (1) France (2) Germany (3) Canada (4) Belgium (4) United Arab Emirates (6) United States (7) United Kingdom (8) Netherlands (9) Switzerland (10)		
	Asparagus	Peru (1) China (2) Philippines (3) Poland (4) Iran (5) Germany (6) Czech Republic (7) Italy (8) Mexico (9) Slovakia (9)	Zimbabwe (30)	Peru (1) Mexico (2) Thailand (3) United States (4) Spain (5) Netherlands (6) Greece (6) Bulgaria (8) Kenya (8) TF.YR of Macedonia (8)	United States (1) France (2) Spain (3) Canada (4) Netherlands (5) United Kingdom (6) Germany (7) Switzerland (8) Belgium (9) Japan (10)		
	Avocados	Mexico (1) Colombia (1) Indonesia (3) Brazil (4) Dominican Republic (5) Chile (6) United States (7) Kenya (8) Lebanon (9) Peru (10)	Swaziland (23) Zimbabwe (28)	Mexico (1) Chile (2) Spain (3) Israel (4) South Africa (5) Peru (6) New Zealand (7) Dominican Republic (8) Netherlands (8) Kenya (10)	United States (1) Japan (2) Netherlands (2) United Kingdom (2) France (5) Spain (6) Germany (7) Canada (8) Australia (9) Sweden (10)	Angola (61)	

Sector	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
	... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Bananas, plantains	India (1) China (2) Philippines (3) Brazil (4) Colombia (5) Honduras (6) Costa Rica (7) Indonesia (8) Ecuador (9) Guatemala (9)	Angola (75) Zimbabwe (105) Swaziland (114) Zambia (118)	Colombia (1) Ecuador (1) Philippines (3) Guatemala (4) Belgium (4) Honduras (6) Costa Rica (7) United Arab Emirates (7) Dominican Republic (9) Germany (10)	Zimbabwe (99)	Russian Federation (1) Belgium (2) United Kingdom (3) Italy (4) Japan (4) Germany (4) France (7) Czech Republic (7) United States (9) Hungary (10)	Zambia (31) Zimbabwe (53) Angola (102)
Beans	China (1) Turkey (2) United States (3) Indonesia (4) France (5) Morocco (6) Spain (7) Belgium (8) Ukraine (9) Egypt (10)	Zimbabwe (37)	Morocco (1) Kenya (2) Egypt (3) France (4) Mexico (4) United States (6) Spain (7) Netherlands (8) Senegal (9) Ethiopia (10)	Zimbabwe (29)	Spain (1) United Kingdom (2) Netherlands (2) Belgium (2) France (5) United States (6) Germany (7) Canada (8) Italy (9) Sudan (10)	Zimbabwe (45) Angola (95)
Broad beans, green	China (1) Morocco (2) Algeria (3) Taiwan (Prov. of China) (4) Spain (4) Lebanon (6) Kazakhstan (7) Libyan Arab Jamahiriya (8) Malta (8) Jordan (10)	Zimbabwe (45)	Guatemala (1) Mexico (2) China (3) Jordan (4) Taiwan (Prov. of China) (5) France (6) Morocco (7) Netherlands (7) Spain (9) Malaysia (10)	Zimbabwe (60)	Spain (1) Belgium (2) Italy (3) United States (4) Netherlands (4) Sudan (4) France (7) Portugal (8) Greece (9) Japan (10)	Zimbabwe (37) Angola (63)
Cabbages	Germany (1) China (2) Rep. of Korea (2) Ukraine (4) Russian Federation (4) India (6) Belarus (6) Japan (8) Poland (9) Viet Nam (10)	Zimbabwe (114)	Mexico (1) Spain (2) Poland (3) Netherlands (4) China (5) United States (5) Italy (7) Uzbekistan (8) Germany (9) Viet Nam (9)	Russian Federation (1) United States (1) Netherlands (3) United Kingdom (3) Germany (3) Canada (6) Sweden (7) Singapore (8) Japan (9) Hong Kong (SARC) (10)	Angola (80)	

Sector	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
	... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Cantaloupes & other melons	Spain (1) China (2) Morocco (3) Italy (4) Romania (5) Iran (6) United States (7) Turkey (8) Venezuela (9) Guatemala (10)	Zimbabwe (54) Namibia (56)	Panama (1) Guatemala (2) Brazil (3) Spain (4) Costa Rica (5) Morocco (6) Uzbekistan (7) Mexico (8) Netherlands (9) United States (10)	Netherlands (2) Germany (3) United Kingdom (3) Russian Federation (5) Spain (6) Canada (7) Belgium (7) United States (9) Italy (10)	France (1) Netherlands (2) Germany (3) United Kingdom (3) Russian Federation (5) Spain (6) Canada (7) Belgium (7) United States (9) Italy (10)	Zambia (23) Angola (67)
Carrots	Germany (1) Belgium (2) Italy (3) Netherlands (4) United Kingdom (5) China (6) Ukraine (6) Russian Federation (8) Poland (9) United States (10)	Zimbabwe (87)	China (1) Netherlands (2) United States (3) Spain (4) Italy (5) Australia (6) France (7) Belgium (8) Uzbekistan (9) South Africa (10)	Russian Federation (1) Belgium (2) Japan (3) Canada (4) United States (4) France (6) Germany (7) Portugal (8) United Kingdom (9) Malaysia (10)	Russian Federation (1) Belgium (2) Japan (3) Canada (4) United States (4) France (6) Germany (7) Portugal (8) United Kingdom (9) Malaysia (10)	Zambia (43) Angola (84) Zimbabwe (123)
Cauliflower	China (1) Italy (2) India (3) Spain (4) Morocco (5) Jordan (6) France (7) Egypt (7) United Kingdom (7) United States (10)	Zimbabwe (12)	China (1) Spain (2) France (3) United States (4) Ecuador (5) Guatemala (6) Mexico (7) Italy (8) Netherlands (9) Morocco (10)	Zimbabwe (36)	Netherlands (1) Canada (2) United Kingdom (2) France (2) Germany (5) Norway (6) Italy (6) Belgium (8) Malaysia (9) Czech Republic (10)	Angola (66) Zimbabwe (113)
Chilies & peppers, green	United States (1) China (2) Turkey (3) Spain (4) Indonesia (5) Netherlands (6) Egypt (7) Israel (8) Mexico (9) United Kingdom (9)	Zimbabwe (46)	Mexico (1) Spain (2) Turkey (3) Netherlands (3) Rep. of Korea (5) Canada (6) Morocco (7) France (8) United States (9) China (10)	Namibia (22) Swaziland (30) Zimbabwe (67)	Netherlands (1) France (2) United Kingdom (2) Italy (2) Germany (5) United States (6) Canada (7) Japan (8) Sweden (9) Czech Republic (10)	Angola (123) Zimbabwe (130)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Citrus fruit nes		China (1)	Angola (22)	Israel (1)	Zimbabwe (15)	United Kingdom (1)	Zambia (9)
		Cuba (2)	Zimbabwe (49)	China (2)		Saudi Arabia (1)	Angola (71)
		Syrian Arab Republic (3)	Swaziland (62)	Netherlands (3)		Netherlands (3)	
		Peru (4)		Taiwan (Prov. of China) (4)		Canada (4)	
		Saudi Arabia (5)		Spain (4)		Ireland (5)	
		Taiwan (Prov. of China) (6)		India (6)		Denmark (6)	
		Guinea (6)		Thailand (7)		Sudan (6)	
		Nigeria (8)		South Africa (8)		Belgium (8)	
		French Polynesia (9)		Egypt (8)		Kenya (9)	
		Japan (10)		Malaysia (10)		Zambia (9)	
Cucumbers and gherkins		Netherlands (1)	Zimbabwe (94)	Jordan (1)	Zambia (28)	United Kingdom (1)	Zambia (57)
		Ukraine (1)		Spain (2)		Netherlands (1)	Angola (82)
		Russian Federation (3)		Mexico (2)		Germany (3)	
		China (4)		Netherlands (4)		France (4)	
		Iran (5)		Canada (5)		Russian Federation (5)	
		Spain (6)		Iran (6)		United States (6)	
		France (7)		Turkey (7)		Czech Republic (7)	
		Mexico (8)		Greece (8)		Belgium (8)	
		Turkey (9)		Belgium (9)		Denmark (9)	
		Egypt (9)		Poland (10)		Iraq (10)	
Currants and gooseberries		Russian Federation (1)	Zimbabwe (11)	Italy (1)	Zimbabwe (21)	Belgium (1)	
		Ireland (2)		Netherlands (2)		France (2)	
		Belgium (3)		Belgium (3)		United Kingdom (2)	
		Poland (4)		United States (4)		Netherlands (4)	
		Germany (5)		Ukraine (5)		Italy (5)	
		Ukraine (6)		Burkina Faso (5)		Poland (5)	
		New Zealand (7)		Chile (5)		Germany (7)	
		United Kingdom (7)		Spain (8)		Belarus (8)	
		Denmark (9)		Malaysia (9)		United States (8)	
		Azerbaijan (10)		Israel (10)		Canada (10)	
Dates		Egypt (1)	Namibia (31)	Israel (1)	Namibia (11)	Germany (1)	Zambia (39)
		Saudi Arabia (2)	Swaziland (34)	Saudi Arabia (2)		United Kingdom (2)	Angola (88)
		China (3)		Iran (3)		Spain (2)	Zimbabwe (137)
		Iran (4)		Tunisia (4)		France (4)	
		Pakistan (5)		Pakistan (5)		Italy (5)	
		United Arab Emirates (5)		Algeria (6)		Malaysia (6)	
		Algeria (7)		Iraq (7)		Russian Federation (7)	
		Kuwait (8)		United States (8)		Canada (7)	
		Sudan (9)		Egypt (9)		United Arab Emirates (9)	
		Jordan (10)		Mexico (9)		Belgium (10)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...	Top 10 exporters: Countries with the highest rank in the export index...	Top 10 markets: Countries with the highest rank in the market index...
		... in the world	... in the region	... in the world
	Lettuce	United States (1) China (2) France (3) Rep. of Korea (4) Spain (5) Turkey (6) Mexico (7) Congo (7) Italy (9) Austria (10)	Zimbabwe (73)	Netherlands (1) Canada (2) Italy (2) France (4) Germany (5) United Kingdom (5) United States (7) Austria (8) Belgium (9) Sweden (10)
	Mangoes	Pakistan (1) Indonesia (2) China (3) Peru (4) India (5) Thailand (6) Mexico (7) Guatemala (8) Viet Nam (8) Philippines (10)	Swaziland (51) Zimbabwe (66)	France (1) United Kingdom (2) Germany (3) United States (3) Netherlands (5) China (6) Japan (8) Canada (9) Hong Kong (SARC) (10)
	Mushrooms	Poland (1) United States (2) Netherlands (3) Spain (4) India (5) China (6) Italy (7) France (8) Canada (9) Ireland (10)	Zimbabwe (26)	United Kingdom (1) Netherlands (1) France (1) Germany (4) United States (4) Belgium (6) Russian Federation (7) Hungary (8) Italy (9) Japan (10)
	Onions	United States (1) Egypt (2) Rep. of Korea (3) China (4) Spain (5) Pakistan (6) Japan (6) Russian Federation (6) Iran (9) India (10)	Zimbabwe (94) Zambia (94) Botswana (117) Angola (136)	Saudi Arabia (1) Russian Federation (2) United States (2) Malaysia (4) United Kingdom (5) Belgium (6) Bangladesh (6) Japan (6) Canada (9) Germany (10)
				Zambia (22) Angola (62) Zimbabwe (135)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Oranges	Italy (1) India (2) Brazil (3) Egypt (4) China (5) United States (6) Turkey (7) Indonesia (8) Spain (9) Iran (9)	Zimbabwe (71) Swaziland (80) Botswana (98) Zambia (98)	Egypt (1) South Africa (2) Morocco (3) Spain (4) United States (5) Turkey (6) Australia (6) Greece (8) Netherlands (9) Argentina (10)	Zimbabwe (27) Swaziland (41)	Saudi Arabia (1) Netherlands (2) Russian Federation (3) Germany (3) United Kingdom (3) France (6) Canada (6) Belgium (8) United States (9) Rep. of Korea (10)	Zambia (16) Angola (95)
	Other fruits	Indonesia (1) Colombia (2) Viet Nam (3) Cuba (4) Philippines (5) Taiwan (Prov. of China) (5) India (7) Iran (8) China (9) Papua New Guinea (10)	Namibia (52) Zambia (63) Zimbabwe (111) Swaziland (124) Angola (134) Botswana (134) Lesotho (145)	Azerbaijan (1) Viet Nam (2) Uzbekistan (2) Thailand (4) Spain (5) Colombia (6) Netherlands (7) Iran (8) Madagascar (9) Israel (10)	Zimbabwe (60)	United Kingdom (1) Russian Federation (2) France (2) Netherlands (2) Germany (5) United States (6) Indonesia (7) China (8) Italy (9) Belgium (10)	Zambia (22) Swaziland (30) Angola (127)
	Other vegetables	China (1) France (2) Viet Nam (3) Rep. of Korea (3) Cuba (5) Italy (6) Philippines (7) Russian Federation (7) Poland (9) Ukraine (9)	Angola (116) Swaziland (128) Zambia (135) Namibia (135) Zimbabwe (135) Lesotho (143) Botswana (174)	Israel (1) Spain (2) Italy (3) Netherlands (3) China (5) Thailand (6) Mexico (7) New Zealand (8) Morocco (9) France (10)	Zambia (16) Namibia (24) Swaziland (64) Zimbabwe (105)	Italy (1) Netherlands (2) France (3) United Kingdom (4) Belgium (4) Germany (4) United States (7) Canada (8) Russian Federation (9) Austria (10)	Swaziland (23) Zambia (23) Angola (126) Zimbabwe (132)
	Papayas	Brazil (1) Mexico (2) Indonesia (3) Belize (4) Taiwan (Prov. of China) (5) Nigeria (5) India (7) Philippines (8) Colombia (9) Costa Rica (10)	Zimbabwe (52)	Belize (1) Mexico (2) Brazil (3) Malaysia (4) Netherlands (5) Côte d'Ivoire (6) Ecuador (7) India (8) Costa Rica (8) Guatemala (8)	Zimbabwe (34)	Netherlands (1) United Kingdom (1) United States (1) Germany (4) Canada (5) Portugal (6) Spain (7) France (8) Japan (9) Italy (10)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...	Top 10 exporters: Countries with the highest rank in the export index...	Top 10 markets: Countries with the highest rank in the market index...
		... in the world	... in the region	... in the world
Peaches and nectarines		Italy (1) United States (1) Spain (3) China (4) Turkey (5) Egypt (6) Slovenia (7) Chile (8) France (9) Iran (10)	Zimbabwe (59)	Italy (1) France (2) Belgium (3) Germany (4) Poland (4) Netherlands (6) Russian Federation (7) Canada (8) United Kingdom (9) United States (10)
		Belgium (1) Netherlands (2) South Africa (3) China (4) United States (4) Argentina (6) Spain (7) Germany (7) France (9) Switzerland (10)	Zimbabwe (76)	Russian Federation (1) Netherlands (2) Belgium (3) United Kingdom (3) France (3) Germany (6) Italy (6) Canada (8) United States (9) Sweden (10)
Peas, green		China (1) India (2) Egypt (3) France (3) United States (5) Belgium (6) Spain (7) Netherlands (8) Lithuania (9) United Kingdom (10)	Zimbabwe (50)	Netherlands (1) United Kingdom (2) Belgium (3) United States (4) Canada (5) Germany (6) Sudan (7) France (8) Japan (9) Norway (10)
		Peru (1) Kenya (1) Guatemala (3) China (4) Netherlands (5) Egypt (6) Zimbabwe (7) Russian Federation (8) Germany (9) Tanzania, United Rep. of (9) Chile (10)	Zimbabwe (7) Swaziland (18)	Zimbabwe (48)
Pineapples		Philippines (1) Mexico (2) Honduras (3) Colombia (4) Taiwan (Prov. of China) (5) Benin (6) India (7) Brazil (7) China (7) Kenya (10)	Swaziland (14) Angola (51) Zimbabwe (62)	Belgium (1) Germany (2) United Kingdom (2) Italy (2) United States (5) Canada (6) Netherlands (7) Spain (8) Japan (9) France (10)
		Costa Rica (1) Netherlands (2) Ghana (3) Belgium (4) Ecuador (5) Philippines (6) Panama (6) United States (8) Côte d'Ivoire (9) Guatemala (10)	Zimbabwe (55)	Zambia (12) Zimbabwe (73) Angola (101)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Plums	Chile (1) Germany (2) France (3) Spain (4) Serbia and Montenegro (5) South Africa (6) Italy (7) Turkey (8) China (9) Ukraine (10)	Zimbabwe (61) Swaziland (69)	Chile (1) Spain (1) South Africa (1) Italy (4) United States (5) Netherlands (6) France (7) Uzbekistan (8) Argentina (9) Australia (9)	Zimbabwe (40)	Netherlands (1) United Kingdom (2) Germany (3) Canada (4) United States (5) Russian Federation (6) France (6) Belgium (8) Italy (9) Sweden (10)	Zambia (17) Angola (53) Zimbabwe (69)
	Raspberries	United States (1) Serbia and Montenegro (2) Russian Federation (2) Mexico (4) Romania (5) Moldova, Rep. of (5) Netherlands (7) United Kingdom (8) Ukraine (8) Azerbaijan (10)	Zimbabwe (32)	Mexico (1) Spain (1) United States (3) Chile (4) Serbia and Montenegro (5) Netherlands (6) Poland (7) South Africa (8) Viet Nam (8) Morocco (10)	Canada (1) United Kingdom (1) United States (3) France (4) Germany (5) Netherlands (6) Austria (7) Italy (8) Ireland (9) Japan (10)		
	Strawberries	United States (1) Spain (2) Morocco (3) Mexico (4) Egypt (5) Turkey (5) Rep. of Korea (5) Japan (8) Russian Federation (8) Italy (10)	Zimbabwe (57)	Spain (1) Netherlands (2) United States (3) Belgium (4) Mexico (5) France (6) Morocco (7) Egypt (8) Turkey (9) Palestine (10)	Italy (1) United Kingdom (2) France (3) Canada (4) United States (4) Belgium (6) Germany (7) Netherlands (8) Russian Federation (9) Austria (10)	Angola (67)	
	Tang. mand. clement. satsma	Brazil (1) Spain (2) China (3) Morocco (4) Egypt (5) Italy (6) Japan (7) Peru (8) Thailand (8) Rep. of Korea (10)	Zimbabwe (46) Swaziland (54)	China (1) Morocco (2) Spain (3) Turkey (3) South Africa (5) Netherlands (6) Cyprus (7) Argentina (8) Peru (9) Israel (10)	Zimbabwe (32) Swaziland (43)	Netherlands (1) Russian Federation (2) France (2) United Kingdom (2) Germany (5) Poland (6) United States (6) Canada (8) Belgium (9) Italy (9)	Zambia (13) Angola (93)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Tomatoes	United States (1) Iran (2) Spain (3) Italy (3) China (5) Egypt (5) Turkey (7) India (8) Netherlands (9) Brazil (10)	Swaziland (116) Zambia (116) Namibia (131) Angola (131) Zimbabwe (147)	Mexico (1) Spain (2) Netherlands (3) Belgium (4) Turkey (5) Canada (5) Morocco (7) Jordan (8) Italy (9) France (10)	Namibia (22)	Russian Federation (1) United States (1) Canada (3) Italy (4) Sweden (5) United Kingdom (6) France (7) Germany (8) Netherlands (8) Norway (10)	Angola (110)
	Watermelons	China (1) Iran (2) Syrian Arab Republic (3) Morocco (4) Spain (5) Egypt (6) United States (7) Turkey (8) Rep. of Korea (9) Italy (10)	Namibia (79)	Panama (1) Mexico (2) Spain (3) Netherlands (4) Iran (5) Viet Nam (6) United States (7) Greece (8) Saudi Arabia (9) Kazakhstan (10)		United Kingdom (1) United States (2) France (3) Netherlands (4) Germany (5) Canada (6) Russian Federation (7) Poland (8) Iraq (9) China (10)	Angola (70)
	Almonds	Syrian Arab Republic (1) United States (2) Jordan (3) Lebanon (4) United Arab Emirates (5) France (6) Tunisia (7) Italy (8) Spain (9) China (10)	Swaziland (43)	Australia (1) United States (2) Spain (2) Afghanistan (4) Chile (5) Tunisia (6) Tanzania, United Rep. of (7) Greece (8) Kuwait (8) Tajikistan (10)		Italy (1) Spain (1) United Arab Emirates (3) France (4) India (5) Belgium (6) Austria (7) Hong Kong (SARC) (8) Turkey (9) Greece (9)	Angola (81)
	Cashew nuts	Viet Nam (1) Brazil (2) India (3) Peru (4) Kenya (5) Nigeria (6) Indonesia (7) Togo (8) Côte d'Ivoire (9) Malaysia (10)	Angola (22)	Viet Nam (1) Côte d'Ivoire (2) Guinea-Bissau (3) Brazil (4) India (5) Netherlands (6) Indonesia (7) Ghana (8) Mozambique (9) Nigeria (10)		Australia (1) United Kingdom (2) Netherlands (2) United States (4) Canada (5) Germany (6) India (7) United Arab Emirates (7) Belgium (9) Spain (9)	Angola (90)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Chestnuts	China (1) Italy (2) Russian Federation (3) Peru (4) Turkey (5) Albania (6) Bolivia (7) Rep. of Korea (8) Serbia and Montenegro (9) Georgia (9)	Zimbabwe (19)	Italy (1) Rep. of Korea (2) China (3) Turkey (4) Chile (5) Ukraine (6) Sri Lanka (6) Fiji (6) India (6) Tanzania, United Rep. of (6)	United States (1) Germany (2) France (3) Spain (5) Canada (5) Switzerland (7) United States (8) United Kingdom (9) Japan (10)	China (1) Germany (2) France (3) Spain (5) Canada (5) Switzerland (7) United States (8) United Kingdom (9) Japan (10)	Angola (59)
	Other nuts	Azerbaijan (1) Russian Federation (2) India (3) China (4) Mexico (5) Turkey (6) Indonesia (7) Taiwan (Prov. of China) (8) United States (9) Guatemala (10)	Zimbabwe (41)	South Africa (1) Indonesia (2) Australia (3) China (4) United States (5) Guatemala (5) Turkey (7) Kenya (7) Spain (7) Russian Federation (10)	Zimbabwe (17)	Area Nes (1) Italy (2) United Kingdom (3) Spain (4) Netherlands (5) United States (5) Japan (7) Germany (8) Pakistan (9) Canada (10)	Angola (80) Zimbabwe (117)
	Castor beans	India (1) Brazil (2) China (3) Ukraine (4) Paraguay (5) Ethiopia (6) Ecuador (6) Cambodia (8) Russian Federation (9) Thailand (10)	Angola (27)	Paraguay (1) United States (1) Myanmar (3) Pakistan (4) Ethiopia (5) Mozambique (6) South Africa (7) Greece (7) Lao People's Dem. Rep. (7) Singapore (7)	Zimbabwe (8)	Brazil (1) China (2) Thailand (3) Mexico (4) Saint Kitts and Nevis (5) United States (5) Canada (7) Rep. of Korea (8) Zimbabwe (8) Togo (10)	Zimbabwe (8)
	Groundnuts in shell	United States (1) Indonesia (2) China (3) Nigeria (3) Sudan (5) Nicaragua (6) Argentina (7) Brazil (8) Mauritius (8) Viet Nam (10)	Angola (37) Swaziland (85) Zambia (92) Zimbabwe (95) Namibia (104) Botswana (107)	Egypt (1) India (2) China (3) United States (4) Israel (5) South Africa (6) Brazil (7) Ghana (8) Senegal (9) Malawi (9)	Zambia (12)	United Kingdom (1) Germany (2) Italy (3) Mexico (3) Indonesia (5) Canada (5) Spain (7) Slovakia (8) Switzerland (9) Netherlands (9)	Botswana (17) Angola (37) Zimbabwe (56)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Oil palm fruit		Indonesia (1) Malaysia (2) Thailand (3) Honduras (4) Colombia (5) Costa Rica (6) Guatemala (7) Ecuador (8) Cameroon (9) Nigeria (10)	Angola (25)	Indonesia (1) Malaysia (2) Colombia (3) Papua New Guinea (4) Singapore (5) Costa Rica (6) Ecuador (7) Côte d'Ivoire (8) Thailand (9) Germany (10)	Russian Federation (1) Netherlands (2) Bangladesh (3) Germany (3) China (5) Italy (5) Egypt (7) United Kingdom (7) Malaysia (7) Belgium (10)	Angola (39) Nambia (39) Zambia (47) Zimbabwe (169)	
	Other oil crops	China (1) India (2) Indonesia (3) Paraguay (4) Thailand (5) Brazil (5) Bulgaria (7) Hungary (8) Azerbaijan (9) Malaysia (10)	Zimbabwe (45)	Ethiopia (1) Bulgaria (2) India (3) Ghana (4) Indonesia (5) China (6) Benin (6) Sudan (8) Austria (9) Hungary (10)	Zimbabwe (42)	United States (1) Canada (2) Mexico (2) Germany (4) Rep. of Korea (5) Spain (6) Austria (7) Netherlands (8) Sweden (8) United Kingdom (10)	Angola (50)
Sesame seed		Myanmar (1) China (2) Ethiopia (3) Italy (4) Lebanon (4) Sudan (6) Israel (6) TFYR of Macedonia (8) Senegal (9) Egypt (10)	Angola (60)	Ethiopia (1) Nigeria (2) India (3) Paraguay (3) Sudan (5) Bolivia (6) Tanzania, United Rep. of (7) Myanmar (8) Guatemala (8) Mozambique (10)	China (1) Germany (2) Japan (3) Israel (4) Turkey (5) Greece (6) Saudi Arabia (6) United States (8) Rep. of Korea (9) Guatemala (10)	Zimbabwe (98)	
Soybeans		Argentina (1) United States (1) Brazil (3) China (4) Canada (5) India (6) Switzerland (7) Bolivia (8) Egypt (8) Australia (10)	Zambia (40) Zimbabwe (62)	Brazil (1) Argentina (2) United States (3) Paraguay (3) Canada (5) Uruguay (6) Ukraine (7) Romania (7) Cambodia (8) Benin (10)	Swaziland (14) Zambia (25) Zimbabwe (61)	China (1) Zimbabwe (65) Angola (126)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...	Top 10 exporters: Countries with the highest rank in the export index...	Top 10 markets: Countries with the highest rank in the market index...
		... in the world	... in the region	... in the world
Sunflower seed		Hungary (1) Argentina (2) Ukraine (3) Russian Federation (4) China (5) India (6) United States (7) Bulgaria (8) France (9) Turkey (10)	Botswana (46) Angola (56) Zambia (57) Namibia (63) Zimbabwe (67)	Russian Federation (1) United Kingdom (2) Italy (3) Spain (4) Netherlands (5) Austria (6) Turkey (7) France (8) Romania (9) Hungary (10)
		Indonesia (1) Brazil (2) Nigeria (3) Viet Nam (4) Thailand (4) Angola (4) Paraguay (7) Ghana (8) India (8) Dem. Rep. Congo (10)	Viet Nam (1) Costa Rica (1) Thailand (3) Indonesia (4) Ghana (5) Ecuador (6) Nigeria (7) Paraguay (7) Mexico (7) Suriname (7)	United States (1) Rep. of Korea (2) China (3) Gambia (4) Finland (4) Spain (6) Austria (7) United Kingdom (8) Malaysia (9) Italy (9)
Roots and tubers	Cassava	Indonesia (1) Brazil (2) Nigeria (3) Viet Nam (4) Thailand (4) Angola (4) Paraguay (7) Ghana (8) India (8) Dem. Rep. Congo (10)	Angola (4) Zambia (71) Zimbabwe (80)	United States (1) Rep. of Korea (2) China (3) Gambia (4) Finland (4) Spain (6) Austria (7) United Kingdom (8) Malaysia (9) Italy (9)
Other roots and tubers		China (1) Benin (2) Ghana (3) Nigeria (4) Ethiopia (4) Egypt (6) Cuba (7) Côte d'Ivoire (8) Cameroon (9) Papua New Guinea (9)	Namibia (30) Botswana (53) Swaziland (66) Zimbabwe (88)	United States (1) United Kingdom (2) Taiwan (Prov. of China) (3) France (4) New Zealand (5) Canada (6) Spain (7) Japan (8) Netherlands (9) Belgium (10)
		France (1) United States (2) Germany (3) China (4) India (4) Canada (6) Netherlands (7) Ukraine (8) United Kingdom (9) Belarus (9)	Zimbabwe (83) Angola (83) Lesotho (83) Zambia (118) Swaziland (146)	Russian Federation (1) Italy (2) Spain (2) Belgium (4) Netherlands (4) Germany (6) United Kingdom (7) United States (8) Iraq (9) Greece (9)
Potatoes		France (1) United States (2) Germany (3) China (4) India (4) Canada (6) Netherlands (7) Ukraine (8) United Kingdom (9) Belarus (9)	Zimbabwe (83) Angola (83) Lesotho (83) Zambia (118) Swaziland (146)	Russian Federation (1) Italy (2) Spain (2) Belgium (4) Netherlands (4) Germany (6) United Kingdom (7) United States (8) Iraq (9) Greece (9)
		France (1) United States (2) Germany (3) China (4) India (4) Canada (6) Netherlands (7) Ukraine (8) United Kingdom (9) Belarus (9)	Zimbabwe (83) Angola (83) Lesotho (83) Zambia (118) Swaziland (146)	Russian Federation (1) Italy (2) Spain (2) Belgium (4) Netherlands (4) Germany (6) United Kingdom (7) United States (8) Iraq (9) Greece (9)

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
Spices, pyrethrum and peppermint	Sweet potatoes	Japan (1) Indonesia (2) China (3) United States (3) India (5) Uganda (6) Nigeria (7) Burundi (8) Angola (8) Israel (10)	Angola (8) Zambia (40) Zimbabwe (96) Swaziland (99)	Israel (1) China (2) United States (3) Viet Nam (4) Indonesia (5) France (6) Egypt (7) Jamaica (8) Brazil (9) Dominican Republic (9)	Netherlands (1) United Kingdom (2) France (3) Canada (4) Singapore (5) Japan (6) Belgium (7) United States (8) Rep. of Korea (9) Hong Kong (SAR) (10)		
	Anise, badian, fennel	Syrian Arab Republic (1) Mexico (2) Canada (3) Iran (4) Bulgaria (5) China (5) India (7) Lebanon (7) Russian Federation (9) Netherlands (10)	Zimbabwe (25)	Iran (1) India (2) Bulgaria (3) Syrian Arab Republic (4) Viet Nam (4) Afghanistan (6) China (7) Turkey (8) Egypt (9) Germany (10)	Germany (1) United Arab Emirates (2) United Kingdom (3) Japan (4) Malaysia (5) Netherlands (6) United States (6) India (8) Bangladesh (9) Nepal (10)		
Other spices		Turkey (1) China (2) Nepal (3) Bangladesh (4) India (5) Mauritius (6) Kuwait (6) Vanuatu (6) Pakistan (9) Palestine (9)	Zambia (15) Zimbabwe (45)	Iran (1) India (2) France (2) Netherlands (4) Austria (5) Germany (6) Turkey (7) Spain (8) China (9) Pakistan (10)	Germany (1) Netherlands (2) Saudi Arabia (3) Belgium (3) France (3) United Kingdom (3) Spain (7) United States (7) United Arab Emirates (9) Area Nes (10)	Zambia (28) Angola (83) Namibia (94) Zimbabwe (180)	
	Pepper, white/long/bia ck	Viet Nam (1) Brazil (2) Thailand (3) Indonesia (4) Cambodia (5) China (6) Tajikistan (7) Costa Rica (8) Macau (9) Mexico (10)	Zimbabwe (13) Zambia (19)	Viet Nam (1) Sri Lanka (2) Brazil (3) Mexico (4) Indonesia (5) Malaysia (6) India (7) Germany (8) Ecuador (9) China (10)	United Kingdom (1) Belgium (2) Japan (3) Germany (3) India (5) France (6) Poland (7) Malaysia (8) Hungary (8) Netherlands (10)	Zambia (20) Angola (68) Zimbabwe (117)	

Sector	Industry	Top 10 producers: Countries with the highest rank in the production index...		Top 10 exporters: Countries with the highest rank in the export index...		Top 10 markets: Countries with the highest rank in the market index...	
		... in the world	... in the region	... in the world	... in the region	... in the world	... in the region
	Pimento, allspice	Hungary (1) China (2) India (3) Myanmar (4) Morocco (5) Peru (6) Cape Verde (7) Ethiopia (8) France (8) Bangladesh (10)	Zambia (21) Zimbabwe (39)	Peru (1) China (2) India (2) Brazil (4) Spain (5) Chile (6) Tunisia (7) Netherlands (8) Serbia and Montenegro (9) Myanmar (10)	Zimbabwe (27) Zambia (37)	Spain (1) Netherlands (1) Germany (1) Malaysia (4) United States (4) United Kingdom (6) Japan (7) Mexico (8) Rep. of Korea (9) Thailand (10)	Zambia (34) Angola (86) Zimbabwe (127)
	Vanilla	Madagascar (1) China (2) Indonesia (3) Uganda (4) Tonga (5) French Polynesia (6) Malawi (7) Turkey (8) Comoros (9) Zimbabwe (9)	Zimbabwe (9)	Uganda (1) Papua New Guinea (2) Madagascar (3) Germany (4) India (5) Netherlands (5) French Polynesia (7) France (7) Guinea (9) Vanuatu (10)		Netherlands (1) Madagascar (2) Canada (3) Denmark (4) Switzerland (5) Singapore (6) Germany (6) Belgium (6) France (9) Japan (10)	

Source: FAOSTAT, ITCs TradeMap and Market Access Map.