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

# **Trade Opportunity Scan for the Eastern African ACP group of countries**

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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 Griffie (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](mailto: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 91 agricultural products for the group of 16 Eastern 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 Tea, Sisal and other textile fibres of agave, Sesame seed, Vanilla, and Cloves.
- The top five products in terms of *proven export performance (Export Index)* are Sesame seed, Green coffee, Seed cotton, Tea, and Beans.
- The top five products in terms of the relative *importance of imported products (Import Index)* are Lentils, Wheat, Sorghum, Oil palm fruit, and Dry peas.
- The top five products in terms of high and accessible international demand (*World Market Index*) are Maize, Green coffee, Oil palm fruit, Wheat, and Bananas, plantains.

**Table 1: Top 20 products for Eastern African countries in each of four indices**

| Product sectors                         | Production Index                                                                                                                                                                                                                                                                                                                                                                                                                       | Export Index                                                                                                                                                                                                                                                                                                                                                                                                                               | Import Index                                                                                                                                                                                                                                                                                                                                                                                                    | World Market Index                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overall                                 | 1 . Tea<br>2 . Sisal & other textile fibres of agave<br>3 . Sesame seed<br>3 . Vanilla<br>3 . Cloves, whole & stems<br>6 . Bananas, plantains<br>7 . Cassava<br>8 . Other pulses<br>9 . Beans, dry<br>10 . Sorghum<br>10 . Avocados<br>10 . Mangoes<br>13 . Millet<br>13 . Coffee, green<br>13 . Other fruits<br>16 . Cow peas, dry<br>16 . Garlic<br>18 . Cauliflower<br>18 . Other roots & tubers<br>20 . Cashew nuts<br>20 . Ginger | 1 . Sesame seed<br>2 . Coffee, green<br>3 . Seed cotton<br>4 . Tea<br>5 . Beans<br>6 . Peas, green<br>7 . Sisal & other textile fibres of agave<br>8 . Cocoa beans<br>8 . Other oil crops<br>8 . Vanilla<br>11 . Cashew nuts<br>11 . Cloves, whole & stems<br>13 . Beans, dry<br>13 . Cow peas, dry<br>15 . Bananas, plantains<br>16 . Other nuts<br>16 . Other fruits<br>18 . Plants & parts of plants<br>19 . Castor beans<br>20 . Maize | 1 . Lentils<br>2 . Wheat<br>2 . Sorghum<br>4 . Oil palm fruit<br>4 . Peas, dry<br>6 . Maize<br>7 . Tea<br>8 . Cow peas, dry<br>9 . Beans, dry<br>10 . Apples<br>11 . Other pulses<br>12 . Garlic<br>13 . Soybeans<br>14 . Other spices<br>15 . Millet<br>16 . Chillies & peppers, green<br>17 . Seed cotton<br>18 . Jute & other bast fibres<br>18 . Vanilla<br>20 . Pimento, allspice<br>20 . Citrus fruit nes | 1 . Maize<br>2 . Coffee, green<br>3 . Oil palm fruit<br>4 . Wheat<br>5 . Bananas, plantains<br>6 . Soybeans<br>7 . Seed cotton<br>8 . Tomatoes<br>9 . Cocoa beans<br>10 . Grapes<br>11 . Sesame seed<br>12 . Tang. mand. clement. satsma<br>13 . Garlic<br>13 . Oranges<br>15 . Chillies & peppers, green<br>15 . Barley<br>15 . Avocados<br>15 . Pineapples<br>19 . Other cereals<br>19 . Strawberries |
| Cereals, grains, beans, peas and pulses | 8 . Other pulses<br>9 . Beans, dry<br>10 . Sorghum<br>13 . Millet<br>16 . Cow peas, dry                                                                                                                                                                                                                                                                                                                                                | 13 . Beans, dry<br>13 . Cow peas, dry<br>20 . Maize                                                                                                                                                                                                                                                                                                                                                                                        | 1 . Lentils<br>2 . Wheat<br>2 . Sorghum<br>4 . Peas, dry<br>6 . Maize<br>8 . Cow peas, dry<br>9 . Beans, dry<br>11 . Other pulses<br>15 . Millet                                                                                                                                                                                                                                                                | 1 . Maize<br>4 . Wheat<br>15 . Barley<br>19 . Other cereals                                                                                                                                                                                                                                                                                                                                             |
| Coffee, cocoa, tea                      | 1 . Tea<br>13 . Coffee, green                                                                                                                                                                                                                                                                                                                                                                                                          | 2 . Coffee, green<br>4 . Tea<br>8 . Cocoa beans                                                                                                                                                                                                                                                                                                                                                                                            | 7 . Tea                                                                                                                                                                                                                                                                                                                                                                                                         | 2 . Coffee, green<br>9 . Cocoa beans                                                                                                                                                                                                                                                                                                                                                                    |
| Cotton                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3 . Seed cotton                                                                                                                                                                                                                                                                                                                                                                                                                            | 17 . Seed cotton                                                                                                                                                                                                                                                                                                                                                                                                | 7 . Seed cotton                                                                                                                                                                                                                                                                                                                                                                                         |
| Fibre crops                             | 2 . Sisal & other textile fibres of agave                                                                                                                                                                                                                                                                                                                                                                                              | 7 . Sisal & other textile fibres of agave                                                                                                                                                                                                                                                                                                                                                                                                  | 18 . Jute & other bast fibres                                                                                                                                                                                                                                                                                                                                                                                   | 5 . Bananas, plantains<br>8 . Tomatoes<br>10 . Grapes<br>12 . Tang. mand. clement. satsma<br>13 . Garlic<br>13 . Oranges<br>15 . Chillies & peppers, green<br>15 . Avocados<br>15 . Pineapples<br>19 . Strawberries                                                                                                                                                                                     |
| Fruits and vegetables                   | 6 . Bananas, plantains<br>10 . Avocados<br>10 . Mangoes<br>13 . Other fruits<br>16 . Garlic<br>18 . Cauliflower                                                                                                                                                                                                                                                                                                                        | 5 . Beans<br>6 . Peas, green<br>15 . Bananas, plantains<br>16 . Other fruits                                                                                                                                                                                                                                                                                                                                                               | 10 . Apples<br>12 . Garlic<br>16 . Chillies & peppers, green<br>20 . Citrus fruit nes                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Nuts                                    | 20 . Cashew nuts                                                                                                                                                                                                                                                                                                                                                                                                                       | 11 . Cashew nuts<br>16 . Other nuts                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Oil crops                               | 3 . Sesame seed                                                                                                                                                                                                                                                                                                                                                                                                                        | 1 . Sesame seed<br>8 . Other oil crops<br>19 . Castor beans                                                                                                                                                                                                                                                                                                                                                                                | 4 . Oil palm fruit<br>13 . Soybeans                                                                                                                                                                                                                                                                                                                                                                             | 3 . Oil palm fruit<br>6 . Soybeans<br>11 . Sesame seed                                                                                                                                                                                                                                                                                                                                                  |
| Roots and tubers                        | 7 . Cassava<br>18 . Other roots & tubers                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Spices, pyrethrum and peppermint        | 3 . Vanilla<br>3 . Cloves, whole & stems<br>20 . Ginger                                                                                                                                                                                                                                                                                                                                                                                | 8 . Vanilla<br>11 . Cloves, whole & stems<br>18 . Plants & parts of plants                                                                                                                                                                                                                                                                                                                                                                 | 14 . Other spices<br>18 . Vanilla<br>20 . Pimento, allspice                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                         |

Source: FAOSTAT, ITC's TradeMap and Market Access Map.  
 For full details, see Table 13, Table 19, Table 24, Table 29, Table 30.  
 The numbers represent a product's ranking within each index.



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

- *Import substitution only*: Products that rank highly in the Import index.
- *Export development only*: Products that rank highly in the Export and/or World Market Indices.
- *Import substitution and export development*: Products that rank highly in both of the above indices.
- *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: Eastern 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                     |
|                                         | <i>High rank in Import and Export or World Market indices</i> | <i>High rank in Export or World Market indices</i>           | <i>High rank in Import index</i>                 | <i>High rank only in Production index</i> |
| Cereals, grains, beans, peas and pulses | Beans, dry (11)<br>Cow peas, dry (5)                          |                                                              | Millet (10)<br>Other pulses (11)<br>Sorghum (11) |                                           |
| Coffee, cocoa, tea                      | Tea (11)                                                      | Coffee, green (10)                                           |                                                  |                                           |
| Fibre crops                             |                                                               | Sisal and other textile fibres of agave (6)                  |                                                  |                                           |
| Fruits and vegetables                   | Garlic (6)                                                    | Bananas, plantains (13)<br>Avocados (4)<br>Other fruits (15) |                                                  | Cauliflower (3)<br>Mangoes (9)            |
| Nuts                                    |                                                               | Cashew nuts (4)                                              |                                                  |                                           |
| Oil crops                               |                                                               | Sesame seed (7)                                              |                                                  |                                           |
| Roots and tubers                        |                                                               |                                                              |                                                  | Cassava (12)<br>Other roots & tubers (12) |
| Spices, pyrethrum and peppermint        | Vanilla (5)                                                   | Cloves, whole and stems (4)                                  |                                                  | Ginger (5)                                |

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

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

| Product sectors                         | Potential strategic responses                                 |                                                                                                                                                     |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | Import substitution and Export development                    | Export development                                                                                                                                  | Import substitution                       | No apparent potential                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                         | <i>High rank in Import and Export or World Market indices</i> | <i>High rank in Export or World Market indices</i>                                                                                                  | <i>High rank in Import index</i>          | <i>High rank only in Production index</i>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Cereals, grains, beans, peas and pulses | Wheat (11)<br>Maize (14)                                      | Barley (4)<br>Other cereals (3)                                                                                                                     | Lentils (5)<br>Peas, dry (8)              | Broad beans, dry (3)<br>Chick-peas (7)<br>Oats (2)<br>Rice, paddy (11)                                                                                                                                                                                                                                                                                                                                                                                       |
| Coffee, cocoa, tea                      |                                                               | Cocoa beans (4)                                                                                                                                     |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cotton                                  | Seed cotton (9)                                               |                                                                                                                                                     |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Fibre crops                             |                                                               |                                                                                                                                                     | Jute & other bast fibres (4)              | Abaca (manila hemp) (1)<br>Other fibre crops (4)                                                                                                                                                                                                                                                                                                                                                                                                             |
| Fruits and vegetables                   | Chillies & peppers, green (5)                                 | Strawberries (1)<br>Tang. mand. clement. satsma (5)<br>Tomatoes (12)<br>Grapes (3)<br>Oranges (8)<br>Pineapples (8)<br>Beans (5)<br>Peas, green (6) | Apples (2)<br>Citrus fruit nes (5)        | Apricots (2)<br>Asparagus (1)<br>Spinach (1)<br>Watermelons (3)<br>Lemon & limes (8)<br>Broad beans, green (4)<br>Cabbages (6)<br>Cantaloupes & other melons (2)<br>Carrots (5)<br>Cucumbers & gherkins (6)<br>Dates (3)<br>Eggplants (4)<br>Grapefruit & pomelos (4)<br>Lettuce (5)<br>Mushrooms (1)<br>Onions (11)<br>Other vegetable products (1)<br>Other vegetables (15)<br>Papayas (3)<br>Peaches & nectarines (2)<br>Pears & quinces (4)<br>Plums (2) |
| Nuts                                    |                                                               | Other nuts (5)                                                                                                                                      |                                           | Pistachios (2)                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Oil crops                               | Soybeans (6)<br>Oil palm fruit (3)                            | Castor beans (7)<br>Other oil crops (9)                                                                                                             |                                           | Sunflower seed (6)<br>Coconuts (7)<br>Groundnuts in shell (13)<br>Linseed (3)<br>Mustard seed (1)<br>Rapeseed (1)<br>Safflower seed (2)                                                                                                                                                                                                                                                                                                                      |
| Roots and tubers                        |                                                               |                                                                                                                                                     |                                           | Sweet potatoes (11)<br>Potatoes (13)                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Spices, pyrethrum and peppermint        |                                                               | Plants and parts of plants (3)                                                                                                                      | Other spices (8)<br>Pimento, allspice (8) | Anise, badian, fennel (4)<br>Cinnamon (canella) (2)<br>Nutmeg, mace, cardamons (5)<br>Pepper, white/long/black (5)                                                                                                                                                                                                                                                                                                                                           |

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 comprises of 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, 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)

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.

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 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) 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.

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 in Table 2 and Table 3 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.

**Table 4: Eastern 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)<br>Lentils (5)<br>Oats (2)<br>Wheat (11)                                                                                                                                                                                                                                                                                                                                  | Beans, dry (11)<br>Broad bean, dry (3)<br>Chick peas (7)<br>Cowpeas, dry (5)<br>Maize (14)<br>Millet (10)<br>Peas, dry (8)<br>Rice, paddy (11)<br>Sorghum (12) |
| Coffee, cocoa, tea                      | Cocoa beans (4)                                                                        | Tea (11)                                                                                                                                                                                                                                                                                                                                                                             | Coffee, green (10)                                                                                                                                             |
| Cotton                                  |                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                      | Cotton (11)                                                                                                                                                    |
| Fibre crops                             | Abaca (manila hemp) (1)                                                                | Jute like fibres (3) (kenaf, roselle)                                                                                                                                                                                                                                                                                                                                                | Sisal & other agave fibres (6)                                                                                                                                 |
| Fruits and vegetables                   | Cabbages (6)<br>Carrots (5)<br>Cauliflower (3)<br>Onions & shallots (5)<br>Papayas (3) | Apples (2)<br>Apricots (2)<br>Avocados (4)<br>Beans, green (3)<br>Cantaloupes & other melons (2)<br>Cucumbers and gherkins (6)<br>Dates (3)<br>Eggplants (4)<br>Grapefruit and pomelos (5)<br>Lemons & limes (8)<br>Lettuce (5)<br>Oranges (8)<br>Peaches & nectarines (2)<br>Pears (4)<br>Peas, green (5)<br>Strawberries (1)<br>Tang. mand. clement. satsma (5)<br>Watermelons (3) | Bananas (13)<br>Chillies & peppers, green (3)<br>Garlic (5)<br>Grapes (3)<br>Mangoes (7)<br>Pineapples (8)<br>Tomatoes (12)                                    |
| Nuts                                    | Pistachios (2)                                                                         |                                                                                                                                                                                                                                                                                                                                                                                      | Cashew nuts (4)                                                                                                                                                |
| Oil crops                               | Oil palm (6)<br>Mustard seed (1)<br>Rapeseed (2)<br>Safflower (2)                      | Linseed (3)<br>Coconuts (7)<br>Sunflower (6)                                                                                                                                                                                                                                                                                                                                         | Castor beans (7)<br>Groundnuts in shell (13)<br>Sesame seed (11)<br>Soybeans (6)                                                                               |
| Roots and tubers                        |                                                                                        | Roots & tubers nes (4) (yams)                                                                                                                                                                                                                                                                                                                                                        | Cassava (12)<br>Potatoes (13)<br>Sweet potatoes (14)                                                                                                           |
| Spices, pyrethrum, peppermint           | Anise, badian & fennel (4)<br>Cinnamon (2)                                             | Ginger (5)<br>Nutmeg, mace, cardamoms (5)<br>Pepper, white/long/black (5)<br>Plants and parts of plants (pyrethrum, neem)<br>Vanilla (5)                                                                                                                                                                                                                                             | Cloves (4)<br>Pimento, allspice (8)                                                                                                                            |

## What are the next steps?

The Trade Opportunity Scan is one component of the ACP Programme's Baseline Information Screening for sectors of development focus. It is based solely upon quantitative data available through global databases developed by ITC and by FAO. These results require further validation against expert knowledge or qualitative information. Inputs from countries will be essential for drawing valid conclusions. A set of

agro-ecological potential indices is also being developed by FAO to assist in determining the potential for the intensification of production of products in the region.

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 to measure 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” (the number of significant producing countries in the region; and the share of the top producing country in the region); the efficiency is evaluated by the “relative yield” (ratio of the region’s yield to world yield).
- *Products with performing exports.* The export Index aims to measure the export performance of the region’s commodities by taking into account four dimensions: “size” (the export value and its share in world exports), “dynamism” (the absolute change in region’s export value and the region’s export growth rate to the world over the period 2001-05), “exporter diversification” (the number of significant exporting countries in the region and the share of the top exporting country of the region) and “trade balance” (the net trade balance and the relative trade balance).
- *Reliance on imports.* The import index aims to measure the significance of imports by taking into account three dimensions: “size” (the import value and its share in world imports), “dynamism” (the absolute change in region’s import value and the region’s import growth rate over the period 2001-05), and “importer diversification” (the 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 to measure the world market trends of the products by taking into account three dimensions of the market demand: “size” (the value of world imports and the share of regional imports in world imports) “dynamism” (the absolute change in world imports and the growth of world imports over the period 2001-05), and “market access conditions” (the 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 Eastern African 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<br>Share of top producing country in the region             |
|                    | Yield                      | Ratio of regional yield to world yield                                                                  |
| Export index       | Size                       | Region's exports to world<br>Share of region's exports in world exports                                 |
|                    | Dynamism                   | Growth of region's exports to world<br>Absolute change in region's exports                              |
|                    | Export diversification     | Number of exporting countries in the region<br>Share of top exporting country in the region             |
|                    | Trade balance              | Net exports (excluding intra-regional trade)<br>Relative trade balance (excluding intra-regional trade) |
| Import index       | Size                       | Region's imports from world<br>Share of region in world imports                                         |
|                    | Dynamism                   | Growth of regional imports from the world<br>Absolute change in region's imports                        |
|                    | Import diversification     | Number of importing countries in the region<br>Share of top importing country in the region             |
| World market index | Size                       | World imports                                                                                           |
|                    | Dynamism                   | Growth of world imports<br>Absolute change in world imports                                             |
|                    | Market Access              | Tariff applied to the region<br>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:

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

## 16 Eastern African countries

We analysed 16 Eastern African countries, for which Table 6 provides some background information.

**Table 6. Eastern African countries**

|            | WTO<br>Member | LDC<br>Status | Rank in<br>Human<br>develop-<br>ment index | Population | GDP per<br>capita<br>(PPP US\$) | Exports<br>(USD<br>million) | Growth<br>of<br>exports<br>(% p.a.) | Share of<br>top 3<br>export<br>products<br>(%) | Share of<br>top 3<br>export<br>markets<br>(%) |
|------------|---------------|---------------|--------------------------------------------|------------|---------------------------------|-----------------------------|-------------------------------------|------------------------------------------------|-----------------------------------------------|
| Burundi    | Yes           | Yes           | 167                                        | 7,833,157  | 106                             | 50                          | 25                                  | 76                                             | 47                                            |
| Comoros    | No            | Yes           | 134                                        | 613,606    | 379                             | 43                          | -10                                 | 67                                             | 55                                            |
| Djibouti   | Yes           | Yes           | 149                                        | 805,657    | 824                             | 37                          | 5                                   | 27                                             | 91                                            |
| Eritrea    | No            | Yes           | 157                                        | 4,538,295  | 165                             | 14                          | 16                                  | 28                                             | 40                                            |
| Ethiopia   | No            | Yes           | 169                                        | 72,711,511 | 155                             | 928                         | 25                                  | 56                                             | 31                                            |
| Kenya      | Yes           | No            | 148                                        | 35,143,188 | 456                             | 2,844                       | 13                                  | 34                                             | 41                                            |
| Madagascar | Yes           | Yes           | 143                                        | 19,086,826 | 238                             | 1,008                       | 15                                  | 30                                             | 62                                            |
| Malawi     | Yes           | Yes           | 164                                        | 13,162,995 | 164                             | 668                         | 12                                  | 69                                             | 46                                            |
| Mauritius  | Yes           | No            | 65                                         | 1,253,434  | 4,522                           | 2,174                       | 5                                   | 44                                             | 59                                            |
| Mozambique | Yes           | Yes           | 172                                        | 20,143,918 | 307                             | 2,381                       | 31                                  | 71                                             | 80                                            |
| Rwanda     | Yes           | Yes           | 161                                        | 9,244,288  | 268                             | 99                          | -3                                  | 80                                             | 50                                            |
| Seychelles | No            | No            | 50                                         | 85,757     | 6,863                           | 380                         | 12                                  | 92                                             | 81                                            |
| Somalia    | No            | Yes           | ...                                        | 8,485,242  | ..                              | 96                          | 0                                   | 49                                             | 68                                            |
| Sudan      | No            | Yes           | 147                                        | 37,003,295 | 511                             | 5,712                       | 33                                  | 92                                             | 90                                            |
| Tanzania   | Yes           | No            | 159                                        | 39,477,000 | 335                             | 1,690                       | 17                                  | 46                                             | 45                                            |
| Uganda     | Yes           | Yes           | 154                                        | 29,874,367 | 274                             | 962                         | 36                                  | 40                                             | 38                                            |

Source: ITC's 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.

## 91 agricultural commodities

We examined 91 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 ITC's 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 ITC's *Market Access Map* database. Both ITC databases are available free of charge for developing countries (see [www.intracen.org/mat](http://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**

|                                                |                                         |
|------------------------------------------------|-----------------------------------------|
| <b>Cereals, grains, beans, peas and pulses</b> | <b>Fruits and vegetables</b>            |
| Barley                                         | Apples                                  |
| Beans, dry                                     | Apricots                                |
| Broad beans, dry                               | Asparagus                               |
| Chick-peas                                     | Avocados                                |
| Cow peas, dry                                  | Bananas, plantains                      |
| Lentils                                        | Beans                                   |
| Maize                                          | Broad beans, green                      |
| Millet                                         | Cabbages                                |
| Oats                                           | Cantaloupes & other melons              |
| Other cereals                                  | Carrots                                 |
| Other pulses                                   | Cauliflower                             |
| Peas, dry                                      | Chillies & peppers, green               |
| Rice, paddy                                    | Citrus fruit nes                        |
| Sorghum                                        | Cucumbers and gherkins                  |
| Wheat                                          | Dates                                   |
|                                                | Eggplants                               |
| <b>Coffee, cocoa, tea</b>                      | Garlic                                  |
| Cocoa beans                                    | Grapefruit and pomelos                  |
| Coffee, green                                  | Grapes                                  |
| Tea                                            | Lemon and limes                         |
| <b>Cotton</b>                                  | Lettuce                                 |
| Seed cotton                                    | Mangoes                                 |
| <b>Fibre crops</b>                             | Mushrooms                               |
| Abaca (manila hemp)                            | Onions                                  |
| Jute and other bast fibres                     | Oranges                                 |
| Other fibre crops                              | Other fruits                            |
| Sisal and other textile fibres of agave        | Other vegetable products                |
| <b>Oil crops</b>                               | Other vegetables                        |
| Castor beans                                   | Papayas                                 |
| Coconuts                                       | Peaches and nectarines                  |
| Groundnuts in shell                            | Pears and quinces                       |
| Linseed                                        | Peas, green                             |
| Mustard seed                                   | Pineapples                              |
| Oil palm fruit                                 | Plums                                   |
| Other oil crops                                | Spinach                                 |
| Rapeseed                                       | Strawberries                            |
| Safflower seed                                 | Tang. mand. clement. satsma             |
| Sesame seed                                    | Tomatoes                                |
| Soybeans                                       | Watermelons                             |
| Sunflower seed                                 | <b>Nuts</b>                             |
| <b>Roots and tubers</b>                        | Cashew nuts                             |
| Cassava                                        | Other nuts                              |
| Other roots and tubers                         | Pistachios                              |
| Potatoes                                       | <b>Spices, pyrethrum and peppermint</b> |
| Sweet potatoes                                 | Anise, badian, fennel                   |
|                                                | Cinnamon (canella)                      |
|                                                | Cloves, whole and stems                 |
|                                                | Ginger                                  |
|                                                | Nutmeg, mace, cardamons                 |
|                                                | Other spices                            |
|                                                | Pepper, white/long/black                |
|                                                | Pimento, allspice                       |
|                                                | Plants and parts of plants              |
|                                                | Vanilla                                 |

## 2. Major findings

### Index 1 : Production

The Production Index for the Eastern African region aims to measure 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 13. As will be detailed now, the major performing products in terms of proven supply capacity and efficiency are Tea, Sisal and other textile fibres of agave, Cloves, Vanilla, Sesame seed, Bananas, plantains, Cassava, Other pulses, Dry beans, Sorghum, Mangoes, and Avocados.

#### 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: Vanilla, Cloves, Sisal and other textile fibres of agave, Sesame seed, and Bananas, plantains.

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

| Top 10 products                            | For information:<br>Production | Share of Eastern Africa<br>in world production |       |
|--------------------------------------------|--------------------------------|------------------------------------------------|-------|
|                                            | MT                             | %                                              | Index |
| 1. Vanilla                                 | 3,238                          | 44                                             | 100   |
| 1. Cloves, whole and stems                 | 31,550                         | 22                                             | 100   |
| 1. Sisal and other textile fibres of agave | 66,890                         | 17                                             | 100   |
| 1. Sesame seed                             | 550,529                        | 17                                             | 100   |
| 1. Bananas, plantains                      | 17,755,150                     | 17                                             | 100   |
| 6. Sorghum                                 | 8,095,390                      | 14                                             | 83    |
| 7. Tea                                     | 444,713                        | 13                                             | 78    |
| 8. Cassava                                 | 25,631,313                     | 13                                             | 75    |
| 9. Broad beans, dry                        | 571,800                        | 12                                             | 74    |
| 10. Beans, dry                             | 1,925,054                      | 10                                             | 60    |

Source: FAOSTAT, see Table 13.

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 region’s 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.

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The major products in terms of dynamism are: Strawberries, Rapeseed, Vanilla, Cauliflower, and Garlic.

**Table 9. Production index: Top ten products for growth**

| Top 10 products               | Growth of Eastern African production |       |
|-------------------------------|--------------------------------------|-------|
|                               | % p.a.                               | Index |
| 1. Strawberries               | 26                                   | 100   |
| 1. Rapeseed                   | 19                                   | 100   |
| 1. Vanilla                    | 17                                   | 100   |
| 1. Cauliflower                | 7                                    | 100   |
| 1. Garlic                     | 7                                    | 100   |
| 6. Broad beans, green         | 7                                    | 98    |
| 7. Asparagus                  | 6                                    | 96    |
| 8. Beans                      | 6                                    | 92    |
| 9. Spinach                    | 6                                    | 88    |
| 10. Chillies & peppers, green | 5                                    | 86    |

Source: FAOSTAT, see Table 13.

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 region’s 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 fruits, Maize, Other vegetables, Potatoes, and Cassava.

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

| Top 10 products     | Number of producing countries in Eastern Africa |       | Share of top producer in Eastern African production |       | Average index |
|---------------------|-------------------------------------------------|-------|-----------------------------------------------------|-------|---------------|
|                     | 1 to 16                                         | Index | % (top producer)                                    | Index |               |
| 1. Other fruits     | 15                                              | 100   | 25 (Sudan)                                          | 100   | 100           |
| 1. Maize            | 14                                              | 100   | 24 (Tanzania)                                       | 100   | 100           |
| 1. Other vegetables | 15                                              | 100   | 24 (Tanzania)                                       | 100   | 100           |
| 4. Potatoes         | 13                                              | 100   | 31 (Malawi)                                         | 95    | 97            |
| 5. Cassava          | 12                                              | 92    | 27 (Tanzania)                                       | 100   | 96            |
| 6. Other pulses     | 11                                              | 83    | 29 (Mozambique)                                     | 98    | 91            |
| 6. Beans, dry       | 11                                              | 83    | 28 (Uganda)                                         | 99    | 91            |
| 8. Onions           | 11                                              | 83    | 30 (Ethiopia)                                       | 97    | 90            |
| 9. Sweet potatoes   | 11                                              | 83    | 38 (Uganda)                                         | 85    | 84            |
| 10. Millet          | 10                                              | 75    | 35 (Uganda)                                         | 90    | 83            |
| 10. Mangoes         | 9                                               | 67    | 23 (Madagascar)                                     | 100   | 83            |

Source: FAOSTAT, see Table 13.

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 region’s yield to world yield.

The major products in terms of yield relative to the world are: Plums, Dates, Cashew nuts, Mangoes, and Tea.

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

| Top 10 products           | Ratio of Eastern African yield and world yield |       |
|---------------------------|------------------------------------------------|-------|
|                           | Ratio                                          | Index |
| 1. Plums                  | 1.66                                           | 100   |
| 1. Dates                  | 1.59                                           | 100   |
| 1. Cashew nuts            | 1.56                                           | 100   |
| 1. Mangoes                | 1.53                                           | 100   |
| 1. Tea                    | 1.46                                           | 100   |
| 6. Apricots               | 1.39                                           | 94    |
| 7. Cow peas, dry          | 1.36                                           | 92    |
| 8. Ginger                 | 1.26                                           | 83    |
| 9. Cucumbers and gherkins | 1.2                                            | 79    |
| 10. Pineapples            | 1.17                                           | 76    |

Source: FAOSTAT, see Table 13.

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

### **Overall production index**

In total, the major products in terms of production capacity and efficiency (that score high in terms of size, dynamism, production diversification and yield) are: Tea, Sisal and other textile fibres of agave, Cloves, Vanilla, and Sesame seed.

**Table 12. Production index for Eastern African countries**

|                                            | Rank size | Rank dynamism | Rank diversification | Rank relative yield |
|--------------------------------------------|-----------|---------------|----------------------|---------------------|
| 1. Tea                                     | 7         | 44            | 21                   | 1                   |
| 2. Sisal and other textile fibres of agave | 1         | 27            | 22                   | 26                  |
| 3. Cloves, whole and stems                 | 1         | 30            | 38                   | 20                  |
| 3. Vanilla                                 | 1         | 1             | 68                   | 38                  |
| 3. Sesame seed                             | 1         | 14            | 29                   | 49                  |
| 6. Bananas, plantains                      | 1         | 28            | 13                   | 55                  |
| 7. Cassava                                 | 8         | 77            | 5                    | 30                  |
| 8. Other pulses                            | 11        | 32            | 6                    | 35                  |
| 9. Beans, dry                              | 10        | 80            | 6                    | 24                  |
| 10. Mangoes                                | 31        | 83            | 10                   | 1                   |
| 10. Avocados                               | 25        | 22            | 37                   | 11                  |
| 10. Sorghum                                | 6         | 44            | 17                   | 55                  |

Source: FAOSTAT, see Table 13.

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.

Annex Table A.2 shows which Eastern African countries trade the produced commodities. It distinguishes between countries that both export and import the commodities, those that export or import them only, and those where they are not traded at all.

**Table 13. Production index for Eastern African countries and underlying indicators**

| Rank in production index<br>and product labels | For<br>information:<br>Production | Size                                              |       | Dynamism                                   |        | Diversification |                                                          |                                                        |                  | Yield                                                |      | Production<br>Index |         |
|------------------------------------------------|-----------------------------------|---------------------------------------------------|-------|--------------------------------------------|--------|-----------------|----------------------------------------------------------|--------------------------------------------------------|------------------|------------------------------------------------------|------|---------------------|---------|
|                                                |                                   | Share of Eastern<br>Africa in world<br>production | Index | Growth of<br>Eastern African<br>production | % p.a. | Index           | Number of<br>producing<br>countries in<br>Eastern Africa | Share of top producer<br>in Eastern African production | Average<br>index | Ratio of Eastern<br>African yield and world<br>yield |      |                     |         |
|                                                |                                   |                                                   |       |                                            |        |                 |                                                          |                                                        |                  | %                                                    | %    |                     | 1 to 16 |
| 1. Tea                                         | MT 444,713                        | 13                                                | 78    | 1                                          | 42     | 11              | 83                                                       | 66 (Kenya)                                             | 46               | 65                                                   | 1.46 | 100                 | 71      |
| 2. Sisal and other textile fibres of agave     | 66,890                            | 17                                                | 100   | 2                                          | 58     | 6               | 42                                                       | 37 (Kenya)                                             | 86               | 64                                                   | 0.85 | 48                  | 67      |
| 3. Cloves, whole and stems                     | 31,550                            | 22                                                | 100   | 2                                          | 52     | 4               | 25                                                       | 49 (Madagascar)                                        | 70               | 47                                                   | 0.94 | 56                  | 64      |
| 3. Vanilla                                     | 3,238                             | 44                                                | 100   | 17                                         | 100    | 5               | 33                                                       | 93 (Madagascar)                                        | 10               | 22                                                   | 0.67 | 33                  | 64      |
| 3. Sesame seed                                 | 550,529                           | 17                                                | 100   | 4                                          | 73     | 7               | 50                                                       | 55 (Sudan)                                             | 63               | 56                                                   | 0.57 | 25                  | 64      |
| 6. Bananas, plantains                          | 17,755,150                        | 17                                                | 100   | 2                                          | 54     | 13              | 100                                                      | 59 (Uganda)                                            | 56               | 78                                                   | 0.53 | 21                  | 63      |
| 7. Cassava                                     | 25,631,313                        | 13                                                | 75    | 0                                          | 31     | 12              | 92                                                       | 27 (Tanzania)                                          | 100              | 96                                                   | 0.81 | 45                  | 62      |
| 8. Other pulses                                | 719,520                           | 10                                                | 57    | 2                                          | 51     | 11              | 83                                                       | 29 (Mozambique)                                        | 98               | 91                                                   | 0.75 | 39                  | 60      |
| 9. Beans, dry                                  | 1,925,054                         | 10                                                | 60    | -1                                         | 26     | 11              | 83                                                       | 28 (Uganda)                                            | 99               | 91                                                   | 0.87 | 50                  | 57      |
| 10. Mangoes                                    | 915,480                           | 3                                                 | 20    | -2                                         | 17     | 9               | 67                                                       | 23 (Madagascar)                                        | 100              | 83                                                   | 1.53 | 100                 | 55      |
| 10. Avocados                                   | 174,515                           | 5                                                 | 32    | 3                                          | 62     | 4               | 25                                                       | 47 (Ethiopia)                                          | 73               | 49                                                   | 1.16 | 75                  | 55      |
| 10. Sorghum                                    | 8,095,390                         | 14                                                | 83    | 1                                          | 42     | 11              | 83                                                       | 52 (Sudan)                                             | 66               | 75                                                   | 0.53 | 21                  | 55      |
| 13. Other fruits                               | 1,606,986                         | 4                                                 | 21    | 1                                          | 44     | 15              | 100                                                      | 25 (Sudan)                                             | 100              | 100                                                  | 0.85 | 49                  | 54      |
| 13. Coffee, green                              | 651,020                           | 8                                                 | 50    | 0                                          | 40     | 10              | 75                                                       | 40 (Ethiopia)                                          | 83               | 79                                                   | 0.82 | 45                  | 54      |
| 13. Millet                                     | 2,030,599                         | 7                                                 | 44    | 3                                          | 60     | 10              | 75                                                       | 35 (Uganda)                                            | 90               | 83                                                   | 0.64 | 30                  | 54      |
| 16. Cow peas, dry                              | 203,800                           | 6                                                 | 33    | -2                                         | 20     | 5               | 33                                                       | 31 (Uganda)                                            | 94               | 64                                                   | 1.36 | 92                  | 52      |
| 16. Garlic                                     | 93,385                            | 1                                                 | 4     | 7                                          | 100    | 6               | 42                                                       | 76 (Ethiopia)                                          | 33               | 37                                                   | 1.08 | 68                  | 52      |
| 18. Cauliflower                                | 4,620                             | 0                                                 | 0     | 7                                          | 100    | 3               | 17                                                       | 50 (Kenya)                                             | 69               | 43                                                   | 0.94 | 56                  | 50      |
| 18. Other roots and tubers                     | 4,804,785                         | 8                                                 | 50    | 2                                          | 50     | 12              | 92                                                       | 86 (Ethiopia)                                          | 20               | 56                                                   | 0.83 | 46                  | 50      |
| 20. Cashew nuts                                | 174,500                           | 7                                                 | 45    | -3                                         | 6      | 4               | 25                                                       | 57 (Tanzania)                                          | 59               | 42                                                   | 1.56 | 100                 | 48      |
| 20. Ginger                                     | 2,473                             | 0                                                 | 1     | 3                                          | 67     | 5               | 33                                                       | 69 (Ethiopia)                                          | 43               | 38                                                   | 1.26 | 83                  | 48      |
| 22. Broad beans, green                         | 4,560                             | 0                                                 | 2     | 7                                          | 98     | 4               | 25                                                       | 55 (Ethiopia)                                          | 62               | 44                                                   | 0.81 | 45                  | 47      |
| 22. Groundnuts in shell                        | 1,822,481                         | 5                                                 | 30    | 4                                          | 71     | 13              | 100                                                      | 66 (Sudan)                                             | 47               | 73                                                   | 0.45 | 14                  | 47      |
| 24. Plums                                      | 7,800                             | 0                                                 | 0     | 3                                          | 64     | 2               | 8                                                        | 77 (Kenya)                                             | 32               | 20                                                   | 1.66 | 100                 | 46      |
| 24. Broad beans, dry                           | 571,800                           | 12                                                | 74    | 1                                          | 47     | 3               | 17                                                       | 75 (Ethiopia)                                          | 34               | 25                                                   | 0.73 | 38                  | 46      |
| 26. Pineapples                                 | 753,570                           | 5                                                 | 28    | 0                                          | 32     | 8               | 58                                                       | 80 (Kenya)                                             | 28               | 43                                                   | 1.17 | 76                  | 45      |
| 27. Dates                                      | 331,080                           | 5                                                 | 33    | 0                                          | 36     | 3               | 17                                                       | 100 (Sudan)                                            | 0                | 9                                                    | 1.59 | 100                 | 44      |
| 28. Other nuts                                 | 96,000                            | 6                                                 | 33    | 0                                          | 39     | 5               | 33                                                       | 78 (Ethiopia)                                          | 30               | 32                                                   | 1.08 | 68                  | 43      |
| 28. Other vegetables                           | 4,097,883                         | 1                                                 | 8     | 0                                          | 38     | 15              | 100                                                      | 24 (Tanzania)                                          | 100              | 100                                                  | 0.6  | 27                  | 43      |
| 30. Papayas                                    | 359,000                           | 5                                                 | 32    | 2                                          | 52     | 3               | 17                                                       | 64 (Ethiopia)                                          | 49               | 33                                                   | 0.89 | 52                  | 42      |
| 30. Cocoa beans                                | 12,027                            | 0                                                 | 2     | 3                                          | 64     | 4               | 25                                                       | 37 (Madagascar)                                        | 86               | 56                                                   | 0.84 | 48                  | 42      |
| 30. Seed cotton                                | 865,831                           | 1                                                 | 8     | 4                                          | 77     | 9               | 67                                                       | 38 (Tanzania)                                          | 85               | 76                                                   | 0.38 | 8                   | 42      |
| 33. Other oil crops                            | 306,570                           | 8                                                 | 50    | 0                                          | 37     | 9               | 67                                                       | 39 (Ethiopia)                                          | 84               | 75                                                   | 0.3  | 1                   | 41      |
| 34. Maize                                      | 13,356,767                        | 3                                                 | 15    | 1                                          | 43     | 14              | 100                                                      | 24 (Tanzania)                                          | 100              | 100                                                  | 0.3  | 1                   | 40      |
| 35. Asparagus                                  | 150                               | 0                                                 | 0     | 6                                          | 96     | 1               | 0                                                        | 100 (Kenya)                                            | 0                | 0                                                    | 0.98 | 59                  | 39      |
| 35. Rice, paddy                                | 4,277,702                         | 1                                                 | 4     | 4                                          | 69     | 11              | 83                                                       | 71 (Madagascar)                                        | 40               | 62                                                   | 0.54 | 22                  | 39      |



| Rank in production index and product labels | For information: Production | Size                                        |    | Dynamism                             |        | Diversification                                 |                                                     |                  |                                                | Yield |       | Production index |    |    |
|---------------------------------------------|-----------------------------|---------------------------------------------|----|--------------------------------------|--------|-------------------------------------------------|-----------------------------------------------------|------------------|------------------------------------------------|-------|-------|------------------|----|----|
|                                             |                             | Share of Eastern Africa in world production |    | Growth of Eastern African production |        | Number of producing countries in Eastern Africa | Share of top producer in Eastern African production |                  | Ratio of Eastern African yield and world yield |       |       |                  |    |    |
|                                             |                             | MT                                          | %  | Index                                | % p.a. |                                                 | Index                                               | % (top producer) | Index                                          | Ratio | Index |                  |    |    |
| 37. Onions                                  | 544,417                     | 1                                           | 5  | 54                                   | 2      | 2                                               | 11                                                  | 83               | 30 (Ethiopia)                                  | 97    | 90    | 0.34             | 4  | 38 |
| 37. Sweet potatoes                          | 6,902,976                   | 5                                           | 32 | 0                                    | 37     | 11                                              | 83                                                  | 38 (Uganda)      | 85                                             | 84    | 84    | 0.29             | 1  | 38 |
| 39. Beans                                   | 45,250                      | 1                                           | 3  | 92                                   | 6      | 92                                              | 5                                                   | 33               | 82 (Kenya)                                     | 25    | 29    | 0.57             | 25 | 37 |
| 39. Wheat                                   | 2,563,907                   | 0                                           | 2  | 60                                   | 3      | 60                                              | 11                                                  | 83               | 64 (Ethiopia)                                  | 49    | 66    | 0.53             | 21 | 37 |
| 39. Chillies & peppers, green               | 10,899                      | 0                                           | 0  | 86                                   | 5      | 86                                              | 5                                                   | 33               | 46 (Kenya)                                     | 74    | 54    | 0.37             | 7  | 37 |
| 42. Cucumbers and gherkins                  | 155,107                     | 0                                           | 2  | 36                                   | 0      | 36                                              | 6                                                   | 42               | 93 (Sudan)                                     | 10    | 26    | 1.2              | 79 | 36 |
| 42. Anise, badian, fennel                   | 470                         | 0                                           | 0  | 46                                   | 1      | 46                                              | 4                                                   | 25               | 70 (Ethiopia)                                  | 41    | 33    | 1.02             | 63 | 36 |
| 44. Peas, dry                               | 281,639                     | 3                                           | 15 | 60                                   | 3      | 60                                              | 8                                                   | 58               | 61 (Ethiopia)                                  | 54    | 56    | 0.39             | 9  | 35 |
| 45. Apricots                                | 1,260                       | 0                                           | 0  | 36                                   | 0      | 36                                              | 2                                                   | 8                | 95 (Madagascar)                                | 7     | 7     | 1.39             | 94 | 34 |
| 45. Citrus fruit nes                        | 173,810                     | 3                                           | 17 | 22                                   | -1     | 22                                              | 5                                                   | 33               | 75 (Kenya)                                     | 35    | 34    | 1.02             | 63 | 34 |
| 45. Oil palm fruit                          | 99,000                      | 0                                           | 0  | 47                                   | 1      | 47                                              | 3                                                   | 17               | 66 (Tanzania)                                  | 47    | 32    | 0.96             | 58 | 34 |
| 45. Grapefruit and pomelos                  | 103,200                     | 3                                           | 17 | 0                                    | 38     | 4                                               | 25                                                  | 66 (Sudan)       | 47                                             | 36    | 36    | 0.8              | 44 | 34 |
| 45. Pepper, white/long/black                | 5,330                       | 1                                           | 8  | 37                                   | 0      | 37                                              | 5                                                   | 33               | 39 (Uganda)                                    | 83    | 58    | 0.68             | 33 | 34 |
| 45. Sunflower seed                          | 69,900                      | 0                                           | 1  | 65                                   | 3      | 65                                              | 6                                                   | 42               | 40 (Tanzania)                                  | 82    | 62    | 0.37             | 7  | 34 |
| 45. Plants and parts of plants              | 11,500                      | 10                                          | 57 | 51                                   | 2      | 51                                              | 3                                                   | 17               | 70 (Kenya)                                     | 42    | 29    | 0.13             | 0  | 34 |
| 52. Rapeseed                                | 30,000                      | 0                                           | 0  | 100                                  | 19     | 100                                             | 1                                                   | 0                | 100 (Ethiopia)                                 | 0     | 0     | 0.67             | 33 | 33 |
| 52. Potatoes                                | 5,779,929                   | 2                                           | 11 | 6                                    | -3     | 6                                               | 13                                                  | 100              | 31 (Malawi)                                    | 95    | 97    | 0.52             | 20 | 33 |
| 52. Other spices                            | 3,439                       | 0                                           | 1  | 41                                   | 1      | 41                                              | 8                                                   | 58               | 32 (Kenya)                                     | 94    | 76    | 0.46             | 15 | 33 |
| 52. Other fibre crops                       | 38,085                      | 6                                           | 35 | 1                                    | 49     | 4                                               | 25                                                  | 53 (Ethiopia)    | 65                                             | 45    | 45    | 0.33             | 4  | 33 |
| 56. Linseed                                 | 77,811                      | 3                                           | 17 | 4                                    | 77     | 3                                               | 17                                                  | 99 (Ethiopia)    | 1                                              | 9     | 9     | 0.59             | 26 | 32 |
| 56. Tomatoes                                | 1,254,723                   | 1                                           | 6  | 34                                   | 0      | 34                                              | 12                                                  | 92               | 56 (Sudan)                                     | 61    | 76    | 0.44             | 13 | 32 |
| 58. Eggplants                               | 232,563                     | 1                                           | 4  | 0                                    | 39     | 4                                               | 25                                                  | 99 (Sudan)       | 2                                              | 13    | 13    | 1.09             | 69 | 31 |
| 58. Lemon and limes                         | 81,190                      | 1                                           | 5  | 43                                   | 1      | 43                                              | 8                                                   | 58               | 78 (Sudan)                                     | 31    | 45    | 0.64             | 30 | 31 |
| 58. Castor beans                            | 25,500                      | 2                                           | 11 | 0                                    | 36     | 7                                               | 50                                                  | 59 (Ethiopia)    | 57                                             | 53    | 53    | 0.57             | 24 | 31 |
| 58. Pears and quinces                       | 10,253                      | 0                                           | 0  | 76                                   | 4      | 76                                              | 4                                                   | 25               | 83 (Kenya)                                     | 24    | 24    | 0.56             | 24 | 31 |
| 58. Pimento, allspice                       | 144,217                     | 6                                           | 35 | 0                                    | 38     | 8                                               | 58                                                  | 80 (Ethiopia)    | 27                                             | 43    | 43    | 0.37             | 7  | 31 |
| 63. Nutmeg, mace, cardamons                 | 910                         | 1                                           | 7  | 0                                    | 36     | 5                                               | 33                                                  | 77 (Tanzania)    | 32                                             | 33    | 33    | 0.84             | 47 | 30 |
| 63. Spinach                                 | 20,000                      | 0                                           | 1  | 88                                   | 6      | 88                                              | 1                                                   | 0                | 100 (Kenya)                                    | 0     | 0     | 0.64             | 30 | 30 |
| 65. Cantaloupes & other melons              | 28,097                      | 0                                           | 0  | 1                                    | 44     | 2                                               | 8                                                   | 100 (Sudan)      | 0                                              | 4     | 4     | 1.06             | 67 | 29 |
| 65. Cabbages                                | 771,260                     | 1                                           | 6  | 0                                    | 35     | 6                                               | 42                                                  | 71 (Kenya)       | 39                                             | 41    | 41    | 0.66             | 32 | 29 |
| 65. Soybeans                                | 211,153                     | 0                                           | 0  | 62                                   | 3      | 62                                              | 6                                                   | 42               | 75 (Uganda)                                    | 35    | 38    | 0.46             | 15 | 29 |
| 65. Coconuts                                | 861,600                     | 2                                           | 9  | 0                                    | 36     | 7                                               | 50                                                  | 43 (Tanzania)    | 78                                             | 64    | 64    | 0.37             | 7  | 29 |
| 65. Other vegetable products                | 46,000                      | 3                                           | 18 | 4                                    | 69     | 1                                               | 0                                                   | 100 (Sudan)      | 0                                              | 0     | 0     |                  |    | 29 |
| 70. Watermelons                             | 151,046                     | 0                                           | 1  | 1                                    | 42     | 3                                               | 17                                                  | 96 (Sudan)       | 6                                              | 11    | 11    | 0.94             | 56 | 28 |
| 70. Chick-peas                              | 239,050                     | 3                                           | 16 | 0                                    | -4     | 0                                               | 7                                                   | 50               | 57 (Ethiopia)                                  | 60    | 55    | 0.79             | 43 | 28 |
| 72. Oranges                                 | 157,733                     | 0                                           | 1  | 0                                    | 38     | 8                                               | 58                                                  | 53 (Madagascar)  | 65                                             | 62    | 62    | 0.36             | 7  | 27 |
| 73. Grapes                                  | 31,200                      | 0                                           | 0  | 0                                    | 37     | 3                                               | 17                                                  | 45 (Tanzania)    | 76                                             | 46    | 46    | 0.54             | 22 | 26 |

| Rank in production index<br>and product labels | For<br>information:<br>Production | Size                                              |       | Dynamism                                   |        | Diversification |                                                          |                                                        |                  | Yield                                                |    | Production<br>index |       |       |
|------------------------------------------------|-----------------------------------|---------------------------------------------------|-------|--------------------------------------------|--------|-----------------|----------------------------------------------------------|--------------------------------------------------------|------------------|------------------------------------------------------|----|---------------------|-------|-------|
|                                                |                                   | Share of Eastern<br>Africa in world<br>production | Index | Growth of<br>Eastern African<br>production | % p.a. | Index           | Number of<br>producing<br>countries in<br>Eastern Africa | Share of top producer<br>in Eastern African production | Average<br>index | Ratio of Eastern<br>African yield and world<br>yield |    |                     |       |       |
|                                                |                                   |                                                   |       |                                            |        |                 |                                                          |                                                        |                  | %                                                    | %  |                     | Index | Index |
| 73. Strawberries                               | MT                                | 250                                               | 0     | 0                                          | 26     | 100             | 1                                                        | 0                                                      | 100 (Kenya)      | 0                                                    | 0  | 0.36                | 6     | 26    |
| 75. Safflower seed                             |                                   | 43,000                                            | 6     | 33                                         | 0      | 36              | 2                                                        | 8                                                      | 88 (Ethiopia)    | 16                                                   | 12 | 0.52                | 20    | 25    |
| 76. Other cereals                              |                                   | 1,722,574                                         | 8     | 49                                         | -1     | 29              | 3                                                        | 17                                                     | 99 (Ethiopia)    | 2                                                    | 9  | 0.33                | 3     | 23    |
| 77. Jute and other bast fibres                 |                                   | 8,000                                             | 0     | 1                                          | 0      | 36              | 4                                                        | 25                                                     | 42 (Sudan)       | 80                                                   | 52 | 0.29                | 0     | 22    |
| 78. Cinnamon (canella)                         |                                   | 1,700                                             | 1     | 7                                          | 0      | 36              | 2                                                        | 8                                                      | 88 (Madagascar)  | 16                                                   | 12 | 0.6                 | 27    | 21    |
| 79. Tang. mand. clement. satsma                |                                   | 10,202                                            | 0     | 0                                          | 1      | 41              | 5                                                        | 33                                                     | 83 (Ethiopia)    | 23                                                   | 28 | 0.4                 | 9     | 20    |
| 80. Mustard seed                               |                                   | 1,500                                             | 0     | 1                                          | 0      | 36              | 1                                                        | 0                                                      | 100 (Ethiopia)   | 0                                                    | 0  | 0.72                | 37    | 19    |
| 81. Apples                                     |                                   | 8,300                                             | 0     | 0                                          | 1      | 46              | 2                                                        | 8                                                      | 83 (Madagascar)  | 23                                                   | 16 | 0.15                | 0     | 16    |
| 82. Barley                                     |                                   | 1,143,763                                         | 1     | 5                                          | -1     | 29              | 4                                                        | 25                                                     | 95 (Ethiopia)    | 6                                                    | 16 | 0.4                 | 9     | 15    |
| 83. Lentils                                    |                                   | 38,925                                            | 1     | 6                                          | -13    | 0               | 5                                                        | 33                                                     | 91 (Ethiopia)    | 13                                                   | 23 | 0.61                | 28    | 14    |
| 84. Peas, green                                |                                   | 30,492                                            | 0     | 2                                          | -4     | 1               | 6                                                        | 42                                                     | 82 (Kenya)       | 25                                                   | 33 | 0.48                | 17    | 13    |
| 84. Lettuce                                    |                                   | 8,362                                             | 0     | 0                                          | -5     | 0               | 5                                                        | 33                                                     | 67 (Ethiopia)    | 45                                                   | 39 | 0.42                | 11    | 13    |
| 86. Peaches and nectarines                     |                                   | 8,000                                             | 0     | 0                                          | 1      | 41              | 2                                                        | 8                                                      | 94 (Madagascar)  | 9                                                    | 8  | 0.24                | 0     | 12    |
| 86. Mushrooms                                  |                                   | 1,000                                             | 0     | 0                                          | 0      | 36              | 1                                                        | 0                                                      | 100 (Madagascar) | 0                                                    | 0  |                     |       | 12    |
| 86. Abaca (manila hemp)                        |                                   | 30                                                | 0     | 0                                          | 0      | 36              | 1                                                        | 0                                                      | 100 (Kenya)      | 0                                                    | 0  |                     |       | 12    |
| 89. Carrots                                    |                                   | 50,718                                            | 0     | 1                                          | -8     | 0               | 5                                                        | 33                                                     | 79 (Kenya)       | 29                                                   | 31 | 0.4                 | 10    | 11    |
| 89. Pistachios                                 |                                   | 165                                               | 0     | 0                                          | 0      | 36              | 2                                                        | 8                                                      | 97 (Madagascar)  | 4                                                    | 6  | 0.28                | 0     | 11    |
| 91. Oats                                       |                                   | 42,500                                            | 0     | 1                                          | -9     | 0               | 2                                                        | 8                                                      | 92 (Ethiopia)    | 11                                                   | 10 | 0.46                | 15    | 6     |

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 Eastern African region aims to measure the export performance of the region's 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 Sesame seed, Green coffee, Seed cotton, Tea, Beans, Green peas, Sisal and other textile fibres of agave, Vanilla, Other oil crops, and Cocoa beans.

### Size

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 Eastern African exports to the world and (2) the share of Eastern Africa in world exports. Products, which register already high export values and in which Eastern 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: Sesame seed, Beans, Vanilla, Tea, and Green peas.

**Table 14. Export index: Top ten products for “size”**

| Top 10 products                            | Eastern Africa exports to world |       | Share of Eastern Africa in world exports |       | Average Index |
|--------------------------------------------|---------------------------------|-------|------------------------------------------|-------|---------------|
|                                            | USD 1,000                       | Index | %                                        | Index |               |
| 1. Sesame seed                             | 289,969                         | 100   | 36                                       | 100   | 100           |
| 2. Beans                                   | 121,072                         | 100   | 22                                       | 78    | 89            |
| 3. Vanilla                                 | 81,121                          | 67    | 57                                       | 100   | 83            |
| 4. Tea                                     | 572,833                         | 100   | 17                                       | 58    | 79            |
| 5. Peas, green                             | 57,531                          | 48    | 29                                       | 100   | 74            |
| 6. Cloves, whole and stems                 | 46,261                          | 38    | 36                                       | 100   | 69            |
| 7. Coffee, green                           | 862,866                         | 100   | 9                                        | 30    | 65            |
| 8. Sisal and other textile fibres of agave | 28,305                          | 23    | 42                                       | 100   | 62            |
| 9. Seed cotton                             | 216,370                         | 100   | 2                                        | 8     | 54            |
| 10. Other oil crops                        | 34,357                          | 28    | 20                                       | 69    | 49            |

Source: ITC's TradeMap and Market Access Map, see Table 19.

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

### Dynamism

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 region's export value over the period 2001-05 and (2) the region's 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 Green peas, Sesame seed, Seed cotton, Beans, and Green coffee.

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

| Top 10 products   | Growth of Eastern African exports to world |       | Absolute change in Eastern African exports |       | Average Index |
|-------------------|--------------------------------------------|-------|--------------------------------------------|-------|---------------|
|                   | % p.a                                      | Index | USD 1,000                                  | Index |               |
| 1. Peas, green    | 42                                         | 89    | 43,571                                     | 75    | 82            |
| 2. Sesame seed    | 23                                         | 62    | 160,027                                    | 100   | 81            |
| 2. Seed cotton    | 23                                         | 63    | 123,379                                    | 100   | 81            |
| 4. Beans          | 18                                         | 55    | 58,348                                     | 100   | 78            |
| 5. Coffee, green  | 18                                         | 55    | 414,838                                    | 100   | 77            |
| 6. Tea            | 4                                          | 36    | 58,158                                     | 100   | 68            |
| 7. Oil palm fruit | 74                                         | 100   | 7,484                                      | 13    | 57            |
| 8. Maize          | 34                                         | 77    | 17,964                                     | 31    | 54            |
| 9. Cabbages       | 163                                        | 100   | 3,058                                      | 6     | 53            |
| 9. Wheat          | 91                                         | 100   | 2,948                                      | 5     | 53            |

Source: ITC's TradeMap and Market Access Map, see Table 19.

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-Eastern African trade. Products market with \* were not exported in 2001, thus growth rates between 2001 and 2005 are infinite. Consequently, they [get 100 points](#).

### Exporter diversification

The “*exporter diversification*” points out how numerous exporting countries of the region are in each product. We appraise the region's 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 major products in terms of exporter diversification are Green coffee, Maize, Seed cotton, Bananas, plantains, Dry cow peas, Pimento, allspice, and Other pulses.

**Table 16. Export index: Top ten products for diversification**

| Top 10 products       | Number of exporting countries |       | Share of top exporter in Eastern African exports |       | Average Index |
|-----------------------|-------------------------------|-------|--------------------------------------------------|-------|---------------|
|                       | 0 to 16                       | Index | % (top exporter)                                 | Index |               |
| 1. Coffee, green      | 11                            | 100   | 42 (Ethiopia)                                    | 89    | 95            |
| 2. Maize              | 11                            | 100   | 44 (Uganda)                                      | 87    | 94            |
| 3. Seed cotton        | 10                            | 100   | 48 (Sudan)                                       | 81    | 90            |
| 4. Bananas, plantains | 8                             | 78    | 38 (Uganda)                                      | 96    | 87            |
| 5. Cow peas, dry      | 7                             | 67    | 30 (Uganda)                                      | 100   | 83            |
| 5. Pimento, allspice  | 7                             | 67    | 29 (Tanzania)                                    | 100   | 83            |
| 5. Other pulses       | 7                             | 67    | 35 (Malawi)                                      | 100   | 83            |
| 8. Sesame seed        | 9                             | 89    | 53 (Ethiopia)                                    | 73    | 81            |
| 9. Beans, dry         | 10                            | 100   | 61 (Ethiopia)                                    | 60    | 80            |
| 10. Tomatoes          | 6                             | 56    | 28 (Ethiopia)                                    | 100   | 78            |

Source: ITC's TradeMap and Market Access Map, see Table 19.

Note: All indices range from 0 (lowest) to 100 (best performance). Data refer to 2005. The trade balance excludes intra-Eastern African 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 major products in terms of trade balance are Green coffee, Sesame seed, Beans, Tea, and Seed cotton.

**Table 17. 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. Coffee, green           | 830,788                | 100   | 100                    | 100   | 100           |
| 1. Sesame seed             | 289,659                | 100   | 100                    | 100   | 100           |
| 1. Beans                   | 120,460                | 100   | 100                    | 100   | 100           |
| 4. Tea                     | 458,807                | 100   | 96                     | 98    | 99            |
| 5. Seed cotton             | 188,461                | 100   | 81                     | 90    | 95            |
| 6. Vanilla                 | 76,703                 | 74    | 90                     | 95    | 84            |
| 7. Cashew nuts             | 60,444                 | 64    | 99                     | 100   | 82            |
| 8. Cloves, whole and stems | 45,863                 | 55    | 99                     | 100   | 77            |
| 9. Peas, green             | 53,174                 | 60    | 86                     | 93    | 76            |
| 10. Other fruits           | 36,128                 | 49    | 96                     | 98    | 74            |

Source: ITC's TradeMap and Market Access Map, see Table 19.

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-Eastern African trade.

## Overall Export index

The top products in terms of Eastern African export performance are Sesame seed, Green coffee, Seed cotton, Tea, and Beans.

**Table 18. Export index for Eastern African countries**

|                                            | Rank size | Rank dynamism | Rank diversification | Rank trade balance |
|--------------------------------------------|-----------|---------------|----------------------|--------------------|
| 1. Sesame seed                             | 1         | 2             | 8                    | 1                  |
| 2. Coffee, green                           | 7         | 5             | 1                    | 1                  |
| 3. Seed cotton                             | 9         | 2             | 3                    | 5                  |
| 4. Tea                                     | 4         | 6             | 17                   | 4                  |
| 5. Beans                                   | 2         | 4             | 59                   | 1                  |
| 6. Peas, green                             | 5         | 1             | 67                   | 9                  |
| 7. Sisal and other textile fibres of agave | 8         | 57            | 28                   | 12                 |
| 8. Vanilla                                 | 3         | 81            | 59                   | 6                  |
| 8. Other oil crops                         | 10        | 54            | 40                   | 11                 |
| 8. Cocoa beans                             | 22        | 39            | 14                   | 12                 |

Source: ITC's TradeMap and Market Access Map, see Table 19.



| Products                       | Size                             |    |                                          | Dynamism                                   |    |                                            | Diversification |                               |                                                  | Trade balance |          |    |                  | Export Index |        |          |     |     |     |    |    |
|--------------------------------|----------------------------------|----|------------------------------------------|--------------------------------------------|----|--------------------------------------------|-----------------|-------------------------------|--------------------------------------------------|---------------|----------|----|------------------|--------------|--------|----------|-----|-----|-----|----|----|
|                                | Eastern African exports to world |    | Share of Eastern Africa in world exports | Growth of Eastern African exports to world |    | Absolute change in Eastern African exports | Average Index   | Number of exporting countries | Share of top exporter in Eastern African exports | Average Index | Absolute |    | Relative         |              |        |          |     |     |     |    |    |
|                                | Index                            | %  |                                          | Index                                      | %  |                                            |                 |                               |                                                  |               | Index    | %  |                  |              |        |          |     |     |     |    |    |
|                                |                                  |    | USD 1,000                                |                                            |    | Index                                      | %               | Index                         | %                                                | Index         |          |    | %                |              | Index  | %        |     |     |     |    |    |
| 32. Coconuts                   | 696                              | 1  | 0                                        | 1                                          | 1  | 99                                         | 100             | 632                           | 1                                                | 51            | 6        | 56 | 64 (Malawi)      | 56           | -442   | 27       | -25 | 37  | 32  | 35 |    |
| 32. Other spices               | 2,286                            | 2  | 0                                        | 1                                          | 2  | 32                                         | 75              | 1,406                         | 3                                                | 39            | 8        | 78 | 57 (Kenya)       | 67           | -2,350 | 26       | -52 | 24  | 25  | 35 |    |
| 32. Tomatoes                   | 193                              | 0  | 0                                        | 0                                          | 0  | 36                                         | 80              | 115                           | 1                                                | 40            | 6        | 56 | 28 (Ethiopia)    | 100          | -628   | 27       | -68 | 16  | 22  | 35 |    |
| 36. Chick-peas                 | 12,631                           | 10 | 3                                        | 10                                         | 10 | 2                                          | 33              | 1,002                         | 2                                                | 18            | 6        | 56 | 83 (Tanzania)    | 27           | 41     | 12,278   | 35  | 95  | 97  | 66 | 34 |
| 36. Pineapples                 | 1,834                            | 1  | 0                                        | 1                                          | 1  | 21                                         | 59              | 966                           | 2                                                | 31            | 4        | 33 | 64 (Mauritius)   | 56           | 45     | 1,470    | 29  | 79  | 89  | 59 | 34 |
| 38. Safflower seed             | 1,254                            | 1  | 9                                        | 31                                         | 16 | 400                                        | 100             | 1,252                         | 3                                                | 51            | 1        | 0  | 100 (Tanzania)   | 0            | 0      | 1,254    | 28  | 100 | 100 | 64 | 33 |
| 38. Jute and other bast fibres | 1,275                            | 1  | 1                                        | 4                                          | 2  |                                            | 100             | 287                           | 1                                                | 50            | 3        | 22 | 77 (Mozambique)  | 35           | 29     | 719      | 28  | 39  | 70  | 49 | 33 |
| 38. Lettuce                    | 136                              | 0  | 0                                        | 0                                          | 0  |                                            | 100             | 136                           | 1                                                | 50            | 3        | 22 | 56 (Kenya)       | 68           | 45     | -50      | 28  | -16 | 42  | 35 | 33 |
| 38. Citrus fruit nes           | 85                               | 0  | 0                                        | 1                                          | 0  | 204                                        | 100             | 84                            | 1                                                | 50            | 4        | 33 | 55 (Tanzania)    | 69           | 51     | -41      | 28  | -28 | 36  | 32 | 33 |
| 42. Papayas                    | 207                              | 0  | 0                                        | 0                                          | 0  | 108                                        | 100             | 196                           | 1                                                | 50            | 2        | 11 | 93 (Kenya)       | 11           | 11     | 191      | 28  | 86  | 93  | 60 | 31 |
| 42. Cauliflower                | 561                              | 0  | 0                                        | 0                                          | 0  | 224                                        | 100             | 543                           | 1                                                | 51            | 3        | 22 | 94 (Kenya)       | 9            | 15     | 503      | 28  | 81  | 91  | 59 | 31 |
| 42. Other cereals              | 1,580                            | 1  | 1                                        | 3                                          | 2  | 7                                          | 40              | 354                           | 1                                                | 20            | 6        | 56 | 58 (Ethiopia)    | 64           | 60     | 224      | 28  | 9   | 54  | 41 | 31 |
| 42. Tang. mand. clement.       | 32                               | 0  | 0                                        | 0                                          | 0  |                                            | 100             | 32                            | 0                                                | 50            | 3        | 22 | 38 (Kenya)       | 97           | 60     | -1,190   | 27  | -97 | 2   | 14 | 31 |
| 42. Grapes                     | 109                              | 0  | 0                                        | 0                                          | 0  |                                            | 100             | 97                            | 1                                                | 50            | 4        | 33 | 41 (Ethiopia)    | 91           | 62     | -5,136   | 25  | -96 | 2   | 13 | 31 |
| 47. Eggplants                  | 2,725                            | 2  | 1                                        | 3                                          | 3  | 90                                         | 100             | 2,515                         | 5                                                | 52            | 1        | 0  | 100 (Kenya)      | 0            | 0      | 2,725    | 29  | 100 | 100 | 65 | 30 |
| 47. Soybeans                   | 1,644                            | 1  | 0                                        | 0                                          | 0  | 102                                        | 100             | 1,544                         | 3                                                | 52            | 4        | 33 | 65 (Malawi)      | 54           | 44     | -2,339   | 26  | -50 | 25  | 26 | 30 |
| 47. Oil palm fruit             | 8,448                            | 7  | 0                                        | 0                                          | 4  | 74                                         | 100             | 7,484                         | 13                                               | 57            | 6        | 56 | 59 (Kenya)       | 64           | 60     | -212,582 | 0   | -99 | 1   | 0  | 30 |
| 50. Other fibre crops          | 41                               | 0  | 1                                        | 2                                          | 1  |                                            | 100             | 41                            | 0                                                | 50            | 1        | 0  | 100 (Madagascar) | 0            | 0      | 41       | 28  | 100 | 100 | 64 | 29 |
| 50. Spinach                    | 138                              | 0  | 0                                        | 0                                          | 0  | 77                                         | 100             | 124                           | 1                                                | 50            | 1        | 0  | 100 (Kenya)      | 0            | 0      | 138      | 28  | 100 | 100 | 64 | 29 |
| 50. Nutmeg, mace, cardamoms    | 282                              | 0  | 0                                        | 0                                          | 0  | 12                                         | 46              | 82                            | 1                                                | 23            | 5        | 44 | 35 (Djibouti)    | 100          | 72     | -2,277   | 26  | -80 | 10  | 18 | 29 |
| 53. Avocados                   | 24,173                           | 20 | 3                                        | 10                                         | 15 | 4                                          | 35              | 3,369                         | 6                                                | 21            | 2        | 11 | 100 (Kenya)      | 0            | 6      | 24,117   | 42  | 100 | 100 | 71 | 28 |
| 53. Mangoes                    | 2,129                            | 2  | 0                                        | 1                                          | 1  | 0                                          | 30              | 12                            | 0                                                | 15            | 3        | 22 | 72 (Kenya)       | 44           | 33     | 2,106    | 29  | 98  | 99  | 64 | 28 |
| 53. Sweet potatoes             | 71                               | 0  | 0                                        | 0                                          | 0  | 121                                        | 100             | 68                            | 0                                                | 50            | 1        | 0  | 100 (Uganda)     | 0            | 0      | 69       | 28  | 95  | 97  | 62 | 28 |
| 53. Cantaloupes & melons       | 110                              | 0  | 0                                        | 0                                          | 0  | -21                                        | 0               | -179                          | 0                                                | 0             | 4        | 33 | 44 (Sudan)       | 87           | 60     | 73       | 28  | 54  | 77  | 52 | 28 |
| 53. Chillies & peppers, green  | 2,412                            | 2  | 0                                        | 0                                          | 1  | 0                                          | 30              | -27                           | 0                                                | 15            | 6        | 56 | 74 (Kenya)       | 40           | 48     | 1,345    | 28  | 39  | 70  | 49 | 28 |
| 58. Broad beans, green         | 982                              | 1  | 2                                        | 6                                          | 3  | 3                                          | 34              | 114                           | 1                                                | 7             | 4        | 33 | 58 (Kenya)       | 64           | 49     | -55      | 28  | -3  | 49  | 38 | 27 |
| 58. Other pulses               | 1,670                            | 1  | 1                                        | 2                                          | 2  | -12                                        | 13              | -1,083                        | 0                                                | 17            | 7        | 67 | 35 (Malawi)      | 100          | 83     | -9,175   | 22  | -76 | 12  | 17 | 27 |
| 58. Garlic                     | 91                               | 0  | 0                                        | 0                                          | 0  | 10                                         | 44              | 10                            | 0                                                | 22            | 5        | 44 | 38 (Somalia)     | 95           | 70     | -2,936   | 26  | -96 | 2   | 14 | 27 |
| 58. Lentils                    | 860                              | 1  | 0                                        | 0                                          | 1  | 76                                         | 100             | 698                           | 2                                                | 51            | 6        | 56 | 64 (Ethiopia)    | 55           | 55     | -52,371  | 0   | -97 | 2   | 1  | 27 |
| 62. Onions                     | 1,908                            | 2  | 0                                        | 0                                          | 1  | -3                                         | 26              | -221                          | 0                                                | 13            | 6        | 56 | 52 (Kenya)       | 75           | 65     | -3,136   | 26  | -48 | 26  | 26 | 26 |
| 62. Mushrooms                  | 43                               | 0  | 0                                        | 0                                          | 0  |                                            | 100             | 43                            | 0                                                | 50            | 2        | 11 | 60 (Uganda)      | 61           | 36     | -331     | 27  | -79 | 10  | 19 | 26 |
| 62. Oranges                    | 363                              | 0  | 0                                        | 0                                          | 0  | 14                                         | 50              | 149                           | 1                                                | 25            | 4        | 33 | 38 (Tanzania)    | 96           | 65     | -6,091   | 24  | -94 | 3   | 14 | 26 |
| 65. Asparagus                  | 195                              | 0  | 0                                        | 0                                          | 0  | 101                                        | 100             | 183                           | 1                                                | 50            | 1        | 0  | 100 (Kenya)      | 0            | 0      | 74       | 28  | 23  | 62  | 45 | 24 |
| 65. Potatoes                   | 1,328                            | 1  | 0                                        | 0                                          | 1  | 504                                        | 100             | 1,327                         | 3                                                | 51            | 4        | 33 | 88 (Ethiopia)    | 18           | 26     | -6,838   | 24  | -73 | 14  | 19 | 24 |

| Products                   | Size                             |       |                                          | Dynamism                                   |       |                                            | Diversification |                               |                                                  | Trade balance |           |       | Export index     |          |          |       |           |       |    |       |
|----------------------------|----------------------------------|-------|------------------------------------------|--------------------------------------------|-------|--------------------------------------------|-----------------|-------------------------------|--------------------------------------------------|---------------|-----------|-------|------------------|----------|----------|-------|-----------|-------|----|-------|
|                            | Eastern African exports to world |       | Share of Eastern Africa in world exports | Growth of Eastern African exports to world |       | Absolute change in Eastern African exports | Average Index   | Number of exporting countries | Share of top exporter in Eastern African exports | Average Index | Absolute  |       |                  | Relative |          |       |           |       |    |       |
|                            | USD 1,000                        | Index |                                          | %                                          | Index |                                            |                 |                               |                                                  |               | USD 1,000 | Index |                  | 0 to 16  | %        | Index | USD 1,000 | Index | %  | Index |
|                            |                                  |       |                                          |                                            |       |                                            |                 |                               |                                                  |               |           |       |                  |          |          |       |           |       |    |       |
| 65. Millet                 | 413                              | 0     | 1                                        | 2                                          | 1     | 23                                         | 62              | 233                           | 1                                                | 32            | 3         | 22    | 48 (Tanzania)    | 80       | -9,123   | 22    | -94       | 3     | 13 | 24    |
| 65. Sorghum                | 1,352                            | 1     | 0                                        | 1                                          | 1     | 31                                         | 74              | 894                           | 2                                                | 38            | 4         | 33    | 48 (Sudan)       | 80       | -45,976  | 0     | -97       | 1     | 1  | 24    |
| 69. Lemon and limes        | 278                              | 0     | 0                                        | 0                                          | 0     | -7                                         | 20              | -94                           | 0                                                | 10            | 4         | 33    | 56 (Somalia)     | 69       | -227     | 27    | -29       | 36    | 31 | 23    |
| 69. Carrots                | 242                              | 0     | 0                                        | 0                                          | 0     | 42                                         | 88              | 182                           | 1                                                | 45            | 2         | 11    | 81 (Kenya)       | 30       | -449     | 27    | -52       | 24    | 26 | 23    |
| 71. Barley                 | 766                              | 1     | 0                                        | 0                                          | 0     | 100                                        |                 | 766                           | 2                                                | 51            | 1         | 0     | 100 (Kenya)      | 0        | 0        | 28    | 0         | 50    | 39 | 22    |
| 71. Sunflower seed         | 742                              | 1     | 0                                        | 0                                          | 0     | 14                                         | 49              | 296                           | 1                                                | 25            | 3         | 22    | 76 (Kenya)       | 37       | -239     | 27    | -14       | 43    | 35 | 22    |
| 71. Anise, badian, fennel  | 239                              | 0     | 0                                        | 0                                          | 0     | -5                                         | 23              | -21                           | 0                                                | 12            | 4         | 33    | 51 (Djibouti)    | 77       | -820     | 27    | -63       | 18    | 23 | 22    |
| 71. Pears and quinces      | 33                               | 0     | 0                                        | 0                                          | 0     | 6                                          | 39              | 5                             | 0                                                | 20            | 3         | 22    | 45 (Kenya)       | 85       | -1,398   | 27    | -99       | 1     | 14 | 22    |
| 75. Rice, paddy            | 703                              | 1     | 0                                        | 1                                          | 1     | 48                                         | 97              | 512                           | 1                                                | 49            | 2         | 11    | 92 (Tanzania)    | 12       | -195     | 28    | -62       | 19    | 23 | 21    |
| 75. Watermelons            | 226                              | 0     | 0                                        | 0                                          | 0     | 100                                        |                 | 226                           | 1                                                | 50            | 2         | 11    | 87 (Uganda)      | 20       | -440     | 27    | -88       | 6     | 17 | 21    |
| 75. Wheat                  | 3,188                            | 3     | 0                                        | 0                                          | 1     | 91                                         | 100             | 2,948                         | 5                                                | 53            | 4         | 33    | 82 (Kenya)       | 28       | -859,299 | 0     | -100      | 0     | 0  | 21    |
| 78. Other roots and tubers | 47                               | 0     | 0                                        | 0                                          | 0     | 35                                         | 80              | 33                            | 0                                                | 40            | 1         | 0     | 100 (Malawi)     | 0        | -116     | 28    | -55       | 22    | 25 | 16    |
| 78. Peaches and nectarines | 2                                | 0     | 0                                        | 0                                          | 0     | 100                                        |                 | 2                             | 0                                                | 50            | 1         | 0     | 100 (Kenya)      | 0        | -305     | 27    | -99       | 1     | 14 | 16    |
| 80. Grapefruit and pomelos | 65                               | 0     | 0                                        | 0                                          | 0     | -22                                        | 0               | -76                           | 0                                                | 0             | 3         | 22    | 66 (Sudan)       | 52       | -534     | 27    | -81       | 10    | 18 | 14    |
| 81. Broad beans, dry       | 486                              | 0     | 0                                        | 1                                          | 1     | -6                                         | 22              | -125                          | 0                                                | 11            | 1         | 0     | 100 (Madagascar) | 0        | 0        | 28    | 0         | 50    | 39 | 13    |
| 81. Cinnamon (canella)     | 324                              | 0     | 0                                        | 1                                          | 1     | -12                                        | 13              | -185                          | 0                                                | 6             | 2         | 11    | 73 (Madagascar)  | 42       | -1,682   | 27    | -72       | 14    | 20 | 13    |
| 83. Apples                 | 103                              | 0     | 0                                        | 0                                          | 0     | 11                                         | 45              | 32                            | 0                                                | 23            | 2         | 11    | 92 (Kenya)       | 12       | -12,562  | 20    | -99       | 0     | 10 | 11    |
| 84. Cassava                | 12                               | 0     | 0                                        | 0                                          | 0     | -36                                        | 0               | -60                           | 0                                                | 0             | 1         | 0     | 100 (Tanzania)   | 0        | 0        | 28    | 0         | 50    | 39 | 10    |
| 85. Dates                  | 42                               | 0     | 0                                        | 0                                          | 0     | 1                                          | 32              | 2                             | 0                                                | 16            | 1         | 0     | 100 (Tanzania)   | 0        | -1,215   | 27    | -94       | 3     | 15 | 8     |
| 86. Mustard seed           | 5                                | 0     | 0                                        | 0                                          | 0     | -56                                        | 0               | -128                          | 0                                                | 0             | 1         | 0     | 100 (Ethiopia)   | 0        | -187     | 28    | -95       | 3     | 15 | 4     |

Source: ITC's 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-Eastern African trade.



## Index 3: Import

The Import Index for the Eastern African region aims to measure 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 Lentils, Wheat, Sorghum, Dry peas, Oil palm fruit, Maize, Tea, Dry cow peas, Dry beans, and Apples.

### Size

We measure the “size” index of the products by the share of the region in world imports. The major products in terms of import size are Wheat, Lentils, Sorghum, Dry peas, and Tea.

**Table 20. Import index: Top ten products for “size**

| Top 10 products   | Eastern African imports from world |       | Share of Eastern Africa in world imports |       | Average Index |
|-------------------|------------------------------------|-------|------------------------------------------|-------|---------------|
|                   | USD 1,000                          | Index | %                                        | Index |               |
| 1. Wheat          | 868,167                            | 100   | 4                                        | 100   | 100           |
| 1. Lentils        | 53,231                             | 100   | 8                                        | 100   | 100           |
| 3. Sorghum        | 48,390                             | 91    | 7                                        | 100   | 95            |
| 4. Peas, dry      | 37,184                             | 70    | 4                                        | 100   | 85            |
| 4. Tea            | 98,832                             | 100   | 3                                        | 71    | 85            |
| 6. Oil palm fruit | 222,819                            | 100   | 2                                        | 53    | 76            |
| 7. Maize          | 112,437                            | 100   | 1                                        | 21    | 60            |
| 8. Millet         | 9,536                              | 18    | 11                                       | 100   | 59            |
| 9. Other pulses   | 10,915                             | 20    | 3                                        | 78    | 49            |
| 10. Vanilla       | 4,418                              | 8     | 3                                        | 83    | 46            |

Source: ITC's TradeMap and Market Access Map, seeTable 24.

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

### Dynamism

The “dynamism” dimension shows how dynamic the regional market is. We evaluate the dynamism index of the products by calculating the region's import growth rate. The major products in terms of import dynamism are Lentils, Sorghum, Maize, Wheat, and Oil palm fruit.

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

| Top 10 products   | Growth of Eastern African imports from world |       | Absolute change in Eastern African imports |       | Average Index |
|-------------------|----------------------------------------------|-------|--------------------------------------------|-------|---------------|
|                   | % p.a                                        | Index | USD 1,000                                  | Index |               |
| 1. Sorghum        | 111                                          | 100   | 45,506                                     | 100   | 100           |
| 1. Lentils        | 51                                           | 100   | 42,959                                     | 100   | 100           |
| 3. Maize          | 32                                           | 67    | 84,714                                     | 100   | 83            |
| 4. Wheat          | 29                                           | 63    | 550,910                                    | 100   | 82            |
| 5. Oil palm fruit | 23                                           | 51    | 122,379                                    | 100   | 75            |
| 6. Peas, dry      | 34                                           | 72    | 26,009                                     | 61    | 66            |
| 7. Millet         | 176                                          | 100   | 9,371                                      | 22    | 61            |
| 7. Other pulses   | 78                                           | 100   | 9,824                                      | 23    | 61            |
| 9. Peas, green    | 569                                          | 100   | 4,014                                      | 9     | 55            |
| 10. Soybeans      | 59                                           | 100   | 3,324                                      | 8     | 54            |

Source: ITC's TradeMap and Market Access Map, seeTable 24.

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

## Diversification

The “*importer diversification*” indicates how numerous producing countries of the region are in each commodity. We appraise *the region’s 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 Maize, Dry beans, Dry peas, Garlic, and Other spices.

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

| Top 10 products   | Number of importing countries in Eastern Africa |       | Share of top importer in Eastern African exports |       | Average Index |
|-------------------|-------------------------------------------------|-------|--------------------------------------------------|-------|---------------|
|                   | 0 to 16                                         | Index | % (top importer)                                 | Index |               |
| 1. Maize          | 14                                              | 100   | 23 (Kenya)                                       | 100   | 100           |
| 1. Beans, dry     | 13                                              | 100   | 30 (Kenya)                                       | 100   | 100           |
| 3. Peas, dry      | 14                                              | 100   | 37 (Uganda)                                      | 91    | 96            |
| 3. Garlic         | 12                                              | 92    | 29 (Sudan)                                       | 100   | 96            |
| 3. Other spices   | 12                                              | 92    | 25 (Uganda)                                      | 100   | 96            |
| 6. Oil palm fruit | 15                                              | 100   | 39 (Tanzania)                                    | 89    | 94            |
| 7. Apples         | 13                                              | 100   | 40 (Sudan)                                       | 87    | 93            |
| 8. Wheat          | 15                                              | 100   | 42 (Sudan)                                       | 83    | 92            |
| 9. Cow peas, dry  | 10                                              | 75    | 39 (Kenya)                                       | 88    | 82            |
| 10. Lentils       | 10                                              | 75    | 44 (Sudan)                                       | 81    | 78            |
| 10. Soybeans      | 10                                              | 75    | 44 (Madagascar)                                  | 81    | 78            |
| 10. Dates         | 9                                               | 67    | 38 (Sudan)                                       | 89    | 78            |

Source: ITC’s TradeMap and Market Access Map, see Table 24.

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

## Overall Import index

The top products in terms of Eastern African import index are Lentils, Wheat, Sorghum, Dry peas, and Oil palm fruit.

**Table 23. Import index for Eastern African countries**

|                   | Rank size | Rank growth | Rank diversification |
|-------------------|-----------|-------------|----------------------|
| 1. Lentils        | 1         | 1           | 10                   |
| 2. Wheat          | 1         | 4           | 8                    |
| 2. Sorghum        | 3         | 1           | 14                   |
| 4. Peas, dry      | 4         | 6           | 3                    |
| 4. Oil palm fruit | 6         | 5           | 6                    |
| 6. Maize          | 7         | 3           | 1                    |
| 7. Tea            | 4         | 52          | 13                   |
| 8. Cow peas, dry  | 11        | 37          | 9                    |
| 9. Beans, dry     | 17        | 37          | 1                    |
| 10. Apples        | 18        | 42          | 7                    |

Source: ITC’s TradeMap and Market Access Map, see Table 24.

Table 24. Import index for Eastern African countries and underlying indicators

| Products                       | Size                               |       |                                              | Dynamism                          |       |                                            | Diversification                                 |         |                                       | Import Index |            |            |                 |     |     |    |
|--------------------------------|------------------------------------|-------|----------------------------------------------|-----------------------------------|-------|--------------------------------------------|-------------------------------------------------|---------|---------------------------------------|--------------|------------|------------|-----------------|-----|-----|----|
|                                | Eastern African imports from world |       | Share of Eastern Africa in world imports (%) | Growth of Eastern African imports |       | Absolute change in Eastern African imports | Number of importing countries in Eastern Africa |         | Share of top Eastern African importer |              |            |            |                 |     |     |    |
|                                | USD 1,000                          | Index |                                              | % p.a                             | Index |                                            | 0 to 16                                         | Index   |                                       |              |            |            |                 |     |     |    |
|                                |                                    |       | %                                            |                                   |       | USD 1,000                                  | Index                                           |         |                                       |              |            |            |                 |     |     |    |
| 1. Lentils                     | 53,231                             | 100   | 8                                            | 100                               | 51    | 100                                        | 42,959                                          | 100     | 10                                    | 75           | 44 (Sudan) | 81         | 78              | 93  |     |    |
| 2. Wheat                       | 868,167                            | 100   | 4                                            | 100                               | 29    | 63                                         | 550,910                                         | 100     | 82                                    | 15           | 100        | 42 (Sudan) | 83              | 92  | 91  |    |
| 2. Sorghum                     | 48,390                             | 91    | 7                                            | 100                               | 111   | 100                                        | 45,506                                          | 100     | 100                                   | 9            | 67         | 41 (Sudan) | 86              | 76  | 91  |    |
| 4. Peas, dry                   | 37,184                             | 70    | 4                                            | 100                               | 85    | 34                                         | 72                                              | 26,009  | 61                                    | 66           | 14         | 100        | 37 (Uganda)     | 91  | 96  | 82 |
| 4. Oil palm fruit              | 222,819                            | 100   | 2                                            | 53                                | 76    | 23                                         | 51                                              | 122,379 | 100                                   | 75           | 15         | 100        | 39 (Tanzania)   | 89  | 94  | 82 |
| 6. Maize                       | 112,437                            | 100   | 1                                            | 21                                | 60    | 32                                         | 67                                              | 84,714  | 100                                   | 83           | 14         | 100        | 23 (Kenya)      | 100 | 100 | 81 |
| 7. Tea                         | 98,832                             | 100   | 3                                            | 71                                | 85    | 6                                          | 21                                              | 19,059  | 44                                    | 32           | 13         | 100        | 62 (Kenya)      | 55  | 77  | 65 |
| 8. Cow peas, dry               | 8,817                              | 17    | 3                                            | 71                                | 44    | 38                                         | 78                                              | 6,422   | 15                                    | 47           | 10         | 75         | 39 (Kenya)      | 88  | 82  | 57 |
| 9. Beans, dry                  | 8,224                              | 15    | 1                                            | 20                                | 17    | 39                                         | 81                                              | 5,312   | 12                                    | 47           | 13         | 100        | 30 (Kenya)      | 100 | 100 | 55 |
| 10. Apples                     | 12,665                             | 24    | 0                                            | 7                                 | 16    | 28                                         | 61                                              | 7,975   | 19                                    | 40           | 13         | 100        | 40 (Sudan)      | 87  | 93  | 50 |
| 11. Other pulses               | 10,915                             | 20    | 3                                            | 78                                | 49    | 78                                         | 100                                             | 9,824   | 23                                    | 61           | 6          | 42         | 83 (Sudan)      | 25  | 33  | 48 |
| 12. Garlic                     | 3,027                              | 6     | 0                                            | 9                                 | 7     | 34                                         | 70                                              | 2,098   | 5                                     | 38           | 12         | 92         | 29 (Sudan)      | 100 | 96  | 47 |
| 13. Soybeans                   | 4,030                              | 8     | 0                                            | 0                                 | 4     | 59                                         | 100                                             | 3,324   | 8                                     | 54           | 10         | 75         | 44 (Madagascar) | 81  | 78  | 45 |
| 14. Other spices               | 4,636                              | 9     | 1                                            | 17                                | 13    | 16                                         | 40                                              | 2,091   | 5                                     | 22           | 12         | 92         | 25 (Uganda)     | 100 | 96  | 44 |
| 15. Millet                     | 9,536                              | 18    | 11                                           | 100                               | 59    | 176                                        | 100                                             | 9,371   | 22                                    | 61           | 3          | 17         | 99 (Sudan)      | 2   | 9   | 43 |
| 16. Chillies & peppers, green  | 1,067                              | 2     | 0                                            | 1                                 | 1     | 55                                         | 100                                             | 529     | 1                                     | 51           | 6          | 42         | 31 (Mauritius)  | 100 | 71  | 41 |
| 17. Seed cotton                | 26,617                             | 50    | 0                                            | 7                                 | 28    | 26                                         | 57                                              | 15,839  | 37                                    | 47           | 10         | 75         | 89 (Mauritius)  | 16  | 46  | 40 |
| 18. Jute and other bast fibres | 657                                | 1     | 1                                            | 13                                | 7     | 7                                          | 100                                             | 508     | 1                                     | 51           | 4          | 25         | 38 (Tanzania)   | 90  | 58  | 39 |
| 18. Vanilla                    | 4,418                              | 8     | 3                                            | 83                                | 46    | 45                                         | 92                                              | 3,425   | 8                                     | 50           | 5          | 33         | 94 (Madagascar) | 9   | 21  | 39 |
| 20. Pimento, allspice          | 1,069                              | 2     | 0                                            | 4                                 | 3     | 43                                         | 88                                              | 781     | 2                                     | 45           | 8          | 58         | 52 (Eritrea)    | 69  | 64  | 37 |
| 20. Citrus fruit nes           | 126                                | 0     | 0                                            | 9                                 | 5     | 55                                         | 100                                             | 104     | 0                                     | 50           | 6          | 42         | 52 (Sudan)      | 69  | 55  | 37 |
| 22. Potatoes                   | 8,166                              | 15    | 0                                            | 10                                | 12    | 18                                         | 44                                              | 3,778   | 9                                     | 26           | 10         | 75         | 57 (Mauritius)  | 62  | 69  | 36 |
| 22. Peas, green                | 4,357                              | 8     | 2                                            | 42                                | 25    | 569                                        | 100                                             | 4,014   | 9                                     | 55           | 6          | 42         | 90 (Sudan)      | 14  | 28  | 36 |
| 24. Cashew nuts                | 481                                | 1     | 0                                            | 1                                 | 1     | 62                                         | 100                                             | 411     | 1                                     | 51           | 5          | 33         | 47 (Kenya)      | 77  | 55  | 35 |
| 24. Other oil crops            | 430                                | 1     | 0                                            | 4                                 | 2     | 138                                        | 100                                             | 310     | 1                                     | 50           | 4          | 25         | 45 (Uganda)     | 80  | 53  | 35 |
| 24. Sunflower seed             | 981                                | 2     | 0                                            | 2                                 | 2     | 162                                        | 100                                             | 961     | 2                                     | 51           | 6          | 42         | 58 (Sudan)      | 61  | 51  | 35 |
| 24. Barley                     | 1,813                              | 3     | 0                                            | 1                                 | 2     | 100                                        | 100                                             | 1,813   | 4                                     | 52           | 3          | 17         | 42 (Uganda)     | 84  | 50  | 35 |
| 28. Grapes                     | 5,245                              | 10    | 0                                            | 3                                 | 6     | 16                                         | 40                                              | 2,389   | 6                                     | 23           | 9          | 67         | 47 (Mauritius)  | 77  | 72  | 34 |
| 28. Other nuts                 | 617                                | 1     | 0                                            | 2                                 | 1     | 37                                         | 76                                              | 441     | 1                                     | 39           | 6          | 42         | 44 (Malawi)     | 81  | 61  | 34 |
| 28. Rice, paddy                | 841                                | 2     | 0                                            | 4                                 | 3     | 93                                         | 100                                             | 770     | 2                                     | 51           | 6          | 42         | 61 (Kenya)      | 56  | 49  | 34 |
| 31. Dates                      | 1,257                              | 2     | 0                                            | 8                                 | 5     | 13                                         | 33                                              | 417     | 1                                     | 17           | 9          | 67         | 38 (Sudan)      | 89  | 78  | 33 |
| 31. Oranges                    | 6,454                              | 12    | 0                                            | 5                                 | 9     | 10                                         | 29                                              | 2,029   | 5                                     | 17           | 9          | 67         | 46 (Sudan)      | 79  | 73  | 33 |
| 31. Other vegetables           | 1,930                              | 4     | 0                                            | 2                                 | 3     | 46                                         | 93                                              | 1,316   | 3                                     | 48           | 7          | 50         | 67 (Sudan)      | 48  | 49  | 33 |
| 34. Beans                      | 341                                | 1     | 0                                            | 1                                 | 1     | 90                                         | 100                                             | 327     | 1                                     | 50           | 5          | 33         | 67 (Seychelles) | 48  | 40  | 31 |
| 35. Onions                     | 5,044                              | 9     | 0                                            | 8                                 | 9     | 7                                          | 24                                              | 1,101   | 3                                     | 13           | 11         | 83         | 64 (Mauritius)  | 52  | 67  | 30 |
| 35. Coffee, green              | 28,432                             | 53    | 0                                            | 7                                 | 30    | 8                                          | 26                                              | 7,773   | 18                                    | 22           | 9          | 67         | 93 (Sudan)      | 10  | 39  | 30 |

| Products                                    | Size                               |       |                                              | Dynamism                          |                  |                                            |               | Diversification                                 |                                       |               | Import Index |           |                  |    |    |    |
|---------------------------------------------|------------------------------------|-------|----------------------------------------------|-----------------------------------|------------------|--------------------------------------------|---------------|-------------------------------------------------|---------------------------------------|---------------|--------------|-----------|------------------|----|----|----|
|                                             | Eastern African imports from world |       | Share of Eastern Africa in world imports (%) | Growth of Eastern African imports |                  | Absolute change in Eastern African imports | Average Index | Number of importing countries in Eastern Africa | Share of top Eastern African importer | Average Index |              |           |                  |    |    |    |
|                                             | USD 1,000                          | Index |                                              | % p.a                             | Index            |                                            |               |                                                 |                                       |               |              | USD 1,000 | Index            |    |    |    |
|                                             | %                                  | Index | %                                            | Index                             | % (top importer) | Index                                      |               |                                                 |                                       |               |              |           |                  |    |    |    |
| 35. Sisal and other textile fibres of agave | 619                                | 1     | 1                                            | 22                                | 12               | 37                                         | 77            | 444                                             | 1                                     | 39            | 4            | 25        | 64 (Djibouti)    | 52 | 38 | 30 |
| 38. Sesame seed                             | 310                                | 1     | 0                                            | 1                                 | 1                | 34                                         | 71            | 214                                             | 1                                     | 36            | 4            | 25        | 47 (Kenya)       | 77 | 51 | 29 |
| 38. Other roots and tubers                  | 163                                | 0     | 0                                            | 2                                 | 1                |                                            | 100           | 163                                             | 0                                     | 50            | 2            | 8         | 57 (Sudan)       | 62 | 35 | 29 |
| 38. Broad beans, green                      | 1,037                              | 2     | 2                                            | 51                                | 27               | 301                                        | 100           | 1,033                                           | 3                                     | 51            | 3            | 17        | 98 (Sudan)       | 3  | 10 | 29 |
| 41. Other cereals                           | 1,244                              | 2     | 1                                            | 26                                | 14               | 132                                        | 100           | 1,173                                           | 3                                     | 51            | 4            | 25        | 94 (Sudan)       | 9  | 17 | 28 |
| 42. Groundnuts in shell                     | 412                                | 1     | 0                                            | 5                                 | 3                | 5                                          | 20            | 79                                              | 0                                     | 10            | 6            | 42        | 40 (Mauritius)   | 87 | 64 | 26 |
| 42. Plants and parts of plants              | 3,113                              | 6     | 0                                            | 6                                 | 6                | 26                                         | 57            | 1,823                                           | 4                                     | 31            | 8            | 58        | 83 (Sudan)       | 24 | 41 | 26 |
| 42. Watermelons                             | 666                                | 1     | 0                                            | 2                                 | 2                | 56                                         | 100           | 554                                             | 1                                     | 51            | 2            | 8         | 70 (Mauritius)   | 43 | 26 | 26 |
| 42. Nutmeg, mace, cardamoms                 | 2,559                              | 5     | 1                                            | 25                                | 15               | 71                                         | 100           | 2,259                                           | 5                                     | 53            | 3            | 17        | 97 (Sudan)       | 5  | 11 | 26 |
| 46. Other fruits                            | 857                                | 2     | 0                                            | 2                                 | 2                | -2                                         | 6             | -50                                             | 0                                     | 3             | 8            | 58        | 46 (Mozambique)  | 78 | 68 | 24 |
| 46. Pears and quinces                       | 1,431                              | 3     | 0                                            | 2                                 | 2                | 11                                         | 31            | 502                                             | 1                                     | 16            | 9            | 67        | 73 (Mauritius)   | 39 | 53 | 24 |
| 46. Ginger                                  | 275                                | 0     | 0                                            | 2                                 | 1                |                                            | 100           | 275                                             | 1                                     | 50            | 4            | 25        | 90 (Seychelles)  | 15 | 20 | 24 |
| 49. Mustard seed                            | 192                                | 0     | 0                                            | 4                                 | 2                | 36                                         | 75            | 136                                             | 0                                     | 38            | 3            | 17        | 70 (Mauritius)   | 43 | 30 | 23 |
| 49. Asparagus                               | 121                                | 0     | 0                                            | 0                                 | 0                | 112                                        | 100           | 115                                             | 0                                     | 50            | 2            | 8         | 81 (Mauritius)   | 28 | 18 | 23 |
| 49. Avocados                                | 56                                 | 0     | 0                                            | 0                                 | 0                |                                            | 100           | 56                                              | 0                                     | 50            | 2            | 8         | 80 (Sudan)       | 28 | 18 | 23 |
| 52. Carrots                                 | 691                                | 1     | 0                                            | 3                                 | 2                | 16                                         | 40            | 304                                             | 1                                     | 20            | 4            | 25        | 56 (Seychelles)  | 63 | 44 | 22 |
| 52. Cantaloupes & other melons              | 37                                 | 0     | 0                                            | 0                                 | 0                | 74                                         | 100           | 33                                              | 0                                     | 50            | 2            | 8         | 84 (Mauritius)   | 23 | 16 | 22 |
| 52. Other vegetable products                | 140                                | 0     | 0                                            | 2                                 | 1                |                                            | 100           | 140                                             | 0                                     | 50            | 2            | 8         | 86 (Kenya)       | 21 | 15 | 22 |
| 55. Pineapples                              | 364                                | 1     | 0                                            | 1                                 | 1                | 19                                         | 45            | 182                                             | 1                                     | 23            | 4            | 25        | 63 (Seychelles)  | 53 | 39 | 21 |
| 55. Mushrooms                               | 374                                | 1     | 0                                            | 1                                 | 1                | 35                                         | 73            | 261                                             | 1                                     | 37            | 3            | 17        | 76 (Mauritius)   | 34 | 25 | 21 |
| 55. Cloves, whole and stems                 | 399                                | 1     | 0                                            | 8                                 | 4                | 41                                         | 84            | 298                                             | 1                                     | 42            | 3            | 17        | 90 (Sudan)       | 15 | 16 | 21 |
| 58. Pepper, white/long/black                | 1,382                              | 3     | 0                                            | 7                                 | 5                | 18                                         | 42            | 648                                             | 2                                     | 22            | 6            | 42        | 81 (Sudan)       | 27 | 34 | 20 |
| 58. Cinnamon (canella)                      | 2,006                              | 4     | 1                                            | 33                                | 18               | 11                                         | 31            | 697                                             | 2                                     | 16            | 5            | 33        | 87 (Sudan)       | 19 | 26 | 20 |
| 60. Coconuts                                | 1,138                              | 2     | 0                                            | 8                                 | 5                | 12                                         | 33            | 409                                             | 1                                     | 17            | 7            | 50        | 87 (Mauritius)   | 19 | 34 | 19 |
| 60. Grapefruit and pomelos                  | 599                                | 1     | 0                                            | 2                                 | 1                | 33                                         | 69            | 405                                             | 1                                     | 35            | 3            | 17        | 81 (Mauritius)   | 27 | 22 | 19 |
| 62. Broad beans, dry                        | 1,459                              | 3     | 1                                            | 25                                | 14               | -23                                        | 0             | -2,603                                          | 0                                     | 0             | 3            | 17        | 58 (Sudan)       | 61 | 39 | 18 |
| 63. Anise, badian, fennel                   | 1,059                              | 2     | 0                                            | 11                                | 6                | 5                                          | 19            | 183                                             | 1                                     | 10            | 5            | 33        | 76 (Mauritius)   | 35 | 34 | 17 |
| 63. Tang, mand. clement.                    | 1,222                              | 2     | 0                                            | 1                                 | 2                | 27                                         | 59            | 752                                             | 2                                     | 30            | 4            | 25        | 92 (Mauritius)   | 12 | 18 | 17 |
| 63. Bananas, plantains                      | 248                                | 0     | 0                                            | 0                                 | 0                | 68                                         | 100           | 217                                             | 1                                     | 50            | 1            | 0         | 100 (Kenya)      | 0  | 0  | 17 |
| 63. Cucumbers and gherkins                  | 14                                 | 0     | 0                                            | 0                                 | 0                |                                            | 100           | 14                                              | 0                                     | 50            | 1            | 0         | 100 (Seychelles) | 0  | 0  | 17 |
| 63. Linseed                                 | 7                                  | 0     | 0                                            | 0                                 | 0                |                                            | 100           | 7                                               | 0                                     | 50            | 1            | 0         | 100 (Mauritius)  | 0  | 0  | 17 |
| 63. Papayas                                 | 16                                 | 0     | 0                                            | 0                                 | 0                |                                            | 100           | 16                                              | 0                                     | 50            | 1            | 0         | 100 (Uganda)     | 0  | 0  | 17 |
| 63. Rapeseed                                | 11                                 | 0     | 0                                            | 0                                 | 0                |                                            | 100           | 11                                              | 0                                     | 50            | 1            | 0         | 100 (Malawi)     | 0  | 0  | 17 |
| 70. Cabbages                                | 60                                 | 0     | 0                                            | 0                                 | 0                | -6                                         | 0             | -13                                             | 0                                     | 0             | 4            | 25        | 52 (Mauritius)   | 70 | 47 | 16 |
| 71. Cauliflower                             | 58                                 | 0     | 0                                            | 0                                 | 0                | 15                                         | 37            | 23                                              | 0                                     | 19            | 2            | 8         | 69 (Mauritius)   | 45 | 27 | 15 |
| 71. Lemon and limes                         | 505                                | 1     | 0                                            | 1                                 | 1                | 12                                         | 32            | 178                                             | 1                                     | 16            | 4            | 25        | 81 (Mauritius)   | 28 | 26 | 15 |

| Products                   | Size                               |       |                                      | Dynamism                          |       |                                            | Diversification |                                                 |                                       | Import Index |       |                |                 |    |    |    |
|----------------------------|------------------------------------|-------|--------------------------------------|-----------------------------------|-------|--------------------------------------------|-----------------|-------------------------------------------------|---------------------------------------|--------------|-------|----------------|-----------------|----|----|----|
|                            | Eastern African imports from world |       | Share of Eastern African imports (%) | Growth of Eastern African imports |       | Absolute change in Eastern African imports | Average Index   | Number of importing countries in Eastern Africa | Share of top Eastern African importer |              |       |                |                 |    |    |    |
|                            | USD 1,000                          | Index |                                      | % p.a                             | Index |                                            |                 |                                                 |                                       |              |       |                |                 |    |    |    |
|                            |                                    |       |                                      |                                   |       |                                            |                 |                                                 |                                       |              | Index |                |                 |    |    |    |
| 73. Plums                  | 760                                | 1     | 0                                    | 3                                 | 2     | 16                                         | 40              | 1                                               | 20                                    | 4            | 25    | 91 (Mauritius) | 13              | 19 | 14 |    |
| 74. Pistachios             | 14                                 | 0     | 0                                    | 0                                 | 0     | 37                                         | 76              | 10                                              | 0                                     | 38           | 1     | 0              | 100 (Mauritius) | 0  | 0  | 13 |
| 75. Peaches and nectarines | 307                                | 1     | 0                                    | 0                                 | 1     | -4                                         | 3               | -60                                             | 0                                     | 1            | 5     | 33             | 76 (Mauritius)  | 35 | 34 | 12 |
| 75. Tomatoes               | 821                                | 2     | 0                                    | 0                                 | 1     | -2                                         | 7               | -63                                             | 0                                     | 3            | 5     | 33             | 79 (Seychelles) | 31 | 32 | 12 |
| 75. Oats                   | 73                                 | 0     | 0                                    | 0                                 | 0     | 2                                          | 14              | 5                                               | 0                                     | 7            | 2     | 8              | 67 (Mauritius)  | 48 | 28 | 12 |
| 75. Mangoes                | 23                                 | 0     | 0                                    | 0                                 | 0     | 35                                         | 73              | 16                                              | 0                                     | 36           | 1     | 0              | 100 (Kenya)     | 0  | 0  | 12 |
| 79. Chick-peas             | 346                                | 1     | 0                                    | 2                                 | 1     | -1                                         | 9               | -16                                             | 0                                     | 4            | 3     | 17             | 75 (Mauritius)  | 37 | 27 | 11 |
| 79. Strawberries           | 65                                 | 0     | 0                                    | 0                                 | 0     | 15                                         | 38              | 28                                              | 0                                     | 19           | 2     | 8              | 85 (Mauritius)  | 22 | 15 | 11 |
| 79. Lettuce                | 186                                | 0     | 0                                    | 0                                 | 0     | 18                                         | 42              | 87                                              | 0                                     | 21           | 2     | 8              | 92 (Mauritius)  | 12 | 10 | 11 |
| 82. Cocoa beans            | 55                                 | 0     | 0                                    | 0                                 | 0     | 21                                         | 47              | 29                                              | 0                                     | 24           | 2     | 8              | 96 (Sudan)      | 5  | 7  | 10 |
| 83. Apricots               | 9                                  | 0     | 0                                    | 0                                 | 0     | -19                                        | 0               | -12                                             | 0                                     | 0            | 3     | 17             | 78 (Sudan)      | 32 | 24 | 8  |
| 84. Cassava                | 12                                 | 0     | 0                                    | 0                                 | 0     | -36                                        | 0               | -60                                             | 0                                     | 0            | 1     | 0              | 100 (Rwanda)    | 0  | 0  | 0  |
| 84. Sweet potatoes         | 2                                  | 0     | 0                                    | 0                                 | 0     |                                            |                 |                                                 |                                       |              | 1     | 0              | 100 (Djibouti)  | 0  | 0  | 0  |

Source: ITC's 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.

## Index 4 : World market

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

### Size

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 25. 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   |
| 1. Coffee, green      | 10,154        | 100   |
| 6. Seed cotton        | 9,922         | 98    |
| 7. Bananas, plantains | 8,743         | 86    |
| 8. Tomatoes           | 5,253         | 52    |
| 9. Grapes             | 4,913         | 48    |
| 10. Cocoa beans       | 4,745         | 47    |

Source: ITC's TradeMap and Market Access Map, see Table 29.

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

### Dynamism

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 major in terms of world import dynamism are Oil palm fruit, Wheat, Green coffee, Soybeans, Maize, and Cocoa beans.

**Table 26. Import 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                      | 63    | 8,080                            | 100   | 82            |
| 2. Coffee, green      | 13                      | 64    | 3,950                            | 100   | 82            |
| 4. Soybeans           | 13                      | 62    | 7,202                            | 100   | 81            |
| 5. Maize              | 8                       | 43    | 3,586                            | 100   | 72            |
| 5. Cocoa beans        | 17                      | 81    | 2,234                            | 62    | 72            |
| 7. Bananas, plantains | 10                      | 52    | 2,831                            | 79    | 65            |
| 7. Tomatoes           | 14                      | 69    | 2,174                            | 61    | 65            |
| 9. Cashew nuts        | 22                      | 100   | 1,012                            | 28    | 64            |
| 10. Grapes            | 14                      | 68    | 2,008                            | 56    | 62            |

Source: ITC's TradeMap and Market Access Map, see Table 29.

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 (1) the applied tariff to the region and of (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 major products in terms of market access are Sesame seed, Maize, Cassava, Garlic, and Apricots.

**Table 27. Import index: Top ten products for “market access”**

| Top 10 products                | Tariff applied to Eastern Africa |       | Tariff advantage |       | Average Index |
|--------------------------------|----------------------------------|-------|------------------|-------|---------------|
|                                | %                                | Index | %                | Index |               |
| 1. Sesame seed                 | 5                                | 84    | 62               | 100   | 92            |
| 2. Maize                       | 6                                | 80    | 37               | 100   | 90            |
| 3. Cassava                     | 8                                | 75    | 46               | 100   | 87            |
| 4. Garlic                      | 8                                | 74    | 27               | 89    | 82            |
| 5. Apricots                    | 1                                | 96    | 20               | 65    | 81            |
| 6. Other cereals               | 1                                | 96    | 15               | 49    | 72            |
| 7. Cucumbers and gherkins      | 5                                | 82    | 16               | 52    | 67            |
| 7. Peaches and nectarines      | 2                                | 93    | 13               | 42    | 67            |
| 9. Bananas, plantains          | 3                                | 89    | 12               | 41    | 65            |
| 9. Strawberries                | 1                                | 97    | 10               | 33    | 65            |
| 9. Tang. mand. clement. satsma | 3                                | 90    | 12               | 40    | 65            |

Source: ITC's TradeMap and Market Access Map, see Table 29.

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 Eastern African countries.

### **Overall World Market index**

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

**Table 28. World market index for Eastern African countries**

|                       | Rank size | Rank growth | Market access conditions |
|-----------------------|-----------|-------------|--------------------------|
| 1. Maize              | 1         | 5           | 2                        |
| 2. Coffee, green      | 1         | 2           | 49                       |
| 3. Oil palm fruit     | 1         | 1           | 82                       |
| 4. Wheat              | 1         | 2           | 71                       |
| 5. Bananas, plantains | 7         | 7           | 9                        |
| 6. Soybeans           | 1         | 4           | 89                       |
| 7. Seed cotton        | 6         | 11          | 82                       |
| 8. Tomatoes           | 8         | 7           | 17                       |
| 9. Cocoa beans        | 10        | 5           | 42                       |
| 10. Grapes            | 9         | 10          | 28                       |

Source: ITC's TradeMap and Market Access Map, see Table 29.



Table 29. 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 Eastern Africa |       | Tariff advantage* |       |                    |    |    |
|                                  | USD million   | Index | % p.a.                  | Index | USD millions                     | Average Index | %                                | Index | %                 | Index |                    |    |    |
| 1. Maize                         | 13,250        | 100   | 8                       | 43    | 3,586                            | 100           | 72                               | 6     | 80                | 37    | 100                | 90 | 87 |
| 2. Coffee, green                 | 10,154        | 100   | 13                      | 64    | 3,950                            | 100           | 82                               | 1     | 96                | 0     | 0                  | 48 | 77 |
| 3. Oil palm fruit                | 10,441        | 100   | 24                      | 100   | 5,952                            | 100           | 100                              | 17    | 43                | 2     | 7                  | 25 | 75 |
| 4. Wheat                         | 21,381        | 100   | 13                      | 63    | 8,080                            | 100           | 82                               | 11    | 65                | 4     | 14                 | 40 | 74 |
| 5. Bananas, plantains            | 8,743         | 86    | 10                      | 52    | 2,831                            | 79            | 65                               | 3     | 89                | 12    | 41                 | 65 | 72 |
| 6. Soybeans                      | 18,916        | 100   | 13                      | 62    | 7,202                            | 100           | 81                               | 18    | 42                | 0     | 0                  | 21 | 67 |
| 7. Seed cotton                   | 9,922         | 98    | 9                       | 45    | 2,756                            | 77            | 61                               | 15    | 51                | 0     | 0                  | 25 | 61 |
| 8. Tomatoes                      | 5,253         | 52    | 14                      | 69    | 2,174                            | 61            | 65                               | 5     | 82                | 12    | 39                 | 61 | 59 |
| 9. Cocoa beans                   | 4,745         | 47    | 17                      | 81    | 2,234                            | 62            | 72                               | 1     | 98                | 0     | 1                  | 49 | 56 |
| 10. Grapes                       | 4,913         | 48    | 14                      | 68    | 2,008                            | 56            | 62                               | 3     | 90                | 7     | 22                 | 56 | 55 |
| 11. Sesame seed                  | 835           | 8     | 14                      | 69    | 343                              | 10            | 39                               | 5     | 84                | 62    | 100                | 92 | 46 |
| 12. Tang. mand. clement. satsuma | 2,408         | 23    | 13                      | 64    | 938                              | 26            | 45                               | 3     | 90                | 12    | 40                 | 65 | 45 |
| 13. Garlic                       | 848           | 8     | 14                      | 68    | 350                              | 10            | 39                               | 8     | 74                | 27    | 89                 | 82 | 43 |
| 13. Oranges                      | 3,161         | 31    | 9                       | 46    | 907                              | 26            | 36                               | 4     | 85                | 11    | 37                 | 61 | 43 |
| 15. Avocados                     | 996           | 10    | 24                      | 100   | 578                              | 16            | 58                               | 1     | 98                | 5     | 17                 | 57 | 42 |
| 15. Chillies & peppers, green    | 2,866         | 28    | 12                      | 58    | 1,029                            | 29            | 43                               | 1     | 98                | 3     | 10                 | 54 | 42 |
| 15. Pineapples                   | 1,497         | 14    | 20                      | 92    | 772                              | 22            | 57                               | 2     | 94                | 4     | 12                 | 53 | 42 |
| 15. Barley                       | 4,119         | 40    | 14                      | 69    | 1,693                            | 47            | 58                               | 19    | 36                | 6     | 19                 | 28 | 42 |
| 19. Other cereals                | 116           | 1     | 21                      | 97    | 61                               | 2             | 49                               | 1     | 96                | 15    | 49                 | 72 | 41 |
| 19. Strawberries                 | 1,338         | 13    | 16                      | 76    | 599                              | 17            | 47                               | 1     | 97                | 10    | 33                 | 65 | 41 |
| 21. Cucumbers and gherkins       | 1,434         | 14    | 13                      | 64    | 560                              | 16            | 40                               | 5     | 82                | 16    | 52                 | 67 | 40 |
| 22. Lemon and limes              | 1,389         | 13    | 14                      | 69    | 575                              | 16            | 43                               | 1     | 97                | 8     | 28                 | 63 | 39 |
| 22. Beans                        | 661           | 6     | 19                      | 90    | 336                              | 10            | 50                               | 1     | 95                | 9     | 28                 | 62 | 39 |
| 22. Cashew nuts                  | 1,874         | 18    | 22                      | 100   | 1,012                            | 28            | 64                               | 9     | 70                | 0     | 0                  | 35 | 39 |
| 25. Lettuce                      | 1,860         | 18    | 15                      | 70    | 784                              | 22            | 46                               | 7     | 78                | 7     | 25                 | 51 | 38 |
| 25. Other vegetables             | 2,470         | 24    | 11                      | 56    | 852                              | 24            | 40                               | 5     | 84                | 6     | 19                 | 51 | 38 |
| 25. Apples                       | 4,237         | 42    | 11                      | 57    | 1,487                            | 42            | 49                               | 17    | 44                | 2     | 6                  | 25 | 38 |
| 28. Cassava                      | 574           | 5     | 6                       | 33    | 119                              | 4             | 18                               | 8     | 75                | 46    | 100                | 87 | 37 |
| 28. Apricots                     | 264           | 2     | 11                      | 54    | 89                               | 3             | 28                               | 1     | 96                | 20    | 65                 | 81 | 37 |
| 28. Peaches and nectarines       | 1,421         | 14    | 9                       | 46    | 415                              | 12            | 29                               | 2     | 93                | 13    | 42                 | 67 | 37 |
| 28. Pistachios                   | 1,194         | 11    | 19                      | 91    | 616                              | 17            | 54                               | 3     | 89                | 1     | 3                  | 46 | 37 |
| 28. Other nuts                   | 911           | 9     | 23                      | 100   | 506                              | 14            | 57                               | 5     | 83                | 1     | 5                  | 44 | 37 |
| 33. Sweet potatoes               | 97            | 1     | 25                      | 100   | 57                               | 2             | 51                               | 2     | 95                | 5     | 17                 | 56 | 36 |
| 34. Mushrooms                    | 1,224         | 12    | 10                      | 49    | 374                              | 11            | 30                               | 1     | 98                | 8     | 28                 | 63 | 35 |
| 34. Eggplants                    | 283           | 2     | 17                      | 79    | 131                              | 4             | 42                               | 2     | 93                | 9     | 29                 | 61 | 35 |
| 34. Sunflower seed               | 1,264         | 12    | 17                      | 81    | 594                              | 17            | 49                               | 4     | 87                | 0     | 1                  | 44 | 35 |
| 37. Cantaloupes & other melons   | 1,253         | 12    | 10                      | 49    | 388                              | 11            | 30                               | 2     | 94                | 7     | 23                 | 59 | 34 |

| Products                                    | Size          |       | Dynamism                |       |                                  |                                  | Market access |                   |    |               |    |    | World Market Index |
|---------------------------------------------|---------------|-------|-------------------------|-------|----------------------------------|----------------------------------|---------------|-------------------|----|---------------|----|----|--------------------|
|                                             | World imports |       | Growth of world imports |       | Absolute change of world imports | Tariff applied to Eastern Africa |               | Tariff advantage* |    | Average index |    |    |                    |
|                                             | USD million   | Index | % p.a.                  | Index |                                  | % Index                          | Index         | % Index           |    |               |    |    |                    |
|                                             |               |       |                         |       |                                  |                                  |               |                   |    |               |    |    |                    |
| 37. Peas, green                             | 254           | 2     | 17                      | 79    | 117                              | 4                                | 41            | 1                 | 96 | 6             | 19 | 57 | 34                 |
| 37. Potatoes                                | 2,091         | 20    | 8                       | 42    | 547                              | 16                               | 29            | 7                 | 78 | 9             | 31 | 54 | 34                 |
| 37. Tea                                     | 3,440         | 34    | 6                       | 34    | 680                              | 19                               | 27            | 6                 | 81 | 1             | 3  | 42 | 34                 |
| 41. Pimento, allspice                       | 644           | 6     | 11                      | 54    | 217                              | 6                                | 30            | 5                 | 82 | 13            | 44 | 63 | 33                 |
| 41. Watermelons                             | 657           | 6     | 12                      | 59    | 237                              | 7                                | 33            | 2                 | 94 | 7             | 24 | 59 | 33                 |
| 43. Asparagus                               | 781           | 7     | 9                       | 48    | 237                              | 7                                | 28            | 3                 | 91 | 9             | 32 | 61 | 32                 |
| 43. Linseed                                 | 412           | 4     | 17                      | 79    | 190                              | 6                                | 42            | 0                 | 99 | 0             | 1  | 50 | 32                 |
| 43. Other fruits                            | 1,085         | 10    | 13                      | 62    | 410                              | 12                               | 37            | 5                 | 83 | 5             | 16 | 49 | 32                 |
| 43. Rapeseed                                | 2,497         | 24    | 6                       | 33    | 484                              | 14                               | 23            | 1                 | 97 | 0             | 0  | 49 | 32                 |
| 43. Pears and quinces                       | 1,716         | 17    | 13                      | 62    | 653                              | 18                               | 40            | 11                | 65 | 4             | 14 | 39 | 32                 |
| 48. Oats                                    | 440           | 4     | 9                       | 44    | 122                              | 4                                | 24            | 3                 | 91 | 11            | 37 | 64 | 31                 |
| 48. Spinach                                 | 115           | 1     | 18                      | 84    | 55                               | 2                                | 43            | 5                 | 85 | 4             | 13 | 49 | 31                 |
| 48. Mangoes                                 | 944           | 9     | 12                      | 59    | 342                              | 10                               | 35            | 2                 | 94 | 1             | 3  | 49 | 31                 |
| 48. Ginger                                  | 321           | 3     | 18                      | 85    | 158                              | 5                                | 45            | 5                 | 82 | 3             | 11 | 47 | 31                 |
| 48. Onions                                  | 1,581         | 15    | 10                      | 52    | 509                              | 14                               | 33            | 6                 | 80 | 3             | 12 | 46 | 31                 |
| 53. Broad beans, green                      | 50            | 0     | 12                      | 60    | 18                               | 1                                | 30            | 2                 | 94 | 7             | 25 | 60 | 30                 |
| 53. Other spices                            | 666           | 6     | 13                      | 65    | 260                              | 8                                | 36            | 3                 | 90 | 2             | 7  | 49 | 30                 |
| 53. Plants and parts of plants              | 1,204         | 12    | 10                      | 50    | 378                              | 11                               | 30            | 2                 | 94 | 0             | 1  | 48 | 30                 |
| 53. Sisal and other textile fibres of agave | 70            | 0     | 18                      | 85    | 32                               | 1                                | 43            | 3                 | 90 | 1             | 3  | 47 | 30                 |
| 53. Other oil crops                         | 264           | 2     | 17                      | 80    | 121                              | 4                                | 42            | 2                 | 92 | 0             | 1  | 46 | 30                 |
| 58. Plums                                   | 559           | 5     | 9                       | 46    | 162                              | 5                                | 25            | 2                 | 93 | 6             | 19 | 56 | 29                 |
| 58. Millet                                  | 84            | 0     | 13                      | 62    | 31                               | 1                                | 32            | 4                 | 87 | 7             | 23 | 55 | 29                 |
| 58. Cabbages                                | 820           | 8     | 10                      | 51    | 260                              | 8                                | 29            | 5                 | 83 | 5             | 17 | 50 | 29                 |
| 58. Coconuts                                | 363           | 3     | 16                      | 76    | 158                              | 5                                | 40            | 4                 | 86 | 1             | 3  | 44 | 29                 |
| 58. Cauliflower                             | 637           | 6     | 14                      | 67    | 258                              | 8                                | 37            | 8                 | 74 | 3             | 11 | 43 | 29                 |
| 63. Safflower seed                          | 13            | 0     | 17                      | 78    | 6                                | 1                                | 39            | 3                 | 91 | 0             | 0  | 45 | 28                 |
| 64. Papayas                                 | 222           | 2     | 10                      | 49    | 68                               | 2                                | 26            | 0                 | 98 | 2             | 8  | 53 | 27                 |
| 64. Carrots                                 | 666           | 6     | 9                       | 47    | 197                              | 6                                | 26            | 7                 | 78 | 6             | 19 | 48 | 27                 |
| 64. Lentils                                 | 644           | 6     | 14                      | 66    | 259                              | 8                                | 37            | 7                 | 76 | 0             | 0  | 38 | 27                 |
| 67. Mustard seed                            | 105           | 1     | 11                      | 54    | 36                               | 1                                | 28            | 1                 | 96 | 0             | 0  | 48 | 26                 |
| 67. Groundnuts in shell                     | 185           | 1     | 12                      | 59    | 67                               | 2                                | 30            | 3                 | 89 | 0             | 1  | 45 | 26                 |
| 67. Rice, paddy                             | 459           | 4     | 15                      | 72    | 193                              | 6                                | 39            | 11                | 62 | 2             | 7  | 35 | 26                 |
| 70. Other fibre crops                       | 9             | 0     | 11                      | 53    | 3                                | 0                                | 27            | 2                 | 94 | 0             | 0  | 47 | 25                 |
| 70. Grapefruit and pomelos                  | 778           | 7     | 6                       | 35    | 172                              | 5                                | 20            | 3                 | 89 | 1             | 4  | 47 | 25                 |
| 70. Dates                                   | 404           | 4     | 12                      | 60    | 144                              | 4                                | 32            | 10                | 67 | 4             | 13 | 40 | 25                 |
| 73. Broad beans, dry                        | 144           | 1     | 4                       | 25    | 20                               | 1                                | 13            | 3                 | 91 | 7             | 23 | 57 | 24                 |
| 74. Other roots and tubers                  | 235           | 2     | 4                       | 25    | 35                               | 1                                | 13            | 4                 | 86 | 4             | 15 | 50 | 22                 |
| 75. Abaca (manila hemp)                     | 26            | 0     | 4                       | 27    | 4                                | 0                                | 14            | 0                 | 98 | 0             | 0  | 49 | 21                 |

| Products                       | Size          |       | Dynamism                |       |                                  |               | Market access                    |       |                   |              | World Market Index |       |    |
|--------------------------------|---------------|-------|-------------------------|-------|----------------------------------|---------------|----------------------------------|-------|-------------------|--------------|--------------------|-------|----|
|                                | World imports |       | Growth of world imports |       | Absolute change of world imports | Average Index | Tariff applied to Eastern Africa |       | Tariff advantage* |              |                    |       |    |
|                                | USD million   | Index | % p.a.                  | Index |                                  |               | % Index                          | Index | % Index           |              |                    |       |    |
|                                |               |       |                         |       |                                  |               |                                  |       |                   | USD millions |                    | Index |    |
| 75. Jute and other bast fibres | 122           | 1     | 9                       | 46    | 22                               | 1             | 23                               | 6     | 80                | 0            | 0                  | 40    | 21 |
| 77. Citrus fruit nes           | 33            | 0     | -8                      | 0     | -12                              | 0             | 0                                | 1     | 95                | 7            | 24                 | 60    | 20 |
| 77. Cinnamon (canella)         | 149           | 1     | 6                       | 35    | 32                               | 1             | 18                               | 6     | 81                | 0            | 2                  | 41    | 20 |
| 79. Beans, dry                 | 1,035         | 10    | 7                       | 39    | 250                              | 7             | 23                               | 19    | 36                | 3            | 9                  | 23    | 19 |
| 80. Vanilla                    | 131           | 1     | -13                     | 0     | -99                              | 0             | 0                                | 1     | 98                | 3            | 9                  | 54    | 18 |
| 80. Sorghum                    | 747           | 7     | -2                      | 1     | -54                              | 0             | 0                                | 4     | 86                | 2            | 8                  | 47    | 18 |
| 80. Anise, badian, fennel      | 247           | 2     | 4                       | 23    | 31                               | 1             | 12                               | 7     | 78                | 1            | 3                  | 40    | 18 |
| 80. Peas, dry                  | 890           | 8     | 7                       | 37    | 206                              | 6             | 22                               | 16    | 47                | 1            | 3                  | 25    | 18 |
| 84. Pepper, white/long/black   | 517           | 5     | -2                      | 0     | -40                              | 0             | 0                                | 5     | 82                | 0            | 1                  | 42    | 15 |
| 84. Nutmeg, mace, cardamons    | 248           | 2     | 0                       | 6     | -4                               | 0             | 3                                | 7     | 76                | 0            | 1                  | 39    | 15 |
| 84. Cow peas, dry              | 306           | 3     | 7                       | 38    | 70                               | 2             | 20                               | 21    | 31                | 4            | 15                 | 23    | 15 |
| 87. Castor beans               | 4             | 0     | -15                     | 0     | -3                               | 0             | 0                                | 5     | 85                | 0            | 0                  | 42    | 14 |
| 87. Chick-peas                 | 472           | 4     | 0                       | 9     | 3                                | 0             | 5                                | 11    | 64                | 0            | 0                  | 32    | 14 |
| 87. Other vegetable products   | 204           | 2     | 16                      | 74    | 88                               | 3             | 38                               | 33    | 0                 | 2            | 7                  | 3     | 14 |
| 90. Other pulses               | 344           | 3     | 3                       | 20    | 33                               | 1             | 11                               | 17    | 42                | 1            | 4                  | 23    | 12 |
| 91. Cloves, whole and stems    | 126           | 1     | -9                      | 0     | -58                              | 0             | 0                                | 25    | 16                | 1            | 3                  | 10    | 4  |

Source: ITC's 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 Eastern African countries.

## Comparing products along the four dimensions

We combine and compare the four indices. High ranks in both the production index and the import index suggest an existing potential for import substitution whereas high ranks in both production, export and/or world market indices suggest a potential for export development. Products which rank lower in terms of the production index, but for which there is identified import reliance, or where world market indices suggest a potential for import substitution or export development in the future may require interventions to develop their capacity.

We 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 31 uses a different colours for the cases depending on the number of dimensions for which the product lies among the top 20 products: Dark red (0 dimension), red (1), yellow (2), green (3), dark green (4).

- The dark green case in the top right shows those products that are among the top 20 in production, exports, imports and world markets. There are no products in this category.
- The dark red case in the bottom left shows those products with low rankings in all four dimensions. Cucumbers and gherkins, Lemon and limes, Other vegetables, and Lettuce for example appear to have low potential both from an import substitution and an export development point of view.
- Between these two extreme cases, some products seem more promising for export development (for example when production and export indices are high), while others seem more promising for import substitution (when production and import indices are high).

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To assist in the interpretation of this information, we distinguish two categories of products on the basis of their current production performance:

- **Products with high ranks in production** represent opportunities for import substitution and/or export development (Table 32). We can discern four subcategories of opportunities:

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- *Export development and import substitution.* This subcategory includes Dry cow peas, Dry beans, Tea, Garlic, and Vanilla.

- *Export development only.* Several fruits and vegetables (Bananas, plantains, Avocados, and Other fruits) lie in this subcategory, and also Green coffee, Sisal and other textile fibres of agave, Cashew nuts, and Sesame seed, and Cloves.

- *Import substitution only.* It consists of Millet, Other pulses, and Sorghum.

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- *No apparent potential* appears for Cauliflower, Mangoes, Other roots and tubers, Cassava, and Ginger.

- **Products with low ranks in production** represent opportunities for significant production capacity development prior to taking advantage of identified import substitution and/or export development opportunities (Table 33). We can discern three subcategories of opportunities:

- *Capacity development for Import substitution and Exports.* Green chillies & peppers lie in this subcategory, and also Wheat, Maize, Seed cotton, Soybeans, and Oil palm fruit.

- *Capacity development for Exports.* This is the case for example for fruits and vegetables (Strawberries, Tang.mand,clement,satsma, Tomateos, Grapes, Lettuce, Oranges, Pineapples, Beans, and Green peas), Barley, Other cereals, Cocoa beans, Seed cotton, Other nuts, Castor beans, and Other oil crops, and Plants and parts of plants.
- Capacity development for Import substitution. This subcategory includes Lentils, Dry peas, Jute and other bast fibres, Apples, Citrus fruit, Other spices, and Pimento, allspice.
- The remaining products have a low regional and world market demand, implying little market opportunities to expand production.

**Table 30: Top 20 products for Eastern African countries according to the four indices**

|                 | Production index                            | Export index                                | Import index                                 | World market index                           |
|-----------------|---------------------------------------------|---------------------------------------------|----------------------------------------------|----------------------------------------------|
| Top 20 products | 1 . Tea                                     | 1 . Sesame seed                             | 1 . Lentils                                  | 1 . Maize                                    |
|                 | 2 . Sisal and other textile fibres of agave | 2 . Coffee, green                           | 2 . Sorghum                                  | 2 . Coffee, green                            |
|                 | 3 . Vanilla                                 | 3 . Seed cotton                             | 2 . Wheat                                    | 3 . Oil palm fruit                           |
|                 | 3 . Cloves, whole and stems                 | 4 . Tea                                     | 4 . Peas, dry                                | 4 . Wheat                                    |
|                 | 3 . Sesame seed                             | 5 . Beans                                   | 4 . Oil palm fruit                           | 5 . Bananas, plantains                       |
|                 | 6 . Bananas, plantains                      | 6 . Peas, green                             | 6 . Maize                                    | 6 . Soybeans                                 |
|                 | 7 . Cassava                                 | 7 . Sisal and other textile fibres of agave | 7 . Tea                                      | 7 . Seed cotton                              |
|                 | 8 . Other pulses                            | 8 . Vanilla                                 | 8 . Cow peas, dry                            | 8 . Tomatoes                                 |
|                 | 9 . Beans, dry                              | 8 . Cocoa beans                             | 9 . Beans, dry                               | 9 . Cocoa beans                              |
|                 | 10 . Avocados                               | 8 . Other oil crops                         | 10 . Apples                                  | 10 . Grapes                                  |
|                 | 10 . Mangoes                                | 11 . Cloves, whole and stems                | 11 . Other pulses                            | 11 . Sesame seed                             |
|                 | 10 . Sorghum                                | 11 . Cashew nuts                            | 12 . Garlic                                  | 12 . Tang. mand. clement. satsma             |
|                 | 13 . Coffee, green                          | 13 . Beans, dry                             | 13 . Soybeans                                | 13 . Garlic                                  |
|                 | 13 . Millet                                 | 13 . Cow peas, dry                          | 14 . Other spices                            | 13 . Oranges                                 |
|                 | 13 . Other fruits                           | 15 . Bananas, plantains                     | 15 . Millet                                  | 15 . Chillies & peppers, green               |
|                 | 16 . Cow peas, dry                          | 16 . Other fruits                           | 16 . Chillies & peppers, green               | 15 . Barley                                  |
|                 | 16 . Garlic                                 | 16 . Other nuts                             | 17 . Seed cotton                             | 15 . Avocados                                |
|                 | 18 . Cauliflower                            | 18 . Plants and parts of plants             | 18 . Vanilla                                 | 15 . Pineapples                              |
|                 | 18 . Other roots and tubers                 | 19 . Castor beans                           | 18 . Jute and other bast fibres              | 19 . Other cereals                           |
|                 | 20 . Cashew nuts                            | 20 . Maize                                  | 20 . Pimento, allspice                       | 19 . Strawberries                            |
|                 | 20 . Ginger                                 |                                             | 20 . Citrus fruit nes                        |                                              |
| Other products  | 22 . Broad beans, green                     | 21 . Groundnuts in shell                    | 22 . Peas, green                             | 21 . Cucumbers and gherkins                  |
|                 | 22 . Groundnuts in shell                    | 21 . Peas, dry                              | 22 . Potatoes                                | 22 . Cashew nuts                             |
|                 | 24 . Broad beans, dry                       | 21 . Pimento, allspice                      | 24 . Other oil crops                         | 22 . Beans                                   |
|                 | 24 . Plums                                  | 24 . Cabbages                               | 24 . Cashew nuts                             | 22 . Lemon and limes                         |
|                 | 26 . Pineapples                             | 25 . Ginger                                 | 24 . Sunflower seed                          | 25 . Apples                                  |
|                 | 27 . Dates                                  | 25 . Cucumbers and gherkins                 | 24 . Barley                                  | 25 . Other vegetables                        |
|                 | 28 . Other nuts                             | 25 . Pepper, white/long/black               | 28 . Other nuts                              | 25 . Lettuce                                 |
|                 | 28 . Other vegetables                       | 28 . Other vegetables                       | 28 . Grapes                                  | 28 . Other nuts                              |
|                 | 30 . Cocoa beans                            | 28 . Linseed                                | 28 . Rice, paddy                             | 28 . Pistachios                              |
|                 | 30 . Papayas                                | 28 . Other vegetable products               | 31 . Other vegetables                        | 28 . Peaches and nectarines                  |
|                 | 30 . Seed cotton                            | 28 . Strawberries                           | 31 . Oranges                                 | 28 . Apricots                                |
|                 | 33 . Other oil crops                        | 32 . Apricots                               | 31 . Dates                                   | 28 . Cassava                                 |
|                 | 34 . Maize                                  | 32 . Other spices                           | 34 . Beans                                   | 33 . Sweet potatoes                          |
|                 | 35 . Asparagus                              | 32 . Tomatoes                               | 35 . Coffee, green                           | 34 . Sunflower seed                          |
|                 | 35 . Rice, paddy                            | 32 . Coconuts                               | 35 . Sisal and other textile fibres of agave | 34 . Mushrooms                               |
|                 | 37 . Sweet potatoes                         | 36 . Pineapples                             | 35 . Onions                                  | 34 . Eggplants                               |
|                 | 37 . Onions                                 | 36 . Chick-peas                             | 38 . Sesame seed                             | 37 . Tea                                     |
|                 | 39 . Beans                                  | 38 . Citrus fruit nes                       | 38 . Broad beans, green                      | 37 . Peas, green                             |
|                 | 39 . Wheat                                  | 38 . Safflower seed                         | 38 . Other roots and tubers                  | 37 . Potatoes                                |
|                 | 39 . Chillies & peppers, green              | 38 . Jute and other bast fibres             | 41 . Other cereals                           | 37 . Cantaloupes & other melons              |
|                 | 42 . Anise, badian, fennel                  | 38 . Lettuce                                | 42 . Plants and parts of plants              | 41 . Pimento, allspice                       |
|                 | 42 . Cucumbers and gherkins                 | 42 . Cauliflower                            | 42 . Groundnuts in shell                     | 41 . Watermelons                             |
|                 | 44 . Peas, dry                              | 42 . Papayas                                | 42 . Nutmeg, mace, cardamoms                 | 43 . Other fruits                            |
|                 | 45 . Apricots                               | 42 . Grapes                                 | 42 . Watermelons                             | 43 . Pears and quinces                       |
|                 | 45 . Sunflower seed                         | 42 . Other cereals                          | 46 . Other fruits                            | 43 . Asparagus                               |
|                 | 45 . Citrus fruit nes                       | 42 . Tang. mand. clement. satsma            | 46 . Ginger                                  | 43 . Linseed                                 |
|                 | 45 . Grapefruit and pomelos                 | 47 . Oil palm fruit                         | 46 . Pears and quinces                       | 43 . Rapeseed                                |
|                 | 45 . Oil palm fruit                         | 47 . Eggplants                              | 49 . Avocados                                | 48 . Onions                                  |
|                 | 45 . Pepper, white/long/black               | 47 . Soybeans                               | 49 . Asparagus                               | 48 . Ginger                                  |
|                 | 45 . Plants and parts of plants             | 50 . Other fibre crops                      | 49 . Mustard seed                            | 48 . Mangoes                                 |
|                 | 52 . Other fibre crops                      | 50 . Spinach                                | 52 . Other vegetable products                | 48 . Oats                                    |
|                 | 52 . Other spices                           | 50 . Nutmeg, mace, cardamoms                | 52 . Cantaloupes & other melons              | 48 . Spinach                                 |
|                 | 52 . Potatoes                               | 53 . Avocados                               | 52 . Carrots                                 | 53 . Other spices                            |
|                 | 52 . Rapeseed                               | 53 . Mangoes                                | 55 . Cloves, whole and stems                 | 53 . Other oil crops                         |
|                 | 56 . Tomatoes                               | 53 . Sweet potatoes                         | 55 . Pineapples                              | 53 . Sisal and other textile fibres of agave |
|                 | 56 . Linseed                                | 53 . Chillies & peppers, green              | 55 . Mushrooms                               | 53 . Broad beans, green                      |
|                 | 58 . Lemon and limes                        | 53 . Cantaloupes & other melons             | 58 . Pepper, white/long/black                | 53 . Plants and parts of plants              |
|                 | 58 . Castor beans                           | 58 . Other pulses                           | 58 . Cinnamon (canella)                      | 58 . Millet                                  |
|                 | 58 . Eggplants                              | 58 . Garlic                                 | 60 . Coconuts                                | 58 . Coconuts                                |
|                 | 58 . Pears and quinces                      | 58 . Broad beans, green                     | 60 . Grapefruit and pomelos                  | 58 . Cabbages                                |
|                 | 58 . Pimento, allspice                      |                                             |                                              | 58 . Cauliflower                             |
|                 | 63 . Spinach                                |                                             |                                              |                                              |

|                                 |                            |                                 |                                |
|---------------------------------|----------------------------|---------------------------------|--------------------------------|
| 63. Nutmeg, mace, cardamoms     | 58. Lentils                | 62. Broad beans, dry            | 58. Plums                      |
| 65. Soybeans                    | 62. Onions                 | 63. Bananas, plantains          | 63. Safflower seed             |
| 65. Cabbages                    | 62. Oranges                | 63. Cucumbers and gherkins      | 64. Lentils                    |
| 65. Cantaloupes & other melons  | 62. Mushrooms              | 63. Linseed                     | 64. Carrots                    |
| 65. Coconuts                    | 65. Sorghum                | 63. Papayas                     | 64. Papayas                    |
| 65. Other vegetable products    | 65. Millet                 | 63. Tang. mand. clement. satsma | 67. Rice, paddy                |
| 70. Watermelons                 | 65. Asparagus              | 63. Anise, badian, fennel       | 67. Groundnuts in shell        |
| 70. Chick-peas                  | 65. Potatoes               | 63. Rapeseed                    | 67. Mustard seed               |
| 72. Oranges                     | 69. Lemon and limes        | 70. Cabbages                    | 70. Dates                      |
| 73. Strawberries                | 69. Carrots                | 71. Cauliflower                 | 70. Grapefruit and pomelos     |
| 73. Grapes                      | 71. Anise, badian, fennel  | 71. Lemon and limes             | 70. Other fibre crops          |
| 75. Safflower seed              | 71. Sunflower seed         | 73. Plums                       | 73. Broad beans, dry           |
| 76. Other cereals               | 71. Pears and quinces      | 74. Pistachios                  | 74. Other roots and tubers     |
| 77. Jute and other bast fibres  | 71. Barley                 | 75. Tomatoes                    | 75. Jute and other bast fibres |
| 78. Cinnamon (canella)          | 75. Rice, paddy            | 75. Mangoes                     | 75. Abaca (manila hemp)        |
| 79. Tang. mand. clement. satsma | 75. Wheat                  | 75. Peaches and nectarines      | 77. Citrus fruit nes           |
| 80. Mustard seed                | 75. Watermelons            | 75. Oats                        | 77. Cinnamon (canella)         |
| 81. Apples                      | 78. Other roots and tubers | 79. Strawberries                | 79. Beans, dry                 |
| 82. Barley                      | 78. Peaches and nectarines | 79. Chick-peas                  | 80. Sorghum                    |
| 83. Lentils                     | 80. Grapefruit and pomelos | 79. Lettuce                     | 80. Peas, dry                  |
| 84. Lettuce                     | 81. Broad beans, dry       | 82. Cocoa beans                 | 80. Vanilla                    |
| 84. Peas, green                 | 81. Cinnamon (canella)     | 83. Apricots                    | 80. Anise, badian, fennel      |
| 86. Abaca (manila hemp)         | 83. Apples                 | 84. Sweet potatoes              | 84. Cow peas, dry              |
| 86. Mushrooms                   | 84. Cassava                | 84. Cassava                     | 84. Nutmeg, mace, cardamoms    |
| 86. Peaches and nectarines      | 85. Dates                  |                                 | 84. Pepper, white/long/black   |
| 89. Carrots                     | 86. Mustard seed           |                                 | 87. Other vegetable products   |
| 89. Pistachios                  |                            |                                 | 87. Chick-peas                 |
| 91. Oats                        |                            |                                 | 87. Castor beans               |
|                                 |                            |                                 | 90. Other pulses               |
|                                 |                            |                                 | 91. Cloves, whole and stems    |

Source: FAOSTAT, ITC's TradeMap and Market Access Map, Table 13, Table 19, Table 24, Table 29.

**Table 31: Top 20 products for Eastern African countries according to 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 (top 20) in Exports and Imports                 | High ranks (top 20) in Exports and Imports:<br>---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | High ranks (top 20) in Exports, Imports and World Markets:<br>Maize (34,20,6 , 1)<br>Seed cotton (30,3 , 17, 7)                                                                                                                                                                        | High ranks (top 20) in Production, Exports and Imports:<br>Tea (1 , 4 , 7 , 37)<br>Beans, dry (9 , 13,9 , 79)<br>Vanilla (3 , 8 , 18, 80)<br>Cow peas, dry (16,13,8 , 84)                                          | High ranks (top 20) in Production, Exports, Imports and World Markets:<br>---                                                                                  |
| High ranks (top 20) in Exports<br><br>Low ranks in Imports | High ranks (top 20) in Exports:<br>Beans (39,5 , 34, 22)<br>Other nuts (28,16,28, 28)<br>Peas, green (84,6 , 22, 37)<br>Other oil crops (33,8 , 24, 53)<br>Plants and parts of plants (45,18,42, 53)<br>Castor beans (58,19,--, 87)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | High ranks (top 20) in Exports and World Markets:<br>Cocoa beans (30,8 ,82, 9)                                                                                                                                                                                                         | High ranks (top 20) in Production and Exports:<br>Cashew nuts (20,11,24, 22)<br>Other fruits (13,16,46, 43)<br>Sisal and other textile fibres of agave (2 , 7 , 35, 53)<br>Cloves, whole and stems (3 , 11,55, 91) | High ranks (top 20) in Production, Exports and World Markets:<br>Coffee, green (13,2 ,35, 2)<br>Bananas, plantains (6 ,15,63, 5)<br>Sesame seed (3 ,1 ,38, 11) |
| High ranks (top 20) in Imports<br><br>Low ranks in Exports | High ranks (top 20) in Imports:<br>Apples (81,83,10, 25)<br>Pimento, allspice (58,21,20, 41)<br>Other spices (52,32,14, 53)<br>Lentils (83,58,1 , 64)<br>Jute and other bast fibres (77,38,18, 75)<br>Citrus fruit nes (45,38,20, 77)<br>Peas, dry (44,21,4 , 80)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | High ranks (top 20) in Imports and World Markets:<br>Oil palm fruit (45,47,4 , 3)<br>Wheat (39,75,2 , 4)<br>Soybeans (65,47,13, 6)<br>Chillies & peppers, green (39,53,16, 15)                                                                                                         | High ranks (top 20) in Production and Imports:<br>Millet (13,65,15, 58)<br>Sorghum (10,65,2 , 80)<br>Other pulses (8 ,58,11, 90)                                                                                   | High ranks (top 20) in Production, Imports and World Markets:<br>Garlic (16,58,12, 13)                                                                         |
| Low ranks in Exports and Imports                           | Cucumbers and gherkins (42,25,63, 21)<br>Lemon and limes (58,69,71, 22)<br>Other vegetables (28,28,31, 25)<br>Lettuce (84,38,79, 25)<br>Pistachios (89,--,74, 28)<br>Peaches and nectarines (86,78,75, 28)<br>Apricots (45,32,83, 28)<br>Sweet potatoes (37,53,84, 33)<br>Sunflower seed (45,71,24, 34)<br>Mushrooms (86,62,55, 34)<br>Eggplants (58,47,--, 34)<br>Potatoes (52,65,22, 37)<br>Cantaloupes & other melons (65,53,52, 37)<br>Watermelons (70,75,42, 41)<br>Pears and quinces (58,71,46, 43)<br>Asparagus (35,65,49, 43)<br>Linseed (56,28,63, 43)<br>Rapeseed (52,--,63, 43)<br>Onions (37,62,35, 48)<br>Oats (91,--,75, 48)<br>Spinach (63,50,--, 48)<br>Broad beans, green (22,58,38, 53)<br>Coconuts (65,32,60, 58)<br>Cabbages (65,24,70, 58)<br>Plums (24,--,73, 58)<br>Safflower seed (75,38,--, 63) | High ranks (top 20) in World Markets:<br>Tomatoes (56,32,75, 8)<br>Grapes (73,42,28, 10)<br>Tang, mand. clement. satsuma (79,42,63, 12)<br>Oranges (72,62,31, 13)<br>Barley (82,71,24, 15)<br>Pineapples (26,36,55, 15)<br>Other cereals (76,42,41, 19)<br>Strawberries (73,28,79, 19) | High ranks (top 20) in Production:<br>Cassava (7 ,84,84, 28)<br>Ginger (20,25,46, 48)<br>Mangoes (10,53,75, 48)<br>Cauliflower (18,42,71, 58)<br>Other roots and tubers (18,78,38, 74)                             | High ranks (top 20) in Production and World Markets:<br>Avocados (10,53,49, 15)                                                                                |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  | <p>Carrots (89,69,52,64)</p> <p>Papayas (30,42,63,64)</p> <p>Rice, paddy (35,75,28,67)</p> <p>Groundnuts in shell (22,21,42,67)</p> <p>Mustard seed (80,86,49,67)</p> <p>Dates (27,85,31,70)</p> <p>Grapefruit and pomelos (45,80,60,70)</p> <p>Other fibre crops (52,50,--,70)</p> <p>Broad beans, dry (24,81,62,73)</p> <p>Abaca (manila hemp) (86,--,--,75)</p> <p>Cinnamon (canela) (78,81,58,77)</p> <p>Anise, badian, fennel (42,71,63,80)</p> <p>Nutmeg, mace, cardamoms (63,50,42,84)</p> <p>Pepper, white/long/black (45,25,58,84)</p> <p>Other vegetable products (65,28,52,87)</p> <p>Chick-peas (70,36,79,87)</p> |  |  |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

Source: FAOSTAT, ITC's TradeMap and Market Access Map. Table 13, Table 19, Table 24, Table 29.  
The numbers in parentheses indicate the product's rank among all products in 1. production index, 2. export index, 3. import 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).

## Selecting broad sectors

**Table 32: Eastern African countries: Products with *high* ranks in production for import substitution and/or export development opportunity**

These are products, which are produced, efficiently in relatively large quantities and for which there is a potential for import substitution and/or export development.

| Product sectors                         | Production capacity                              |                                                              | Import substitution and Export development                   |                                                              |                                                 |                                                              | Export development                                           |                                                              |
|-----------------------------------------|--------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
|                                         | (low rank in World Markets, Imports and Exports) | High rank in Imports (low rank in exports 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 | 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) |
| Cereals, grains, beans, peas and pulses |                                                  | Millet (10)<br>Other pulses (11)<br>Sorghum (11)             | Beans, dry (11)<br>Cow peas, dry (5)                         |                                                              |                                                 |                                                              |                                                              |                                                              |
| Coffee, cocoa, tea                      |                                                  |                                                              | Tea (11)                                                     |                                                              |                                                 | Coffee, green (10)                                           |                                                              |                                                              |
| Fibre crops                             |                                                  |                                                              |                                                              |                                                              |                                                 |                                                              |                                                              | Sisal and other textile fibres of agave (6)                  |
| Fruits and vegetables                   | Cauliflower (3)<br>Mangoes (9)                   |                                                              |                                                              | Garlic (6)                                                   |                                                 | Bananas, plantains (13)                                      | Avocados (4)                                                 | Other fruits (15)                                            |
| Nuts                                    |                                                  |                                                              |                                                              |                                                              |                                                 |                                                              |                                                              | Cashew nuts (4)                                              |
| Oil crops                               |                                                  |                                                              |                                                              |                                                              |                                                 | Sesame seed (7)                                              |                                                              |                                                              |
| Roots and tubers                        | Cassava (12)<br>Other roots and tubers (12)      |                                                              |                                                              |                                                              |                                                 |                                                              |                                                              |                                                              |
| Spices, pyrethrum and peppermint        | Ginger (5)                                       |                                                              | Vanilla (5)                                                  |                                                              |                                                 |                                                              |                                                              | Cloves, whole and stems (4)                                  |

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 33: Eastern African countries: Products with low ranks in production for production capacity development and opportunities**

These are products, which are produced inefficiently or in relatively small quantities but for which there is a potential for import substitution and/or export development.

| Product sectors                         | Low demand<br>(low rank in World Markets, Imports and Exports)                                                                                                                                                                                                                                                                                                                                                                                            | Capacity development for Import substitution                 |                                                              | Capacity development for Import substitution and Export development |                                                 | Capacity development for Export                              |                                                              |                                                                                                                                                      |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                           | High rank in Imports (low rank in exports 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 | High rank in World Markets (low rank in imports and exports) | High rank in Exports (low rank in imports and world markets) |                                                                                                                                                      |
| Cereals, grains, beans, peas and pulses | Broad beans, dry (3)                                                                                                                                                                                                                                                                                                                                                                                                                                      | Lentils (5)<br>Peas, dry (8)                                 |                                                              | Wheat (11)                                                          | Maize (14)                                      |                                                              |                                                              | Barley (4)<br>Other cereals (3)                                                                                                                      |
|                                         | Chick-peas (7)<br>Oats (2)<br>Rice, paddy (11)                                                                                                                                                                                                                                                                                                                                                                                                            |                                                              |                                                              |                                                                     |                                                 |                                                              |                                                              |                                                                                                                                                      |
| Coffee, cocoa, tea                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                              |                                                              |                                                                     |                                                 | Cocoa beans (4)                                              |                                                              |                                                                                                                                                      |
| Cotton                                  | Abaca (manila hemp) (1)<br>Other fibre crops (4)                                                                                                                                                                                                                                                                                                                                                                                                          | Jute and other bast fibres (4)                               |                                                              | Seed cotton (9)                                                     |                                                 |                                                              |                                                              |                                                                                                                                                      |
| Fibre crops                             | Apricots (2)<br>Asparagus (1)<br>Spinach (1)<br>Watermelons (3)<br>Lemon and limes (8)<br>Broad beans, green (4)<br>Cabbages (6)<br>Cantaloupes & other melons (2)<br>Carrots (5)<br>Cucumbers and gherkins (6)<br>Dates (3)<br>Eggplants (4)<br>Grapefruit and pomelos (4)<br>Lettuce (5)<br>Mushrooms (1)<br>Onions (11)<br>Other vegetable products (1)<br>Other vegetables (15)<br>Papayas (3)<br>Peaches and nectarines (2)<br>Pears and quinces (4) | Apples (2)<br>Citrus fruit nes (5)                           |                                                              | Chillies & peppers, green (5)                                       |                                                 |                                                              |                                                              | Strawberries (1)<br>Tang, mand. clement. satsuma (5)<br>Tomatoes (12)<br>Grapes (3)<br>Oranges (8)<br>Pineapples (8)<br>Beans (5)<br>Peas, green (6) |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                              |                                                              |                                                                     |                                                 |                                                              |                                                              |                                                                                                                                                      |

| Product sectors                  | Low demand<br>(low rank in World Markets, Imports and Exports) | Capacity development for Import substitution                 |                                                              |                                                              | Capacity development for Export substitution and Export development |                                                              |                                                              | Capacity development for Export                              |                                |  |
|----------------------------------|----------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------|--|
|                                  |                                                                | High rank in Imports (low rank in exports 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                     | 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) |                                |  |
| Nuts                             | Plums (2)                                                      |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Pistachios (2)                                                 |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              | Other nuts (5)                 |  |
|                                  | Sunflower seed (6)                                             |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Coconuts (7)                                                   |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Groundnuts in shell (13)                                       |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
| Oil crops                        | Linseed (3)                                                    |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Mustard seed (1)                                               |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Rapeseed (1)                                                   |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Safflower seed (2)                                             |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
| Roots and tubers                 | Sweet potatoes (11)                                            |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Potatoes (13)                                                  |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
| Spices, pyrethrum and peppermint | Anise, badian, fennel (4)                                      |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Cinnamon (canella) (2)                                         |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Nutmeg, mace, cardamons (5)                                    |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Pepper, white/long/black (5)                                   |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              |                                |  |
|                                  | Other spices (8)<br>Pimento, allspice (8)                      |                                                              |                                                              |                                                              |                                                                     |                                                              |                                                              |                                                              | Plants and parts of plants (3) |  |

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 34 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 34 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 34 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 comprises of 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 gave 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.

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.

Information in Table 34 provides a means to 'filter' the trade opportunity scan results in Table 32 and Table 33 as described in the following sections.

For products with **high ranks** in production (Table 32):

- The potential for export development and import substitution for cowpeas (dry) and beans (dry), tea, garlic and vanilla appears sound as these crops have medium to high regional agro-ecological potential. Cowpeas (dry) and beans (dry) combine well with cereal-based farming systems, particularly with maize and sorghum, together with other legume crops such as soybeans and groundnuts. Legumes need to be rotated with cereal-based production systems. In the lowlands, cotton is an important crop in the cereal-based systems, and so are sweet potatoes and cassava. Tea is well suited to the humid cool conditions in the highlands in several countries in the region.
- A potential for export development only for coffee, sisal & other agave fibres, avocados, bananas & plantains, cashew nuts, sesame seed, and cloves appears sound. Most of these crops are well-established in the region, have a high agro-ecological potential and should respond to any increase in effective demand.
- A potential for important substitution only for millet and sorghum also appears sound, as the regional agro-ecological potential of these crops is high. In addition, sweet sorghum has a good potential as a bioenergy crop whose agro-ecological potential is greater than for grain sorghum in the wetter parts of the savanna ecologies. The countries that are importing millet and sorghum grain do so from within the region, but there is good agro-ecological potential for the region to become self-sufficient in these coarse grains.
- No apparent potential due to low rank in world markets, imports and exports for cauliflower appears sound as there is perhaps marginal agro-ecological potential for it in the region generally, although there is rainfed potential in the highlands or during the cool dry season under irrigation. However, mangoes, cassava, other roots and tubers (yams), and ginger have medium to high agro-ecological potential, and are important products in the domestic and regional markets. Cassava, which has a high regional agro-ecological potential, is a particularly important crop for food security throughout much of the region, and is a potential feed and bioenergy crop.

For products with **low ranks** in production (Table 33):

- The potential for capacity development for import substitutions and export development for wheat, maize, cotton, apples, chillies & peppers (green), and soybeans is sound as these crops have medium to high regional agro-ecological potential. Wheat and apples are suitable crops in the highland rainfed ecologies, and wheat is produced under irrigation in the cooler dry season in lower altitudes away from the equator. In fact, maize, cotton, chillies & peppers, and soybeans have a high regional agro-ecological potential, and the potential for maize goes beyond grain into fresh maize products such as maize on-the-cob, or sweet corn and baby corn as vegetables. Cotton crop is well established in the region and is produced under rainfed as well as irrigated conditions, and the importance of soybeans and chillies is expanding. In the case of oil palm, the regional agro-ecological potential for large scale expansion is low, and compared with Central and West Africa, it is lower still. However, Madagascar appears to have good agro-ecological potential

and Tanzania has some potential for oil palm. For Kenya, Ethiopia and Tanzania where the agro-ecological potential is relatively low because of moisture stress and/or cooler temperatures, there are or can be opportunities to expand and intensify oil palm production with the cool-tolerant and partially drought-resistant 'compact' hybrids although these do not currently play a significant economic or food security role. Similarly, red palm oil (RPO) offers natural health products and could be considered for specialized export development and import substitution in country-specific situations. It has the precursors of vitamin A and E and has been proven to reduce vitamin A deficiency and enhance anti-oxidant vitamin E benefits. RPO can be produced at on-farm level with artesian technology as can soap from crude oil palm.

It would seem appropriate to include rice in this strategic response group because of the very high domestic, regional and international demand for rice and of the high agro-ecological potential for rice in the region. 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 Eastern African countries, enables 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 barley, strawberries, grapes, tangerines, mandarins & clementines, lettuce, beans (green), peas (green), tomatoes, oranges, pineapples, castor beans, and plants and parts of plants (pyrethrum and neem) appears sound as there is medium to high regional agro-ecological potential for these crops (Table 33). Crops such as grapes, tomatoes, beans (green), pineapples and castor beans have a high regional agro-ecological potential and could justify investment if the return is attractive. Castor beans as a potential bioenergy crop in remote villages in the semi-arid agro-ecologies may have scope and could be tested; new work in the NE of Brazil provides insights on how this might work. There is medium regional potential for pyrethrum and neem as a source of biopesticides, and the agro-ecological potential for pyrethrum in the moist highland ecologies in lower latitudes is good. The regional agro-ecological potentials for cocoa appear to be relatively low compared with West and Central Africa, although countries such as Madagascar, Tanzania and Uganda have moderate to good agro-ecological potential for development.
- A potential for capacity development for import substitution only for lentils, peas (dry), jute like fibres (kenaf, rosselle), apples, pimento, allspice appear reasonable as all these crops have medium to high regional agro-ecological potential. With kenaf and rosselle, water supply for retting can be a constraint in drier ecologies.
- No apparent potential due to low rank in world markets, imports and exports for abaca, cabbages, carrots, papayas, onions, pistachios, mustard seed, rapeseed, safflower, anise, badian & fennel, and cinnamon seems reasonable as the regional agro-ecological potentials for these crops are generally low or confined to certain ecologies in certain countries. However, for cabbage, carrots, onions, mustard seed, rapeseed, and anise & fennel there can be good agro-ecological potential for rainfed production in the cooler highland areas, and during the cooler dry season under irrigation. For rice, broad beans (dry), chick peas, groundnuts, sweet potatoes and potatoes the regional agro-ecological potential is high. Potatoes for fresh market and some processed products for urban populations could be expanded but investment for clean seed and storage would be substantial. Also, crops such as oats, apricots, cantaloupes, dates, plums, peaches, pears, eggplants, grapefruit, watermelons, coconuts, sunflower, ginger, pepper (white/long/black) and nutmeg, mace & cardamoms have medium regional agro-ecological potentials in suitable ecologies. These crops could become important in different seasons at different altitudes for export or import substitution development, and crops such as rice, groundnuts, and sweet potatoes have an important role to play in enhancing local food security throughout the region. Other crops such as broad beans (dry), chick peas, egg plants and potatoes as well as fruits serve significant and growing domestic and regional urban markets, while there is some potential for spices such as cinnamon and cardamoms in the moist island ecologies.

**Table 34: Eastern 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)<br>Lentils (5)<br>Oats (2)<br>Wheat (11)                                                                                                                                                                                                                                                                                                                                  | Beans, dry (11)<br>Broad bean, dry (3)<br>Chick peas (7)<br>Cowpeas, dry (5)<br>Maize (14)<br>Millet (10)<br>Peas, dry (8)<br>Rice, paddy (11)<br>Sorghum (12) |
| Coffee, cocoa, tea                      | Cocoa beans (4)                                                                        | Tea (11)                                                                                                                                                                                                                                                                                                                                                                             | Coffee, green (10)                                                                                                                                             |
| Cotton                                  |                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                      | Cotton (11)                                                                                                                                                    |
| Fibre crops                             | Abaca (manila hemp) (1)                                                                | Jute like fibres (3) (kenaf, roselle)                                                                                                                                                                                                                                                                                                                                                | Sisal & other agave fibres (6)                                                                                                                                 |
| Fruits and vegetables                   | Cabbages (6)<br>Carrots (5)<br>Cauliflower (3)<br>Onions & shallots (5)<br>Papayas (3) | Apples (2)<br>Apricots (2)<br>Avocados (4)<br>Beans, green (3)<br>Cantaloupes & other melons (2)<br>Cucumbers and gherkins (6)<br>Dates (3)<br>Eggplants (4)<br>Grapefruit and pomelos (5)<br>Lemons & limes (8)<br>Lettuce (5)<br>Oranges (8)<br>Peaches & nectarines (2)<br>Pears (4)<br>Peas, green (5)<br>Strawberries (1)<br>Tang. mand. clement. satsma (5)<br>Watermelons (3) | Bananas (13)<br>Chillies & peppers, green (3)<br>Garlic (5)<br>Grapes (3)<br>Mangoes (7)<br>Pineapples (8)<br>Tomatoes (12)                                    |
| Nuts                                    | Pistachios (2)                                                                         |                                                                                                                                                                                                                                                                                                                                                                                      | Cashew nuts (4)                                                                                                                                                |
| Oil crops                               | Oil palm (6)<br>Mustard seed (1)<br>Rapeseed (2)<br>Safflower (2)                      | Linseed (3)<br>Coconuts (7)<br>Sunflower (6)                                                                                                                                                                                                                                                                                                                                         | Castor beans (7)<br>Groundnuts in shell (13)<br>Sesame seed (11)<br>Soybeans (6)                                                                               |
| Roots and tubers                        |                                                                                        | Roots & tubers (4) (yams)                                                                                                                                                                                                                                                                                                                                                            | Cassava (12)<br>Potatoes (13)<br>Sweet potatoes (14)                                                                                                           |
| Spices, pyrethrum, peppermint           | Anise, badian & fennel (4)<br>Cinnamon (2)                                             | Ginger (5)<br>Nutmeg, mace, cardamoms (5)<br>Pepper, white/long/black (5)<br>Plants and parts of plants (pyrethrum, neem)<br>Vanilla (5)                                                                                                                                                                                                                                             | Cloves (4)<br>Pimento, allspice (8)                                                                                                                            |

In light of the above agro-ecological and agronomic comments based on the information provided in Table 34, an expanded interpretation of the trade opportunity scan results in Table 32 and Table 33 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.



## Annex

**Table A.1. 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                                                                                                                       |
|                                         | Broad beans, dry                        | 071350   | Dried, shelled broad beans "Vicia faba var. major" and horse beans "Vicia faba var. equina and Vicia faba var. minor", 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) |
|                                         | Lentils                                 | 071340   | Dried, shelled lentils, whether or not skinned or split                                                                                                                                                 |
|                                         | 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)                                                                                      |
|                                         |                                         | 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                                                                                                                                                            |
|                                         |                                         | 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                                                                                                |
| Cotton                                  | Seed cotton                             | 090240   | Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packings of > 3 kg                                                                                                 |
|                                         |                                         | 120720   | Cotton seeds, whether or not broken                                                                                                                                                                     |
| Fibre crops                             | Abaca (manila hemp)                     | 520100   | Cotton, neither carded nor combed                                                                                                                                                                       |
|                                         |                                         | 530521   | Abaca "Manila hemp or Musa textilis Nee", raw                                                                                                                                                           |
|                                         | Jute and other bast fibres              | 530529   | Abaca "Manila hemp or Musa textilis Nee", processed but not spun; tow, noils and waste of these fibres, incl. yarn waste and garnetted stock                                                            |
|                                         |                                         | 530310   | Jute and other textile bast fibres, raw or retted (excl. flax, true hemp and ramie)                                                                                                                     |
|                                         | Other fibre crops                       | 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)            |
|                                         |                                         | 530591   | Ramie and other vegetable textile fibres n.e.s., raw                                                                                                                                                    |
|                                         |                                         | 530599   | Ramie and other vegetable textile fibres n.e.s., processed but not spun; tow, noils and waste of these fibres, incl. yarn waste and garnetted stock                                                     |
|                                         | 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                                                           |

| Broad sectors         | FAO products               | HS6 rev1 | HS 6 rev1 description                                                                                                                                                                                                                                           |
|-----------------------|----------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fruits and vegetables | Apples                     | 080810   | Fresh apples                                                                                                                                                                                                                                                    |
|                       |                            | 080910   | Fresh apricots                                                                                                                                                                                                                                                  |
|                       | 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.")                                                                                                                                |
|                       | 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                                                                                                                                                                                                                        |
|                       | Dates                      | 080410   | Fresh or dried dates                                                                                                                                                                                                                                            |
|                       | Eggplants                  | 070930   | Fresh or chilled aubergines                                                                                                                                                                                                                                     |
|                       | 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,   |
|                       |                            | 121292   | Sugar cane, fresh, chilled, frozen or dried, whether or not ground                                                                                                                                                                                              |
|                       |                            | 121299   | Fruit stones and kernels and other vegetable products, incl. unroasted chicory roots of the variety cichorium intybus sativum, of a kind used primarily for human consumption n.e.s.                                                                            |
|                       | Other vegetable products   | 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 pawpaws "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                                                                                                                                                                                                                                           |
|                       | Spinach                    | 070970   | Fresh or chilled spinach, New Zealand spinach and orache spinach                                                                                                                                                                                                |

| Broad sectors                    | FAO products                | HS6 rev1 | HS 6 rev1 description                                                                                                                                                                                                                                           |
|----------------------------------|-----------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | 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                             | Cashew nuts                 | 080131   | Fresh or dried cashew nuts, in shell                                                                                                                                                                                                                            |
|                                  |                             | 080132   | Fresh or dried cashew nuts, shelled                                                                                                                                                                                                                             |
|                                  | 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)                                                                                        |
|                                  | Pistachios                  | 080250   | Fresh or dried pistachios, whether or not shelled or peeled                                                                                                                                                                                                     |
| Oil crops                        | Castor beans                | 120730   | Castor oil seeds, whether or not broken                                                                                                                                                                                                                         |
|                                  | Coconuts                    | 080111   | Desiccated coconuts                                                                                                                                                                                                                                             |
|                                  |                             | 080119   | Fresh coconuts, whether or not shelled or peeled                                                                                                                                                                                                                |
|                                  | Groundnuts in shell         | 120210   | Ground-nuts in shell, not roasted or otherwise cooked                                                                                                                                                                                                           |
|                                  | Linseed                     | 120400   | Linseed, whether or not broken                                                                                                                                                                                                                                  |
|                                  | Mustard seed                | 120750   | Mustard seeds, whether or not broken                                                                                                                                                                                                                            |
|                                  | 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 |
|                                  | Rapeseed                    | 120500   | Rape or colza seeds, whether or not broken                                                                                                                                                                                                                      |
|                                  | Safflower seed              | 120760   | Safflower seeds, whether or not broken                                                                                                                                                                                                                          |
|                                  | 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                                                                                                                                                                                                                                |
|                                  | Cinnamon (canella)          | 090610   | Cinnamon and cinnamon-tree flowers (excl. crushed and ground)                                                                                                                                                                                                   |
|                                  |                             | 090620   | Crushed or ground cinnamon and cinnamon-tree flowers                                                                                                                                                                                                            |
|                                  | Cloves, whole and stems     | 090700   | Cloves, whole fruit, cloves and stems                                                                                                                                                                                                                           |
|                                  | Ginger                      | 091010   | Ginger                                                                                                                                                                                                                                                          |
|                                  | Nutmeg, mace, cardamoms     | 090810   | Nutmeg                                                                                                                                                                                                                                                          |
|                                  |                             | 090820   | Mace                                                                                                                                                                                                                                                            |
|                                  |                             | 090830   | Cardamoms                                                                                                                                                                                                                                                       |
|                                  | Other spices                | 091020   | Saffron                                                                                                                                                                                                                                                         |
|                                  |                             | 091030   | Turmeric "curcuma"                                                                                                                                                                                                                                              |
|                                  |                             | 091040   | Thyme and bay leaves                                                                                                                                                                                                                                            |
|                                  |                             | 091050   | Curry                                                                                                                                                                                                                                                           |
|                                  |                             | 091091   | Mixtures of different types of spices                                                                                                                                                                                                                           |

| Broad sectors | FAO products               | HS6 rev1 | HS 6 rev1 description                                                                                                                                                                                                                                          |
|---------------|----------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | Other spices               | 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, |
|               | Pepper, white/long/black   | 090411   | Pepper of the genus Piper, neither crushed nor ground                                                                                                                                                                                                          |
|               |                            | 090412   | Pepper of the genus Piper, crushed or ground                                                                                                                                                                                                                   |
|               | Pimento, allspice          | 090420   | Fruits of the genus Capsicum or of the genus Pimenta, dried or crushed or ground                                                                                                                                                                               |
|               | Plants and parts of plants | 121190   | Plants, parts of plants, seeds and fruit used in perfumery, medicaments or for insecticidal, fungicidal or similar purposes, fresh or dried, whether or not cut, crushed or powdered (excl. liquorice and ginseng roots)                                       |
|               | Vanilla                    | 090500   | Vanilla                                                                                                                                                                                                                                                        |

**Table A.2. Do the producing countries export, import, both or neither?**

| Sector                                     | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                                                 | Countries that<br>import only                                                      | Countries that<br>export only                                              | Countries that<br>both<br>export and import                                                                                                                         |
|--------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cereals, grains, beans,<br>peas and pulses | Barley (82)                                       | Ethiopia (65)                                                                  | Tanzania (58)<br>Eritrea (96)<br>Uganda *                                          | Kenya (76)                                                                 |                                                                                                                                                                     |
|                                            | Beans, dry (9)                                    |                                                                                | Sudan (58)<br>Burundi (69)<br>Rwanda (95)<br>Mauritius *                           | Djibouti (113)                                                             | Uganda (26)<br>Tanzania (41)<br>Madagascar (55)<br>Malawi (64)<br>Ethiopia (95)<br>Kenya (95)<br>Eritrea (111)<br>Mozambique *<br>Somalia *                         |
|                                            | Broad beans, dry<br>(24)                          | Ethiopia (6)<br>Eritrea (50)                                                   | Sudan (5)<br>Malawi *<br>Mauritius *                                               | Madagascar *                                                               |                                                                                                                                                                     |
|                                            | Chick-peas (70)                                   | Eritrea (48)                                                                   | Sudan (9)<br>Mauritius *                                                           | Ethiopia (28)<br>Tanzania (34)<br>Malawi (41)<br>Uganda (41)<br>Djibouti * | Kenya (45)                                                                                                                                                          |
|                                            | Cow peas, dry<br>(16)                             |                                                                                | Malawi (19)<br>Eritrea *<br>Mauritius *<br>Rwanda *<br>Sudan *                     | Madagascar (20)<br>Ethiopia *                                              | Uganda (13)<br>Tanzania (20)<br>Kenya (29)<br>Djibouti *<br>Mozambique *                                                                                            |
|                                            | Lentils (83)                                      | Malawi (18)                                                                    | Eritrea (45)<br>Mauritius *<br>Seychelles *<br>Somalia *<br>Sudan *                | Madagascar (34)                                                            | Kenya (31)<br>Ethiopia (44)<br>Djibouti *<br>Uganda *<br>Tanzania *                                                                                                 |
|                                            | Maize (34)                                        | Comoros (104)                                                                  | Rwanda (116)<br>Sudan (121)<br>Burundi (125)<br>Seychelles *                       | Ethiopia (93)                                                              | Tanzania (44)<br>Mozambique (52)<br>Madagascar (58)<br>Uganda (77)<br>Malawi (85)<br>Mauritius (111)<br>Kenya (116)<br>Djibouti (143)<br>Eritrea (149)<br>Somalia * |
|                                            | Millet (13)                                       | Burundi (35)<br>Eritrea (35)<br>Rwanda (55)<br>Malawi (68)<br>Mozambique (71)  | Sudan (23)<br>Kenya (62)<br>Mauritius *                                            | Uganda (6)<br>Ethiopia (33)<br>Tanzania (40)                               |                                                                                                                                                                     |
|                                            | Oats (91)                                         | Kenya (56)<br>Ethiopia (64)                                                    | Mauritius *<br>Sudan *                                                             |                                                                            |                                                                                                                                                                     |
|                                            | Other cereals (76)                                | Eritrea (69)                                                                   | Burundi *                                                                          | Ethiopia (12)<br>Tanzania (52)<br>Mozambique *                             | Kenya *<br>Sudan *<br>Uganda *                                                                                                                                      |
|                                            | Other pulses (8)                                  | Mozambique (17)<br>Comoros (51)<br>Burundi (72)<br>Eritrea (78)                | Sudan (33)<br>Mauritius *<br>Seychelles *                                          | Uganda (25)<br>Tanzania (31)<br>Madagascar (61)<br>Djibouti *              | Kenya (9)<br>Ethiopia (27)<br>Malawi (34)                                                                                                                           |
|                                            | Peas, dry (44)                                    | Eritrea (87)                                                                   | Burundi (64)<br>Rwanda (70)<br>Mauritius *<br>Seychelles *<br>Somalia *<br>Sudan * |                                                                            | Ethiopia (39)<br>Madagascar (45)<br>Uganda (73)<br>Tanzania (73)<br>Malawi (83)<br>Djibouti *<br>Kenya *<br>Mozambique *                                            |
|                                            | Rice, paddy (35)                                  | Sudan (39)<br>Madagascar (45)<br>Burundi (58)<br>Ethiopia (93)<br>Malawi (111) | Kenya (41)<br>Uganda (85)<br>Comoros (100)<br>Rwanda (106)                         |                                                                            | Tanzania (63)<br>Mozambique (93)                                                                                                                                    |

| Sector                | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                   | Countries that<br>import only                                                                                                                                               | Countries that<br>export only                                                 | Countries that<br>both<br>export and import                                                                                                                                |
|-----------------------|---------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | Sorghum (10)                                      | Ethiopia (14)<br>Burundi (58)<br>Madagascar (87) | Rwanda (45)<br>Eritrea (62)<br>Mozambique (73)<br>Malawi (82)<br>Somalia *                                                                                                  |                                                                               | Sudan (17)<br>Tanzania (35)<br>Uganda (48)<br>Kenya (98)                                                                                                                   |
|                       | Wheat (39)                                        |                                                  | Sudan (64)<br>Rwanda (69)<br>Madagascar (82)<br>Mozambique (84)<br>Ethiopia (89)<br>Burundi (115)<br>Malawi (118)<br>Djibouti *<br>Mauritius *<br>Seychelles *<br>Somalia * |                                                                               | Kenya (52)<br>Uganda (90)<br>Tanzania (115)<br>Eritrea (119)                                                                                                               |
|                       | Cocoa beans (30)                                  | Comoros (37)                                     | Sudan *                                                                                                                                                                     | Madagascar (10)<br>Tanzania (14)<br>Uganda (40)<br>Malawi *                   | Kenya *                                                                                                                                                                    |
|                       | Coffee, green (13)                                | Mozambique (34)                                  | Mauritius *<br>Seychelles *<br>Sudan *                                                                                                                                      | Rwanda (20)<br>Malawi (27)<br>Madagascar (44)<br>Comoros (62)<br>Burundi (74) | Ethiopia (6)<br>Uganda (23)<br>Tanzania (37)<br>Kenya (47)<br>Eritrea *<br>Djibouti *                                                                                      |
| Coffee, cocoa, tea    | Tea (1)                                           |                                                  | Seychelles (44)<br>Sudan *                                                                                                                                                  | Burundi (44)                                                                  | Kenya (3)<br>Malawi (6)<br>Uganda (13)<br>Mauritius (14)<br>Mozambique (19)<br>Tanzania (25)<br>Madagascar (27)<br>Rwanda (33)<br>Ethiopia (37)<br>Djibouti *<br>Somalia * |
| Cotton                | Seed cotton (30)                                  |                                                  | Mauritius *<br>Seychelles *                                                                                                                                                 | Sudan (37)<br>Uganda (71)                                                     | Ethiopia (41)<br>Tanzania (41)<br>Malawi (48)<br>Burundi (65)<br>Kenya (71)<br>Mozambique (77)<br>Madagascar (82)<br>Rwanda *                                              |
| Fibre crops           | Abaca (manila<br>hemp) (86)                       | Kenya (5)                                        |                                                                                                                                                                             |                                                                               |                                                                                                                                                                            |
|                       | Jute and other<br>bast fibres (77)                | Sudan (13)<br>Madagascar (20)<br>Ethiopia (28)   | Malawi *                                                                                                                                                                    |                                                                               | Mozambique (25)<br>Kenya *<br>Tanzania *                                                                                                                                   |
|                       | Other fibre crops<br>(52)                         | Ethiopia (7)<br>Tanzania (8)<br>Mauritius (22)   |                                                                                                                                                                             | Madagascar (14)                                                               |                                                                                                                                                                            |
|                       | Sisal and other<br>textile fibres of<br>agave (2) | Ethiopia (18)<br>Malawi (26)                     | Djibouti *                                                                                                                                                                  | Mozambique (25)                                                               | Kenya (1)<br>Madagascar (5)<br>Tanzania (10)                                                                                                                               |
| Fruits and vegetables | Apples (81)                                       |                                                  | Madagascar (80)<br>Ethiopia *<br>Eritrea *<br>Djibouti *<br>Malawi *<br>Mauritius *<br>Mozambique *<br>Somalia *<br>Sudan *<br>Uganda *<br>Tanzania *                       |                                                                               | Kenya (53)<br>Seychelles *                                                                                                                                                 |
|                       | Apricots (45)                                     | Madagascar (27)                                  | Kenya (39)<br>Mauritius *<br>Sudan *                                                                                                                                        | Eritrea *<br>Tanzania *                                                       |                                                                                                                                                                            |

| Sector | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                                                                                          | Countries that<br>import only                                                                                     | Countries that<br>export only                                                                        | Countries that<br>both<br>export and import                |
|--------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
|        | Asparagus (35)                                    |                                                                                                                         | Mauritius *<br>Seychelles *                                                                                       | Kenya (17)                                                                                           |                                                            |
|        | Avocados (10)                                     | Ethiopia (15)<br>Madagascar (23)<br>Seychelles (45)                                                                     | Mauritius *<br>Sudan *                                                                                            | Kenya (8)<br>Uganda *                                                                                |                                                            |
|        | Bananas,<br>plantains (6)                         | Malawi (18)<br>Mauritius (42)<br>Burundi (51)<br>Ethiopia (61)<br>Madagascar (92)<br>Tanzania (101)<br>Seychelles (105) |                                                                                                                   | Rwanda (9)<br>Uganda (13)<br>Sudan (33)<br>Comoros (84)<br>Mozambique (92)<br>Eritrea *<br>Somalia * | Kenya (61)                                                 |
|        | Beans (39)                                        |                                                                                                                         | Mauritius (70)<br>Mozambique *<br>Seychelles *<br>Sudan *                                                         | Ethiopia (76)<br>Tanzania (79)<br>Madagascar (85)<br>Uganda *                                        | Kenya (52)                                                 |
|        | Broad beans,<br>green (22)                        | Malawi (44)                                                                                                             | Eritrea *<br>Sudan *                                                                                              | Tanzania (22)<br>Ethiopia (35)<br>Madagascar *                                                       | Kenya (29)                                                 |
|        | Cabbages (65)                                     | Malawi (49)<br>Ethiopia (76)<br>Madagascar (76)<br>Djibouti (99)                                                        | Mauritius (89)<br>Mozambique *<br>Sudan *                                                                         | Tanzania *                                                                                           | Kenya (63)                                                 |
|        | Cantaloupes &<br>other melons (65)                | Djibouti (66)                                                                                                           | Mauritius *                                                                                                       | Sudan (24)<br>Uganda *<br>Tanzania *                                                                 | Kenya *                                                    |
|        | Carrots (89)                                      | Djibouti (47)<br>Ethiopia (102)<br>Madagascar (102)                                                                     | Mauritius (102)<br>Mozambique *<br>Seychelles *<br>Uganda *                                                       | Kenya (107)<br>Tanzania *                                                                            |                                                            |
|        | Cauliflower (18)                                  | Madagascar (59)                                                                                                         | Mauritius (44)                                                                                                    | Kenya (25)<br>Tanzania *                                                                             | Mozambique *                                               |
|        | Chillies & peppers,<br>green (39)                 | Sudan (84)                                                                                                              | Djibouti (78)<br>Eritrea *                                                                                        | Madagascar (78)<br>Mozambique *                                                                      | Kenya (55)<br>Mauritius (84)<br>Ethiopia *<br>Seychelles * |
|        | Citrus fruit nes<br>(45)                          | Ethiopia (49)                                                                                                           | Malawi (46)<br>Mauritius (58)<br>Seychelles *<br>Sudan *                                                          | Tanzania (40)<br>Somalia *                                                                           | Kenya (23)<br>Uganda *                                     |
|        | Cucumbers and<br>gherkins (42)                    | Sudan (51)<br>Djibouti (59)<br>Mauritius (78)<br>Madagascar (100)                                                       | Seychelles *                                                                                                      | Ethiopia (57)<br>Kenya (110)<br>Eritrea *<br>Tanzania *                                              |                                                            |
|        | Dates (27)                                        |                                                                                                                         | Sudan (9)<br>Djibouti (24)<br>Kenya (26)<br>Malawi *<br>Mauritius *<br>Mozambique *<br>Seychelles *<br>Somalia *  |                                                                                                      | Tanzania *                                                 |
|        | Eggplants (58)                                    | Sudan (18)<br>Djibouti (33)<br>Mauritius (51)<br>Madagascar (61)                                                        |                                                                                                                   | Kenya *                                                                                              |                                                            |
|        | Garlic (16)                                       |                                                                                                                         | Sudan (20)<br>Kenya (43)<br>Madagascar (61)<br>Comoros *<br>Eritrea *<br>Malawi *<br>Mozambique *<br>Seychelles * | Ethiopia (3)                                                                                         | Mauritius (22)<br>Tanzania (58)<br>Djibouti *<br>Somalia * |
|        | Grapefruit and<br>pomelos (45)                    | Madagascar (51)                                                                                                         | Kenya (51)<br>Mauritius *<br>Seychelles *                                                                         | Sudan (19)<br>Mozambique (54)<br>Tanzania *                                                          |                                                            |

| Sector | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                                                                       | Countries that<br>import only                                                                               | Countries that<br>export only                                                        | Countries that<br>both<br>export and import                     |
|--------|---------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------|
|        | Grapes (73)                                       |                                                                                                      | Tanzania (61)<br>Madagascar (65)<br>Malawi *<br>Mauritius *<br>Seychelles *<br>Sudan *                      | Djibouti *                                                                           | Ethiopia (68)<br>Kenya *<br>Mozambique *                        |
|        | Lemon and limes<br>(58)                           | Djibouti (50)<br>Tanzania (58)                                                                       | Seychelles (52)<br>Kenya (65)<br>Mozambique (71)<br>Mauritius *                                             | Sudan (26)<br>Ethiopia (45)<br>Madagascar (65)<br>Somalia *                          |                                                                 |
|        | Lettuce (84)                                      | Djibouti (30)<br>Ethiopia (67)<br>Madagascar (78)                                                    | Mauritius (64)<br>Mozambique *                                                                              | Kenya (82)<br>Eritrea *<br>Tanzania *                                                |                                                                 |
|        | Mangoes (10)                                      | Tanzania (23)<br>Madagascar (24)<br>Ethiopia (31)<br>Seychelles (66)<br>Djibouti (77)<br>Malawi (77) |                                                                                                             | Sudan (11)<br>Mozambique (56)                                                        | Kenya (71)                                                      |
|        | Mushrooms (86)                                    | Madagascar (38)                                                                                      | Kenya *<br>Mauritius *<br>Seychelles *                                                                      | Uganda *<br>Tanzania *                                                               |                                                                 |
|        | Onions (37)                                       | Sudan (118)                                                                                          | Malawi (38)<br>Djibouti (112)<br>Comoros (136)<br>Mozambique (136)<br>Rwanda *<br>Seychelles *<br>Somalia * | Ethiopia (78)<br>Madagascar (118)                                                    | Mauritius (82)<br>Kenya (104)<br>Uganda (126)<br>Tanzania (136) |
|        | Oranges (72)                                      | Djibouti (63)                                                                                        | Seychelles (63)<br>Sudan (69)<br>Mozambique (93)<br>Malawi *<br>Mauritius *<br>Uganda *                     | Ethiopia (63)                                                                        | Tanzania (61)<br>Madagascar (71)<br>Kenya (80)                  |
|        | Other fruits (13)                                 | Sudan (48)<br>Burundi (119)                                                                          | Ethiopia (17)<br>Mozambique (58)<br>Malawi (68)<br>Seychelles (92)<br>Djibouti (163)                        | Rwanda (64)<br>Tanzania (65)<br>Comoros (134)<br>Madagascar (134)<br>Eritrea (148)   | Kenya (36)<br>Uganda (83)<br>Mauritius (101)                    |
|        | Other vegetable<br>products (65)                  |                                                                                                      | Malawi *                                                                                                    | Sudan (3)<br>Ethiopia *<br>Madagascar *<br>Tanzania *                                | Kenya *                                                         |
|        | Other vegetables<br>(28)                          | Burundi (88)<br>Rwanda (128)<br>Comoros (186)                                                        | Sudan (102)<br>Malawi (116)<br>Seychelles (135)<br>Djibouti (143)                                           | Tanzania (87)<br>Madagascar (116)<br>Uganda (116)<br>Ethiopia (135)<br>Eritrea (192) | Mauritius (88)<br>Kenya (93)<br>Mozambique (162)                |
|        | Papayas (30)                                      | Ethiopia (12)<br>Mozambique (27)                                                                     | Uganda *                                                                                                    | Kenya (27)<br>Tanzania *                                                             |                                                                 |
|        | Peaches and<br>nectarines (86)                    | Madagascar (62)                                                                                      | Malawi *<br>Mauritius *<br>Mozambique *<br>Sudan *                                                          |                                                                                      | Kenya (36)                                                      |
|        | Pears and quinces<br>(58)                         | Djibouti (56)                                                                                        | Madagascar (76)<br>Malawi *<br>Mauritius *<br>Mozambique *<br>Sudan *<br>Uganda *                           |                                                                                      | Kenya (38)<br>Tanzania (64)<br>Seychelles *                     |
|        | Peas, green (84)                                  | Ethiopia (47)                                                                                        | Mauritius (39)<br>Mozambique *<br>Seychelles *<br>Sudan *<br>Uganda *                                       | Malawi (52)<br>Tanzania (52)<br>Madagascar (70)                                      | Kenya (50)                                                      |
|        | Pineapples (26)                                   | Tanzania (55)<br>Madagascar (66)<br>Mozambique (66)                                                  | Sudan (74)<br>Ethiopia *                                                                                    | Mauritius (24)<br>Uganda (62)                                                        | Kenya (10)<br>Seychelles (71)                                   |



| Sector    | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                                  | Countries that<br>import only                                                                                             | Countries that<br>export only                                                                          | Countries that<br>both<br>export and import                                         |
|-----------|---------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | Plums (24)                                        | Madagascar (61)                                                 | Kenya (34)<br>Malawi *<br>Mauritius *<br>Seychelles *                                                                     |                                                                                                        |                                                                                     |
|           | Spinach (63)                                      |                                                                 |                                                                                                                           | Kenya (34)                                                                                             |                                                                                     |
|           | Strawberries (73)                                 | Kenya (38)                                                      | Mauritius *<br>Seychelles *                                                                                               | Ethiopia *<br>Djibouti *<br>Tanzania *                                                                 |                                                                                     |
|           | Tang. mand.<br>clement. satsma<br>(79)            | Djibouti (42)<br>Ethiopia (49)<br>Sudan (53)<br>Mozambique (54) | Mauritius *<br>Seychelles *<br>Uganda *                                                                                   | Madagascar *<br>Somalia *                                                                              | Kenya (42)                                                                          |
|           | Tomatoes (56)                                     | Djibouti (67)<br>Sudan (75)<br>Mauritius (109)<br>Malawi (116)  | Mozambique (131)<br>Uganda (131)<br>Comoros (149)                                                                         | Tanzania (109)<br>Ethiopia (116)<br>Madagascar (116)<br>Somalia *                                      | Kenya (109)<br>Seychelles (131)                                                     |
|           | Watermelons (70)                                  | Sudan (25)<br>Djibouti (93)                                     | Kenya (75)<br>Mauritius *                                                                                                 | Uganda *<br>Tanzania *                                                                                 |                                                                                     |
|           | Cashew nuts (20)                                  |                                                                 | Eritrea *<br>Mauritius *                                                                                                  | Mozambique (12)<br>Madagascar (22)                                                                     | Kenya (5)<br>Tanzania (12)<br>Malawi *                                              |
| Nuts      | Other nuts (28)                                   | Ethiopia (21)<br>Madagascar (51)                                | Djibouti *<br>Mauritius *<br>Uganda *                                                                                     | Tanzania (48)                                                                                          | Kenya (11)<br>Malawi (60)<br>Seychelles *                                           |
|           | Pistachios (89)                                   | Madagascar (13)                                                 | Mauritius (9)                                                                                                             |                                                                                                        |                                                                                     |
| Oil crops | Castor beans (58)                                 | Sudan (20)<br>Madagascar (24)<br>Uganda (25)                    |                                                                                                                           | Ethiopia (6)<br>Tanzania (17)<br>Mozambique (25)<br>Kenya (28)                                         |                                                                                     |
|           | Coconuts (65)                                     | Seychelles (47)<br>Comoros (59)                                 | Sudan *<br>Uganda *                                                                                                       | Malawi *                                                                                               | Mauritius (35)<br>Mozambique (41)<br>Kenya (57)<br>Madagascar (66)<br>Tanzania (66) |
|           | Groundnuts in<br>shell (22)                       | Eritrea (42)<br>Comoros (77)<br>Burundi (85)                    | Uganda (53)<br>Mozambique (77)<br>Rwanda (92)                                                                             | Sudan (5)<br>Ethiopia (49)<br>Malawi (51)<br>Madagascar (68)<br>Djibouti *                             | Mauritius (8)<br>Kenya (42)<br>Tanzania (60)                                        |
|           | Linseed (56)                                      | Kenya (23)<br>Eritrea (46)                                      | Mauritius *                                                                                                               | Ethiopia (29)<br>Djibouti *<br>Somalia *                                                               |                                                                                     |
|           | Mustard seed (80)                                 |                                                                 | Kenya *<br>Malawi *<br>Mauritius *                                                                                        | Ethiopia (16)                                                                                          |                                                                                     |
|           | Oil palm fruit (45)                               |                                                                 | Burundi (16)<br>Comoros *<br>Ethiopia *<br>Djibouti *<br>Mozambique *<br>Rwanda *<br>Seychelles *<br>Somalia *<br>Sudan * |                                                                                                        | Tanzania (21)<br>Madagascar (29)<br>Kenya *<br>Malawi *<br>Mauritius *<br>Uganda *  |
|           | Other oil crops<br>(33)                           | Eritrea (42)                                                    | Kenya (34)<br>Mozambique (37)<br>Malawi (47)                                                                              | Ethiopia (13)<br>Sudan (18)<br>Tanzania (30)<br>Madagascar (45)<br>Djibouti *                          | Uganda (24)                                                                         |
|           | Rapeseed (52)                                     | Ethiopia (39)                                                   | Malawi *                                                                                                                  |                                                                                                        |                                                                                     |
|           | Safflower seed<br>(75)                            | Ethiopia (13)                                                   |                                                                                                                           | Tanzania (19)                                                                                          |                                                                                     |
|           | Sesame seed (3)                                   |                                                                 | Malawi *<br>Mauritius *                                                                                                   | Ethiopia (3)<br>Sudan (6)<br>Eritrea (14)<br>Uganda (15)<br>Mozambique (19)<br>Djibouti *<br>Somalia * | Tanzania (39)<br>Kenya (55)                                                         |

| Sector                              | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade                                                                                                                                       | Countries that<br>import only                                                                                     | Countries that<br>export only                                   | Countries that<br>both<br>export and import       |
|-------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------|
| Roots and tubers                    | Soybeans (65)                                     | Burundi (75)                                                                                                                                                         | Ethiopia (11)<br>Madagascar (62)<br>Rwanda (75)<br>Kenya *<br>Mauritius *<br>Seychelles *<br>Sudan *              | Malawi *                                                        | Uganda (57)<br>Tanzania (82)<br>Mozambique *      |
|                                     | Sunflower seed<br>(45)                            |                                                                                                                                                                      | Sudan (36)<br>Uganda (57)<br>Mozambique (61)<br>Mauritius *                                                       | Malawi (57)                                                     | Kenya (50)<br>Tanzania (65)                       |
|                                     | Cassava (7)                                       | Uganda (13)<br>Malawi (22)<br>Mozambique (34)<br>Kenya (43)<br>Burundi (60)<br>Mauritius (71)<br>Madagascar (74)<br>Comoros (77)<br>Seychelles (84)<br>Sudan (91)    | Rwanda (69)                                                                                                       | Tanzania (15)                                                   |                                                   |
|                                     | Other roots and<br>tubers (18)                    | Ethiopia (4)<br>Kenya (31)<br>Rwanda (40)<br>Mauritius (48)<br>Tanzania (53)<br>Madagascar (62)<br>Comoros (71)<br>Mozambique (88)<br>Eritrea (101)<br>Burundi (104) | Sudan (95)                                                                                                        |                                                                 | Malawi (94)                                       |
|                                     | Potatoes (52)                                     | Rwanda (50)<br>Uganda (111)<br>Burundi (150)                                                                                                                         | Mauritius (61)<br>Mozambique (111)<br>Eritrea (126)<br>Sudan (126)<br>Comoros (135)<br>Malawi (139)<br>Djibouti * | Ethiopia (115)                                                  | Tanzania (118)<br>Kenya (131)<br>Madagascar (139) |
|                                     | Sweet potatoes<br>(37)                            | Burundi (8)<br>Ethiopia (16)<br>Kenya (18)<br>Tanzania (18)<br>Madagascar (28)<br>Rwanda (29)<br>Sudan (45)<br>Mozambique (64)<br>Mauritius (72)<br>Comoros (96)     | Djibouti *                                                                                                        | Uganda (6)                                                      |                                                   |
|                                     | Anise, badian,<br>fennel (42)                     | Madagascar (25)                                                                                                                                                      | Mauritius *<br>Seychelles *<br>Sudan *<br>Tanzania *                                                              | Ethiopia (20)<br>Malawi (25)<br>Djibouti *                      | Kenya (25)                                        |
|                                     | Cinnamon<br>(canella) (78)                        |                                                                                                                                                                      | Ethiopia *<br>Djibouti *<br>Kenya *<br>Mauritius *<br>Sudan *                                                     | Madagascar (4)<br>Seychelles (8)                                |                                                   |
|                                     | Cloves, whole and<br>stems (3)                    |                                                                                                                                                                      | Mauritius *<br>Sudan *                                                                                            | Tanzania (3)<br>Comoros (5)<br>Madagascar (6)                   | Kenya (9)                                         |
|                                     | Ginger (20)                                       |                                                                                                                                                                      | Mauritius (31)<br>Malawi *<br>Seychelles *                                                                        | Ethiopia (10)<br>Kenya (25)<br>Uganda (25)<br>Djibouti *        | Madagascar (21)                                   |
| Spices, pyrethrum and<br>peppermint | Nutmeg, mace,<br>cardamoms (63)                   | Malawi (15)                                                                                                                                                          | Mauritius *<br>Sudan *                                                                                            | Ethiopia (15)<br>Kenya (15)<br>Madagascar (15)<br>Tanzania (15) | Djibouti *                                        |

| Sector | Products<br>(rank in regions<br>production index) | Countries that<br>do not trade | Countries that<br>import only                                       | Countries that<br>export only                                                 | Countries that<br>both<br>export and import                                                                |
|--------|---------------------------------------------------|--------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|        | Other spices (52)                                 | Eritrea (45)<br>Rwanda (45)    | Comoros (37)<br>Mozambique *<br>Seychelles *<br>Sudan *<br>Uganda * | Somalia *                                                                     | Mauritius (6)<br>Ethiopia (31)<br>Madagascar (41)<br>Kenya (45)<br>Malawi (45)<br>Djibouti *<br>Tanzania * |
|        | Pepper,<br>white/long/black<br>(45)               |                                | Djibouti *<br>Seychelles *<br>Sudan *                               | Ethiopia (17)<br>Uganda (19)<br>Madagascar (32)<br>Mozambique *<br>Tanzania * | Malawi (19)<br>Kenya (22)<br>Mauritius *                                                                   |
|        | Pimento, allspice<br>(58)                         | Sudan (48)                     | Djibouti (21)<br>Eritrea *<br>Mauritius *<br>Seychelles *           | Tanzania (43)<br>Madagascar (51)<br>Uganda (51)                               | Ethiopia (8)<br>Kenya (51)<br>Malawi (58)<br>Mozambique *                                                  |
|        | Plants and parts of<br>plants (45)                | Rwanda (9)                     | Mauritius *<br>Seychelles *                                         | Burundi *<br>Comoros *<br>Ethiopia *<br>Somalia *                             | Tanzania (3)<br>Kenya (6)<br>Madagascar *<br>Mozambique *<br>Sudan *<br>Uganda *                           |
|        | Vanilla (3)                                       | Malawi (7)<br>Kenya (11)       | Mozambique *<br>Seychelles *<br>Sudan *                             | Uganda (4)<br>Comoros (9)                                                     | Madagascar (1)<br>Mauritius *                                                                              |

\* Countries that do *not* produce.

Source: ITCs TradeMap and Market Access Map, FAOSTAT.

**Table A.3: 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 countrys production                                              |
|                   | Yield         | Ratio of regional yield to world yield                                     |
| Export index      | Size          | Share of country in world exports                                          |
|                   | Dynamism      | Growth of countrys exports to world<br>Absolute change in countrys exports |
|                   | Trade balance | Net exports<br>Relative trade balance (net exports / total trade)          |
| Market index      | Size          | Share of country in world imports                                          |
|                   | Dynamism      | Growth of countrys imports<br>Absolute change in countrys imports          |
|                   | Market Access | Tariff applied to the region<br>Preferential tariff advantage              |

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

**Table A.4: Top 10 producers, exporters and markets in the world and in the Eastern African region**

| Sector label                                     | Industry label   | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                            |                                                                                                                                                             |                                                                                                                                                                                   | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                    |                                                                                                                                                                                    |                                                                                                                                                                    | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |                   |
|--------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|-------------------|
|                                                  |                  | ... in the world                                                                                                                                                                              | ... in the region                                                                                                                                           | ... in the world                                                                                                                                                                  | ... in the region                                                                                                                                                 | ... in the world                                                                                                                                                                   | ... in the region                                                                                                                                                  | ... in the world                                                             | ... in the region | ... in the region |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Barley           | France (1)<br>Canada (2)<br>Turkey (3)<br>Germany (4)<br>United Kingdom (5)<br>Denmark (5)<br>China (5)<br>New Zealand (8)<br>Czech Republic (9)<br>Switzerland (9)                           | Tanzania (58)<br>Ethiopia (65)<br>Kenya (76)<br>Eritrea (96)                                                                                                | Ukraine (1)<br>Australia (1)<br>France (3)<br>Germany (4)<br>Canada (5)<br>Russian Federation (6)<br>Czech Republic (7)<br>United Kingdom (8)<br>Lithuania (9)<br>Turkey (10)     | Kenya (15)                                                                                                                                                        | Area Nes (1)<br>Saudi Arabia (2)<br>China (3)<br>Iran (Islamic Republic of) (3)<br>Spain (5)<br>Syrian Arab Republic (6)<br>Belgium (7)<br>Jordan (8)<br>Tunisia (9)<br>Japan (10) | Uganda (14)<br>Tanzania (14)<br>Eritrea (21)                                                                                                                       |                                                                              |                   |                   |
|                                                  | Beans, dry       | United States of America (1)<br>China (2)<br>Belarus (3)<br>Myanmar (4)<br>Mexico (4)<br>Brazil (4)<br>India (7)<br>Serbia and Montenegro (8)<br>Latvia (9)<br>Ireland (10)                   | Uganda (26)<br>Tanzania (41)<br>Madagascar (55)<br>Sudan (58)<br>Malawi (64)<br>Burundi (69)<br>Ethiopia (95)<br>Kenya (95)<br>Rwanda (95)<br>Eritrea (111) | Myanmar (1)<br>China (2)<br>Canada (3)<br>Nicaragua (4)<br>United States of America (5)<br>Netherlands (6)<br>Ethiopia (7)<br>Argentina (8)<br>Egypt (9)<br>Kyrgyzstan (10)       | Ethiopia (7)<br>Uganda (16)<br>Djibouti (19)<br>Mozambique (26)<br>Eritrea (28)<br>Somalia (39)<br>Madagascar (41)<br>Kenya (45)<br>Tanzania (67)<br>Malawi (103) | United States of America (1)<br>United Kingdom (2)<br>France (3)<br>Cuba (4)<br>Italy (5)<br>Spain (6)<br>India (7)<br>Algeria (8)<br>Belgium (9)<br>Pakistan (9)                  | Mozambique (55)<br>Tanzania (55)<br>Kenya (55)<br>Malawi (62)<br>Somalia (73)<br>Madagascar (73)<br>Mauritius (73)<br>Sudan (97)<br>Ethiopia (114)<br>Rwanda (118) |                                                                              |                   |                   |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Broad beans, dry | France (1)<br>United Kingdom (2)<br>China (2)<br>Egypt (4)<br>Sudan (5)<br>Argentina (6)<br>Slovakia (6)<br>Ethiopia (6)<br>Netherlands (9)<br>Germany (10)                                   | Sudan (5)<br>Ethiopia (6)<br>Eritrea (50)                                                                                                                   | France (1)<br>United Kingdom (2)<br>Australia (3)<br>Russian Federation (4)<br>Syrian Arab Republic (5)<br>Belgium (6)<br>Germany (7)<br>China (8)<br>Guatemala (9)<br>Chile (10) | Madagascar (22)                                                                                                                                                   | Norway (1)<br>Egypt (2)<br>France (3)<br>United Arab Emirates (4)<br>Jordan (5)<br>Italy (6)<br>Yemen (6)<br>Spain (8)<br>United States of America (9)<br>Saudi Arabia (10)        | Malawi (12)<br>Mauritius (49)<br>Sudan (49)                                                                                                                        |                                                                              |                   |                   |
|                                                  | Chick-peas       | Pakistan (1)<br>India (2)<br>Turkey (3)<br>China (4)<br>Myanmar (5)<br>Kazakhstan (6)<br>Bosnia and Herzegovina (6)<br>Russian Federation (8)<br>Sudan (9)<br>Iran (Islamic Republic of) (10) | Sudan (9)<br>Ethiopia (28)<br>Tanzania (34)<br>Uganda (41)<br>Malawi (41)<br>Kenya (45)<br>Eritrea (48)                                                     | Turkey (1)<br>Pakistan (2)<br>Iran (Islamic Republic of) (2)<br>Australia (2)<br>Mexico (5)<br>India (6)<br>Tanzania (7)<br>Canada (8)<br>Myanmar (9)<br>Kazakhstan (10)          | Tanzania (7)<br>Uganda (16)<br>Malawi (26)<br>Djibouti (29)<br>Kenya (32)<br>Ethiopia (44)                                                                        | Bangladesh (1)<br>United Kingdom (1)<br>Italy (1)<br>Spain (4)<br>Algeria (5)<br>Iraq (6)<br>Portugal (7)<br>Afghanistan (8)<br>Norway (8)<br>Pakistan (10)                        | Mauritius (60)<br>Kenya (60)<br>Sudan (94)                                                                                                                         |                                                                              |                   |                   |

| Sector label                                     | Industry label   | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                                                 |                                                                                                                                                                       |                                                                                                                                                                                          | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                   |                                                                                                                                                                                                                |                                                                                                                                                                   | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                  |  |
|--------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------|--|
|                                                  |                  | ... in the world                                                                                                                                                                                                   | ... in the region                                                                                                                                                     | ... in the world                                                                                                                                                                         | ... in the world                                                                                                                                                 | ... in the region                                                                                                                                                                                              | ... in the world                                                                                                                                                  | ... in the region                                                            | ... in the world |  |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Cow peas,<br>dry | Niger (1)<br>Nigeria (2)<br>Palestine (3)<br>The former Yugoslav Rep.<br>of Macedonia(4)<br>Croatia (4)<br>Trinidad and Tobago (6)<br>United States of America<br>(7)<br>Cameroon (8)<br>Egypt (9)<br>Myanmar (10) | Uganda (13)<br>Malawi (19)<br>Tanzania (20)<br>Madagascar (20)<br>Kenya (29)                                                                                          | Myanmar (1)<br>Pakistan (2)<br>Canada (3)<br>Peru (4)<br>Australia (5)<br>United States of America<br>(6)<br>Thailand (7)<br>China (8)<br>Tanzania (9)<br>Uganda (10)                    | Tanzania (9)<br>Uganda (10)<br>Madagascar (15)<br>Djibouti (15)<br>Mozambique (21)<br>Ethiopia (25)<br>Kenya (56)                                                | United States of America<br>(1)<br>Canada (1)<br>United States of America<br>(1)<br>Malaysia (3)<br>Angola (4)<br>Dominican Republic (5)<br>Kenya (5)<br>India (7)<br>Uganda (8)<br>Pakistan (9)<br>Japan (10) | Kenya (5)<br>Uganda (8)<br>Sudan (13)<br>Tanzania (24)<br>Djibouti (39)<br>Malawi (46)<br>Mauritius (72)<br>Mozambique (84)<br>Rwanda (107)<br>Eritrea (121)      |                                                                              |                  |  |
|                                                  |                  | Canada (1)<br>Turkey (2)<br>India (3)<br>United States of America<br>(4)<br>China (4)<br>Azerbaijan (6)<br>Armenia (7)<br>New Zealand (8)<br>Mexico (9)<br>Russian Federation (10)                                 | Malawi (18)<br>Kenya (31)<br>Madagascar (34)<br>Ethiopia (44)<br>Eritrea (45)                                                                                         | India (1)<br>United States of America<br>(2)<br>Canada (3)<br>Australia (4)<br>Turkey (5)<br>Syrian Arab Republic (6)<br>China (7)<br>Myanmar (8)<br>Tanzania (9)<br>Romania (10)        | Tanzania (9)<br>Madagascar (16)<br>Kenya (22)<br>Uganda (30)<br>Ethiopia (39)<br>Djibouti (58)                                                                   | Iraq (1)<br>Pakistan (2)<br>Sudan (3)<br>Bangladesh (4)<br>Algeria (5)<br>Egypt (6)<br>Ethiopia (7)<br>United Kingdom (8)<br>Spain (9)<br>Turkey (10)                                                          | Sudan (3)<br>Ethiopia (7)<br>Eritrea (20)<br>Djibouti (31)<br>Uganda (47)<br>Somalia (52)<br>Seychelles (52)<br>Kenya (60)<br>Mauritius (60)<br>Tanzania (138)    |                                                                              |                  |  |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Maize            | United States of America<br>(1)<br>Argentina (2)<br>Hungary (3)<br>Italy (3)<br>South Africa (5)<br>Indonesia (6)<br>Ukraine (7)<br>Chile (8)<br>Egypt (9)<br>India (10)                                           | Tanzania (44)<br>Mozambique (52)<br>Madagascar (58)<br>Uganda (77)<br>Malawi (85)<br>Ethiopia (93)<br>Comoros (104)<br>Mauritius (111)<br>Kenya (116)<br>Rwanda (116) | Ukraine (1)<br>South Africa (2)<br>China (3)<br>Argentina (4)<br>France (5)<br>United States of America<br>(6)<br>Hungary (7)<br>Serbia and Montenegro (8)<br>India (9)<br>Bulgaria (10) | Eritrea (21)<br>Tanzania (23)<br>Ethiopia (23)<br>Uganda (33)<br>Mozambique (52)<br>Mauritius (52)<br>Kenya (52)<br>Djibouti (75)<br>Somalia (80)<br>Malawi (83) | Korea, Rep. of Korea (1)<br>Spain (2)<br>Germany (3)<br>Netherlands (4)<br>Malaysia (5)<br>Taiwan, Province of<br>(China) (6)<br>Iran (Islamic Republic of)<br>(6)<br>Zimbabwe (8)<br>Japan (9)<br>Italy (10)  | Kenya (21)<br>Uganda (23)<br>Malawi (30)<br>Sudan (40)<br>Rwanda (40)<br>Mozambique (40)<br>Seychelles (46)<br>Madagascar (83)<br>Tanzania (83)<br>Mauritius (97) |                                                                              |                  |  |
|                                                  |                  | China (1)<br>Nigeria (2)<br>France (3)<br>Ukraine (4)<br>Spain (5)<br>Uganda (6)<br>Serbia and Montenegro (7)<br>Croatia (8)<br>Mali (9)<br>India (10)                                                             | Uganda (6)<br>Sudan (23)<br>Ethiopia (33)<br>Burundi (35)<br>Eritrea (35)<br>Tanzania (40)<br>Rwanda (55)<br>Kenya (62)<br>Malawi (68)<br>Mozambique (71)             | India (1)<br>France (2)<br>China (3)<br>United States of America<br>(3)<br>Ukraine (5)<br>Austria (6)<br>Egypt (7)<br>Bulgaria (8)<br>Hungary (9)<br>Slovakia (10)                       | Tanzania (13)<br>Ethiopia (17)<br>Uganda (22)                                                                                                                    | Belgium (1)<br>Germany (2)<br>Korea, Rep. of Korea (3)<br>Sudan (4)<br>United Kingdom (5)<br>Italy (6)<br>South Africa (7)<br>Netherlands (8)<br>Switzerland (9)<br>Philippines (10)                           | Sudan (4)<br>Kenya (64)<br>Mauritius (81)                                                                                                                         |                                                                              |                  |  |

| Sector label                                     | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                     |                                                                                                                                                               |                                                                                                                                                                                                   | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                   |                                                                                                                                                                                      |                                                                                                                                                                            | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |  |                   |
|--------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|-------------------|
|                                                  |                | ... in the world                                                                                                                                                       |                                                                                                                                                               | ... in the region                                                                                                                                                                                 | ... in the world                                                                                                                 |                                                                                                                                                                                      | ... in the region                                                                                                                                                          | ... in the world                                                             |  | ... in the region |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Oats           | Canada (1)<br>Belarus (2)<br>Poland (3)<br>Denmark (4)<br>Finland (5)<br>France (5)<br>United States of America (5)<br>Germany (8)<br>United Kingdom (8)<br>Chile (10) | Kenya (56)<br>Ethiopia (64)                                                                                                                                   | Canada (1)<br>Australia (2)<br>Sweden (3)<br>Poland (4)<br>Finland (4)<br>France (6)<br>Czech Republic (7)<br>Germany (8)<br>Estonia (9)<br>Chile (10)                                            |                                                                                                                                  |                                                                                                                                                                                      | Area Nes (1)<br>Spain (2)<br>Denmark (3)<br>Germany (3)<br>United States of America (5)<br>South Africa (6)<br>Portugal (7)<br>Japan (8)<br>Switzerland (9)<br>Belgium (9) | Sudan (28)<br>Mauritius (81)                                                 |  |                   |
|                                                  | Other cereals  | France (1)<br>China (2)<br>Belarus (3)<br>Poland (4)<br>Germany (5)<br>Sweden (6)<br>Belgium (7)<br>Hungary (8)<br>Czech Republic (9)<br>Netherlands (9)               | Ethiopia (12)<br>Tanzania (52)<br>Eritrea (69)                                                                                                                | China (1)<br>Poland (2)<br>Germany (3)<br>France (4)<br>United States of America (5)<br>Hungary (6)<br>Bolivia (7)<br>Lao People's Democratic Republic (8)<br>Thailand (9)<br>Czech Republic (10) | Tanzania (11)<br>Mozambique (34)<br>Ethiopia (38)<br>Uganda (52)<br>Sudan (58)<br>Kenya (60)                                     | Spain (1)<br>Portugal (2)<br>Netherlands (3)<br>Germany (3)<br>Italy (5)<br>France (6)<br>Thailand (7)<br>United Kingdom (7)<br>Belgium (9)<br>Korea, Rep. of Korea (10)             | Sudan (32)<br>Burundi (78)<br>Kenya (87)<br>Uganda (93)                                                                                                                    |                                                                              |  |                   |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Other pulses   | Poland (1)<br>China (2)<br>Myanmar (3)<br>Tajikistan (3)<br>United Kingdom (5)<br>India (6)<br>Iran (Islamic Republic of) (7)<br>Denmark (8)<br>Spain (9)<br>Kenya (9) | Kenya (9)<br>Mozambique (17)<br>Uganda (25)<br>Ethiopia (27)<br>Tanzania (31)<br>Sudan (33)<br>Malawi (34)<br>Comoros (51)<br>Madagascar (61)<br>Burundi (72) | United Kingdom (1)<br>Pakistan (2)<br>Myanmar (3)<br>Australia (4)<br>India (5)<br>Area Nes (6)<br>Madagascar (7)<br>Malawi (8)<br>Ukraine (9)<br>Uganda (9)                                      | Madagascar (7)<br>Malawi (8)<br>Uganda (9)<br>Djibouti (23)<br>Ethiopia (29)<br>Tanzania (45)<br>Kenya (54)                      | Sudan (1)<br>China (2)<br>Egypt (3)<br>United Arab Emirates (4)<br>United States of America (4)<br>Nepal (6)<br>United Kingdom (6)<br>Pakistan (8)<br>Malaysia (9)<br>Turkey (10)    | Sudan (1)<br>Malawi (17)<br>Kenya (23)<br>Seychelles (34)<br>Mauritius (43)<br>Ethiopia (53)                                                                               |                                                                              |  |                   |
|                                                  | Peas, dry      | Canada (1)<br>United States of America (2)<br>France (3)<br>China (4)<br>India (5)<br>Germany (6)<br>Ireland (6)<br>Switzerland (8)<br>Netherlands (9)<br>Italy (10)   | Ethiopia (39)<br>Madagascar (45)<br>Burundi (64)<br>Rwanda (70)<br>Tanzania (73)<br>Uganda (73)<br>Malawi (83)<br>Eritrea (87)                                | United States of America (1)<br>Canada (2)<br>France (3)<br>Ukraine (4)<br>Tanzania (5)<br>Germany (6)<br>Australia (7)<br>Russian Federation (8)<br>New Zealand (9)<br>Hungary (10)              | Tanzania (5)<br>Ethiopia (13)<br>Malawi (28)<br>Mozambique (32)<br>Kenya (44)<br>Uganda (49)<br>Madagascar (52)<br>Djibouti (72) | Uganda (1)<br>Spain (2)<br>Italy (3)<br>United States of America (3)<br>United Kingdom (3)<br>Netherlands (6)<br>China (6)<br>Canada (8)<br>Belgium (9)<br>United Arab Emirates (10) | Uganda (1)<br>Kenya (14)<br>Sudan (16)<br>Ethiopia (19)<br>Djibouti (30)<br>Seychelles (35)<br>Somalia (53)<br>Mauritius (53)<br>Malawi (56)<br>Madagascar (72)            |                                                                              |  |                   |

| Sector label                                     | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                           |                                                                                                                                                                  |                                                                                                                                                                                                        | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                                                         |                                                                              |                                                                                                                                                                               | Top 10 markets:<br>Countries with the highest rank<br>in the market index...                                                                                       |                   |  |
|--------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|
|                                                  |                | ... in the world                                                                                                                                                                             | ... in the region                                                                                                                                                | ... in the world                                                                                                                                                                                       | ... in the world                                                                                                                                                                                       | ... in the region                                                            | ... in the world                                                                                                                                                              | ... in the region                                                                                                                                                  | ... in the region |  |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Rice, paddy    | China (1)<br>Viet Nam (2)<br>Indonesia (3)<br>Bangladesh (4)<br>Myanmar (5)<br>Egypt (6)<br>Brazil (7)<br>United States of America (8)<br>Iran (Islamic Republic of) (9)<br>Philippines (10) | Sudan (39)<br>Kenya (41)<br>Madagascar (45)<br>Burundi (58)<br>Tanzania (63)<br>Uganda (85)<br>Mozambique (93)<br>Ethiopia (93)<br>Comoros (100)<br>Rwanda (106) | United States of America (1)<br>China (2)<br>Paraguay (3)<br>Egypt (4)<br>India (5)<br>France (6)<br>Russian Federation (6)<br>Italy (8)<br>Tanzania (9)<br>The former Yugoslav Rep. of Macedonia (10) | United States of America (1)<br>China (2)<br>Paraguay (3)<br>Egypt (4)<br>India (5)<br>France (6)<br>Russian Federation (6)<br>Italy (8)<br>Tanzania (9)<br>The former Yugoslav Rep. of Macedonia (10) | Tanzania (9)<br>Mozambique (32)                                              | Guatemala (1)<br>Saudi Arabia (2)<br>Honduras (3)<br>Mexico (4)<br>Costa Rica (5)<br>El Salvador (6)<br>Gambia (7)<br>Panama (8)<br>South Africa (9)<br>Turkey (10)           | Kenya (28)<br>Uganda (29)<br>Tanzania (54)<br>Mozambique (79)<br>Rwanda (89)<br>Comoros (99)                                                                       |                   |  |
|                                                  |                | Argentina (1)<br>United States of America (2)<br>Egypt (3)<br>Nigeria (3)<br>India (5)<br>Jordan (5)<br>Palestine (7)<br>Mexico (8)<br>Israel (9)<br>China (10)                              | Ethiopia (14)<br>Sudan (17)<br>Tanzania (35)<br>Rwanda (45)<br>Uganda (48)<br>Burundi (58)<br>Eritrea (62)<br>Mozambique (73)<br>Malawi (82)<br>Madagascar (87)  | India (1)<br>Australia (2)<br>Argentina (3)<br>United States of America (3)<br>France (5)<br>Ukraine (6)<br>China (7)<br>Egypt (8)<br>South Africa (9)<br>Myanmar (9)                                  | India (1)<br>Australia (2)<br>Argentina (3)<br>United States of America (3)<br>France (5)<br>Ukraine (6)<br>China (7)<br>Egypt (8)<br>South Africa (9)<br>Myanmar (9)                                  | Tanzania (17)<br>Kenya (30)<br>Sudan (46)<br>Uganda (47)                     | Uganda (1)<br>Sudan (2)<br>Spain (3)<br>Taiwan, Province of (China) (4)<br>Brazil (5)<br>Kenya (6)<br>Zambia (7)<br>Japan (8)<br>Eritrea (8)<br>Malawi (10)                   | Uganda (1)<br>Sudan (2)<br>Kenya (6)<br>Eritrea (8)<br>Malawi (10)<br>Rwanda (19)<br>Somalia (24)<br>Mozambique (46)<br>Tanzania (46)                              |                   |  |
| Cereals,<br>grains,<br>beans, peas<br>and pulses | Wheat          | France (1)<br>United Kingdom (2)<br>Germany (3)<br>China (4)<br>Canada (5)<br>United States of America (6)<br>India (7)<br>Egypt (8)<br>Pakistan (8)<br>Turkey (10)                          | Kenya (52)<br>Sudan (64)<br>Rwanda (69)<br>Madagascar (82)<br>Mozambique (84)<br>Ethiopia (89)<br>Uganda (90)<br>Tanzania (115)<br>Burundi (115)<br>Malawi (118) | Australia (1)<br>Russian Federation (2)<br>France (3)<br>United States of America (3)<br>Argentina (5)<br>Canada (6)<br>Ukraine (7)<br>Czech Republic (8)<br>Germany (9)<br>Bulgaria (10)              | Australia (1)<br>Russian Federation (2)<br>France (3)<br>United States of America (3)<br>Argentina (5)<br>Canada (6)<br>Ukraine (7)<br>Czech Republic (8)<br>Germany (9)<br>Bulgaria (10)              | Kenya (43)<br>Uganda (43)<br>Tanzania (43)<br>Eritrea (43)                   | Area Nes (1)<br>Spain (2)<br>Indonesia (3)<br>Egypt (4)<br>Algeria (5)<br>Japan (6)<br>Italy (7)<br>Sudan (7)<br>China (9)<br>Nigeria (10)                                    | Sudan (7)<br>Ethiopia (25)<br>Uganda (31)<br>Djibouti (35)<br>Mozambique (40)<br>Madagascar (43)<br>Rwanda (43)<br>Seychelles (55)<br>Malawi (63)<br>Tanzania (69) |                   |  |
|                                                  |                | Indonesia (1)<br>Ghana (2)<br>Côte d'Ivoire (3)<br>Ecuador (4)<br>Cameroon (5)<br>Grenada (6)<br>Nigeria (7)<br>Solomon Is (7)<br>El Salvador (9)<br>Madagascar (10)                         | Madagascar (10)<br>Tanzania (14)<br>Comoros (37)<br>Uganda (40)                                                                                                  | Ghana (1)<br>Nigeria (1)<br>Indonesia (3)<br>Côte d'Ivoire (3)<br>Cameroon (5)<br>Belgium (6)<br>Ecuador (7)<br>Papua New Guinea (8)<br>Guinea (9)<br>Togo (10)                                        | Ghana (1)<br>Nigeria (1)<br>Indonesia (3)<br>Côte d'Ivoire (3)<br>Cameroon (5)<br>Belgium (6)<br>Ecuador (7)<br>Papua New Guinea (8)<br>Guinea (9)<br>Togo (10)                                        | Uganda (12)<br>Kenya (14)<br>Malawi (14)<br>Madagascar (35)<br>Tanzania (35) | Malaysia (1)<br>Germany (2)<br>United States of America (3)<br>Netherlands (4)<br>Belgium (5)<br>France (6)<br>Spain (7)<br>Turkey (7)<br>Russian Federation (9)<br>China (9) | Sudan (13)<br>Kenya (63)                                                                                                                                           |                   |  |

| Sector label          | Industry label      | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                               |                                                                                                                                                                 |                                                                                                                                                                                       | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                                    |                                                                                                                                                                                                 |                                                                                                                                                                          | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                       |                     | ... in the world                                                                                                                                                                 | ... in the region                                                                                                                                               | ... in the world                                                                                                                                                                      | ... in the region                                                                                                                                                                 | ... in the world                                                                                                                                                                                | ... in the region                                                                                                                                                        | ... in the world                                                             | ... in the region |  |
| Coffee,<br>cocoa, tea | Coffee, green       | Viet Nam (1)<br>Colombia (2)<br>Brazil (3)<br>Indonesia (4)<br>China (5)<br>Ethiopia (6)<br>Zimbabwe (7)<br>Belize (8)<br>Tonga (8)<br>Mexico (10)                               | Ethiopia (6)<br>Rwanda (20)<br>Uganda (23)<br>Malawi (27)<br>Mozambique (34)<br>Tanzania (37)<br>Madagascar (44)<br>Kenya (47)<br>Comoros (62)<br>Burundi (74)  | Indonesia (1)<br>Ethiopia (1)<br>Brazil (3)<br>Viet Nam (4)<br>Colombia (4)<br>Honduras (6)<br>Guatemala (7)<br>Peru (8)<br>Costa Rica (9)<br>India (10)                              | Ethiopia (1)<br>Uganda (12)<br>Kenya (16)<br>Burundi (18)<br>Rwanda (19)<br>Tanzania (19)<br>Comoros (21)<br>Djibouti (21)<br>Eritrea (43)<br>Madagascar (54)                     | United States of America (1)<br>Belgium (1)<br>Germany (1)<br>Japan (1)<br>Spain (1)<br>Italy (6)<br>Netherlands (6)<br>Sweden (8)<br>Canada (9)<br>France (10)                                 | Eritrea (34)<br>Djibouti (34)<br>Uganda (34)<br>Sudan (40)<br>Tanzania (40)<br>Mauritius (68)<br>Seychelles (119)<br>Ethiopia (119)<br>Kenya (126)                       |                                                                              |                   |  |
|                       | Coffee, cocoa, tea  | Turkey (1)<br>China (2)<br>Kenya (3)<br>Sri Lanka (4)<br>India (5)<br>Malawi (6)<br>Japan (7)<br>Viet Nam (8)<br>Indonesia (9)<br>Zimbabwe (10)                                  | Kenya (3)<br>Malawi (6)<br>Uganda (13)<br>Mauritius (14)<br>Mozambique (19)<br>Tanzania (25)<br>Madagascar (27)<br>Rwanda (33)<br>Ethiopia (37)<br>Burundi (44) | China (1)<br>Sri Lanka (2)<br>Kenya (3)<br>India (4)<br>Indonesia (5)<br>Germany (6)<br>United Arab Emirates (7)<br>United Kingdom (8)<br>Viet Nam (9)<br>Malawi (10)                 | Kenya (3)<br>Malawi (10)<br>Mozambique (11)<br>Uganda (14)<br>Ethiopia (15)<br>Burundi (15)<br>Tanzania (27)<br>Rwanda (32)<br>Mauritius (36)<br>Madagascar (60)                  | France (1)<br>Canada (1)<br>Russian Federation (1)<br>United States of America (1)<br>Germany (5)<br>United Arab Emirates (5)<br>Saudi Arabia (7)<br>Australia (8)<br>Kenya (9)<br>Ukraine (10) | Kenya (9)<br>Djibouti (16)<br>Rwanda (18)<br>Malawi (22)<br>Sudan (25)<br>Mauritius (26)<br>Uganda (31)<br>Madagascar (33)<br>Somalia (77)<br>Tanzania (102)             |                                                                              |                   |  |
| Cotton                | Seed cotton         | China (1)<br>Brazil (2)<br>Pakistan (3)<br>United States of America (4)<br>Uzbekistan (5)<br>India (6)<br>Turkey (7)<br>Syrian Arab Republic (8)<br>Australia (9)<br>Israel (10) | Sudan (37)<br>Tanzania (41)<br>Ethiopia (41)<br>Burundi (65)<br>Uganda (71)<br>Kenya (71)<br>Mozambique (77)<br>Madagascar (82)                                 | India (1)<br>Brazil (2)<br>United States of America (3)<br>Greece (4)<br>Burkina Faso (5)<br>Mali (6)<br>Uzbekistan (7)<br>Australia (8)<br>Kazakhstan (9)<br>Benin (10)              | Sudan (12)<br>Tanzania (16)<br>Malawi (23)<br>Madagascar (32)<br>Mozambique (39)<br>Ethiopia (43)<br>Burundi (47)<br>Uganda (47)<br>Kenya (61)<br>Rwanda (103)                    | Thailand (1)<br>Pakistan (2)<br>Turkey (2)<br>China (4)<br>Taiwan, Province of (5)<br>Korea, Rep. of Korea (6)<br>Egypt (6)<br>Tokelau (8)<br>Mexico (9)<br>Indonesia (10)                      | Madagascar (24)<br>Rwanda (24)<br>Malawi (24)<br>Tanzania (24)<br>Mauritius (42)<br>Ethiopia (72)<br>Kenya (83)<br>Seychelles (110)<br>Burundi (127)<br>Mozambique (132) |                                                                              |                   |  |
| Fibre crops           | Abaca (manila hemp) | Ecuador (1)<br>Philippines (2)<br>Costa Rica (3)<br>Indonesia (4)<br>Kenya (5)<br>Equatorial Guinea (6)                                                                          | Kenya (5)                                                                                                                                                       | Philippines (1)<br>Ecuador (2)<br>Bangladesh (3)<br>Thailand (4)<br>Pakistan (5)<br>France (6)<br>Netherlands (7)<br>United States of America (7)<br>Spain (9)<br>United Kingdom (10) | Japan (1)<br>United Kingdom (2)<br>Brazil (3)<br>China (4)<br>Germany (5)<br>Belgium (5)<br>Denmark (5)<br>Italy (5)<br>Taiwan, Province of (5)<br>(China) (5)<br>Netherlands (5) |                                                                                                                                                                                                 |                                                                                                                                                                          |                                                                              |                   |  |



| Sector label          | Industry label                          | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                                             |                                                                                                 |                                                                                                                                                                                          | Top 10 exporters:<br>Countries with the highest rank<br>in the export index.... |                                                               |                                                                                                                                                                                              | Top 10 markets:<br>Countries with the highest rank<br>in the market index....                                                                                      |                   |                   |
|-----------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|
|                       |                                         | ... in the world                                                                                                                                                                                | ... in the region                                                                               | ... in the world                                                                                                                                                                         | ... in the world                                                                | ... in the region                                             | ... in the world                                                                                                                                                                             | ... in the world                                                                                                                                                   | ... in the region | ... in the region |
| Fibre crops           | Jute and other bast fibres              | India (1)<br>Bhutan (2)<br>Uzbekistan (3)<br>Bangladesh (4)<br>Viet Nam (5)<br>China (5)<br>Russian Federation (7)<br>Peru (8)<br>Cambodia (9)<br>Egypt (10)                                    | Sudan (13)<br>Madagascar (20)<br>Mozambique (25)<br>Ethiopia (28)                               | Bangladesh (1)<br>Israel (1)<br>Myanmar (3)<br>Mozambique (5)<br>Viet Nam (6)<br>India (7)<br>France (8)<br>South Africa (9)<br>Lao People's Democratic Republic (9)                     |                                                                                 | Mozambique (5)<br>Tanzania (17)<br>Kenya (27)                 | China (1)<br>Côte d'Ivoire (2)<br>United States of America (3)<br>India (4)<br>Saudi Arabia (5)<br>Korea, Rep. of Korea (6)<br>Philippines (7)<br>Nepal (7)<br>Pakistan (9)<br>Malaysia (10) | China (1)<br>Tanzania (15)<br>Kenya (17)<br>Mozambique (62)                                                                                                        |                   |                   |
| Fibre crops           | Other fibre crops                       | Brazil (1)<br>China (2)<br>Viet Nam (3)<br>Indonesia (4)<br>Thailand (5)<br>Chile (6)<br>Ethiopia (7)<br>Tanzania (8)<br>Cambodia (9)<br>Lao People's Democratic Republic (10)                  | Ethiopia (7)<br>Tanzania (8)<br>Madagascar (14)<br>Mauritius (22)                               | China (1)<br>Taiwan, Province of (China) (2)<br>Indonesia (3)<br>Madagascar (4)<br>Viet Nam (5)<br>Sri Lanka (5)<br>Russian Federation (5)<br>Honduras (5)<br>France (9)<br>Pakistan (9) |                                                                                 | Madagascar (4)                                                | Japan (1)<br>India (2)<br>Turkey (3)<br>South Africa (4)<br>Italy (5)<br>Peru (6)<br>Switzerland (6)<br>Finland (8)<br>Austria (9)<br>Tunisia (9)                                            | Japan (1)<br>India (2)<br>Turkey (3)<br>South Africa (4)<br>Italy (5)<br>Peru (6)<br>Switzerland (6)<br>Finland (8)<br>Austria (9)<br>Tunisia (9)                  |                   |                   |
| Fibre crops           | Sisal and other textile fibres of agave | Kenya (1)<br>Brazil (2)<br>Colombia (3)<br>China (4)<br>Madagascar (5)<br>Ecuador (6)<br>Mexico (7)<br>Cuba (8)<br>Indonesia (9)<br>Tanzania (10)                                               | Kenya (1)<br>Madagascar (5)<br>Tanzania (10)<br>Ethiopia (18)<br>Mozambique (25)<br>Malawi (26) | Brazil (1)<br>Kenya (2)<br>Tanzania (3)<br>Madagascar (4)<br>Germany (5)<br>El Salvador (6)<br>Mozambique (7)<br>Fiji (8)<br>Bangladesh (8)<br>Belgium (10)                              |                                                                                 | Kenya (2)<br>Tanzania (3)<br>Madagascar (4)<br>Mozambique (7) | China (1)<br>Mexico (2)<br>Spain (3)<br>Saudi Arabia (4)<br>Belgium (5)<br>Morocco (6)<br>India (7)<br>Cuba (7)<br>Indonesia (9)<br>Netherlands (10)                                         | Djibouti (16)<br>Tanzania (21)<br>Madagascar (24)<br>Kenya (70)                                                                                                    |                   |                   |
| Fruits and vegetables | Apples                                  | Chile (1)<br>Slovenia (2)<br>China (3)<br>South Africa (3)<br>Turkey (3)<br>Italy (6)<br>United States of America (7)<br>France (7)<br>Iran (Islamic Republic of) (9)<br>Russian Federation (9) | Kenya (53)<br>Madagascar (80)                                                                   | China (1)<br>New Zealand (2)<br>Italy (3)<br>Chile (4)<br>United States of America (4)<br>France (6)<br>South Africa (7)<br>Poland (8)<br>Netherlands (9)<br>Japan (10)                  |                                                                                 | Kenya (71)<br>Seychelles (84)                                 | Area Nes (1)<br>Canada (2)<br>Russian Federation (3)<br>France (4)<br>Netherlands (5)<br>Saudi Arabia (5)<br>Spain (5)<br>United Kingdom (8)<br>Norway (8)<br>Germany (10)                   | Sudan (16)<br>Malawi (19)<br>Eritrea (22)<br>Uganda (24)<br>Madagascar (31)<br>Tanzania (36)<br>Seychelles (40)<br>Ethiopia (52)<br>Somalia (65)<br>Mauritius (83) |                   |                   |

| Sector label          | Industry label     | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                                        |                                                                                                                                                            |                                                                                                                                                                                                               | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                             |                                                                                                                                                                                  |                                            | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-----------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                       |                    | ... in the world                                                                                                                                                                                          | ... in the region                                                                                                                                          | ... in the world                                                                                                                                                                                              | ... in the region                                                                                                          | ... in the world                                                                                                                                                                 | ... in the region                          | ... in the world                                                             | ... in the region |  |
| Fruits and vegetables | Apricots           | France (1)<br>Italy (1)<br>Pakistan (3)<br>Ukraine (4)<br>Serbia and Montenegro (5)<br>South Africa (6)<br>Iran (Islamic Republic of) (6)<br>Syrian Arab Republic (8)<br>Slovenia (9)<br>Switzerland (10) | Madagascar (27)<br>Kenya (39)                                                                                                                              | France (1)<br>Greece (1)<br>Uzbekistan (3)<br>Turkey (4)<br>Spain (5)<br>Italy (6)<br>South Africa (7)<br>United States of America (8)<br>Netherlands (9)<br>Belgium (10)                                     | Tanzania (19)<br>Eritrea (19)                                                                                              | United Kingdom (1)<br>Germany (2)<br>Austria (3)<br>Switzerland (4)<br>Russian Federation (4)<br>Netherlands (6)<br>Belgium (7)<br>Czech Republic (8)<br>Poland (9)<br>Italy (9) | Kenya (34)<br>Sudan (40)<br>Mauritius (66) |                                                                              |                   |  |
|                       |                    | Peru (1)<br>China (2)<br>Philippines (3)<br>Poland (4)<br>Iran (Islamic Republic of) (5)<br>Germany (6)<br>Czech Republic (7)<br>Italy (8)<br>Mexico (9)<br>Slovakia (9)                                  | Kenya (17)                                                                                                                                                 | Peru (1)<br>Mexico (2)<br>Thailand (3)<br>United States of America (4)<br>Spain (5)<br>Netherlands (6)<br>Greece (6)<br>Bulgaria (8)<br>The former Yugoslav Rep. of Macedonia(8)<br>Serbia and Montenegro (8) | Kenya (8)                                                                                                                  | United States of America (1)<br>France (2)<br>Spain (3)<br>Canada (4)<br>Netherlands (5)<br>United Kingdom (6)<br>Germany (7)<br>Belgium (8)<br>Japan (9)<br>Switzerland (10)    | Mauritius (14)<br>Seychelles (28)          |                                                                              |                   |  |
| Fruits and vegetables | Avocados           | Mexico (1)<br>Colombia (1)<br>Indonesia (3)<br>Brazil (4)<br>Dominican Republic (5)<br>Chile (6)<br>United States of America (7)<br>Kenya (8)<br>Lebanon (9)<br>Peru (10)                                 | Kenya (8)<br>Ethiopia (15)<br>Madagascar (23)<br>Seychelles (45)                                                                                           | Mexico (1)<br>Chile (2)<br>Spain (3)<br>Israel (4)<br>South Africa (5)<br>Peru (6)<br>New Zealand (7)<br>Dominican Republic (8)<br>Netherlands (8)<br>Kenya (10)                                              | Kenya (10)<br>Uganda (12)                                                                                                  | United States of America (1)<br>Japan (2)<br>Netherlands (2)<br>United Kingdom (2)<br>France (5)<br>Spain (6)<br>Germany (7)<br>Canada (8)<br>Australia (9)<br>Sudan (9)         | Sudan (9)<br>Mauritius (12)                |                                                                              |                   |  |
| Fruits and vegetables | Bananas, plantains | India (1)<br>China (2)<br>Philippines (3)<br>Brazil (4)<br>Colombia (5)<br>Honduras (6)<br>Costa Rica (7)<br>Indonesia (8)<br>Ecuador (9)<br>Guatemala (9)                                                | Rwanda (9)<br>Uganda (13)<br>Malawi (18)<br>Sudan (33)<br>Mauritius (42)<br>Burundi (51)<br>Kenya (61)<br>Ethiopia (61)<br>Comoros (84)<br>Mozambique (92) | Colombia (1)<br>Ecuador (1)<br>Philippines (3)<br>Guatemala (4)<br>Belgium (4)<br>Honduras (6)<br>Costa Rica (7)<br>United Arab Emirates (7)<br>Dominican Republic (9)<br>Germany (10)                        | Sudan (20)<br>Comoros (20)<br>Mozambique (20)<br>Eritrea (20)<br>Somalia (20)<br>Rwanda (46)<br>Uganda (49)<br>Kenya (112) | Belgium (1)<br>United Kingdom (2)<br>Italy (3)<br>Germany (3)<br>Japan (5)<br>Russian Federation (6)<br>France (7)<br>Czech Republic (7)<br>Sweden (9)<br>Hungary (10)           | Kenya (31)                                 |                                                                              |                   |  |

| Sector label          | Industry label             | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                                  |                                                                                                  |                                                                                                                                                                             | Top 10 exporters:<br>Countries with the highest rank<br>in the export index.... |                                                                                                                                                                                                  |                                                                                  | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-----------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                       |                            | ... in the world                                                                                                                                                                     | ... in the region                                                                                | ... in the world                                                                                                                                                            | ... in the region                                                               | ... in the world                                                                                                                                                                                 | ... in the region                                                                | ... in the world                                                             | ... in the region |  |
| Fruits and vegetables | Beans                      | China (1)<br>Turkey (2)<br>United States of America (3)<br>Indonesia (4)<br>France (5)<br>Morocco (6)<br>Spain (7)<br>Belgium (8)<br>Ukraine (9)<br>Egypt (10)                       | Kenya (52)<br>Mauritius (70)<br>Ethiopia (76)<br>Tanzania (79)<br>Madagascar (85)                | Morocco (1)<br>Kenya (2)<br>Egypt (3)<br>France (4)<br>Mexico (4)<br>United States of America (6)<br>Spain (7)<br>Netherlands (8)<br>Senegal (9)<br>Ethiopia (10)           | Kenya (2)<br>Ethiopia (10)<br>Madagascar (25)<br>Uganda (42)<br>Tanzania (64)   | Spain (1)<br>United Kingdom (2)<br>Netherlands (2)<br>Belgium (2)<br>France (5)<br>United States of America (6)<br>Germany (7)<br>Canada (8)<br>Italy (9)<br>Portugal (10)                       | Sudan (10)<br>Mauritius (14)<br>Seychelles (27)<br>Kenya (70)<br>Mozambique (96) |                                                                              |                   |  |
|                       | Broad beans, green         | China (1)<br>Morocco (2)<br>Algeria (3)<br>Taiwan, Province of (China) (4)<br>Spain (4)<br>Lebanon (6)<br>Kazakhstan (7)<br>Libyan Arab Jamahiriya (8)<br>Malta (8)<br>Jordan (10)   | Tanzania (22)<br>Kenya (29)<br>Ethiopia (35)<br>Malawi (44)                                      | Guatemala (1)<br>Mexico (2)<br>China (3)<br>Jordan (4)<br>Taiwan, Province of (China) (5)<br>France (6)<br>Morocco (7)<br>Netherlands (7)<br>Spain (9)<br>Malaysia (10)     | Ethiopia (15)<br>Madagascar (20)<br>Tanzania (29)<br>Kenya (37)                 | Spain (1)<br>Belgium (2)<br>Italy (3)<br>United States of America (4)<br>Netherlands (5)<br>France (6)<br>Portugal (7)<br>Sudan (8)<br>Japan (9)<br>Greece (9)                                   | Sudan (8)<br>Eritrea (28)<br>Kenya (33)                                          |                                                                              |                   |  |
| Fruits and vegetables | Cabbages                   | Germany (1)<br>China (2)<br>Korea, Rep. of (2)<br>Ukraine (4)<br>Russian Federation (4)<br>India (6)<br>Belarus (6)<br>Japan (8)<br>Poland (9)<br>Viet Nam (10)                      | Malawi (49)<br>Kenya (63)<br>Ethiopia (76)<br>Madagascar (76)<br>Mauritius (89)<br>Djibouti (99) | Mexico (1)<br>Spain (2)<br>Poland (3)<br>Netherlands (4)<br>China (5)<br>United States of America (5)<br>Italy (7)<br>Uzbekistan (8)<br>Germany (9)<br>Viet Nam (9)         | Kenya (11)<br>Tanzania (15)                                                     | United States of America (1)<br>Russian Federation (2)<br>United Kingdom (3)<br>Netherlands (4)<br>Germany (4)<br>Canada (6)<br>Sweden (7)<br>Singapore (8)<br>Japan (9)<br>Hong Kong (SAR) (10) | Mauritius (19)<br>Kenya (35)<br>Sudan (58)<br>Mozambique (119)                   |                                                                              |                   |  |
| Fruits and vegetables | Cantaloupes & other melons | Spain (1)<br>China (2)<br>Morocco (3)<br>Italy (4)<br>Romania (5)<br>Iran (Islamic Republic of) (6)<br>United States of America (7)<br>Turkey (8)<br>Venezuela (9)<br>Guatemala (10) | Sudan (24)<br>Djibouti (66)                                                                      | Panama (1)<br>Guatemala (2)<br>Brazil (2)<br>Spain (4)<br>Costa Rica (5)<br>Morocco (6)<br>Uzbekistan (7)<br>Mexico (8)<br>Netherlands (9)<br>United States of America (10) | Uganda (20)<br>Tanzania (20)<br>Kenya (44)<br>Sudan (63)                        | France (1)<br>Netherlands (2)<br>Germany (3)<br>United Kingdom (3)<br>Russian Federation (5)<br>Spain (6)<br>Canada (7)<br>Belgium (7)<br>Italy (9)<br>United States of America (10)             | Kenya (11)<br>Mauritius (18)                                                     |                                                                              |                   |  |

| Sector label          | Industry label            | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                      |                                                                                       |                                                                                                                                                                               | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                         |                                                                                                                                                                                     |                                                                                                                                                                   | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-----------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                       |                           | ... in the world                                                                                                                                                                        | ... in the region                                                                     | ... in the world                                                                                                                                                              | ... in the world                                                                                       | ... in the region                                                                                                                                                                   | ... in the world                                                                                                                                                  | ... in the world                                                             | ... in the region |  |
| Fruits and vegetables | Carrots                   | Germany (1)<br>Belgium (2)<br>Italy (3)<br>Netherlands (4)<br>United Kingdom (5)<br>China (6)<br>Ukraine (6)<br>Russian Federation (8)<br>Poland (9)<br>United States of America (10)   | Djibouti (47)<br>Ethiopia (102)<br>Madagascar (102)<br>Mauritius (102)<br>Kenya (107) | China (1)<br>Netherlands (2)<br>United States of America (3)<br>Spain (4)<br>Italy (5)<br>Australia (6)<br>France (7)<br>Belgium (8)<br>Uzbekistan (9)<br>South Africa (10)   | China (16)<br>Kenya (22)                                                                               | Russian Federation (2)<br>Japan (3)<br>United States of America (4)<br>Canada (5)<br>France (6)<br>Germany (7)<br>Portugal (8)<br>Malaysia (9)<br>United Kingdom (9)                | Belgium (1)<br>Uganda (15)<br>Mauritius (17)<br>Seychelles (70)<br>Mozambique (122)                                                                               |                                                                              |                   |  |
| Fruits and vegetables | Cauliflower               | China (1)<br>Italy (2)<br>India (3)<br>Spain (4)<br>Morocco (5)<br>Jordan (6)<br>France (7)<br>Egypt (7)<br>United Kingdom (7)<br>United States of America (10)                         | Kenya (25)<br>Mauritius (44)<br>Madagascar (59)                                       | China (1)<br>Spain (2)<br>France (3)<br>United States of America (4)<br>Ecuador (5)<br>Guatemala (6)<br>Mexico (7)<br>Italy (8)<br>Netherlands (9)<br>Morocco (10)            | Kenya (10)<br>Tanzania (14)<br>Mozambique (51)                                                         | Netherlands (1)<br>Canada (2)<br>United Kingdom (2)<br>France (2)<br>Germany (5)<br>Norway (6)<br>Italy (6)<br>Belgium (8)<br>Malaysia (9)<br>Czech Republic (10)                   | Netherlands (1)<br>Canada (2)<br>United Kingdom (2)<br>France (2)<br>Germany (5)<br>Norway (6)<br>Italy (6)<br>Belgium (8)<br>Malaysia (9)<br>Czech Republic (10) | Mauritius (15)<br>Mozambique (106)                                           |                   |  |
| Fruits and vegetables | Chillies & peppers, green | United States of America (1)<br>China (2)<br>Turkey (3)<br>Spain (4)<br>Indonesia (5)<br>Netherlands (6)<br>Egypt (7)<br>Israel (8)<br>Mexico (9)<br>United Kingdom (9)                 | Kenya (55)<br>Madagascar (78)<br>Djibouti (78)<br>Mauritius (84)<br>Sudan (84)        | Mexico (1)<br>Spain (2)<br>Turkey (3)<br>Netherlands (3)<br>Korea, Rep. of Korea (5)<br>Canada (6)<br>Morocco (7)<br>France (8)<br>United States of America (9)<br>China (10) | Mozambique (22)<br>Kenya (56)<br>Madagascar (63)<br>Ethiopia (75)<br>Mauritius (88)<br>Seychelles (95) | Netherlands (1)<br>France (2)<br>United Kingdom (2)<br>Italy (2)<br>Germany (5)<br>United States of America (6)<br>Canada (7)<br>Japan (8)<br>Sweden (9)<br>Russian Federation (10) | Netherlands (1)<br>Eritrea (38)<br>Seychelles (80)<br>Kenya (87)<br>Ethiopia (92)<br>Djibouti (130)                                                               |                                                                              |                   |  |
| Fruits and vegetables | Citrus fruit nes          | China (1)<br>Cuba (2)<br>Syrian Arab Republic (3)<br>Peru (4)<br>Saudi Arabia (5)<br>Taiwan, Province of (China) (6)<br>Guinea (6)<br>Nigeria (8)<br>French Polynesia (9)<br>Japan (10) | Kenya (23)<br>Tanzania (40)<br>Malawi (46)<br>Ethiopia (49)<br>Mauritius (58)         | Israel (1)<br>China (2)<br>Netherlands (3)<br>Taiwan, Province of (China) (4)<br>Spain (4)<br>India (6)<br>Thailand (7)<br>South Africa (8)<br>Egypt (8)<br>Malaysia (10)     | Tanzania (15)<br>Somalia (22)<br>Uganda (30)<br>Kenya (39)                                             | United Kingdom (1)<br>Saudi Arabia (2)<br>Netherlands (3)<br>Canada (4)<br>Ireland (5)<br>Denmark (6)<br>Belgium (7)<br>Sweden (8)<br>France (9)<br>Italy (9)                       | Uganda (15)<br>Kenya (15)<br>Seychelles (35)<br>Sudan (50)<br>Malawi (50)<br>Mauritius (60)                                                                       |                                                                              |                   |  |

| Sector label          | Industry label         | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                                    |                                                                                                                                                                                   |                                                                                                                                                                                | Top 10 exporters:<br>Countries with the highest rank<br>in the export index....                                                                                                       |                                                                                                                                                                                               |                                                                                                                                                                               | Top 10 markets:<br>Countries with the highest rank<br>in the market index....                                                                         |                   |  |
|-----------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|
|                       |                        | ... in the world                                                                                                                                                                       | ... in the region                                                                                                                                                                 | ... in the world                                                                                                                                                               | ... in the region                                                                                                                                                                     | ... in the world                                                                                                                                                                              | ... in the region                                                                                                                                                             | ... in the world                                                                                                                                      | ... in the region |  |
| Fruits and vegetables | Cucumbers and gherkins | Netherlands (1)<br>Ukraine (1)<br>Russian Federation (3)<br>China (4)<br>Iran (Islamic Republic of) (5)<br>Spain (6)<br>France (7)<br>Mexico (8)<br>Turkey (9)<br>Egypt (9)            | Sudan (51)<br>Ethiopia (57)<br>Djibouti (59)<br>Mauritius (78)<br>Madagascar (100)<br>Kenya (110)                                                                                 | Jordan (1)<br>Spain (2)<br>Mexico (2)<br>Netherlands (4)<br>Canada (5)<br>Iran (Islamic Republic of) (6)<br>Turkey (7)<br>Greece (8)<br>Belgium (9)<br>Poland (10)             | Ethiopia (18)<br>Kenya (18)<br>Eritrea (18)<br>Tanzania (18)                                                                                                                          | United Kingdom (1)<br>Netherlands (1)<br>Germany (3)<br>United States of America (4)<br>France (5)<br>Russian Federation (5)<br>Czech Republic (7)<br>Iraq (8)<br>Belgium (9)<br>Denmark (10) | Seychelles (33)                                                                                                                                                               |                                                                                                                                                       |                   |  |
|                       |                        | Dates                                                                                                                                                                                  | Egypt (1)<br>Saudi Arabia (2)<br>China (3)<br>Iran (Islamic Republic of) (4)<br>Pakistan (5)<br>United Arab Emirates (5)<br>Algeria (7)<br>Kuwait (8)<br>Sudan (9)<br>Jordan (10) | Sudan (9)<br>Djibouti (24)<br>Kenya (26)                                                                                                                                       | Israel (1)<br>Saudi Arabia (2)<br>Iran (Islamic Republic of) (3)<br>Tunisia (4)<br>Pakistan (5)<br>Algeria (6)<br>Iraq (7)<br>United States of America (8)<br>Egypt (9)<br>Mexico (9) | Tanzania (52)                                                                                                                                                                                 | Germany (1)<br>United Kingdom (2)<br>Spain (2)<br>France (4)<br>Italy (5)<br>Malaysia (6)<br>Russian Federation (7)<br>Canada (8)<br>United Arab Emirates (9)<br>Belgium (10) | Kenya (23)<br>Seychelles (40)<br>Mauritius (76)<br>Djibouti (83)<br>Tanzania (99)<br>Malawi (110)<br>Sudan (115)<br>Mozambique (126)<br>Somalia (139) |                   |  |
| Fruits and vegetables | Eggplants              | Egypt (1)<br>China (2)<br>India (3)<br>Jordan (4)<br>Turkey (5)<br>Netherlands (6)<br>Italy (7)<br>Iran (Islamic Republic of) (8)<br>Kazakhstan (8)<br>Palestine (8)                   | Sudan (18)<br>Djibouti (33)<br>Mauritius (51)<br>Madagascar (61)                                                                                                                  | Jordan (1)<br>Spain (2)<br>Mexico (3)<br>Netherlands (4)<br>Turkey (5)<br>Kenya (6)<br>Iran (Islamic Republic of) (7)<br>Uzbekistan (8)<br>China (9)<br>Kazakhstan (10)        | Kenya (6)                                                                                                                                                                             | United Kingdom (1)<br>France (2)<br>Germany (3)<br>United States of America (4)<br>Italy (5)<br>Netherlands (6)<br>Greece (7)<br>Russian Federation (8)<br>Iraq (8)<br>Hungary (8)            | Kenya (40)<br>Sudan (40)<br>Djibouti (44)<br>Malawi (44)<br>Somalia (76)<br>Eritrea (76)<br>Seychelles (94)<br>Mozambique (100)<br>Mauritius (109)<br>Tanzania (121)          |                                                                                                                                                       |                   |  |
| Fruits and vegetables | Garlic                 | China (1)<br>United States of America (2)<br>Ethiopia (3)<br>Russian Federation (4)<br>Egypt (5)<br>Cuba (5)<br>Korea, Rep. of Korea (7)<br>Argentina (8)<br>India (9)<br>Myanmar (10) | Ethiopia (3)<br>Sudan (20)<br>Mauritius (22)<br>Kenya (43)<br>Tanzania (58)<br>Madagascar (61)                                                                                    | China (1)<br>Argentina (2)<br>Spain (3)<br>India (4)<br>Netherlands (4)<br>France (6)<br>Italy (7)<br>Turkmenistan (8)<br>Myanmar (9)<br>Lao People's Democratic Republic (10) | Ethiopia (19)<br>Djibouti (35)<br>Somalia (66)<br>Mauritius (71)<br>Tanzania (81)                                                                                                     | Germany (1)<br>Italy (2)<br>United Kingdom (3)<br>France (4)<br>Pakistan (5)<br>Russian Federation (5)<br>Malaysia (7)<br>United States of America (7)<br>Bangladesh (9)<br>Netherlands (10)  | Kenya (40)<br>Sudan (40)<br>Djibouti (44)<br>Malawi (44)<br>Somalia (76)<br>Eritrea (76)<br>Seychelles (94)<br>Mozambique (100)<br>Mauritius (109)<br>Tanzania (121)          |                                                                                                                                                       |                   |  |

| Sector label          | Industry label         | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                  |                                                                                                                                      |                                                                                                                                                                          | Top 10 exporters:<br>Countries with the highest rank<br>in the export index... |                                                                                                                                                                                                 |                                                                                                                                                       | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-----------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                       |                        | ... in the world                                                                                                                                                                    | ... in the region                                                                                                                    | ... in the world                                                                                                                                                         | ... in the world                                                               | ... in the region                                                                                                                                                                               | ... in the world                                                                                                                                      | ... in the region                                                            | ... in the region |  |
| Fruits and vegetables | Grapefruit and pomeles | Turkey (1)<br>China (2)<br>India (3)<br>Israel (4)<br>Belize (5)<br>Cyprus (6)<br>Lebanon (7)<br>Taiwan, Province of (China) (8)<br>Paraguay (8)<br>South Africa (10)               | Sudan (19)<br>Kenya (51)<br>Madagascar (51)<br>Mozambique (54)                                                                       | South Africa (1)<br>Turkey (2)<br>Israel (3)<br>Netherlands (4)<br>United States of America (5)<br>Spain (6)<br>Belgium (7)<br>China (8)<br>Cyprus (9)<br>Argentina (10) | Sudan (18)<br>Tanzania (48)<br>Mozambique (51)                                 | Netherlands (1)<br>France (2)<br>Belgium (2)<br>United Kingdom (2)<br>Germany (2)<br>Russian Federation (6)<br>Italy (7)<br>Japan (8)<br>Slovenia (8)<br>Zambia (8)                             | Kenya (17)<br>Seychelles (25)<br>Mauritius (46)                                                                                                       |                                                                              |                   |  |
|                       |                        | United States of America (1)<br>China (2)<br>Italy (3)<br>Spain (4)<br>Chile (5)<br>South Africa (6)<br>Egypt (7)<br>India (8)<br>Turkey (9)<br>Brazil (10)                         | Tanzania (61)<br>Madagascar (65)<br>Ethiopia (68)                                                                                    | South Africa (1)<br>Chile (2)<br>Brazil (3)<br>Netherlands (4)<br>Italy (5)<br>Uzbekistan (6)<br>Spain (7)<br>Turkey (8)<br>United States of America (9)<br>Egypt (9)    | Djibouti (20)<br>Ethiopia (26)<br>Kenya (49)<br>Mozambique (70)                | Russian Federation (1)<br>Netherlands (2)<br>United Kingdom (3)<br>Germany (4)<br>France (4)<br>Canada (6)<br>United States of America (6)<br>Poland (8)<br>Belgium (9)<br>Hong Kong (SAR) (10) | Sudan (31)<br>Seychelles (31)<br>Madagascar (34)<br>Malawi (34)<br>Kenya (47)<br>Ethiopia (53)<br>Tanzania (74)<br>Mauritius (81)<br>Mozambique (158) |                                                                              |                   |  |
| Fruits and vegetables | Lemon and limes        | Turkey (1)<br>Iran (Islamic Republic of) (2)<br>Mexico (3)<br>China (3)<br>South Africa (5)<br>India (5)<br>Italy (5)<br>United States of America (8)<br>Colombia (9)<br>Spain (10) | Sudan (26)<br>Ethiopia (45)<br>Djibouti (50)<br>Seychelles (52)<br>Tanzania (58)<br>Madagascar (65)<br>Kenya (65)<br>Mozambique (71) | Mexico (1)<br>Turkey (2)<br>Argentina (3)<br>Spain (4)<br>South Africa (5)<br>Netherlands (6)<br>Brazil (7)<br>United States of America (8)<br>Egypt (8)<br>Chile (10)   | Ethiopia (11)<br>Madagascar (11)<br>Somalia (11)<br>Sudan (50)                 | France (1)<br>Russian Federation (1)<br>Netherlands (3)<br>Germany (4)<br>United Kingdom (4)<br>Spain (4)<br>United States of America (7)<br>Greece (8)<br>Italy (8)<br>Poland (10)             | Kenya (41)<br>Mauritius (51)<br>Seychelles (57)<br>Mozambique (116)                                                                                   |                                                                              |                   |  |
|                       |                        | United States of America (1)<br>China (2)<br>France (3)<br>Korea, Rep. of (4)<br>Spain (5)<br>Turkey (6)<br>Mexico (7)<br>Congo (7)<br>Italy (9)<br>Austria (10)                    | Djibouti (30)<br>Mauritius (64)<br>Ethiopia (67)<br>Madagascar (78)<br>Kenya (82)                                                    | Spain (1)<br>United States of America (2)<br>Italy (3)<br>Netherlands (4)<br>France (5)<br>Belgium (6)<br>China (7)<br>Portugal (8)<br>Turkey (9)<br>Egypt (9)           | Kenya (12)<br>Eritrea (12)<br>Tanzania (12)                                    | Netherlands (1)<br>Italy (2)<br>Canada (3)<br>Germany (3)<br>United Kingdom (3)<br>France (3)<br>Austria (7)<br>Switzerland (8)<br>United States of America (8)<br>Belgium (10)                 | Mauritius (16)<br>Mozambique (123)                                                                                                                    |                                                                              |                   |  |

| Sector label          | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                                              |                                                                                                                                                                       |                                                                                                                                                                                      | Top 10 exporters:<br>Countries with the highest rank<br>in the export index....                                                                                                      |                                                                                                  |                                                                                                                                                                                                | Top 10 markets:<br>Countries with the highest rank<br>in the market index....                                                                                                                  |                                                                                                                                                                  |  |
|-----------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                       |                | ... in the world                                                                                                                                                                                 | ... in the region                                                                                                                                                     | ... in the world                                                                                                                                                                     | ... in the world                                                                                                                                                                     | ... in the region                                                                                | ... in the world                                                                                                                                                                               | ... in the region                                                                                                                                                                              | ... in the world                                                                                                                                                 |  |
| Fruits and vegetables | Mangoes        | Pakistan (1)<br>Indonesia (2)<br>China (3)<br>Peru (4)<br>India (5)<br>Thailand (6)<br>Mexico (7)<br>Guatemala (8)<br>Viet Nam (8)<br>Philippines (10)                                           | Sudan (11)<br>Tanzania (23)<br>Madagascar (24)<br>Ethiopia (31)<br>Mozambique (56)<br>Seychelles (66)<br>Kenya (71)<br>Djibouti (77)<br>Malawi (77)                   | India (1)<br>Brazil (2)<br>Peru (3)<br>Pakistan (4)<br>Thailand (5)<br>Mexico (6)<br>Netherlands (6)<br>Philippines (8)<br>Ecuador (9)<br>Israel (10)                                | India (1)<br>Brazil (2)<br>Peru (3)<br>Pakistan (4)<br>Thailand (5)<br>Mexico (6)<br>Netherlands (6)<br>Philippines (8)<br>Ecuador (9)<br>Israel (10)                                | Mozambique (24)<br>Kenya (30)<br>Sudan (65)                                                      | France (1)<br>United Kingdom (2)<br>Germany (3)<br>Netherlands (4)<br>China (5)<br>United Arab Emirates (5)<br>United States of America (5)<br>Japan (8)<br>Canada (9)<br>Hong Kong (SAR) (10) | France (1)<br>United Kingdom (2)<br>Germany (3)<br>Netherlands (4)<br>China (5)<br>United Arab Emirates (5)<br>United States of America (5)<br>Japan (8)<br>Canada (9)<br>Hong Kong (SAR) (10) | Kenya (14)                                                                                                                                                       |  |
|                       | Mushrooms      | Poland (1)<br>United States of America (2)<br>Netherlands (3)<br>Spain (4)<br>India (5)<br>China (6)<br>Italy (7)<br>France (8)<br>Canada (9)<br>Ireland (10)                                    | Madagascar (38)                                                                                                                                                       | Poland (1)<br>China (2)<br>Canada (2)<br>Ireland (2)<br>Netherlands (5)<br>Belgium (6)<br>Bulgaria (7)<br>Romania (8)<br>Lithuania (9)<br>The former Yugoslav Rep. of Macedonia (10) | Poland (1)<br>China (2)<br>Canada (2)<br>Ireland (2)<br>Netherlands (5)<br>Belgium (6)<br>Bulgaria (7)<br>Romania (8)<br>Lithuania (9)<br>The former Yugoslav Rep. of Macedonia (10) | Uganda (15)<br>Tanzania (15)                                                                     | United States of America (1)<br>Netherlands (2)<br>France (2)<br>United Kingdom (4)<br>Germany (5)<br>Russian Federation (6)<br>Belgium (7)<br>Hungary (8)<br>Italy (9)<br>Austria (10)        | United States of America (1)<br>Netherlands (2)<br>France (2)<br>United Kingdom (4)<br>Germany (5)<br>Russian Federation (6)<br>Belgium (7)<br>Hungary (8)<br>Italy (9)<br>Austria (10)        | Mauritius (18)<br>Kenya (27)<br>Seychelles (31)                                                                                                                  |  |
| Fruits and vegetables | Onions         | United States of America (1)<br>Egypt (2)<br>Korea, Rep. of (3)<br>China (4)<br>Spain (5)<br>Pakistan (6)<br>Japan (6)<br>Russian Federation (6)<br>Iran (Islamic Republic of) (9)<br>India (10) | Malawi (38)<br>Ethiopia (78)<br>Mauritius (82)<br>Kenya (104)<br>Djibouti (112)<br>Madagascar (118)<br>Sudan (118)<br>Uganda (126)<br>Tanzania (136)<br>Comoros (136) | China (1)<br>India (1)<br>Mexico (3)<br>Netherlands (4)<br>Egypt (5)<br>Spain (6)<br>Poland (7)<br>Uzbekistan (8)<br>United States of America (9)<br>New Zealand (10)                | China (1)<br>India (1)<br>Mexico (3)<br>Netherlands (4)<br>Egypt (5)<br>Spain (6)<br>Poland (7)<br>Uzbekistan (8)<br>United States of America (9)<br>New Zealand (10)                | Madagascar (30)<br>Ethiopia (37)<br>Tanzania (41)<br>Uganda (45)<br>Kenya (48)<br>Mauritius (95) | Russian Federation (1)<br>Saudi Arabia (2)<br>United Kingdom (2)<br>Belgium (4)<br>United States of America (4)<br>Malaysia (6)<br>Canada (7)<br>Japan (7)<br>Bangladesh (9)<br>Germany (10)   | Russian Federation (1)<br>Saudi Arabia (2)<br>United Kingdom (2)<br>Belgium (4)<br>United States of America (4)<br>Malaysia (6)<br>Canada (7)<br>Japan (7)<br>Bangladesh (9)<br>Germany (10)   | Uganda (22)<br>Mauritius (24)<br>Malawi (24)<br>Kenya (24)<br>Djibouti (35)<br>Tanzania (49)<br>Somalia (65)<br>Seychelles (73)<br>Rwanda (107)<br>Comoros (171) |  |
|                       | Oranges        | Italy (1)<br>India (2)<br>Brazil (3)<br>Egypt (4)<br>China (5)<br>United States of America (6)<br>Turkey (7)<br>Indonesia (8)<br>Spain (9)<br>Iran (Islamic Republic of) (9)                     | Tanzania (61)<br>Ethiopia (63)<br>Djibouti (63)<br>Seychelles (63)<br>Sudan (69)<br>Madagascar (71)<br>Kenya (80)<br>Mozambique (93)                                  | Egypt (1)<br>South Africa (2)<br>Morocco (3)<br>Spain (4)<br>United States of America (5)<br>Turkey (6)<br>Australia (6)<br>Greece (8)<br>Netherlands (9)<br>Argentina (10)          | Egypt (1)<br>South Africa (2)<br>Morocco (3)<br>Spain (4)<br>United States of America (5)<br>Turkey (6)<br>Australia (6)<br>Greece (8)<br>Netherlands (9)<br>Argentina (10)          | Ethiopia (16)<br>Madagascar (22)<br>Tanzania (51)<br>Kenya (78)                                  | Netherlands (1)<br>France (2)<br>Germany (2)<br>United Kingdom (2)<br>Belgium (5)<br>Russian Federation (6)<br>Saudi Arabia (7)<br>Canada (8)<br>United States of America (9)<br>Spain (10)    | Netherlands (1)<br>France (2)<br>Germany (2)<br>United Kingdom (2)<br>Belgium (5)<br>Russian Federation (6)<br>Saudi Arabia (7)<br>Canada (8)<br>United States of America (9)<br>Spain (10)    | Kenya (46)<br>Seychelles (56)<br>Malawi (62)<br>Uganda (66)<br>Sudan (75)<br>Mauritius (81)<br>Tanzania (89)<br>Madagascar (104)<br>Mozambique (133)             |  |

| Sector label          | Industry label                | Top 10 producers:<br>Countries with the highest rank<br>in the production index.... |                   |                                      | Top 10 exporters:<br>Countries with the highest rank<br>in the export index.... |                              |                  | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                  |  |
|-----------------------|-------------------------------|-------------------------------------------------------------------------------------|-------------------|--------------------------------------|---------------------------------------------------------------------------------|------------------------------|------------------|------------------------------------------------------------------------------|------------------|--|
|                       |                               | ... in the world                                                                    | ... in the region | ... in the world                     | ... in the world                                                                | ... in the region            | ... in the world | ... in the region                                                            | ... in the world |  |
| Fruits and vegetables | Other fruits                  | Indonesia (1)                                                                       | Ethiopia (17)     | Azerbaijan (1)                       | Madagascar (9)                                                                  | Russian Federation (1)       | Uganda (17)      |                                                                              |                  |  |
|                       |                               | Colombia (2)                                                                        | Kenya (36)        | Viet Nam (2)                         | Tanzania (23)                                                                   | United Kingdom (2)           | Malawi (19)      |                                                                              |                  |  |
|                       |                               | Viet Nam (3)                                                                        | Sudan (48)        | Uzbekistan (2)                       | Eritrea (23)                                                                    | France (3)                   | Seychelles (37)  |                                                                              |                  |  |
|                       |                               | Cuba (4)                                                                            | Mozambique (58)   | Thailand (4)                         | Kenya (34)                                                                      | Netherlands (3)              | Djibouti (37)    |                                                                              |                  |  |
|                       |                               | Philippines (5)                                                                     | Rwanda (64)       | Spain (5)                            | Mauritius (34)                                                                  | Germany (5)                  | Kenya (42)       |                                                                              |                  |  |
|                       | Taiwan, Province of (China)   | Tanzania (65)                                                                       | Tanzania (65)     | Colombia (6)                         | Comoros (60)                                                                    | United States of America (6) | Mauritius (50)   |                                                                              |                  |  |
|                       |                               | Malawi (68)                                                                         | Malawi (68)       | Netherlands (7)                      | Uganda (75)                                                                     | Indonesia (7)                | Ethiopia (59)    |                                                                              |                  |  |
|                       |                               | India (7)                                                                           | Uganda (83)       | Iran (Islamic Republic of)           | Rwanda (78)                                                                     | Mozambique (142)             | Mozambique (142) |                                                                              |                  |  |
|                       |                               | Iran (Islamic Republic of)                                                          | Seychelles (92)   |                                      |                                                                                 | China (8)                    |                  |                                                                              |                  |  |
|                       |                               |                                                                                     | Mauritius (101)   | Madagascar (9)                       |                                                                                 | Italy (9)                    |                  |                                                                              |                  |  |
|                       |                               | China (9)                                                                           |                   | Israel (10)                          |                                                                                 | Belgium (10)                 |                  |                                                                              |                  |  |
|                       | Papua New Guinea (10)         |                                                                                     |                   |                                      |                                                                                 |                              |                  |                                                                              |                  |  |
| Fruits and vegetables | Other vegetable products      | Belgium (1)                                                                         | Sudan (3)         | South Africa (1)                     | Sudan (4)                                                                       | United Arab Emirates (1)     | Malawi (16)      |                                                                              |                  |  |
|                       |                               | France (2)                                                                          |                   | China (2)                            | Ethiopia (24)                                                                   | Netherlands (2)              | Kenya (23)       |                                                                              |                  |  |
|                       |                               | Nigeria (3)                                                                         |                   | Nigeria (3)                          | Madagascar (24)                                                                 | United Kingdom (3)           |                  |                                                                              |                  |  |
|                       |                               | Sudan (3)                                                                           |                   | Sudan (4)                            | Tanzania (24)                                                                   | Germany (4)                  |                  |                                                                              |                  |  |
|                       |                               | Spain (5)                                                                           |                   | Morocco (5)                          | Kenya (40)                                                                      | Jordan (5)                   |                  |                                                                              |                  |  |
|                       |                               | Kazakhstan (5)                                                                      |                   | Ukraine (6)                          |                                                                                 | United States of America (6) |                  |                                                                              |                  |  |
|                       |                               | China (7)                                                                           |                   | United States of America (7)         |                                                                                 | Viet Nam (7)                 |                  |                                                                              |                  |  |
|                       |                               | Croatia (8)                                                                         |                   | Germany (8)                          |                                                                                 | Spain (7)                    |                  |                                                                              |                  |  |
|                       |                               | Poland (9)                                                                          |                   | Lao People's Democratic Republic (9) |                                                                                 | Syrian Arab Republic (9)     |                  |                                                                              |                  |  |
|                       | Central African Republic (10) |                                                                                     |                   | Malaysia (10)                        |                                                                                 | Japan (10)                   |                  |                                                                              |                  |  |
| Fruits and vegetables | Other vegetables              | China (1)                                                                           | Tanzania (87)     | Israel (1)                           | Tanzania (20)                                                                   | United States of America (1) | Sudan (15)       |                                                                              |                  |  |
|                       |                               | France (2)                                                                          | Mauritius (88)    | Spain (2)                            | Madagascar (24)                                                                 | Netherlands (2)              | Kenya (20)       |                                                                              |                  |  |
|                       |                               | Viet Nam (3)                                                                        | Burundi (88)      | Italy (3)                            | Uganda (24)                                                                     | Netherlands (2)              | Seychelles (35)  |                                                                              |                  |  |
|                       |                               | Korea, Rep. of (3)                                                                  | Kenya (93)        | Netherlands (3)                      | Ethiopia (24)                                                                   | United Kingdom (2)           | Malawi (39)      |                                                                              |                  |  |
|                       |                               | Cuba (5)                                                                            | Sudan (102)       | China (5)                            | Eritrea (24)                                                                    | Italy (2)                    | Mauritius (45)   |                                                                              |                  |  |
|                       |                               | Italy (6)                                                                           | Madagascar (116)  | Thailand (6)                         | Kenya (37)                                                                      | Belgium (5)                  | Djibouti (97)    |                                                                              |                  |  |
|                       |                               | Philippines (7)                                                                     | Uganda (116)      | Mexico (7)                           | Mauritius (113)                                                                 | France (5)                   | Mozambique (158) |                                                                              |                  |  |
|                       |                               | Russian Federation (7)                                                              | Malawi (116)      | New Zealand (8)                      | Mozambique (118)                                                                | Germany (7)                  |                  |                                                                              |                  |  |
|                       |                               | Poland (9)                                                                          | Rwanda (128)      | Morocco (9)                          |                                                                                 | Canada (8)                   |                  |                                                                              |                  |  |
|                       |                               | Ukraine (9)                                                                         | Ethiopia (135)    | France (10)                          |                                                                                 | Austria (9)                  |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   |                                      | Russian Federation (10)                                                         |                              |                  |                                                                              |                  |  |
| Fruits and vegetables | Papayas                       | Brazil (1)                                                                          | Ethiopia (12)     | Belize (1)                           | Kenya (13)                                                                      | Netherlands (1)              | Uganda (9)       |                                                                              |                  |  |
|                       |                               | Mexico (2)                                                                          | Kenya (27)        | Mexico (2)                           | Tanzania (17)                                                                   | United Kingdom (1)           |                  |                                                                              |                  |  |
|                       |                               | Indonesia (3)                                                                       | Mozambique (27)   | Brazil (3)                           |                                                                                 | United States of America (1) |                  |                                                                              |                  |  |
|                       |                               | Belize (4)                                                                          |                   | Malaysia (4)                         |                                                                                 | Germany (4)                  |                  |                                                                              |                  |  |
|                       | Taiwan, Province of (China)   |                                                                                     |                   | Netherlands (5)                      |                                                                                 | Canada (5)                   |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   | Cote d'Ivoire (6)                    |                                                                                 | Portugal (6)                 |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   | Ecuador (7)                          |                                                                                 | Spain (7)                    |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   | India (8)                            |                                                                                 | France (8)                   |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   | Costa Rica (8)                       |                                                                                 | Uganda (9)                   |                  |                                                                              |                  |  |
|                       |                               |                                                                                     |                   | Guatemala (8)                        |                                                                                 | Japan (10)                   |                  |                                                                              |                  |  |



| Sector label          | Industry label         | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                            |                                                                                                                                     |                                                                                                                                                                                      | Top 10 exporters:<br>Countries with the highest rank<br>in the export index.... |                                                                                                                                                                                       |                                                                                                                                                     | Top 10 markets:<br>Countries with the highest rank<br>in the market index.... |                  |  |
|-----------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------|--|
|                       |                        | ... in the world                                                                                                                                                               | ... in the region                                                                                                                   | ... in the world                                                                                                                                                                     | ... in the world                                                                | ... in the region                                                                                                                                                                     | ... in the world                                                                                                                                    | ... in the region                                                             | ... in the world |  |
| Fruits and vegetables | Peaches and nectarines | Italy (1)<br>United States of America (1)<br>Spain (3)<br>China (4)<br>Turkey (5)<br>Egypt (6)<br>Slovenia (7)<br>Chile (8)<br>France (9)<br>Iran (Islamic Republic of) (10)   | Kenya (36)<br>Madagascar (62)                                                                                                       | Spain (1)<br>Italy (2)<br>Chile (3)<br>United States of America (4)<br>France (5)<br>Turkey (6)<br>Greece (7)<br>Morocco (8)<br>Egypt (9)<br>Japan (10)                              | Kenya (35)                                                                      | Italy (1)<br>France (2)<br>Belgium (3)<br>Germany (4)<br>Poland (4)<br>Netherlands (6)<br>Russian Federation (7)<br>Canada (8)<br>United Kingdom (9)<br>United States of America (10) | Sudan (16)<br>Malawi (21)<br>Kenya (30)<br>Mauritius (72)<br>Mozambique (123)                                                                       |                                                                               |                  |  |
|                       |                        | Belgium (1)<br>Netherlands (2)<br>South Africa (3)<br>China (4)<br>United States of America (4)<br>Argentina (6)<br>Spain (7)<br>Germany (7)<br>France (9)<br>Switzerland (10) | Kenya (38)<br>Djibouti (56)<br>Tanzania (64)<br>Madagascar (76)                                                                     | China (1)<br>Belgium (2)<br>Netherlands (3)<br>South Africa (4)<br>Argentina (5)<br>Italy (6)<br>Korea, Rep. of Korea (7)<br>Spain (8)<br>United States of America (9)<br>Chile (10) | Kenya (31)<br>Tanzania (59)<br>Seychelles (67)                                  | Russian Federation (1)<br>Netherlands (2)<br>Belgium (3)<br>United Kingdom (3)<br>France (3)<br>Germany (6)<br>Italy (6)<br>Canada (8)<br>United States of America (9)<br>Sweden (10) | Uganda (19)<br>Tanzania (21)<br>Seychelles (25)<br>Madagascar (33)<br>Sudan (36)<br>Malawi (47)<br>Kenya (57)<br>Mauritius (71)<br>Mozambique (145) |                                                                               |                  |  |
| Fruits and vegetables | Peas, green            | China (1)<br>India (2)<br>Egypt (3)<br>France (3)<br>United States of America (5)<br>Belgium (6)<br>Spain (7)<br>Netherlands (8)<br>Lithuania (9)<br>United Kingdom (10)       | Mauritius (39)<br>Ethiopia (47)<br>Kenya (50)<br>Tanzania (52)<br>Malawi (52)<br>Madagascar (70)                                    | Peru (1)<br>Kenya (1)<br>Guatemala (3)<br>China (4)<br>Netherlands (5)<br>Egypt (6)<br>Zimbabwe (7)<br>Russian Federation (8)<br>Germany (9)<br>Tanzania (9)                         | Kenya (1)<br>Tanzania (9)<br>Malawi (18)<br>Madagascar (34)                     | Netherlands (1)<br>United Kingdom (2)<br>Belgium (3)<br>United States of America (4)<br>Canada (5)<br>Germany (6)<br>Sudan (7)<br>France (8)<br>Japan (9)<br>Norway (10)              | Sudan (7)<br>Uganda (10)<br>Kenya (10)<br>Mauritius (14)<br>Seychelles (29)<br>Mozambique (94)                                                      |                                                                               |                  |  |
|                       |                        | Philippines (1)<br>Mexico (2)<br>Honduras (3)<br>Colombia (4)<br>Taiwan, Province of (China) (5)<br>Benin (6)<br>India (7)<br>Brazil (7)<br>China (7)<br>Kenya (10)            | Kenya (10)<br>Mauritius (24)<br>Tanzania (55)<br>Uganda (62)<br>Madagascar (66)<br>Mozambique (66)<br>Seychelles (71)<br>Sudan (74) | Costa Rica (1)<br>Netherlands (2)<br>Ghana (3)<br>Belgium (4)<br>Ecuador (5)<br>Philippines (6)<br>Panama (6)<br>United States of America (8)<br>Côte d'Ivoire (9)<br>Guatemala (10) | Uganda (12)<br>Mauritius (31)<br>Kenya (37)<br>Seychelles (78)                  | Belgium (1)<br>Germany (2)<br>United Kingdom (2)<br>Italy (2)<br>United States of America (5)<br>Canada (6)<br>Netherlands (7)<br>Spain (8)<br>Japan (9)<br>France (10)               | Kenya (12)<br>Sudan (15)<br>Ethiopia (49)<br>Seychelles (73)                                                                                        |                                                                               |                  |  |

| Sector label          | Industry label               | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                 |                                                                               |                                                                                                                                                                              | Top 10 exporters:<br>Countries with the highest rank<br>in the export index... |                                                                                                                                                                                            |                                                                                                                                                                                       | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |            |
|-----------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|------------|
|                       |                              | ... in the world                                                                                                                                                                   | ... in the region                                                             | Kenya (34)                                                                                                                                                                   | ... in the world                                                               | ... in the region                                                                                                                                                                          | Kenya (12)                                                                                                                                                                            | ... in the world                                                             | ... in the region | Kenya (24) |
| Fruits and vegetables | Plums                        | Chile (1)<br>Germany (2)<br>France (3)<br>Spain (4)<br>Serbia and Montenegro (5)<br>South Africa (6)<br>Italy (7)<br>Turkey (8)<br>China (9)<br>Ukraine (10)                       | Kenya (34)<br>Madagascar (61)                                                 | Chile (1)<br>Spain (1)<br>South Africa (1)<br>Italy (4)<br>United States of America (5)<br>Netherlands (6)<br>France (7)<br>Uzbekistan (8)<br>Argentina (9)<br>Australia (9) |                                                                                |                                                                                                                                                                                            | Netherlands (1)<br>United Kingdom (2)<br>Germany (3)<br>Canada (4)<br>Russian Federation (5)<br>United States of America (6)<br>France (7)<br>Belgium (8)<br>Italy (9)<br>Sweden (10) | Kenya (31)<br>Malawi (31)<br>Seychelles (35)<br>Mauritius (57)               |                   |            |
|                       | Spinach                      | United States of America (1)<br>China (2)<br>Belgium (3)<br>Jordan (4)<br>Japan (5)<br>Austria (6)<br>Turkey (7)<br>Israel (8)<br>Kuwait (9)<br>France (10)                        | Kenya (34)                                                                    | Spain (1)<br>United States of America (2)<br>Italy (3)<br>France (4)<br>China (5)<br>Portugal (6)<br>Mexico (6)<br>Turkey (8)<br>Netherlands (9)<br>Canada (9)               | Kenya (12)                                                                     | United States of America (1)<br>Canada (2)<br>United Kingdom (2)<br>Norway (4)<br>Germany (5)<br>Spain (6)<br>Sweden (7)<br>Netherlands (8)<br>Singapore (9)<br>Malaysia (10)              |                                                                                                                                                                                       |                                                                              |                   |            |
| Fruits and vegetables | Strawberries                 | United States of America (1)<br>Spain (2)<br>Morocco (3)<br>Mexico (4)<br>Egypt (5)<br>Turkey (5)<br>Korea, Rep. of Korea (5)<br>Japan (8)<br>Russian Federation (8)<br>Italy (10) | Kenya (38)                                                                    | Spain (1)<br>Netherlands (2)<br>United States of America (3)<br>Belgium (4)<br>Mexico (5)<br>France (6)<br>Morocco (7)<br>Egypt (8)<br>Turkey (9)<br>Palestine (10)          | Ethiopia (15)<br>Tanzania (15)<br>Djibouti (23)                                | Italy (1)<br>United Kingdom (2)<br>France (3)<br>Belgium (4)<br>Canada (5)<br>United States of America (6)<br>Germany (7)<br>Switzerland (8)<br>Netherlands (9)<br>Russian Federation (10) | Seychelles (34)<br>Mauritius (54)                                                                                                                                                     |                                                                              |                   |            |
| Fruits and vegetables | Tang. mand. clement. satsuma | Brazil (1)<br>Spain (2)<br>China (3)<br>Morocco (4)<br>Egypt (5)<br>Italy (6)<br>Japan (7)<br>Peru (8)<br>Thailand (8)<br>Korea, Rep. of Korea (10)                                | Kenya (42)<br>Djibouti (42)<br>Ethiopia (49)<br>Sudan (53)<br>Mozambique (54) | China (1)<br>Morocco (2)<br>Spain (3)<br>Turkey (3)<br>South Africa (5)<br>Netherlands (6)<br>Cyprus (7)<br>Argentina (8)<br>Peru (9)<br>Israel (10)                         | Madagascar (20)<br>Somalia (20)<br>Kenya (41)                                  | Russian Federation (1)<br>Netherlands (1)<br>France (3)<br>United Kingdom (3)<br>Germany (5)<br>Poland (6)<br>United States of America (7)<br>Belgium (8)<br>Italy (9)<br>Canada (10)      | Uganda (29)<br>Seychelles (38)<br>Kenya (50)<br>Mauritius (50)                                                                                                                        |                                                                              |                   |            |

| Sector label          | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                                       |                                                                                                                                                                               |                                                                                                                                                                                                 | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                      |                                                                                                                                                                                          |                                                                                  | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                  |  |
|-----------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------|--|
|                       |                | ... in the world                                                                                                                                                                                         | ... in the region                                                                                                                                                             | ... in the world                                                                                                                                                                                | ... in the world                                                                                    | ... in the region                                                                                                                                                                        | ... in the world                                                                 | ... in the region                                                            | ... in the world |  |
| Fruits and vegetables | Tomatoes       | United States of America (1)<br>Iran (Islamic Republic of) (2)<br>Spain (3)<br>Italy (3)<br>China (5)<br>Egypt (5)<br>Turkey (7)<br>India (8)<br>Netherlands (9)<br>Brazil (10)                          | Djibouti (67)<br>Sudan (75)<br>Tanzania (109)<br>Kenya (109)<br>Mauritius (109)<br>Ethiopia (116)<br>Madagascar (116)<br>Malawi (116)<br>Seychelles (131)<br>Mozambique (131) | Mexico (1)<br>Spain (2)<br>Netherlands (3)<br>Belgium (4)<br>Turkey (5)<br>Canada (5)<br>Morocco (7)<br>Jordan (8)<br>Italy (9)<br>France (10)                                                  | Ethiopia (22)<br>Madagascar (22)<br>Somalia (22)<br>Tanzania (47)<br>Kenya (61)<br>Seychelles (100) | Russian Federation (1)<br>Italy (2)<br>Sweden (3)<br>United Kingdom (4)<br>France (4)<br>Germany (6)<br>Netherlands (6)<br>Canada (8)<br>United States of America (8)<br>Belgium (10)    | Seychelles (35)<br>Uganda (35)<br>Kenya (67)<br>Comoros (92)<br>Mozambique (144) |                                                                              |                  |  |
|                       | Watermelons    | China (1)<br>Iran (Islamic Republic of) (2)<br>Syrian Arab Republic (3)<br>Morocco (4)<br>Spain (5)<br>Egypt (6)<br>United States of America (7)<br>Turkey (8)<br>Korea, Rep. of Korea (9)<br>Italy (10) | Sudan (25)<br>Kenya (75)<br>Djibouti (93)                                                                                                                                     | Panama (1)<br>Mexico (2)<br>Spain (3)<br>Netherlands (4)<br>Iran (Islamic Republic of) (5)<br>Viet Nam (6)<br>United States of America (7)<br>Greece (8)<br>Saudi Arabia (9)<br>Kazakhstan (10) | Uganda (24)<br>Tanzania (24)                                                                        | United Kingdom (1)<br>United States of America (2)<br>France (3)<br>Netherlands (4)<br>Germany (5)<br>Canada (6)<br>Russian Federation (6)<br>Poland (8)<br>Iraq (9)<br>China (10)       | Kenya (17)<br>Mauritius (24)                                                     |                                                                              |                  |  |
| Nuts                  | Cashew nuts    | Viet Nam (1)<br>Brazil (2)<br>India (3)<br>Peru (4)<br>Kenya (5)<br>Nigeria (6)<br>Indonesia (7)<br>Togo (8)<br>Côte d'Ivoire (9)<br>Malaysia (10)                                                       | Kenya (5)<br>Mozambique (12)<br>Tanzania (12)<br>Madagascar (22)                                                                                                              | Viet Nam (1)<br>Côte d'Ivoire (2)<br>Guinea-Bissau (3)<br>Brazil (4)<br>India (5)<br>Netherlands (6)<br>Indonesia (7)<br>Ghana (8)<br>Mozambique (9)<br>Nigeria (10)                            | Mozambique (9)<br>Tanzania (15)<br>Madagascar (16)<br>Malawi (19)<br>Kenya (23)                     | Australia (1)<br>United Kingdom (2)<br>Netherlands (2)<br>United States of America (4)<br>Canada (5)<br>Germany (6)<br>India (7)<br>United Arab Emirates (7)<br>Belgium (9)<br>Spain (9) | Tanzania (13)<br>Kenya (23)<br>Mauritius (42)<br>Malawi (60)<br>Eritrea (115)    |                                                                              |                  |  |

| Sector label | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                                   |                                                                                                                |                                                                                                                                                                                                               | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                                            |                                                                                                                                                                            |                                                                                                 | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |                   |
|--------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|-------------------|
|              |                | ... in the world                                                                                                                                                                                     | ... in the region                                                                                              | ... in the world                                                                                                                                                                                              | ... in the region                                                                                                                                                                         | ... in the world                                                                                                                                                           | ... in the region                                                                               | ... in the world                                                             | ... in the region | ... in the region |
| Nuts         | Other nuts     | Azerbaijan (1)<br>Russian Federation (2)<br>India (3)<br>China (4)<br>Mexico (5)<br>Turkey (6)<br>Indonesia (7)<br>Taiwan, Province of (China) (8)<br>United States of America (9)<br>Guatemala (10) | Kenya (11)<br>Ethiopia (21)<br>Tanzania (48)<br>Madagascar (51)<br>Malawi (60)                                 | South Africa (1)<br>Indonesia (2)<br>Australia (3)<br>China (4)<br>United States of America (5)<br>Guatemala (5)<br>Turkey (7)<br>Spain (7)<br>Kenya (7)<br>Russian Federation (10)                           | Kenya (7)<br>Malawi (10)<br>Tanzania (35)<br>Seychelles (41)                                                                                                                              | Area Nes (1)<br>Italy (2)<br>United Kingdom (3)<br>Spain (4)<br>United States of America (4)<br>Netherlands (6)<br>Japan (7)<br>Germany (8)<br>Pakistan (9)<br>Canada (10) | Uganda (16)<br>Kenya (19)<br>Malawi (24)<br>Mauritius (52)<br>Djibouti (55)<br>Seychelles (125) |                                                                              |                   |                   |
| Nuts         | Pistachios     | United States of America (1)<br>Syrian Arab Republic (2)<br>Turkey (3)<br>Iran (Islamic Republic of) (4)<br>China (5)<br>Greece (6)<br>Morocco (6)<br>Pakistan (8)<br>Italy (9)<br>Mauritius (9)     | Mauritius (9)<br>Madagascar (13)                                                                               | United States of America (1)<br>Iran (Islamic Republic of) (2)<br>Netherlands (3)<br>Germany (4)<br>Luxembourg (5)<br>Area Nes (6)<br>Afghanistan (7)<br>Côte d'Ivoire (8)<br>Kyrgyzstan (9)<br>Slovakia (10) | Ethiopia (5)<br>Mozambique (6)<br>Kenya (15)<br>Tanzania (19)                                                                                                                             | Hong Kong (SAR) (1)<br>Luxembourg (2)<br>Italy (3)<br>Netherlands (3)<br>France (5)<br>Germany (5)<br>Spain (7)<br>United Arab Emirates (8)<br>Iraq (9)<br>Greece (10)     | Mauritius (41)                                                                                  |                                                                              |                   |                   |
| Oil crops    | Castor beans   | India (1)<br>Brazil (2)<br>China (3)<br>Ukraine (4)<br>Paraguay (5)<br>Ecuador (6)<br>Ethiopia (6)<br>Cambodia (8)<br>Russian Federation (9)<br>Thailand (10)                                        | Ethiopia (6)<br>Tanzania (17)<br>Sudan (20)<br>Madagascar (24)<br>Mozambique (25)<br>Uganda (25)<br>Kenya (28) | Paraguay (1)<br>United States of America (1)<br>Myanmar (3)<br>Pakistan (4)<br>Ethiopia (5)<br>Mozambique (6)<br>South Africa (7)<br>Greece (7)<br>Lao People's Democratic Republic (7)<br>Singapore (7)      | Brazil (1)<br>China (2)<br>Thailand (3)<br>Mexico (4)<br>Saint Kitts and Nevis (5)<br>United States of America (5)<br>Canada (7)<br>Korea, Rep. of Korea (8)<br>Zimbabwe (8)<br>Togo (10) |                                                                                                                                                                            |                                                                                                 |                                                                              |                   |                   |

| Sector label | Industry label         | Top 10 producers:<br>Countries with the highest rank<br>in the production index....                                                                                      |                                                                                                                                                             |                                                                                                                                                                                                  | Top 10 exporters:<br>Countries with the highest rank<br>in the export index....                                                |                                                                                                                                                                                   |                                                                                                                  | Top 10 markets:<br>Countries with the highest rank<br>in the market index.... |                  |  |
|--------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------|--|
|              |                        | ... in the world                                                                                                                                                         | ... in the region                                                                                                                                           | ... in the world                                                                                                                                                                                 | ... in the world                                                                                                               | ... in the region                                                                                                                                                                 | ... in the world                                                                                                 | ... in the region                                                             | ... in the world |  |
| Oil crops    | Coconuts               | Brazil (1)<br>Indonesia (2)<br>Philippines (3)<br>Thailand (4)<br>Myanmar (5)<br>Venezuela (6)<br>Solomon Is (7)<br>El Salvador (7)<br>India (9)<br>China (9)            | Mauritius (35)<br>Mozambique (41)<br>Seychelles (47)<br>Kenya (57)<br>Comoros (59)<br>Tanzania (66)<br>Madagascar (66)                                      | Viet Nam (1)<br>Philippines (2)<br>Indonesia (3)<br>Sri Lanka (4)<br>Singapore (5)<br>Thailand (6)<br>Dominican Republic (7)<br>Netherlands (8)<br>Côte d'Ivoire (9)<br>Mexico (10)              | Malawi (10)<br>Tanzania (16)<br>Kenya (32)<br>Madagascar (32)<br>Mauritius (44)<br>Mozambique (68)                             | Singapore (1)<br>Germany (2)<br>Netherlands (2)<br>Belgium (2)<br>Egypt (2)<br>United States of America (6)<br>United Arab Emirates (7)<br>Canada (8)<br>Spain (8)<br>France (10) | Uganda (23)<br>Kenya (30)<br>Madagascar (33)<br>Sudan (34)<br>Tanzania (41)<br>Mozambique (62)<br>Mauritius (69) |                                                                               |                  |  |
| Oil crops    | Groundnuts<br>in shell | United States of America (1)<br>Indonesia (2)<br>China (3)<br>Nigeria (3)<br>Sudan (5)<br>Nicaragua (6)<br>Argentina (7)<br>Brazil (8)<br>Mauritius (8)<br>Viet Nam (10) | Sudan (5)<br>Mauritius (8)<br>Kenya (42)<br>Eritrea (42)<br>Ethiopia (49)<br>Malawi (51)<br>Uganda (53)<br>Tanzania (60)<br>Madagascar (68)<br>Comoros (77) | Egypt (1)<br>India (2)<br>China (3)<br>United States of America (4)<br>Israel (5)<br>South Africa (6)<br>Brazil (7)<br>Ghana (8)<br>Senegal (9)<br>Tajikistan (9)                                | Malawi (9)<br>Djibouti (22)<br>Ethiopia (26)<br>Tanzania (28)<br>Sudan (30)<br>Kenya (31)<br>Madagascar (33)<br>Mauritius (40) | United Kingdom (1)<br>Germany (2)<br>Italy (3)<br>Mexico (3)<br>Indonesia (5)<br>Canada (6)<br>Spain (7)<br>Slovakia (8)<br>Switzerland (9)<br>Romania (9)                        | Mozambique (13)<br>Tanzania (47)<br>Rwanda (61)<br>Kenya (71)<br>Mauritius (77)<br>Uganda (77)                   |                                                                               |                  |  |
| Oil crops    | Linseed                | Canada (1)<br>United States of America (2)<br>China (3)<br>Poland (4)<br>United Kingdom (5)<br>Sweden (5)<br>Romania (7)<br>New Zealand (7)<br>Tunisia (7)<br>Egypt (10) | Kenya (23)<br>Ethiopia (29)<br>Eritrea (46)                                                                                                                 | United Kingdom (1)<br>Canada (2)<br>Ukraine (3)<br>United States of America (4)<br>Belgium (4)<br>China (6)<br>Russian Federation (6)<br>Argentina (8)<br>Belarus (9)<br>Sweden (10)             | Ethiopia (10)<br>Djibouti (15)<br>Somalia (21)                                                                                 | United States of America (1)<br>Belgium (2)<br>Canada (3)<br>France (4)<br>Italy (5)<br>Germany (6)<br>Netherlands (7)<br>Switzerland (8)<br>Denmark (9)<br>Turkey (9)            | Mauritius (18)                                                                                                   |                                                                               |                  |  |
| Oil crops    | Mustard seed           | Canada (1)<br>Ukraine (2)<br>France (3)<br>Nepal (3)<br>Mexico (5)<br>Russian Federation (6)<br>Czech Republic (7)<br>Romania (8)<br>Myanmar (9)<br>Slovakia (10)        | Ethiopia (16)                                                                                                                                               | Ukraine (1)<br>Canada (2)<br>Czech Republic (3)<br>Russian Federation (4)<br>Germany (4)<br>Hungary (6)<br>Kyrgyzstan (7)<br>Syrian Arab Republic (7)<br>Serbia and Montenegro (7)<br>India (10) | Ethiopia (27)                                                                                                                  | Bangladesh (1)<br>France (2)<br>United States of America (2)<br>Japan (4)<br>Netherlands (5)<br>Germany (6)<br>Turkey (7)<br>Nepal (7)<br>United Kingdom (9)<br>Belgium (10)      | Malawi (21)<br>Kenya (40)<br>Mauritius (40)                                                                      |                                                                               |                  |  |

| Sector label | Industry label  | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                          |                                                                                                                                                |                                                                                                                                                                              | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                           |                                                                                                                                                                          |                                                                                                                                                                                                                   | Top 10 markets:<br>Countries with the highest rank<br>in the market index...                                                                                                                                      |                                                                                                                                                                                                                   |                                                                                                                                                                                                                   |
|--------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                 | ... in the world                                                                                                                                                            | ... in the region                                                                                                                              | ... in the world                                                                                                                                                             | ... in the world                                                                                                                                                         | ... in the region                                                                                                                                                        | ... in the world                                                                                                                                                                                                  | ... in the world                                                                                                                                                                                                  | ... in the region                                                                                                                                                                                                 | ... in the region                                                                                                                                                                                                 |
| Oil crops    | Oil palm fruit  | Indonesia (1)<br>Malaysia (2)<br>Thailand (3)<br>Honduras (4)<br>Colombia (5)<br>Costa Rica (6)<br>Guatemala (7)<br>Ecuador (8)<br>Cameroon (9)<br>Nigeria (10)             | Burundi (16)<br>Tanzania (21)<br>Madagascar (29)                                                                                               | Indonesia (1)<br>Malaysia (2)<br>Colombia (2)<br>Papua New Guinea (2)<br>Singapore (5)<br>Costa Rica (6)<br>Ecuador (7)<br>Côte d'Ivoire (8)<br>Thailand (9)<br>Germany (10) | Kenya (29)<br>Malawi (35)<br>Mauritius (35)<br>Uganda (41)<br>Tanzania (63)<br>Madagascar (74)                                                                           | Kenya (29)<br>Malawi (35)<br>Mauritius (35)<br>Uganda (41)<br>Tanzania (63)<br>Madagascar (74)                                                                           | Netherlands (1)<br>Russian Federation (2)<br>Germany (2)<br>Italy (4)<br>China (5)<br>Bangladesh (6)<br>Egypt (6)<br>United Kingdom (6)<br>Belgium (9)<br>Malaysia (10)                                           | Netherlands (1)<br>Kenya (23)<br>Djibouti (26)<br>Tanzania (29)<br>Rwanda (34)<br>Madagascar (36)<br>Uganda (36)<br>Malawi (47)<br>Sudan (71)<br>Mauritius (82)<br>Burundi (91)                                   | Kenya (23)<br>Djibouti (26)<br>Tanzania (29)<br>Rwanda (34)<br>Madagascar (36)<br>Uganda (36)<br>Malawi (47)<br>Sudan (71)<br>Mauritius (82)<br>Burundi (91)                                                      | Kenya (23)<br>Djibouti (26)<br>Tanzania (29)<br>Rwanda (34)<br>Madagascar (36)<br>Uganda (36)<br>Malawi (47)<br>Sudan (71)<br>Mauritius (82)<br>Burundi (91)                                                      |
| Oil crops    | Other oil crops | China (1)<br>India (2)<br>Indonesia (3)<br>Paraguay (4)<br>Thailand (5)<br>Brazil (5)<br>Bulgaria (7)<br>Hungary (8)<br>Azerbaijan (9)<br>Malaysia (10)                     | Ethiopia (13)<br>Sudan (18)<br>Uganda (24)<br>Tanzania (30)<br>Kenya (34)<br>Mozambique (37)<br>Eritrea (42)<br>Madagascar (45)<br>Malawi (47) | Ethiopia (1)<br>Bulgaria (2)<br>India (3)<br>Ghana (4)<br>Indonesia (5)<br>China (6)<br>Benin (6)<br>Sudan (8)<br>Austria (9)<br>Hungary (10)                                | Ethiopia (1)<br>Sudan (8)<br>Tanzania (18)<br>Madagascar (25)<br>Djibouti (35)<br>Uganda (55)                                                                            | Ethiopia (1)<br>Sudan (8)<br>Tanzania (18)<br>Madagascar (25)<br>Djibouti (35)<br>Uganda (55)                                                                            | United States of America (1)<br>Canada (2)<br>Mexico (2)<br>Germany (4)<br>Korea, Rep. of Korea (5)<br>Austria (7)<br>Netherlands (8)<br>Sweden (8)<br>United Kingdom (10)                                        | United States of America (1)<br>Canada (2)<br>Mexico (2)<br>Germany (4)<br>Korea, Rep. of Korea (5)<br>Austria (7)<br>Netherlands (8)<br>Sweden (8)<br>United Kingdom (10)                                        | United States of America (1)<br>Canada (2)<br>Mexico (2)<br>Germany (4)<br>Korea, Rep. of Korea (5)<br>Austria (7)<br>Netherlands (8)<br>Sweden (8)<br>United Kingdom (10)                                        | United States of America (1)<br>Canada (2)<br>Mexico (2)<br>Germany (4)<br>Korea, Rep. of Korea (5)<br>Austria (7)<br>Netherlands (8)<br>Sweden (8)<br>United Kingdom (10)                                        |
| Oil crops    | Rapeseed        | France (1)<br>Canada (2)<br>China (2)<br>Germany (4)<br>India (5)<br>United Kingdom (6)<br>Netherlands (7)<br>Luxembourg (8)<br>Belgium (9)<br>Poland (10)                  | Ethiopia (39)                                                                                                                                  | France (1)<br>Canada (1)<br>Australia (3)<br>Hungary (4)<br>Ukraine (5)<br>Lithuania (6)<br>Latvia (7)<br>United Kingdom (8)<br>Poland (9)<br>Russian Federation (9)         | France (1)<br>Canada (1)<br>Australia (3)<br>Hungary (4)<br>Ukraine (5)<br>Lithuania (6)<br>Latvia (7)<br>United Kingdom (8)<br>Poland (9)<br>Russian Federation (9)     | France (1)<br>Canada (1)<br>Australia (3)<br>Hungary (4)<br>Ukraine (5)<br>Lithuania (6)<br>Latvia (7)<br>United Kingdom (8)<br>Poland (9)<br>Russian Federation (9)     | Mexico (1)<br>Pakistan (1)<br>Germany (3)<br>Japan (4)<br>Belgium (5)<br>United States of America (6)<br>Austria (7)<br>Netherlands (8)<br>Finland (8)<br>Poland (10)                                             | Mexico (1)<br>Pakistan (1)<br>Germany (3)<br>Japan (4)<br>Belgium (5)<br>United States of America (6)<br>Austria (7)<br>Netherlands (8)<br>Finland (8)<br>Poland (10)                                             | Mexico (1)<br>Pakistan (1)<br>Germany (3)<br>Japan (4)<br>Belgium (5)<br>United States of America (6)<br>Austria (7)<br>Netherlands (8)<br>Finland (8)<br>Poland (10)                                             | Mexico (1)<br>Pakistan (1)<br>Germany (3)<br>Japan (4)<br>Belgium (5)<br>United States of America (6)<br>Austria (7)<br>Netherlands (8)<br>Finland (8)<br>Poland (10)                                             |
| Oil crops    | Safflower seed  | Mexico (1)<br>Tajikistan (2)<br>Australia (3)<br>India (4)<br>China (5)<br>United States of America (6)<br>Kyrgyzstan (6)<br>Argentina (8)<br>Turkey (9)<br>Kazakhstan (10) | Ethiopia (13)<br>Tanzania (19)                                                                                                                 | India (1)<br>Tanzania (2)<br>Kazakhstan (3)<br>Mexico (4)<br>Australia (4)<br>Czech Republic (6)<br>Argentina (7)<br>South Africa (8)<br>Netherlands (9)<br>Hungary (10)     | India (1)<br>Tanzania (2)<br>Kazakhstan (3)<br>Mexico (4)<br>Australia (4)<br>Czech Republic (6)<br>Argentina (7)<br>South Africa (8)<br>Netherlands (9)<br>Hungary (10) | India (1)<br>Tanzania (2)<br>Kazakhstan (3)<br>Mexico (4)<br>Australia (4)<br>Czech Republic (6)<br>Argentina (7)<br>South Africa (8)<br>Netherlands (9)<br>Hungary (10) | Belgium (1)<br>Netherlands (2)<br>Taiwan, Province of (China) (3)<br>United States of America (4)<br>United Kingdom (5)<br>India (5)<br>Philippines (7)<br>Zimbabwe (7)<br>United Arab Emirates (9)<br>Canada (9) | Belgium (1)<br>Netherlands (2)<br>Taiwan, Province of (China) (3)<br>United States of America (4)<br>United Kingdom (5)<br>India (5)<br>Philippines (7)<br>Zimbabwe (7)<br>United Arab Emirates (9)<br>Canada (9) | Belgium (1)<br>Netherlands (2)<br>Taiwan, Province of (China) (3)<br>United States of America (4)<br>United Kingdom (5)<br>India (5)<br>Philippines (7)<br>Zimbabwe (7)<br>United Arab Emirates (9)<br>Canada (9) | Belgium (1)<br>Netherlands (2)<br>Taiwan, Province of (China) (3)<br>United States of America (4)<br>United Kingdom (5)<br>India (5)<br>Philippines (7)<br>Zimbabwe (7)<br>United Arab Emirates (9)<br>Canada (9) |

| Sector label        | Industry label    | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                              |                                                                                                                                                                  |                                                                                                                                                                                    | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                             |                                                                                                                                                                                      |                                                                                                                                                                                      | Top 10 markets:<br>Countries with the highest rank<br>in the market index...                                                                                         |                   |                  |
|---------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|
|                     |                   | ... in the world                                                                                                                                                                | ... in the region                                                                                                                                                | ... in the world                                                                                                                                                                   | ... in the world                                                                                                                           | ... in the region                                                                                                                                                                    | ... in the world                                                                                                                                                                     | ... in the world                                                                                                                                                     | ... in the region | ... in the world |
| Oil crops           | Sesame seed       | Myanmar (1)<br>China (2)<br>Ethiopia (3)<br>Italy (4)<br>Lebanon (4)<br>Israel (6)<br>Sudan (6)<br>The former Yugoslav Rep.<br>of Macedonia (8)<br>Senegal (9)<br>Egypt (10)    | Ethiopia (3)<br>Sudan (6)<br>Eritrea (14)<br>Uganda (15)<br>Mozambique (19)<br>Tanzania (39)<br>Kenya (55)                                                       | Ethiopia (1)<br>Nigeria (2)<br>India (3)<br>Paraguay (3)<br>Sudan (5)<br>Bolivia (6)<br>Tanzania (7)<br>Myanmar (8)<br>Guatemala (8)<br>Afghanistan (10)                           | Ethiopia (1)<br>Sudan (5)<br>Tanzania (7)<br>Mozambique (10)<br>Uganda (15)<br>Eritrea (19)<br>Djibouti (19)<br>Kenya (25)<br>Somalia (35) | China (1)<br>Germany (2)<br>Japan (3)<br>Israel (4)<br>Turkey (5)<br>Saudi Arabia (6)<br>Greece (7)<br>United States of America<br>(8)<br>Korea, Rep. of (9)<br>Guatemala (10)       | China (1)<br>Germany (2)<br>Japan (3)<br>Germany (4)<br>Spain (5)<br>Turkey (6)<br>Mexico (7)<br>Italy (7)<br>Thailand (9)<br>Egypt (10)                                             | Malawi (32)<br>Mauritius (52)<br>Tanzania (58)<br>Kenya (77)                                                                                                         |                   |                  |
| Oil crops           | Soybeans          | Argentina (1)<br>United States of America<br>(1)<br>Brazil (3)<br>China (4)<br>Canada (5)<br>India (6)<br>Switzerland (7)<br>Bolivia (8)<br>Egypt (8)<br>Australia (10)         | Ethiopia (11)<br>Uganda (57)<br>Madagascar (62)<br>Burundi (75)<br>Rwanda (75)<br>Tanzania (82)                                                                  | Brazil (1)<br>Argentina (2)<br>United States of America<br>(3)<br>Paraguay (3)<br>Canada (5)<br>Uruguay (6)<br>Ukraine (7)<br>Romania (8)<br>Cambodia (8)<br>Benin (10)            | Tanzania (10)<br>Malawi (10)<br>Mozambique (26)<br>Uganda (48)                                                                             | China (1)<br>Taiwan, Province of<br>(China) (2)<br>Japan (3)<br>Germany (4)<br>Spain (5)<br>Turkey (6)<br>Mexico (7)<br>Italy (7)<br>Thailand (9)<br>Egypt (10)                      | China (1)<br>Taiwan, Province of<br>(China) (2)<br>Japan (3)<br>Germany (4)<br>Spain (5)<br>Turkey (6)<br>Mexico (7)<br>Italy (7)<br>Thailand (9)<br>Egypt (10)                      | Sudan (23)<br>Kenya (24)<br>Uganda (25)<br>Madagascar (30)<br>Rwanda (32)<br>Ethiopia (61)<br>Tanzania (71)<br>Mozambique (75)<br>Seychelles (95)<br>Mauritius (111) |                   |                  |
| Oil crops           | Sunflower<br>seed | Hungary (1)<br>Argentina (2)<br>Ukraine (3)<br>Russian Federation (4)<br>China (5)<br>India (6)<br>United States of America<br>(7)<br>Bulgaria (8)<br>France (9)<br>Turkey (10) | Sudan (36)<br>Kenya (50)<br>Malawi (57)<br>Uganda (57)<br>Mozambique (61)<br>Tanzania (65)                                                                       | Bulgaria (1)<br>Hungary (2)<br>China (2)<br>France (4)<br>United States of America<br>(5)<br>Argentina (6)<br>Uruguay (7)<br>Romania (8)<br>Russian Federation (9)<br>Austria (10) | Malawi (14)<br>Tanzania (21)<br>Kenya (31)                                                                                                 | Russian Federation (1)<br>United Kingdom (2)<br>Italy (3)<br>Spain (4)<br>Netherlands (5)<br>Austria (6)<br>Turkey (6)<br>France (8)<br>Romania (9)<br>Hungary (10)                  | Russian Federation (1)<br>United Kingdom (2)<br>Italy (3)<br>Spain (4)<br>Netherlands (5)<br>Austria (6)<br>Turkey (6)<br>France (8)<br>Romania (9)<br>Hungary (10)                  | Uganda (22)<br>Kenya (22)<br>Tanzania (25)<br>Sudan (30)<br>Mauritius (38)<br>Mozambique (110)                                                                       |                   |                  |
| Roots and<br>tubers | Cassava           | Indonesia (1)<br>Brazil (2)<br>Nigeria (3)<br>Viet Nam (4)<br>Thailand (4)<br>Angola (4)<br>Paraguay (7)<br>Ghana (8)<br>India (8)<br>Democratic Republic of the<br>Congo (10)  | Uganda (13)<br>Tanzania (15)<br>Malawi (22)<br>Mozambique (34)<br>Kenya (43)<br>Burundi (60)<br>Rwanda (69)<br>Mauritius (71)<br>Madagascar (74)<br>Comoros (77) | Viet Nam (1)<br>Costa Rica (1)<br>Thailand (3)<br>Indonesia (4)<br>Ghana (5)<br>Ecuador (6)<br>Nigeria (7)<br>Paraguay (7)<br>Mexico (7)<br>Suriname (7)                           | Tanzania (33)                                                                                                                              | United States of America<br>(1)<br>Korea, Rep. of (2)<br>China (3)<br>Austria (4)<br>Spain (5)<br>Finland (6)<br>Gambia (7)<br>Portugal (7)<br>Luxembourg (7)<br>United Kingdom (10) | United States of America<br>(1)<br>Korea, Rep. of (2)<br>China (3)<br>Austria (4)<br>Spain (5)<br>Finland (6)<br>Gambia (7)<br>Portugal (7)<br>Luxembourg (7)<br>United Kingdom (10) | Rwanda (41)                                                                                                                                                          |                   |                  |

| Sector label                     | Industry label         | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                                                            |                                                                                                                                                                       |                                                                                                                                                                                             | Top 10 exporters:<br>Countries with the highest rank<br>in the export index... |                                                                                                                                                                                                    |                                                                                                                                                                     | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |                   |
|----------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|-------------------|
|                                  |                        | ... in the world                                                                                                                                                                              | ... in the region                                                                                                                                                     | ... in the world                                                                                                                                                                            | ... in the region                                                              | ... in the world                                                                                                                                                                                   | ... in the region                                                                                                                                                   | ... in the world                                                             | ... in the region | ... in the region |
| Roots and tubers                 | Other roots and tubers | China (1)<br>Benin (2)<br>Ghana (3)<br>Nigeria (4)<br>Ethiopia (4)<br>Egypt (6)<br>Cuba (7)<br>Côte d'Ivoire (8)<br>Cameroon (9)<br>Papua New Guinea (9)                                      | Ethiopia (4)<br>Kenya (31)<br>Rwanda (40)<br>Mauritius (48)<br>Tanzania (53)<br>Madagascar (62)<br>Comoros (71)<br>Mozambique (88)<br>Malawi (94)<br>Sudan (95)       | Ghana (1)<br>China (2)<br>Fiji (3)<br>Costa Rica (4)<br>Panama (5)<br>Jamaica (6)<br>Brazil (7)<br>Dominican Republic (8)<br>Ecuador (9)<br>Colombia (10)                                   | Malawi (51)                                                                    | United States of America (1)<br>United Kingdom (1)<br>Taiwan, Province of (China) (3)<br>France (4)<br>New Zealand (5)<br>Canada (6)<br>Spain (7)<br>Sudan (7)<br>Zambia (9)<br>Japan (10)         | Sudan (7)<br>Malawi (19)                                                                                                                                            |                                                                              |                   |                   |
| Roots and tubers                 | Potatoes               | France (1)<br>United States of America (2)<br>Germany (3)<br>China (4)<br>India (4)<br>Canada (6)<br>Netherlands (7)<br>Ukraine (8)<br>United Kingdom (9)<br>Belarus (9)                      | Rwanda (50)<br>Mauritius (61)<br>Mozambique (111)<br>Uganda (111)<br>Ethiopia (115)<br>Tanzania (118)<br>Eritrea (126)<br>Sudan (126)<br>Kenya (131)<br>Comoros (135) | France (1)<br>Egypt (1)<br>Canada (3)<br>Netherlands (4)<br>China (5)<br>Israel (6)<br>Germany (7)<br>United States of America (8)<br>Iran (Islamic Republic of) (9)<br>United Kingdom (10) | Ethiopia (16)<br>Tanzania (18)<br>Madagascar (43)<br>Kenya (50)                | Russian Federation (1)<br>Spain (2)<br>Belgium (3)<br>Italy (3)<br>Netherlands (3)<br>Germany (6)<br>United Kingdom (7)<br>United States of America (8)<br>Iraq (9)<br>Greece (9)                  | Djibouti (36)<br>Eritrea (51)<br>Mauritius (56)<br>Kenya (77)<br>Madagascar (77)<br>Malawi (77)<br>Sudan (90)<br>Tanzania (98)<br>Comoros (163)<br>Mozambique (181) |                                                                              |                   |                   |
| Roots and tubers                 | Sweet potatoes         | Japan (1)<br>Indonesia (2)<br>China (3)<br>United States of America (3)<br>India (5)<br>Uganda (6)<br>Nigeria (7)<br>Angola (8)<br>Burundi (8)<br>Israel (10)                                 | Uganda (6)<br>Burundi (8)<br>Ethiopia (16)<br>Kenya (18)<br>Tanzania (18)<br>Madagascar (28)<br>Rwanda (29)<br>Sudan (45)<br>Mozambique (64)<br>Mauritius (72)        | Israel (1)<br>China (2)<br>United States of America (3)<br>Viet Nam (4)<br>Indonesia (5)<br>France (6)<br>Egypt (7)<br>Jamaica (8)<br>Brazil (9)<br>Dominican Republic (9)                  | Uganda (13)                                                                    | Netherlands (1)<br>United Kingdom (2)<br>France (3)<br>Canada (4)<br>Singapore (5)<br>Japan (6)<br>Belgium (7)<br>United States of America (8)<br>Korea, Rep. of Korea (9)<br>Hong Kong (SAR) (10) | Djibouti (42)                                                                                                                                                       |                                                                              |                   |                   |
| Spices, pyrethrum and peppermint | Anise, badian, fennel  | Syrian Arab Republic (1)<br>Mexico (2)<br>Canada (3)<br>Iran (Islamic Republic of) (4)<br>Bulgaria (5)<br>China (5)<br>India (7)<br>Lebanon (7)<br>Russian Federation (9)<br>Netherlands (10) | Ethiopia (20)<br>Malawi (25)<br>Kenya (25)<br>Madagascar (25)                                                                                                         | Iran (Islamic Republic of) (1)<br>India (2)<br>Bulgaria (3)<br>Syrian Arab Republic (4)<br>Viet Nam (4)<br>Afghanistan (6)<br>China (7)<br>Turkey (8)<br>Egypt (9)<br>Germany (10)          | Malawi (14)<br>Djibouti (30)<br>Ethiopia (53)<br>Kenya (61)                    | Germany (1)<br>United Arab Emirates (2)<br>United Kingdom (3)<br>Morocco (3)<br>Malaysia (5)<br>Japan (5)<br>Netherlands (7)<br>United States of America (7)<br>India (9)<br>Bangladesh (10)       | Sudan (13)<br>Kenya (30)<br>Seychelles (30)<br>Mauritius (51)<br>Tanzania (115)                                                                                     |                                                                              |                   |                   |



| Sector label                              | Industry label                | Top 10 producers:<br>Countries with the highest rank<br>in the production index... |                   |                                       | Top 10 exporters:<br>Countries with the highest rank<br>in the export index... |                              |                   | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |                   |
|-------------------------------------------|-------------------------------|------------------------------------------------------------------------------------|-------------------|---------------------------------------|--------------------------------------------------------------------------------|------------------------------|-------------------|------------------------------------------------------------------------------|-------------------|-------------------|
|                                           |                               | ... in the world                                                                   | ... in the region | ... in the world                      | ... in the region                                                              | ... in the world             | ... in the region | ... in the world                                                             | ... in the region | ... in the region |
| Spices,<br>pyrethrum<br>and<br>peppermint | Cinnamon<br>(canela)          | China (1)                                                                          | Madagascar (4)    | Sri Lanka (1)                         | Madagascar (18)                                                                | Germany (1)                  | Sudan (9)         | Germany (1)                                                                  | Sudan (9)         |                   |
|                                           |                               | Indonesia (2)                                                                      | Seychelles (8)    | Indonesia (2)                         | Seychelles (24)                                                                | United States of America (2) | Djibouti (15)     | United States of America (2)                                                 | Djibouti (15)     |                   |
|                                           |                               | Viet Nam (3)                                                                       |                   | China (3)                             |                                                                                | Mexico (3)                   | Kenya (47)        | Mexico (3)                                                                   | Kenya (47)        |                   |
|                                           |                               | Madagascar (4)                                                                     |                   | Viet Nam (4)                          |                                                                                | United Arab Emirates (4)     | Mauritius (72)    | United Arab Emirates (4)                                                     | Mauritius (72)    |                   |
|                                           |                               | Sri Lanka (5)                                                                      |                   | Brazil (5)                            |                                                                                | Netherlands (5)              | Ethiopia (106)    | Netherlands (5)                                                              | Ethiopia (106)    |                   |
|                                           |                               | Dominica (6)                                                                       |                   | Poland (6)                            |                                                                                | Bangladesh (6)               |                   | Bangladesh (6)                                                               |                   |                   |
|                                           |                               | Sao Tome and Principe (7)                                                          |                   | Sierra Leone (7)                      |                                                                                | Singapore (7)                |                   | Singapore (7)                                                                |                   |                   |
|                                           |                               | Grenada (8)                                                                        |                   | Jamaica (7)                           |                                                                                | Denmark (8)                  |                   | Denmark (8)                                                                  |                   |                   |
|                                           |                               | Timor-Leste (8)                                                                    |                   | Nepal (9)                             |                                                                                | Sudan (9)                    |                   | Sudan (9)                                                                    |                   |                   |
|                                           |                               | Seychelles (8)                                                                     |                   | Netherlands (9)                       |                                                                                | United Kingdom (10)          |                   | United Kingdom (10)                                                          |                   |                   |
| Spices,<br>pyrethrum<br>and<br>peppermint | Cloves,<br>whole and<br>stems | Indonesia (1)                                                                      | Tanzania (3)      | Sri Lanka (1)                         | Tanzania (3)                                                                   | Malaysia (1)                 | Sudan (9)         | Malaysia (1)                                                                 | Sudan (9)         |                   |
|                                           |                               | China (2)                                                                          | Comoros (5)       | Indonesia (2)                         | Madagascar (4)                                                                 | United Arab Emirates (2)     | Mauritius (55)    | United Arab Emirates (2)                                                     | Mauritius (55)    |                   |
|                                           |                               | Tanzania (3)                                                                       | Madagascar (6)    | Tanzania (3)                          | Comoros (6)                                                                    | Viet Nam (3)                 | Kenya (55)        | Viet Nam (3)                                                                 | Kenya (55)        |                   |
|                                           |                               | Sri Lanka (4)                                                                      | Kenya (9)         | Madagascar (4)                        | Kenya (24)                                                                     | Bangladesh (4)               |                   | Bangladesh (4)                                                               |                   |                   |
|                                           |                               | Comoros (5)                                                                        |                   | Singapore (5)                         |                                                                                | India (5)                    |                   | India (5)                                                                    |                   |                   |
|                                           |                               | Madagascar (6)                                                                     |                   | Comoros (6)                           |                                                                                | Saudi Arabia (6)             |                   | Saudi Arabia (6)                                                             |                   |                   |
|                                           |                               | Grenada (7)                                                                        |                   | Cambodia (7)                          |                                                                                | United States of America (7) |                   | United States of America (7)                                                 |                   |                   |
|                                           |                               | Malaysia (8)                                                                       |                   | El Salvador (7)                       |                                                                                | Denmark (8)                  |                   | Denmark (8)                                                                  |                   |                   |
|                                           |                               | Kenya (9)                                                                          |                   | Poland (9)                            |                                                                                | Germany (9)                  |                   | Germany (9)                                                                  |                   |                   |
|                                           |                               |                                                                                    |                   | Brazil (10)                           |                                                                                | Hungary (9)                  |                   | Hungary (9)                                                                  |                   |                   |
| Spices,<br>pyrethrum<br>and<br>peppermint | Ginger                        | China (1)                                                                          | Ethiopia (10)     | Nigeria (1)                           | Ethiopia (8)                                                                   | Malaysia (1)                 | Seychelles (25)   | Malaysia (1)                                                                 | Seychelles (25)   |                   |
|                                           |                               | Fiji (2)                                                                           | Madagascar (21)   | China (2)                             | Kenya (14)                                                                     | United States of America (2) | Mauritius (43)    | United States of America (2)                                                 | Mauritius (43)    |                   |
|                                           |                               | Taiwan, Province of (China)                                                        | Kenya (25)        | Netherlands (3)                       | Djibouti (17)                                                                  | Netherlands (3)              | Madagascar (66)   | Netherlands (3)                                                              | Madagascar (66)   |                   |
|                                           |                               | (2)                                                                                | Uganda (25)       | India (4)                             | Uganda (19)                                                                    | Pakistan (4)                 | Malawi (79)       | Pakistan (4)                                                                 | Malawi (79)       |                   |
|                                           |                               | Nepal (4)                                                                          | Mauritius (31)    | Thailand (5)                          | Madagascar (23)                                                                | United Arab Emirates (4)     |                   | United Arab Emirates (4)                                                     |                   |                   |
|                                           |                               | India (5)                                                                          |                   | Nepal (6)                             |                                                                                | United Kingdom (4)           |                   | United Kingdom (4)                                                           |                   |                   |
|                                           |                               | Nigeria (6)                                                                        |                   | Brazil (6)                            |                                                                                | Japan (7)                    |                   | Japan (7)                                                                    |                   |                   |
|                                           |                               | Indonesia (7)                                                                      |                   | Ethiopia (8)                          |                                                                                | Germany (8)                  |                   | Germany (8)                                                                  |                   |                   |
|                                           |                               | United States of America                                                           |                   | Fiji (9)                              |                                                                                | Bangladesh (9)               |                   | Bangladesh (9)                                                               |                   |                   |
|                                           |                               | (8)                                                                                |                   | Philippines (9)                       |                                                                                | Singapore (10)               |                   | Singapore (10)                                                               |                   |                   |
|                                           |                               | Bangladesh (9)                                                                     |                   |                                       |                                                                                |                              |                   |                                                                              |                   |                   |
|                                           |                               | Ethiopia (10)                                                                      |                   |                                       |                                                                                |                              |                   |                                                                              |                   |                   |
| Spices,<br>pyrethrum<br>and<br>peppermint | Nutmeg,<br>mace,<br>cardamoms | Indonesia (1)                                                                      | Madagascar (15)   | Indonesia (1)                         | Djibouti (12)                                                                  | Germany (1)                  | Sudan (5)         | Germany (1)                                                                  | Sudan (5)         |                   |
|                                           |                               | Dominica (2)                                                                       | Tanzania (15)     | Sri Lanka (2)                         | Madagascar (18)                                                                | Singapore (1)                | Djibouti (24)     | Singapore (1)                                                                | Djibouti (24)     |                   |
|                                           |                               | Guatemala (3)                                                                      | Kenya (15)        | Guatemala (3)                         | Tanzania (18)                                                                  | United Arab Emirates (1)     | Mauritius (64)    | United Arab Emirates (1)                                                     | Mauritius (64)    |                   |
|                                           |                               | Nepal (4)                                                                          | Ethiopia (15)     | Nepal (3)                             | Kenya (24)                                                                     | Viet Nam (4)                 |                   | Viet Nam (4)                                                                 |                   |                   |
|                                           |                               | Bhutan (5)                                                                         | Malawi (15)       | Grenada (3)                           | Ethiopia (30)                                                                  | Sudan (5)                    |                   | Sudan (5)                                                                    |                   |                   |
|                                           |                               | India (6)                                                                          |                   | Netherlands (6)                       |                                                                                | India (6)                    |                   | India (6)                                                                    |                   |                   |
|                                           |                               | Grenada (7)                                                                        |                   | India (7)                             |                                                                                | Brazil (7)                   |                   | Brazil (7)                                                                   |                   |                   |
|                                           |                               | Saint Vincent and the Grenadines (8)                                               |                   | Brazil (7)                            |                                                                                | Netherlands (7)              |                   | Netherlands (7)                                                              |                   |                   |
|                                           |                               | Togo (8)                                                                           |                   | Saint Vincent and the Grenadines (10) |                                                                                | Belgium (9)                  |                   | Belgium (9)                                                                  |                   |                   |
|                                           |                               | Lao People's Democratic Republic (10)                                              |                   |                                       |                                                                                | Saudi Arabia (9)             |                   | Saudi Arabia (9)                                                             |                   |                   |

| Sector label                              | Industry label       | Top 10 producers:<br>Countries with the highest rank<br>in the production index...                                                                       |                                                                                                                               |                                                                                                                                                                     | Top 10 exporters:<br>Countries with the highest rank<br>in the export index...                                                                                   |                                                                                                                                                                                                  |                                                                                                                                                                   | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |  |
|-------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------|--|
|                                           |                      | ... in the world                                                                                                                                         | ... in the region                                                                                                             | ... in the world                                                                                                                                                    | ... in the world                                                                                                                                                 | ... in the region                                                                                                                                                                                | ... in the world                                                                                                                                                  | ... in the region                                                            | ... in the region |  |
| Spices,<br>pyrethrum<br>and<br>peppermint | Other spices         | Turkey (1)<br>China (2)<br>Nepal (3)<br>Bangladesh (4)<br>India (5)<br>Kuwait (6)<br>Vanuatu (6)<br>Mauritius (6)<br>Pakistan (9)<br>Palestine (9)       | Mauritius (6)<br>Ethiopia (31)<br>Comoros (37)<br>Madagascar (41)<br>Kenya (45)<br>Malawi (45)<br>Eritrea (45)<br>Rwanda (45) | Iran (Islamic Republic of) (1)<br>India (2)<br>France (2)<br>Netherlands (4)<br>Austria (5)<br>Germany (6)<br>Turkey (7)<br>Spain (8)<br>China (9)<br>Pakistan (10) | Somalia (20)<br>Tanzania (20)<br>Djibouti (22)<br>Kenya (24)<br>Madagascar (29)<br>Mauritius (50)<br>Ethiopia (50)<br>Malawi (108)                               | Germany (1)<br>Netherlands (2)<br>Belgium (3)<br>France (3)<br>United Kingdom (3)<br>Saudi Arabia (6)<br>Spain (6)<br>United States of America (8)<br>United Arab Emirates (9)<br>Area Nes (10)  | Sudan (21)<br>Djibouti (21)<br>Uganda (25)<br>Madagascar (27)<br>Tanzania (29)<br>Mauritius (50)<br>Kenya (50)<br>Seychelles (70)<br>Malawi (75)<br>Comoros (127) |                                                                              |                   |  |
|                                           |                      | Viet Nam (1)<br>Brazil (2)<br>Thailand (3)<br>Indonesia (4)<br>Cambodia (5)<br>China (6)<br>Tajikistan (7)<br>Costa Rica (8)<br>Macau (9)<br>Mexico (10) | Ethiopia (17)<br>Malawi (19)<br>Uganda (19)<br>Kenya (22)<br>Madagascar (32)                                                  | Viet Nam (1)<br>Sri Lanka (2)<br>Brazil (3)<br>Mexico (4)<br>Indonesia (5)<br>Malaysia (6)<br>India (7)<br>Germany (8)<br>Ecuador (9)<br>China (10)                 | Malawi (13)<br>Ethiopia (15)<br>Tanzania (19)<br>Madagascar (28)<br>Mozambique (28)<br>Uganda (35)<br>Kenya (37)<br>Mauritius (48)                               | United Kingdom (1)<br>Belgium (2)<br>Japan (3)<br>India (4)<br>Germany (5)<br>France (6)<br>Poland (7)<br>Malaysia (8)<br>United States of America (9)<br>Hungary (9)                            | Sudan (13)<br>Malawi (13)<br>Djibouti (21)<br>Seychelles (29)<br>Kenya (33)<br>Mauritius (74)                                                                     |                                                                              |                   |  |
| Spices,<br>pyrethrum<br>and<br>peppermint | Pimento,<br>allspice | Hungary (1)<br>China (2)<br>India (3)<br>Myanmar (4)<br>Morocco (5)<br>Peru (6)<br>Cape Verde (7)<br>France (8)<br>Ethiopia (8)<br>Bangladesh (10)       | Ethiopia (8)<br>Djibouti (21)<br>Tanzania (43)<br>Sudan (48)<br>Uganda (51)<br>Kenya (51)<br>Madagascar (51)<br>Malawi (58)   | Peru (1)<br>China (2)<br>India (2)<br>Brazil (4)<br>Spain (5)<br>Chile (6)<br>Tunisia (7)<br>Netherlands (8)<br>Serbia and Montenegro (9)<br>Myanmar (10)           | Tanzania (12)<br>Uganda (13)<br>Kenya (32)<br>Ethiopia (39)<br>Mozambique (39)<br>Madagascar (44)<br>Malawi (61)                                                 | Spain (1)<br>Netherlands (1)<br>Germany (1)<br>United States of America (4)<br>Malaysia (5)<br>United Kingdom (6)<br>Japan (7)<br>Mexico (8)<br>Korea, Rep. of (9)<br>Thailand (10)              | Kenya (20)<br>Eritrea (32)<br>Djibouti (39)<br>Seychelles (43)<br>Mauritius (55)<br>Malawi (86)<br>Ethiopia (107)<br>Mozambique (131)                             |                                                                              |                   |  |
|                                           |                      | Morocco (1)<br>Spain (2)<br>Tanzania (3)<br>Argentina (4)<br>Papua New Guinea (4)<br>Kenya (6)<br>Tunisia (7)<br>Italy (7)<br>Rwanda (9)<br>Ecuador (10) | Tanzania (3)<br>Kenya (6)<br>Rwanda (9)                                                                                       | Poland (1)<br>China (2)<br>Mexico (3)<br>Burundi (3)<br>Egypt (4)<br>France (5)<br>India (6)<br>Chile (7)<br>Morocco (8)<br>Bulgaria (9)<br>Albania (10)            | Kenya (11)<br>Ethiopia (26)<br>Burundi (31)<br>Comoros (31)<br>Somalia (31)<br>Mozambique (55)<br>Madagascar (62)<br>Sudan (77)<br>Uganda (81)<br>Tanzania (102) | Germany (1)<br>Singapore (1)<br>Spain (1)<br>Viet Nam (4)<br>United Kingdom (4)<br>United States of America (6)<br>Canada (6)<br>Italy (8)<br>Taiwan, Province of (China) (9)<br>Netherlands (9) | Sudan (21)<br>Uganda (27)<br>Tanzania (32)<br>Seychelles (36)<br>Madagascar (48)<br>Kenya (70)<br>Mauritius (82)<br>Mozambique (95)                               |                                                                              |                   |  |

| Sector label                              | Industry label | Top 10 producers:<br>Countries with the highest rank<br>in the production index... |                   |                      | Top 10 exporters:<br>Countries with the highest rank<br>in the export index... |                   |                  | Top 10 markets:<br>Countries with the highest rank<br>in the market index... |                   |                   |
|-------------------------------------------|----------------|------------------------------------------------------------------------------------|-------------------|----------------------|--------------------------------------------------------------------------------|-------------------|------------------|------------------------------------------------------------------------------|-------------------|-------------------|
|                                           |                | ... in the world                                                                   | ... in the region | ... in the world     | ... in the world                                                               | ... in the region | ... in the world | ... in the world                                                             | ... in the region | ... in the region |
| Spices,<br>pyrethrum<br>and<br>peppermint | Vanilla        | Madagascar (1)                                                                     | Madagascar (1)    | Papua New Guinea (2) | Uganda (1)                                                                     | Uganda (1)        | Netherlands (1)  | Madagascar (2)                                                               | Madagascar (2)    |                   |
|                                           |                | China (2)                                                                          | Uganda (4)        | Madagascar (3)       | New Guinea (2)                                                                 | Madagascar (3)    | Madagascar (2)   | Sudan (5)                                                                    | Sudan (5)         |                   |
|                                           |                | Indonesia (3)                                                                      | Malawi (7)        | Germany (4)          | Madagascar (3)                                                                 | Comoros (15)      | Canada (3)       | Mauritius (17)                                                               | Mauritius (17)    |                   |
|                                           |                | Uganda (4)                                                                         | Comoros (9)       | India (5)            | Germany (4)                                                                    | Mauritius (50)    | Denmark (4)      | Seychelles (30)                                                              | Seychelles (30)   |                   |
|                                           |                | Tonga (5)                                                                          | Kenya (11)        | Netherlands (5)      | India (5)                                                                      |                   | Switzerland (5)  | Mozambique (69)                                                              | Mozambique (69)   |                   |
|                                           |                | French Polynesia (6)                                                               |                   | French Polynesia (7) | Netherlands (5)                                                                |                   | Sudan (5)        |                                                                              |                   |                   |
|                                           |                | Malawi (7)                                                                         |                   | France (7)           | French Polynesia (7)                                                           |                   | Singapore (7)    |                                                                              |                   |                   |
|                                           |                | Turkey (8)                                                                         |                   | Guinea (9)           | France (7)                                                                     |                   | Germany (7)      |                                                                              |                   |                   |
|                                           |                | Zimbabwe (9)                                                                       |                   | Vanuatu (10)         | Guinea (9)                                                                     |                   | Belgium (7)      |                                                                              |                   |                   |
|                                           |                | Comoros (9)                                                                        |                   |                      |                                                                                |                   | France (10)      |                                                                              |                   |                   |

Source: FAOSTAT, ITCs TradeMap and Market Access Map.