

# FAO Statistical Yearbook

2014



**Africa** food  
and agriculture





FAO STATISTICAL YEARBOOK  
2014  
Africa  
Food and Agriculture

**Food and Agriculture Organization of the United Nations  
Regional Office for Africa**

Accra, 2014

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# Foreword

The objective of the FAO Regional Office for Africa (RAF) is to improve sustainable nutrition and food security in the African continent. To realize this vision, RAF focuses its work on promoting sustainable increases in agricultural production, enhancing sustainable use and management of natural resources, supporting market access and measures for better trade and promoting information and knowledge management and sharing. The issue of better monitoring progress, learning from experiences, best practices and improving further activities is of great importance to RAF, and statistical data constitute an important input.

The *FAO Statistical Yearbook 2014: Africa Food and Agriculture*, which RAF is pleased to release, aims to disseminate statistical information that will help all stakeholders to access, easily and quickly, a set of statistics on food and agriculture related to the current themes and domains of interest in the region. The document provides users in Africa and abroad with statistics and reliable indicators on food and agriculture that can be used for policy formulation, monitoring and evaluation. These statistics and indicators cover a wide range of themes: agricultural production, productivity and growth, capital, rural population and well-being, poverty, labour, food security, food safety and nutrition, natural resource use in agricultural activities (e.g. land, water and forest), climate change, environmental pollution and biodiversity.

The 2014 Statistical Yearbook is the second release using the new publication format, promoted by the FAO Statistics Division. It goes beyond the traditional compilation of tables by including more graphs, maps and text, highlighting the main trends and issues observed in the data. This new format responds to new demands for a more comprehensive set of statistics and indicators that provide a broader and more in-depth examination of the various roles of agriculture.

This edition responds to the specific needs of African and other users by providing indicators for each country as well as aggregate indicators for FAO sub-regions in Africa, the Regional Economic Communities and for the entire African continent. Indicators for other regions of the world are also presented for easy comparison.

We hope you will find this book informative, useful and reader-friendly.

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Assistant Director-General,  
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This publication was jointly prepared by FAORAF and ESS. The work was carried under the guidance of Bukar Tijani (Regional Representative and Assistant Director General, FAORAF) and Pietro Gennari (Chief Statistician, FAO, and Director, ESS). Production was managed by Eloi Ouedraogo (FAORAF) and his team in Accra, which included Marcel Ouattara (FAORAF); and Amy Heyman (ESS) and her team in Rome, which included Filippo Gheri (ESS) and Shira Fano (ESS). Contributors were Nienke Beintema (the International Food Policy Research Institute – IFPRI), Riccardo Biancalani (NRC), Andrea Borlizzi (ESS), Chiara Brunelli (ESS), Carlo Cafiero (ESS), Cinzia Cerri (ESS), Rocio Condor-Golec (Climate, Energy and Tenure Division – NRC), Piero Conforti (ESS), Elisenda Estruch (Gender, Equity and Rural Employment Division – ESW), Alessandro Ferrara (NRC), Karen Frenken (Land and Water Division – NRL), Nandini Gunewardena (FAOLOW), Gary Jones (International Monetary Fund – IMF), Arvydas Lebedys (Forest Economics, Policy and Products Division – FOE), Erdgin Mane (ESS), Robert Mayo (ESS), Verena Nowak (Nutrition Division – ESN), Michael Rahija (IFPRI), Simone Rossi (NRC), Mirella Salvatore (NRC), Nadia Scialabba (NRC), Gert-Jan Stads (IFPRI), Nathalie Troubat (ESS), Sachiko Tsuji (Statistics and Information Service – FIPS), Francesco Tubiello (NRC), Stefania Vannuccini (FIPS), Nathan Wanner (ESS) and Firas Yassin (ESS). A special thanks goes to Andrea Alcibiade (ESS), Guido Barbaglia (ESS), Giorgia DeSantis (ESS), James Edge (ESS), Carola Fabi (ESS), Amanda Gordon (ESS), Nicola Graziani (ESS), Fabio Grita (ESS), Michelle Kendrick (ESA), Francesca Pittueo, Adam Prakash (ESS), Gordon Ramsay, Nicholas Sakoff (ESS), Nicola Selleri (ESS), Sylvaine Thomas (ESS), and Boris Veytsman.



## How to use this book

### *The structure*

The FAO Statistical Yearbook products build on the process that began with the 2012 edition. The book has been created from beginning to end with the statistical software R and the typesetting language  $\text{\LaTeX}$ : from data retrieval, to data processing, indicator construction, and blueprint-ready pdf file for distribution. This technique has circumvented the traditional route of manual production, involving costly software licences, significant labour costs and inefficiencies associated with a lack of integration.

Using data from global statistical providers, including FAO, the publication presents a visual synthesis of major trends and factors shaping the global food and agricultural landscape, and their interplay with broader environmental, social and economic dimensions. In doing so, it serves as a unique reference point of world food and agriculture for policy-makers, donor agencies, researchers, analysts and the general public.

The book is divided into four thematic parts, in an attempt to present the full spectrum of issues relevant to the subject matter:

**Part 1 The setting** measures the state of the agricultural resource base by assessing the supply of land, labour, capital and inputs, and examining the pressure on the world food system stemming from demographic and macroeconomic change.

**Part 2 Hunger dimensions** gauges the state of food insecurity and malnutrition, measuring the multitude of dimensions that give rise to hunger and shape undernourishment.

**Part 3 Feeding the world** evaluates the past and present productive capacity of world agriculture, together with the role of trade in meeting changing food, feed and other demands.

**Part 4 Sustainability dimensions** examines the sustainability of agriculture in the context of the pressure it exerts on the environment, including the interaction of agriculture with climate change, and how it can provide ecosystem services through the bio-based economy.

Several page spreads are used to present each thematic issue. Each spread contains visualizations of the data in maps and charts, along with text providing background to the salient issues and an assessment of current trends. Tables are provided at the end of each part. A list of indicators used throughout the book and a section on concepts and methods can be found in Part 5.

### *Country definitions and classification*

The publication follows the FAO Regional Office for Africa composition (see “Table: Country list” or <http://www.fao.org/africa>).

South Sudan declared independence on 9 July 2011. When available, data for the Sudan and South Sudan are shown separately. In the tables, the Sudan (former) is also reported. Based on the data available, the assessment presented in the map of the Sudan and South Sudan reflects the situation up to 2011 of the Sudan (former).

### *Aggregations*

Two types of aggregations are used in the book: sum and weighted mean. Two restrictions are imposed when computing the aggregation: i) the sufficiency condition – the aggregation is computed only when sufficient countries have reported data, and the current threshold is set at 50 percent of the variable and the weighting variable, if present; and ii) the comparability condition – as aggregations are usually computed over time, this condition is designed to ensure that the number of countries is comparable over several years; under the current restriction the number of countries may not vary by more than 15 over time.

### *Data presentation conventions*

The cutoff date for the data is 30 September 2013.

- When country data have not been reported for the reference year, an asterisk (\*) on the year label indicates that the value for the most recent year available is shown. For example, 2008–2010\* means that the most recent value for the period from 2008 to 2010 is shown. When a growth rate is computed, the specified interval always refers to available data.
- A billion is 1 000 million.
- A trillion is 1 000 billion.
- A blank means that data are not available or that aggregates cannot be calculated because of missing data for the years shown.
- In tables, 0 or 0.0 means zero or a number that is small enough to round to zero at the displayed number of decimal places.
- A ~ in the maps refers to the range specified in the class intervals.



# CONTENTS

Foreword:	iii
Acknowledgements:	v
How to use this book:	vii
<b>Part 1 The Setting:</b>	<b>1</b>
Overview	2
Economy	6
Land and Water	8
Labour	12
Inputs	14
Capital and Investment	16
Innovation	18
Tables	20
<b>Part 2 Hunger dimensions:</b>	<b>31</b>
Number undernourished and their prevalence in the population	32
Anthropometric indicators	34
Poverty	36
Food Availability	38
Economic and physical access	40
Clean water and sanitation	42
Economic and political stability	44
Education and health	48
Natural and human-made risks	50
Tables	52
<b>Part 3 Feeding the world:</b>	<b>61</b>
Aggregate agriculture	62
Growth in crop production	64
Trends in the crop sector	66
Trends in the livestock sector	76
Trends in the fisheries sector	82
Trends in agricultural trade	86
Tables	94
<b>Part 4 Sustainability dimensions:</b>	<b>115</b>
Land and Forestry	116
Water	120
Biodiversity	122
Agri-environmental indicators	124
Organic farming	126
Bio-based economy	128
Climate change	130
Greenhouse gas emissions	132
Tables	134
<b>Part 5 Metadata:</b>	<b>143</b>
Country list	143
Metadata	145
Bibliography	167

# List of Charts

1	Africa rural and urban population (1960-2050) . . . . .	2
2	Rural and urban population, share of total population (2011) . . . . .	2
3	Agricultural population, share of total population (1990 and 2012) . . . . .	3
4	Population ages 0-14, 15-64 and 65+, share of total (2010) . . . . .	3
5	Life expectancy at birth, selected countries (2000-2011) . . . . .	4
6	Value added in agriculture, industry, and services as shares of GDP (2009) . . . . .	6
7	Africa trade, FDI, and ODA as shares of GDP (2000-2012) . . . . .	6
8	Arable land per capita (2000-2011) . . . . .	8
9	Land area (2011) . . . . .	9
10	Agricultural area (2011) . . . . .	9
11	Irrigation potential, selected countries (2012) . . . . .	10
12	Total equipped area (2009) . . . . .	10
13	Female employment in agriculture, share of female employment, selected countries (2005-2010*) . . . . .	12
14	Labor force participation rate by gender, ages 15+ (2011) . . . . .	12
15	Africa fertilizer consumption per ha of arable area and permanent crops (2002-2011) . . . . .	14
16	Fertilizer consumption per ha of arable land and permanent crops (2011) . . . . .	14
17	Africa credit to agriculture, share of added value in agriculture, selected countries (2005-2010) . . . . .	16
18	ODA received in agriculture, total share of ODA (2002 and 2010) . . . . .	16
19	Share of components in capital stock (2007) . . . . .	17
20	Government expenditures in agriculture, forestry, fishing, and hunting, selected countries (2010) . . . . .	17
21	Total public agricultural research expenditure, share of agricultural GDP, selected countries (2008) . . . . .	18
22	Mobile cellular, broadband internet, and telephone lines subscribers (2012) . . . . .	18
23	Undernourishment in the developing world (1990-1992 to 2011-2013) . . . . .	32
24	Number of people undernourished (1990-1992 and 2011-2013) . . . . .	32
25	Percentage of children under 5 years of age who are stunted (2005-2011*) . . . . .	34
26	Percentage of children under 5 years of age who underweight (2005-2011*) . . . . .	34
27	People in the world living on less than 2005 PPP \$1.25 and \$2 a day (1981-2005) . . . . .	36
28	Gini coefficient for African countries (1995-2000 and 2007-2010) . . . . .	36
29	Average dietary supply adequacy (1990-1992 and 2011-2013) . . . . .	38
30	Trend of the value of food production (1992-2011) . . . . .	38
31	Share of energy supply derived from cereals, roots and tubers (1990-1992 and 2008-2010) . . . . .	39
32	Relative change in average protein supply (between 1990-1992 and 2008-2010) . . . . .	39
33	Relative change in average protein supply from animal origin (between 1990-1992 and 2008-2010) . . . . .	39
34	Relative change in average fat supply (between 1990-1992 and 2008-2010) . . . . .	39
35	Rail lines density (2011) . . . . .	40
36	Relative price of food (2000-2010) . . . . .	40
37	Percentage of population without reasonable access to improved water sources (1992 and 2011) . . . . .	42
38	Percentage of population without reasonable access to improved sanitation facilities (1992 and 2011) . . . . .	42
39	Value of food imports over total merchandise exports (1992 and 2010) . . . . .	44
40	Cereal import dependency ratio (1992 and 2009) . . . . .	44
41	Domestic food price volatility (1995-2013) . . . . .	45
42	Per capita food production variability (1990-2011) . . . . .	45
43	Domestic food price volatility (2000 and 2013) . . . . .	46
44	Domestic food price volatility (2000 and 2013) . . . . .	46
45	Per capita food supply variability (1995-2010) . . . . .	47
46	Girls' and boys' enrolment in primary education (2011) . . . . .	48
47	Total health expenditure, share of GDP (1995-2011) . . . . .	48
48	Droughts, floods, extreme temperatures - share of population affected (2009) . . . . .	50
49	Refugees in Africa region (2000-2011) . . . . .	50
50	Food supply in crops primary equivalent (2000-2009) . . . . .	62
51	Africa protein and fat supply in crops primary equivalent (2000-2009) . . . . .	62
52	Protein supply in crops primary equivalent (2009) . . . . .	63
53	Fat supply in crops primary equivalent (2009) . . . . .	63
54	Crops, gross per capita production index number (2004-2006 = 100) (2000-2011) . . . . .	64
55	Growth in cereal production (2000-2012) . . . . .	64
56	Per capita cereal production (2000-2011) . . . . .	66
57	Per capita coarse grain production (2000-2011) . . . . .	66
58	Per capita rice production, selected countries (2011) . . . . .	68
59	Per capita wheat production (2011) . . . . .	68

60	Per capita oil crop production (2000-2011)	70
61	Per capita pulse production (2000-2011)	70
62	Per capita root and tuber production (2000-2011)	72
63	Per capita citrus fruit production (2000-2011)	72
64	Per capita fruit production, excluding melons (2000-2011)	74
65	Per capita vegetable production, including melons (2000-2011)	74
66	Africa stocks of cattle and buffaloes, and sheep and goats (2000-2011)	76
67	Stock of poultry birds (2000-2011)	76
68	Stocks of cattle and buffaloes, and sheep and goats (2011)	77
69	Stock of poultry birds (2011)	77
70	Africa meat production (2000-2011)	78
71	Meat production by type (2011)	78
72	Africa per capita meat production (2000-2011)	79
73	Per capita total meat production (2011)	79
74	Egg production (2000-2011)	80
75	Cheese production (2011)	80
76	Capture fish production, per capita (2000-2011)	82
77	Aquaculture fish production, per capita (2000-2011)	82
78	State of the world's fishery stocks (1974-2009)	84
79	Composition of fish products (2009)	84
80	Per capita world fish food supply (1990-2011)	85
81	Sugar and honey net trade (2000-2011)	86
82	Sugar and honey net trade (2011)	86
83	Africa composition of global exports (2000-2011)	87
84	Cereal net trade (2000-2011)	88
85	Cereal net trade (2011)	88
86	Major export flows of cocoa beans from African countries (US\$, 2011)	89
87	Fruit and vegetables net trade (2000-2011)	90
88	Fruit and vegetables net trade (2011)	90
89	Major export flows of unmanufactured tobacco from African countries (US\$, 2011)	91
90	Net trade of coffee, tea, cocoa, and spices (2000-2011)	92
91	Net trade of coffee, tea, cocoa, and spices (2011)	92
92	Major export flows of coffee (green) from African countries (US\$, 2011)	93
93	Annual growth rate in forest area (1990-2011)	116
94	Forest characteristics (2010)	116
95	Africa production of selected forest products (1970-2012)	118
96	Africa production of selected forest products (1970-2012)	118
97	Exports of forest products (2000 and 2012)	119
98	Imports of forest products (2000 and 2012)	119
99	Freshwater withdrawal by agricultural sector, shares of total (2000-2010*)	120
100	Freshwater withdrawal by industrial sector, shares of total (2000-2010*)	120
101	Species threatened in Africa (2012)	122
102	Terrestrial protected areas, share of total land area (1990 and 2010)	122
103	Livestock density per ha of agricultural land, cattle and buffaloes, sheep and goats (2011)	124
104	Agricultural land, share of total land area (1992-2011)	124
105	Organic water pollutant (BOD) emissions (2005)	125
106	Organic water pollutant (BOD) emissions per worker (2005)	125
107	Organic agriculture area (2011)	126
108	Organic agriculture, share of total agricultural area (2011)	126
109	World area under bioenergy crops (2005-2010)	128
110	Biofuel production (1990-2009)	128
111	Share of food crop usage in world bio-based economy (2009)	129
112	Global land-ocean temperature index, base period 1951-1980 (1880-2012)	130
113	Global land-ocean temperature index for three latitude bands, base period 1951-1981 (1880-2011)	130
114	Net emissions/removals from net forest conversions (1990, 2000 and 2010)	132
115	Greenhouse gas emissions from cultivated organic soils (2010)	132
116	Africa agricultural greenhouse gas emissions by sector (2010)	133

# List of Maps

1	Population annual growth (percent, 2000-2012)	3
2	GNI per capita (current US\$, 2011-2012*)	5
3	Under-5 mortality rate (per 1000 live births, 2010-2011*)	5
4	Agriculture, value added per worker annual growth (percent, 2011-2012)	7
5	Agriculture, value added as share of GDP (percent, 2008-2012*)	7
6	Cropland per capita (ha/cap, 2011)	9
7	Share of equipped area actually irrigated (percent, 2000-2012*)	11
8	Water resources per capita (m <sup>3</sup> /yr/cap, 2010)	11
9	Employment in agriculture, share of total employment (percent, 2005-2010*)	13
10	Children in employment, total (percent, 2000-2011*)	13
11	Nitrogen and phosphate fertilizers consumption per ha of arable area and permanent crops (tonne/ha, 2011)	15
12	Agricultural tractors, total (tractors, 2000-2010*)	15
13	FDI (inward flows) to agriculture (million US\$, 2010-2011*)	17
14	Access to mobile cellular phone subscriptions annual growth (percent, 2000-2011)	19
15	Total public agricultural research expenditure, share of agricultural GDP (percent, 2006-2010*)	19
16	Map of hunger (percent, prevalence of undernourishment 2011-2013)	33
17	Prevalence of food inadequacy (percent, 2011-2013)	33
18	Percentage of children under 5 years of age who are stunted (percent, 2005-2011*)	35
19	Percentage of children under 5 years of age who are underweight (percent, 2005-2011*)	35
20	Poverty gap at national poverty line (percent, 2005-2012*)	37
21	Poverty headcount ratio at national poverty line, share of population (percent, 2005-2011*)	37
22	Road density (km per 100 square km of land area, 2005-2010*)	41
23	Percent of paved roads over total roads (percent, 2005-2010*)	41
24	Share of population without reasonable access to improved water sources (percent, 2011)	43
25	Share of population without reasonable access to improved sanitation facilities (percent, 2011)	43
26	Political stability and absence of violence/terrorism (index, 2009)	47
27	Literacy rate, adult female - share of females ages 15 and above (percent, 2005-2010*)	49
28	Primary completion rate, total (percent, 2005-2010*)	49
29	Droughts, floods, extreme temperatures - share of population affected (average 1990-2009) (percent, 2009)	51
30	UNHCR total population of concern (thousand people, 2011)	51
31	Food supply in crops primary equivalent (kcal/cap/day, 2009)	63
32	Crops, net per capita production index number (2004-2006 = 100) (index, 2011)	65
33	Food, net per capita production index number (2004-2006 = 100) (index, 2011)	65
34	Cereal producing countries (million tonnes, 2011)	67
35	Coarse grain producing countries (million tonnes, 2011)	67
36	Rice producing countries (million tonnes, 2011)	69
37	Wheat producing countries (million tonnes, 2011)	69
38	Oil crop producing countries (million tonnes, 2011)	71
39	Pulse producing countries (million tonnes, 2011)	71
40	Root and tuber producing countries (million tonnes, 2011)	73
41	Per capita citrus fruit production (tonne/cap, 2011)	73
42	Fruit producing countries, excluding melons (million tonnes, 2011)	75
43	Vegetable producing countries, including melons (million tonnes, 2011)	75
44	Stock of cattle and buffaloes (million heads, 2011)	77
45	Meat producing countries (million tonnes, 2011)	79
46	Milk production (million tonnes, 2011)	81
47	Butter and ghee production (million tonnes, 2011)	81
48	Capture fish producing countries (thousand tonnes, 2011)	83
49	Aquaculture producing countries (thousand tonnes, 2011)	83
50	Geo-location of harvests by capture and aquaculture (thousand tonnes, 2010)	85
51	Import value index (index, 2010)	87
52	Global distribution of risks associated with main agricultural production systems	117
53	Forest area as share of total land area (percent, 2011)	117
54	Roundwood production (thousand m <sup>3</sup> , 2012)	119
55	Total water withdrawal per capita (m <sup>3</sup> /yr/cap, 2000-2010*)	121
56	Renewable freshwater resources withdrawn by agriculture (percent, 2000-2010*)	121
57	Terrestrial protected areas, share of total land area (percent, 2010)	123
58	Marine protected areas, share of territorial waters (percent, 2010)	123
59	Nitrogen fertilizer consumption per ha of arable area and permanent crops (kg/ha, 2009)	125

60	Organic agriculture area (ha, 2011) . . . . .	127
61	Organic agriculture, share of total agricultural area (percent, 2011) . . . . .	127
62	Biofuel production (kilotonne of oil equivalent, 2009) . . . . .	129
63	Surface temperature, anomaly versus 1951-1980 (degrees Celsius, 2012) . . . . .	131
64	Share of population living in areas with elevation of 5 meters or less (percent, 2000) . . . . .	131
65	Total agricultural greenhouse gas emissions (gigagrams CO <sub>2</sub> eq, 2010) . . . . .	133

# List of Tables

1	Population and structure . . . . .	20
2	Demographic indicators . . . . .	21
3	Economy . . . . .	22
4	Land . . . . .	23
5	Water resources per capita and irrigation . . . . .	24
6	Labour . . . . .	25
7	Inputs . . . . .	26
8	Agricultural capital stock . . . . .	27
9	Foreign direct investment and official development assistance . . . . .	28
10	Government expenditures . . . . .	29
11	Innovation . . . . .	30
12	Outcomes: Inadequate access to food . . . . .	52
13	Utilization . . . . .	53
14	Poverty . . . . .	54
15	Determinants: Availability . . . . .	55
16	Determinants: Physical and economic access . . . . .	56
17	Vulnerability/Stability . . . . .	57
18	Health and education . . . . .	58
19	Population at risk . . . . .	59
20	Cereal producers and their productivity . . . . .	94
21	Coarse grain producers and their productivity . . . . .	95
22	Rice producers and their productivity . . . . .	96
23	Wheat producers and their productivity . . . . .	97
24	Oilcrop producers and their productivity . . . . .	98
25	Pulse producers and their productivity . . . . .	99
26	Root and tuber producers and their productivity . . . . .	100
27	Vegetable producers and their productivity . . . . .	101
28	Sugar producers and their productivity . . . . .	102
29	Treenut producers and their productivity . . . . .	103
30	Fruit producers and their productivity . . . . .	104
31	Citrus fruit producers and their productivity . . . . .	105
32	Fibre crop producers and their productivity . . . . .	106
33	Jute and jute-like producers and their productivity . . . . .	107
34	Meat producers . . . . .	108
35	Eggs, milk, and processed milk . . . . .	109
36	Fish production . . . . .	110
37	Volume of total cereal trade . . . . .	111
38	Volume of total oilseeds, and sugar and honey trade . . . . .	112
39	Volume of total meat and dairy products trade . . . . .	113
40	Value of fish trade . . . . .	114
41	Land and Forestry . . . . .	134
42	Forestry production and trade . . . . .	135
43	Forestry production: finished products . . . . .	136
44	Water withdrawal and pressure on renewable water resources . . . . .	137
45	Species threatened and nationally protected areas . . . . .	138
46	Agri-environmental indicators . . . . .	139
47	Water pollution . . . . .	140
48	Renewable feedstocks . . . . .	141
49	Agricultural emissions . . . . .	142

**PART**

# 1

## **The Setting**

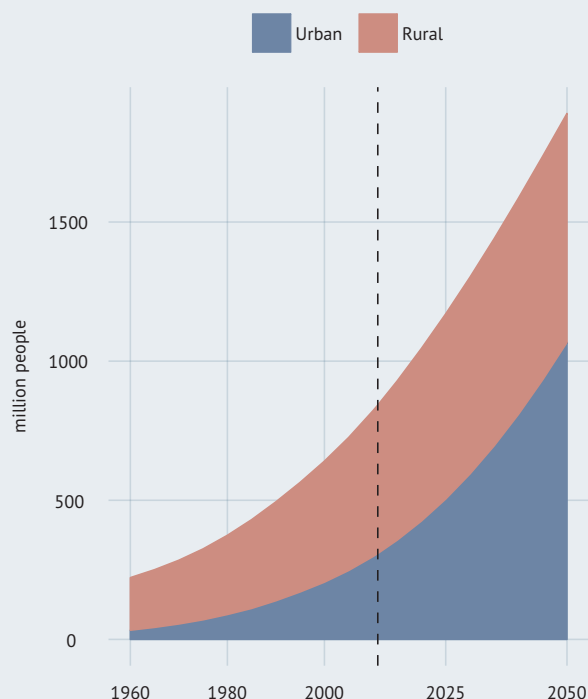
## Overview

The world's population is constantly growing, especially in urban areas. Indeed in 2011, the world had 47.5 percent of rural population against 52.6 percent for urban. Data analysis at the regional level shows that the Regional Office for Africa (RAF) was the region with the largest rural population. The Regional Office for Asia and the Pacific (RAP) was placed second, followed by the Regional Office for the Near East (RNE), the Regional Office for Europe & Central Asia (REU), and finally the Regional Office for Latin America and the Caribbean (RLAC). In RAF, 63.9 percent of the population lived in rural areas and only 36.1 percent in urban areas. North Africa stood out, with more than half (55.2 percent) of the population in urban areas (table 1, chart 2). At a sub-regional level, in RAF, for 2011, East Africa had the largest proportion of the rural population (79.1 percent) followed by Central Africa (61.7 percent), Southern Africa (55.8 percent) and West Africa (55.1 percent).

According to the age group, RAF had the highest proportion of extreme youth of its population compared with the other regions of the world. Indeed, in 2011, the population under 15 years was estimated at 28.5 percent at the global level. In RAF, this population was 42.4 percent while it was 25.1 percent in RAP, 17.4 percent in REU, 27.9 percent for RLAC, and 31.5 percent in RNE. With the exception of North Africa, where this segment of the population accounted for 29.3 percent, the extreme youth of the African population was significant and evenly distributed as it accounted for 44.5 percent in Central Africa, 42.8 percent in East Africa, 39.4 percent in Southern Africa, and 43 percent in West Africa, (table 1, chart 4).

As for agricultural population, in 2012, at the global level, the proportion of agricultural population in the total population was 31.7 percent, while in RAF it was 54.2 percent. RAP was second with 30.2 percent, then RNE with 22.7 percent, RLAC, 15.2 percent, and REU, 7.8 percent. This means that Africa recorded a large proportion of agricultural population, except for North Africa, which was low (23.5 percent), (table 1). From 1990 to 2012, a general decline in the trend of the proportion of the agricultural population in the total population in all sub-regions was observed. In North Africa the decline was more pronounced. It was also high in Central Africa, but relatively low in South Africa (chart 3).

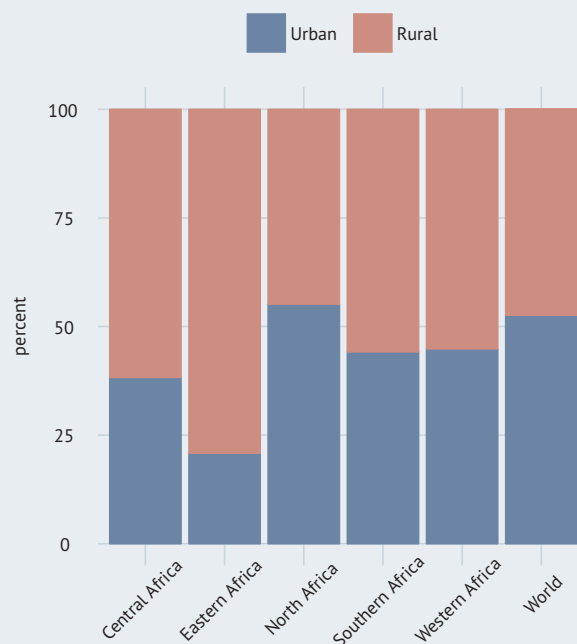
CHART 1: Africa rural and urban population (1960-2050)



Source: United Nations Population Division.

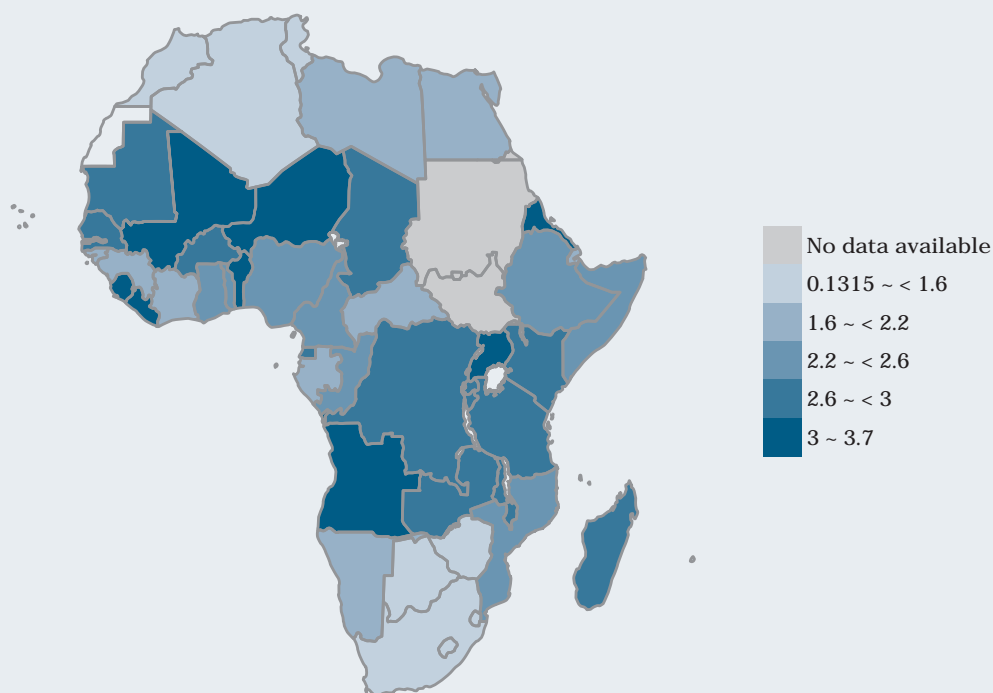
Data after 2011 are projections.

CHART 2: Rural and urban population, share of total population (2011)



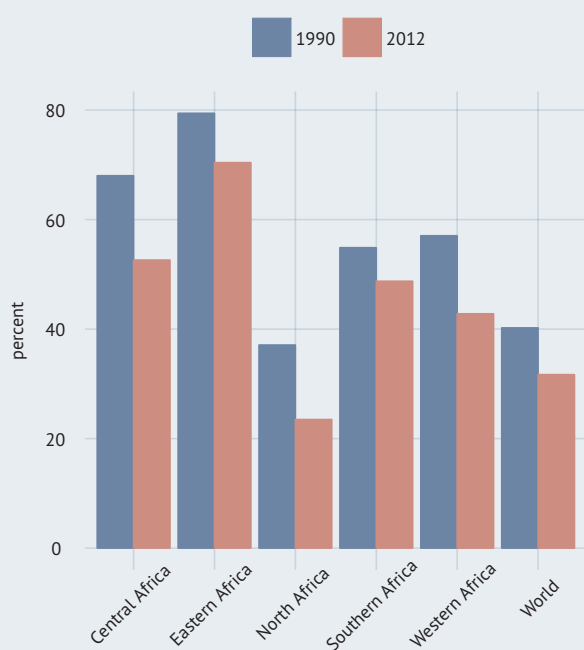
Source: United Nations Population Division.

MAP 1: Population annual growth (percent, 2000-2012)



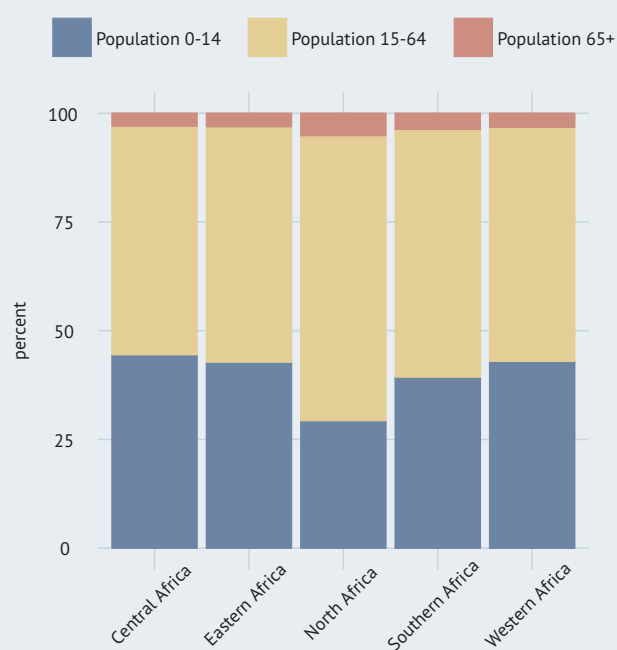
Source: United Nations Population Division.

CHART 3: Agricultural population, share of total population (1990 and 2012)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 4: Population ages 0-14, 15-64 and 65+, share of total (2010)



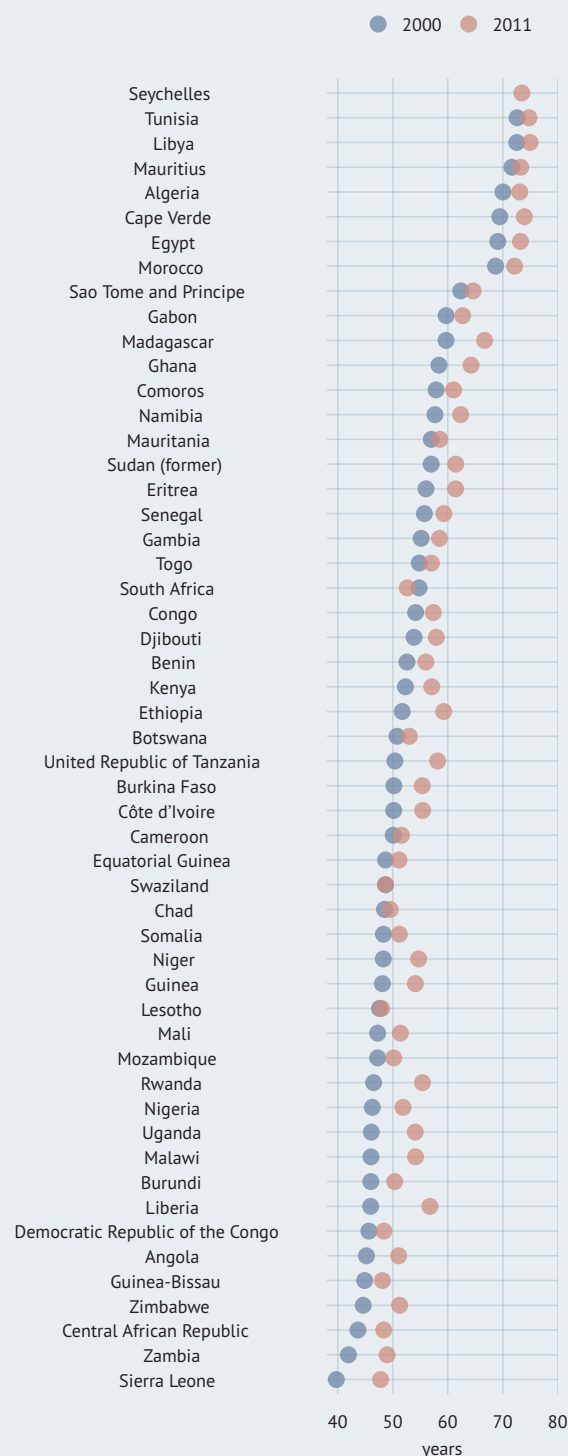
Source: United Nations Population Division.

Population growth was rapid in RAF. This increase in population could be explained by several factors including: (i) the decline in infant mortality, and (ii) the improvement of life expectancy.

The rate of infant mortality was down in all regions. At the global level, it declined by 15 per 1 000 live births between 2000 and 2012, which is encouraging. In Africa, the decline was the greatest. Indeed the drop was 22.6 per 1 000 live births for all of Africa and 22.9 per 1 000 live births for RAF, whereas it was 14.4 per 1 000 live births for RAP, 6.3 per 1 000 live births for REU, 7 per 1 000 live births for RLAC, and 9 per 1 000 live births for RNE, (Table 2). Life expectancy at birth increased worldwide during the period 2000-2012, with the exception of South Africa where it declined due to the AIDS pandemic. These results are encouraging, particularly in Africa and in RAF. However the health policies that helped achieve these results should be maintained and strengthened as infant mortality rates remained persistently high especially in Africa and also as the lowest life expectancy was recorded in Africa.

Furthermore, during the period 2010-2012, the life expectancy at birth at the global level was 70.5 years. RAF (55.9 years) recorded the weakest life expectancy at birth followed by the RAP (70.9 years). In contrast REU (76.3 years), RLAC (74.4 years), and RNE (70.6 years) had the longest life expectancy at birth which is above the global average, (Table 2). The weak life expectancy at birth in RAF is mainly as a result of the very low life expectancy at birth of Central Africa (50.8 years). East Africa, with 60.5 years, had a much better indicator than West Africa whose life expectancy at birth was 54 years and that of Southern Africa (55.1 years). As for North Africa, with a life expectancy at birth of 71.1 years, it was well above the African average and close to the global average, (chart 5). However there was a wide disparity between countries. Indeed chart 5 shows that 8 countries (Seychelles, Tunisia, Libya, Mauritius, Algeria, Cape Verde, Egypt and Morocco) had a life expectancy at birth over 70 years. For 9 countries it was between 60 and 70 years. In contrast, for 11 countries, it was less than 50 years, which was too low. Among these countries were Guinea-Bissau, and Sierra Leone in West Africa, and Central African Republic, the Chad, Democratic Republic of the Congo in Central Africa, Burundi and Somalia in East Africa, Mozambique, Lesotho, Swaziland and Zambia in Southern Africa.

CHART 5: Life expectancy at birth, selected countries (2000-2011)

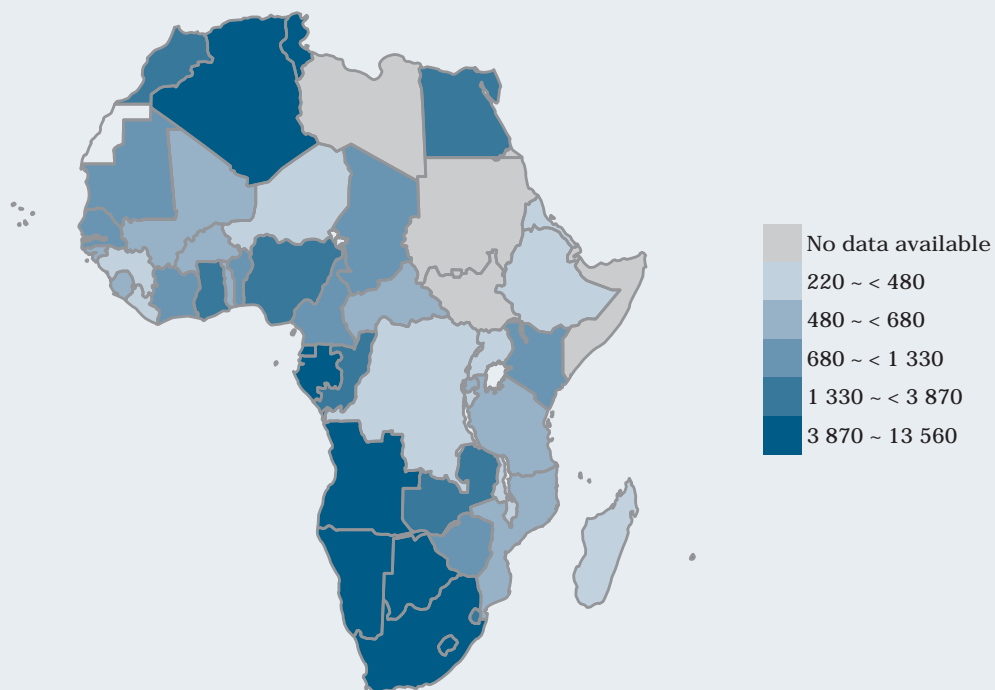


Source: World Bank (WDI).

## Further reading

- World Population Prospects: the 2011 revision ([www.un.org/esa/population/](http://www.un.org/esa/population/))
- UN Population Fund ([www.unfpa.org/](http://www.unfpa.org/))
- FAO Food and Nutrition Security in Urban Environments ([www.fao.org/ag/agn/nutrition/urban\\_security\\_en.stm](http://www.fao.org/ag/agn/nutrition/urban_security_en.stm))

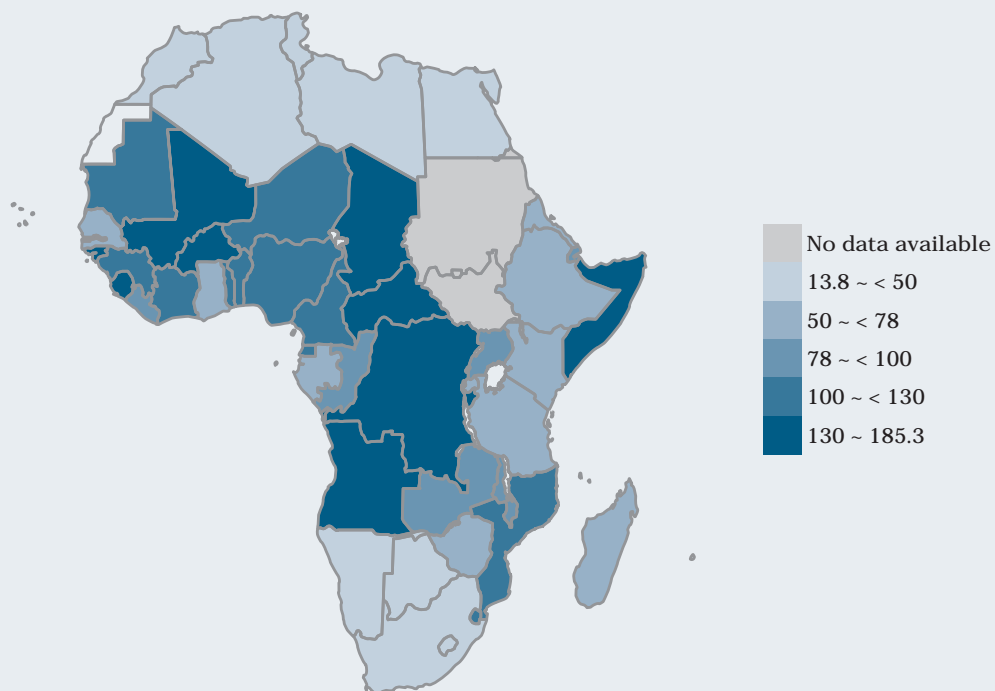
MAP 2: GNI per capita (current US\$, 2011-2012\*)




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Source: World Bank (WDI).

MAP 3: Under-5 mortality rate (per 1000 live births, 2010-2011\*)




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Source: World Bank (WDI).

## Economy

“The global economy appears to be transitioning toward a period of more stability, but slower growth. Global Gross Domestic Product (GDP), which slowed in mid-2012, is recovering, and a modest acceleration in quarterly GDP is expected during the course of 2013”. In 2012, the Gross Domestic Product (GDP) of the world was estimated at U.S. \$69 569 billion. RAF accounted for only U.S. \$1 263 billion, which was very low. Within the regions, North Africa, with U.S. \$666 billion in GDP was the highest. It was followed closely by Southern Africa (U.S. \$605 billion), then West Africa (U.S. \$401 billion), East Africa (U.S. \$151 billion) and Central Africa (U.S. \$106 billion). “Sub-Saharan Africa GDP is projected<sup>1</sup> to pick up to 4.9 percent in 2013, 5.2 percent in 2014, and 5.4 percent in 2015. Excluding, the region’s largest economy, South Africa, GDP growth for the rest of the region is expected to increase by 6.2 percent in 2013 and 2014, and further strengthen to 6.4 percent in 2015”.

At the global level, in 2009-11, the share of the value added of services was the largest (73 percent), while industry accounted for a quarter, and agriculture had the smallest share with only 2 percent. However in RAF, agriculture rather represented a significant portion of about 14.3 percent compared with the global level. Services (55 percent) and industry (30.7 percent) however, accounted for a significant part of the value added in all RAF sub-regions. The significance of the value added of the agricultural sector in RAF can be explained by the contributions from Central Africa, East Africa and West Africa. In contrast, the Southern Africa and North Africa recorded a low value added in agriculture (Chart 6). This small contribution to the added value of the agricultural sector was due to the situation of countries such as Botswana, Seychelles and South Africa. These countries are structured as developed countries where agriculture occupies a low position in the value added.

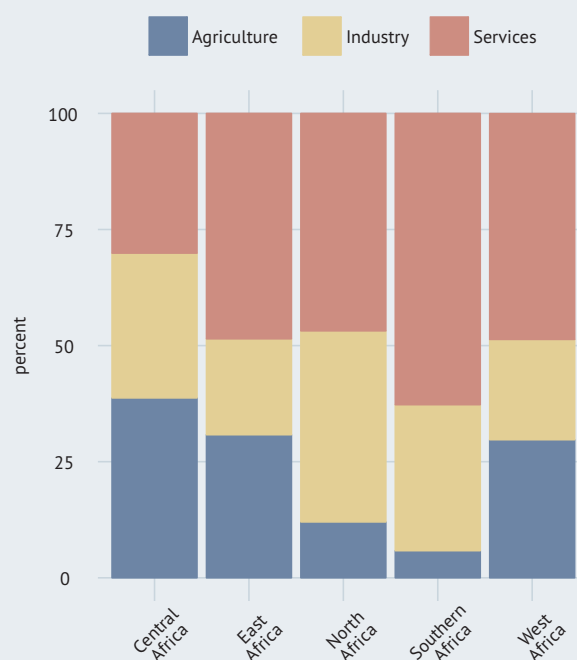
“Exports from Sub-Saharan Africa were not spared the decline in global trade during 2012 (the exception being agricultural exporters whose trade held up during the second half of the year). Industrial production slowed sharply in the second half of 2012 among oil exporting economies (Angola, Gabon, and Nigeria), partly because of domestic challenges in Nigeria”. Foreign direct investment inflows to developing countries remained robust in 2012 after the increased uncertainty in global financial markets earlier in the year.

## Further reading

- World Bank: Global Economic Prospects ([www.worldbank.org/prospects/](http://www.worldbank.org/prospects/))
- International Monetary Fund: World Economic Outlook ([www.imf.org/external/index.htm](http://www.imf.org/external/index.htm))

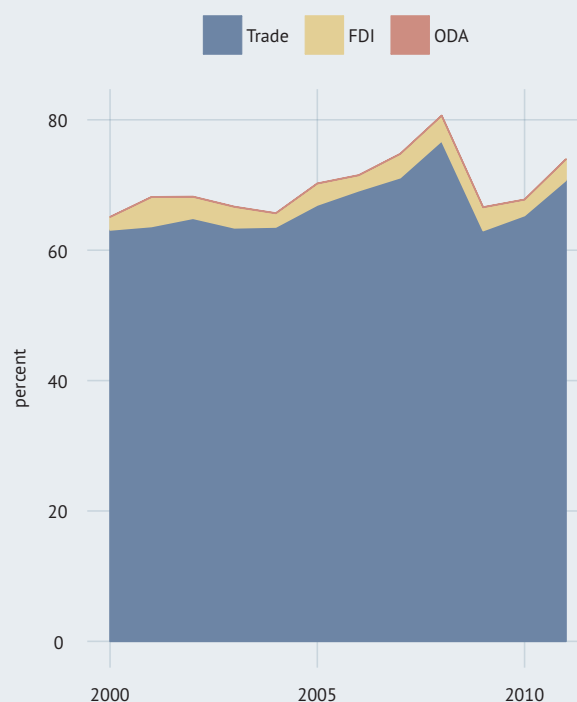
<sup>1</sup>The World Bank. 2013. Global Economic Prospects, Volume 7, June 2013, World Bank, Washington, DC.

CHART 6: Value added in agriculture, industry, and services as shares of GDP (2009)



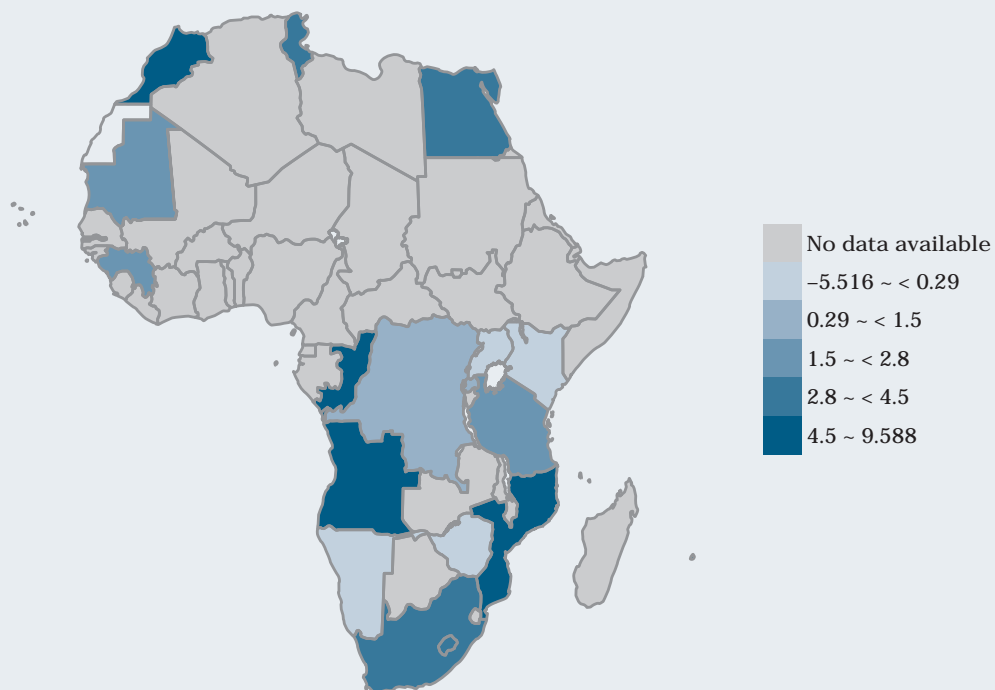
Source: World Bank (WDI).

CHART 7: Africa trade, FDI, and ODA as shares of GDP (2000-2012)



Source: World Bank (WDI).

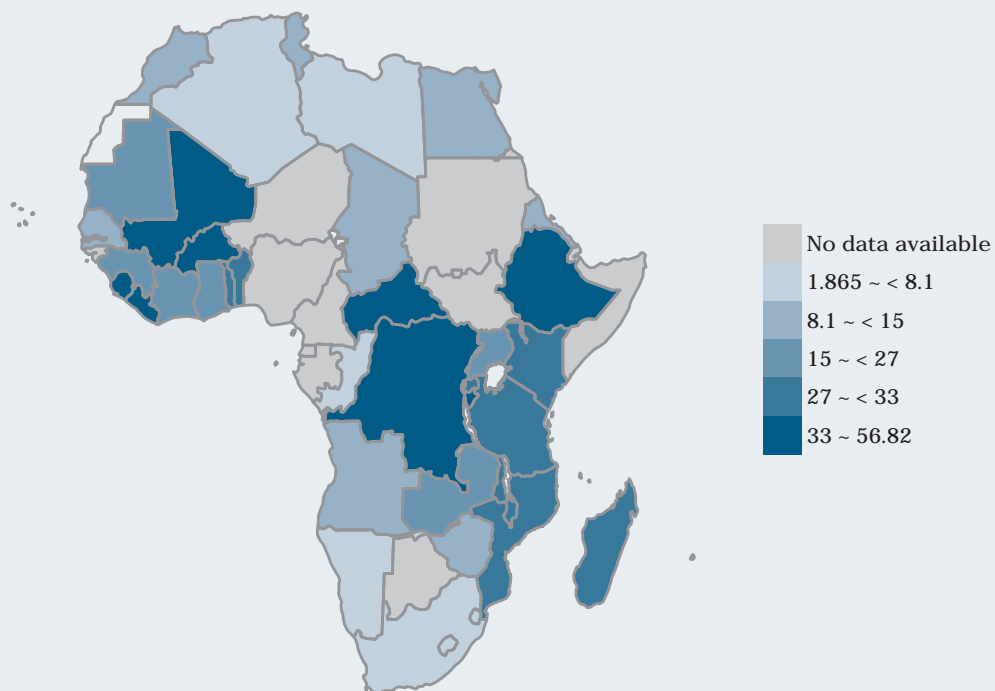
MAP 4: Agriculture, value added per worker annual growth (percent, 2011-2012)




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Source: World Bank.

MAP 5: Agriculture, value added as share of GDP (percent, 2008-2012\*)




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Source: World Bank (WDI).

## Land and Water

"The world's land and water resources are finite and under pressure from a growing population. Global figures show a relatively low portion of land and water actually used by agriculture, but these figures hide major regional variations and a series of locally important imbalances between demand and supply".<sup>2</sup>

In 2011, of the over 12 766 million hectares of land area in the world, agriculture occupied 37.4 percent, forests 31.0 percent and the others 32 percent. In RAF, agriculture accounted for 43.6 percent of the land area and forests 27.9 percent. For RAP, agriculture was 38.9 percent and forests 31.3 percent. In REU, it was 29.7 percent for agriculture and 38.3 percent for forests while in RLAC, 36.7 percent for agriculture and 46.8 percent for forests and finally in RNE, agriculture was 33.8 percent and only 1.9 percent for forest (table 4, chart 9).

Compared with other regions, in RAF, more land area was occupied by agriculture and less so by forests. This is the result of the fact that, in East Africa, almost half (49.8 percent) of the land area was reserved for agriculture and much less by forests (17.5 percent). It was also due to the significant use of land area for agriculture in Southern Africa (55.3 percent) and West Africa (47.6 percent).

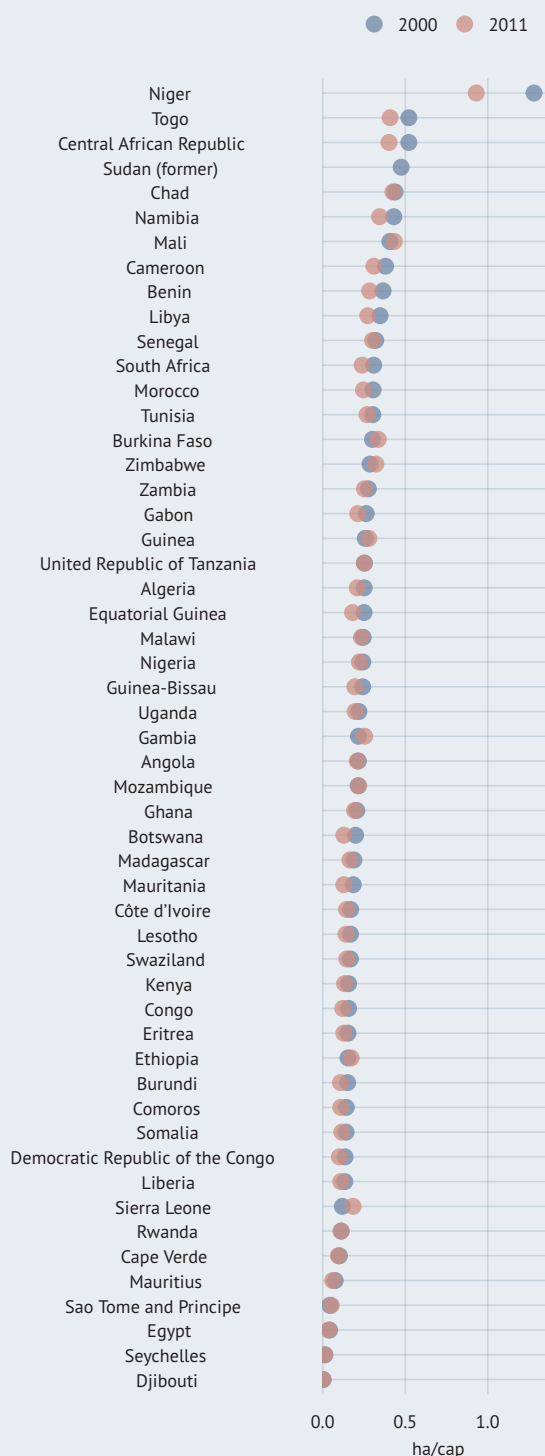
The geographical environment of North Africa is such that only a small proportion of land area (17.6 percent) is devoted to agriculture and only 1.4 percent for forests.

The area covered by agriculture is the total area of arable land, land under permanent crops and permanent pastures. In 2011, at the global level, the area covered by agriculture was divided into 68.5 percent for the Permanent pasture (the biggest part), 28.6 percent for arable land and 3.2 percent for land under permanent crops (chart 10).

RAP and REU are the two regions that have more than three quarters of agricultural land that are arable; the other regions are below the average. In RAF, arable land accounted for 20.3 percent. The shares for the different sub-regions are West Africa (29.7 percent), followed by East Africa (24.6 percent), Central Africa (19.4 percent) and last Southern Africa (10.5 percent).

In 2011, the lands under permanent crops represented 2.6 percent of agricultural land in RAF, 4.0 percent in RAP, 2.5 percent in REU, 2.7 percent for RLAC and 1.9 percent for RNE. Comparing the FAI Regions, RAP had more lands under permanent crops. RAF occupied the third position, but it should be noted that within RAF, West Africa was a special case, with highest percentage of lands under permanent crops (4.3 percent), while North Africa was 2.8 percent, Central Africa 2.4 percent, East Africa 3.7 percent and Southern Africa with only 0.5 percent.

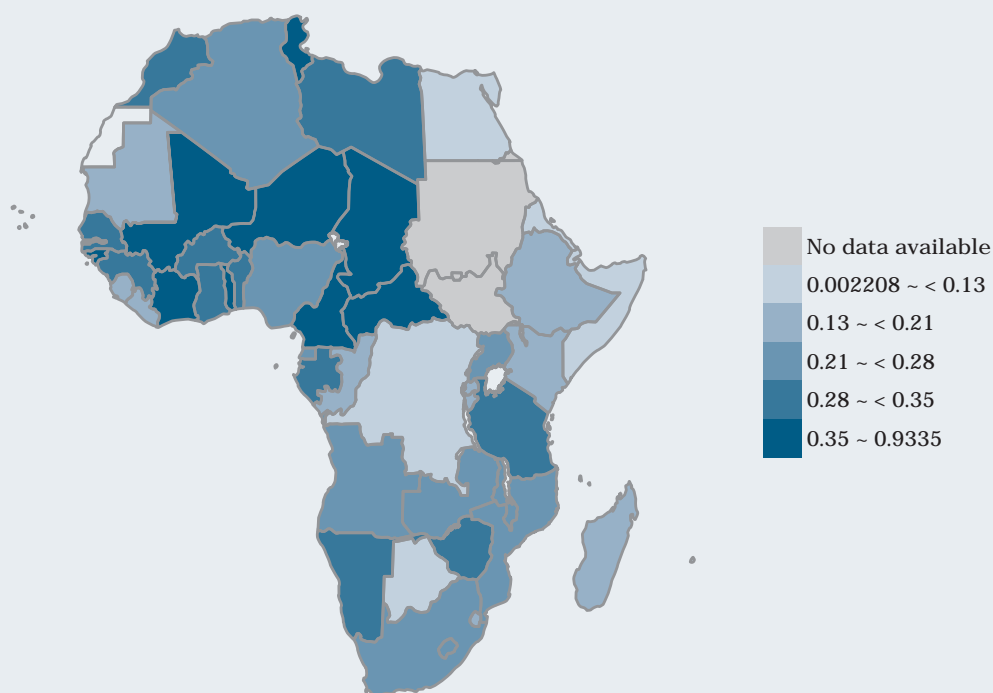
CHART 8: Arable land per capita (2000-2011)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

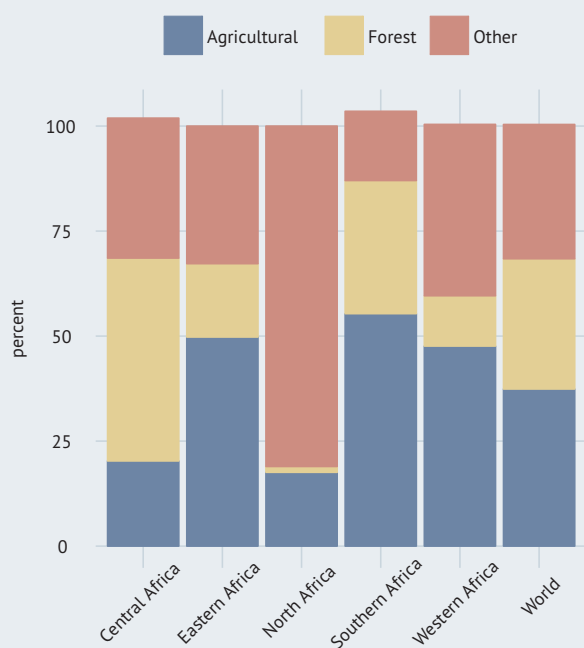
<sup>2</sup> FAO. 2011. The State of the world's land and water resources for food and agriculture (SOLAW) – Managing systems at risk. Food and Agriculture Organization of the United Nations, Rome and Earthscan, London.

MAP 6: Cropland per capita (ha/cap, 2011)



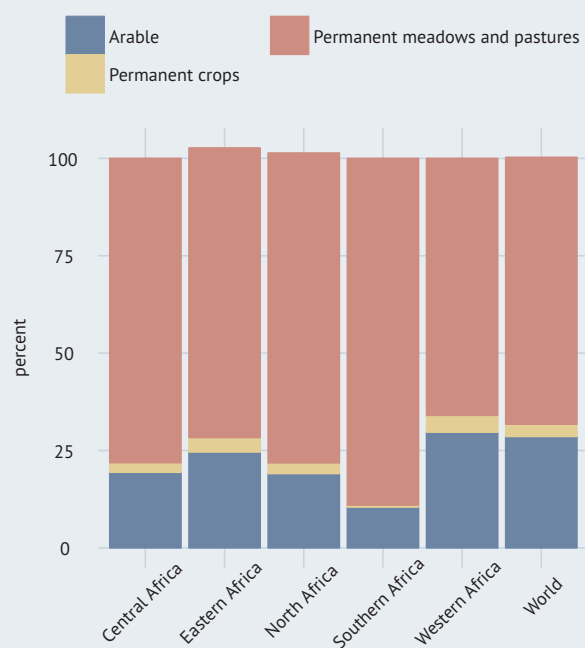
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 9: Land area (2011)



Source: FAO, Statistics Division (FAOSTAT).

CHART 10: Agricultural area (2011)



Source: FAO, Statistics Division (FAOSTAT).

RNE had the biggest land under permanent meadows and pasture (85.3 percent). RAF was second, with 77.8 percent, followed by RLAC (74.6 percent), RAP (65.4 percent) and finally REU (56.1 percent).

Regions that have contributed the most to the position of RAF were, in order of size, Southern Africa (89.0 percent of permanent meadows and pasture), North Africa (79.6 percent), Central Africa (78.1 percent), East Africa (74.3 percent) and West Africa (66.0 percent).

The Democratic Republic of the Congo had the biggest irrigation potential in 2012 with 7 million ha. It was followed by Egypt with just above 4 million ha, and Angola with almost 4 million ha (chart 11). The vast portion of equipped land for irrigation actually irrigated (hundred percent) was recorded in Egypt, Ethiopia, Namibia, South Africa, Tanzania, and Zambia (map 7).

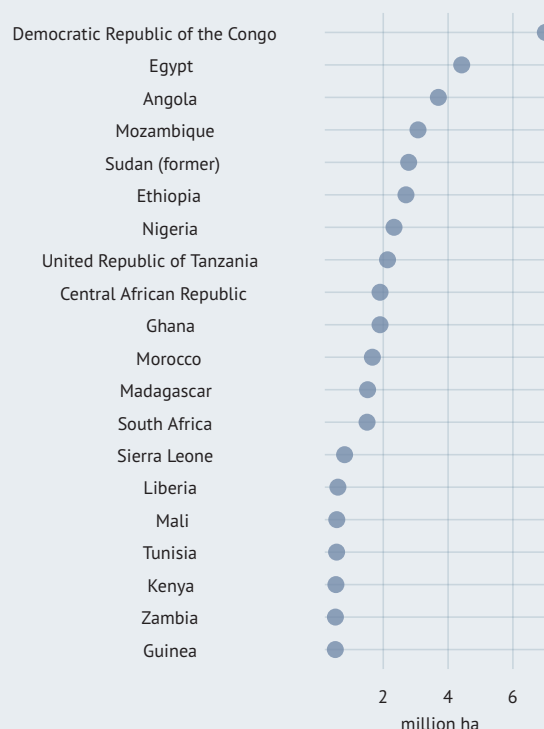
Egypt also had the largest total equipped area for irrigation in 2009 (roughly 3.5 million ha). It was followed by (former) Sudan, South Africa and Morocco. Conversely Angola, Guinea, Kenya, Mozambique and Senegal had the lowest total irrigation (chart 12).

In 2010, Cameroon, Central Africa Republic, Congo, Democratic Republic of the Congo, Gabon, and Madagascar had the biggest water resources per capita ranging from 14 300 to 205 788 m<sup>3</sup>/yr/cap. (map 8). In contrast some countries such as Burkina Faso, Ethiopia, Kenya, Nigeria, Somalia, South Africa and Zimbabwe experienced the lowest water resources per capita (110 to 1 030 m<sup>3</sup>/yr/cap).

## Further reading

- AQUASTAT, FAO's global information system on water and agriculture (<http://www.fao.org/nr/water/aquastat/main/index.stm>)
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 ([www.fao.org/nr/solaw/solaw-home/en/](http://www.fao.org/nr/solaw/solaw-home/en/))
- Bruinsma (2011)
- FAO Natural Resources and Environment Department ([www.fao.org/nr/](http://www.fao.org/nr/))

CHART 11: Irrigation potential, selected countries (2012)



Source: Land and Water Division (AQUASTAT).

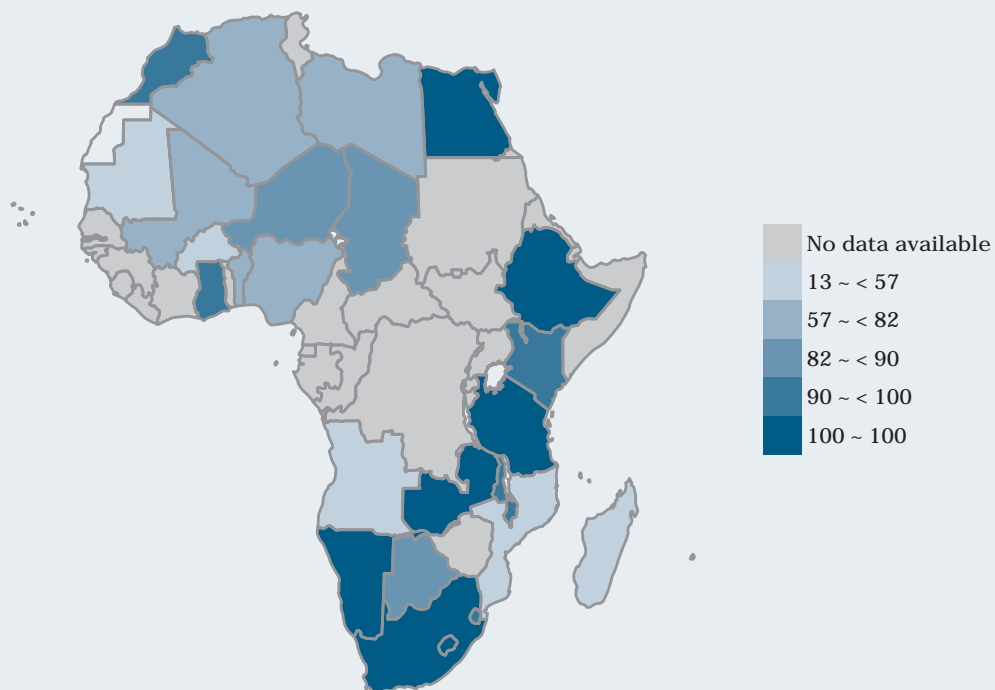
The irrigation potential area includes the area already equipped for irrigation.

CHART 12: Total equipped area (2009)

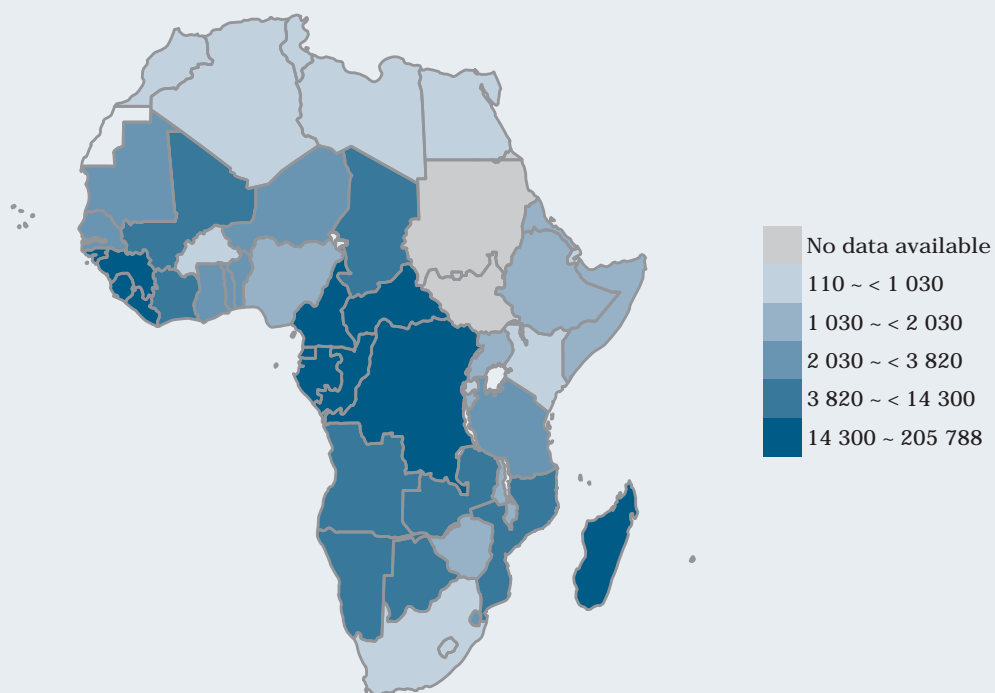


Source: Land and Water Division (AQUASTAT).

MAP 7: Share of equipped area actually irrigated (percent, 2000-2012\*)



Source: Land and Water Division (AQUASTAT).

MAP 8: Water resources per capita ( $\text{m}^3/\text{yr}/\text{cap}$ , 2010)

Source: Land and Water Division (AQUASTAT).

## Labour

“Labor force participation rate is the proportion of the population aged 15 years and above that is economically active: all people who supply labor for the production of goods and services during a specified period”.<sup>3</sup> In 2010, this rate was 50.6 percent for women and 77.3 percent for men at the global level. In RAF, women had the highest rate of labor participation (62.8 percent) followed by RAP (49.4 percent), then REU (49.9 percent), RLAC (53.3 percent), and RNE (21.6 percent). With regard to men, RLAC had the highest labor force participation rate, followed by RAP, RAF, RNE, and REU.

Within RAF, East Africa had the highest women's participation rate (68.8 percent), followed by Central Africa (68.3 percent), Southern Africa (66.9 percent), and West Africa (53.2 percent). North Africa had the lowest rate with 22.5 percent. The male labor force participation rate recorded in East Africa was very high, more than 83.1 percent; in Southern Africa, it was 76.2 percent, Central Africa (74.7 percent), North Africa (73.6 percent), and West Africa (71 percent). This exceptional high rate is due to the elevated rates recorded by Eritrea, Ethiopia, and Rwanda.

The portion of female employment in agriculture, over the total female employment was significant (more than 75 percent) over the period 2005-2010, in Burkina Faso, Madagascar, Zambia, and Ethiopia. Conversely it was low (less than 12.5 percent) in Mauritius, Algeria and South Africa (chart 13 and map 9).

With respect to child labour, the new estimates released by the ILO, “indicated that 168 million children worldwide are engaged in child labour, accounting for almost 11 percent of the child population as a whole. Children in hazardous work that directly endangers their health, safety and moral development make up more than half of all child labourers, numbering 85 million in absolute terms. The largest absolute number of child labourers is found in the Asia and the Pacific region but Sub-Saharan Africa continues to be the region with the highest incidence of child labour with more than one in five children in child labour”.<sup>4</sup>

The new estimates (ILO) indicate that the number of children engaged in child labour has declined by one third since 2000, from 246 million to 168 million. The most spectacular increase occurred in the four years between 2008 and 2012, when child labour fell by 22 percent. Nevertheless, in Africa, the portion of child labour employment as a whole remained high (range between 47 to 74.4 percent) in some countries, including Benin, Central African Republic (CAR), Ghana, Niger, Sierra Leone, Somalia, and Togo (Map 10).

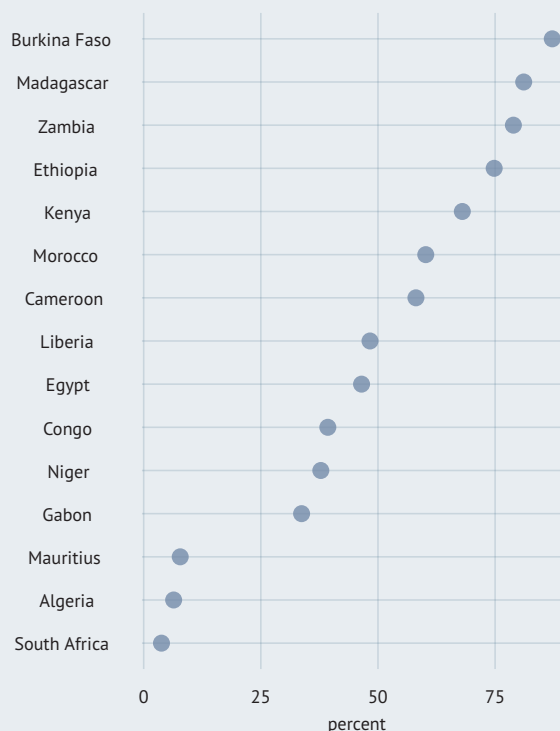
## Further reading

- FAO (2012b)

<sup>3</sup> Source: World Bank (WDI).

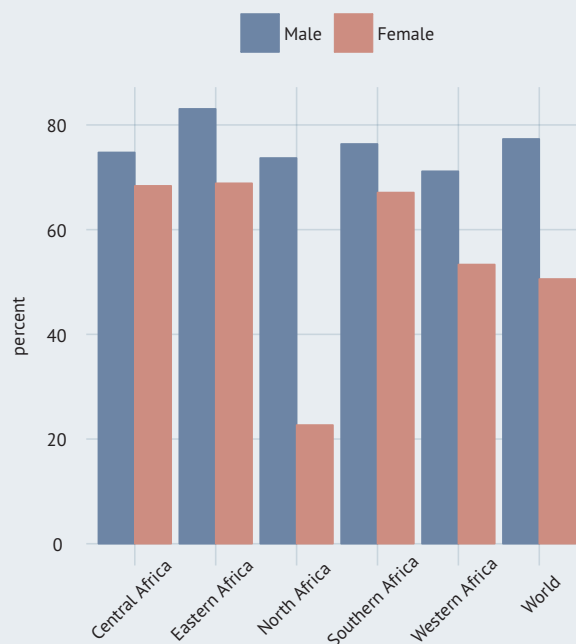
<sup>4</sup> ILO-IPEC Marking progress against child labour - Global estimates and trends 2000-2012 / International Labour Office, International Programme on the Elimination of Child Labour (IPEC) - Geneva: ILO, 2013.

CHART 13: Female employment in agriculture, share of female employment, selected countries (2005-2010\*)

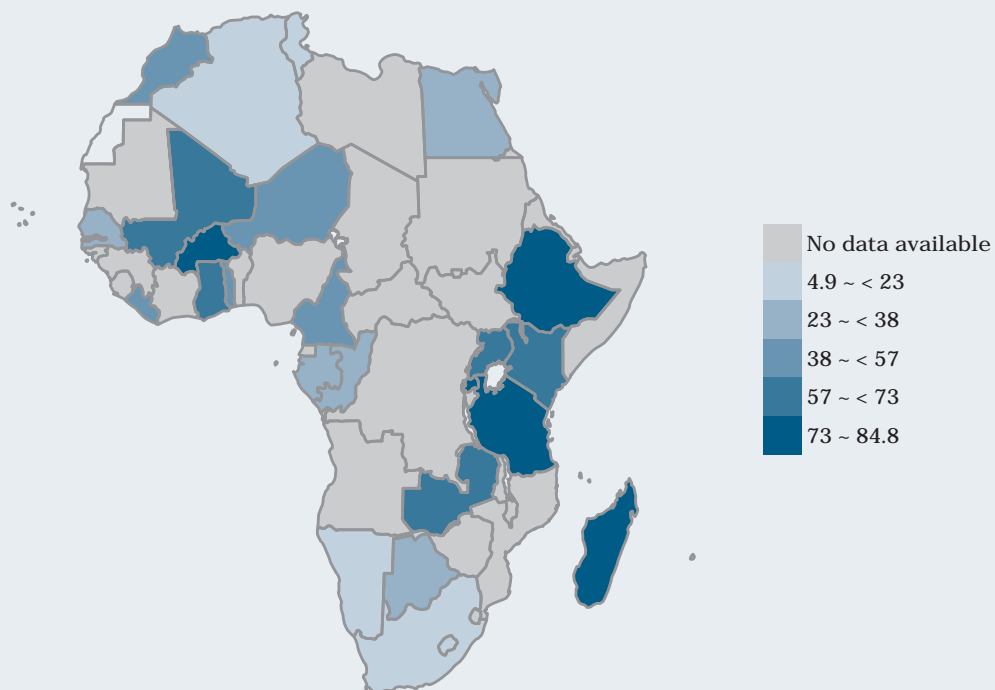


Source: World Bank (WDI).

CHART 14: Labor force participation rate by gender, ages 15+ (2011)

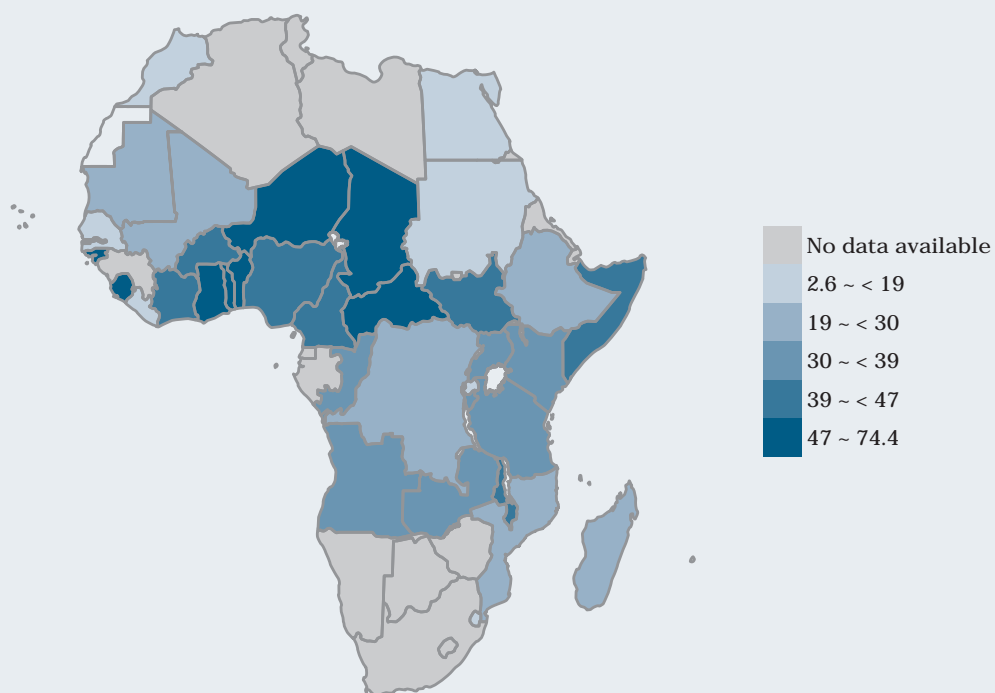


Source: World Bank (WDI).

MAP 9: **Employment in agriculture, share of total employment (percent, 2005-2010\*)**


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Source: World Bank (WDI).

MAP 10: **Children in employment, total (percent, 2000-2011\*)**


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Source: World Bank (WDI).

## Inputs

Inputs are a range of materials that may be used to enhance agricultural productivity. Most important among these are fertilizers and improved seeds.

"Fertilizers are organic or inorganic substances containing chemical elements that improve plant growth and fertility of the soil. Organic fertilizers (manure) are derived from animal products and plant residues containing organic nutrients such as nitrogen. However, the percentage content of nutrients in organic fertilizers is relatively low. In inorganic or mineral fertilizers, the nutrients are inorganic salts, obtained by extraction or physical and chemical processes".<sup>5</sup>

Inorganic fertilizers are most commonly a blend of three primary plant nutrients in varying proportions: N - nitrogen, P - phosphorus, K - Potassium. Chart 15 shows that fertilizer consumption in Africa per ha of arable land and permanent crops rose from 10.5 kg/ha in 2002 to about 11.5 kg/ha in 2011, in keeping the same share of all the primary plant nutrients (nitrogen, phosphate, potash).

Concerning fertilizer consumption in tons per ha of arable land and permanent crops, RAF Africa was the lowest consumer in inorganic fertilizers with the lowest proportions of Nitrogen, Phosphate and Potash. In contrast, RAP was the top user of fertilizer with high rate of nitrogen, phosphate and an average rate of potash. The low consumption of fertilizers in RAF in 2011, can be explained by the low consumptions of fertilizer of Central Africa, West Africa and East Africa, which had recorded less than 12 kg/ha each. In contrast, North Africa was the biggest fertilizer user per ha (almost 80 kg/ha) with substantial share of nitrogen and phosphate but a low proportion of potash. North Africa was followed by Southern Africa, with roughly 25 kg/ha (chart 16).

Egypt, Libya, Morocco, South Africa, Tunisia, and Zambia, with more than 23 ton/ha each, recorded the highest nitrogen and phosphate fertilizer consumptions per ha of arable land and permanent crops in 2011.

Pesticides can increase agricultural productivity but, when handled improperly, they are toxic to humans and other species. Use can be reduced through the practice of Integrated Pest Management (IPM), which uses information on pest populations to estimate losses and adjust pesticide doses accordingly.

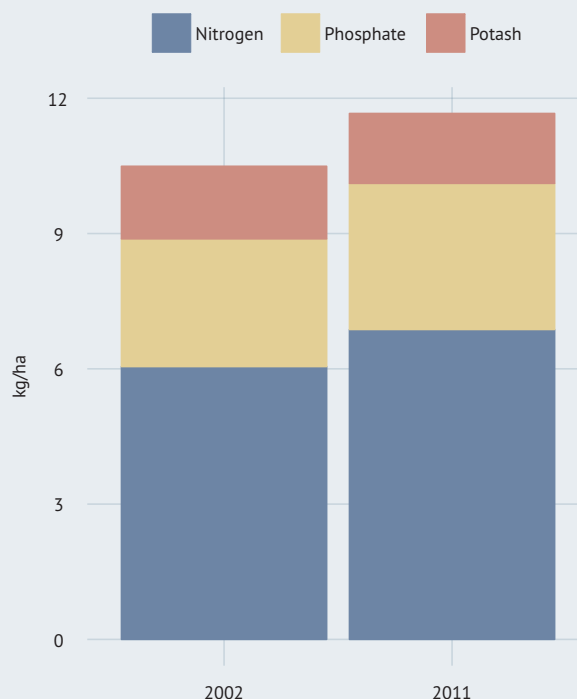
Plant breeding also plays an important role in bolstering productivity by adapting cultivated varieties to local conditions and making them more resilient to biotic (e.g. insects, diseases, viruses) and abiotic (e.g. droughts, floods) stresses.

## Further reading

- Schmidhuber, J. and Bruinsma, J. (2011)
- FAO Agriculture Department ([www.fao.org/ag/portal/index\\_en/en/](http://www.fao.org/ag/portal/index_en/en/))

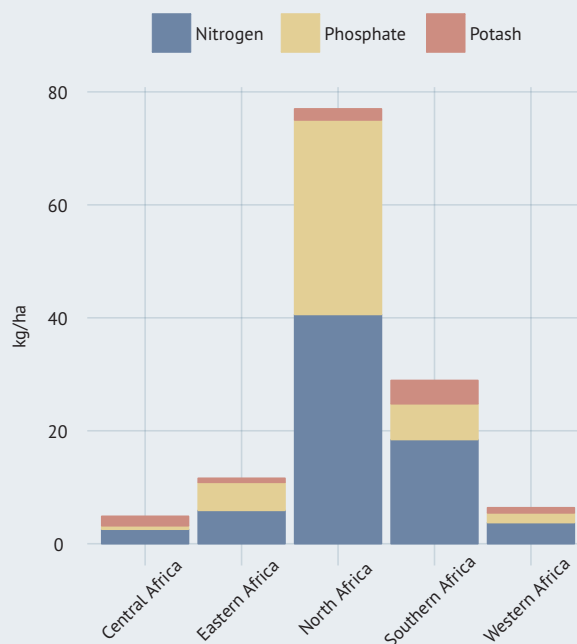
<sup>5</sup>Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, UN, 1997.

CHART 15: Africa fertilizer consumption per ha of arable area and permanent crops (2002-2011)



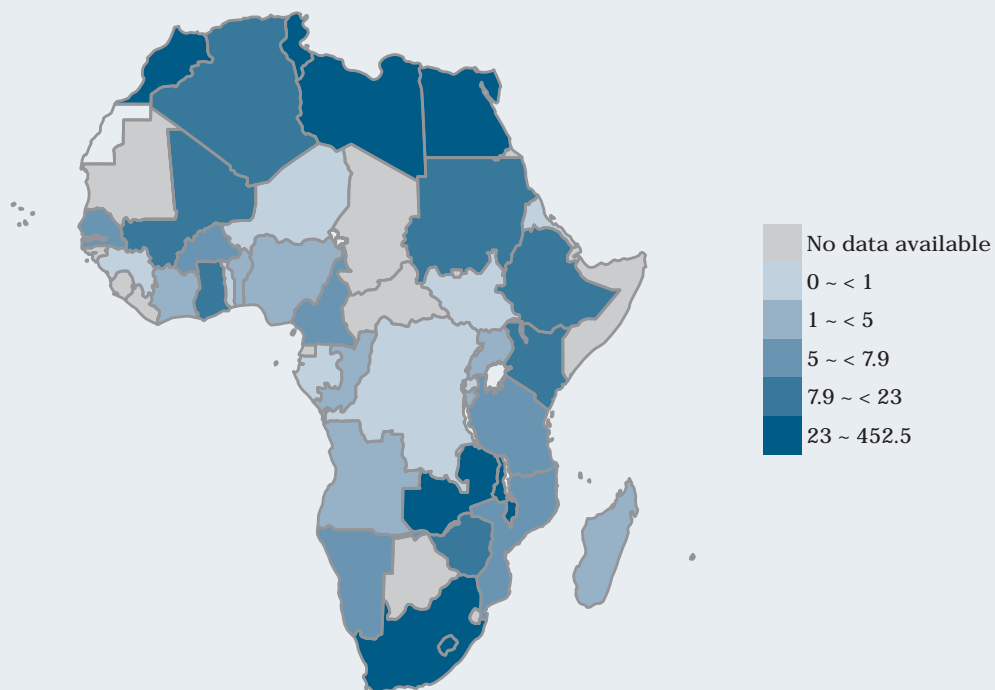
Source: FAO, Statistics Division (FAOSTAT).

CHART 16: Fertilizer consumption per ha of arable land and permanent crops (2011)



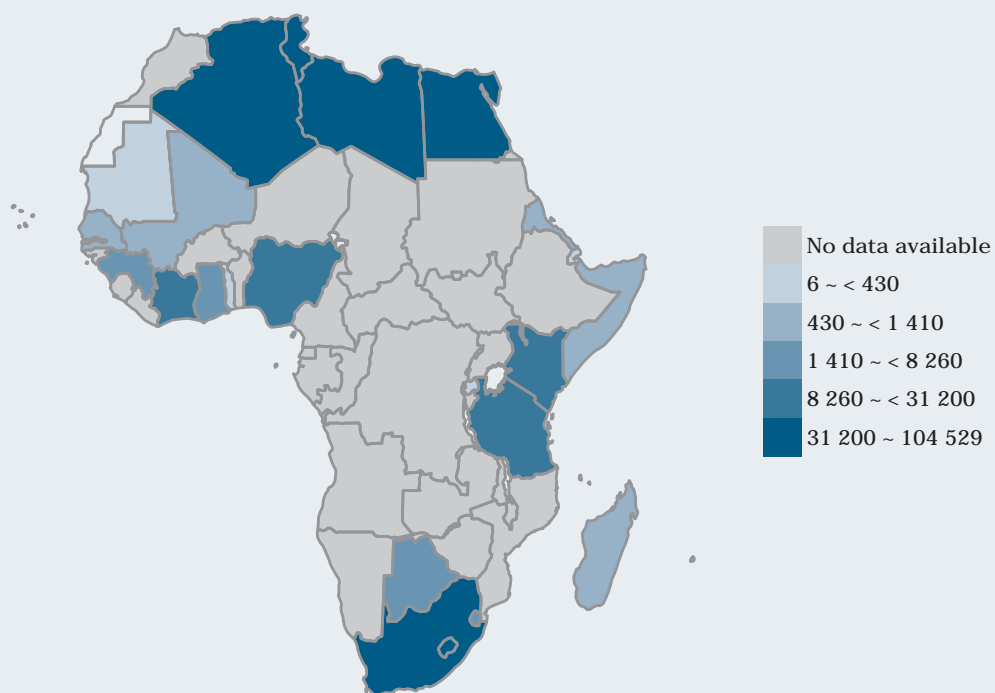
Source: FAO, Statistics Division (FAOSTAT).

MAP 11: Nitrogen and phosphate fertilizers consumption per ha of arable area and permanent crops (tonne/ha, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 12: Agricultural tractors, total (tractors, 2000-2010\*)



Source: FAO, Statistics Division (FAOSTAT).

## Capital and Investment

Given its strong impact on welfare, investment is particularly important in agriculture: countries that perform best in terms of reducing poverty and hunger are also those that have achieved higher net investment rates per agricultural worker.

The share of credit to agriculture in the added value of agriculture in Africa grew from roughly 4 percent from 2005 to around 10 percent in 2010. This is made up of agriculture, forestry and fisheries. Chart 17 shows that only the part of agriculture experienced strong growth.

From 2000 to 2010, Official Development Assistance (ODA) in terms of total receipts of RAF countries rose from 24 913 million to 42 252 million U.S. dollars, implying a growth rate of 76 percent over 10 years. Furthermore in 2010, RAF's share accounted for 6.6 percent. At the sub-regional level, the major contribution to this share came from West Africa (9.1 percent), followed by East Africa (7.8 percent). Next was North Africa, Southern Africa, with Central Africa lagging behind. Nevertheless this indicator rose rapidly in North Africa and in West Africa, (chart 18). Concerning [200B?][200B?]forestry and fishery, the contribution of ODA is minor; in RAF, it was 0.5 percent for forestry and 0.3 percent for fishery.

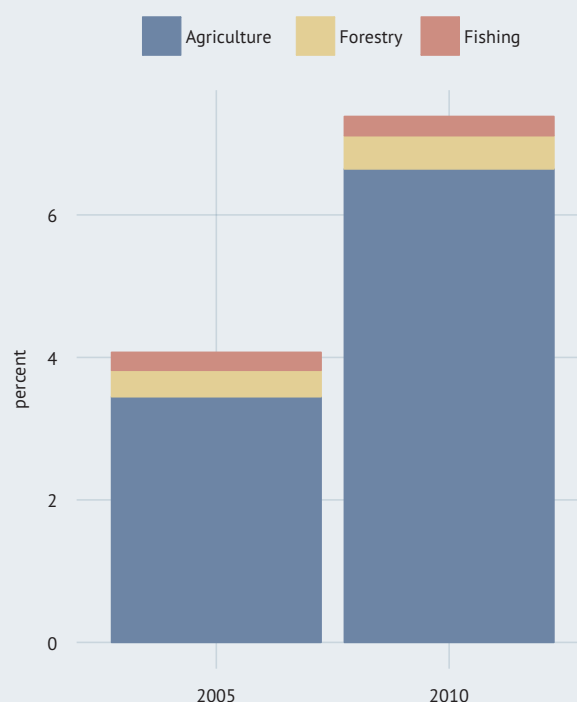
Gross Fixed Capital Formation (GFCF) in the agricultural sector includes two main components, which are gross fixed capital formation in agricultural and non-agricultural products. GFCF in agriculture products is a production for final use in the sector. GFCF of the agriculture sector in agricultural products consists exclusively of two types of products: animal (livestock fixed assets, livestock inventory) and plantations (plantation crops). GFCF in non-agricultural products corresponds to land development and structures for livestock machinery and equipment.

With respect to government expenditures in agriculture, chart 20 shows that only Zimbabwe had devoted a significant part of government expenditures to agriculture, forestry, fishing and hunting vis-à-vis total government expenditures (16 percent). All other countries spent less than 6 percent. For some countries like Egypt, Nigeria, Seychelles and Sierra Leone, this share was low (less than 2 percent) in 2010.

## Further reading

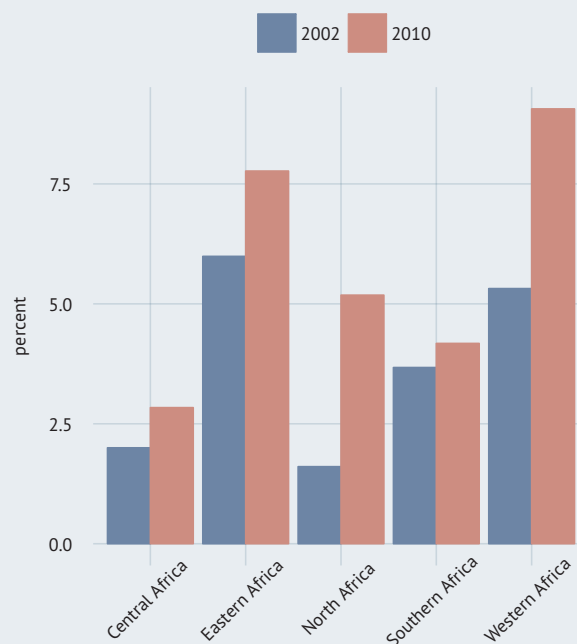
- FAO How to Feed the World in 2050: Investment Brief ([www.fao.org/wsfs/forum2050/](http://www.fao.org/wsfs/forum2050/))
- FAO Foreign Investment in Agriculture ([www.fao.org/economic/est/investments/](http://www.fao.org/economic/est/investments/))
- Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources ([www.unctad.org/en/Pages/Home.aspx](http://www.unctad.org/en/Pages/Home.aspx))
- Foreign Agriculture Investment Database ([www.fao.org/tc/policy-support/investment-policy/fdi/en/](http://www.fao.org/tc/policy-support/investment-policy/fdi/en/))

CHART 17: Africa credit to agriculture, share of added value in agriculture, selected countries (2005-2010)



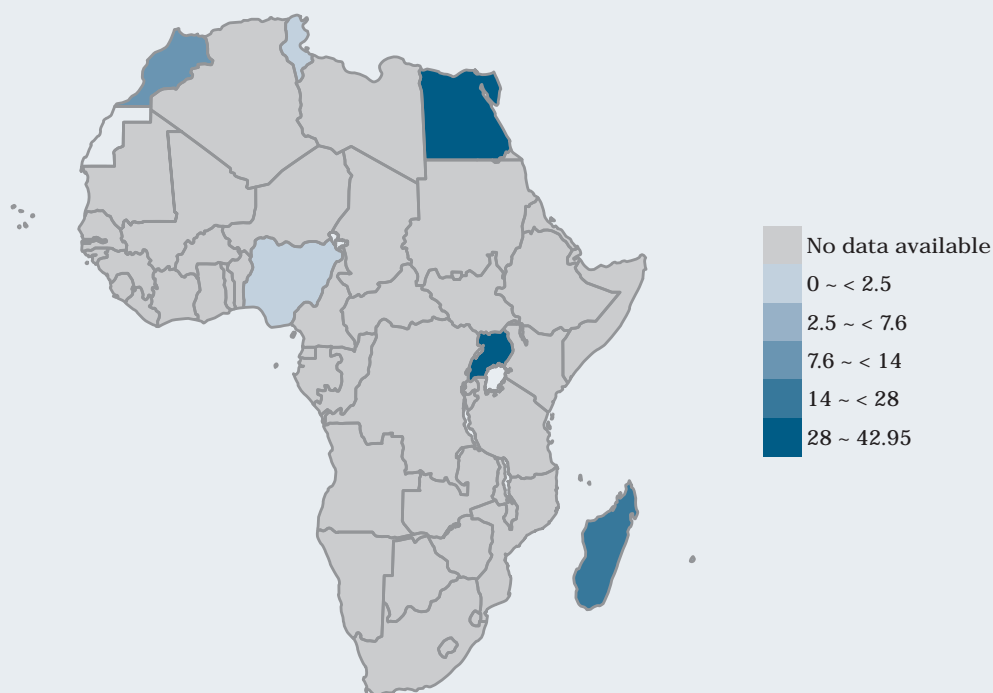
Source: FAO, Statistics Division.

CHART 18: ODA received in agriculture, total share of ODA (2002 and 2010)



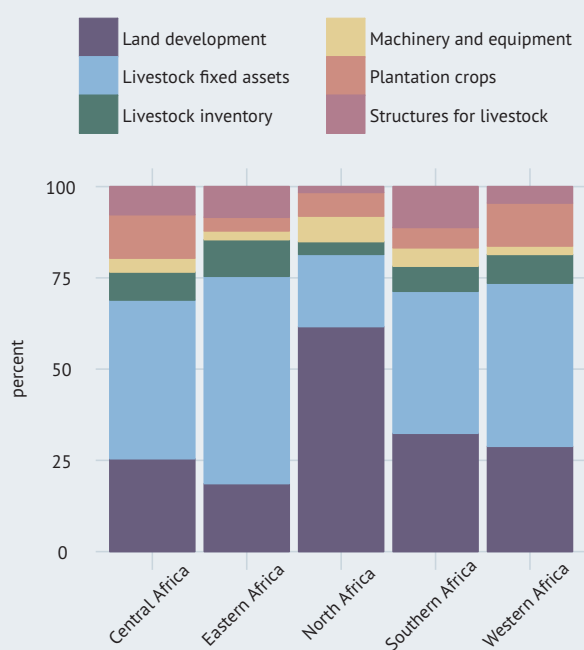
Source: FAO, Statistics Division.

MAP 13: FDI (inward flows) to agriculture (million US\$, 2010-2011\*)



Source: Foreign agriculture investment database.

CHART 19: Share of components in capital stock (2007)



Source: FAO, Statistics Division (FAOSTAT).

CHART 20: Government expenditures in agriculture, forestry, fishing, and hunting, selected countries (2010)



Source: FAO, Statistics Division (FAOSTAT).

## Innovation

In 2011, at the global level, there were 8.5 subscribers for 100 people for fixed broadband internet, 85.4 subscribers for 100 people for mobile and 17 lines for 100 people for telephone line (table 11). In Africa, information technology and communication is expanding. Indeed compared with the global level, all the indicators in Africa were low including the fixed broadband Internet (0.6 subscribers per 100 people), mobile cellular phones (61.7 subscriptions per 100 people) and fixed telephone lines (2.8 lines per 100 people).

The trends are similar in RAF. RAF, with only 0.2 subscribers for 100 people, had the less subscribers for fixed broadband internet, whereas RAP recorded 6.5, REU 20.0, RLAC 7.7, and RNE 2.3 per 100 people. As for mobile phone use, RAF also accounted for the lower subscription (53.2) while RAP had 81, REU 128.7, RLAC 105.3, and RNE 94.9.

With regards to fixed telephone lines, RAF had the smallest number of telephone lines (1.4 lines per 100 people). In contrast RAP recorded 14.1 lines per 100 people, REU 36.9, RLAC 18.1, and RNE 14.7.

Nevertheless, mobile cellular subscribers greater than internet and telephone lines for the entire Africa sub-region. North Africa recorded the greatest number of subscribers (106.1) whereas the average at the global level was 85.4 subscribers (chart 22). Annual growth in access to mobile cellular phone subscriptions was significant (more than 80 to 98.78 percent) during the period 2000-2010 in countries such as Burkina Faso, Cameroon, DR Congo, Ethiopia, Mali, Nigeria, and Niger (map 14).

What accounts for Africa lagging behind in innovation is the lack of funds for research. As shown in chart 21, with the exception of Botswana, which had an allocation of public funds for agricultural research from the agricultural GDP of equal to roughly 4.3 percent and Mauritius almost 4 percent, most of the countries in RAF spent less than 2 percent of agricultural GDP on research. Mauritania, Senegal, Ghana, Congo, Uganda, Kenya, Namibia, Botswana, South Africa devoted between 1.2 to 4.32 percent of agricultural GDP to research expenditure. These proportions, though low, are the highest (map 15).

## Further reading

- Agricultural Science and Technology Indicators ([www.asti.cgiar.org/](http://www.asti.cgiar.org/))
- ASTI Global Assessment of Agricultural R & D Spending ([www.ifpri.org/sites/default/files/publications/astiglobalassessment.pdf](http://www.ifpri.org/sites/default/files/publications/astiglobalassessment.pdf))

CHART 21: Total public agricultural research expenditure, share of agricultural GDP, selected countries (2008)



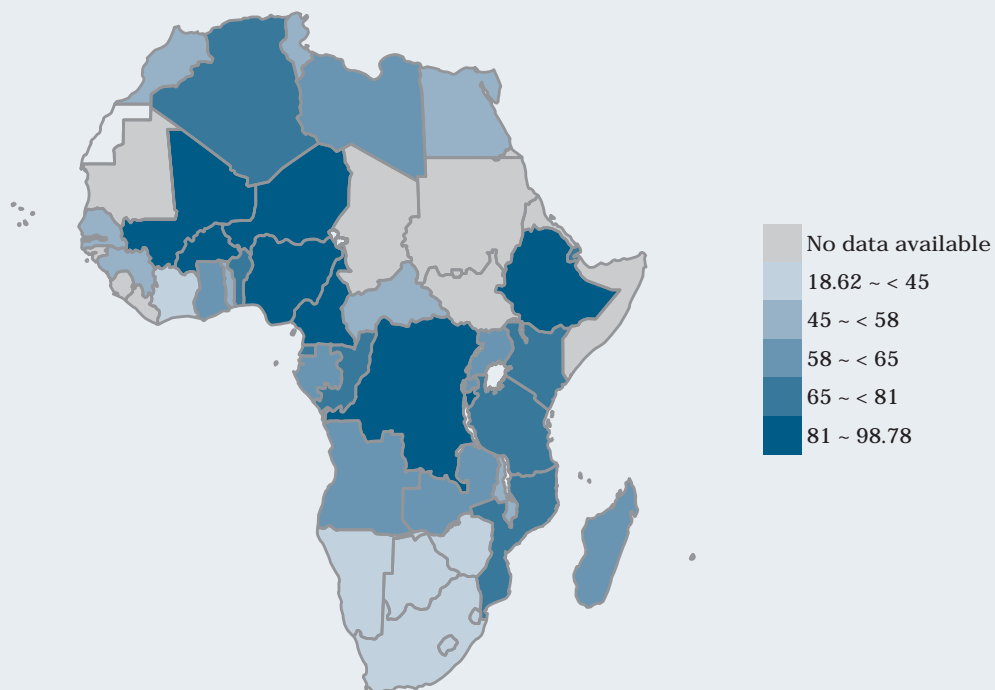
Source: ASTI.

CHART 22: Mobile cellular, broadband internet, and telephone lines subscribers (2012)



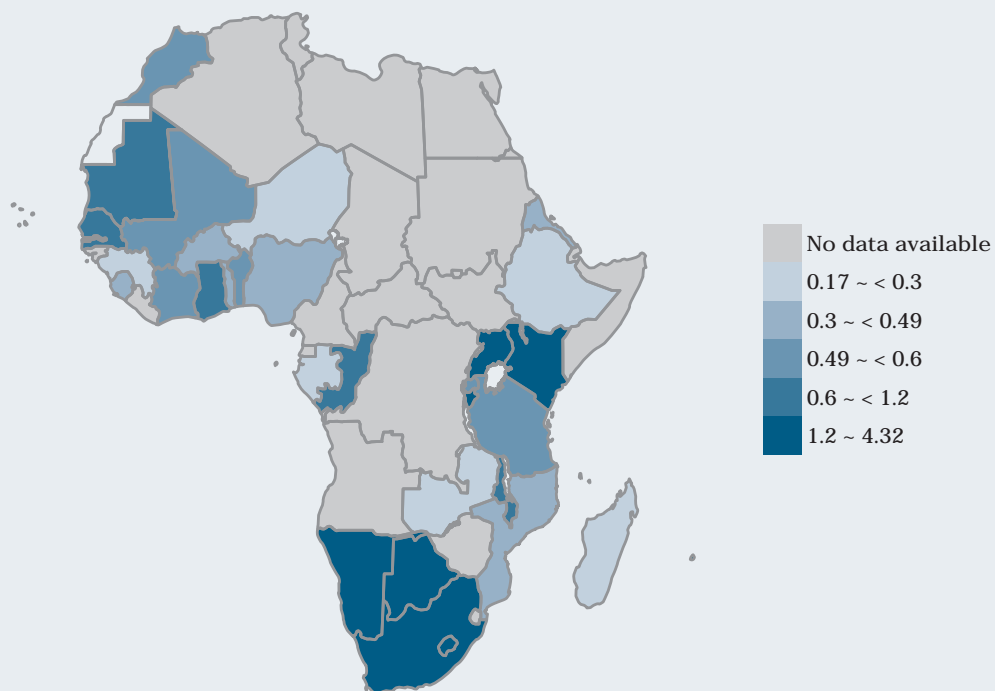
Source: World Bank (WDI).

MAP 14: Access to mobile cellular phone subscriptions annual growth (percent, 2000-2011)



Source: World Bank (WDI).

MAP 15: Total public agricultural research expenditure, share of agricultural GDP (percent, 2006-2010\*)



Source: ASTI.

TABLE 1: Population and structure

	Population										Age composition	
	total		rural		urban		density	agricultural		share of total	between	over
	thousand people 2000	thousand people 2012	percent 2000	percent 2011	percent 2000	percent 2011		percent 2000	percent 2012		0-14 percent	65+ percent
<b>Africa</b>	811 099	1 070 096	64.2	60.0	35.8	40.0	35.9	55.1	49.3		40.3	3.5
<b>North Africa</b>	141 662	170 217	48.6	44.8	51.4	55.2	28.9	30.4	23.5		29.3	5.1
Algeria	30 534	36 486	39.2	27.0	60.8	73.0	15.9	24.2	20.2		27.0	4.6
Egypt	67 648	83 958	57.2	56.5	42.8	43.5	79.8	34.7	26.6		31.5	5.0
Libya	5 231	6 469	23.7	22.3	76.3	77.7	3.5	5.8	2.7		30.4	4.3
Morocco	28 793	32 599	46.7	43.0	53.3	57.0	71.8	33.7	24.5		28.0	5.5
Sudan												
Tunisia	9 456	10 705	36.6	33.7	63.4	66.3	68.7	23.8	19.9		23.5	7.0
<b>Regional Office for Africa</b>	668 229	898 226	68.5	63.9	31.5	36.1	37.6	60.4	54.2		42.4	3.2
<b>Central Africa</b>	82 260	113 160	66.0	61.7	34.0	38.3	20.6	61.0	52.6		44.5	3.0
Cameroon	15 678	20 469	54.5	47.9	45.5	52.1	44.8	53.2	38.5		40.6	3.5
Central African Republic	3 702	4 576	62.3	60.9	37.6	39.1	7.1	72.6	61.2		40.4	4.0
Chad	8 222	11 831	78.5	78.2	21.5	21.8	9.6	75.4	63.4		45.4	2.9
Congo	3 136	4 233	41.3	36.3	58.7	63.6	12.4	40.0	30.4		40.6	3.7
Democratic Republic of the Congo	49 626	69 575	70.7	65.7	29.3	34.3	28.2	62.1	56.2		46.3	2.7
Equatorial Guinea	520	740	61.2	60.6	38.8	39.4	25.5	69.4	63.2		39.3	3.0
Gabon	1 235	1 564	19.9	13.8	80.2	86.2	6.2	37.7	24.7		35.5	4.3
Sao Tome and Principe	141	172	46.8	37.3	53.2	62.7	190.8	62.4	55.8		40.6	4.2
<b>East Africa</b>	215 542	294 609	82.5	79.1	17.5	20.9	50.9	77.0	70.4		42.8	3.1
Burundi	6 374	8 749	91.8	89.1	8.3	10.9	371.5	90.8	88.9		37.9	2.9
Djibouti	732	923	23.5	23.0	76.5	77.0	36.5	78.3	73.1		35.9	3.4
Eritrea	3 668	5 581	82.4	78.7	17.6	21.3	58.7	77.0	73.1		41.6	2.5
Ethiopia	65 578	86 539	85.3	83.0	14.7	17.0	89.4	82.3	76.2		41.5	3.3
Kenya	31 254	42 749	80.1	76.0	19.9	24.0	73.8	75.4	69.6		42.5	2.7
Rwanda	8 098	11 272	86.2	80.9	13.8	19.1	451.7	90.8	89.0		42.6	2.7
Somalia	7 399	9 797	66.8	62.3	33.2	37.7	15.8	70.1	64.6		44.9	2.7
South Sudan												
Sudan (former)	34 188	45 722					19.7	60.9	49.6		40.1	3.6
Uganda	24 213	35 621	87.9	84.4	12.1	15.6	175.9	79.0	72.2		48.4	2.5
United Republic of Tanzania	34 038	47 656	77.7	73.3	22.3	26.7	52.3	78.3	72.2		44.7	3.1
<b>Southern Africa</b>	134 710	170 114	59.9	55.8	40.1	44.2	26.0	51.4	48.7		39.4	3.7
Angola	13 926	20 163	51.0	40.8	49.0	59.2	16.2	71.8	68.7		46.6	2.5
Botswana	1 758	2 053	46.8	38.4	53.2	61.6	3.5	43.9	41.6		32.6	3.9
Comoros	562	773	72.1	72.0	28.1	28.0	376.3	73.7	68.4		42.6	2.6
Lesotho	1 964	2 217	80.0	72.4	20.0	27.6	66.8	41.7	38.2		37.4	4.3
Madagascar	15 364	21 929	72.9	67.4	27.1	32.6	37.3	74.8	69.1		43.1	3.1
Malawi	11 229	15 883	85.4	84.3	14.6	15.7	164.0	78.0	71.8		45.8	3.1
Mauritius	1 196	1 314	57.4	58.2	42.6	41.8	633.5	11.5	7.4		21.9	6.9
Mozambique	18 201	24 475	70.9	68.8	29.1	31.2	31.3	78.5	75.4		44.1	3.3
Namibia	1 896	2 364	67.6	61.6	32.4	38.4	2.7	49.1	39.4		36.4	3.7
Seychelles	79	87	49.4	46.0	50.6	54.0	190.1	78.5	73.6			
South Africa	44 760	50 738	43.1	38.0	56.9	62.0	41.7	13.9	9.1		30.1	4.6
Swaziland	1 064	1 220	77.3	78.8	22.7	21.3	70.5	35.4	27.5		38.4	3.4
Zambia	10 202	13 884	65.2	60.8	34.8	39.2	18.3	69.1	62.0		46.4	3.0
Zimbabwe	12 509	13 014	66.2	61.4	33.8	38.6	34.5	62.9	55.0		38.9	4.2
<b>West Africa</b>	235 717	320 343	61.5	55.1	38.5	44.9	51.7	50.2	42.8		43.0	3.2
Benin	6 518	9 352	61.7	55.1	38.3	44.9	86.7	54.0	42.4		43.7	3.1
Burkina Faso	12 294	17 482	82.2	73.5	17.8	26.5	58.5	92.2	92.0		45.3	2.2
Cabo Verde	437	505	46.7	37.3	53.5	62.7	121.7	23.1	15.8		31.9	6.0
Côte d'Ivoire	16 582	20 595	56.5	48.7	43.5	51.3	61.0	48.8	35.8		40.9	3.8
Gambia	1 297	1 825	51.2	42.7	48.8	57.3	171.4	79.1	75.3		43.9	2.2
Ghana	19 165	25 546	56.0	48.1	44.0	51.9	109.1	56.4	53.3		38.6	3.8
Guinea	8 344	10 481	69.0	64.6	31.0	35.4	45.4	83.8	78.9		42.9	3.3
Guinea-Bissau	1 241	1 580	64.1	56.1	35.9	44.0	57.8	82.5	78.7		41.3	3.3
Liberia	2 847	4 245	55.7	51.8	44.3	48.2	42.4	67.5	60.8		43.5	2.8
Mali	11 295	16 319	71.9	65.1	28.1	34.9	11.8	80.7	73.6		47.2	2.2
Mauritania	2 643	3 623	60.0	58.5	40.0	41.5	3.6	52.7	49.9		39.9	2.7
Niger	10 922	16 644	83.8	82.2	16.2	17.8	13.0	85.7	82.3		49.0	2.2
Nigeria	123 689	166 629	57.6	50.4	42.4	49.6	180.3	33.3	23.4		42.8	3.4
Senegal	9 506	13 108	59.7	57.5	40.3	42.5	69.2	73.5	69.6		43.7	2.4
Sierra Leone	4 143	6 126	64.2	60.8	35.8	39.2	81.9	65.0	58.9		43.0	1.9
Togo	4 794	6 283	67.1	62.0	32.9	38.0	119.0	59.7	52.1		39.6	3.4
<b>CEMAC</b>	32 493	43 413	59.0	55.4	41.0	44.6	14.8	59.4	46.8		41.7	3.4
<b>CEN-SAD</b>	393 894	518 668	58.8	54.4	41.2	45.6	38.6	46.8	39.4		39.4	3.7
<b>COMESA</b>	348 815	465 262	73.4	70.9	26.6	29.1	41.0	64.4	58.4		40.9	3.4
<b>ECCAS</b>	102 560	142 072	65.6	60.4	34.4	39.6	21.2	64.3	57.1		44.4	2.9
<b>ECOWAS</b>	233 074	316 720	61.5	55.1	38.5	44.9	61.6	50.2	42.7		43.0	3.2
<b>IGAD</b>	167 032	226 932	83.1	80.1	16.9	19.9	47.0	75.5	68.4		42.6	3.1
<b>SADC</b>	217 812	286 572	65.1	61.1	34.9	38.9	28.9	58.0	54.4		41.9	3.3
<b>UEMOA</b>	73 152	101 363	69.0	63.7	31.0	36.3	28.1	71.5	65.9		44.5	2.7
<b>UMA</b>	76 657	89 882	41.3	34.5	58.7	65.5	15.6	27.4	21.7		27.7	5.1
<b>Regional Office for Asia and the Pacific</b>	3 640 853	4 110 736	50.0	47.3	50.0	52.7	81.2	34.9	30.2		25.1	7.7
<b>Regional Office for Europe and Central Asia</b>	866 961	900 803	31.7	29.6	68.3	70.4	33.5	11.1	7.8		17.4	14.4
<b>Regional Office for Latin America and the Caribbean</b>	516 162	597 748	24.7	21.0	75.3	79.0	29.7	20.6	15.2		27.9	6.8
<b>Regional Office for the Near East</b>	338 485	432 218	42.6	38.8	57.4	61.2	29.2	29.8	22.7		31.5	4.3
<b>World</b>	6 100 688	7 028 688	50.5	47.5	49.7	52.6	53.5	35.7	31.7		28.5	7.5

TABLE 2: Demographic indicators

	GNI per capita		Infant mortality		Under-5 mortality		Life expectancy at birth	
	current US\$		per 1,000 live births		per 1,000 live births		total	
	US\$ 2000	US\$ 2012	rate 2000-01*	rate 2010-12*	rate 2000-01*	rate 2010-12*	years 2000-01*	years 2010-12*
<b>Africa</b>	673	1 614	82.9	60.3	134.6	91.4	53.7	58.4
<b>North Africa</b>	1 512	3 084	40.2	26.2	54.6	34.5	69.2	71.1
Algeria	1 540		28.2	17.8	32.8	20.8	69.1	70.8
Egypt	1 470	3 000	33.8	18.7	41.9	22.0	68.8	70.7
Libya			23.6	13.8	27.5	16.1	72.3	75.0
Morocco	1 320	2 950	40.6	27.7	48.1	32.3	68.3	70.4
Sudan			66.2	50.6	103.0	75.5		
Tunisia	2 310	4 150	23.6	14.4	28.1	16.8	72.8	74.8
<b>Regional Office for Africa</b>	496	1 383	86.1	63.2	140.6	96.1	50.5	55.9
<b>Central Africa</b>	276	769	89.0	73.0	140.4	110.4	48.0	50.8
Cameroon	600	1 170	89.4	63.0	145.8	98.5	51.8	54.1
Central African Republic	270	490	108.0	92.8	163.3	133.1	43.8	48.8
Chad	180	740	104.3	91.3	186.6	154.4	46.8	50.2
Congo	570	2 550	74.6	63.9	118.0	98.9	52.4	57.8
Democratic Republic of the Congo	90	220	112.3	102.2	171.2	150.4	46.7	49.3
Equatorial Guinea	1 260	13 560	96.7	74.3	139.0	103.6	47.8	52.1
Gabon	3 100	10 070	55.5	43.9	84.9	64.7	59.5	62.7
Sao Tome and Principe		1 320	54.9	39.0	83.1	55.0	63.5	66.0
<b>East Africa</b>	258	681	85.9	56.9	138.0	85.7	52.7	60.5
Burundi	130	240	91.1	68.9	147.9	107.8	48.5	53.1
Djibouti	760		83.9	67.3	106.8	83.2	57.1	60.8
Eritrea	180	450	55.9	38.3	84.9	53.8	56.6	61.7
Ethiopia	130	410	86.6	48.6	139.7	71.9	52.9	62.3
Kenya	420	850	67.2	49.8	108.4	75.5	52.8	60.4
Rwanda	230		100.6	40.8	167.7	58.9	49.1	62.9
Somalia			103.3	93.1	170.6	151.6	51.2	54.4
South Sudan			103.9	68.8	171.8	107.7		
Sudan (former)	330	1 450					58.3	61.7
Uganda	260	440	85.4	48.9	140.1	74.0	49.0	58.0
United Republic of Tanzania	310	570	75.4	39.3	122.6	57.3	50.5	60.1
<b>Southern Africa</b>	1 327	3 416	76.9	55.7	121.1	83.7	50.5	55.1
Angola	420	4 580	119.8	102.2	201.3	168.5	46.0	51.1
Botswana	3 120	7 430	54.5	42.9	86.9	56.0	49.4	46.7
Comoros	410	840	70.9	59.3	98.4	80.1	58.1	60.4
Lesotho	580	1 380	81.0	72.7	116.5	102.1	45.7	48.2
Madagascar	250	430	66.0	42.2	102.6	60.6	59.1	63.8
Malawi	150	320	96.5	49.2	162.4	77.1	46.3	54.1
Mauritius	3 870	8 570	15.0	12.8	17.1	14.9	71.8	73.3
Mozambique	230	510	106.9	67.2	157.6	96.1	47.5	49.5
Namibia	1 950	5 640	47.9	29.2	73.9	41.3	54.4	63.3
Seychelles	7 390	11 640	11.9	11.5	13.9	13.3		73.5
South Africa	3 050	7 610	52.3	34.2	76.7	47.2	54.6	55.3
Swaziland	1 520	2 860	80.7	57.0	124.7	84.9	47.4	48.7
Zambia	310	1 350	95.3	58.7	161.0	95.0	42.5	55.8
Zimbabwe	490	680	59.9	58.6	101.4	95.2	43.3	55.9
<b>West Africa</b>	317	1 165	91.4	67.6	156.5	104.3	49.4	54.0
Benin	360	750	88.5	60.4	143.2	92.8	55.5	58.9
Burkina Faso	250	670	95.2	67.7	183.2	108.0	50.9	55.4
Cabo Verde	1 310	3 810	29.1	19.5	35.5	22.9	70.0	74.2
Côte d'Ivoire	670	1 220	97.4	78.1	142.9	110.7	46.3	50.0
Gambia	670	510	61.1	49.9	111.7	75.6	55.5	58.4
Ghana	340	1 550	64.8	49.9	100.6	74.2	57.1	60.8
Guinea	380	460	99.3	67.5	163.1	105.3	51.3	55.6
Guinea-Bissau	160	550	103.3	82.9	170.6	133.0	51.6	53.8
Liberia	180	370	112.2	58.2	164.1	78.4	52.5	59.9
Mali	250	660	113.1	81.4	212.4	132.7	49.5	54.2
Mauritania	510	1 110	74.4	65.8	108.9	86.5	59.8	61.2
Niger	170	370	97.7	64.8	217.4	119.5	51.4	57.5
Nigeria	270	1 430	109.3	80.1	181.9	127.9	46.9	51.7
Senegal	510	1 040	67.7	46.2	132.5	63.0	58.2	63.0
Sierra Leone	160	580	140.9	120.1	230.8	187.2	38.8	45.1
Togo	300	500	75.4	63.5	119.5	98.3	53.6	55.8
<b>CEMAC</b>	559	1 648	89.6	72.7	143.2	111.5	49.9	53.1
<b>CEN-SAD</b>	640	1 666	87.2	65.4	145.5	100.3	55.6	59.0
<b>COMESA</b>	492	1 084	77.0	52.7	121.3	78.1	55.0	60.7
<b>ECCAS</b>	286	1 278	92.9	75.9	148.5	116.8	47.7	51.0
<b>ECOWAS</b>	315	1 165	92.4	67.7	159.3	105.4	49.3	53.9
<b>IGAD</b>	253		82.4	58.7	130.7	88.3	53.5	60.8
<b>SADC</b>	889	2 174	80.4	58.3	127.4	87.9	49.6	54.5
<b>UEMOA</b>	379	774	93.0	68.3	168.6	108.3	51.3	55.8
<b>UMA</b>	1 515		43.9	32.1	58.5	40.2	69.2	71.0
<b>Regional Office for Asia and the Pacific</b>	2 202	5 612	44.8	30.4	58.7	38.0	68.3	70.9
<b>Regional Office for Europe and Central Asia</b>	11 912	24 003	19.1	12.8	22.8	14.9	73.4	76.3
<b>Regional Office for Latin America and the Caribbean</b>	3 847	9 145	26.4	19.4	32.7	23.3	71.8	74.4
<b>Regional Office for the Near East</b>	1 966		34.6	25.6	46.1	32.7	68.5	70.6
<b>World</b>	5 323	10 116	53.8	38.8	81.5	55.4	67.9	70.5

TABLE 3: Economy

	Gross domestic product		Value added, share of GDP			Share of GDP		
	total current US\$		agriculture	industry	services	trade	FDI	ODA
	billion US\$ 2000	billion US\$ 2012	percent 2010-12*	percent 2010-12*	percent 2010-12*	percent 2011-12*	percent 2011-12*	percent 2011
<b>Africa</b>	589	1 928				67.6	2.5	
<b>North Africa</b>	247	666				62.1	0.9	0.0
Algeria	55	208	6.9	62.1	31.0	52.4	1.4	0.0
Egypt	100	257	13.9	36.7	49.3	44.8	-0.2	0.0
Libya	34							
Morocco	37	96	15.1	29.9	55.1	86.6	2.5	0.0
Sudan		59						0.0
Tunisia	21	46	8.7	29.9	61.4	106.6	0.9	0.0
<b>Regional Office for Africa</b>	342	1 263				70.8	3.2	0.0
<b>Central Africa</b>	25	106				92.2	8.0	0.1
Cameroon	9	25				65.4	1.4	0.0
Central African Republic	1	2				35.6	5.0	0.1
Chad	1	11				66.2	17.5	0.0
Congo	3	14	3.4	76.6	20.0	122.1	20.3	0.0
Democratic Republic of the Congo	4	18	45.6	21.8	32.6	146.3	10.2	0.4
Equatorial Guinea	1	18				139.9	4.4	0.0
Gabon	5	19					3.9	0.0
Sao Tome and Principe	0	0				68.8	8.5	0.3
<b>East Africa</b>	53	151				58.5	2.6	0.1
Burundi	1	2	34.7	18.3	47.0	47.0	0.1	0.2
Djibouti	1							
Eritrea	1	3				37.5	0.7	0.1
Ethiopia	8	43	46.4	10.5	43.1	48.7	2.0	0.1
Kenya	13	37	29.3	17.4	53.3	71.8	1.0	0.1
Rwanda	2	7	33.0	15.9	51.1	46.0	1.7	0.2
Somalia								
South Sudan		9						0.1
Sudan (former)	12		24.5	28.1	47.4	34.8	4.8	
Uganda	6	20	23.4	25.4	51.2	58.1	8.7	0.1
United Republic of Tanzania	10	28	27.7	25.1	47.2	81.3	4.6	0.1
<b>Southern Africa</b>	179	605				69.3	1.7	0.0
Angola	9	114	9.3	62.1	28.6	108.3	-2.9	0.0
Botswana	6	14	3.0	34.9	62.2	95.1	2.0	0.0
Comoros	0	1				67.1	1.1	0.1
Lesotho	1	2	7.4	34.6	58.0	154.5	5.2	0.1
Madagascar	4	10				63.2	9.2	0.0
Malawi	2	4	30.2	19.3	50.5	69.1	1.6	0.1
Mauritius	5	10	3.6	25.8	70.6	119.9	2.4	0.0
Mozambique	4	15	30.3	23.3	46.4	75.7	16.5	0.2
Namibia	4	13				95.0	7.7	0.0
Seychelles	1	1	2.2	13.6	84.2	144.7	13.1	0.0
South Africa	133	384	2.6	28.4	69.0	59.6	1.5	0.0
Swaziland	2	4	7.5	47.7	44.8	141.3	2.4	0.0
Zambia	3	21	19.5	37.3	43.2	83.1	10.3	0.1
Zimbabwe	7	11	15.7	36.9	47.4	137.3	4.0	0.1
<b>West Africa</b>	84	401				76.0	4.6	0.0
Benin	2	8	32.4	13.2	54.3	41.9	1.6	0.1
Burkina Faso	3	10	33.8	24.3	41.9	49.7	0.1	0.1
Cabo Verde	1	2	10.4	17.8	71.8	114.8	2.8	0.1
Côte d'Ivoire	10	25					1.4	0.1
Gambia	1	1	18.9	13.5	67.7	76.0	4.0	0.2
Ghana	5	41	22.7	27.3	50.0	102.1	8.1	0.0
Guinea	3	7	22.1	44.8	33.1	78.4	18.8	0.0
Guinea-Bissau	0	1					2.0	0.1
Liberia	1	2	53.1	10.2	36.7	120.8	84.9	0.5
Mali	2	10				61.8	1.7	0.1
Mauritania	1	4	15.5	50.1	34.4	152.3	1.1	0.1
Niger	2	7				76.5	16.8	0.1
Nigeria	46	263				75.2	3.6	0.0
Senegal	5	14	14.8	23.7	61.4	68.0	2.0	0.1
Sierra Leone	1	4	56.7	8.3	35.0	69.9	24.3	0.1
Togo	1	4	31.3	15.8	52.8	97.6	1.5	0.2
<b>CEMAC</b>	21	88				72.6	7.6	0.0
<b>CEN-SAD</b>	287	872				63.8	2.7	0.0
<b>COMESA</b>	204	518	18.7	31.9	49.4	58.2	1.7	0.0
<b>ECCAS</b>	35	223				94.7	2.5	0.0
<b>ECOWAS</b>	82	397	27.9	22.5	49.7	75.0	4.6	0.0
<b>IGAD</b>	41	172						0.1
<b>SADC</b>	193	650	6.8	30.4	62.8	71.9	2.0	0.0
<b>UEMOA</b>	26	78				63.5	2.6	0.1
<b>UMA</b>	148	354	10.0	45.2	44.8	71.2	1.6	0.0
<b>Regional Office for Asia and the Pacific</b>	8 450	23 671	4.9	31.4	63.7	47.6	2.3	0.0
<b>Regional Office for Europe and Central Asia</b>	9 704	21 289	1.8	26.2	72.0	83.6	1.8	
<b>Regional Office for Latin America and the Caribbean</b>	2 080	5 614	6.3	32.4	61.3	46.6	3.0	0.0
<b>Regional Office for the Near East</b>	818					82.0	1.4	
<b>World</b>	31 979	69 569				58.6	2.5	

TABLE 4: Land

	Land area				Agricultural area				Cropland per capita
	total	agricultural	forest	other	total	arable	permanent		
	million ha		percent	percent	percent	thousand ha	percent	crops percent	meadows & pastures percent
	2011	2011	2011	2011	2011	2011	2011	2011	2011
Africa	2 727	37.9	22.0	42.2	1 169 696	19.8	2.6	78.2	0.24
North Africa	574	17.6	1.4	81.0	209 488	19.1	2.8	79.6	0.17
Algeria	238	17.4	0.6	82.0	41 383	18.1	2.2	79.7	0.23
Egypt	100	3.7	0.1	96.2	3 665	78.3	21.7		0.04
Libya	176	8.9	0.1	91.0	15 585	11.2	2.1	86.6	0.32
Morocco	45	67.5	11.5	21.0	30 104	26.4	3.9	69.8	0.28
Sudan					108 679	15.7	0.2	84.2	
Tunisia	16	64.8	6.6	28.6	10 072	28.2	23.8	48.0	0.49
Regional Office for Africa	2 126	43.6	27.9	30.2	955 135	20.3	2.6	77.8	0.25
Central Africa	525	20.3	48.3	33.3	106 440	19.4	2.4	78.1	0.21
Cameroon	47	20.3	41.7	38.0	9 600	64.6	14.6	20.8	0.38
Central African Republic	62	8.2	36.2	55.6	5 080	35.4	1.6	63.0	0.42
Chad	126	39.7	9.1	51.3	49 932	9.8	0.1	90.1	0.43
Congo	34	30.9	65.6	3.5	10 560	4.7	0.6	94.7	0.14
Democratic Republic of the Congo	227	11.4	67.9	20.8	25 755	26.4	2.9	70.7	0.11
Equatorial Guinea	3	10.8	57.5	31.6	304	42.8	23.0	34.2	0.28
Gabon	26	20.0	85.4		5 160	6.3	3.3	90.4	0.32
Sao Tome and Principe	0	50.7	28.1	21.1	49	17.9	80.1	2.1	0.28
East Africa	346	49.8	17.5	32.8	200 591	24.6	3.7	74.3	0.20
Burundi	3	86.4	6.6	6.9	2 220	41.4	18.0	40.5	0.15
Djibouti	2	73.4	0.2	26.3	1 702	0.1		99.9	0.00
Eritrea	10	75.2	15.1	9.7	7 592	9.1	0.0	90.9	0.13
Ethiopia	100	35.7	12.2	52.2	35 683	40.8	3.1	56.0	0.19
Kenya	57	48.2	6.1	45.7	27 450	20.0	2.4	77.6	0.15
Rwanda	2	77.8	18.0	4.1	1 920	63.5	13.0	23.4	0.13
Somalia	63	70.3	10.6	19.0	44 129	2.5	0.1	97.4	0.12
South Sudan					28 533			90.3	
Sudan (former)									
Uganda	20	70.4	14.5	15.1	14 062	48.0	15.6	36.4	0.26
United Republic of Tanzania	89	42.1	37.3	20.6	37 300	31.1	4.6	64.3	0.29
Southern Africa	649	55.3	31.7	16.5	359 345	10.5	0.5	89.0	0.24
Angola	125	46.8	46.8	6.4	58 390	7.0	0.5	92.5	0.22
Botswana	57	45.6	19.8	34.5	25 861	1.0	0.0	99.0	0.13
Comoros	0	83.3	1.4	15.3	155	52.9	37.4	9.7	0.19
Lesotho	3	76.2	1.5	22.4	2 312	13.3	0.2	86.5	0.14
Madagascar	58	71.2	21.5	7.3	41 395	8.5	1.4	90.1	0.19
Malawi	9	59.2	34.0	6.8	5 580	64.5	2.3	33.2	0.24
Mauritius	0	43.8	17.3	38.9	89	87.6	4.5	7.9	0.06
Mozambique	79	62.8	49.4		49 400	10.5	0.4	89.1	0.23
Namibia	82	47.1	8.8	44.1	38 809	2.1	0.0	97.9	0.35
Seychelles	0	6.5	88.5	5.0	3	33.3	66.7		0.03
South Africa	121	79.4	7.6	12.9	96 374	12.5	0.4	87.1	0.25
Swaziland	2	71.0	33.0		1 222	14.3	1.2	84.5	0.16
Zambia	74	31.5	66.3	2.2	23 435	14.5	0.1	85.3	0.25
Zimbabwe	39	42.2	39.5	18.3	16 320	25.1	0.7	74.1	0.33
West Africa	606	47.6	12.0	40.8	288 759	29.7	4.3	66.0	0.31
Benin	11	30.4	40.0	29.6	3 430	75.2	8.7	16.0	0.32
Burkina Faso	27	43.0	20.4	36.6	11 765	48.4	0.6	51.0	0.34
Cabo Verde	0	18.6	21.0	60.3	75	62.7	4.0	33.3	0.10
Côte d'Ivoire	32	64.5	32.7	2.8	20 500	14.1	21.5	64.4	0.36
Gambia	1	60.8	47.6		615	73.2	0.8	26.0	0.26
Ghana	23	69.9	21.2	8.9	15 900	30.2	17.6	52.2	0.30
Guinea	25	58.0	26.5	15.6	14 240	20.0	4.8	75.1	0.35
Guinea-Bissau	3	58.0	71.6		1 630	18.4	15.3	66.3	0.36
Liberia	10	27.3	44.6	28.1	2 630	17.1	6.8	76.0	0.15
Mali	122	34.1	10.2	55.7	41 621	16.5	0.3	83.2	0.44
Mauritania	103	38.5	0.2	61.2	39 711	1.1	0.0	98.8	0.13
Niger	127	34.6	0.9	64.5	43 782	34.1	0.1	65.7	0.93
Nigeria	91	83.7	9.5	6.9	76 200	47.2	4.2	48.6	0.24
Senegal	19	49.4	43.8	6.8	9 505	40.5	0.6	58.9	0.31
Sierra Leone	7	48.0	37.8	14.3	3 435	32.0	3.9	64.0	0.21
Togo	5	68.4	4.9	26.7	3 720	67.5	5.6	26.9	0.44
CEMAC	298	27.0	33.4	43.8	80 636	17.2	2.2	80.6	0.37
CEN-SAD	1 077	37.4	10.6	52.3	539 961	24.1	3.3	74.0	0.27
COMESA	879	25.5	29.1	45.6	361 045	22.0	2.3	77.7	0.15
ECCAS	652	25.6	47.9	27.9	167 050	15.4	2.0	82.7	0.21
ECOWAS	503	49.5	14.4	36.6	249 048	34.3	5.0	60.7	0.32
IGAD	252	51.8	10.6	37.6	267 830	19.1	1.8	80.4	0.18
SADC	965	43.8	40.7	18.0	422 245	13.3	1.0	85.7	0.22
UEMOA	347	39.2	12.9	48.5	135 953	29.2	4.0	66.8	0.46
UMA	577	23.7	1.4	74.9	136 855	15.0	3.5	81.5	0.28
Regional Office for Asia and the Pacific	5 013	38.9	31.3	29.8	1 951 899	30.8	4.0	65.4	0.17
Regional Office for Europe and Central Asia	2 694	29.7	38.3	32.0	800 592	41.5	2.5	56.1	0.39
Regional Office for Latin America and the Caribbean	2 013	36.7	46.8	16.4	739 587	22.7	2.7	74.6	0.32
Regional Office for the Near East	1 222	33.8	1.9	64.4	521 071	13.7	1.9	85.0	0.17
World	12 766	37.4	31.0	32.0	4 911 605	28.6	3.2	68.5	0.22

TABLE 5: Water resources per capita and irrigation

	Water resources			Irrigation			
	per capita			potential	total area equipped	equipped area actually irrigated	
	m <sup>3</sup> /yr/cap	m <sup>3</sup> /yr/cap	m <sup>3</sup> /yr/cap			year	share percent
	1990	2000	2010	thousand ha 2012	thousand ha 2009	1987-2012	1987-2012*
<b>Africa</b>							
<b>North Africa</b>							
Algeria	461	382	329	510	570	2 001	80
Egypt	1 008	847	706	4 420	3 650	2 002	100
Libya	162	134	110	40	470	2 000	67
Morocco	1 170	1 007	908	1 664	1 458	2 004	98
Sudan							
Tunisia	559	486	438	560	445		
<b>Regional Office for Africa</b>							
<b>Central Africa</b>							
Cameroon	23 438	18 210	14 567	290	29		
Central African Republic	49 199	39 006	32 811	1 900	1	1 987	51
Chad	7 154	5 230	3 830	335	30	2 002	87
Congo	348 263	265 306	205 788	340	2	1 993	11
Democratic Republic of the Congo	35 241	25 853	19 449	7 000	11		
Equatorial Guinea	69 519	50 000	37 143	30			
Gabon	176 534	132 794	108 970	440	4		
Sao Tome and Principe	18 793	15 461	13 212	11	10		
<b>East Africa</b>							
Burundi	2 238	1 967	1 496	215	23		
Djibouti	534	410	337	2	1	1 999	38
Eritrea		1 718	1 199	188	21	1 993	62
Ethiopia		1 860	1 471	2 700	290	2 001	100
Kenya	1 309	982	758	539	103	2 003	94
Rwanda	1 336	1 173	894	165	9		
Somalia	2 228	1 987	1 575	240	200		
South Sudan							
Sudan (former)	2 435	1 887	1 481	2 784	1 863	2 000	43
Uganda	3 729	2 726	1 975	90	9	1 998	64
United Republic of Tanzania	3 778	2 828	2 147	2 132	184	2 002	100
<b>Southern Africa</b>							
Angola	14 320	10 628	7 756	3 700	80	2 005	13
Botswana	8 857	6 962	6 099	13	2	2 002	85
Comoros	2 740	2 135	1 633	0	0	1 987	65
Lesotho	3 191	2 663	2 409	13	3	1 999	3
Madagascar	29 873	21 934	16 269	1 517	1 086	2 000	51
Malawi	1 842	1 539	1 160	162	59	2 002	96
Mauritius	2 595	2 300	2 118	33	22	2 002	98
Mozambique	16 026	11 928	9 281	3 072	118	2 001	34
Namibia	12 523	9 346	7 762	47	8	2 002	100
Seychelles				1	0	2 003	86
South Africa	1 359	1 117	997	1 500	1 498	2 000	100
Swaziland	5 226	4 239	3 803	93	50	2 000	90
Zambia	13 384	10 312	8 037	523	156	2 002	100
Zimbabwe	1 910	1 599	1 591	366	174	1 999	85
<b>West Africa</b>							
Benin	5 529	4 049	2 982	322	12	2 002	75
Burkina Faso	1 341	1 017	759	165	30	2 001	54
Cabo Verde	862	686	605	3	3	1 997	66
Côte d'Ivoire	6 482	4 893	4 111	475	73	1 994	92
Gambia	8 282	6 168	4 630	80	2	1 999	47
Ghana	3 596	2 776	2 181	1 900	34	2 000	90
Guinea	39 243	27 085	22 641	520	95		
Guinea-Bissau	30 482	24 980	20 462	281	25	1 996	100
Liberia	109 074	81 489	58 087	600	3		
Mali	11 530	8 853	6 506	566	236	2 000	75
Mauritania	5 711	4 313	3 295	250	45	2 004	51
Niger	4 321	3 081	2 169	270	74	2 005	89
Nigeria	2 934	2 314	1 807	2 331	293	2 004	75
Senegal	5 358	4 082	3 120	409	120		
Sierra Leone	40 181	38 619	27 267	807	30		
Togo	4 010	3 066	2 439	180	7	1 996	86
<b>CEMAC</b>							
<b>CEN-SAD</b>							
<b>COMESA</b>							
<b>ECCAS</b>							
<b>ECOWAS</b>							
<b>IGAD</b>							
<b>SADC</b>							
<b>UEMOA</b>							
<b>UMA</b>							
<b>Regional Office for Asia and the Pacific</b>							
<b>Regional Office for Europe and Central Asia</b>							
<b>Regional Office for Latin America and the Caribbean</b>							
<b>Regional Office for the Near East</b>							
<b>World</b>							

TABLE 6: Labour

	Employment		Employment in agriculture			Labor force		Children in employment
	female	male	share of total	female	male	participation rate		% of children ages 7-14 total
				share of female employment percent	share of male employment percent	female	male	
	million people 2010	million people 2010	percent 2005-12*	2005-12*	2005-12*	percent 2010	percent 2010	percent 2000-12*
<b>Africa</b>	152	209				56.3	75.9	
<b>North Africa</b>	11	39				22.5	73.6	
Algeria	2	8	11.7	6.4	12.6	14.7	71.7	
Egypt	5	19	28.2	45.6	28.2	23.5	74.2	7.9
Libya	1	2				30.4	76.9	
Morocco	3	8	40.2	60.2	33.0	25.9	74.7	4.5
Sudan								12.5
Tunisia	1	2	17.7			25.3	69.7	
<b>Regional Office for Africa</b>	141	169				62.8	76.4	
<b>Central Africa</b>	19	20				68.3	74.7	
Cameroon	4	4	53.3	58.1	48.9	63.9	77.3	43.4
Central African Republic	1	1				72.5	85.2	67.0
Chad	2	2				64.5	80.2	60.4
Congo	1	1	35.4	39.3	31.3	68.2	72.7	30.1
Democratic Republic of the Congo	12	12				70.2	72.4	20.5
Equatorial Guinea	0	0				80.6	92.3	
Gabon	0	0	24.2	33.7	17.3	56.0	64.9	
Sao Tome and Principe						43.2	76.4	
<b>East Africa</b>	50	60				68.8	83.1	
Burundi	2	2				83.7	81.9	31.9
Djibouti						35.5	67.0	
Eritrea	1	1				79.6	90.0	
Ethiopia	18	21	79.3	74.8	83.2	78.3	89.9	26.1
Kenya	6	8	61.1	68.0	54.5	61.2	71.5	37.7
Rwanda	3	2	78.8			86.3	85.2	7.5
Somalia	1	2				37.6	77.0	43.5
South Sudan								45.6
Sudan (former)	3	7				30.8	76.5	19.1
Uganda	6	7	65.6			76.2	79.6	38.2
United Republic of Tanzania	10	10	76.5	80.0	72.7	88.3	90.3	31.1
<b>Southern Africa</b>	29	32				66.9	76.2	
Angola	3	4				62.7	77.0	30.1
Botswana	0	0	29.9	24.3	35.1	71.6	81.5	
Comoros	0	0				34.7	80.4	
Lesotho	0	0				58.7	73.3	2.6
Madagascar	5	5	80.4	81.1	79.8	83.5	88.7	26.0
Malawi	3	3				85.0	81.2	40.3
Mauritius	0	0	8.7	7.8	9.5	43.9	75.7	
Mozambique	5	5				86.3	83.0	27.4
Namibia	0	0	16.3	8.2	22.7	58.4	69.8	
Seychelles								
South Africa	6	8	4.9	3.8	5.7	43.8	60.4	
Swaziland	0	0				43.5	70.7	13.3
Zambia	2	2	72.2	78.9	65.9	73.3	85.7	34.4
Zimbabwe	3	3				82.9	89.5	
<b>West Africa</b>	44	57				53.2	71.0	
Benin	2	2				67.1	78.3	74.4
Burkina Faso	4	4	84.8	87.2	82.3	77.5	90.5	42.1
Cabo Verde	0	0				50.2	83.1	
Côte d'Ivoire	3	5				51.5	81.3	45.7
Gambia	0	0				72.4	83.2	35.9
Ghana	5	5	57.2	53.2	61.4	66.8	71.6	48.9
Guinea	2	2				65.2	78.3	
Guinea-Bissau	0	0				67.8	78.2	50.5
Liberia	1	1	48.9	48.3	49.5	57.8	64.0	18.4
Mali	1	3	66.0	63.9	67.8	36.8	69.7	23.0
Mauritania	0	1				28.4	79.1	21.3
Niger	2	3	56.9	37.8	64.1	39.8	90.1	47.1
Nigeria	20	27				47.8	63.0	40.7
Senegal	2	3	33.7	33.0	34.1	66.0	88.3	17.4
Sierra Leone	1	1				66.4	68.9	53.7
Togo	1	1	54.1	48.2	60.5	80.3	81.2	48.8
<b>CEMAC</b>	7	9				65.4	78.3	
<b>CEN-SAD</b>	59	99				44.0	72.7	
<b>COMESA</b>	70	95				60.4	79.6	
<b>ECCAS</b>	24	26				68.5	75.4	
<b>ECOWAS</b>	43	57				53.5	70.9	
<b>IGAD</b>	35	45				63.3	81.5	
<b>SADC</b>	50	53				71.3	77.6	
<b>UEMOA</b>	15	21				57.1	83.0	
<b>UMA</b>	6	20				21.7	73.2	
<b>Regional Office for Asia and the Pacific</b>	728	1 168				49.4	80.0	
<b>Regional Office for Europe and Central Asia</b>	175	213	14.1	12.5	13.5	49.9	67.3	
<b>Regional Office for Latin America and the Caribbean</b>	105	155	14.9	9.1	19.7	53.3	80.1	
<b>Regional Office for the Near East</b>	24	97				21.6	73.5	
<b>World</b>	1 201	1 820				50.6	77.3	

TABLE 7: Inputs

	Agricultural tractors	Pesticides use	Fertilizers consumption		
	total	per ha of arable land and permanent crops	per ha of arable land and permanent crops		
	tractors 2000-12*	kg/ha 2008-12*	nitrogen kg/ha 2011	phosphate kg/ha 2011	potash kg/ha 2011
<b>Africa</b>			13.26	9.11	1.63
<b>North Africa</b>			40.59	34.43	1.96
Algeria	104 529	0.50	7.52	3.84	3.74
Egypt	103 188		366.98	85.51	7.57
Libya	39 733		29.31	15.22	0.00
Morocco			26.44	34.69	2.30
Sudan			5.08	4.01	0.22
Tunisia	40 438	0.43	11.23	155.22	1.14
<b>Regional Office for Africa</b>			6.87	3.24	1.55
<b>Central Africa</b>			2.57	0.61	1.68
Cameroon		1.45	4.94	1.14	2.99
Central African Republic					
Chad					
Congo			1.33	0.53	3.04
Democratic Republic of the Congo			0.40	0.12	0.27
Equatorial Guinea					
Gabon			0.66	0.04	1.32
Sao Tome and Principe					
<b>East Africa</b>			5.91	4.96	0.72
Burundi			1.12	0.07	0.00
Djibouti	6				
Eritrea	463		0.81	0.00	0.00
Ethiopia		0.28	9.90	10.27	0.00
Kenya	12 844		12.28	9.02	3.30
Rwanda	56	0.12	0.05	0.02	0.00
Somalia	1 371				
South Sudan			0.00	0.00	0.00
Sudan (former)	25 564				
Uganda			0.85	0.29	0.21
United Republic of Tanzania	21 207		4.28	2.29	1.05
<b>Southern Africa</b>			18.44	6.33	4.13
Angola			2.73	1.16	1.24
Botswana	3 371				
Comoros					
Lesotho					
Madagascar	550	0.08	1.40	0.60	0.70
Malawi		0.11	22.92	3.82	2.06
Mauritius		25.70	93.91	27.68	108.33
Mozambique		0.14	6.04	1.38	0.28
Namibia			6.01	0.33	0.19
Seychelles			5.00	1.67	3.33
South Africa	63 200		31.34	12.86	8.03
Swaziland	1 550				
Zambia			33.91	7.81	6.65
Zimbabwe			13.59	6.17	2.41
<b>West Africa</b>			3.74	1.72	0.92
Benin			1.54	1.42	1.42
Burkina Faso		0.14	5.15	2.65	2.78
Cabo Verde	56				
Côte d'Ivoire	8 981		3.50	1.26	2.99
Gambia			5.78	2.19	2.19
Ghana	1 807	1.97	5.60	8.70	3.72
Guinea	5 388	0.13	0.73	0.08	0.06
Guinea-Bissau					
Liberia					
Mali	1 300	0.00	16.25	4.33	0.36
Mauritania	390	0.03			
Niger		0.00	0.25	0.13	0.13
Nigeria	24 800		2.95	0.65	0.27
Senegal	645		3.83	2.62	0.22
Sierra Leone					
Togo	129	0.02	0.47	0.00	0.00
<b>CEMAC</b>					
<b>CEN-SAD</b>			16.20	12.87	1.10
<b>COMESA</b>			24.18	8.50	1.30
<b>ECCAS</b>					
<b>ECOWAS</b>			3.74	1.72	0.92
<b>IGAD</b>			6.34	5.60	0.50
<b>SADC</b>			12.98	4.64	2.95
<b>UEMOA</b>			4.34	1.59	1.06
<b>UMA</b>	168 530		17.06	47.99	2.35
<b>Regional Office for Asia and the Pacific</b>			106.76	35.62	22.36
<b>Regional Office for Europe and Central Asia</b>	11 467 067		45.08	11.69	12.29
<b>Regional Office for Latin America and the Caribbean</b>			45.66	32.58	32.64
<b>Regional Office for the Near East</b>	651 197		35.94	26.59	3.66
<b>World</b>			73.34	26.83	19.82

TABLE 8: Agricultural capital stock

	Gross capital stock								
	total			share					
	p.a. growth			land development	plantation crops	livestock fixed assets	livestock inventory	structures for livestock	machinery & equipment
	million US\$ 2007	percent 1990-2000	percent 2000-07	percent 2007	percent 2007	percent 2007	percent 2007	percent 2007	percent 2007
<b>Africa</b>	526 417	1.7	1.8	32.1	7.1	42.9	7.6	6.6	3.8
<b>North Africa</b>	95 180	1.4	0.9	61.7	6.5	19.8	3.5	1.6	7.0
Algeria	14 545	1.0	1.2	42.0	6.9	28.8	5.1	1.4	15.8
Egypt	36 793	2.3	1.5	73.6	2.3	15.1	2.7	2.3	4.0
Libya	7 531	-0.1	0.7	64.6	5.6	15.4	2.7	0.5	11.1
Morocco	26 006	0.7	0.0	63.2	4.9	22.9	4.0	1.2	3.7
Sudan									
Tunisia	10 304	1.8	0.8	40.5	25.5	19.2	3.4	0.9	10.5
<b>Regional Office for Africa</b>	430 811	1.8	2.0	25.5	7.3	48.0	8.5	7.7	3.0
<b>Central Africa</b>	23 722	1.1	1.2	25.5	11.9	43.5	7.7	7.7	3.8
Cameroon	7 423	0.9	0.3	24.0	17.5	41.4	7.3	7.8	1.9
Central African Republic	2 492	2.5	1.8	15.8	2.6	56.0	9.9	13.8	1.8
Chad	7 111	2.7	3.1	19.5	0.5	57.5	10.1	10.9	1.5
Congo	636	1.1	1.5	32.5	12.6	40.1	7.1	2.0	5.7
Democratic Republic of the Congo	5 023	-1.2	-0.2	38.4	16.6	27.5	4.9	2.1	10.6
Equatorial Guinea	369	0.1	-2.1	27.1	66.8	3.4	0.6	0.1	1.9
Gabon	444	1.0	-0.7	26.4	38.3	22.7	4.0	0.9	7.7
Sao Tome and Principe	225	0.7	0.2	54.1	42.7	1.9	0.3	0.2	0.8
<b>East Africa</b>	166 898	2.2	2.7	18.6	3.7	56.8	10.0	8.4	2.4
Burundi	1 685	-1.0	4.5	16.0	17.8	46.7	8.2	3.4	7.7
Djibouti	386	1.9	0.1	2.4	0.0	73.2	12.9	9.1	2.4
Eritrea	3 396		-0.5	17.8	0.1	63.4	11.2	5.8	1.8
Ethiopia	48 891		5.7	5.9	1.2	69.1	12.2	9.3	2.3
Kenya	18 542	-0.8	2.0	15.4	4.1	59.0	10.4	7.2	3.8
Rwanda	2 007	0.6	5.1	11.4	9.0	57.5	10.1	5.2	6.8
Somalia	13 261	-0.3	0.1	21.7	0.4	59.3	10.5	7.3	0.8
South Sudan									
Sudan (former)	48 106	4.5	1.4	29.4	0.4	50.9	9.0	9.0	1.3
Uganda	8 730	1.8	2.5	12.8	19.8	45.9	8.1	8.3	5.2
United Republic of Tanzania	21 894	1.7	1.2	27.9	11.1	42.6	7.5	7.9	2.9
<b>Southern Africa</b>	98 055	0.3	0.1	32.4	5.6	38.9	6.9	11.2	5.0
Angola	6 663	0.7	0.6	32.7	7.4	42.5	7.5	5.9	4.0
Botswana	1 870	-0.3	-1.5	4.6	0.1	65.8	11.6	12.7	5.2
Comoros	140	1.9	0.7	17.3	47.5	21.3	3.8	3.8	6.3
Lesotho	1 082	0.9	-0.8	12.2	0.5	64.7	11.4	7.1	4.0
Madagascar	17 689	0.3	-0.2	46.5	4.2	36.3	6.4	4.9	1.6
Malawi	3 125	2.8	3.1	35.5	4.0	42.8	7.6	3.3	6.7
Mauritius	274	0.5	0.4	60.9	1.8	24.8	4.4	0.9	7.2
Mozambique	4 953	2.1	1.4	37.0	5.3	38.9	6.9	3.4	8.7
Namibia	2 653	0.8	0.4	14.8	0.5	61.4	10.8	9.4	3.1
Seychelles	11	0.5	-5.1	3.6	43.0	33.9	6.0	1.0	12.5
South Africa	43 832	0.1	-0.2	33.8	8.3	28.4	5.0	18.3	6.3
Swaziland	820	-0.3	-0.7	37.5	2.4	44.3	7.8	6.7	1.3
Zambia	5 987	0.9	1.5	30.9	0.8	50.7	8.9	4.6	4.1
Zimbabwe	8 957	-0.6	-0.4	7.7	0.6	68.5	12.1	5.8	5.3
<b>West Africa</b>	142 135	2.6	2.7	28.9	11.8	44.7	7.9	4.5	2.3
Benin	2 957	3.5	2.0	29.8	11.8	42.8	7.5	6.1	2.0
Burkina Faso	10 177	3.8	4.1	11.0	0.5	65.5	11.6	8.8	2.6
Cabo Verde	207	2.2	4.4	19.1	1.9	64.5	11.4	2.5	0.7
Côte d'Ivoire	7 852	1.1	0.9	16.9	65.3	11.4	2.0	1.6	2.7
Gambia	376	1.3	4.2	21.8	1.1	51.2	9.0	11.2	5.5
Ghana	7 209	2.6	2.9	16.7	37.0	34.4	6.1	2.3	3.6
Guinea	5 399	5.4	4.8	12.4	8.0	59.3	10.5	7.2	2.6
Guinea-Bissau	1 821	3.9	0.8	24.9	29.3	35.6	6.3	3.0	0.9
Liberia	637	1.7	0.9	23.8	45.4	20.7	3.6	0.9	5.7
Mali	12 642	4.1	3.4	30.2	1.1	51.5	9.1	6.8	1.4
Mauritania	4 331	3.1	1.2	8.9	0.3	70.9	12.5	6.6	0.7
Niger	13 096	3.5	3.1	27.7	0.3	54.1	9.5	7.3	1.1
Nigeria	60 871	2.1	2.6	40.1	11.0	36.6	6.5	3.2	2.7
Senegal	10 561	1.5	1.1	11.9	0.4	70.3	12.4	3.5	1.4
Sierra Leone	2 224	1.0	6.2	44.2	9.7	34.5	6.1	3.3	2.1
Togo	1 775	0.7	1.7	34.7	9.0	43.2	7.6	2.6	2.9
<b>CEMAC</b>	18 474	1.7	1.5	21.6	10.3	48.3	8.5	9.3	2.0
<b>CEN-SAD</b>	287 725	2.4	1.8	38.9	7.6	38.9	6.9	4.8	2.9
<b>COMESA</b>	218 094	1.9	2.2	31.4	3.2	47.3	8.3	6.5	3.4
<b>ECCAS</b>	32 071	0.9	1.2	26.5	11.3	43.4	7.7	7.1	4.0
<b>ECOWAS</b>	137 804	2.5	2.7	29.5	12.1	43.9	7.7	4.4	2.3
<b>IGAD</b>	141 312		2.9	17.3	2.4	59.1	10.4	8.6	2.2
<b>SADC</b>	124 832	0.5	0.3	31.9	6.9	39.1	6.9	10.3	4.9
<b>UEMOA</b>	60 880	2.8	2.5	21.5	10.6	51.3	9.1	5.7	1.8
<b>UMA</b>	62 717	1.0	0.6	51.0	8.5	26.1	4.6	1.5	8.3
<b>Regional Office for Asia and the Pacific</b>	1 719 508	0.9	0.7	32.5	10.2	25.9	4.6	4.1	22.6
<b>Regional Office for Europe and Central Asia</b>	1 239 351		-0.4	35.2	5.8	16.5	2.9	4.3	35.3
<b>Regional Office for Latin America and the Caribbean</b>	725 911	0.5	0.9	24.3	6.9	47.1	8.3	5.2	8.1
<b>Regional Office for the Near East</b>	335 938	1.9	1.2	61.9	3.3	21.9	3.9	2.3	6.7
<b>World</b>	4 797 327	0.6	0.6	31.0	7.6	26.8	4.7	5.4	24.5

TABLE 9: Foreign direct investment and official development assistance

	FDI, inward flows				ODA				
	agriculture, hunting, forestry, fishing		food, beverages, tobacco		total receipts		agriculture	forestry	fishery
	thousand US\$ 2000-01*	thousand US\$ 2011-12*	thousand US\$ 2000-01*	thousand US\$ 2011-12*	million US\$ 2000	million US\$ 2010	share of total percent	share of total percent	share of total percent
<b>Africa</b>					28 865	48 740			
<b>North Africa</b>					3 937	5 827	5.2	0.0	0.8
Algeria					225	294	0.4	0.0	2.8
Egypt	15 860		35 740		1 970	2 531	6.0	0.0	0.0
Libya					0	46	0.1	0.0	0.0
Morocco	6 150		0		996	2 138	6.8	0.0	1.9
Sudan					0	0			
Tunisia	6 190	0	12 440	0	746	818	0.5	0.0	0.1
<b>Regional Office for Africa</b>					24 913	42 252	6.6	0.5	0.3
<b>Central Africa</b>					1 885	6 971	2.8	0.5	0.1
Cameroon					635	763	7.6	1.7	0.0
Central African Republic					170	256	0.7	0.4	0.0
Chad					521	549	1.8	0.0	0.0
Congo					76	1 344	0.1	0.0	0.0
Democratic Republic of the Congo					276	3 726	2.7	0.3	0.0
Equatorial Guinea					34	83	0.0	0.1	0.3
Gabon					110	208	10.9	3.9	0.6
Sao Tome and Principe					64	41	6.4	0.0	2.6
<b>East Africa</b>					8 209	14 589	7.8	0.4	0.2
Burundi					212	576	19.2	0.0	0.0
Djibouti					122	175	0.8	0.1	0.0
Eritrea					523	107	3.0	0.0	10.6
Ethiopia	14 540		37 690		1 466	3 479	6.7	0.6	0.0
Kenya					1 475	3 489	9.9	0.4	0.4
Rwanda					730	1 050	6.6	0.9	0.0
Somalia					140	394	0.3	0.0	0.0
South Sudan					0	0			
Sudan (former)							7.3	0.1	0.0
Uganda	50		0		1 589	2 102	10.8	0.0	0.0
United Republic of Tanzania	-10 710		0		1 952	3 217	4.5	0.2	0.0
<b>Southern Africa</b>					7 089	8 158	4.2	0.6	0.2
Angola					449	501	6.0	0.1	0.0
Botswana					45	120	0.6	0.1	0.0
Comoros					37	82	2.1	0.0	0.1
Lesotho					75	262	0.1	0.0	0.0
Madagascar					630	343	5.6	0.6	0.2
Malawi					871	1 061	6.6	1.9	0.0
Mauritius	480	6 170	0	0	36	322	0.0	0.0	0.0
Mozambique	6 010		0		2 260	2 225	2.5	0.6	0.6
Namibia					160	395	2.0	1.3	0.6
Seychelles					5	56	0.0	0.0	2.0
South Africa					614	1 211	1.2	0.7	0.1
Swaziland					38	126	5.0	0.0	0.0
Zambia					1 593	852	4.8	0.0	0.0
Zimbabwe					279	602	15.5	0.0	0.0
<b>West Africa</b>					7 730	12 534	9.1	0.5	0.5
Benin					526	665	3.3	0.2	0.1
Burkina Faso					687	929	8.4	0.3	0.1
Cabo Verde					118	239	1.1	0.0	0.6
Côte d'Ivoire					738	831	10.8	2.1	0.0
Gambia					67	194	9.0	0.0	0.1
Ghana					961	1 780	7.0	0.8	0.3
Guinea					230	153	5.5	0.4	0.1
Guinea-Bissau					151	146	0.9	0.1	7.2
Liberia					33	1 573	2.4	0.2	0.0
Mali					856	1 028	22.8	0.2	1.9
Mauritania	0				277	379	1.0	0.0	2.5
Niger					500	608	8.1	0.0	0.0
Nigeria	320		0		1 024	1 449	5.5	0.0	0.0
Senegal					1 012	1 493	17.4	1.3	1.0
Sierra Leone					437	516	16.7	0.0	0.0
Togo					113	549	7.6	0.0	0.0
<b>CEMAC</b>					1 545	3 203	2.9	0.7	0.1
<b>CEN-SAD</b>					12 328	18 859	7.6	0.3	0.6
<b>COMESA</b>					11 849	20 725	7.1	0.4	0.1
<b>ECCAS</b>					2 546	8 048	4.2	0.4	0.1
<b>ECOWAS</b>					7 453	12 155	9.3	0.5	0.5
<b>IGAD</b>					5 316	9 746	8.3	0.4	0.3
<b>SADC</b>					9 280	15 019	3.9	0.5	0.1
<b>UEMOA</b>					4 583	6 250	12.4	0.7	0.8
<b>UMA</b>					2 244	3 676	4.2	0.0	1.6
<b>Regional Office for Asia and the Pacific</b>					22 256	43 802	4.3	0.4	0.1
<b>Regional Office for Europe and Central Asia</b>					5 636	8 877			
<b>Regional Office for Latin America and the Caribbean</b>					8 633	13 085	5.6	2.5	0.4
<b>Regional Office for the Near East</b>					6 205	11 726	3.9	0.0	0.7
<b>World</b>					68 583	123 943			

TABLE 10: Government expenditures

	Agriculture, forestry, fishing, and hunting				Environmental Protection	
	% of total outlays		% of agricultural GDP		% of total outlays	
	cash percent 2009-12*	non-cash percent 2009-12*	cash percent 2009-12*	non-cash percent 2009-12*	cash percent 2009-12*	non-cash percent 2009-12*
<b>Africa</b>						
<b>North Africa</b>						
Algeria		3.6		23.4		0.3
Egypt	1.9		4.3		0.4	
Libya						
Morocco						
Sudan						
Tunisia	5.5		17.3		1.6	
<b>Regional Office for Africa</b>						
<b>Central Africa</b>						
Cameroon						
Central African Republic		2.3		0.8		0.0
Chad						
Congo		3.6		24.6		2.3
Democratic Republic of the Congo						
Equatorial Guinea	0.8		12.5		4.0	
Gabon						
Sao Tome and Principe		3.1				0.5
<b>East Africa</b>						
Burundi						
Djibouti						
Eritrea						
Ethiopia	17.5		6.1		0.0	
Kenya	4.6		5.7		0.8	
Rwanda						
Somalia						
South Sudan						
Sudan (former)						
Uganda	3.9		3.4		0.2	
United Republic of Tanzania	1.6		2.5			
<b>Southern Africa</b>						
Angola	4.1		21.5		0.6	
Botswana	3.0		50.9			
Comoros						
Lesotho	2.4		13.2		0.3	
Madagascar						
Malawi						
Mauritius		3.8		30.1		3.4
Mozambique					0.4	
Namibia	4.1		13.6			
Seychelles	1.5				4.7	
South Africa		1.2		16.5		0.3
Swaziland	4.9		31.5			
Zambia						
Zimbabwe	16.0					
<b>West Africa</b>						
Benin		1.4				0.4
Burkina Faso		2.5				0.2
Cabo Verde	3.3		12.6		1.0	
Côte d'Ivoire		0.7		1.3		0.4
Gambia						
Ghana	1.5		0.5		2.9	
Guinea						
Guinea-Bissau						
Liberia	2.4		0.0			
Mali		2.2				0.6
Mauritania						
Niger						
Nigeria	0.9					
Senegal						
Sierra Leone	1.1		0.6		0.1	
Togo						
<b>CEMAC</b>						
<b>CEN-SAD</b>						
<b>COMESA</b>						
<b>ECCAS</b>						
<b>ECOWAS</b>						
<b>IGAD</b>						
<b>SADC</b>						
<b>UEMOA</b>						
<b>UMA</b>						
<b>Regional Office for Asia and the Pacific</b>						
<b>Regional Office for Europe and Central Asia</b>						
<b>Regional Office for Latin America and the Caribbean</b>						
<b>Regional Office for the Near East</b>						
<b>World</b>						

TABLE 11: Innovation

	Agricultural R&D spending		Total public agric. research	Fixed broadband Internet	Mobile cellulars	Telephone lines	CPIA business regulatory environment rating
			expenditures	per 100 people	per 100 people	per 100 people	
			share of GDP percent				(1=low to 6=high) rating
	million 2005 PPP US\$ 2000	million 2005 PPP US\$ 2008	2008	subscribers	subscriptions	lines	2012
<b>Africa</b>	1 889	2 324		0.6	61.7	2.8	
<b>North Africa</b>	572	576		2.4	106.1	10.5	
Algeria	102	112		2.8	99.0	8.5	
Egypt	298	293		2.2	101.1	10.6	
Libya	23	11		1.1	155.7	15.6	
Morocco	104	96	0.6	1.8	113.3	11.0	
Sudan							2.5
Tunisia	46	63		5.1	116.9	11.5	
<b>Regional Office for Africa</b>	1 317	1 748		0.2	53.2	1.4	
<b>Central Africa</b>	97	111		0.0	34.1	0.7	
Cameroon	32	43		0.0	52.4	3.3	3.0
Central African Republic	8	9		0.0	22.1	0.1	2.0
Chad	14	8		0.1	31.8	0.3	2.5
Congo	3	4	0.8	0.0	93.8	0.3	2.5
Democratic Republic of the Congo	35	44		0.0	23.1	0.1	2.5
Equatorial Guinea	2	2		0.2	66.5	2.0	
Gabon	2	2	0.2	0.3	154.5	1.5	
Sao Tome and Principe	0	0		0.4	68.3	4.7	3.0
<b>East Africa</b>	342	490		0.0	40.8	0.9	
Burundi	4	10	1.8	0.0	22.3	0.3	3.0
Djibouti	0	0		1.2	21.3	2.0	3.5
Eritrea	8	3	0.4	0.0	4.5	1.1	2.0
Ethiopia	49	69	0.3	0.0	16.7	1.0	3.5
Kenya	151	173	1.3	0.1	67.5	0.7	3.5
Rwanda	14	18	0.5	0.0	40.6	0.4	4.0
Somalia					6.9	1.0	
South Sudan							2.5
Sudan (former)	38	52	0.3	0.0	56.1	1.1	
Uganda	39	88	1.2	0.1	48.4	1.3	4.0
United Republic of Tanzania	38	77	0.5	0.0	55.5	0.3	3.5
<b>Southern Africa</b>	450	466		0.7	72.0	3.7	
Angola	11	39		0.1	48.4	1.5	2.0
Botswana	20	19	4.3	0.8	142.8	7.4	
Comoros	2	2		0.0	28.7	3.1	2.5
Lesotho	1	1		0.1	56.2	1.8	3.5
Madagascar	9	12	0.3	0.0	40.7	0.6	3.0
Malawi	28	21	0.7	0.0	25.7	1.1	3.0
Mauritius	23	22	3.9	9.8	99.0	28.7	
Mozambique	4	18	0.4	0.1	32.8	0.4	3.0
Namibia	21	22	2.0	0.8	96.4	6.8	
Seychelles	0	0	0.7	10.4	145.7	32.1	
South Africa	283	273	2.0	1.8	126.8	8.2	
Swaziland	2	2		0.2	63.7	6.3	
Zambia	15	8	0.3	0.1	60.6	0.6	3.5
Zimbabwe	32	28		0.3	72.1	2.8	2.0
<b>West Africa</b>	428	681		0.2	61.4	0.8	
Benin	13	22	0.6	0.0	85.3	1.7	3.5
Burkina Faso	23	19	0.4	0.1	45.3	0.8	3.5
Cabo Verde	1	1		4.0	79.2	14.9	3.5
Côte d'Ivoire	56	43	0.5	0.2	86.1	1.3	3.0
Gambia	3	2	0.5	0.0	78.9	2.8	3.5
Ghana	41	100	0.9	0.3	84.8	1.1	4.5
Guinea	10	4	0.2	0.0	44.0	0.2	2.5
Guinea-Bissau	4	5		0.0	56.2	0.3	2.5
Liberia	5	5		0.0	49.2	0.1	3.0
Mali	31	25	0.6	0.0	68.3	0.7	3.5
Mauritania	6	6	1.2	0.2	93.6	2.0	3.0
Niger	5	6	0.2	0.0	29.5	0.5	3.0
Nigeria	191	404	0.4	0.1	58.6	0.4	3.5
Senegal	25	25	0.9	0.7	73.3	2.7	4.0
Sierra Leone	1	6	0.3		35.6	0.3	3.0
Togo	12	8	0.5	0.1	50.4	3.6	3.0
<b>CEMAC</b>	62	68		0.1	51.6	1.8	
<b>CEN-SAD</b>	951	1 207		0.7	70.4	3.5	
<b>COMESA</b>	769	854		0.5	51.1	2.9	
<b>ECCAS</b>	112	160		0.0	35.4	0.8	
<b>ECOWAS</b>	422	675		0.2	61.1	0.8	
<b>IGAD</b>	286	384		0.1	38.4	1.0	
<b>SADC</b>	522	585		0.4	57.6	2.3	
<b>UEMOA</b>	170	153		0.2	62.6	1.3	
<b>UMA</b>	280	289		2.5	110.2	10.0	
<b>Regional Office for Asia and the Pacific</b>	9 942	13 454		6.5	81.0	14.1	
<b>Regional Office for Europe and Central Asia</b>	6 267	7 315		20.0	128.7	36.9	
<b>Regional Office for Latin America and the Caribbean</b>	2 826	3 302		7.7	105.3	18.1	
<b>Regional Office for the Near East</b>	1 541	1 731		2.3	94.9	14.7	
<b>World</b>	26 053	31 744		8.5	85.4	17.0	

**PART**

**2**

**Hunger dimensions**

## Number undernourished and their prevalence in the population

The number of undernourished persons in the developing world was about one billion in 1990-1992. It declined slowly to reach 842 million in 2011-13, which is a reduction of 200 million undernourished in 20 years. This reduction is still too low if we are to attain the figure of 500 million undernourished by the year 2015 as envisaged by the Millennium Development Goals (MDGs). In developing countries, the percentage of undernourished dropped by 23.6 percent in 1990-92 to 14.3 percent in 2011-13, which is a reduction of 10 percent. However in RAF, it was estimated at 32.8 percent in 1990-92, but this too dropped to 24.8 percent in 2011-13. These results clearly show that Africa remains the region with the highest proportion of undernourished compared to the other developing countries and that this proportion declined more slowly (Chart 23).

There are also some discrepancies in the distribution of the number of undernourished within the regions. Indeed, East Africa had the largest number (less than 90 million in 1990-1992), and the number increased to more than 100 million undernourished in 2011-13. In contrast, North Africa recorded less than 5 million in 1990-92, which dropped slightly by 2011-13.

West Africa, with more than 40 million undernourished in 1990-92, experienced a drop, reaching just over 30 million in 2011-13. Paradoxically, regions such as Central Africa and Southern Africa, which had relatively low undernourished population in 1990-1992 but then experienced an increase. Specifically, the increase recorded in Central Africa was high: from 13.4 million undernourished to 44.1 million over two decades (Chart 24).

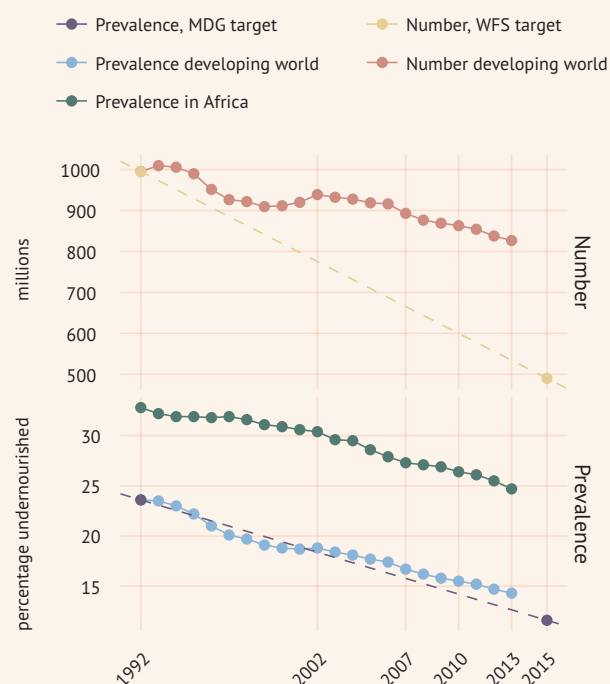
The disparity is also observed from one country to another. Map 16 shows that in 2011-13, hunger affected more than 35 percent of the population in countries like Eritrea, Ethiopia, Mozambique, and Zambia. Moreover between 25 and 35 percent of the population faced hunger in Chad, Botswana, Burkina Faso, Burundi, Kenya, Liberia, Madagascar, Namibia, Rwanda, Sierra Leone, Tanzania, Uganda, and Zimbabwe.

Furthermore, with regard to the food inadequacy in 2011-13, the prevalence was high in Africa (27 percent), especially more than 40 percent in Central Africa, East Africa and Southern Africa (with the exception of Mauritius and South Africa). In West Africa, food inadequacy prevalence was low (15.9 percent) but high in Burkina Faso, Liberia, Senegal and Sierra Leone.

### Further reading

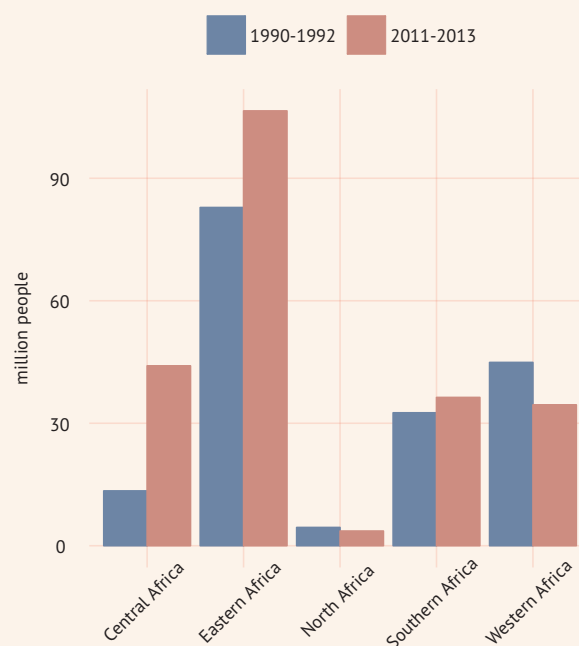
- FAO The State of Food Insecurity in the World 2013 - The multiple dimensions of food security ([www.fao.org/publications/sofi/en/](http://www.fao.org/publications/sofi/en/))
- FAO The State of Food Insecurity in the World 2012 - Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition ([www.fao.org/publications/sofi/en/](http://www.fao.org/publications/sofi/en/))
- FAO Hunger Portal ([www.fao.org/hunger](http://www.fao.org/hunger))

CHART 23: Undernourishment in the developing world (1990-1992 to 2011-2013)



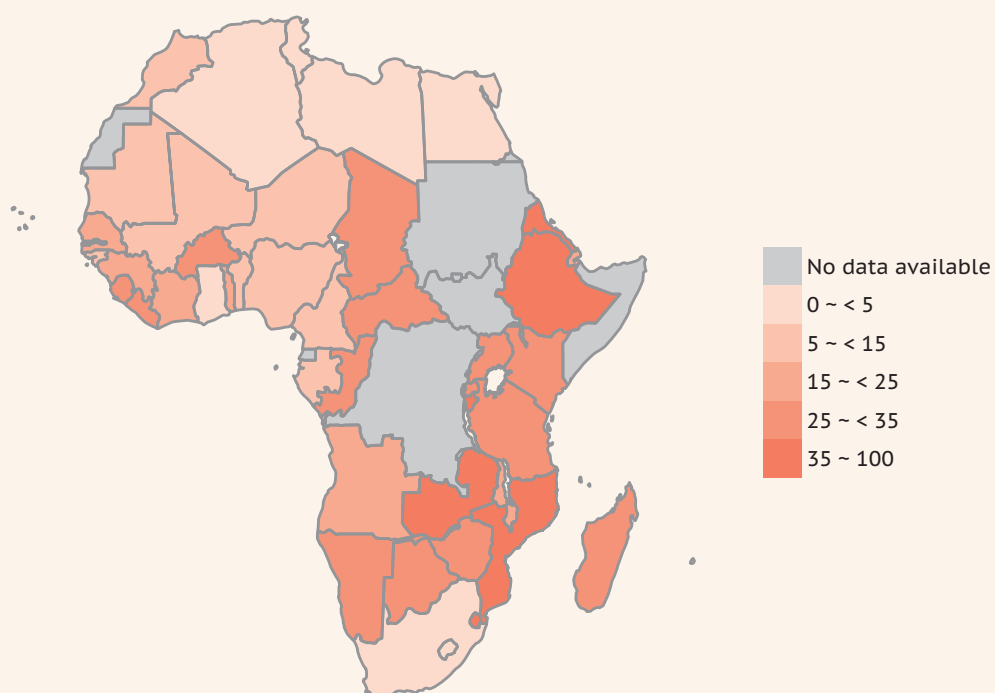
Source: FAO, Statistics Division.

CHART 24: Number of people undernourished (1990-1992 and 2011-2013)



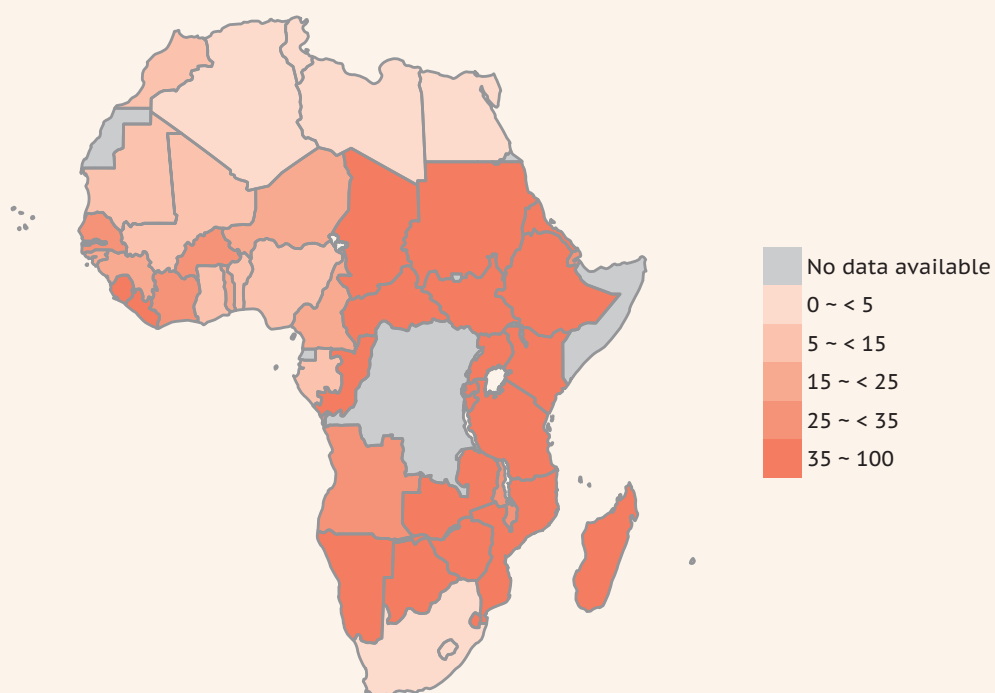
Source: FAO, Statistics Division.

MAP 16: Map of hunger (percent, prevalence of undernourishment 2011-2013)



Source: FAO, Statistics Division.

MAP 17: Prevalence of food inadequacy (percent, 2011-2013)



Source: FAO, Statistics Division.

## Anthropometric indicators

Anthropometric measures are an important element of the new FAO suite of food security indicators. They convey information on the most dramatic and long-lasting consequences of chronic and acute undernourishment. Measures in children under five years can approximate the nutritional status of a population. Stunting is the outcome of prolonged inadequate nutrition and/or repeated infections; wasting is the consequence of acute malnutrition; and low body weight reflects a combination of chronic and acute malnutrition. Anthropometric data are not available and updated as regularly as other indicators, and this prevents a complete comparison across countries, regions and time periods.

During the period (2005-11), Niger and Burundi experienced a very high percentage stunting among children under 5 years (more than 50 percent). For others, it ranged between 40 to 50 percent. In ascending order, the countries were: Nigeria, United Republic of Tanzania, Somalia, Mozambique, Ethiopia, Rwanda, Benin, Central African Republic, Zambia, Malawi and Madagascar.

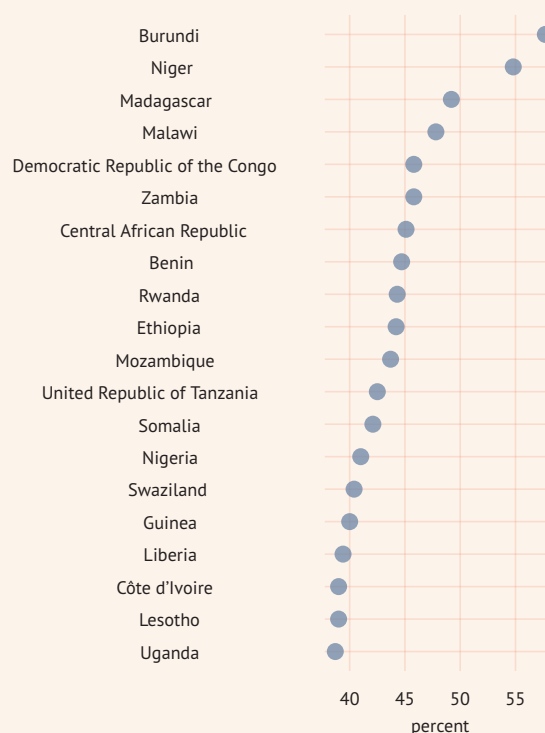
In contrast some countries had stunting rates in children under 5 years of less than 40 percent. They were, in an ascending order: Djibouti, which recorded the lowest rate (30 percent), followed by Burkina Faso, Kenya, Cameroon, Sierra Leone, Mali, Uganda, Lesotho, and Liberia (Chart 25, Map 18).

The percentage of underweight children under 5 years of age (2005-11) was very high for Niger and Burundi (more than 30 percent). It was between 25 and 30 percent for Burkina Faso, Nigeria, Mali, Central African Republic, Congo (DR), Ethiopia, Côte d'Ivoire, Somalia, Sudan and Djibouti (in an ascending order) (Chart 26). However it was lower (less than 20 percent) in Uganda, Kenya, Cameroon, Guinea-Bissau, Namibia, Mozambique, and Senegal (in ascending order) (Chart 26, Map 19).

## Further reading

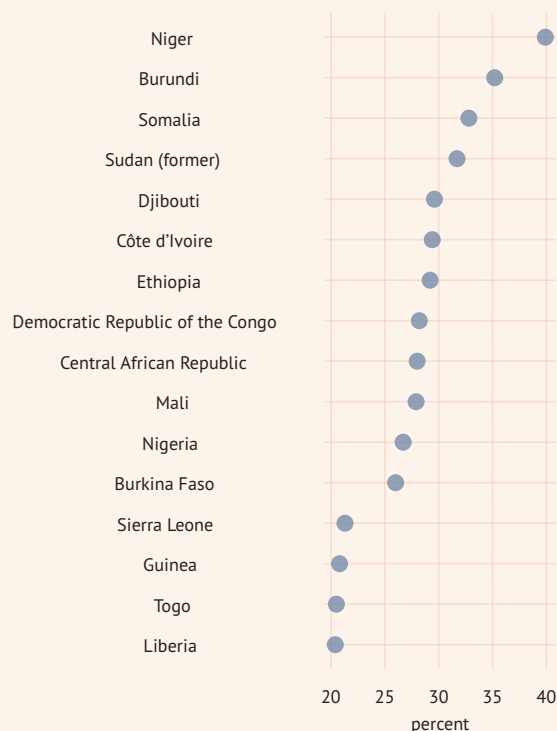
- FAO Nutrition and Consumer Protection Division ([www.fao.org/food/](http://www.fao.org/food/))
- UNICEF Nutrition ([www.unicef.org/nutrition/](http://www.unicef.org/nutrition/))

CHART 25: **Percentage of children under 5 years of age who are stunted (2005-2011\*)**



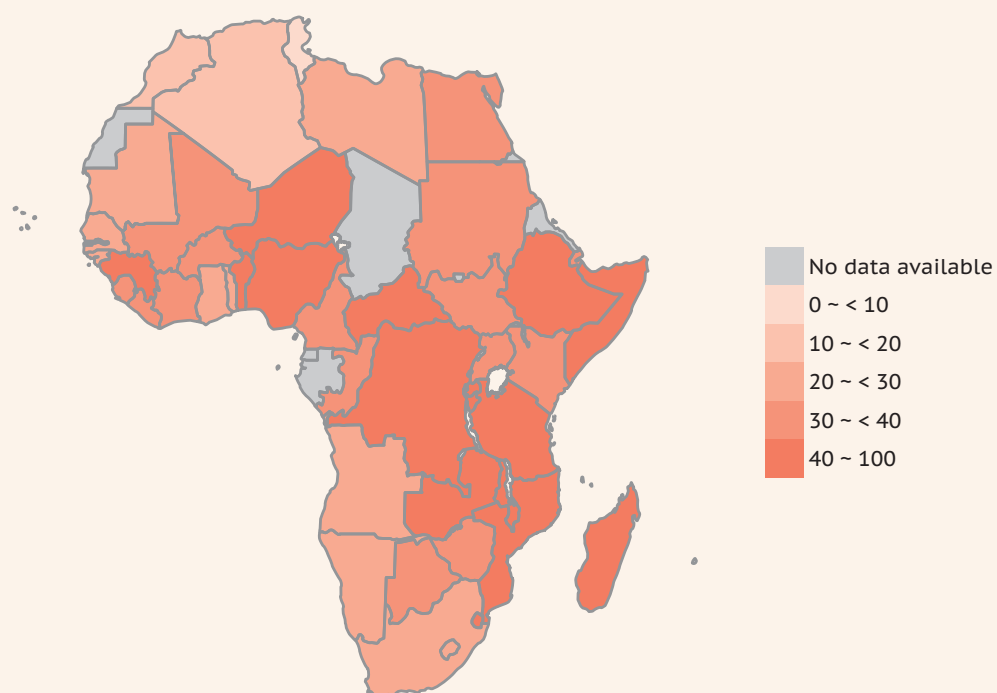
Source: FAO, Statistics Division.

CHART 26: **Percentage of children under 5 years of age who underweight (2005-2011\*)**



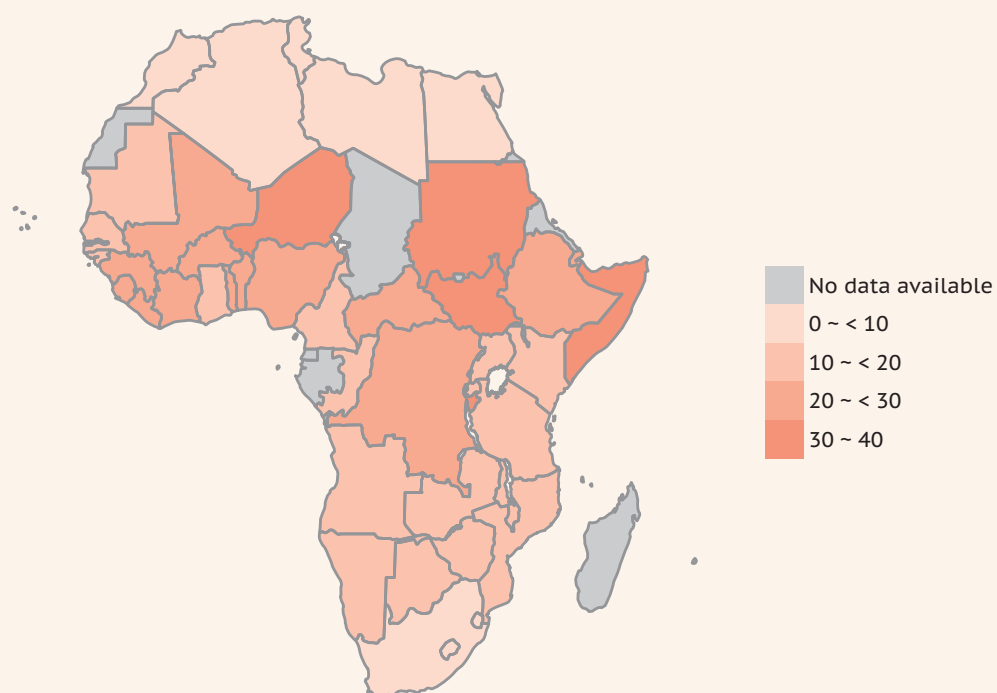
Source: FAO, Statistics Division.

MAP 18: Percentage of children under 5 years of age who are stunted (percent, 2005-2011\*)



Source: FAO, Statistics Division.

MAP 19: Percentage of children under 5 years of age who are underweight (percent, 2005-2011\*)



Source: FAO, Statistics Division.

## Poverty

Poverty is the main determinant of hunger. But, like hunger, poverty is also multifaceted; it is not simply defined by a lack of income or consumption and includes deprivation in areas of health, education, nutrition, security, empowerment and dignity. Vulnerability is another dimension of poverty. Without effective coping mechanisms, excessive exposure to shocks – such as droughts or sudden price swings – creates the risk of future poverty. All of these dimensions interact with and reinforce one another. However, to facilitate international comparison, poverty indicators generally measure the proportion of a population whose income is below a particular threshold.

Among these indicators is the poverty gap against the national poverty line, which indicates the gap (missing) to be filled in order to bring all of the poor to the poverty line. Poverty is a determinant of hunger. Poor households generally spend large shares of their incomes on food, and many of them, even among farmers, are net food buyers. The inability of poor families to consume enough food to meet dietary requirements can have long-lasting impacts on labour and productivity and hamper development prospects.

In 2005-12, the poverty gap against national poverty line was high for some African countries (between 26 and 45.3 percent) in Central African Republic (CAR), Democratic Republic of Congo, Equatorial Guinea, Madagascar, Mozambique, Nigeria, Swaziland and Zambia. However, this indicator was low (3.6 - 9.7 percent) in Benin, Egypt, Ethiopia, Namibia, Ghana, South Africa, and Uganda (Map 20).

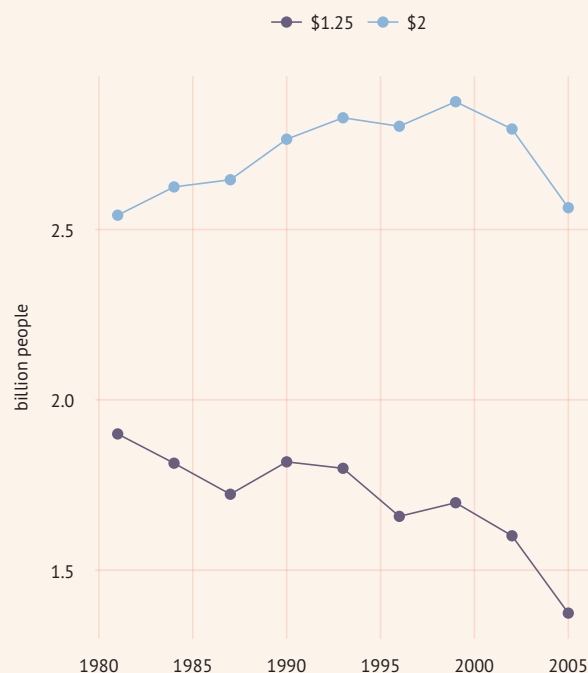
Many countries with a high poverty gap at the national poverty line are the same as those that have recorded high poverty per capita at the national poverty line, share of population (Map 21).

There is more than one country where a considerable proportion of population living with less than \$2 per day (PPP) is associated with a high prevalence of undernourishment. This is the case in Africa, for instance, in Burundi, Ethiopia, Mozambique, and Zambia. In other countries, however, a high proportion of population below the same poverty line is associated with prevalence of food insecurity close to the regional average, which is 27 percent. For Africa, this is the case of the Central African Republic, Guinea, Liberia, Madagascar, and Rwanda. In contrast, there are countries – Nigeria for example – where a high level of poverty is associated with prevalence of undernourishment below 10 percent.

## Further reading

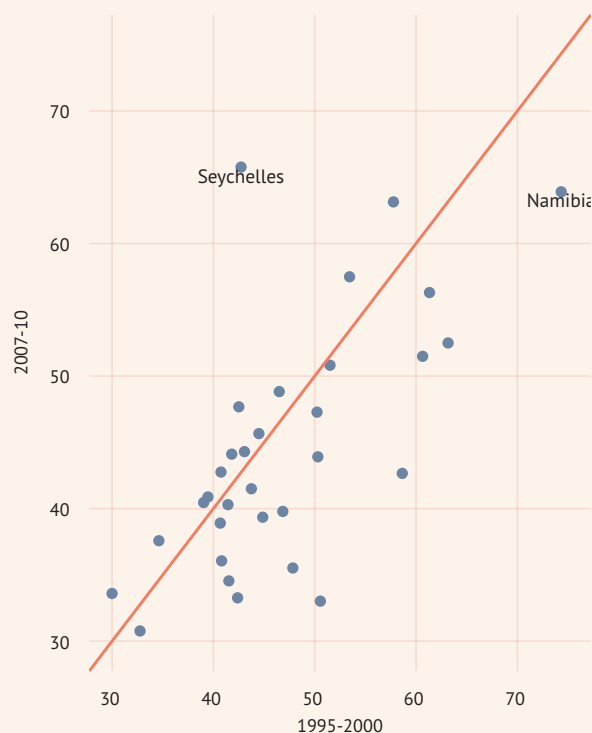
- MDG Indicators web site: <http://mdgs.un.org/unsd/mdg/Metadata.aspx?IndicatorId=0&SeriesId=584>
- World Bank Poverty Reduction and Equity Group ([www.worldbank.org/poverty](http://www.worldbank.org/poverty))

CHART 27: People in the world living on less than 2005 PPP \$1.25 and \$2 a day (1981-2005)



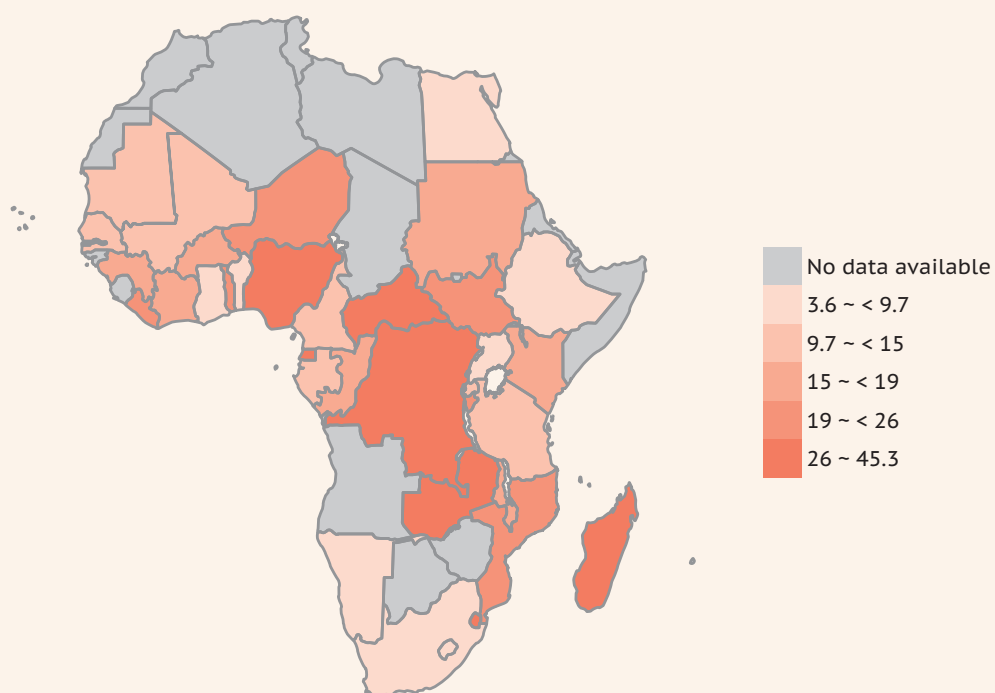
Source: World Bank (WDI).

CHART 28: Gini coefficient for African countries (1995-2000 and 2007-2010)



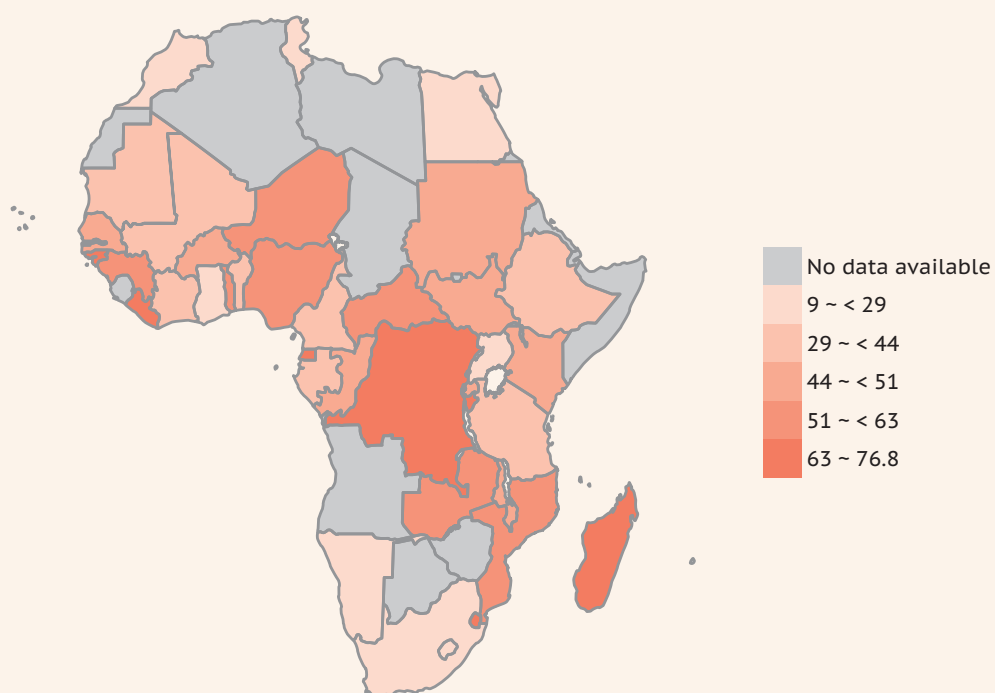
Source: World Bank (WDI).

MAP 20: Poverty gap at national poverty line (percent, 2005-2012\*)



Source: World Bank (WDI).

MAP 21: Poverty headcount ratio at national poverty line, share of population (percent, 2005-2011\*)



Source: World Bank (WDI).

## Food Availability

One of the key determinants of food security lies in the availability of food and its constituents. Dietary energy may be available but not diversified enough to provide the macro and micro nutrients essential for a healthy life. Information on food available for consumption is mainly obtained at an aggregate level through food balance sheets, which provide data on the amount of energy and protein available per person per day at the country level. However, this information reports only on the energy or nutrients available for consumption at the national level, not the food consumed by individuals. Even if dietary energy supply is a good indicator of food availability, other indicators, such as food adequacy, are needed to provide information on the gap between food supply and average energy requirements.

Between 1990 and 2011, the share of energy supply derived from cereals, roots and tubers increased in Central Africa, and East Africa. Southern Africa experienced no growth, while North Africa and West Africa recorded a slight drop. (Chart 31).

On the whole, with the exception of Central Africa where the relative change in average protein supply (between 1990-92 and 2008-10) was negative, for all other parts of Africa, this relative change was positive. West Africa had the highest relative change in average protein supply (over 20 percent), followed by North Africa (just under 15 percent) and East Africa and Southern Africa with less than 10 percent each (Chart 32).

Considering animal-based protein supply, the relative changes became negative for East Africa and again for Central Africa. It was positive in North Africa, Southern Africa, and West Africa; this relative change in average animal-based protein supply increased dramatically (over 40 percent) in North Africa, followed by West Africa and Southern Africa (chart 33).

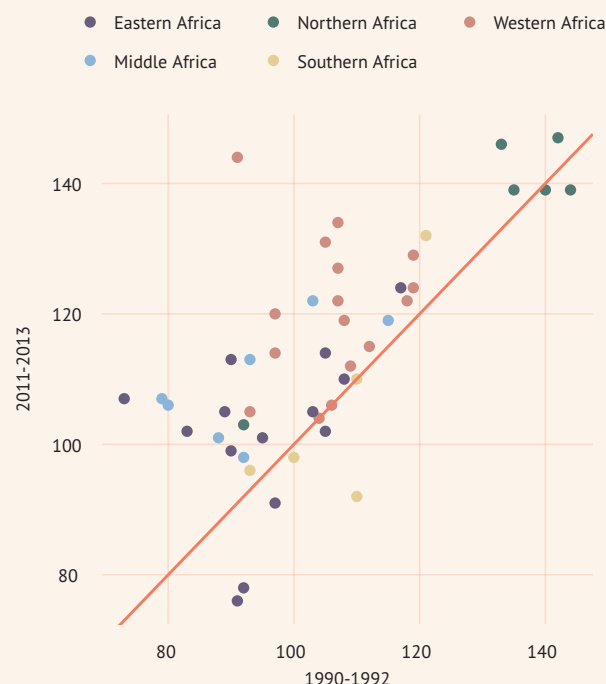
In conclusion one could say that the relative change in average protein supply in North Africa was mainly due to animal-based protein supply. This does not seem to be the case for West Africa and Southern Africa. In East Africa, apparently the relative change in protein supply was not related to animal-based protein.

With regard to fat supply, here again Central Africa recorded a negative relative change in average fat supply. West Africa had the highest (over 20 percent), followed by Southern Africa (about 15 percent), North Africa and East Africa (chart 34).

## Further reading

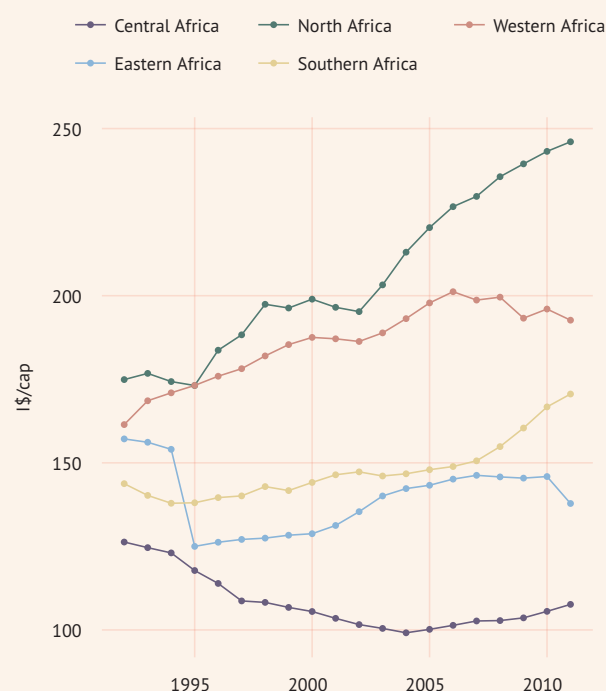
- WHO Nutrition and disorders ([www.who.int/topics/nutrition/en/](http://www.who.int/topics/nutrition/en/))
- FAO The State of Food Insecurity in the World 2013 - The multiple dimensions of food security ([www.fao.org/publications/sofi/en/](http://www.fao.org/publications/sofi/en/))

CHART 29: Average dietary supply adequacy (1990-1992 and 2011-2013)



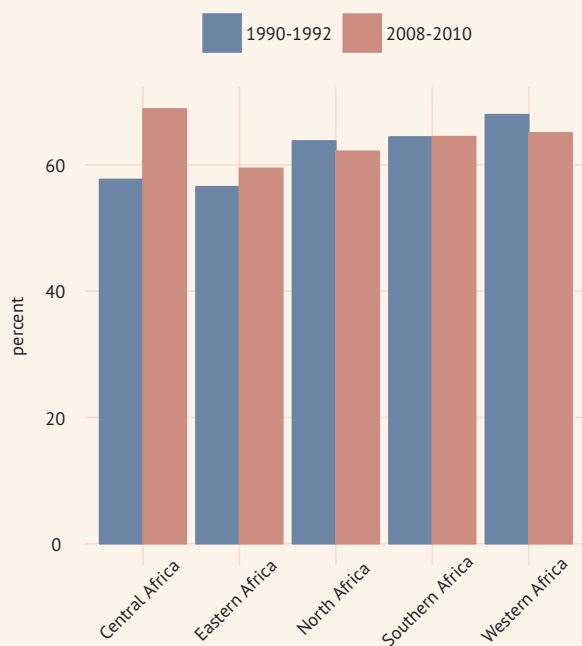
Source: FAO, Statistics Division.

CHART 30: Trend of the value of food production (1992-2011)



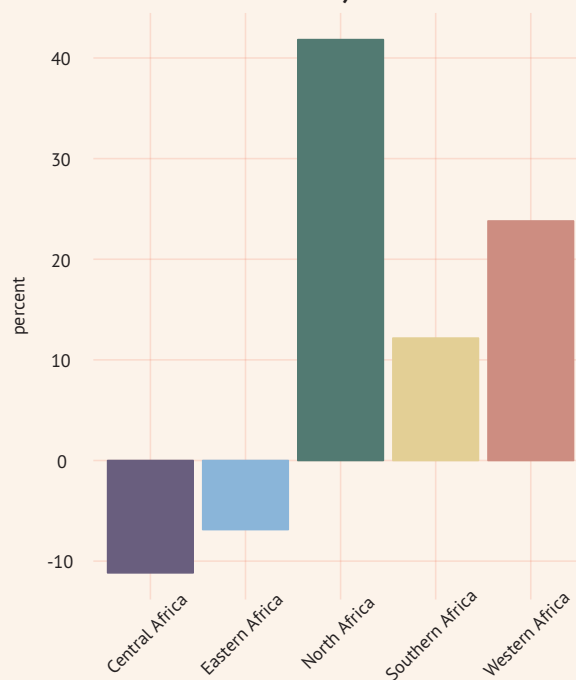
Source: FAO, Statistics Division.

**CHART 31: Share of energy supply derived from cereals, roots and tubers (1990-1992 and 2008-2010)**



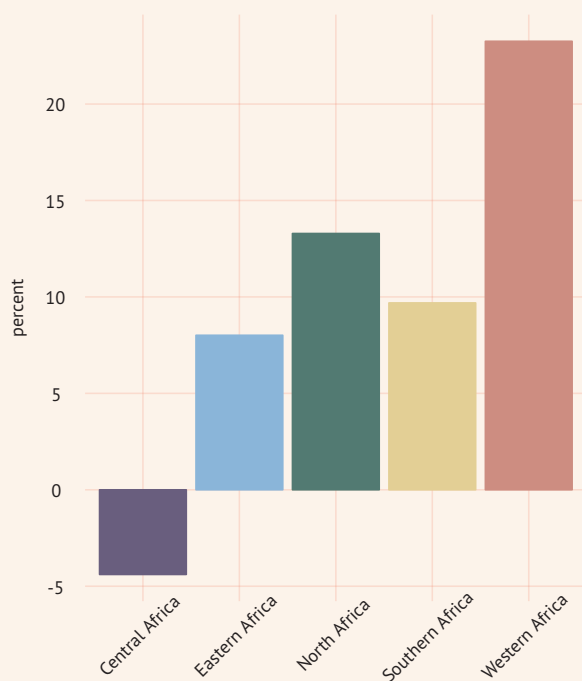
Source: FAO, Statistics Division.

**CHART 33: Relative change in average protein supply from animal origin (between 1990-1992 and 2008-2010)**



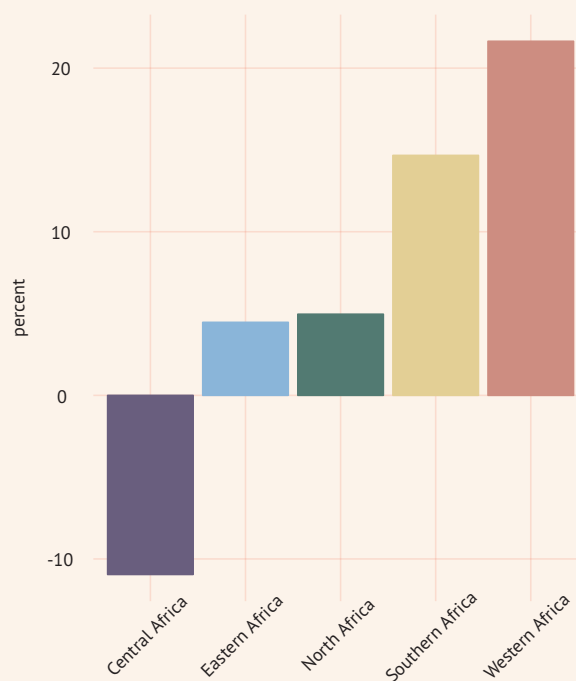
Source: FAO, Statistics Division.

**CHART 32: Relative change in average protein supply (between 1990-1992 and 2008-2010)**



Source: FAO, Statistics Division.

**CHART 34: Relative change in average fat supply (between 1990-1992 and 2008-2010)**



Source: FAO, Statistics Division.

## Economic and physical access

As long as food is available but is not adequately distributed among the population, hunger will be an issue. It is therefore necessary to ensure that people have physical and economic access to food.

Access to food is primarily determined by incomes, food prices and the ability of households and individuals to access social support. Over the entire period from 2000 to 2010, West Africa recorded the highest relative food price index (around 2.3 in 2001-2002) vis-à-vis other parts of Africa. Central Africa had the second highest, with indexes between 2.1 and 2.2 in 2010. The relative food price index for Southern Africa was the lowest, moving from just over 1.4 to just over 1.6 during the same period. North Africa was higher than East Africa until around 2004 when the trend was reversed and East Africa's index greater until 2010 (chart 36).

Beyond economic affordability, physical access to food is facilitated by adequate infrastructure, such as rail lines and paved roads. These facilitate the access and the functioning of markets, help reduce price arbitrage, and the delivery of food and non-food products across regions and between rural and urban areas. Except for South Africa and Swaziland, where the rail line density in 2011 exceeded 1.5 km per 100 square km of land area, for most countries in Africa, the density was below 0.5 (chart 35).

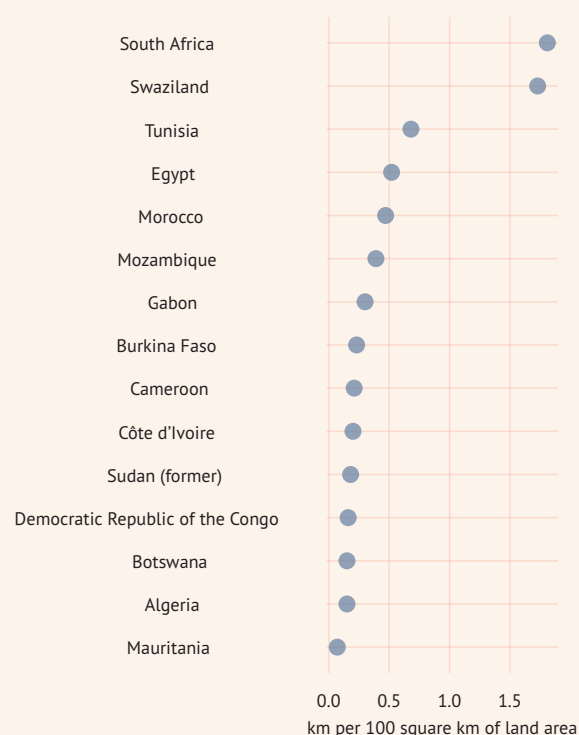
As regards roads, in 2005-10, Morocco, Tunisia, Egypt, Côte d'Ivoire, Ghana, Senegal, Kenya, Tanzania had the highest road density (14 to 110 km per 100 square km of land area). In countries such as Central African Republic (CAR), Chad, Mali, Mauritania and Niger, the density was very low (less than 3.4 km per 100 square km of land area), (Map 22).

With respect to paved roads, only Algeria, Egypt, Tunisia, Mauritius, and Seychelles had a percentage of paved roads out of total roads higher than 75.

## Further reading

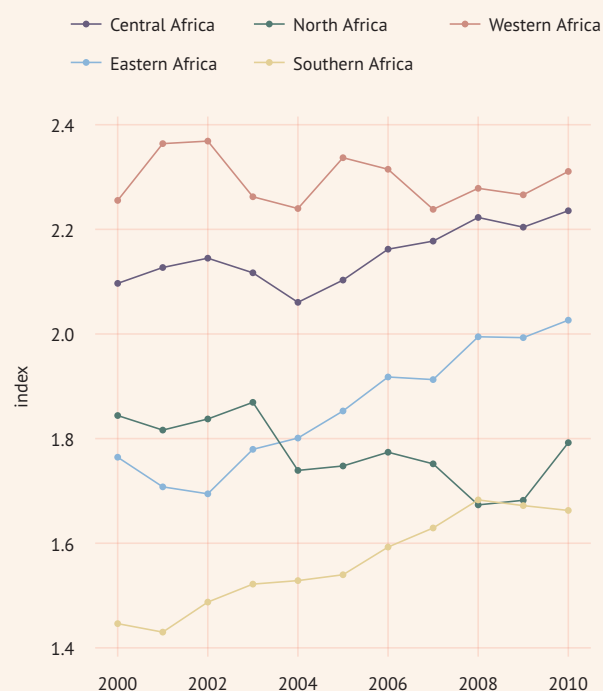
- The Implications of Soaring Food Prices and the Global Financial and Economic Crisis for Agricultural Development and Food and Nutrition Security in the Near East from the 30th Regional Conference (<http://www.fao.org/docrep/meeting/020/k9532e.pdf>)
- FAO The State of Food Insecurity in the World 2013 - The multiple dimensions of food security ([www.fao.org/publications/sofi/en/](http://www.fao.org/publications/sofi/en/))

CHART 35: Rail lines density (2011)



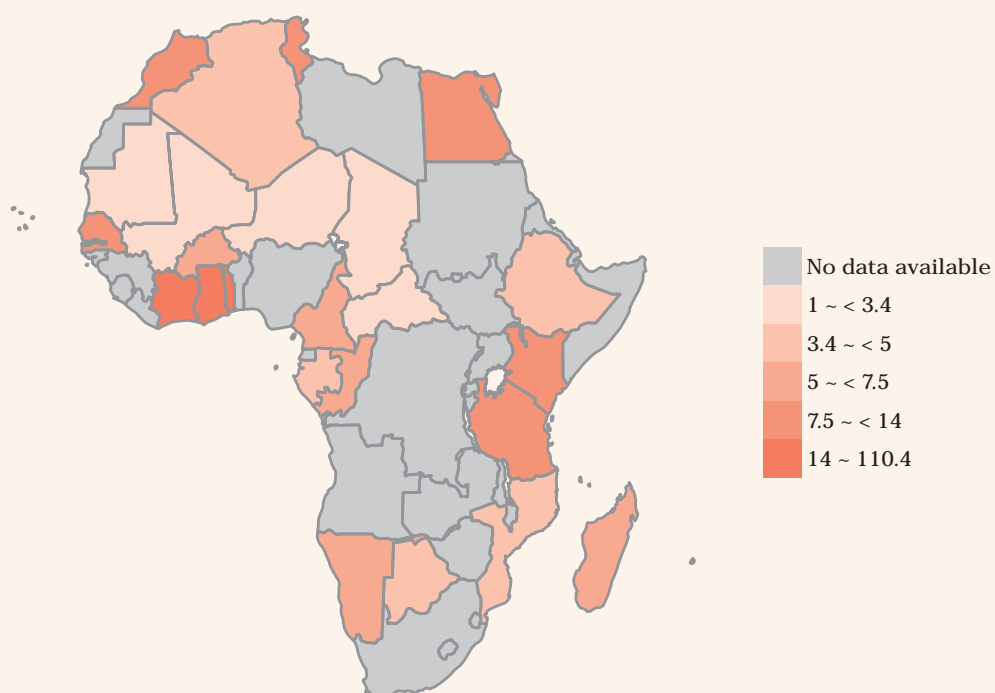
Source: FAO, Statistics Division.

CHART 36: Relative price of food (2000-2010)



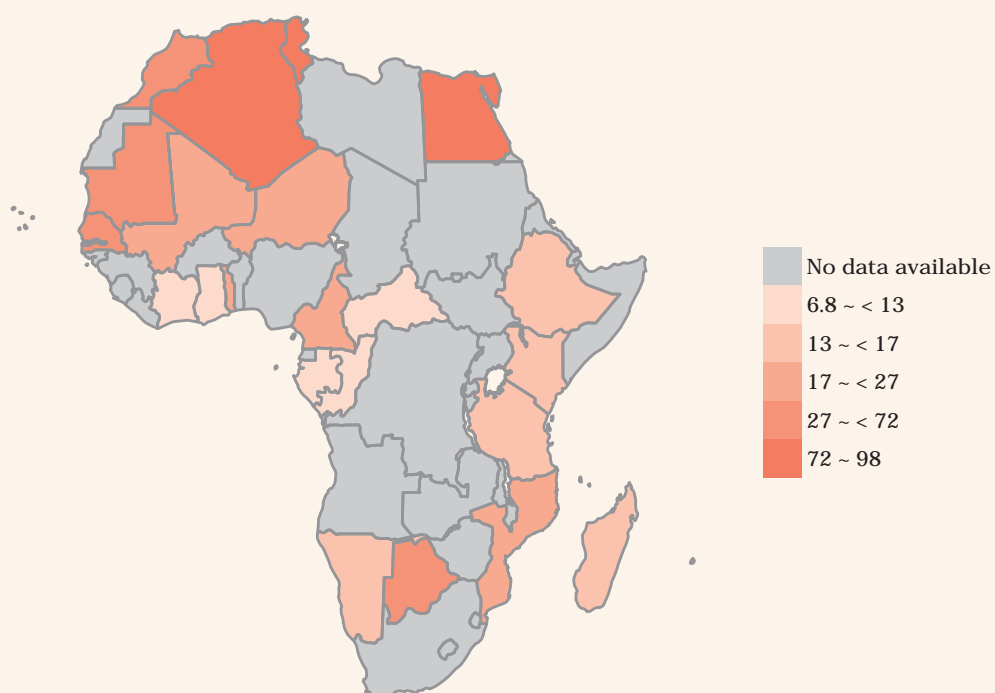
Source: FAO, Statistics Division.

MAP 22: Road density (km per 100 square km of land area, 2005-2010\*)



Source: FAO, Statistics Division.

MAP 23: Percent of paved roads over total roads (percent, 2005-2010\*)



Source: FAO, Statistics Division.

## Clean water and sanitation

Access to clean water and sanitation facilities affects health conditions of individuals and households, and hence their ability to utilize food. The body's capacity to absorb nutrients requires a good health status, especially in young individuals. Therefore, these two indicators are considered an important part of the suite of food security indicators.

North Africa recorded the lowest percentage (approximately 12 percent) of population without reasonable access to improved water sources in 1992. In addition, this percentage dropped to even less than 10 percent in 2011. In contrast, other parts of Africa had high percentages, ranging from less than 40 percent in Southern Africa to about 60 percent for East Africa in 1992. They all experienced a decrease in 2011, with percentages ranging from less than 30 percent for Southern Africa to 45 percent for Central Africa (Chart 37). The situation is critical in countries such as Chad, Democratic Republic of the Congo, Ethiopia, Madagascar, Mauritania, Mozambique, Niger and Somalia, where more than half of the population was without reasonable access to improved water sources in 2011 (Map 24).

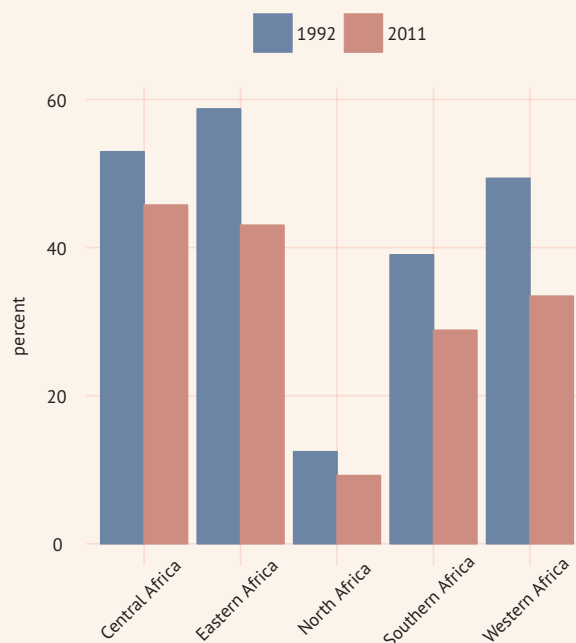
Low levels of access to clean water are associated in several countries with high levels of undernourishment and a high frequency of underweight children. This is the case, for instance, in Ethiopia, Mozambique, Sudan and Zambia. While this association does not make it possible for establishing causality, it does warrant further investigation.

As in the case of access to improved water sources, the percentage of population without access to reasonable improved sanitation facilities was lowest in North Africa (25 percent in 1992), which declined significantly to only 10 percent in 2011. However access to improved sanitation facilities in other parts of Africa was problematic. Indeed the percentage of population without access to adequate sanitation facilities was very high in 1992, ranging from almost 60 percent for Southern Africa to more than 80 percent for East Africa. However, a slight decrease was observed in 2011, where percentages ranged from approximately 52 percent for Southern Africa to roughly 75 percent for East Africa and West Africa. As the data show, the situation of access to improved sanitation facilities remains crucial and very alarming in Africa (chart 38).

## Further reading

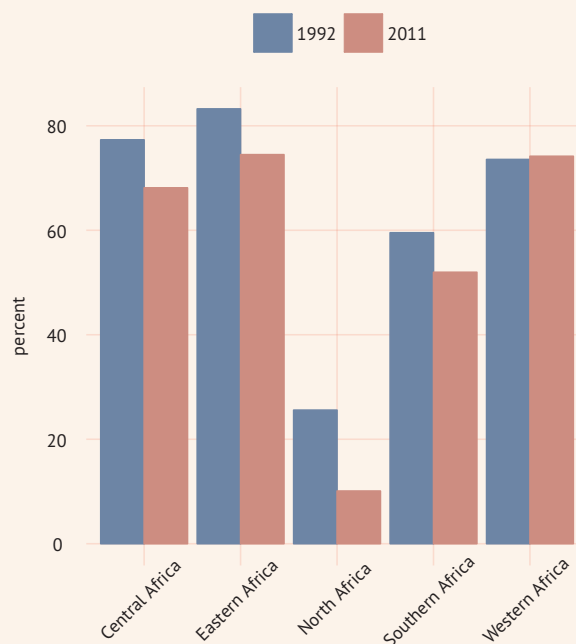
- UNICEF Water, Sanitation and Hygiene ([www.unicef.org/wash/](http://www.unicef.org/wash/))

CHART 37: Percentage of population without reasonable access to improved water sources (1992 and 2011)



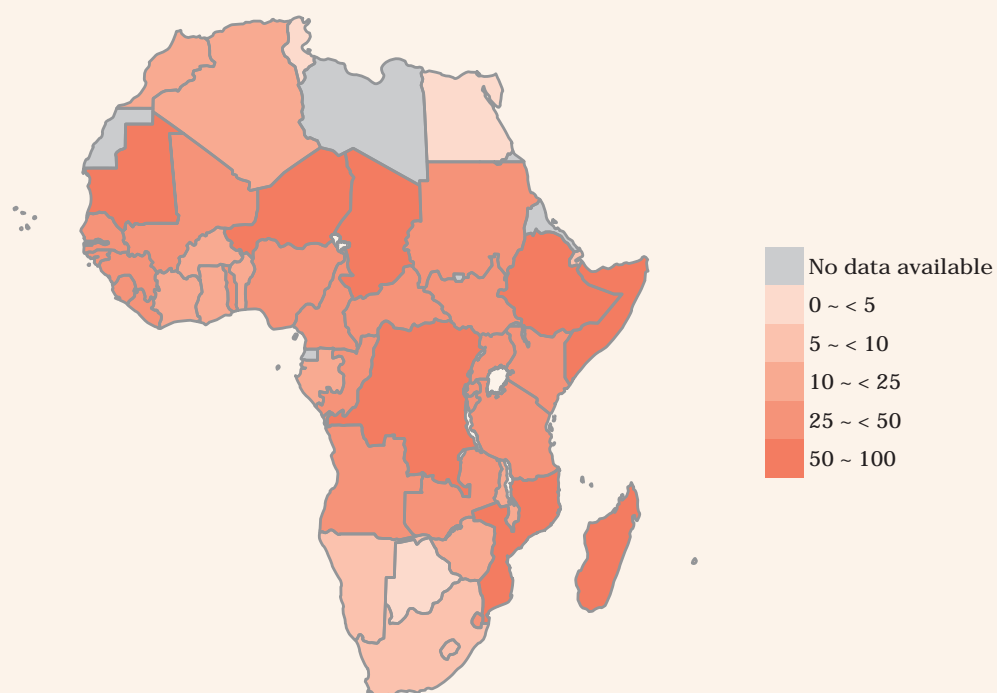
Source: FAO, Statistics Division.

CHART 38: Percentage of population without reasonable access to improved sanitation facilities (1992 and 2011)



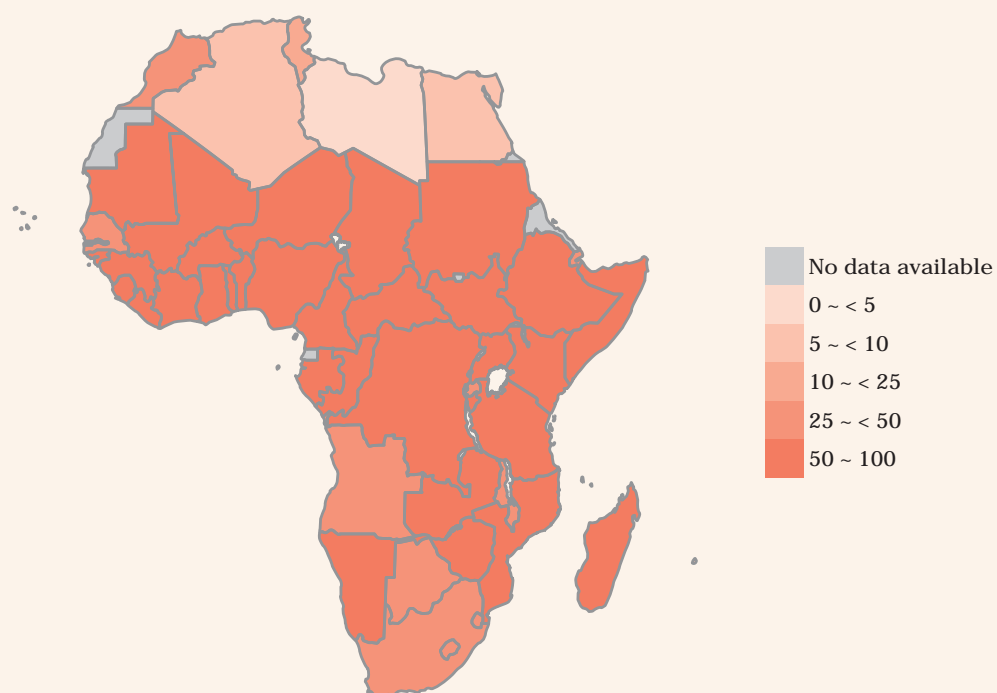
Source: FAO, Statistics Division.

MAP 24: Share of population without reasonable access to improved water sources (percent, 2011)



Source: FAO, Statistics Division.

MAP 25: Share of population without reasonable access to improved sanitation facilities (percent, 2011)



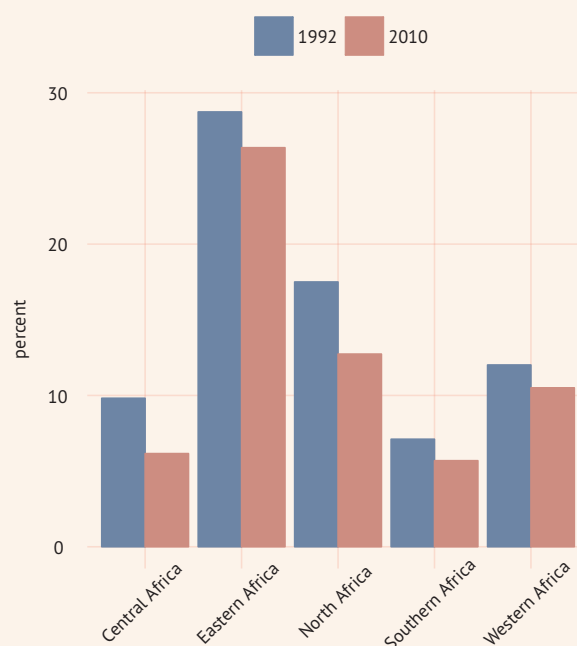
Source: FAO, Statistics Division.

## Economic and political stability

On the whole, throughout the period 1992-2010, the value of food imports vis-à-vis total merchandise exports was around 10 percent for RAF and higher in East Africa (more than 25 percent) than in other parts of Africa. This indicator assesses the country capacity to finance its food imports by revenue gained from all commodities exports. East Africa was followed by North Africa, West Africa, Central Africa and Southern Africa. In general, the value of food imports over total commodity exports was down in all parts of Africa (Chart 39).

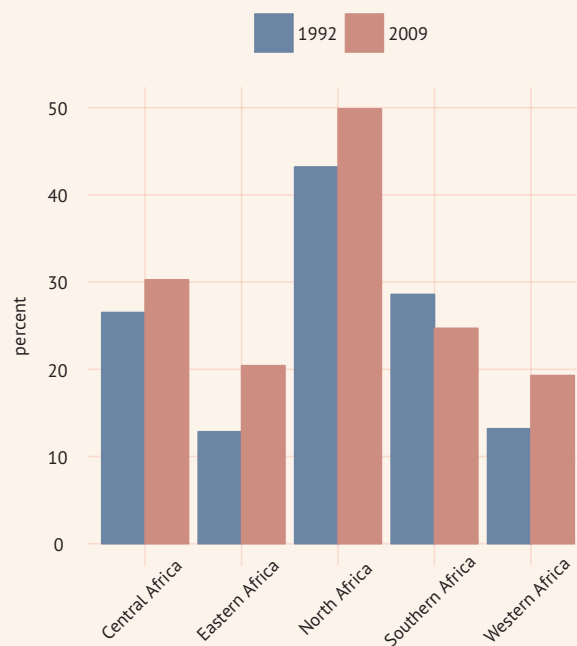
However, the cereal import dependency ratio, which expresses the importance of cereal imports as a part of total availability, increased across Africa between 1992-2009, with the exception of Southern Africa where it recorded a drop. At 43 percent in 1992 and 50 percent by 2009, North Africa had the highest ratio. It was followed by Central Africa with a ratio, which increased from 26 percent in 1992 to 30 percent in 2009. Then came East Africa and West Africa, whose results were almost similar with ratios that ranged from about 13 percent to 20 percent (chart 40).

CHART 39: Value of food imports over total merchandise exports (1992 and 2010)



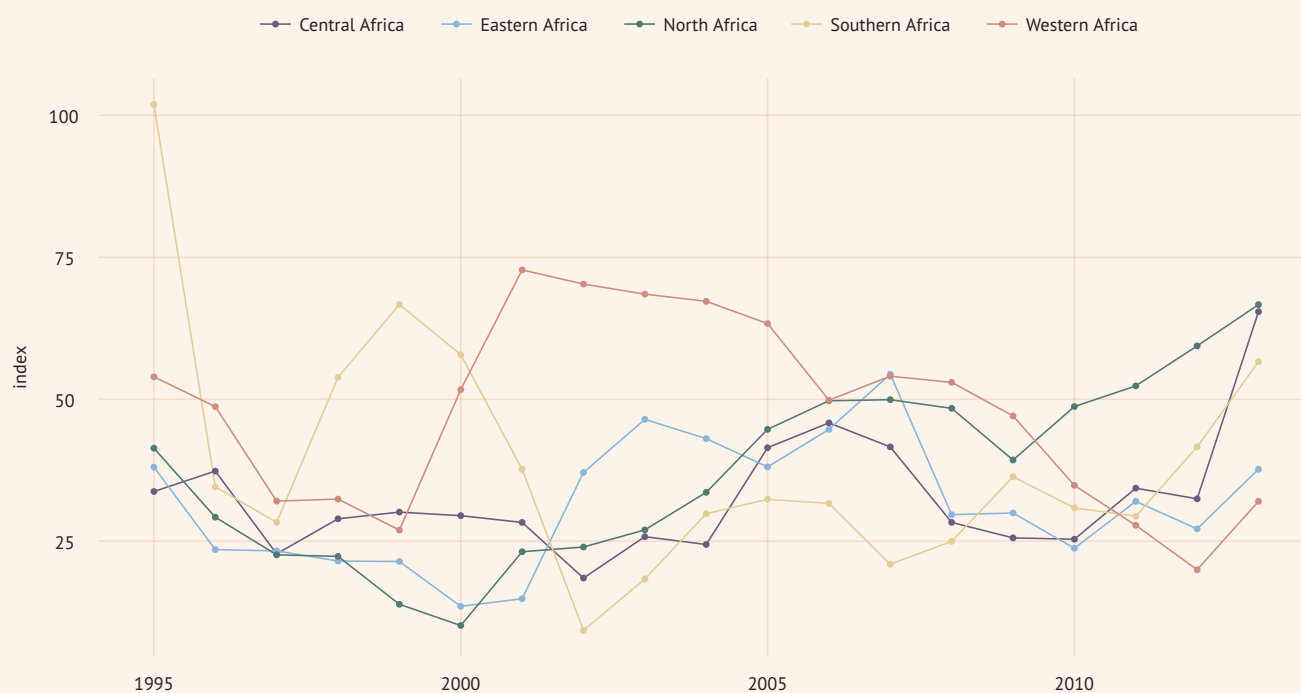
Source: FAO, Statistics Division.

CHART 40: Cereal import dependency ratio (1992 and 2009)



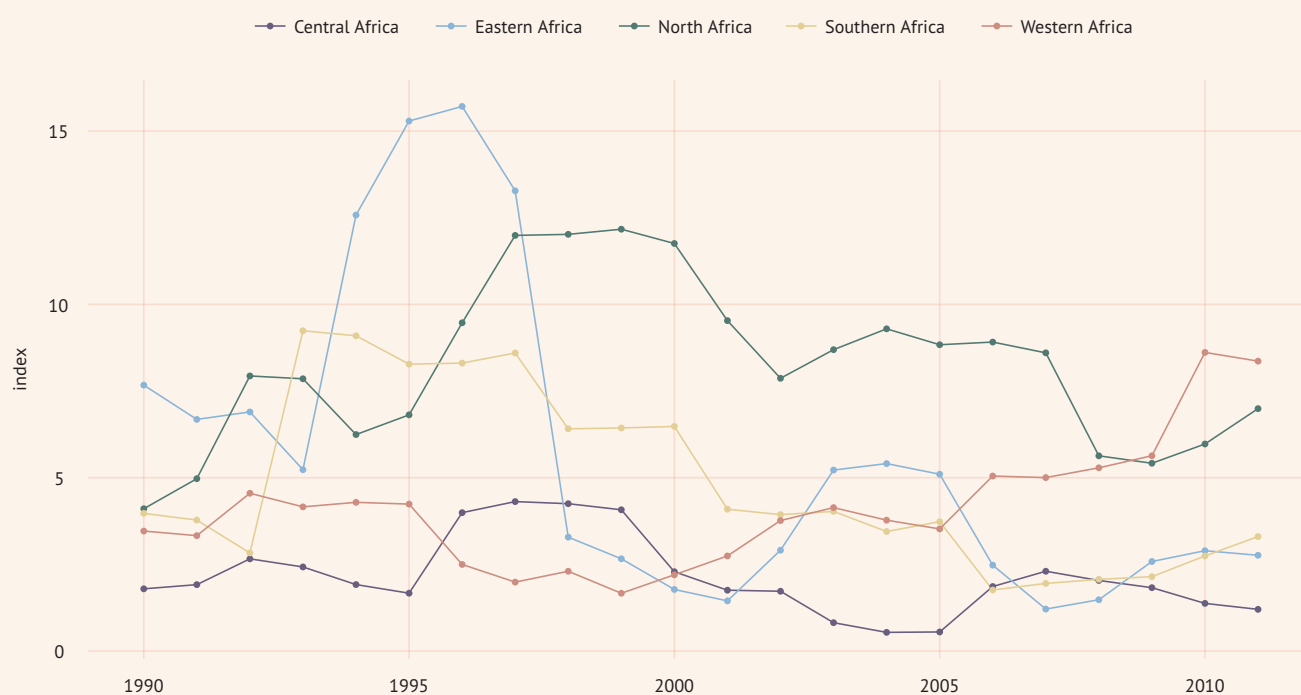
Source: FAO, Statistics Division.

CHART 41: Domestic food price volatility (1995-2013)



Source: FAO, Statistics Division.

CHART 42: Per capita food production variability (1990-2011)



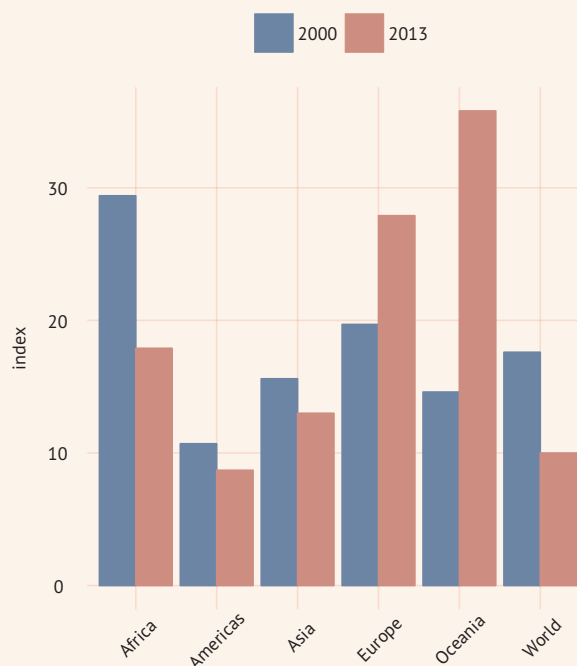
Source: FAO, Statistics Division.

In 2000 the highest domestic food price volatility index (30 percent) was recorded in Africa, while in Europe the index was 20 percent, Asia 18 percent, Oceania 15 percent. The lowest level was in America (about 12 percent). However in 2013, the domestic food price volatility index dropped significantly in Africa, to about 18 percent. Paradoxically in 2013, there was tremendous growth in those parts of world where it was lowest in 2000, especially in Europe, where it showed a 28 percent increase (Chart 43).

In Africa, disparities exist from region to region. In fact, in 2000, while the domestic food price volatility index was highest in Southern Africa (just under 60 percent) and West Africa (over 50 percent), it was relatively low in Central Africa (33 percent), very low in East Africa (12 percent) and North Africa (less than 10 percent), (chart 44).

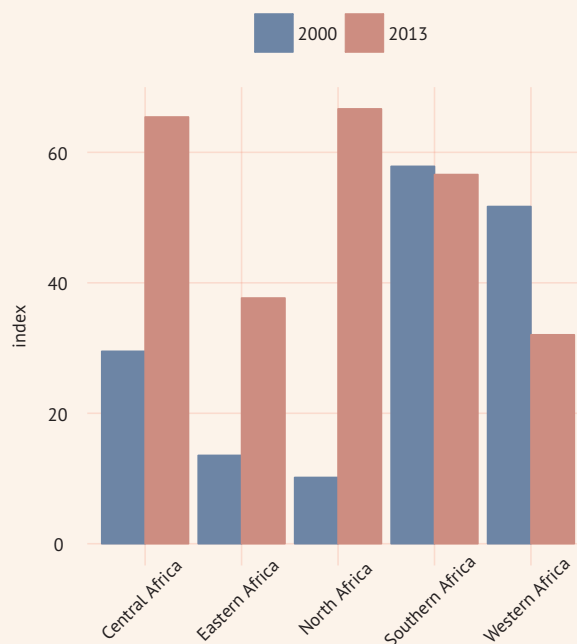
In 2009, political stability and absence of violence/terrorism index was high (0.39-0.85) in Libya, Mozambique, Namibia and Zambia (map 26).

CHART 43: Domestic food price volatility (2000 and 2013)



Source: FAO, Statistics Division.

CHART 44: Domestic food price volatility (2000 and 2013)

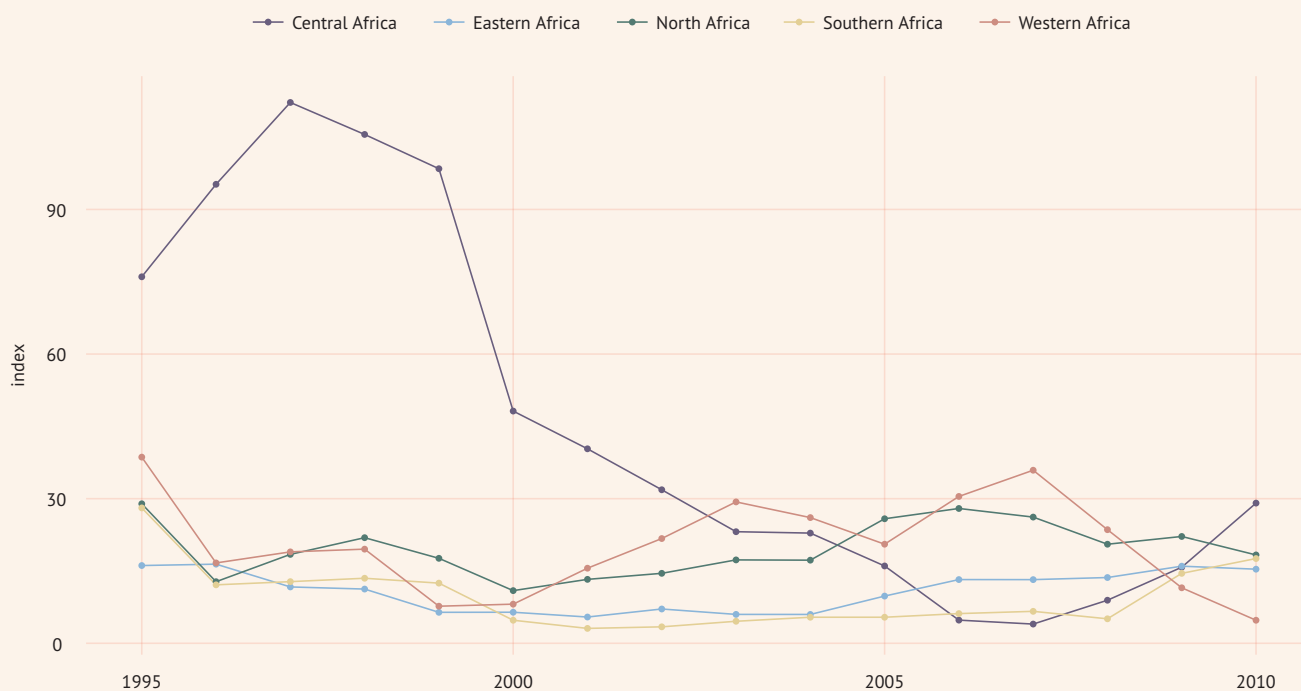


Source: FAO, Statistics Division.

## Further reading

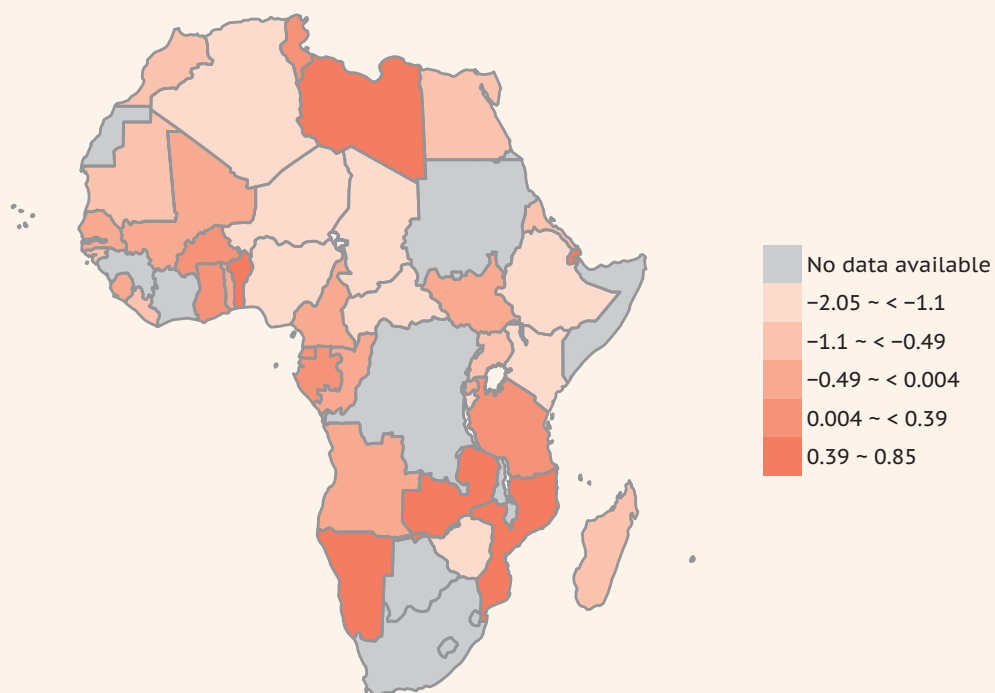
- FAO The State of Food Insecurity in the World 2012 - Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition ([www.fao.org/publications/sofi/en/](http://www.fao.org/publications/sofi/en/))
- Global Information and Early Warning System ([www.fao.org/gIEWS/english/index.htm](http://www.fao.org/gIEWS/english/index.htm))
- Prakash (2011) ([www.fao.org/economic/est/issues/volatility/vgm/en/](http://www.fao.org/economic/est/issues/volatility/vgm/en/))

CHART 45: Per capita food supply variability (1995-2010)



Source: FAO, Statistics Division.

MAP 26: Political stability and absence of violence/terrorism (index, 2009)



Source: FAO, Statistics Division.

## Education and health

Over the period 2005-2010, the literacy rate for adult female was high (88 percent) in Namibia, South Africa and Zimbabwe. It ranged from 64 percent to 85 percent in Gabon, Kenya, Libya, Tanzania and Uganda. However, it was very low in Burkina Faso, Chad, Ethiopia, Guinea, Mali, Niger, Senegal and Sierra Leone.

The primary completion rate was very high (86-133 percent) during the period 2005-2010 in Algeria, Egypt, Ghana, Kenya, Tanzania, Zambia and Botswana. It was also high (71-86 percent) in Cameroon, Nigeria, Morocco, Namibia and Madagascar. However, this rate was low in Angola, Burkina, CAR, Chad, Côte d'Ivoire, Mali and Niger. Several factors account for this low rate, such as lack of school infrastructure. However, other reasons include economic problems (poverty and economic deprivation) and the perception of non-profitability of the school.

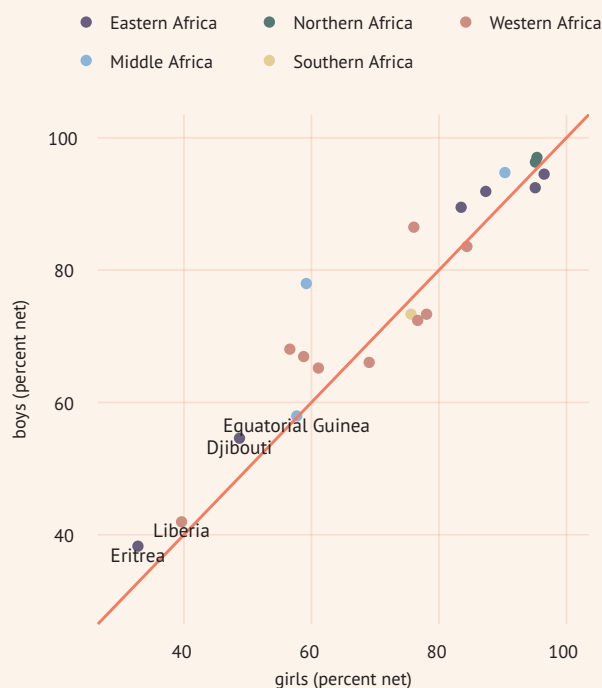
Health is one of the major components of physical, social and mental well-being and remains one of the primary concerns of well-being. Good health is a crucial element of human development. Health is one main cause of poor performance of people in the agricultural sector in Africa. Therefore the health sector requires huge capital expenditure budgets (health facilities, training, medical equipment, etc.) and operating expenditure (remuneration of medical staff, drug purchase expenditure, etc.). It therefore seems that there is the need to increase the total expenditure given the rapid population growth in Africa. This is achieved with difficulty insofar as the share of total health expenditure as a percentage of GDP has remained below 6 percent since 1995 in all African regions with the exception of Southern Africa.

Indeed, over the period 1995-2010, Southern Africa recorded the largest share of total health expenditure as a percentage of GDP. This share varied between 7 percent and 8 percent. West Africa had the next highest, which varied roughly between 5 percent and 6 percent with huge annual variations. Central Africa had the lowest expenditure on health, which remained around 4 percent of the GDP from 1995 to 2008 and then grew at 5 percent to reach around 4.5 percent in 2010 (Chart 47).

## Further reading

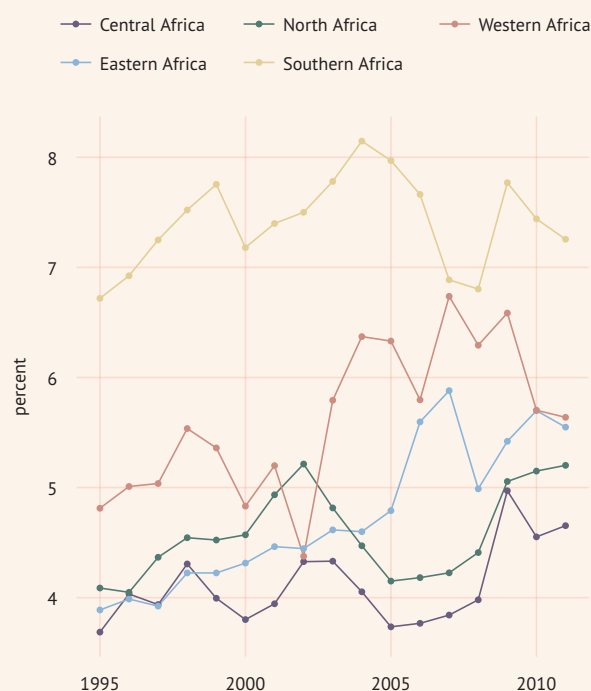
- UNESCO education ([www.unesco.org/new/en/education/](http://www.unesco.org/new/en/education/))
- UNDP Human Development Report 2010 - The Real Wealth of Nations: Pathways to Human Development ([hdr.undp.org/en/reports/global/hdr2010/](http://hdr.undp.org/en/reports/global/hdr2010/))
- O'Donovan (2008)

CHART 46: Girls' and boys' enrolment in primary education (2011)



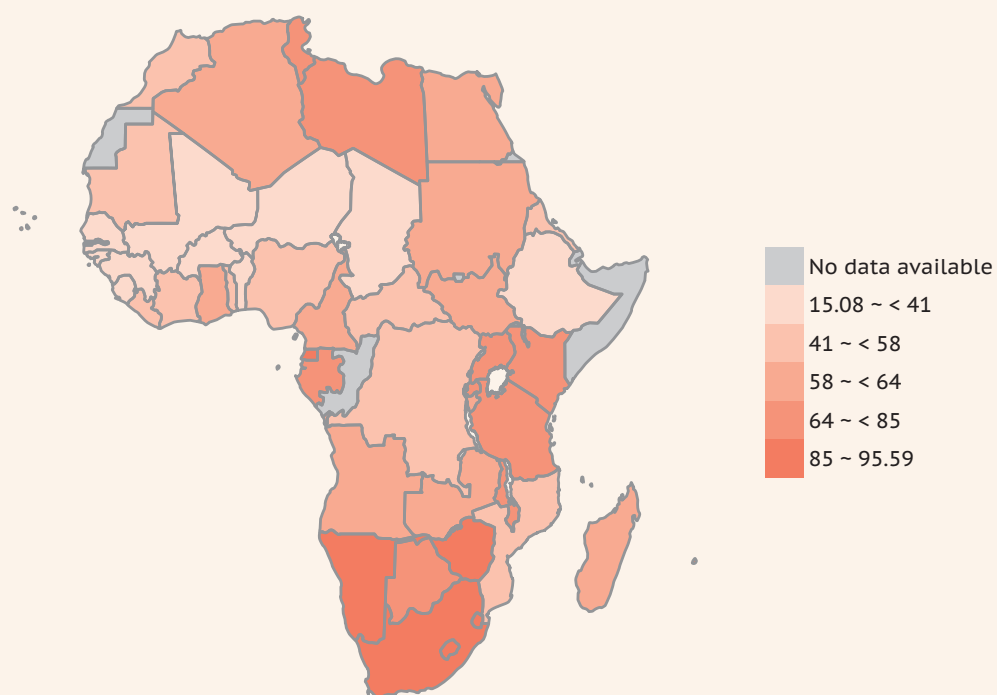
Source: World Bank (WDI).

CHART 47: Total health expenditure, share of GDP (1995-2011)



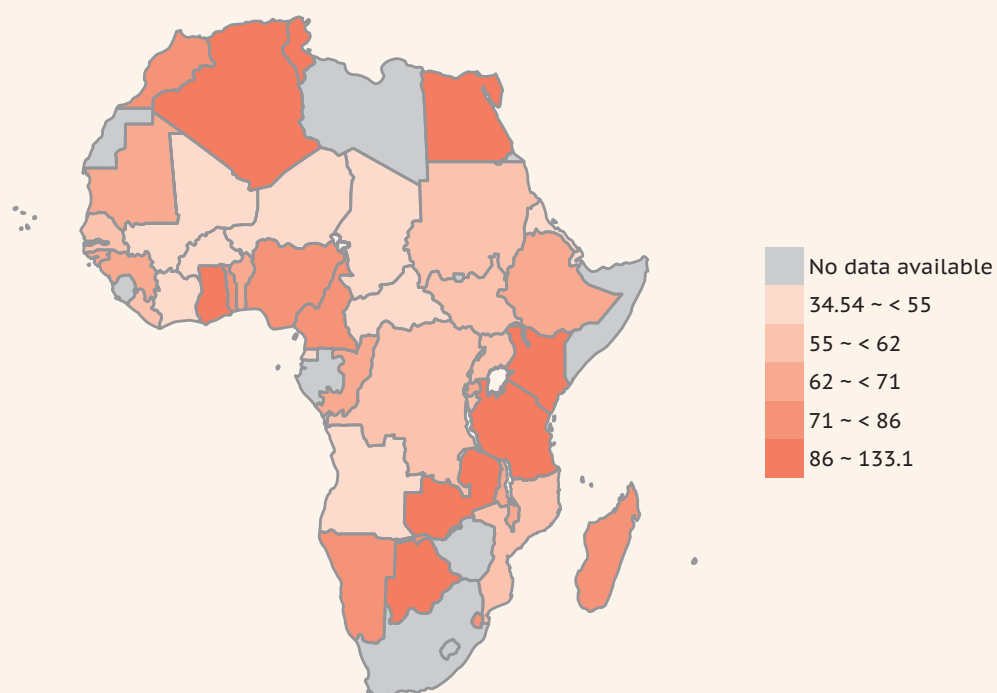
Source: World Bank (WDI).

MAP 27: Literacy rate, adult female - share of females ages 15 and above (percent, 2005-2010\*)



Source: World Bank (WDI).

MAP 28: Primary completion rate, total (percent, 2005-2010\*)



Source: World Bank (WDI).

## Natural and human-made risks

Armed conflict and natural disasters pose significant risks to a population's food security, especially when combined with poverty, poor governance, scarce resources, unsustainable livelihood systems and/or the breakdown of local institutions. Under these circumstances, a perceived temporal shock or short-lived crisis can turn into a self-perpetuating vicious cycle from which countries will find it difficult to extricate themselves and return to a path of longer-term development. Severe events can have an irreversible impact on human capital and societal systems. Armed conflicts and natural disasters, therefore, represent ongoing and fundamental threats to both lives and livelihoods, the recovery from which is progressively more difficult over time.

Among countries in the world most affected by disasters, 68 percent of these were flood-related, 19 percent storms-related, 10 percent drought-related, 2 percent related to extreme temperatures, and 1 percent earthquake-related. Almost all of the floods occurred in Asia, which made the area mostly affected by natural disasters in general, followed by Africa, which was substantially affected by drought. More than 7 million people were affected by drought and about 3 million by floods in 2011.

East Africa recorded the largest share of population affected (more than 3.5 percent) by droughts, floods, extreme temperatures, followed by Southern Africa (around 2.8 percent). Other regions were well below 2.5 percent. It was mainly in North Africa that the share of population was almost insignificant.

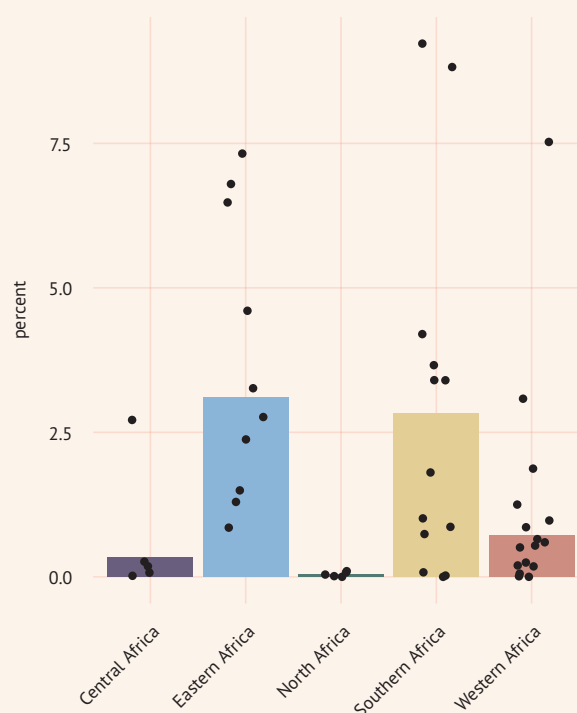
However there were extreme disparities among countries. Though some countries in East Africa recorded 7.5 percent, in Southern Africa, two countries were above 7.5 percent (chart 48). The less affected countries included Kenya, Mauritania, Mozambique, Namibia, Niger, Somalia and Zambia.

Natural disasters and armed conflicts lead to large numbers of displaced people. In 2011, refugees, both men and women, in RAF region were roughly 3 million people, comprising (chart 49). In some countries the affected population was above 500 000. However, the corresponding population has been under 2 000 in the cases of Burkina Faso, Gabon, Niger, and in all of the countries of Southern Africa, including Madagascar. By September 2011, the food crisis in the Horn of Africa, a result of the worst drought since 1950-1951, affected 12 million people in Djibouti, Ethiopia, Kenya and Uganda, with parts of southern Somalia experiencing famine. The situation was worsened by high local cereal prices, excessive livestock mortality, conflict and restricted humanitarian access.

## Further reading

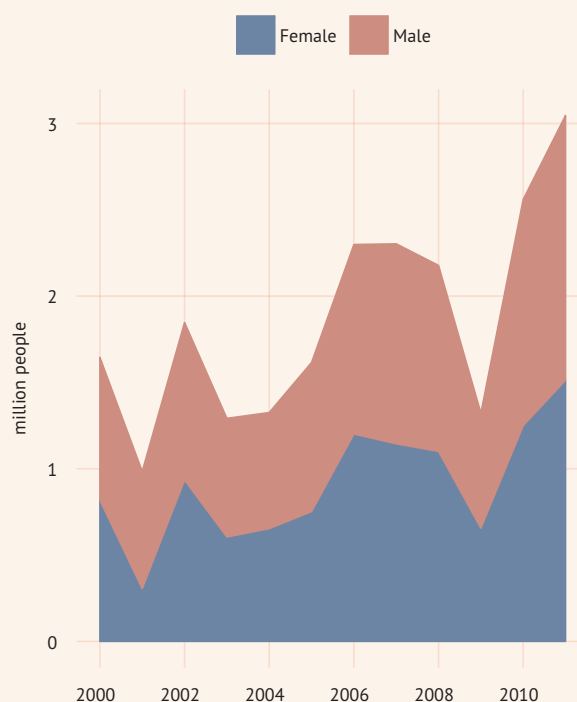
- Centre for Research on the Epidemiology of Disasters ([www.cred.be/](http://www.cred.be/))
- United Nations High Commissioner for Refugees ([www.unhcr.org](http://www.unhcr.org))
- Internal Displacement Monitoring Centre (<http://www.internal-displacement.org/>)

CHART 48: Droughts, floods, extreme temperatures - share of population affected (2009)



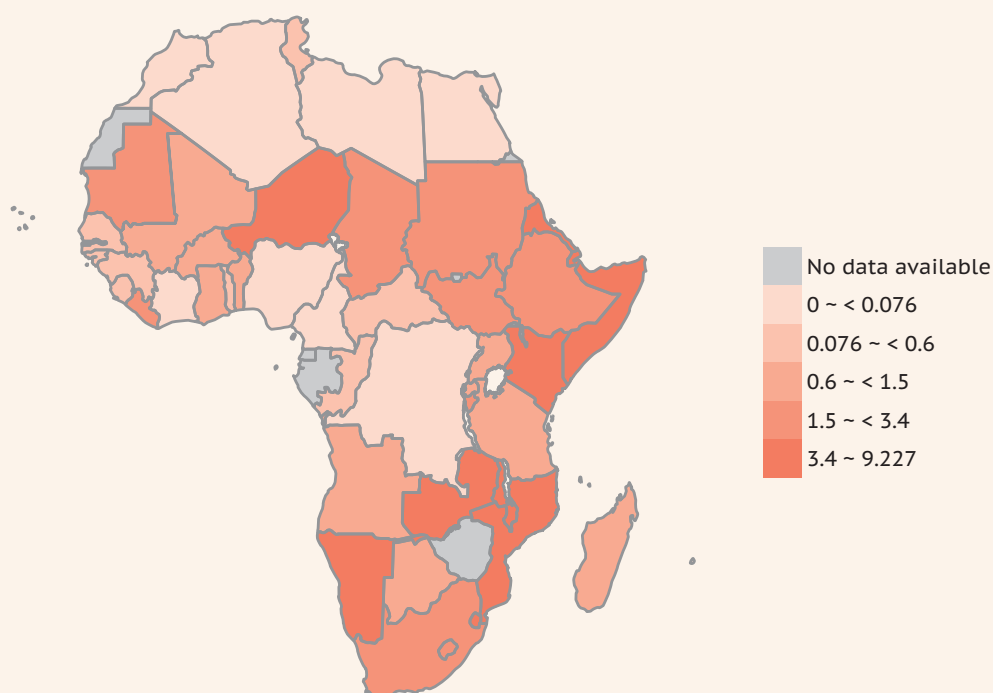
Source: World Bank (WDI).

CHART 49: Refugees in Africa region (2000-2011)



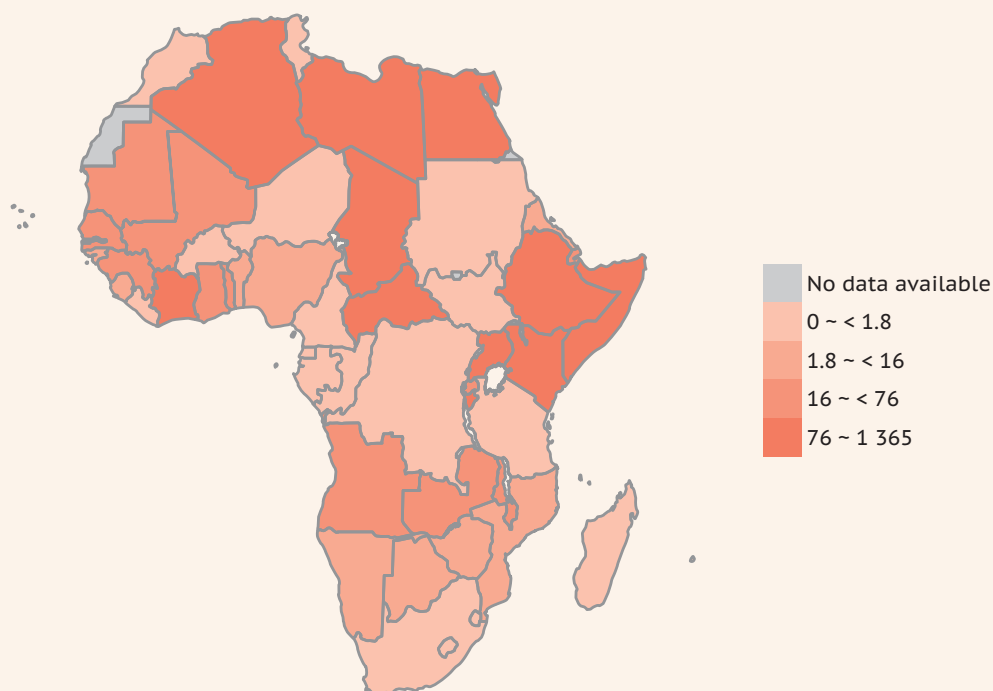
Source: Statistical Online Population Database.

MAP 29: Droughts, floods, extreme temperatures - share of population affected (average 1990-2009) (percent, 2009)



Source: World Bank (WDI).

MAP 30: UNHCR total population of concern (thousand people, 2011)



Source: Statistical Online Population Database.

TABLE 12: Outcomes: Inadequate access to food

	Inadequate access to food								
	prevalence of		number of		% of food expenditure of the poor	depth of the food deficit		prevalence of food inadequacy	
	undernourishment percent	percent	undernourished million people	million people	percent	kcal/cap/day	kcal/cap/day	percent	percent
	1990-92	2011-13	1990-92	2011-13	2000-12*	1990-92	2011-13	1990-92	2011-13
Africa	27.3	21.2	177.6	226.4		179	145	34.4	27.0
North Africa	3.7	2.1	4.5	3.6		21	13	7.0	4.9
Algeria	5.5	< 5	1.4	ns		31	15	9.2	< 5
Egypt	< 5	< 5	ns	ns		13	8	5.5	< 5
Libya	< 5	< 5	ns	ns		5	8	< 5	< 5
Morocco	6.7	5.0	1.7	ns		38	31	10.7	9.0
Sudan									
Tunisia	< 5	< 5	ns	ns	41.0	5	6	< 5	< 5
Regional Office for Africa	32.8	24.8	173.1	222.7		241	189	41.1	31.2
Central Africa	21.3	39.2	13.4	44.1		151	354	28.6	45.4
Cameroon	38.3	13.3	4.8	2.7		263	85	49.2	20.9
Central African Republic	48.5	28.2	1.5	1.3		364	196	58.9	38.0
Chad	60.1	29.4	3.7	3.5	82.0	493	216	68.8	36.6
Congo	42.4	33.0	1.0	1.4		309	234	52.6	43.3
Democratic Republic of the Congo									
Equatorial Guinea									
Gabon	9.5	5.6	0.1	0.1	47.0	56	35	16.8	11.3
Sao Tome and Principe	22.9	7.2	0.0	0.0		144	45	32.1	12.5
East Africa	49.0	36.1	82.8	106.5		385	281	57.7	44.0
Burundi	44.4	67.3	2.5	5.9	52.0	312	581	54.5	76.7
Djibouti	70.2	20.5	0.4	0.2		620	143	78.0	29.2
Eritrea		61.3	2.4	3.4			488		71.8
Ethiopia		37.1	35.5	32.1	57.0		314		44.0
Kenya	34.8	25.8	8.4	11.0		221	166	45.0	36.1
Rwanda	52.3	29.7	3.6	3.4		393	201	60.7	38.4
Somalia					76.0				
South Sudan									
Sudan (former)	41.9		11.4	17.8	72.0	294	328	51.8	45.3
Uganda	27.1	30.1	5.0	10.7	59.0	166	192	35.8	37.3
United Republic of Tanzania	28.8	33.0	7.6	15.7	77.0	180	221	38.1	40.5
Southern Africa	29.8	21.4	32.6	36.3		220	148	37.1	28.2
Angola	63.2	24.4	6.7	4.9		500	153	71.5	32.2
Botswana	25.1	25.7	0.4	0.5		163	187	35.0	37.8
Comoros	41.4	65.3	0.2	0.5		343	655	51.8	75.0
Lesotho	17.0	15.7	0.3	0.3		102	102	24.6	23.9
Madagascar	24.4	27.2	2.8	6.0	78.0	152	176	33.1	36.6
Malawi	45.2	20.0	4.3	3.2	49.0	331	119	54.2	26.9
Mauritius	8.6	5.4	0.1	0.1		58	37	15.5	11.0
Mozambique	57.8	36.8	8.0	9.0		451	269	65.2	43.8
Namibia	36.2	29.3	0.5	0.7		250	212	47.4	41.2
Seychelles	16.5	8.3	0.0	0.0		95	49	25.7	14.8
South Africa	< 5	< 5	ns	ns	49.0	30	13	9.3	< 5
Swaziland	15.8	35.8	0.1	0.4		92	262	23.1	47.9
Zambia	33.8	43.1	2.7	6.0	77.0	225	306	43.1	52.5
Zimbabwe	43.6	30.5	4.7	4.0		330	225	52.5	39.7
West Africa	24.0	10.8	45.2	34.5		156	67	32.5	15.9
Benin	22.4	6.1	1.1	0.6		138	34	30.5	9.9
Burkina Faso	22.9	25.0	2.2	4.4	60.0	142	178	31.1	30.7
Cabo Verde	13.6	9.6	0.0	0.0	47.0	81	66	20.8	17.0
Côte d'Ivoire	13.3	20.5	1.7	4.2	45.0	76	133	21.1	27.0
Gambia	18.2	16.0	0.2	0.3		113	102	25.6	23.2
Ghana	44.4	< 5	6.8	ns		322	18	54.5	5.8
Guinea	18.2	15.2	1.1	1.6		111	91	24.7	21.1
Guinea-Bissau	21.8	10.1	0.2	0.2		138	61	29.9	15.6
Liberia	29.6	28.6	0.6	1.2		205	201	37.0	36.3
Mali	24.9	7.3	2.2	1.2	79.0	153	39	32.9	11.3
Mauritania	12.9	7.8	0.3	0.3		76	46	18.9	12.5
Niger	35.5	13.9	2.9	2.3	51.0	239	77	44.3	19.5
Nigeria	21.3	7.3	21.3	12.1		133	42	29.7	11.9
Senegal	22.0	21.6	1.6	2.8		139	142	30.6	30.7
Sierra Leone	42.5	29.4	1.7	1.8		333	209	51.0	37.1
Togo	34.8	15.5	1.3	1.0	85.0	236	98	44.1	22.9
CEMAC									
CEN-SAD									
COMESA									
ECCAS									
ECOWAS									
IGAD									
SADC									
UEMOA									
UMA									
Regional Office for Asia and the Pacific	20.9	11.8	735.0	528.7		157	88	31.7	20.5
Regional Office for Europe and Central Asia	8.2	< 5	10.0	ns		19	12	5.9	3.9
Regional Office for Latin America and the Caribbean	14.7	7.9	65.6	47.0		97	56	21.8	14.1
Regional Office for the Near East	9.0	10.0	25.8	43.7		59	78	13.5	14.6
World	18.9	12.0	1 015.3	842.3		128	83	26.2	18.4

TABLE 13: Utilization

	Outcomes						adults underweight percent 1990-2011*
	children under 5 years of age						
	underweight		stunted		wasted		
	percent 1990-95*	percent 2005-11*	percent 1990-95*	percent 2005-11*	percent 1990-95*	percent 2005-11*	
Africa							
North Africa							
Algeria	11.3	3.7	22	16	9.6	4.0	
Egypt	10.8	6.8	35	31	5.7	7.9	
Libya	4.3	5.6	21	21	3.7	6.5	
Morocco	8.1	3.1	30	15	2.6	2.3	5.3
Sudan							
Tunisia	8.1	3.3	31	9	4.5	3.4	
Regional Office for Africa							
Central Africa							
Cameroon	18.0	16.6	36	36	4.5	7.3	
Central African Republic	20.4	28.0	35	45	7.8	12.2	
Chad							
Congo		11.8		31		8.0	
Democratic Republic of the Congo	30.7	28.2	51	46	11.4	14.0	
Equatorial Guinea							
Gabon							
Sao Tome and Principe		14.4		32		11.2	
East Africa							
Burundi		35.2		58		9.0	
Djibouti		29.6		33		26.0	
Eritrea	38.3		44		20.2		
Ethiopia		29.2		44		10.1	
Kenya	19.8	16.4	40	35	9.4	7.0	
Rwanda	24.3	11.7	57	44	5.0	3.0	
Somalia		32.8		42		13.2	
South Sudan							
Sudan (former)	31.8	31.7	39	38	18.8	21.0	
Uganda	21.5	16.4	45	39	7.0	6.3	
United Republic of Tanzania	25.1	16.2	50	42	7.9	4.9	
Southern Africa							
Angola		15.6		29		8.2	
Botswana		11.2		31		7.2	
Comoros	16.2		39		5.8		
Lesotho	18.9	13.5	38	39	22.4	3.9	
Madagascar	30.4		55	49	9.0		19.2
Malawi	26.5	13.8	54	48	8.5	4.1	
Mauritius	13.0		14		15.7		
Mozambique	23.9	18.3	60	44	9.6	4.2	
Namibia	21.5	17.5	36	30	9.6	7.5	
Seychelles							
South Africa	8.0	8.7	29	24	3.3	4.7	8.6
Swaziland		7.3		40		1.1	
Zambia	21.2	14.9	58	46	6.3	5.6	
Zimbabwe	11.7	10.1	29	32	6.3	3.1	9.9
West Africa							
Benin		20.2		45		8.4	
Burkina Faso	29.6	26.0	41	35	15.5	11.3	
Cabo Verde	11.8		21		6.9		
Côte d'Ivoire	20.9	29.4	32	39	11.2	14.0	
Gambia		15.8		28		7.4	
Ghana	25.1	14.3	34	29	14.6	8.7	
Guinea	21.2	20.8	35	40	14.0	8.3	
Guinea-Bissau		17.2		28		5.6	
Liberia		20.4		39		7.8	
Mali		27.9		38		15.3	
Mauritania	43.3	15.9	55	23	17.4	8.1	
Niger	41.0	39.9	48	55	18.9	12.4	
Nigeria	35.1	26.7	44	41	20.6	14.4	
Senegal	21.9	19.2	34	29	9.4	9.8	
Sierra Leone	25.4	21.3	41	37	10.2	10.5	
Togo		20.5		27		6.0	
CEMAC							
CEN-SAD							
COMESA							
ECCAS							
ECOWAS							
IGAD							
SADC							
UEMOA							
UMA							
Regional Office for Asia and the Pacific							
Regional Office for Europe and Central Asia							
Regional Office for Latin America and the Caribbean							
Regional Office for the Near East							
World							

TABLE 14: Poverty

	Headcount ratio		Gap				GINI	Income share	
	in \$ per day (PPP)		in \$ per day (PPP)		at national poverty line	at rural poverty line	coefficient	held by highest 20%	held by lowest 20%
	1.25 percent 2005-12*	2 percent 2005-12*	1.25 percent 2005-12*	2 percent 2005-12*	percent 2005-12*	percent 2005-12*	index 2005-12*	percent 2005-12*	percent 2005-12*
<b>Africa</b>									
<b>North Africa</b>									
Algeria									
Egypt	1.7	15.4	0.4	2.8	3.6		31	40	9.2
Libya									
Morocco	2.5	14.0	0.5	3.2			41	48	6.5
Sudan					16.2	21.3	35		
Tunisia	1.1	4.2	0.4	1.1			36	43	6.7
<b>Regional Office for Africa</b>									
<b>Central Africa</b>									
Cameroon	9.6	30.4	1.2	8.2	12.3	17.5	39	46	6.7
Central African Republic	62.8	80.1	31.3	46.8	33.1	35.0	56	61	3.4
Chad									
Congo	54.1	74.4	22.8	38.8	18.9	20.6	47	53	5.0
Democratic Republic of the Congo	87.7	95.2	52.8	67.6	32.2	34.9	44	51	5.5
Equatorial Guinea					45.3	49.8			
Gabon	4.8	19.6	0.9	5.0	10.0	16.0	41	48	6.2
Sao Tome and Principe					24.8				
<b>East Africa</b>									
Burundi	81.3	93.5	36.4	56.1	23.4	24.2	33	43	9.0
Djibouti									
Eritrea									
Ethiopia	30.6	66.0	8.2	23.6	7.8	8.0	34	42	8.0
Kenya	43.4	67.2	16.9	31.8	16.3	17.5	48	53	4.8
Rwanda	63.2	82.4	26.6	44.6	14.8	26.0	51	57	5.2
Somalia									
South Sudan					23.7	26.5	46		
Sudan (former)	19.8	44.1	5.5	15.4				42	6.8
Uganda	38.0	64.7	12.2	27.4	6.8	7.6	44	51	5.8
United Republic of Tanzania	67.9	87.9	28.1	47.5	9.9	11.0	38	45	6.8
<b>Southern Africa</b>									
Angola	43.4	67.4	16.4	31.5			43	49	5.4
Botswana									
Comoros									
Lesotho									
Madagascar	81.3	92.6	43.3	60.1	26.8	28.9	44	50	5.4
Malawi	61.6	82.3	26.2	44.0	18.9	21.4	44	50	5.6
Mauritius									
Mozambique	59.6	81.8	25.1	42.9	21.2	22.2	46	51	5.2
Namibia					8.8	11.6			
Seychelles	0.2	1.8	0.1	0.3			66	70	3.7
South Africa	13.8	31.3	2.3	10.2	7.0		63	68	2.7
Swaziland	40.6	60.4	16.0	29.3	30.4	36.9	51	57	4.0
Zambia	74.5	86.6	41.9	56.8	28.0	37.9	57	62	3.6
Zimbabwe									
<b>West Africa</b>									
Benin					9.5	10.1			
Burkina Faso	44.6	72.6	14.7	31.7	15.1	17.4	40	47	6.7
Cabo Verde					8.1	14.3			
Côte d'Ivoire	23.8	46.3	7.5	17.8	15.3	20.3	42	48	5.6
Gambia					27.9				
Ghana	28.6	51.8	9.9	21.3	9.6	13.5	43	49	5.2
Guinea	43.3	69.6	15.0	31.0	18.4	22.6	39	46	6.3
Guinea-Bissau									
Liberia	83.8	94.9	40.9	59.6	24.4	26.3	38	45	6.4
Mali	50.4	78.7	16.4	35.2	13.2	15.6	33	41	8.0
Mauritania	23.4	47.7	6.8	17.7	14.5	22.3	40	47	6.0
Niger	43.6	75.2	12.4	30.8	19.6	21.2	35	43	8.1
Nigeria	68.0	84.5	33.7	50.2	26.2	30.3	49	54	4.4
Senegal	29.6	55.2	9.1	21.9	14.5	18.6	40	47	6.0
Sierra Leone	51.7	79.6	16.6	35.8			35	44	7.8
Togo	28.2	52.6	8.8	20.9	24.4	33.1	39	46	6.0
<b>CEMAC</b>									
<b>CEN-SAD</b>									
<b>COMESA</b>									
<b>ECCAS</b>									
<b>ECOWAS</b>									
<b>IGAD</b>									
<b>SADC</b>									
<b>UEMOA</b>									
<b>UMA</b>									
<b>Regional Office for Asia and the Pacific</b>									
<b>Regional Office for Europe and Central Asia</b>									
<b>Regional Office for Latin America and the Caribbean</b>									
<b>Regional Office for the Near East</b>									
<b>World</b>									

TABLE 15: Determinants: Availability

	Availability									
	average dietary supply adequacy		value of food production per capita		share of energy supply derived from cereals, roots and tubers		average supply of			
	percent 1990-92	percent 2011-13	I\$/cap 1990-92	I\$/cap 2009-11	percent 1990-92	percent 2008-10	protein g/cap/day 1990-92	protein g/cap/day 2008-10	protein of animal origin g/cap/day 1990-92	protein of animal origin g/cap/day 2008-10
<b>Africa</b>	108	117	150	179	64	63	57	65	12	15
<b>North Africa</b>	138	144	175	246	64	62	82	93	16	22
Algeria	133	146	117	183	59	58	77	89	19	23
Egypt	142	147	177	259	68	67	84	97	13	21
Libya	144	139	172	175	49	52	81	80	27	27
Morocco	135	139	188	265	64	60	84	89	15	21
Sudan										
Tunisia	140	139	302	332	56	53	85	95	19	26
<b>Regional Office for Africa</b>	100	111	152	160	62	64	52	59	12	13
<b>Central Africa</b>	114	98	126	108	58	69	40	38	8	7
Cameroon	93	113	152	241	59	57	49	62	11	11
Central African Republic	88	101	168	210	57	55	41	51	15	18
Chad	80	106	129	125	65	65	51	64	12	10
Congo	92	98	82	100	60	62	46	43	19	14
Democratic Republic of the Congo										
Equatorial Guinea			80	61						
Gabon	115	119	209	170	46	52	72	82	36	41
Sao Tome and Principe	103	122	116	180	52	47	52	63	13	17
<b>East Africa</b>	88	101	157	138	57	59	55	60	15	14
Burundi	91	76	173	126	46	50	59	43	4	2
Djibouti	73	107	74	72	56	55	41	59	12	16
Eritrea		78		46	79	81		50		7
Ethiopia		101		109	81	75		63		8
Kenya	95	101	150	160	55	55	55	60	17	17
Rwanda	89	105	168	198	49	51	44	54	4	5
Somalia										
South Sudan										
Sudan (former)	92	103	156	261	58	48	62	75	21	30
Uganda	108	110	178	155	45	45	51	49	11	12
United Republic of Tanzania	103	105	139	154	70	59	55	55	11	10
<b>Southern Africa</b>	102	111	144	171	64	64	56	61	16	18
Angola	79	107	78	186	59	60	35	46	13	14
Botswana	100	98	159	136	48	48	68	61	29	23
Comoros	92	78	116	96	58	57	54	49	15	14
Lesotho	110	110	61	57	78	80	65	67	10	10
Madagascar	105	102	196	167	74	79	52	48	16	11
Malawi	90	113	75	169	73	71	51	62	5	5
Mauritius	117	124	218	195	49	47	70	84	28	38
Mozambique	83	102	70	83	76	75	31	43	4	5
Namibia	93	96	260	177	61	57	58	62	19	23
Seychelles	105	114	78	46	47	49	71	78	36	35
South Africa	121	132	211	241	55	54	74	84	26	34
Swaziland	110	92	288	239	56	60	58	58	17	17
Zambia	97	91	85	101	77	74	51	47	11	10
Zimbabwe	90	99	95	97	64	59	50	55	9	12
<b>West Africa</b>	106	125	161	193	68	65	52	64	10	12
Benin	107	134	148	198	74	71	54	64	8	11
Burkina Faso	108	119	109	122	76	72	71	80	8	9
Cabo Verde	112	115	70	97	55	46	62	74	20	33
Côte d'Ivoire	119	124	248	254	66	67	53	54	15	12
Gambia	109	112	73	77	58	62	52	62	12	15
Ghana	91	144	172	271	68	64	43	60	15	16
Guinea	118	122	166	180	63	64	57	56	7	9
Guinea-Bissau	107	122	141	200	69	62	46	45	9	9
Liberia	106	106	91	80	67	69	39	38	7	6
Mali	105	131	145	213	69	70	62	72	16	19
Mauritania	119	129	163	138	55	49	79	85	33	36
Niger	97	120	133	190	76	59	56	80	12	19
Nigeria	107	127	170	195	67	65	49	64	7	10
Senegal	104	104	109	116	65	62	66	62	19	18
Sierra Leone	93	105	94	119	61	61	42	50	8	11
Togo	97	114	102	131	75	73	48	55	8	8
<b>CEMAC</b>										
<b>CEN-SAD</b>										
<b>COMESA</b>										
<b>ECCAS</b>										
<b>ECOWAS</b>										
<b>IGAD</b>										
<b>SADC</b>										
<b>UEMOA</b>										
<b>UMA</b>										
<b>Regional Office for Asia and the Pacific</b>	107	117	175	259	63	57	59	75	15	26
<b>Regional Office for Europe and Central Asia</b>	132	135	431	419	29	38	79	101	42	53
<b>Regional Office for Latin America and the Caribbean</b>	117	127	315	457	43	40	68	82	30	41
<b>Regional Office for the Near East</b>	131	130	177	226	61	57	74	82	18	24
<b>World</b>	114	122	240	302	56	51	69	79	24	31

TABLE 16: Determinants: Physical and economic access

	Access										
	physical access						economic access			lack of access to	
	% of paved roads		rail lines density		road density		food price level index			water percent	sanitation percent
	percent	percent	km per 100 square km of land area	km per 100 square km of land area	km per 100 square km of land area	km per 100 square km of land area	index	index	index		
	1990	2005-10*	1990	2005-11*	1990	2005-10*	2000	2005	2013	2011	2011
<b>Africa</b>					7		1.8	1.8	1.9	33	60
<b>North Africa</b>	62	77			6		1.8	1.8		8	10
Algeria	67	77	0.2	0.1	4	5				16	5
Egypt	72	92	0.5	0.5		14	2.0	1.8	2.0	1	5
Libya	52				4						3
Morocco	49	70	0.4	0.5	13	13	1.6	1.6	1.6	18	30
Sudan										2	10
Tunisia	76	76	1.4	0.7	12	12	1.7	1.7	1.8	4	10
<b>Regional Office for Africa</b>							1.8	1.9		37	69
<b>Central Africa</b>							2.1	2.1		46	68
Cameroon	10	17	0.2	0.2	7	6	1.9	1.9		26	52
Central African Republic		7			4	3	2.2	2.2		33	66
Chad	1				2	3	2.3	2.5		50	88
Congo	10	7		0.2	4	5	2.5	2.1		28	82
Democratic Republic of the Congo			0.2	0.2						54	69
Equatorial Guinea					9		2.0	2.1			
Gabon	8	12	0.3	0.3	3	3	2.1	2.1		12	67
Sao Tome and Principe	62						2.1	2.0		3	66
<b>East Africa</b>					5		1.8	1.8		43	74
Burundi							2.3	2.2		26	50
Djibouti				3.4	12					7	39
Eritrea	19				3						
Ethiopia	15	14			2	4	1.7	1.8	1.9	51	79
Kenya	13	14	0.4	0.3	11	11	1.7	1.9		39	71
Rwanda	9				50		1.5	1.7	1.8	31	39
Somalia	11				3					70	76
South Sudan											
Sudan (former)	34		0.2	0.2	0					45	76
Uganda			0.5				1.7	1.7	1.9	25	65
United Republic of Tanzania		15	0.5	0.3		10	1.9	2.0	2.4	47	88
<b>Southern Africa</b>							1.4	1.5		29	52
Angola							2.0	2.1		47	41
Botswana	32	33		0.1	1	4	1.9	1.8	1.9	3	36
Comoros	69										
Lesotho	18	53			17		2.3	1.9		22	74
Madagascar	15	16		0.1		6	2.1	2.2	2.0	52	86
Malawi			0.7	0.7	9		2.3	2.1		16	47
Mauritius	93	98			88	101	1.6	1.6		0	9
Mozambique	17	21		0.4	3	4	1.9	1.9		53	81
Namibia	11	14	0.3		8	5	1.5	1.6	1.8	7	68
Seychelles	57	96				110				4	3
South Africa			1.8	1.8			1.3	1.4		8	26
Swaziland			1.7		16		1.5	1.8		28	43
Zambia	17		0.2		5		1.7	1.7	1.4	36	58
Zimbabwe	14		0.7	0.7	23		1.9	1.9		20	60
<b>West Africa</b>	16				8		2.3	2.3		33	74
Benin	20			0.7			2.4	2.1	2.0	24	86
Burkina Faso	17			0.2		6	1.9	1.9	2.1	20	82
Cabo Verde	78				27		1.5	1.5	1.4	11	37
Côte d'Ivoire	9	8	0.2	0.2		25	1.9	1.9		20	76
Gambia					21		2.5	2.7		11	32
Ghana	20	13	0.4	0.4	16	46	2.4	2.4	1.7	14	86
Guinea	15				12		1.9	2.4		26	81
Guinea-Bissau	8				11			2.0		28	81
Liberia	6				8					26	82
Mali	11	25	0.0		1	2	1.9	2.0	2.0	35	78
Mauritania		30		0.1	1	1	2.0	2.1		50	73
Niger	29	21			1	2	1.9	2.0	2.5	50	90
Nigeria				0.4	13		2.4	2.5		39	69
Senegal	27	36	0.5		7	8	2.0	2.1	2.0	27	49
Sierra Leone	11				16		2.2	2.4	2.4	42	87
Togo	21	21			13	20	2.2	2.2		41	89
<b>CEMAC</b>											
<b>CEN-SAD</b>											
<b>COMESA</b>											
<b>ECCAS</b>											
<b>ECOWAS</b>											
<b>IGAD</b>											
<b>SADC</b>											
<b>UEMOA</b>											
<b>UMA</b>											
<b>Regional Office for Asia and the Pacific</b>		55			18	24	1.7	1.7		9	42
<b>Regional Office for Europe and Central Asia</b>					26	29	1.2	1.2		2	6
<b>Regional Office for Latin America and the Caribbean</b>	15	20			14	15	1.3	1.3		6	19
<b>Regional Office for the Near East</b>	54				5		1.6	1.6		10	10
<b>World</b>			0.8	0.9	21	25				11	37

TABLE 17: Vulnerability/Stability

	Value of food imports over total merchandise exports			Cereal import dependency ratio			Percent of arable land equipped for irrigation		
	percent 1990-92	percent 1999-2001	percent 2008-10	percent 1990-92	percent 1999-2001	percent 2007-09	percent 1990-92	percent 1999-2001	percent 2009-11
<b>Africa</b>	13	12	10	27	30	30	6	7	6
<b>North Africa</b>	18	16	13	43	53	50	21	24	26
Algeria	16	13	10	62	80	71	7	7	8
Egypt	69	46	33	38	36	36	100	100	100
Libya	9	9	4	90	91	92	26	26	27
Morocco	15	17	20	27	60	54	14	16	18
Sudan									11
Tunisia	11	9	10	35	67	60	13	14	16
<b>Regional Office for Africa</b>	10	9	9	18	18	22	4	4	3
<b>Central Africa</b>	10	8	6	26	26	30	0	0	0
Cameroon	9	13	17	34	30	33	0	0	0
Central African Republic	26	11	37	31	21	19	0	0	0
Chad	12	16	3	7	5	8	0	1	1
Congo	9	6	4	96	95	90	0	0	0
Democratic Republic of the Congo	26	26	19				0	0	0
Equatorial Guinea									
Gabon	5	5	5	79	86	83	1	1	1
Sao Tome and Principe	113	48	248	77	86	85	100	100	100
<b>East Africa</b>	34	33	26	13	17	20	5	6	2
Burundi	27	41	76	11	14	25	2	2	2
Djibouti	247	298	561	100	100	100	100	100	50
Eritrea		197	861		52	59		4	3
Ethiopia		52	61		11	10		3	2
Kenya	18	23	27	14	26	36	1	2	2
Rwanda	46	72	57	11	20	22	0	1	1
Somalia	80	81	140				20	19	18
South Sudan									
Sudan (former)	42	21	15	18	22	25	15	11	
Uganda	14	26	31	2	7	18	0	0	0
United Republic of Tanzania	22	44	18	4	12	14	2	2	2
<b>Southern Africa</b>	7	6	6	29	18	25	9	9	9
Angola	11	5	4	50	52	55	3	3	2
Botswana	11	12	11	82	98	90	0	0	1
Comoros	89	118	431	71	70	74	0	0	0
Lesotho	148	49	17	72	55	85	1	1	1
Madagascar	18	20	26	6	12	9	40	37	31
Malawi	24	8	19	18	4	6	1	2	2
Mauritius	14	14	24	100	100	100	18	23	26
Mozambique	156	43	25	60	23	30	3	3	2
Namibia	9	15	6	63	72	65	1	1	1
Seychelles	54	21	17	100	100	100	0	0	30
South Africa	3	3	4	24	13	19	9	11	13
Swaziland	13	15	10	56	58	79	26	28	29
Zambia	6	9	4	24	9	5	1	5	4
Zimbabwe	9	5	33	31	9	52	4	5	4
<b>West Africa</b>	12	11	11	13	18	19	1	1	1
Benin	38	45	37	35	12	19	1	0	0
Burkina Faso	53	55	24	8	12	8	1	1	0
Cabo Verde	822	578	475	90	73	94	7	7	7
Côte d'Ivoire	13	9	10	40	47	59	3	3	2
Gambia	142	313	242	52	40	46	1	1	1
Ghana	21	17	17	26	24	31	0	1	1
Guinea	16	18	24	27	21	14	3	4	3
Guinea-Bissau	165	49	54	33	38	27	7	8	8
Liberia	21	28	108	60	64	64	1	1	1
Mali	25	18	17	5	7	6	4	5	4
Mauritania	27	43	23	74	68	75	10	10	10
Niger	29	39	26	6	9	7	0	0	0
Nigeria	5	6	6	4	14	14	1	1	1
Senegal	47	54	60	42	48	55	2	4	3
Sierra Leone	59	590	67	30	50	28	6	5	3
Togo	27	12	27	24	17	16	0	0	0
<b>CEMAC</b>									
<b>CEN-SAD</b>									
<b>COMESA</b>									
<b>ECCAS</b>									
<b>ECOWAS</b>									
<b>IGAD</b>									
<b>SADC</b>									
<b>UEMOA</b>									
<b>UMA</b>									
<b>Regional Office for Asia and the Pacific</b>	5	4	4	11	10	9	33	31	36
<b>Regional Office for Europe and Central Asia</b>	7	5	6	18	16	21	16	13	13
<b>Regional Office for Latin America and the Caribbean</b>	9	8	6	22	30	30	13	13	13
<b>Regional Office for the Near East</b>	12	9	7	41	53	53	30	32	42
<b>World</b>	7	5	5	15	15	16	19	21	23

TABLE 18: Health and education

	Literacy rate	Primary completion rate		School enrollment				Health expenditure	
	adult	total		primary				share of GDP	
	female, % of females ages 15 +			female		male			
	percent 2005-10*	percent 1990	percent 2010	percent 1990	percent 2010	percent 1990	percent 2010	percent 1995	percent 2010
<b>Africa</b>								5.1	6.0
<b>North Africa</b>			96					4.1	5.2
Algeria	64	81	96	81	95	94	97	4.2	4.3
Egypt	64		101					3.9	4.7
Libya	83							3.5	
Morocco	44	52	85	46	93	67	95	3.9	5.9
Sudan									7.2
Tunisia	71	80		87		97		5.8	5.7
<b>Regional Office for Africa</b>			67					5.7	6.5
<b>Central Africa</b>			60					3.7	4.6
Cameroon	63	54	79	67	85	76	98	3.9	5.1
Central African Republic	43	30	41	46	60	69	81	3.9	3.8
Chad	24	17	35					5.8	4.0
Congo		60	71		89		92	3.2	2.3
Democratic Republic of the Congo	57		59					3.6	7.5
Equatorial Guinea	91		52		56		57	5.9	4.2
Gabon	85							3.0	3.5
Sao Tome and Principe	85	79	85						7.5
<b>East Africa</b>			68					3.9	5.7
Burundi	62	41	56					5.5	9.1
Djibouti		32		25		33		4.0	
Eritrea	58		40		31		36	4.5	2.9
Ethiopia	29		62		79		84	2.8	4.8
Kenya	84							4.3	4.4
Rwanda	68	45	70					4.5	10.4
Somalia									
South Sudan									2.1
Sudan (former)	62							3.4	
Uganda	65		57		92		90	5.8	9.2
United Republic of Tanzania	67		90	52		51		3.6	7.2
<b>Southern Africa</b>			68					6.7	7.4
Angola	58		47		78		93	5.1	3.4
Botswana	85	89		89		82		4.2	5.1
Comoros	70							4.7	5.3
Lesotho	96	58	70	78	75	63	72	8.1	11.5
Madagascar	62	36	72	69		70		2.8	3.6
Malawi	68	28	68					5.0	8.4
Mauritius	86	111						3.6	6.2
Mozambique	43	27	61		89		94	5.3	6.3
Namibia	88		81	83	87	76	83	6.2	5.5
Seychelles	92		133					5.2	3.3
South Africa	87							7.4	8.7
Swaziland	87	63	77	76		72		5.0	7.8
Zambia	62		103		92		90	5.6	6.0
Zimbabwe	90							0.1	
<b>West Africa</b>			68					4.8	5.7
Benin	30	19	70	28		55		4.7	4.3
Burkina Faso	22	18	45		56		60	4.3	7.4
Cabo Verde	79	57	99		92		94	5.3	4.8
Côte d'Ivoire	47	40						5.1	6.2
Gambia	40		70		67		64	3.3	4.4
Ghana	61							5.3	5.2
Guinea	30	21	64	18	70	36	83	5.5	6.2
Guinea-Bissau	41		68		72		75	6.4	7.0
Liberia	57							0.0	16.4
Mali	20		55		57		66	5.2	6.5
Mauritania	51	29			76		72	4.8	6.1
Niger	15	17	41	18	51	29	63	3.4	4.8
Nigeria	50		74		55		60	4.5	5.4
Senegal	39	43	59	39	78	53	73	3.9	5.8
Sierra Leone	31							15.3	20.8
Togo	44	38	74	55		79		4.6	7.5
<b>CEMAC</b>		42	61					3.7	4.0
<b>CEN-SAD</b>								4.2	5.5
<b>COMESA</b>								3.7	5.4
<b>ECCAS</b>			57					4.0	4.0
<b>ECOWAS</b>			68					4.8	5.7
<b>IGAD</b>								3.9	5.9
<b>SADC</b>			70					6.5	7.4
<b>UEMOA</b>		30	54					4.6	6.1
<b>UMA</b>		67						4.2	5.0
<b>Regional Office for Asia and the Pacific</b>								5.8	6.4
<b>Regional Office for Europe and Central Asia</b>			99					8.4	9.8
<b>Regional Office for Latin America and the Caribbean</b>			102					6.5	7.6
<b>Regional Office for the Near East</b>								3.8	4.6
<b>World</b>								8.8	10.3

TABLE 19: Population at risk

	Droughts, floods, extr temp	UNHCR population of concern					
		% of population affected	total		total refugees	internally displaced persons	others and stateless persons
			thousand people 2000	thousand people 2011	thousand people 2011	thousand people 2011	thousand people 2011
<b>Africa</b>	1.5	2 640	5 053	105	4 445	12	
<b>North Africa</b>	0.0	23	306	0	0	0	
Algeria	0.0	14	94	0	0	0	
Egypt	0.0	7	114	0	0	0	
Libya	0.0	2	96	0	0	0	
Morocco	0.1	0	1	0	0	0	
Sudan		0	0	0	0	0	
Tunisia	0.1	0	0	0	0	0	
<b>Regional Office for Africa</b>	1.9	2 616	4 747	105	4 445	12	
<b>Central Africa</b>	0.3	518	633	0	1 938	9	
Cameroon	0.1	4	0	0	0	0	
Central African Republic	0.2	56	200	0	105	0	
Chad	2.7	18	433	0	124	0	
Congo	0.3	119	0	0	0	0	
Democratic Republic of the Congo	0.0	300	0	0	1 709	0	
Equatorial Guinea		0	0	0	0	0	
Gabon		21	0	0	0	9	
Sao Tome and Principe		0	0	0	0	0	
<b>East Africa</b>	3.1	1 214	3 079	105	2 326	0	
Burundi	2.4	27	130	0	79	0	
Djibouti	6.8	23	22	0	0	0	
Eritrea	7.3	2	5	0	0	0	
Ethiopia	3.3	195	290	0	0	0	
Kenya	6.5	206	922	0	300	0	
Rwanda	1.3	30	63	0	0	0	
Somalia	4.6	0	1 365	0	1 357	0	
South Sudan		0	0	105	560	0	
Sudan (former)	2.8						
Uganda	0.9	219	282	0	30	0	
United Republic of Tanzania	1.5	511	0	0	0	0	
<b>Southern Africa</b>	2.8	323	105	0	54	0	
Angola	1.0	12	23	0	0	0	
Botswana	0.7	4	4	0	0	0	
Comoros	0.0	0	0	0	0	0	
Lesotho	3.4	0	0	0	0	0	
Madagascar	0.9	0	0	0	0	0	
Malawi	8.8	4	17	0	0	0	
Mauritius	0.0	0	0	0	0	0	
Mozambique	3.7	2	14	0	0	0	
Namibia	3.4	28	7	0	0	0	
Seychelles	0.1	0	0	0	0	0	
South Africa	1.8	19	0	0	0	0	
Swaziland	9.2	0	0	0	0	0	
Zambia	4.2	251	34	0	0	0	
Zimbabwe		4	6	0	54	0	
<b>West Africa</b>	0.7	561	931	0	127	3	
Benin	0.9	2	8	0	0	0	
Burkina Faso	1.3	1	1	0	0	0	
Cabo Verde	0.0	0	0	0	0	0	
Côte d'Ivoire	0.0	0	754	0	127	1	
Gambia	0.2	12	10	0	0	0	
Ghana	1.0	0	26	0	0	0	
Guinea	0.2	426	17	0	0	0	
Guinea-Bissau	0.5	8	8	0	0	0	
Liberia	1.9	54	0	0	0	2	
Mali	0.7	9	18	0	0	0	
Mauritania	3.1	0	27	0	0	0	
Niger	7.5	1	0	0	0	0	
Nigeria	0.1	7	10	0	0	0	
Senegal	0.6	23	23	0	0	0	
Sierra Leone	0.2	7	8	0	0	0	
Togo	0.5	12	20	0	0	0	
<b>CEMAC</b>	0.9	218	633	0	229	9	
<b>CEN-SAD</b>	0.9	242	3 123	105	2 273	3	
<b>COMESA</b>	2.3	1 271	1 981	105	2 732	0	
<b>ECCAS</b>	0.6	557	786	0	2 017	9	
<b>ECOWAS</b>	0.7	561	904	0	127	3	
<b>IGAD</b>	3.6	646	2 886	105	2 247	0	
<b>SADC</b>	1.9	1 135	105	0	1 764	0	
<b>UEMOA</b>	1.7	55	832	0	127	1	
<b>UMA</b>	0.2	17	218	0	0	0	
<b>Regional Office for Asia and the Pacific</b>	4.4	3 154	6 556	1	1 566	955	
<b>Regional Office for Europe and Central Asia</b>	0.2	2 009	2 589	3	1 294	17	
<b>Regional Office for Latin America and the Caribbean</b>	0.5	34	338	0	3 888	0	
<b>Regional Office for the Near East</b>	0.9	273	3 900	0	1 680	0	
<b>World</b>	2.9	8 350	17 564	109	12 844	980	



**PART**

**3**

**Feeding the world**

## Aggregate agriculture

FAO projections show that, even with decreasing consumption, agricultural production still needs to increase by 60 percent (and nearly 80 percent in developing countries) in the next four decades or so in order to cope with a 39 percent increase in world population and increase global dietary energy supply beyond 3 000 kcal per person per day. This translates into the additional production of almost one billion tons of cereals and just less than 200 million tons of meat annually by 2050.

For the world as a whole, per capita food supply has risen from about 2 200 kcal/person/day in the early 1960s to over 2 800 kcal/person/day by 2009. At 3 370 kcal/person/day, Europe is the region with the greatest average supply.

In Africa, North Africa's food supply in primary crop equivalent was well above 3 000 kcal/cap/day in 2000, and it recorded a growth until 2009. North Africa is followed by West Africa, where it rose from 2 500 kcal/cap/day in 2000 to 2 700 kcal/cap/day in 2009. Southern Africa rose from 2 300 to 2 400 kcal/cap/day during the same period. In East Africa food supply was slightly above 2 000 kcal/cap/day, while Central Africa was just under 2 000 kcal/cap/day for the entire nine year period (chart 50).

Algeria, Egypt, Gabon, Ghana, Libya, Mauritania, Morocco, South Africa and Tunisia had the highest food supply of primary food crops, which ranged between 2 730 and 3 349 kcal/cap/day in 2009 (map 31).

In Africa during 2000-2009, protein supply quantity in primary crops equivalent varied between 54 and 58 g/cap/day, whereas primary crops fat supply quantity equivalent ranged between 45 to 50 g/cap/day (chart 51).

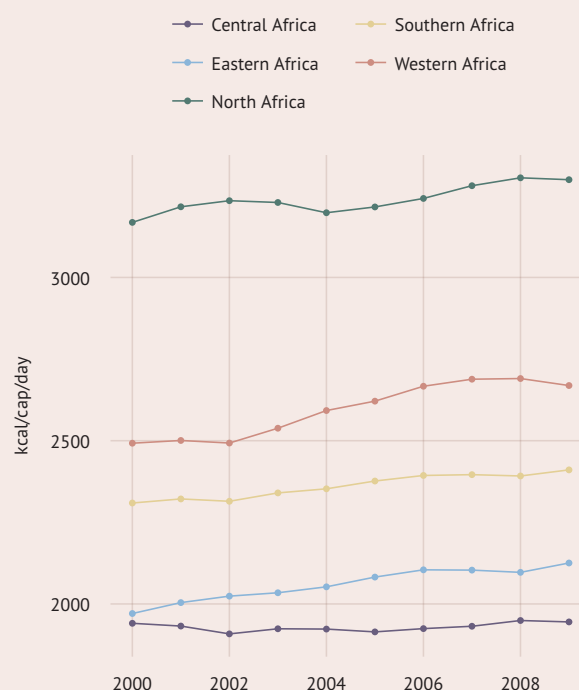
In 2009 food supply in crops primary crops equivalent, North Africa recorded the highest level (90 g/cap/day) of food supply in crops primary equivalent, followed by West Africa (roughly 63 g/cap/day), South Africa, East Africa and Central Africa (chart 52).

Also North Africa recorded the highest fat supply in primary crops equivalent (63 g/cap/day) in 2009, however the gap between North Africa and West Africa (roughly 61 g/cap/day), was much closer than that of primary food crops supply equivalent (chart 53).

## Further reading

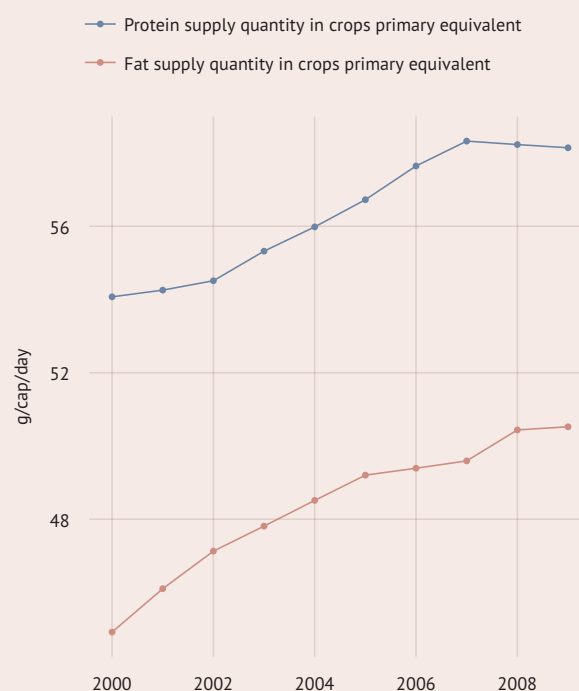
- FAO Agricultural Development Economics Division ([www.fao.org/economic/esa/esa-home/en/](http://www.fao.org/economic/esa/esa-home/en/))
- Bruinsma (2011)

CHART 50: Food supply in crops primary equivalent (2000-2009)



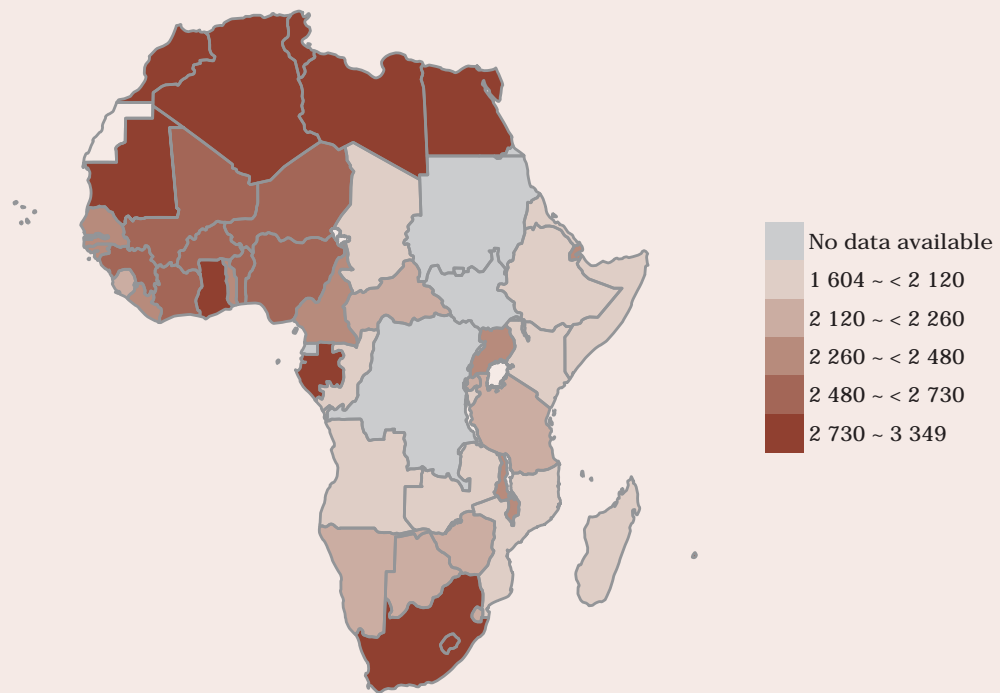
Source: FAO, Statistics Division (FAOSTAT).

CHART 51: Africa protein and fat supply in crops primary equivalent (2000-2009)



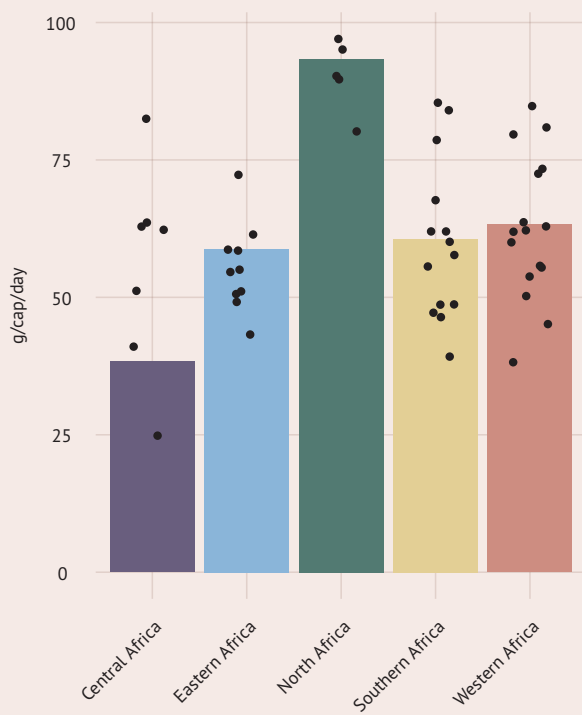
Source: FAO, Statistics Division (FAOSTAT).

MAP 31: Food supply in crops primary equivalent (kcal/cap/day, 2009)



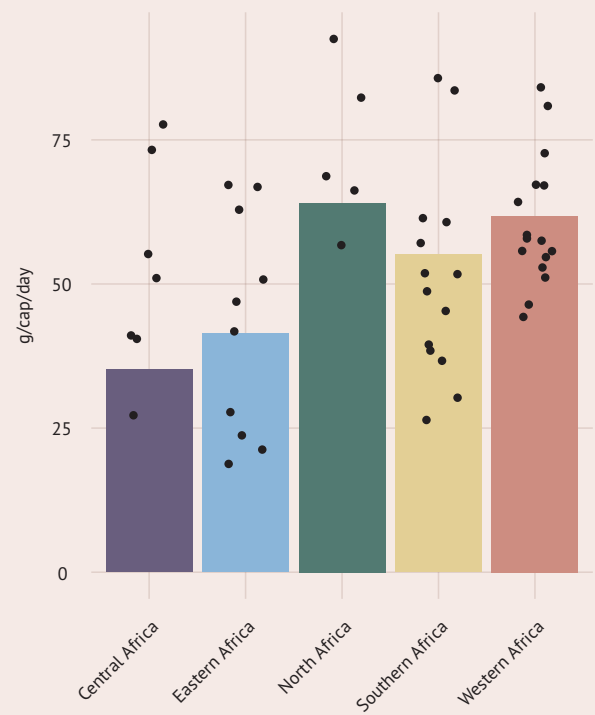
Source: FAO, Statistics Division (FAOSTAT).

CHART 52: Protein supply in crops primary equivalent (2009)



Source: FAO, Statistics Division (FAOSTAT).

CHART 53: Fat supply in crops primary equivalent (2009)



Source: FAO, Statistics Division (FAOSTAT).

## Growth in crop production

Over the past 50 years or so, global crop production has expanded three-fold. Growth in crop production goes hand in hand with an increase and/or expansion in crop yields in the physical area (arable land) allocated to crops, which – together with increases in crop intensification, such as higher multiple cropping and/or shortening of fallow periods – leads to an expansion in the area harvested. Over the past five decades, global arable land increased by 67 million ha as a result of two opposite trends: an increase of 107 million ha in developing countries and a decline of 40 million ha in developed countries. The arable land in the latter group peaked in the mid-1980s and has been falling since at an accelerated rate. Hence, increase in yields and more intensive use of land accounts for the overall growth in crop production in developed countries.

In fact, much of the increase in global crop production over this period can be attributed to improvements in yield, followed by an expansion in arable land, while a small part is due to crop intensification. These trends, however, are not uniform across regions.

An increase in cereal production (2000–2012) was highest (more than 6 percent) in East Africa due to the large harvested area and improved yields. North Africa had the second highest growth rate, which can be explained mainly by the improvement in yields than by an increase in harvested area. North Africa was followed by Central Africa, where growth in cereal production was related more to an increase in harvested area than improvement in yields. Finally growth in West Africa and Southern Africa can primarily be explained by harvested area than yield (chart 55).

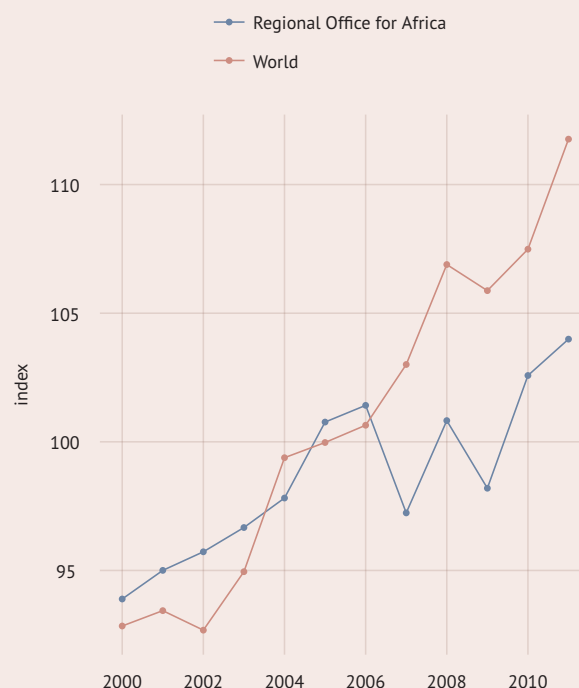
The gross per capita crop production index number of RAF was higher than the world level from 2000 through 2003. However from 2004, changes occurred. The trend reversed, and the index at the global level gradually passed RAF. From 2007 to 2010, a significant variation emerged, with strong growth in the global index and erratic movement of the index for RAF region (chart 54).

Map 32 shows that the net per capita crop production index number ranged from 120 to 176.1 in Algeria, CAR, Democratic Republic of the Congo, Ethiopia, Mozambique, Niger and Zambia. As for the net per capita food production index number (map 33), the observations were similar: the countries that had recorded the highest index for crops were similar for the food index.

## Further reading

- FAO World Agriculture: Towards 2030/2050 - Prospects for Food, Nutrition, Agriculture and Major Commodity Groups ([www.fao.org/docrep/009/a0607e/a0607e00.htm](http://www.fao.org/docrep/009/a0607e/a0607e00.htm))
- FAO Food Outlook ([www.fao.org/giews/english/fo/index.htm](http://www.fao.org/giews/english/fo/index.htm))

CHART 54: Crops, gross per capita production index number (2004–2006 = 100) (2000–2011)



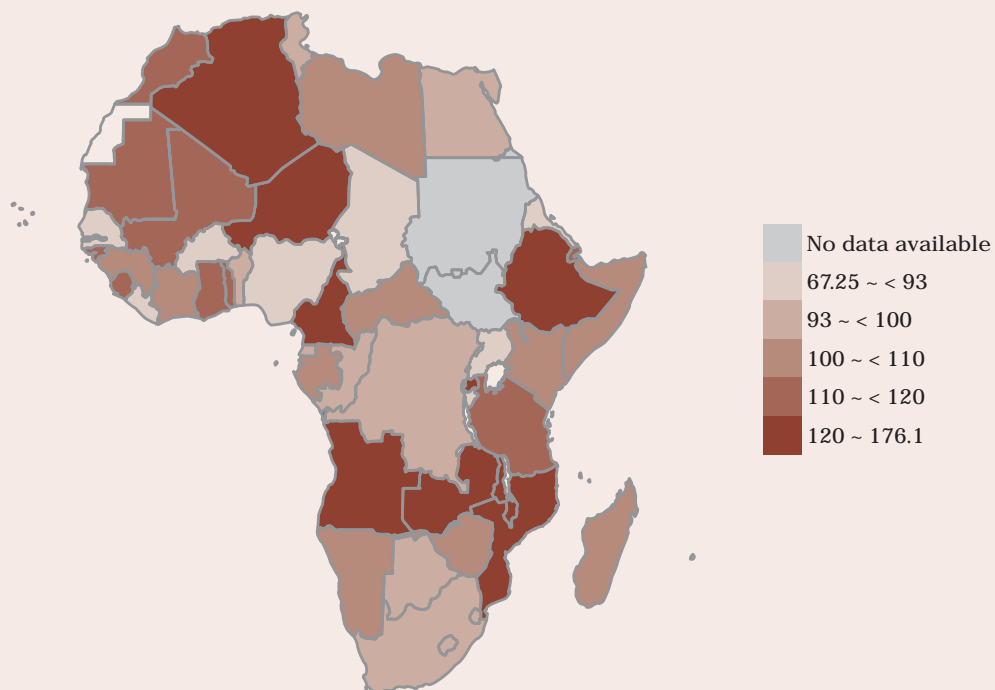
Source: FAO, Statistics Division (FAOSTAT).

CHART 55: Growth in cereal production (2000–2012)



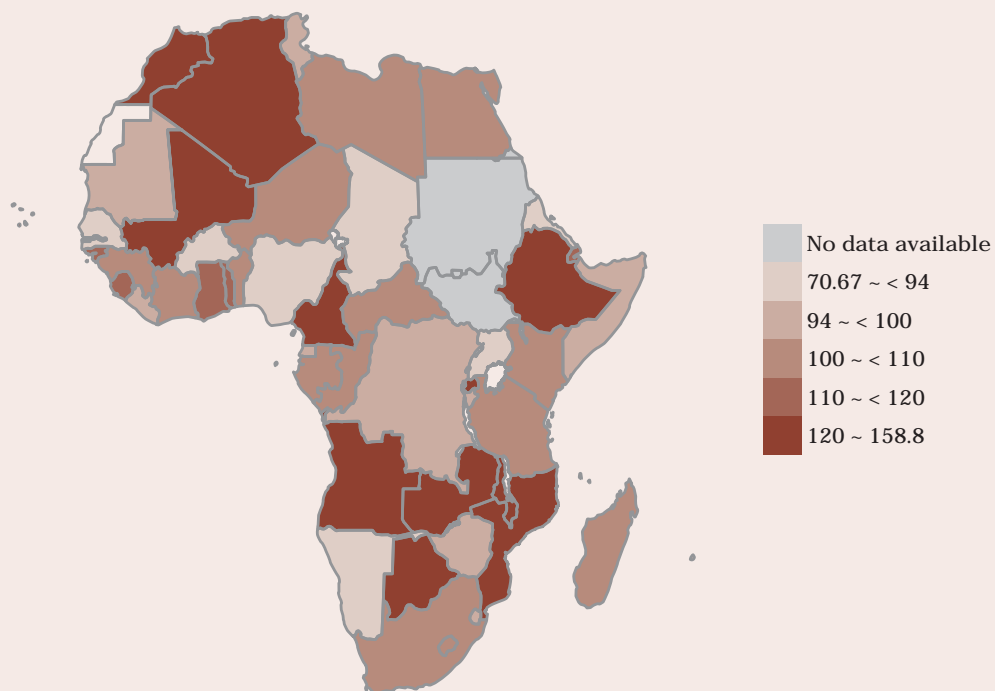
Source: FAO, Statistics Division (FAOSTAT).

MAP 32: Crops, net per capita production index number (2004-2006 = 100) (index, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 33: Food, net per capita production index number (2004-2006 = 100) (index, 2011)



Source: FAO, Statistics Division (FAOSTAT).

## Trends in the crop sector

At the regional level in 2010 and 2011, the African region ranked fourth in cereal production, after RAP REU, and RLAC. RNE recorded the lowest production.

In terms of per capita, over the period 2000-2011, the region with the highest per capita cereal production was North Africa, followed by West Africa, then Southern Africa, East Africa. Central Africa had the smallest production (Chart 56).

In North Africa, Algeria recorded a huge growth rate in cereal production (13.4 percent) in the region over the period 2000-2011. This rate is due to both improved yields (4.6 percent) and an increase in area harvested (8.5 percent). However the highest rate was recorded by Morocco (14.3 percent), which can primarily be explained by the increase in yield (14.4 percent).

In Central Africa, strong growth in grain production was recorded during the period 2000-2011 in Cameroon, which had an annual average growth of 8.1 percent and Congo at 9.5 percent. The high growth recorded in Cameroon is related to an increase in area, while in Congo, it was due to the combined effect of both yield and area.

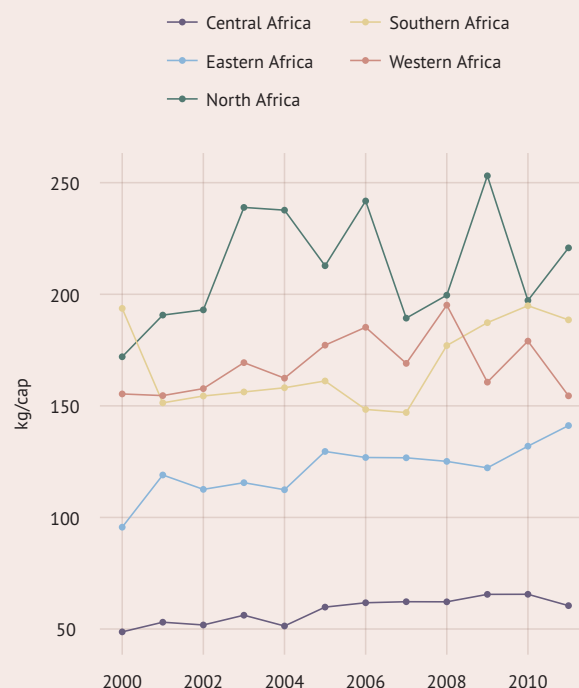
In East Africa, the highest increase in cereal production (12.3 percent) was observed in Rwanda through increased yields, in view of the very limited availability of arable land of the country. High cereal growth rates were recorded in other countries in East Africa: Eritrea (6.8 percent), Ethiopia (7.5 percent) and the United Republic of Tanzania (7.3 percent). However, since 2000, Somalia has been facing a decline in cereal production with an average rate of -3.1 percent over ten years. This can be explained by the fact that there was no growth in planted area and a rapid decrease in yields. Growth in the United Republic of Tanzania, is primarily explained by the increase planted in areas (7.7 percent), (table 20).

Compared to the other regions, RAF was fourth in the production of coarse grains. The production of coarse grains in Africa was 115.3 million tons in 2010 and 112.8 million tons in 2011 and had an average annual growth rate of 3.9 percent, which was primarily due to improvements in yield and expansion in area. Similarly, in RAF, there was a slight decrease between 2010 and 2011, but the production grew by 3.9 percent as it did across Africa. The production in North Africa was almost stagnant from 2010-2011, but its growth was 3.6 percent from 2000 to 2011.

The decrease in coarse grain production in RAF was due to the drop in production in Central and West Africa, and also the slight reduction in the production recorded in Southern Africa.

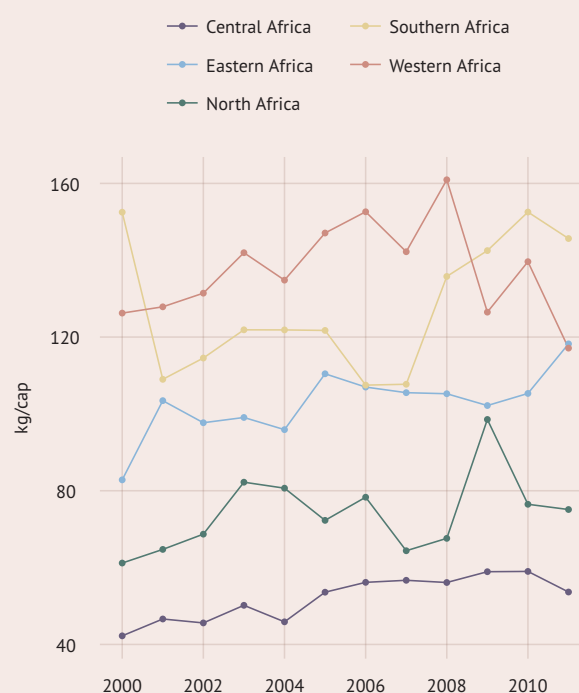
West Africa was the top per capita coarse grain producer between 2000-2011, with a per capita production ranging between 120-160 kg/cap. The next largest producers were Southern Africa, East Africa, North Africa and Central Africa (chart 57). Egypt, Ethiopia, Kenya, Mali, Niger, Nigeria, South Africa and Tanzania were the biggest producers with production ranging between 3.5 - 17.4 million tons of coarse grain produced in 2011 (map 35).

CHART 56: Per capita cereal production (2000-2011)



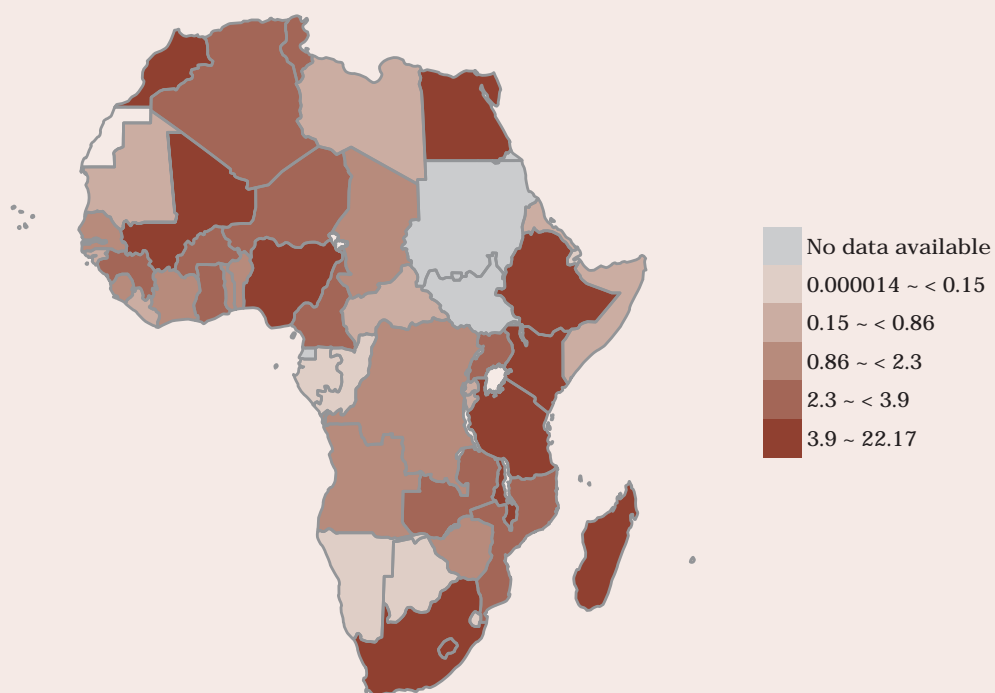
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 57: Per capita coarse grain production (2000-2011)



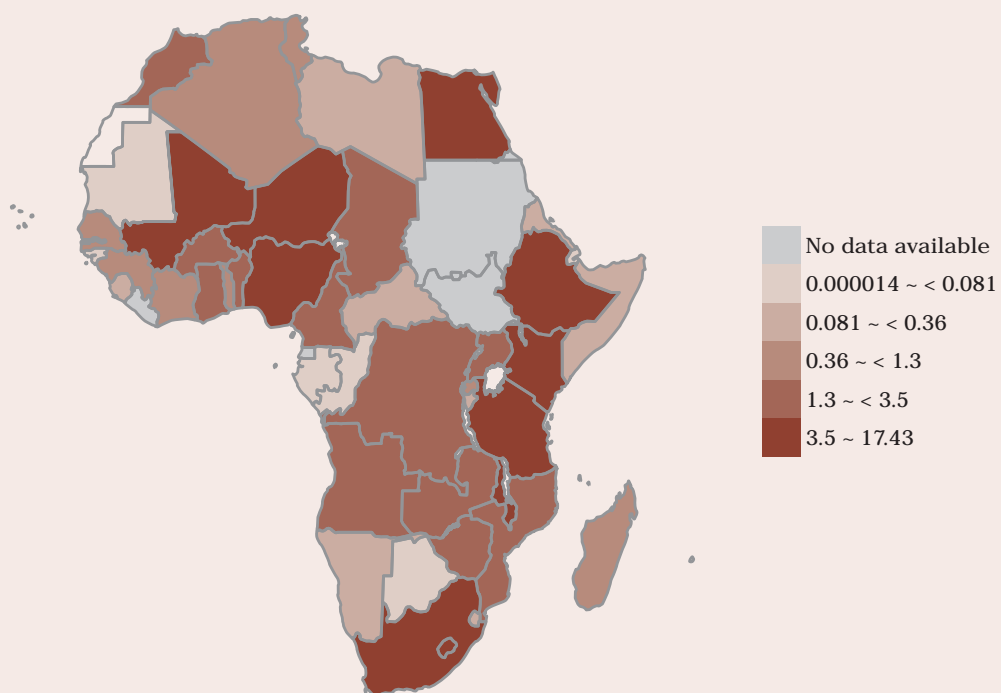
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

MAP 34: Cereal producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 35: Coarse grain producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

The bulk of world rice production is destined for food, although some quantities are used in domestic animal feed production. Rice is the main staple for more than half of the world's population, with Asia representing the largest producing and consuming region. In recent years, rice has also become an important staple throughout Africa.

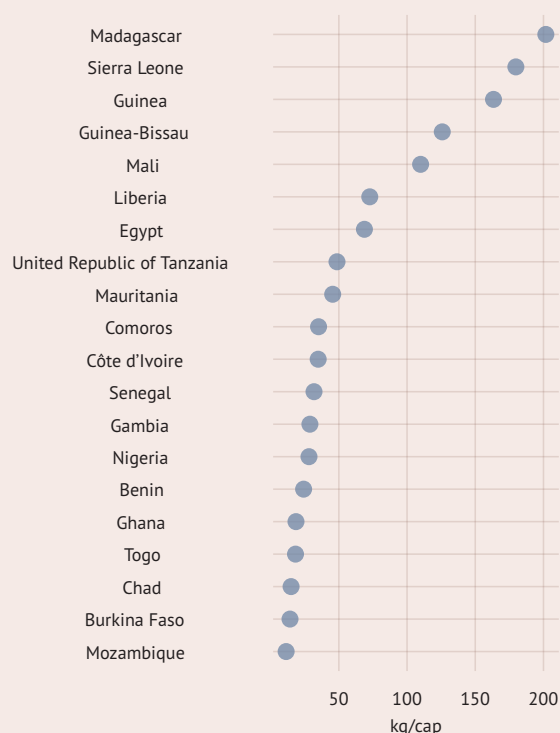
Rice production in North Africa increased from 2010 to 2011. However, over the last ten years (2000-2011), this level of production dropped as the annual growth rate was -0.5 percent. In contrast RAF recorded a reduction in rice production from 2010 to 2011 due to the decrease of production in East Africa, Southern Africa and West Africa. Only Central Africa recorded a slight increase between 2010 and 2011. Paradoxically, all of these sub-regions showed positive annual growth from 2000 to 2011. At 10.2 percent, East Africa had the highest annual growth (Table 22).

In 2011, the largest per capita producers of rice were Madagascar, followed by Sierra Leone, Guinea, Guinea-Bissau and Mali where per capita rice production was above 100 kg/cap. Madagascar recorded roughly 200 kg/cap (chart 58).

With respect to wheat, more of the earth's surface is covered by wheat than by any other food crop. Wheat is the third most produced cereal after maize and rice, but in terms of dietary intake, it is currently second to rice as the main food crop, given the more extensive use of maize as animal feed. Currently, around 70 percent of this crop is used for food, 19 percent for animal feed, and the remaining 11 percent is used for industrial purposes.

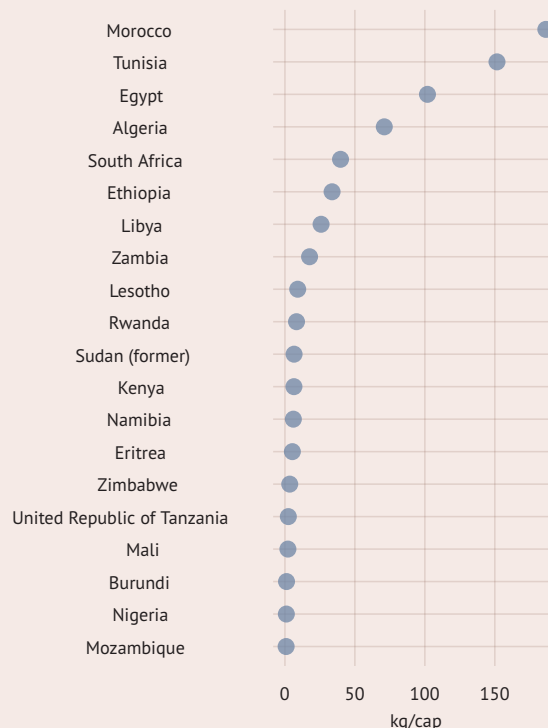
In 2011, the leading producers of wheat per capita in Africa were Morocco, with almost 200 kg/cap, followed by Tunisia (150 kg/cap), Egypt (100 kg/cap) and Algeria (75 kg/cap) (chart 59). In terms of volume, Ethiopia and South Africa produced high quantities of wheat (map 37).

CHART 58: Per capita rice production, selected countries (2011)



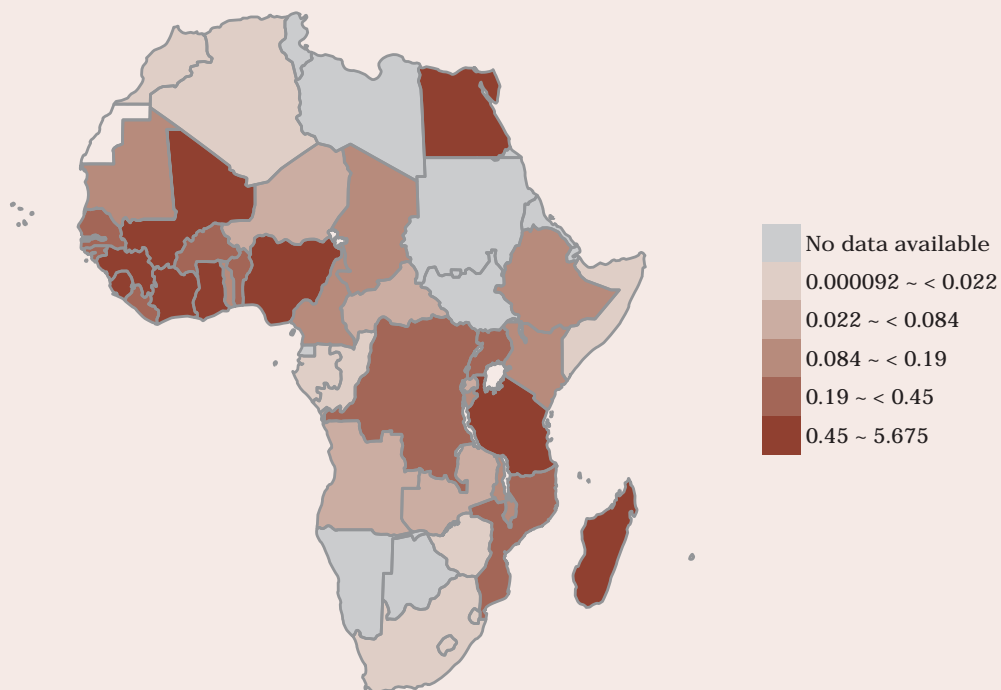
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 59: Per capita wheat production (2011)



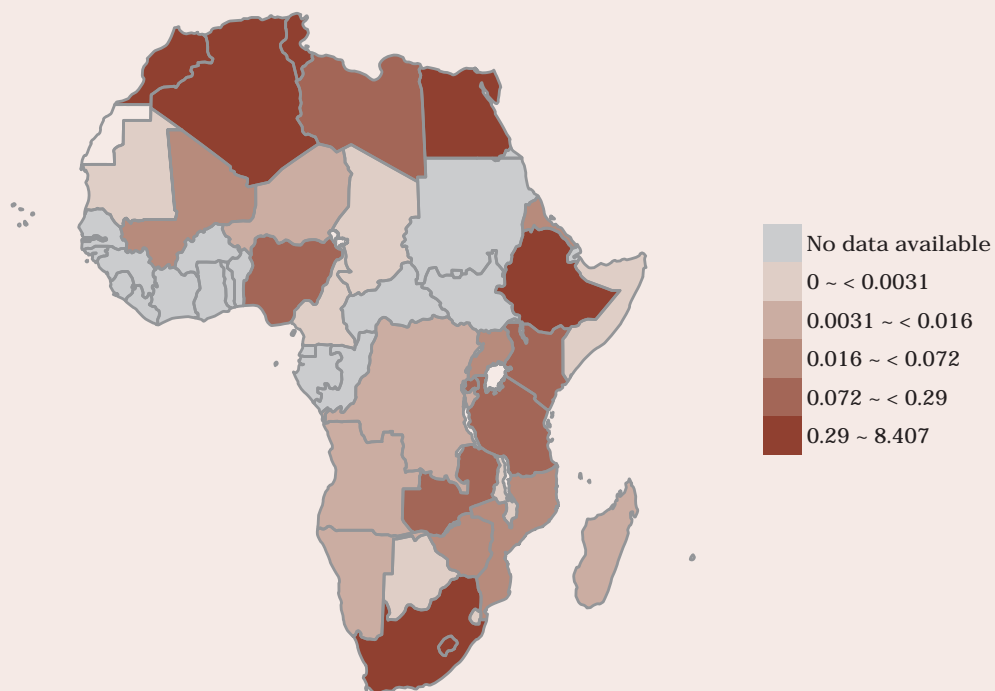
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

MAP 36: Rice producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 37: Wheat producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

Oil crop production in Africa grew from 9 981 thousand tons in 2010 to 10 341 thousand tons in 2011 mainly as a result of the expansion of area (2.8 percent). Over the period 2000-2011, production has risen at an annual rate of 4.6 percent. Compared to the other regions, North Africa recorded a decrease in oil crop production from 2010 to 2011 after a 5.9 percent growth between 2000 and 2011.

In RAF, production also rose from 9 060 million to 9 448 million tons from 2010 to 2011. The region had an annual growth rate from 2000-2011 of 4.5 percent. This growth can be explained by strong production in Central Africa, East Africa and Southern Africa, which recorded an increase in their production. There was only a drop in West Africa between 2010 to 2011, however overall production continuously increased between 2000-2006. Nevertheless West Africa was the leader in per capita oil crop production. It recorded more than 15 kg/cap, whereas the average in Central Africa was around 10 kg/cap (chart 60).

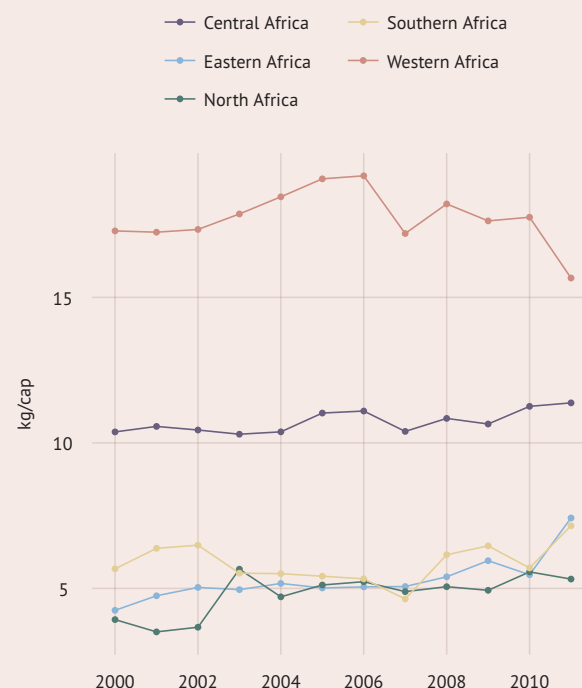
The leading oil crop producing countries in 2011 with production levels above 0.25 million tons were Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Morocco, Nigeria, South Africa, Tanzania and Uganda (map 38).

In Africa, pulse production fell from 15 292 thousand tons in 2010 to 13 887 thousand tons in 2011, which means a reduction of roughly 9 percent. However production increased on average over the period 2000-2011 with an annual growth rate of 5.8 percent. This last result can be explained more by expansion of areas (4.2 percent) than by yields (1.5 percent).

In terms of volume, RAF was the second largest producer of pulses after RAP; REU was third, and RLAC was fourth while RNE lagged behind. RAF, like RLAC, recorded a drop in pulse production from 2010 to 2011. This could be explained by the huge reduction of the production in West Africa, which was the leading pulse producer in 2010. Nevertheless production in West Africa grew at an annual rate of 6.6 percent over the past 10 years (2000-2010) due to expansion of area.

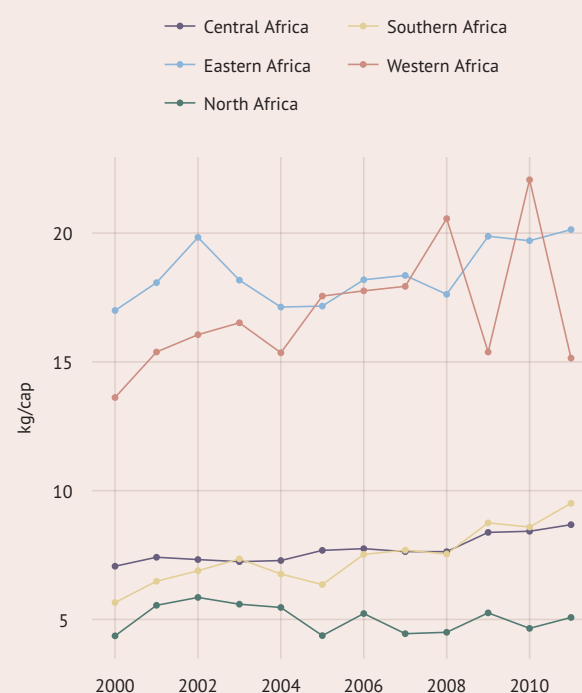
The other sub-regions of RAF (Central Africa, East Africa and Southern Africa) recorded growth in production in 2010-2011. Pulse production also increased in North Africa (table 25). In 2011, the leading producers with production levels between 0.4 million and 1 969 million tons were Burkina Faso, Niger and Nigeria in West Africa; Cameroon in Central Africa; Ethiopia, Kenya, Malawi, Mozambique, Tanzania and Uganda in Southern Africa (map 39).

CHART 60: Per capita oil crop production (2000-2011)



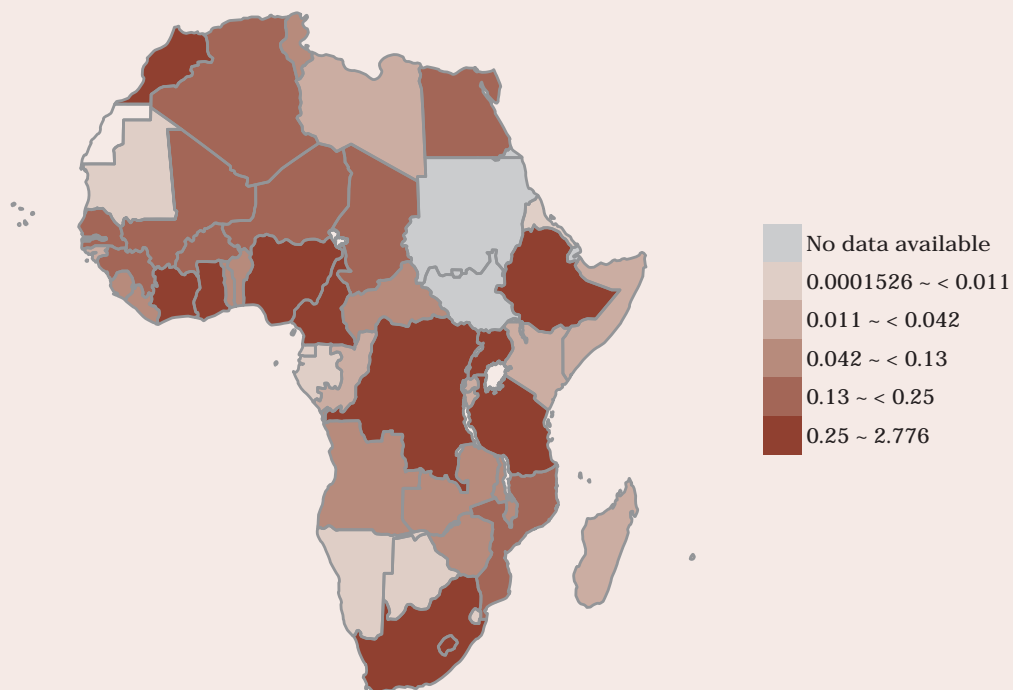
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 61: Per capita pulse production (2000-2011)



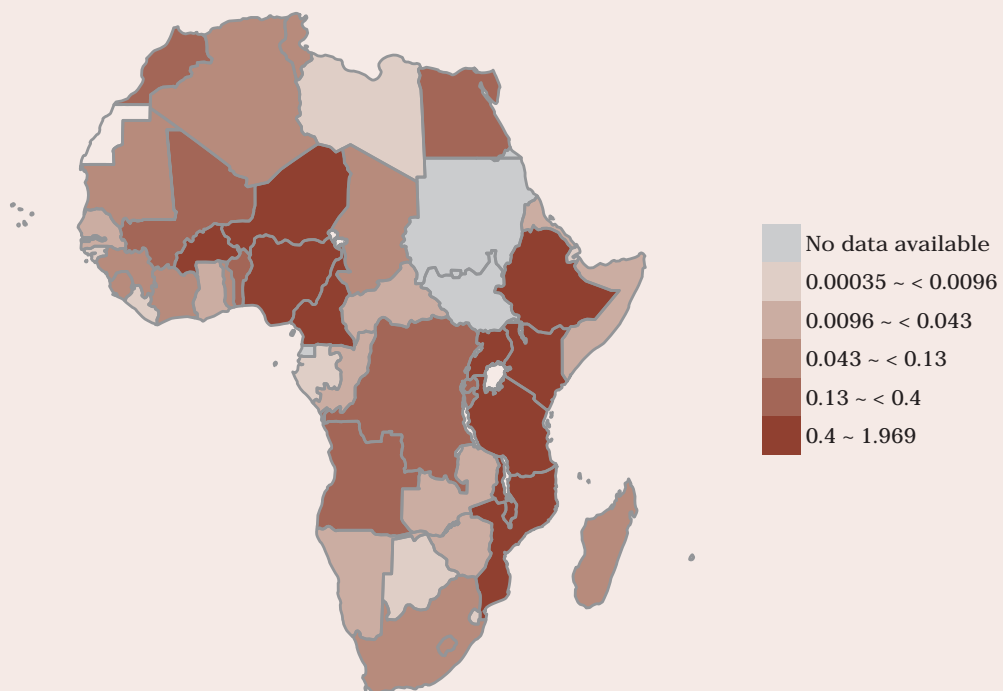
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

MAP 38: Oil crop producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 39: Pulse producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

In Africa, production of roots and tubers rose from 239 053 thousand tons in 2010 to 258 415 thousand tons in 2011, with a growth of 8.1 percent. Likewise, production increased over the period 2000-2011 at an annual growth rate of 4.3 percent. These results could be explained by improvements in both area (2.1 percent) and yields (1.8 percent).

In terms of volume, just like pulse production, RAF was the second producer of roots and tubers after RAP. REU was third, followed by RLAC and last (table 26). RAF registered an increase in the production of roots and tubers from 2010 to 2011. This increase was due to the growth in production observed in all sub-regions of Africa. The highest increase was recorded in North Africa (13.7 percent), followed by West Africa (11.8 percent); Central Africa (4.1 percent) and Southern Africa (3.3 percent).

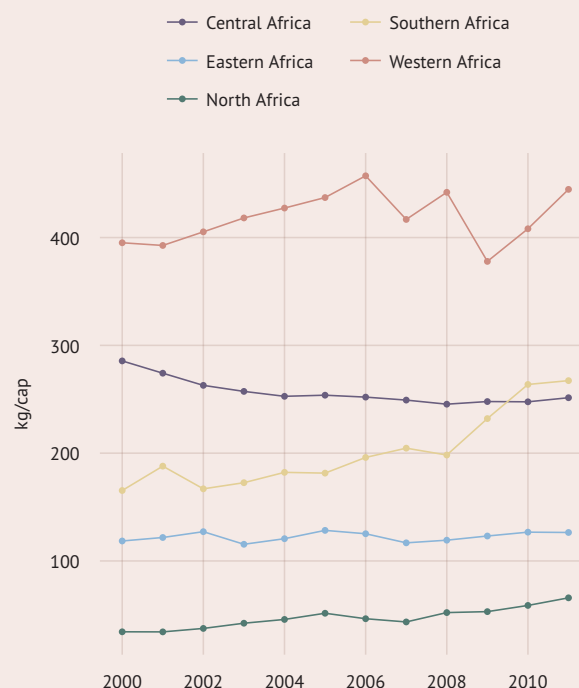
In terms of per capita production, West Africa was the best producer of roots and tubers from 2000 to 2011, with its production around 400 kg/cap during the period 2000-2010. It was followed by Central Africa (under 300 kg/cap) which declined over the same period, then Southern Africa (increasing from less than 200 kg/cap in 2000 to almost 300 kg/cap in 2011). East Africa per capita production (just over 100 kg/cap) was stagnant. North Africa had the lowest per capita root and tubers production, which increased from roughly 30 kg/cap in 2000 to around 60 kg/cap in 2011 (chart 62).

In 2011, the countries with the highest production levels (between 6.2 million 97.18 million tons) were: Angola, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Nigeria, Ethiopia, Mozambique, Tanzania and Uganda (map 40).

RAF recorded an increase in citrus fruit production from 2010 to 2011. This increase was due to the increase in production observed all over Africa. Nevertheless in RAF, Central Africa recorded the highest percentage in citrus fruit production (23.5 percent), and West Africa came second (9.9 percent). North Africa also recorded high growth (14 percent).

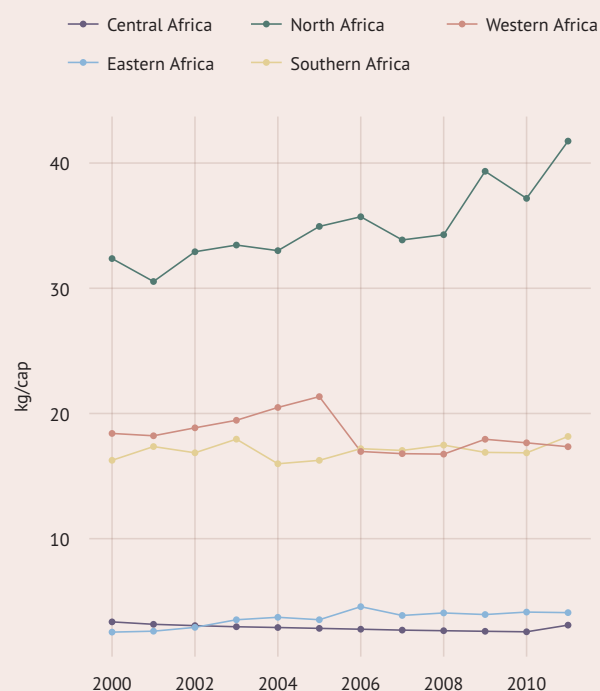
In terms of per capita production, North Africa was the largest producer of citrus fruit from 2000 to 2011, as it grew from around 30 kg/cap to 40 kg/cap. It was followed by West Africa and Southern Africa (both from above 15 kg/cap to just under 30 kg/cap in 2011). Next were East Africa and Central Africa, whose per capita productions were just over 5 kg/cap (chart 63). In 2011, the leading producers were: Algeria, Egypt, Guinea, Morocco, South Africa and Tunisia (map 41).

**CHART 62: Per capita root and tuber production (2000-2011)**



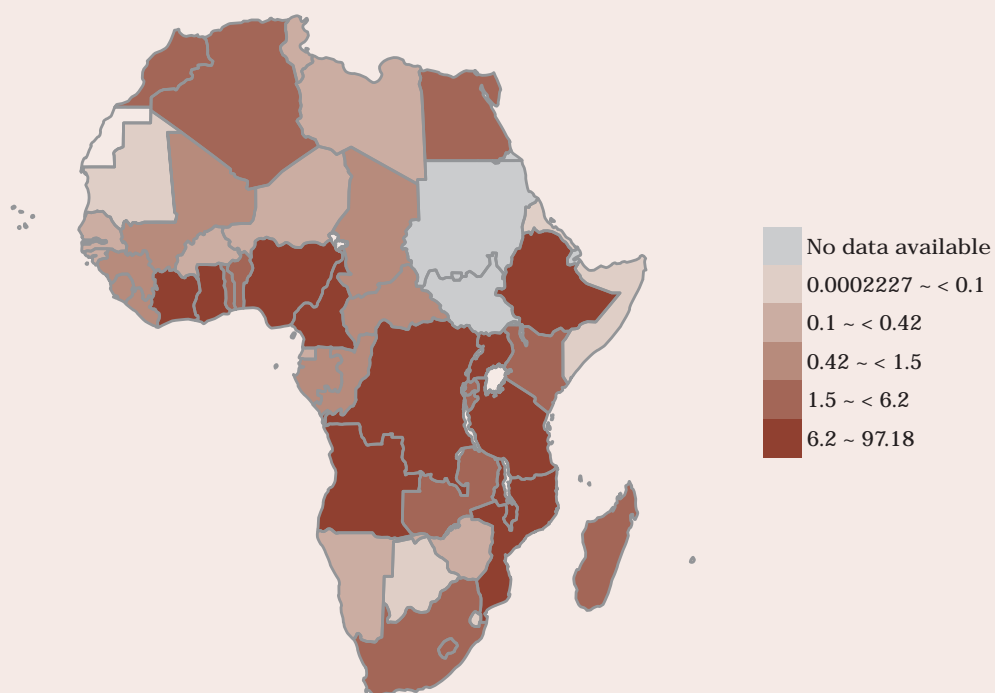
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

**CHART 63: Per capita citrus fruit production (2000-2011)**



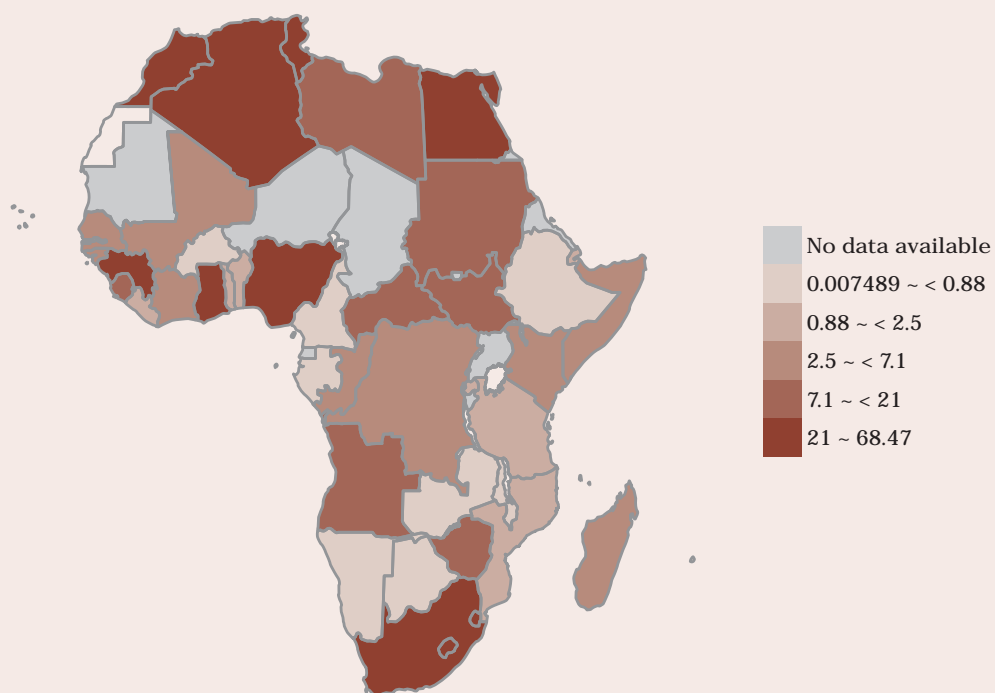
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

MAP 40: Root and tuber producing countries (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 41: Per capita citrus fruit production (tonne/cap, 2011)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

During the period 2000-2011, fruit production grew by 3.4 percent at the global level. In Africa, production rose from 85.723 million in 2010 to 88.925 million in 2011, which meant a growth rate of 3.7 percent. Nevertheless, for the period 2000-2011, African production recorded an annual growth rate of 4.2 percent. RAF as a region had the same rate (4.2 percent), while RAP was 5.2 percent. In the other regions, growth in fruit production was below the global average: 0.5 percent in REU, 1.7 percent in RLAC and 2.5 percent in RNE (Table 30). Within Africa, North Africa recorded the same growth in fruit production as RAF (4.2 percent) over the period. It is explained by a 2.5 percent increase in area and a 1.6 percent improvement in yield.

Fruit production was 5.9 percent in Central Africa and 6.7 percent in Southern Africa. In Central Africa, the increase was due more to improvements in yield, while, in Southern Africa, it was related more to an increase in area.

Based on per capita production, two periods can be highlighted. From 2000 to 2005, the leading sub-regions in terms of per capita production were East Africa, North Africa, West Africa, Central Africa and South Africa. From 2005 to 2011, some major changes occurred, and North Africa, which was the second largest producer, moved became the first, followed by East Africa. Next were Central Africa, Southern Africa, and finally West Africa (chart 64). The countries that exceeded the production of 3.2 million tons were Morocco, Algeria, Egypt, Ghana, Nigeria, Cameroon, Angola, South Africa, Tanzania and Uganda (map 42).

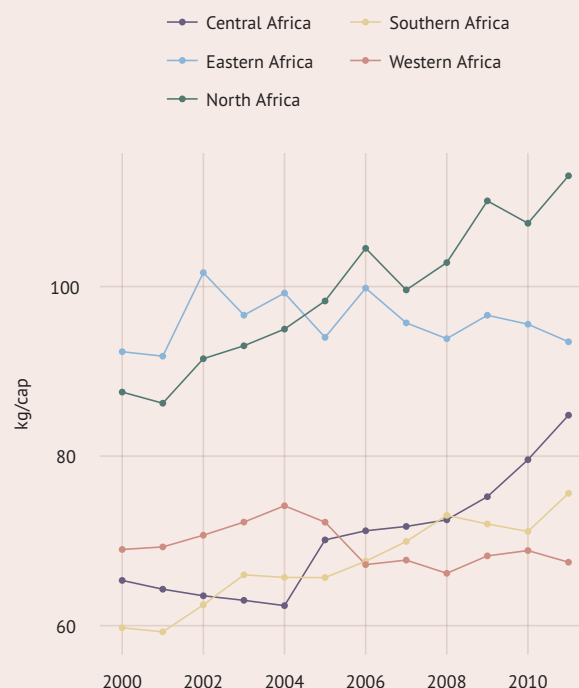
In Africa vegetable production, including melons, stagnated between 2010 (70 869 thousand tons) and 2011 (70 879 thousand tons). Nevertheless, production has increased at an annual rate of 3.5 percent over the last 11 years (2000-2011). Growth in vegetable production, including melons, was lower in RAF (3.4 percent) than in RAP (4.0 percent), but higher than RLAC (2.3 percent) and REU (1.9 percent). RNE was the region that recorded the biggest growth (4.5 percent).

North Africa was the largest per capita producer, with vegetable production increasing from slightly over 150 kg/cap in 2000 to more than 200 kg/cap in 2011. In contrast, per capita production of the other parts of Africa was far below, particularly East Africa and Central Africa, whose per capita vegetable production, including melons, was largely under 50 kg/cap. West Africa was just over 50 kg/cap, which was far below the level of North Africa (chart 65). The leading producing countries of vegetables, including melons, were Morocco, Algeria, Tunisia, Egypt, Nigeria, Cameroon, Ethiopia, Kenya, Tanzania and South Africa (map 43).

## Further reading

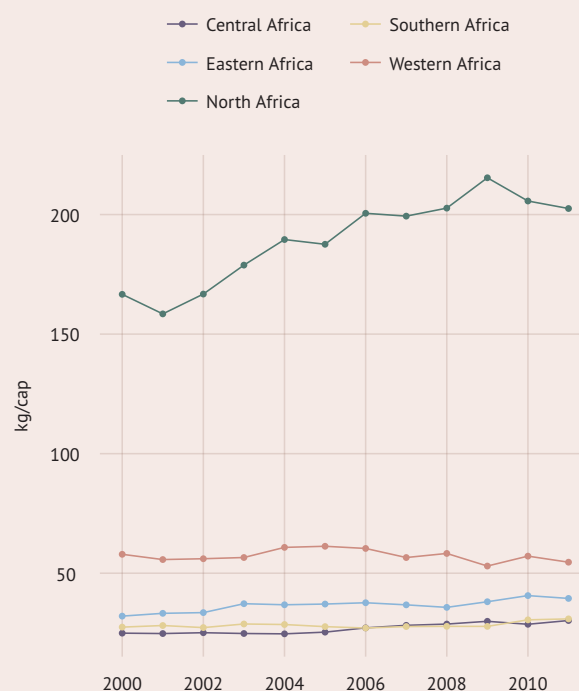
- The State of Food and Agriculture 2012: Investing in agriculture for a better future ([www.fao.org/publications/sofa/en/](http://www.fao.org/publications/sofa/en/))
- OECD-FAO Agricultural Outlook 2012-2021 ([www.oecd.org/site/oecd-faoagriculturaloutlook/](http://www.oecd.org/site/oecd-faoagriculturaloutlook/))

CHART 64: Per capita fruit production, excluding melons (2000-2011)



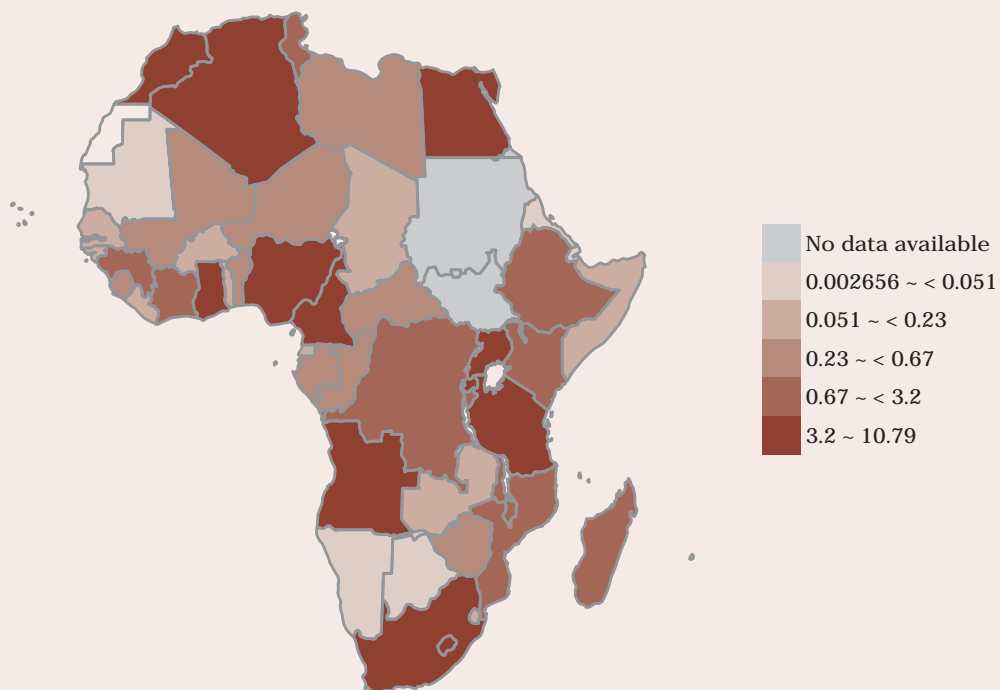
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 65: Per capita vegetable production, including melons (2000-2011)



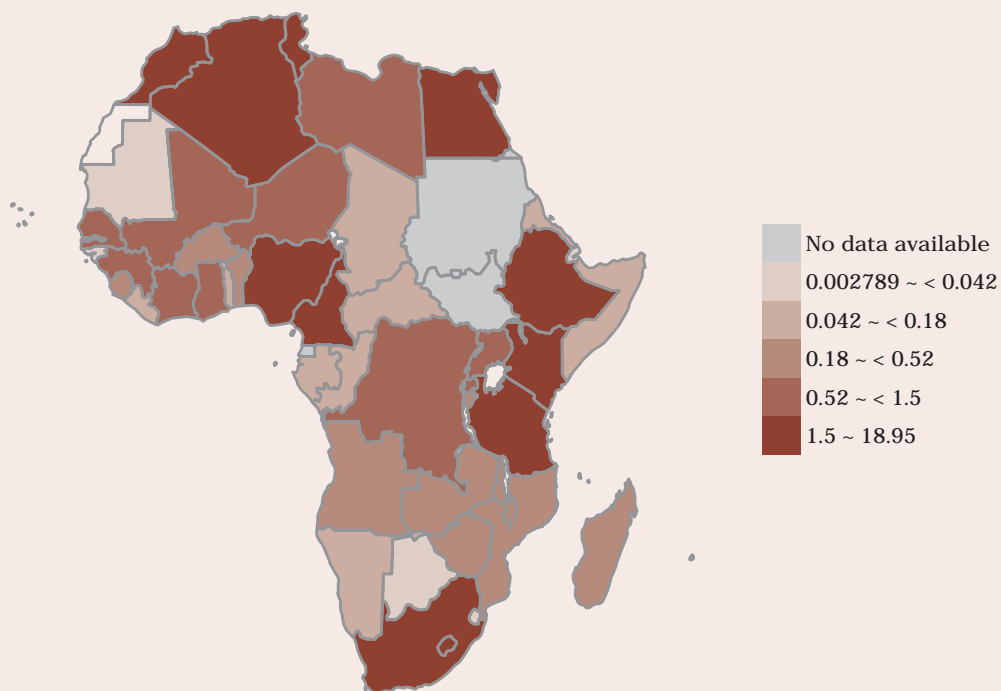
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

MAP 42: Fruit producing countries, excluding melons (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 43: Vegetable producing countries, including melons (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

## Trends in the livestock sector

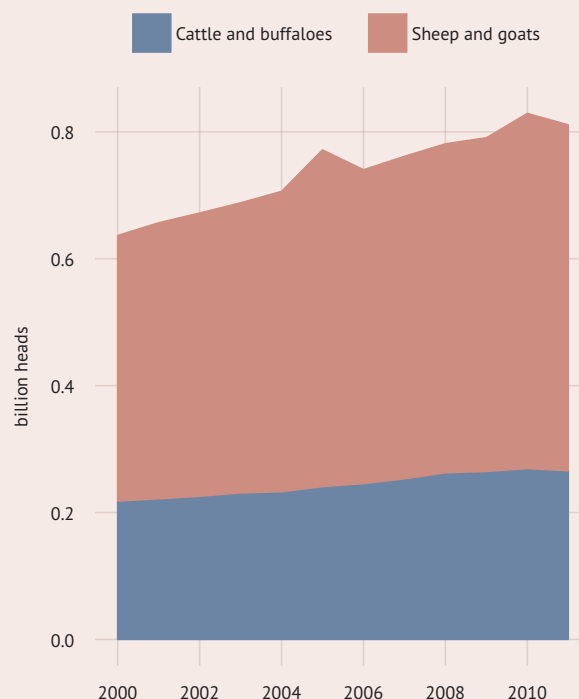
In many countries across the world, a shift in diets towards meat and dairy products is driving animal production. In the last few decades, in developing countries – where nearly all of the world population increase is taking place – consumption of meat has been growing at over 2.7 percent per annum, and milk and dairy products at 3.5 to 4.0 percent per annum.

In 2011, based on livestock numbers, Burkina Faso, Egypt, Ethiopia, Kenya, Madagascar, Mali, Niger, Nigeria, South Africa and Tanzania each recorded between 8.4 to 53.4 million heads of cattle and buffaloes (Map 44).

With respect to cattle and buffaloes (2011), the sub-region of Africa with the most heads was East Africa, followed by West Africa and Southern Africa. Concerning sheep and goats, East Africa and West Africa topped the producers with more than 0.2 billion heads of sheep and goats in 2011 (chart 68).

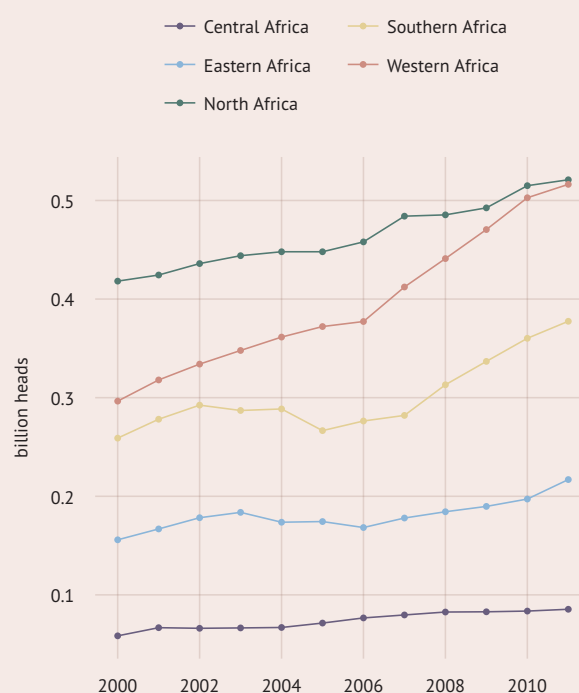
North Africa possessed the highest stock of poultry birds (2000-2011) compared to other parts of Africa. This stock rose from more than 0.4 billion heads in 2000 to more than 0.5 billion heads in 2011. West Africa was second; its stock of poultry birds accounted for 0.3 billion in 2000. Southern Africa was in third with a stock less than 0.3 billion in 2000, which increased to less than 0.4 billion by 2011. Next was East Africa, whose stock was less than 0.2 billion, which increased to slightly over 0.2 billion. Central Africa had the lowest stock of poultry, which remained under 0.1 billion (chart 67 and 69).

CHART 66: Africa stocks of cattle and buffaloes, and sheep and goats (2000-2011)



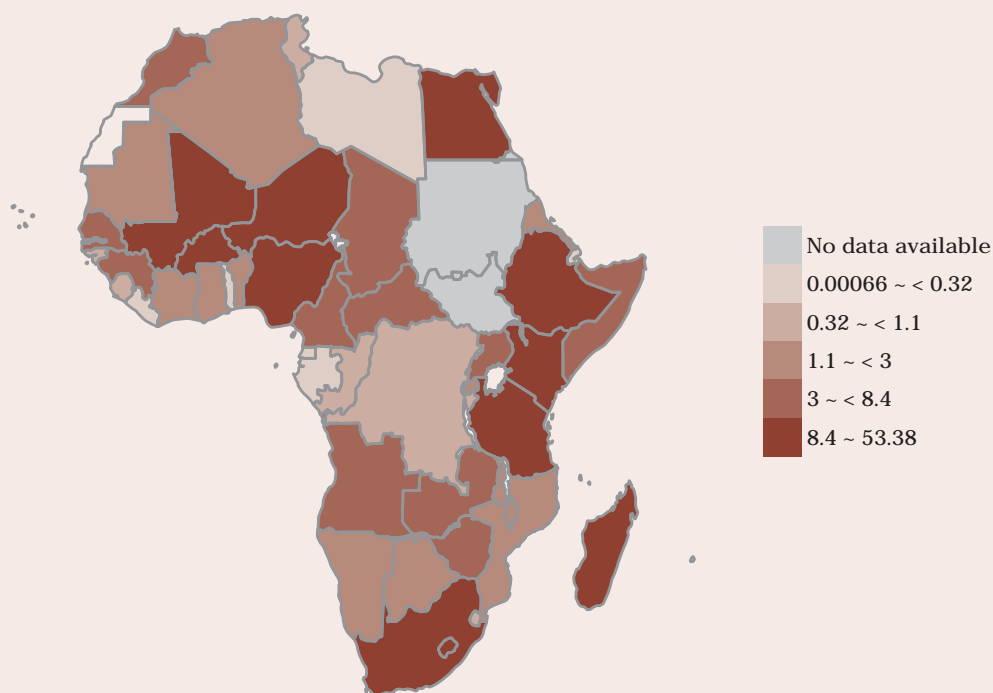
Source: FAO, Statistics Division (FAOSTAT).

CHART 67: Stock of poultry birds (2000-2011)



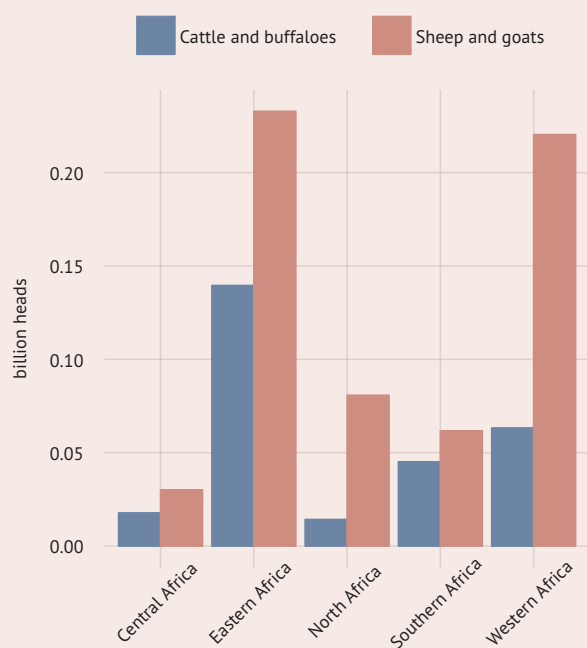
Source: FAO, Statistics Division (FAOSTAT).

MAP 44: Stock of cattle and buffaloes (million heads, 2011)



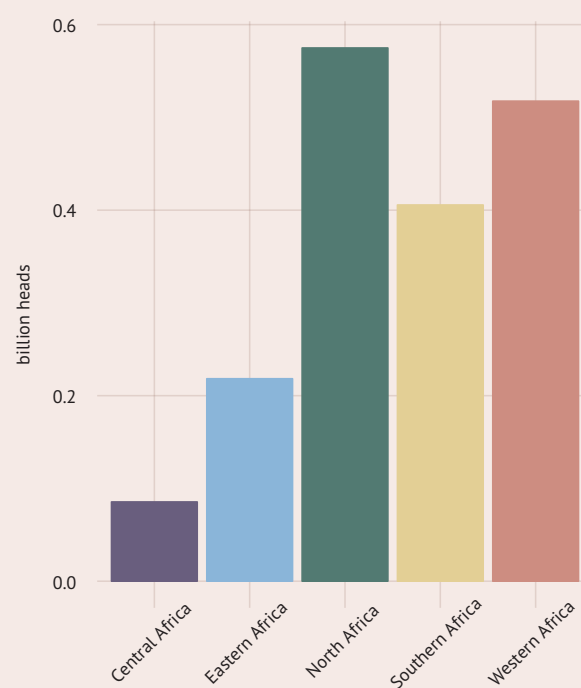
Source: FAO, Statistics Division (FAOSTAT).

CHART 68: Stocks of cattle and buffaloes, and sheep and goats (2011)



Source: FAO, Statistics Division (FAOSTAT).

CHART 69: Stock of poultry birds (2011)



Source: FAO, Statistics Division (FAOSTAT).

In Africa, total meat production was 16 537 million tons in 2011, and it experienced an annual growth of 3.5 percent in the period 2000-11, (table 34). This was mainly as a result of the production of pork meat (5.8 percent) and poultry meat (5 percent).

In RAF, the increase in meat production over the period 2000-2011 was slightly low (3.4 percent) compared with North Africa (3.6 percent). Within RAF, the highest rate was recorded in Southern Africa (3.9 percent). West Africa (3.7 percent), Central Africa (3.1 percent) and East Africa (2.6 percent) were slower. The high expansion recorded by Southern Africa can be explained by the exceptional growth of the production of pork (7.7 percent) and the production of poultry meat (5.4 percent).

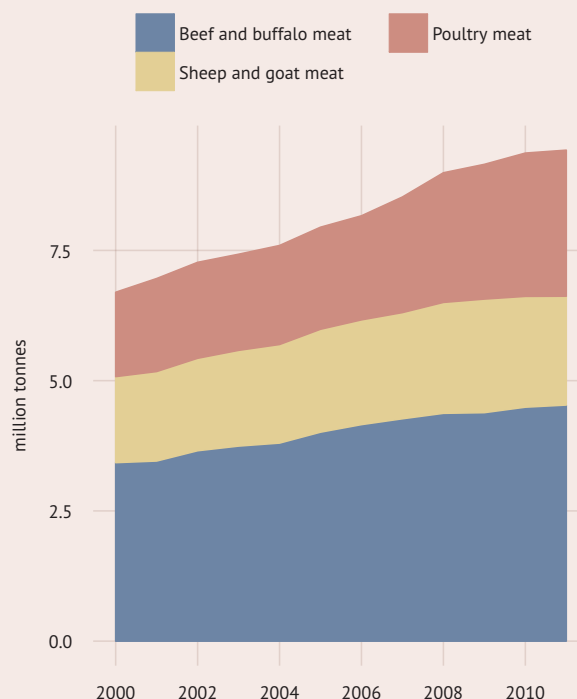
In 2011, the total meat production in Africa mainly comprised the production of beef and buffalo meat (39.2 percent) followed by the production of poultry meat (33.4 percent). Production of mutton came third (18.7 percent), while pork represented only 8.7 percent.

With more than two million tons, North Africa had the largest poultry meat production. Southern Africa was next, followed by West Africa (more than 0.5 million tons). With regard to the production of beef and buffalo meat, East Africa, the largest producer in Africa, produced roughly 1.75 million tons, followed by Southern Africa, North Africa and West Africa. For mutton, the largest producer was West Africa, followed by East Africa and North Africa (chart 71).

With meat production ranging from 0.35 to 2.86 million tons in 2011, Algeria, Egypt, Ethiopia, Kenya, Mali, Morocco, Nigeria, South Africa, Tanzania and Uganda were the leading meat producing countries (map 45).

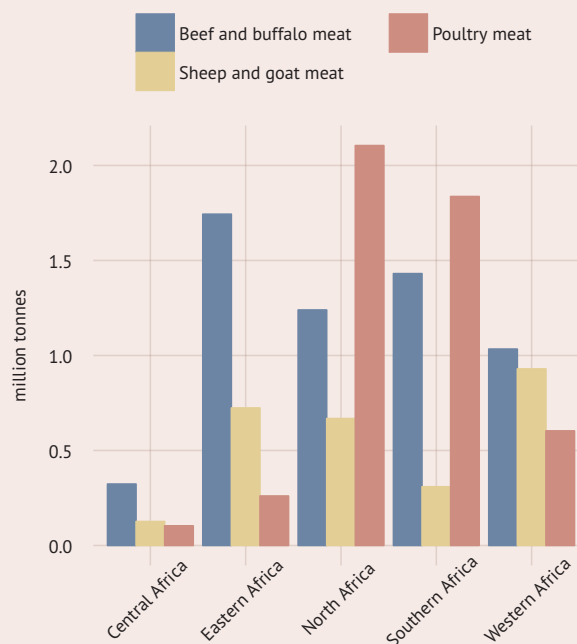
Based on per capita, Southern Africa accounted for the highest per capita total meat production (roughly 27 kg/cap), followed by North Africa (almost 25 kg/cap). The other parts of Africa accounted for less than 10 kg/cap (Chart 73).

CHART 70: Africa meat production (2000-2011)



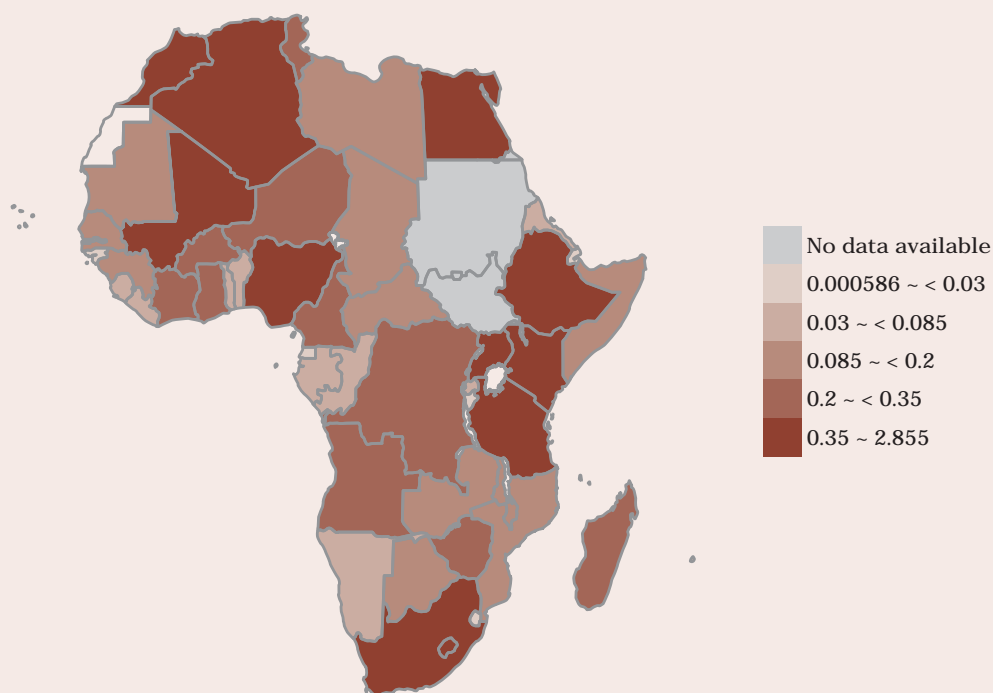
Source: FAO, Statistics Division (FAOSTAT).

CHART 71: Meat production by type (2011)



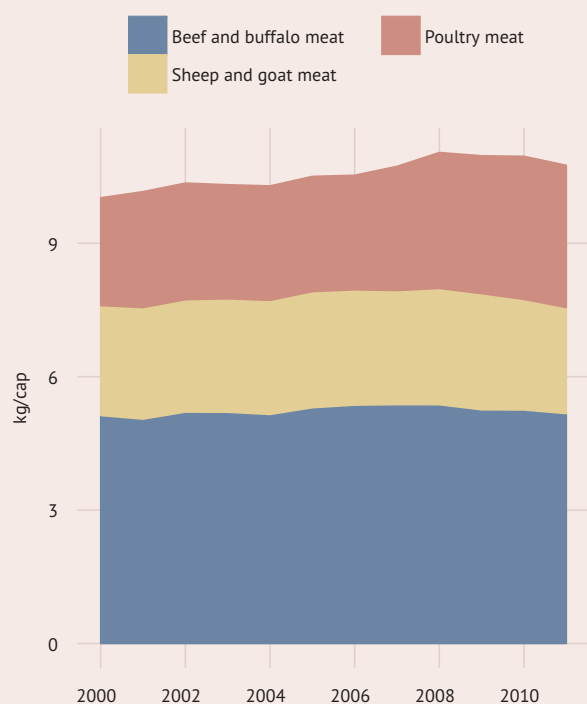
Source: FAO, Statistics Division (FAOSTAT).

MAP 45: Meat producing countries (million tonnes, 2011)



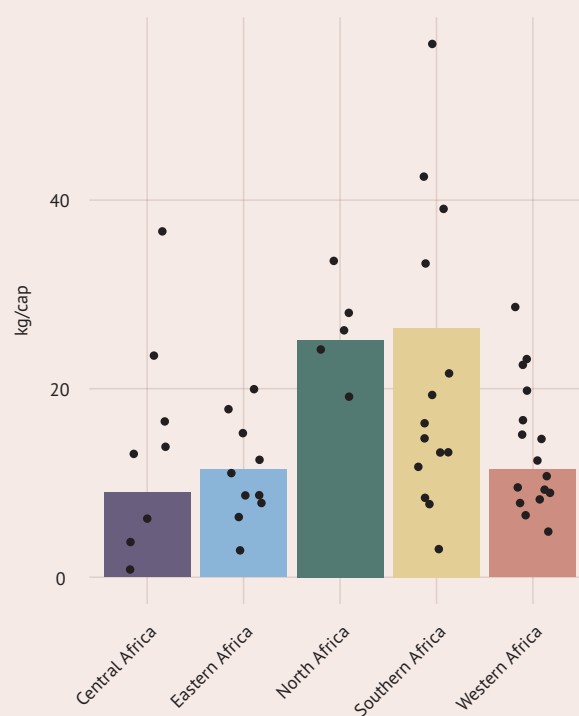
Source: FAO, Statistics Division (FAOSTAT).

CHART 72: Africa per capita meat production (2000-2011)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 73: Per capita total meat production (2011)



Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

In Africa, egg production was 2 771 thousand tons in 2011. From 2000 to 2011, global egg production in Africa grew at an average annual growth rate of 4.1 percent and milk at 4.9 percent. The RAF and RLAC regions had the highest growth rates of milk production, 4.4 percent and 3.4 percent respectively (table 35).

Central Africa was the smallest producer, with two percent of RAF milk production, whereas Southern Africa accounted for 15.8 percent and West Africa 14.2 percent. East Africa was the largest producer of milk in RAF, with 68 percent of regional production.

From 2000 to 2010 West Africa had the highest growth rate of milk production (6.9 percent) in RAF, primarily due to the fast increase in milk production in Cape Verde (8.4 percent), Mali (12.4 percent) and Sierra Leone (6.9 percent).

The leading milk producing countries were Algeria, Egypt, Ethiopia, Kenya, Mali, Morocco, Somalia, Tanzania and South Africa. These countries each had more than 1.2 million tons of milk in 2011 (map 46).

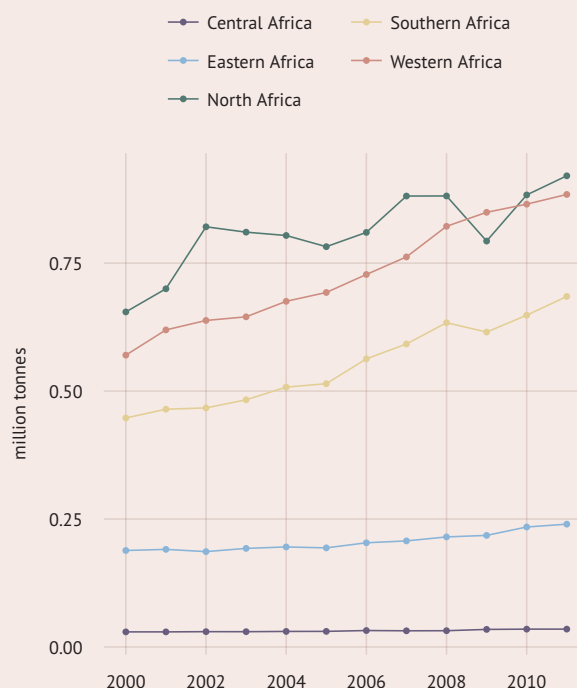
In Africa, Egypt was the biggest cheese producer in 2011, with a production of more than 0.6 million tons. Sudan, former next, albeit much smaller with less than 0.2 million tons of cheese.

Concerning butter and ghee production, the leading producing countries with more than 14 thousand tons in 2011, were Egypt, Ethiopia, Kenya, Morocco and Tanzania (map 47).

## Further reading

- FAO Animal Production and Health Division ([www.fao.org/ag/portal/aga-index/en/](http://www.fao.org/ag/portal/aga-index/en/))
- The State of Food and Agriculture 2009: Livestock in the balance ([www.fao.org/docrep/012/i0680e/i0680e00.htm](http://www.fao.org/docrep/012/i0680e/i0680e00.htm))

CHART 74: Egg production (2000-2011)



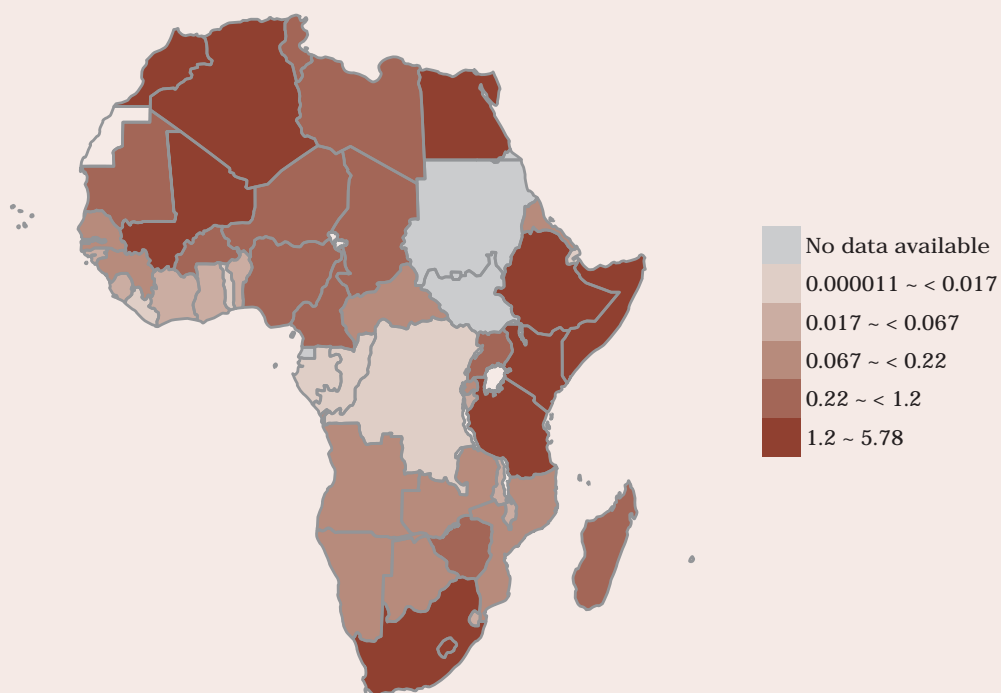
Source: FAO, Statistics Division (FAOSTAT).

CHART 75: Cheese production (2011)



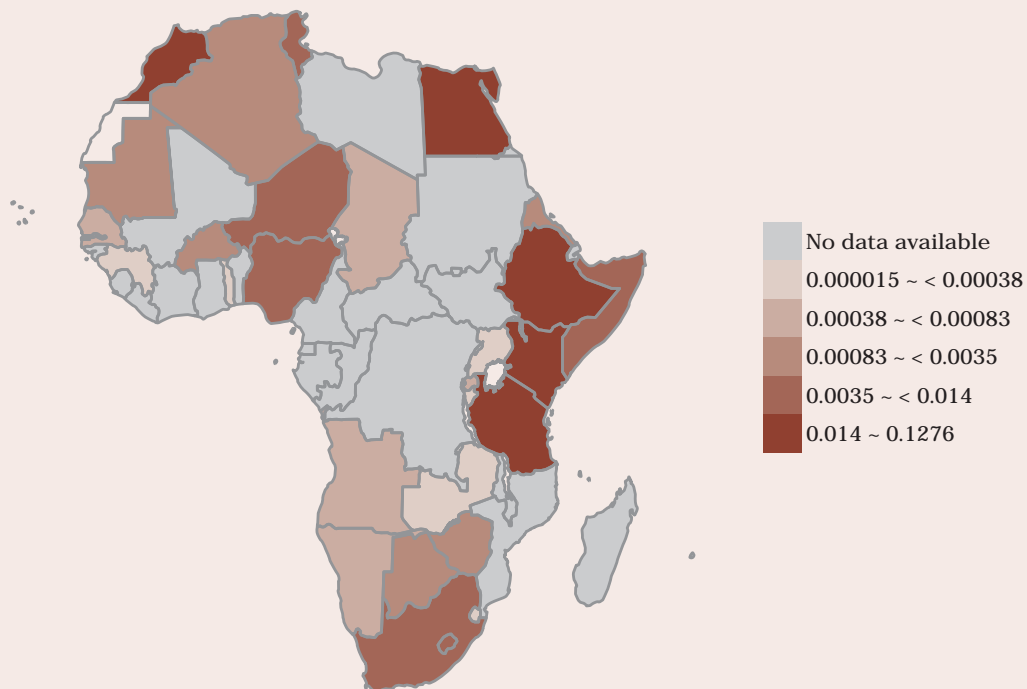
Source: FAO, Statistics Division (FAOSTAT).

MAP 46: Milk production (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 47: Butter and ghee production (million tonnes, 2011)



Source: FAO, Statistics Division (FAOSTAT).

## Trends in the fisheries sector

Capture fisheries and aquaculture supplied the world with about 168 million tons of fish in 2010 (for a total value of USD 217.5 billion), of which about 122 million tons was utilized as food for people providing an estimated per capita fish supply of about 18 kg (live weight equivalent).

Fish production in RAF was estimated at 6.01 million tons in 2011 (table 36). It consisted of 83 percent of capture and 17 percent for aquaculture. In RAF, capture fish production was low compared to other regions and recorded a growth rate of 2.3 percent. In REU and RLAC, capture fish production was declining, respectively -1.3 percent and -1.1 percent.

West Africa had the highest growth rate (3.4 percent), followed by East Africa (2.7 percent), whereas the growth of capture fish production was low in Central Africa (0.9 percent) and Southern Africa (1.0 percent) over the period 2000-2011 (table 36).

In per capita terms, Southern Africa was the major per capita capture fish producer from 2000 to 2011. Nevertheless the per capita fish capture in this sub-region dropped from about 14 kg/cap to 11 kg/cap during the same period. North Africa (around 10 kg/cap) had the next highest, followed by West Africa with a per capita fish production below 9 kg/cap. In Central Africa per capita production dropped from roughly 7 kg/cap in 2000 to less than 6 kg/cap 2011. East Africa had a per capita fish production of approximately 3 kg/cap during the same period (chart 76).

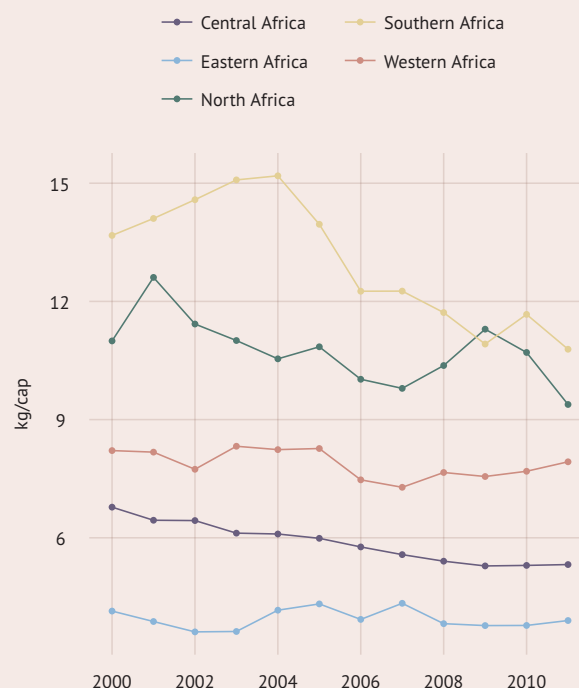
Regarding the production from aquaculture, Aquaculture production has grown worldwide. It has expanded on average 22.8 percent from 2000 to 2011. This significant growth of aquaculture is linked to the strong growth recorded in East Africa (27.2 percent) and West Africa (21.0 percent).

Some countries have contributed substantially to this expansion, including Burkina Faso (44.0 percent), Cameroon (29.2 percent), Kenya (40.8 percent), Mali (47.0 percent) and Uganda (52.6 percent).

Based on per capita production, Chart 77 showed that North Africa was the major per capita aquaculture fish producer compared to the other parts of Africa. Its per capita production jumped from more than 2 kg/cap in 2000 to 6 kg/cap in 2011, while the other parts of Africa were increasing under one kg/cap over the same period.

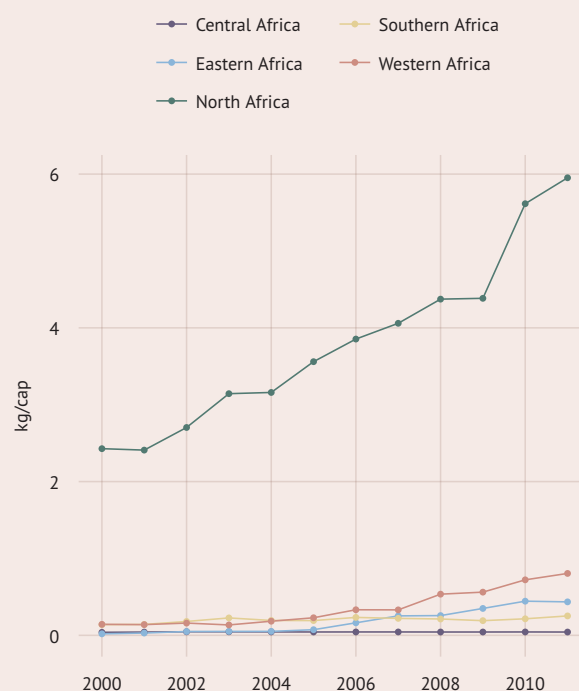
In 2011, the leading aquaculture producing countries (production between 7.9 to 986.8 thousand tons) were Madagascar, Zambia, Tanzania, Kenya, Uganda, Nigeria, Ghana, Egypt and Tunisia (map 49).

CHART 76: Capture fish production, per capita (2000-2011)



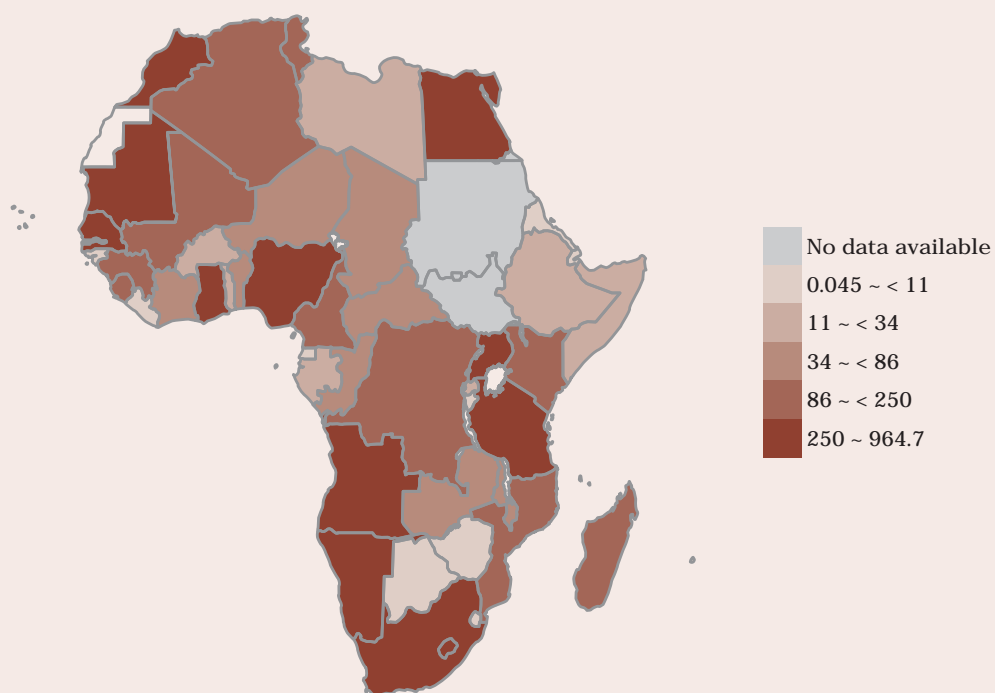
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics) and United Nations Population Division.

CHART 77: Aquaculture fish production, per capita (2000-2011)



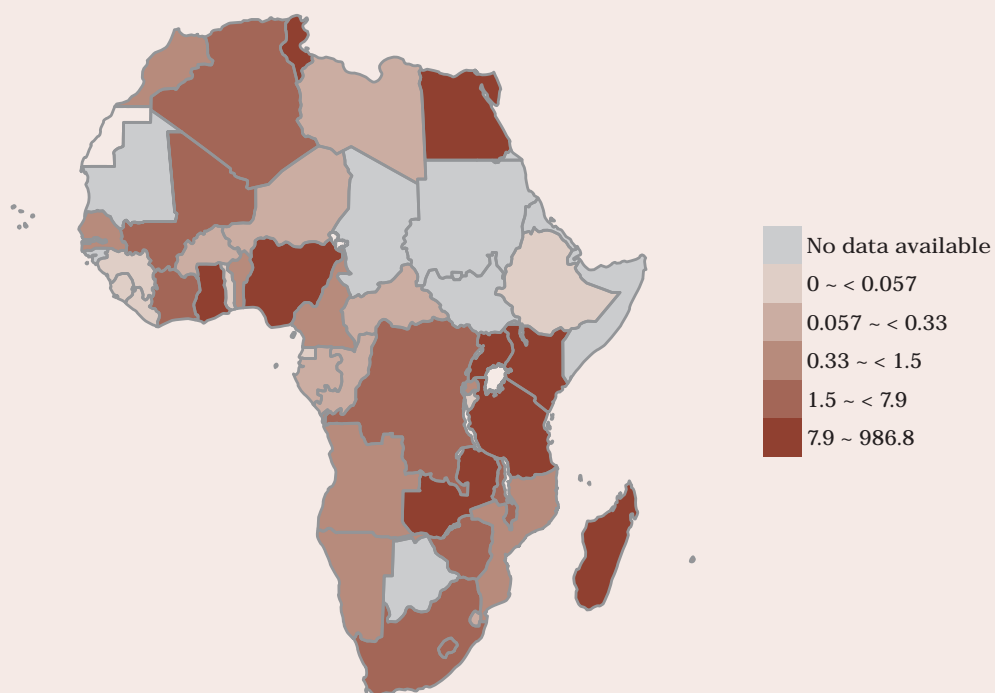
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics) and United Nations Population Division.

MAP 48: Capture fish producing countries (thousand tonnes, 2011)



Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics).

MAP 49: Aquaculture producing countries (thousand tonnes, 2011)



Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics).

The substantial harvests by capture and aquaculture are geo-located in Asia and Near East Japan. The harvests in Asia were due to the huge aquaculture harvest while in Near East Japan, it was by capture. Asia possessed the biggest aquaculture production in the World (Map 50).

On the map of Africa, the main geo-locations of harvest were: north of Madagascar, South Africa, west of Senegal and Cape Verde, Central Africa and North Africa. The harvests accounted for more capture than aquaculture, which is only developed in Central Africa and North Africa.

The other important geo-locations of harvest were North-East of Australia, West of Australia, West Argentina, around the United Kingdom, all with more capture than aquaculture.

In 2009, aquaculture fish production comprised:

- freshwater and diadromous fish (almost 70 percent)
- molluscs excluding cephalopods (roughly 20 percent)
- crustaceans (around 8 percent)
- marine fish (2 percent)
- and others

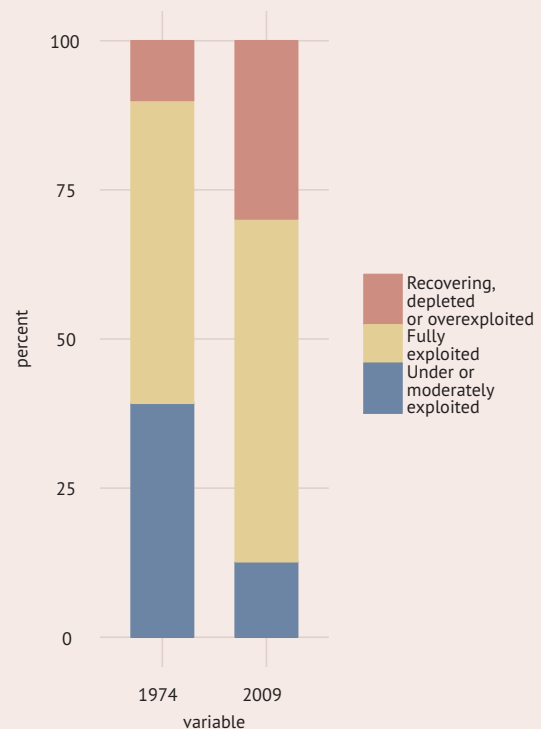
In contrast, compared to aquaculture, capture fish production accounted for:

- more marine fish (about 74 percent)
- less freshwater and diadromous fish (almost 12 percent)
- less crustaceans (around 6 percent)
- more cephalopods (around 4 percent)
- small part of molluscs excluding cephalopods (roughly 3 percent)
- and others

## Further reading

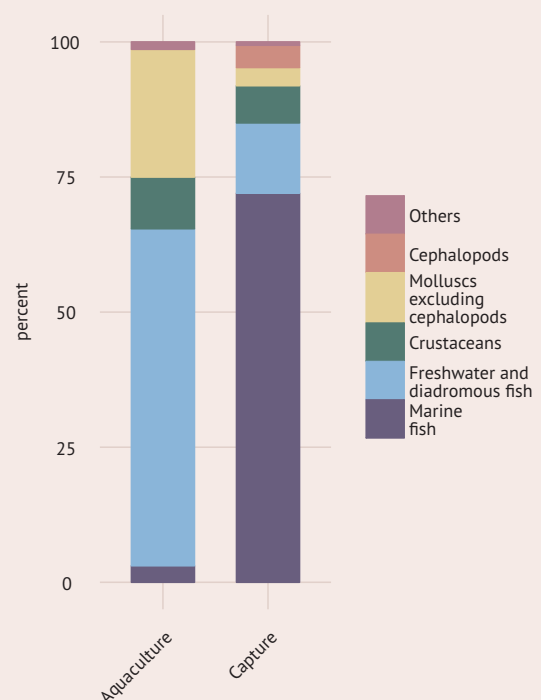
- FAO The State of World Fisheries and Aquaculture (SOFIA) ([www.fao.org/fishery/sofia/en](http://www.fao.org/fishery/sofia/en))
- FAO Fisheries and Aquaculture Department ([www.fao.org/fishery/en](http://www.fao.org/fishery/en))

CHART 78: **State of the world's fishery stocks (1974-2009)**



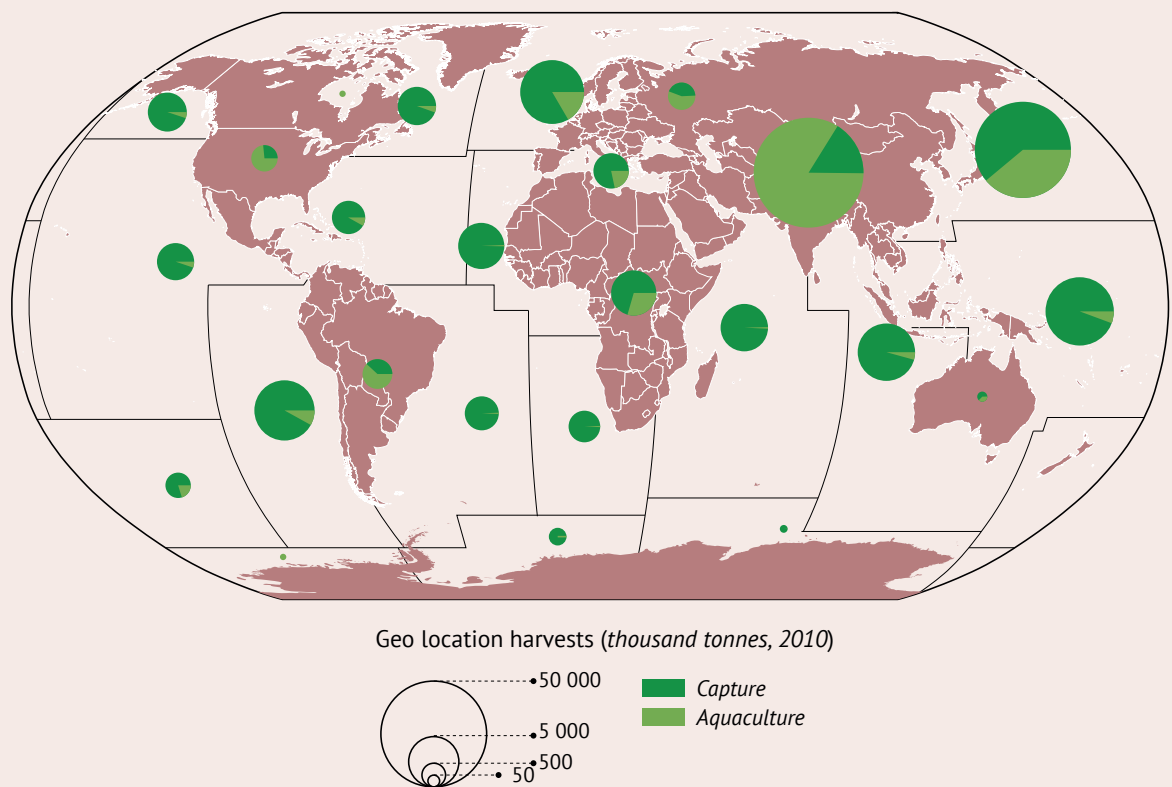
Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

CHART 79: **Composition of fish products (2009)**



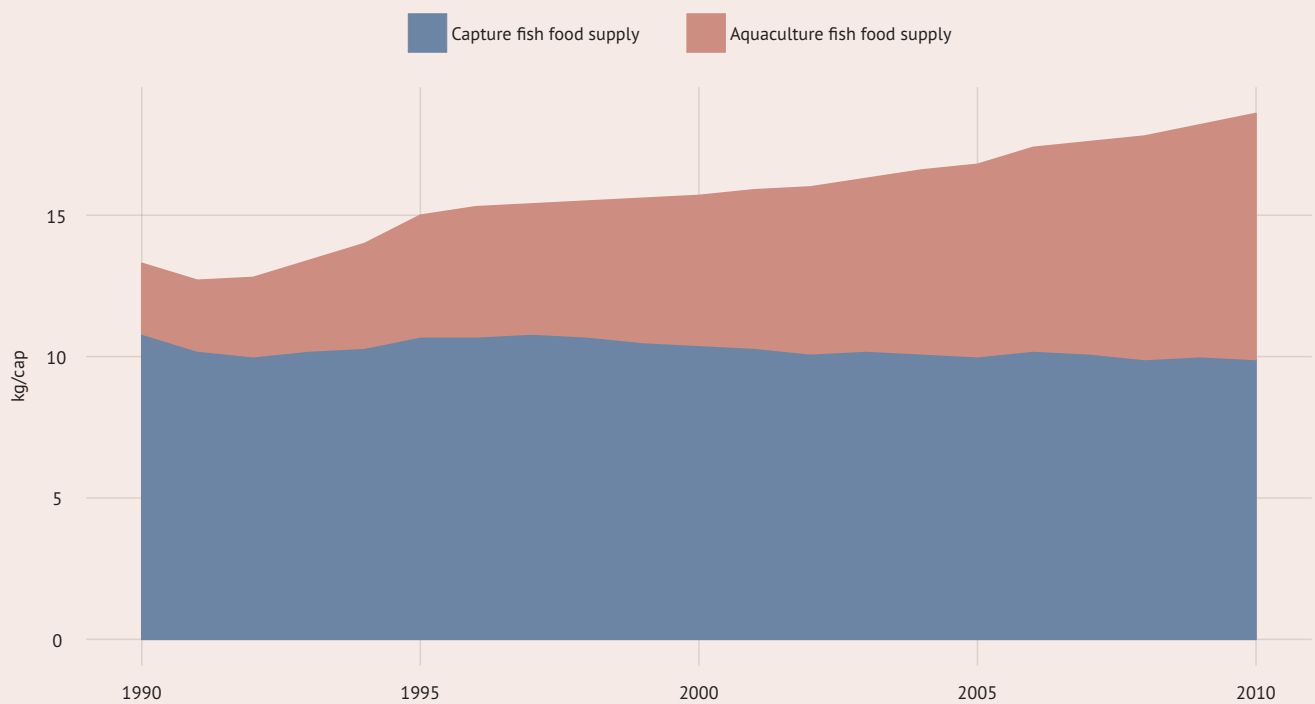
Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

MAP 50: Geo-location of harvests by capture and aquaculture (thousand tonnes, 2010)



Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

CHART 80: Per capita world fish food supply (1990-2011)



Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics) and United Nations Population Division.

## Trends in agricultural trade

Most of the food consumed worldwide is grown locally. Where this is not possible, global trade has been instrumental in helping countries fill the gap in order to achieve food security. The scale of food and agricultural trade today is unprecedented. In real terms, international flows have increased around fivefold over the past fifty years, which also reflects global trends in overall trade. This expansion, however, has been unevenly distributed across regions. For much of this period, the rich world outpaced the poor world in the very area where developing countries are supposed to have a comparative advantage.

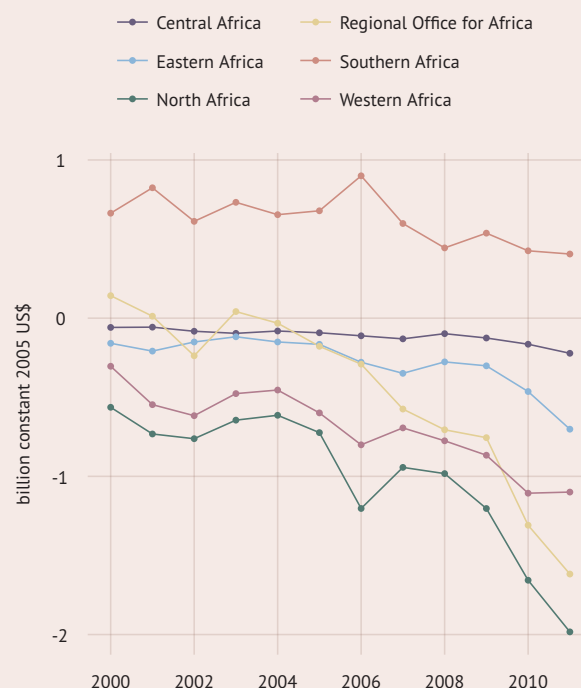
In general, production growth rates in most developing regions have been slightly below those of demand, as their agricultural imports have grown faster than their exports, thus leading to a gradual erosion of their traditional surplus in agricultural trade (excluding fishery and forestry products). By the turn of the 1990s the trend was for the surplus to diminish and become a net deficit.

The commercial balance or net exports of sugar and honey in the economy can be defined as the difference between the monetary value of exports and imports of output in an economy over a certain period, measured in the currency of that economy.

From 2000 to 2011, the net trade in sugar and honey in Africa was only positive for Southern Africa. All the other sub-regions experienced a trade deficit or a trade gap, which means that they imported more sugar and honey than they exported. North Africa recorded the widest gap, which means it imported more sugar and honey vis-à-vis its exports. West Africa followed with the second widest gap, followed by East Africa. Central Africa recorded the narrowest gap. (chart 81).

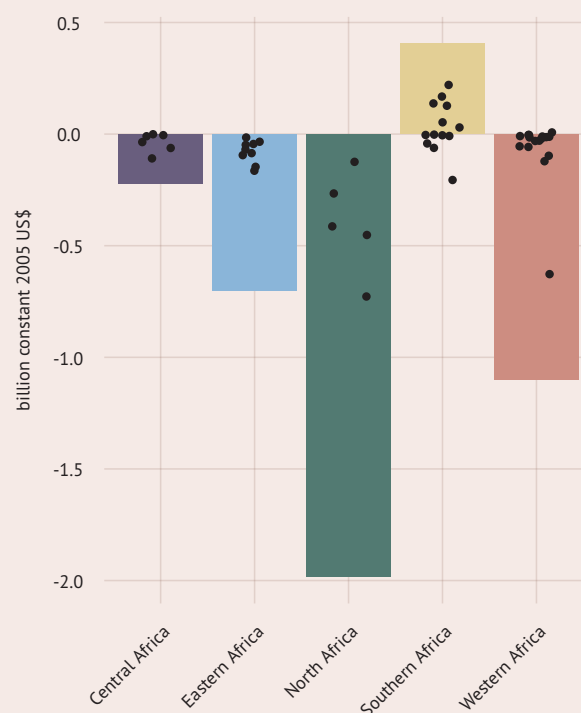
In 2011, North Africa's gap of was approximately –2 billion constant 2005 US\$, followed by West Africa. In contrast, Southern Africa held a positive balance, also known as a trade surplus, of less than 0.5 billion constant 2005 US\$, (chart 82).

CHART 81: Sugar and honey net trade (2000-2011)



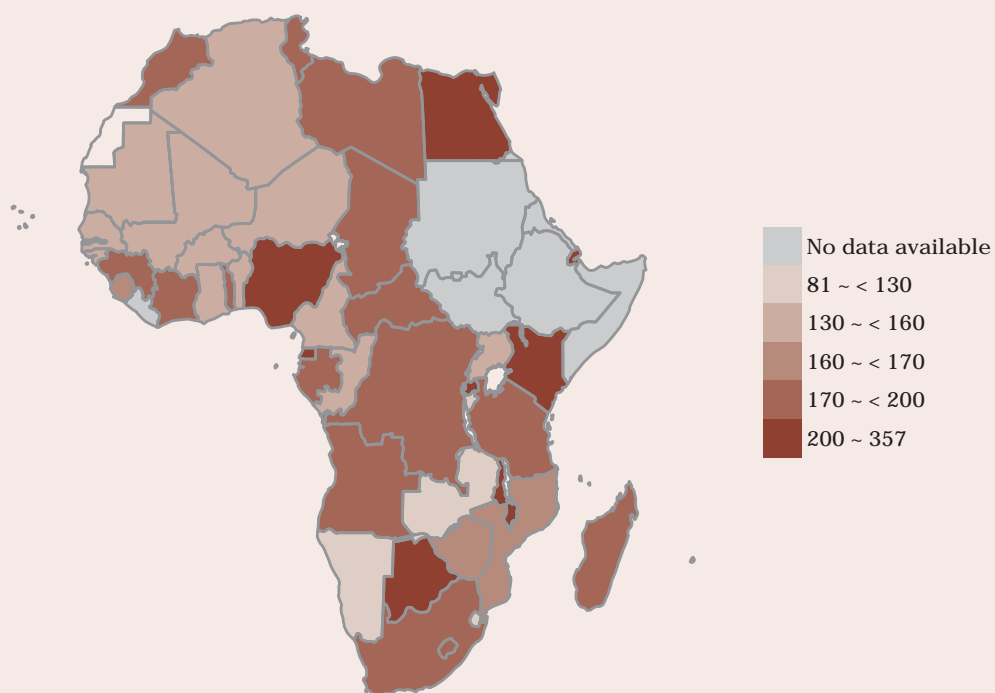
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 82: Sugar and honey net trade (2011)



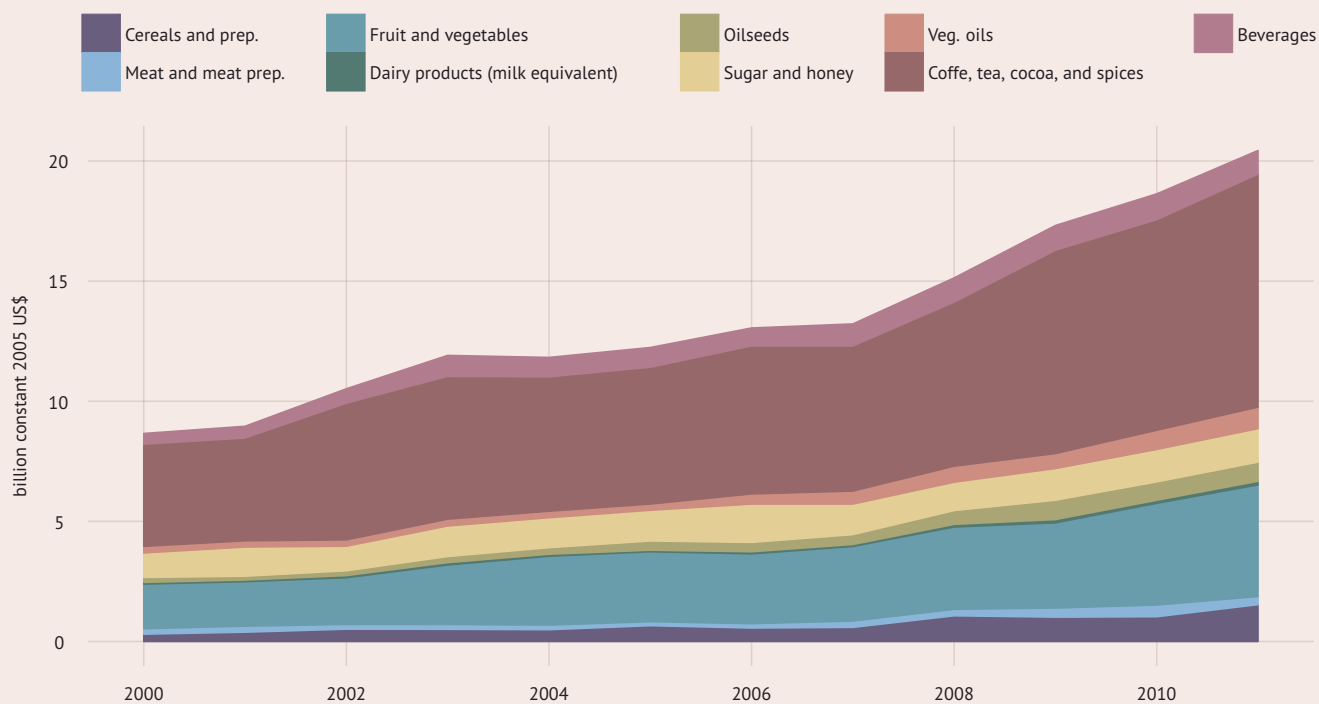
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

MAP 51: Import value index (index, 2010)



Source: FAO, Statistics Division (FAOSTAT).

CHART 83: Africa composition of global exports (2000-2011)

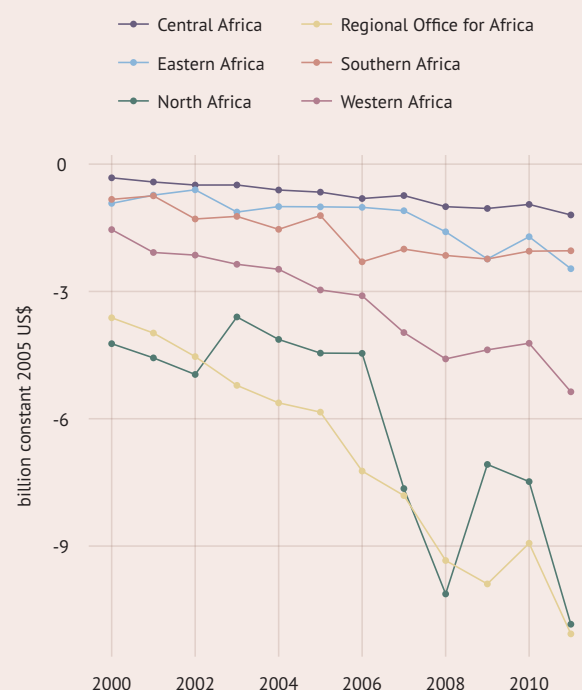


Source: FAO, Statistics Division (FAOSTAT) and World Bank.

The commercial balance or net exports of cereal in the economy can be defined as the difference between the monetary value of exports and imports of output in an economy over a certain period, measured in the currency of that economy. Africa recorded a growth in imports of 7 percent from 2010 to 2011. At the same time exports increased by 26 percent. Even with this large jump in exports, Africa recorded a negative balance, which is referred to as a trade deficit, in cereals. Therefore, despite its increase, the export quantity was far lower than imports and therefore the gap in cereal imports remains too high.

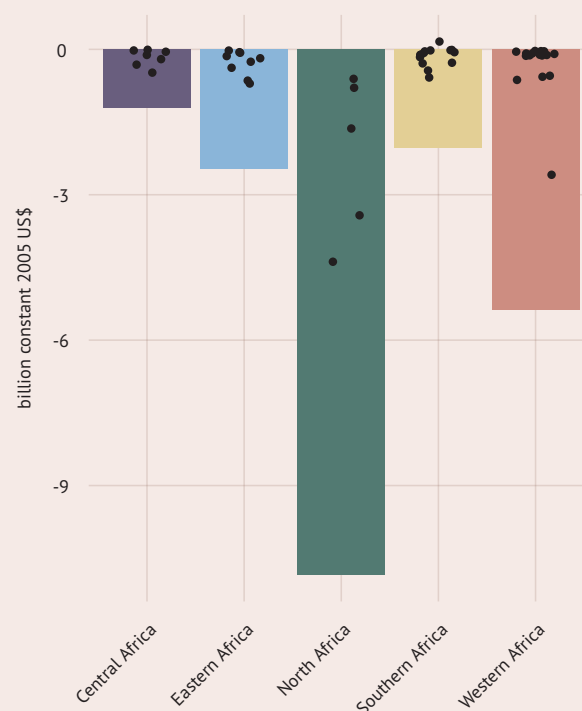
The same situation was observed in RAF and all of the sub-regions of Africa. They all recorded a negative balance (a trade deficit or a trade gap), which means that they imported more cereal than they exported (chart 84). For instance in 2011, the net trade for cereal was less than -10 billion in constant 2005 US\$ in North Africa. In West Africa, it was almost - 6 billion (Chart 85).

CHART 84: Cereal net trade (2000-2011)



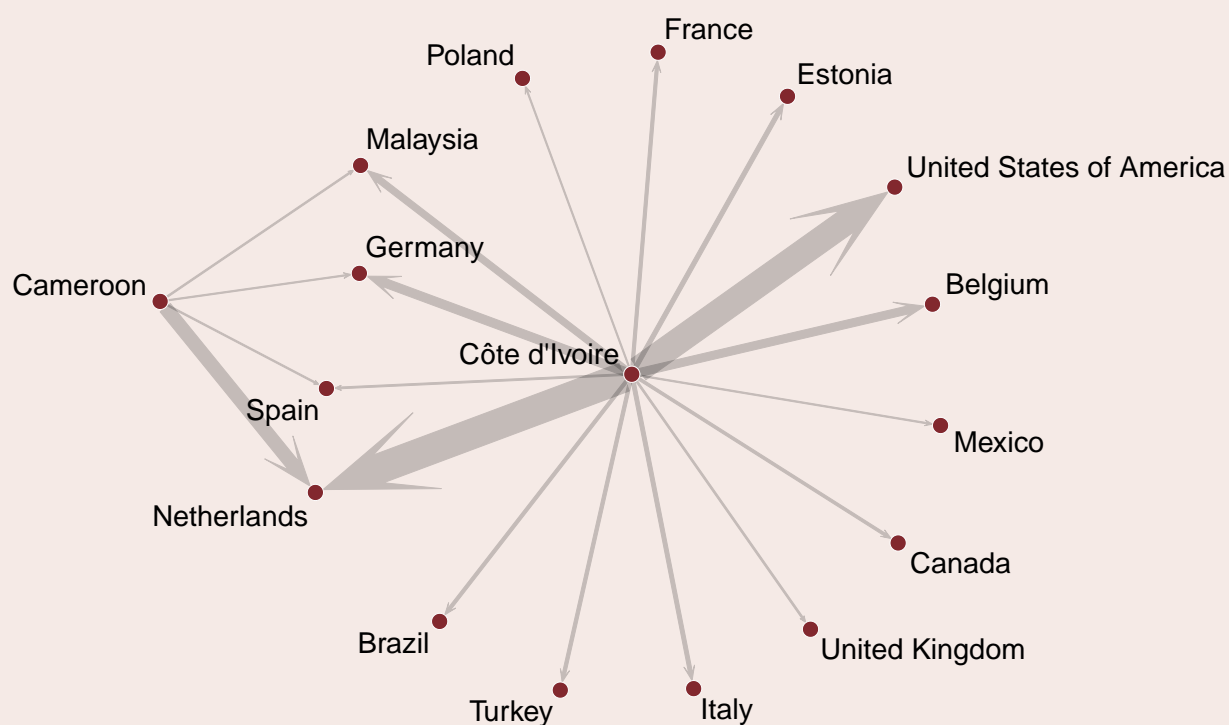
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 85: Cereal net trade (2011)



Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 86: Major export flows of cocoa beans from African countries (US\$, 2011)



Ten largest export flows of cocoa beans

Exporting country	Importing country	Million US\$
Côte d'Ivoire	Netherlands	756.23
Côte d'Ivoire	United States of America	511.65
Cameroon	Netherlands	428.4
Ghana	Netherlands	249.34
Côte d'Ivoire	Belgium	169.48
Côte d'Ivoire	Estonia	168.01
Côte d'Ivoire	Germany	161.46
Ghana	United Kingdom	146.74
Côte d'Ivoire	France	99.3
Ghana	Belgium	95.81

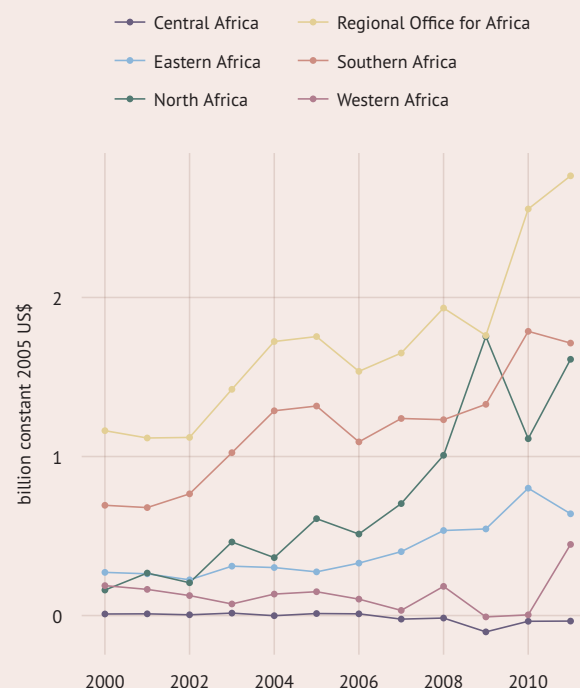
Source: FAO, Statistics Division (FAOSTAT).

The flows cover ninety-five percent of the exports of cocoa beans from African countries.

The commercial balance or net exports of fruits and vegetables in the economy can be defined as the difference between the monetary value of exports and imports of output in an economy over a certain period, measured in the currency of that economy.

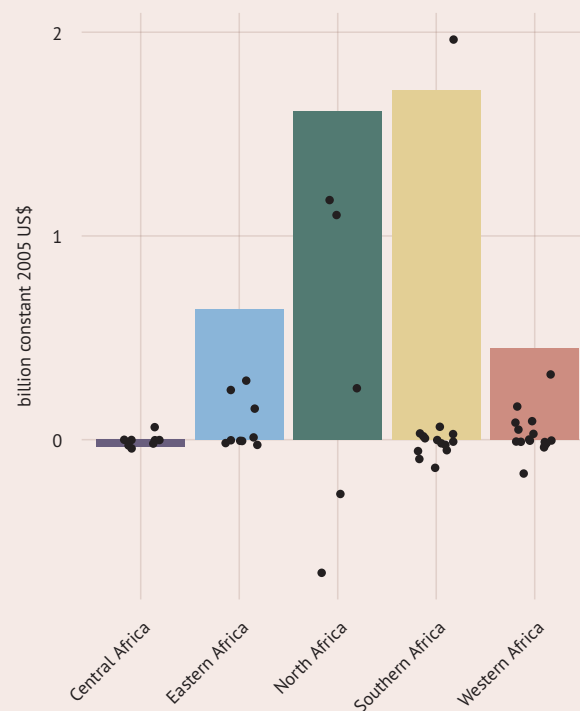
From 2000 to 2011, net trade in fruits and vegetables was positive for the RAF region and all of the sub-regions. In 2011, Southern Africa recorded the biggest trade surplus, followed by North Africa that had a level of trade surplus of more than 1.5 billion constant 2005 US\$. East Africa was next, with a trade surplus of roughly 0.5 billion constant 2005 US\$. For Central Africa, the trade surplus remained constant, at around zero from, 2000 to 2011 (chart 87 and 88).

CHART 87: **Fruit and vegetables net trade (2000-2011)**



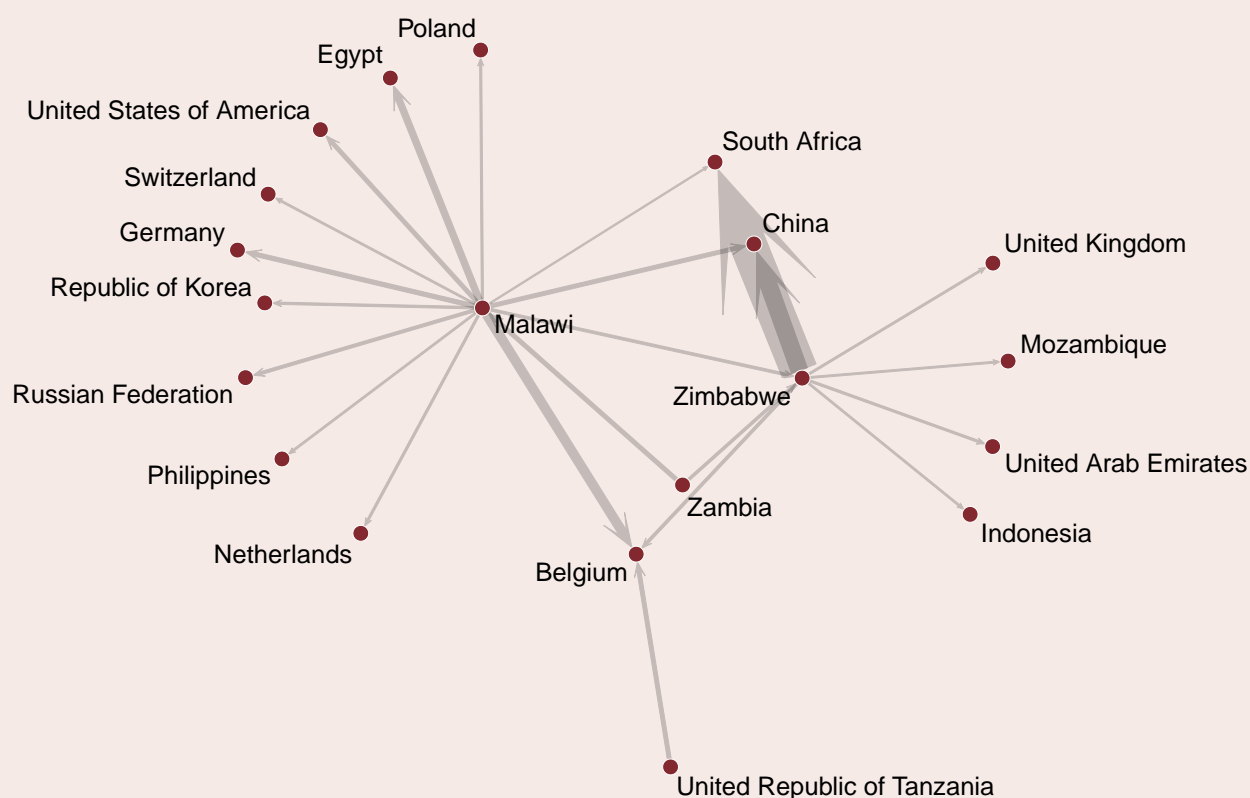
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 88: **Fruit and vegetables net trade (2011)**



Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 89: Major export flows of unmanufactured tobacco from African countries (US\$, 2011)



Ten largest export flows of unmanufactured tobacco

Exporting country	Importing country	Million US\$
Malawi	Belgium	187.71
Zimbabwe	China	177.22
Malawi	Egypt	146.06
Malawi	Germany	86.88
United Republic of Tanzania	Belgium	67.86
Zimbabwe	United Kingdom	65.02
Malawi	Netherlands	63.07
Malawi	United States of America	61.08
Zambia	Malawi	60.63
Malawi	China	47.11

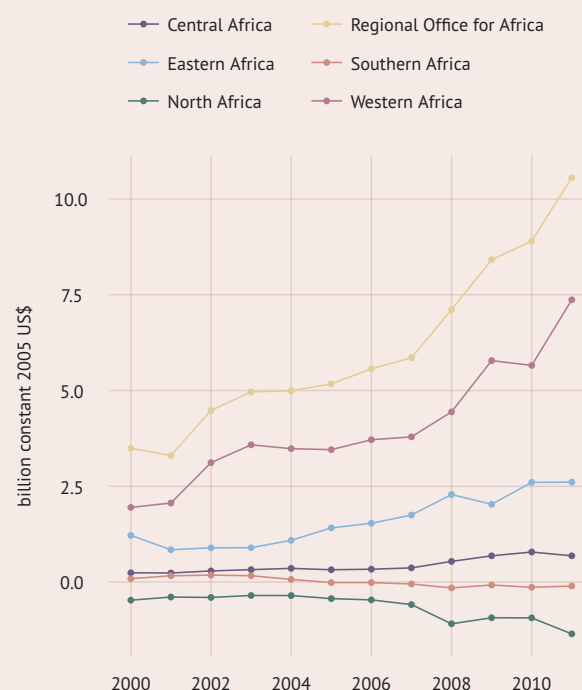
Source: FAO, Statistics Division (FAOSTAT).

The flows cover seventy-five percent of the exports of unmanufactured tobacco from African countries.

A positive balance is known as a trade surplus if exports are greater than imports. A negative balance is referred to as a trade deficit. From 2000 to 2011, the net trade in coffee, tea, cocoa, and spices was positive for RAF. This trade surplus grew from roughly 3.5 billion constant 2005 US\$ in 2000 to more than 10 billion constant 2005 US\$ in 2011.

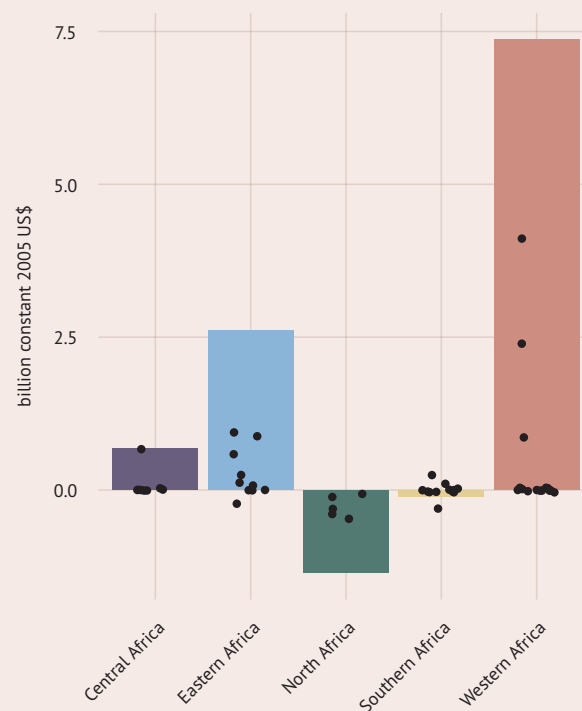
Over the period of 2000 to 2011, West Africa recorded a large trade surplus of coffee, tea, cocoa and spices, which rose from just below 2.5 to 7.5 billion constant 2005 US\$. East Africa had the next largest, with a net trade that grew from 1.3 to 2.5 billion constant 2005 US\$. Central Africa, with the third largest increase in trade surplus, was very low. In contrast, Southern Africa and North Africa recorded a trade deficit from 2000 to 2011, (chart 90).

CHART 90: Net trade of coffe, tea, cocoa, and spices (2000-2011)



Source: FAO, Statistics Division (FAOSTAT).

CHART 91: Net trade of coffe, tea, cocoa, and spices (2011)

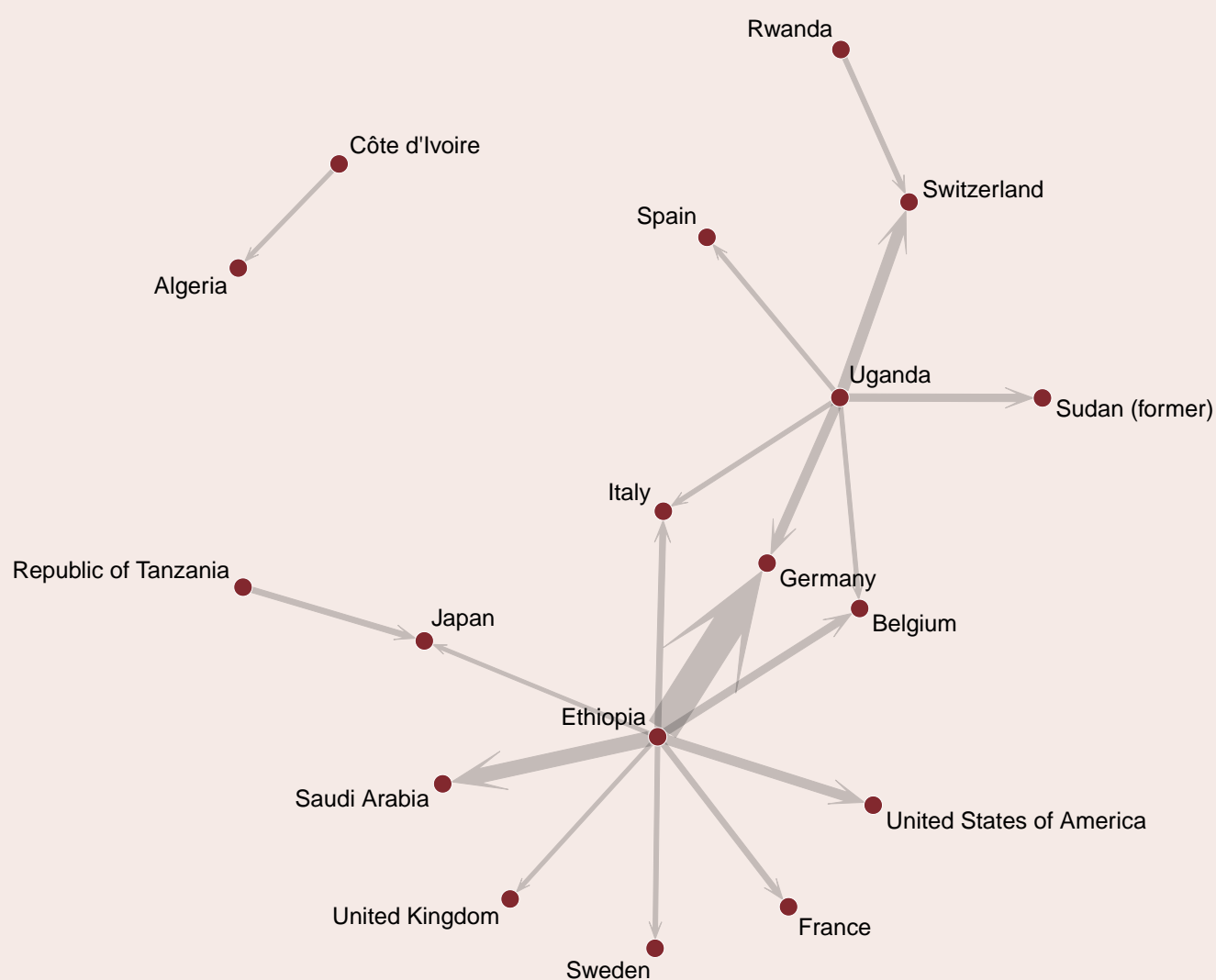


Source: FAO, Statistics Division (FAOSTAT).

## Further reading

- FAO Trade and Markets Division ([www.fao.org/economic/est/](http://www.fao.org/economic/est/))

CHART 92: Major export flows of coffee (green) from African countries (US\$, 2011)



Ten largest export flows of coffee (green)

Exporting country	Importing country	Million US\$
Ethiopia	Germany	226.71
Ethiopia	Saudi Arabia	102.35
Côte d'Ivoire	Algeria	82.47
Ethiopia	United States of America	69.44
Uganda	Germany	59.22
Côte d'Ivoire	Spain	49.03
Uganda	Sudan (former)	47.8
Ethiopia	Belgium	46.49
Uganda	Switzerland	42.72
Kenya	Germany	35.19

Source: FAO, Statistics Division (FAOSTAT).

The flows cover seventy percent of the exports of coffee (green) from African countries.

TABLE 20: Cereal producers and their productivity

	Cereals							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	111 054.0	2.7	14.8	1.5	162 890.3	163 891.5		4.5
<b>North Africa</b>	12 738.1	2.1	29.1	3.1	32 614.6	37 049.5	2.4	5.7
Algeria	2 584.7	8.5	14.4	4.6	4 002.3	3 728.3	-5.4	13.4
Egypt	3 037.8	0.9	72.5	-0.0	19 450.5	22 014.9	4.4	0.8
Libya	365.0	0.5	7.5	1.4	217.9	275.1	-2.0	2.0
Morocco	5 382.2	-0.1	16.1	14.4	7 834.4	8 689.2	-10.8	14.3
Sudan								
Tunisia	1 368.3	1.7	17.1	5.2	1 109.5	2 342.0	-3.9	7.0
<b>Regional Office for Africa</b>	98 310.9	2.8	12.9	1.5	130 260.3	126 825.1	2.3	4.2
<b>Central Africa</b>	6 292.6	3.3	10.5	1.7	7 009.7	6 629.9	3.0	5.2
Cameroon	1 777.6	8.5	16.8	-0.4	3 011.8	2 988.1	4.6	8.1
Central African Republic	170.2	-0.0	15.2	4.2	249.0	259.0	6.4	4.1
Chad	2 010.9	1.2	7.7	3.5	2 149.5	1 553.3	4.5	4.8
Congo	33.2	8.9	8.1	0.5	24.9	27.1	5.2	9.5
Democratic Republic of the Congo	2 272.8	1.2	7.7	-0.2	1 527.8	1 753.4	0.5	1.0
Equatorial Guinea								
Gabon	26.6	4.4	17.0	0.4	43.0	45.2	1.3	4.8
Sao Tome and Principe	1.3	2.4	30.0	2.7	3.6	3.9	-1.9	5.2
<b>East Africa</b>	31 366.3	4.0	12.9	2.6	36 910.1	40 527.8	1.6	6.5
Burundi	246.7	2.1	13.3	0.6	313.2	328.5	-1.8	2.7
Djibouti	0.0	1.4	20.0	0.8	0.0	0.0	1.0	2.2
Eritrea	446.6	2.8	5.8	4.0	243.6	258.1		6.8
Ethiopia	9 690.7	2.8	18.3	4.6	15 534.2	17 761.2		7.5
Kenya	2 679.6	3.3	15.1	0.9	4 347.4	4 058.6	-0.7	4.2
Rwanda	407.0	3.4	21.1	8.6	745.6	857.3	-1.0	12.3
Somalia	570.8	0.6	4.9	-3.6	256.6	279.0	-3.8	-3.1
South Sudan								
Sudan (former)	9 929.2	4.0	5.6	1.0	3 562.3	5 598.0	6.5	5.0
Uganda	1 702.0	2.0	20.8	2.8	3 270.4	3 536.0	2.9	4.8
United Republic of Tanzania	5 693.7	7.7	13.8	-0.4	8 636.7	7 851.1	-0.9	7.3
<b>Southern Africa</b>	15 516.3	1.6	20.3	0.7	31 874.0	31 436.8	2.6	2.7
Angola	1 945.7	7.4	6.9	1.8	1 135.2	1 350.7	7.4	9.3
Botswana	173.0	-0.8	3.9	10.4	50.3	67.2	-7.6	9.5
Comoros	23.6	2.6	14.1	1.5	30.5	33.3	1.4	4.1
Lesotho	156.6	-2.6	6.6	-0.7	173.2	104.0	-4.7	-3.3
Madagascar	1 772.8	2.1	26.7	3.2	5 162.9	4 740.1	0.3	5.4
Malawi	1 874.1	1.6	20.9	2.0	3 610.3	3 925.0	6.4	3.7
Mauritius	0.2	8.0	39.0	-7.2	0.3	0.6	-12.2	0.2
Mozambique	2 816.1	4.0	10.4	1.7	2 285.7	2 931.9	8.0	5.7
Namibia	301.0	-0.7	5.0	2.6	122.5	149.1	2.1	1.9
Seychelles								
South Africa	3 210.4	-4.4	40.2	3.5	14 699.3	12 918.6	2.3	-1.1
Swaziland	69.2	-0.1	12.4	-2.4	68.9	86.0	0.3	-2.5
Zambia	1 231.1	5.0	27.3	4.5	3 097.6	3 362.7	-0.0	9.8
Zimbabwe	1 942.5	0.7	9.1	-3.9	1 437.2	1 767.6	-0.2	-3.2
<b>West Africa</b>	45 135.6	2.3	10.7	1.3	54 466.6	48 230.5	2.5	3.2
Benin	1 044.6	1.4	14.8	2.7	1 333.4	1 544.2	6.2	4.1
Burkina Faso	3 684.4	3.0	10.0	1.3	4 560.5	3 666.4	4.2	4.4
Cabo Verde	31.3	0.2	1.8	-12.7	7.0	5.6	7.9	-12.5
Côte d'Ivoire	854.1	1.0	16.8	0.0	1 478.2	1 436.8	0.4	1.0
Gambia	210.9	4.1	8.7	-3.6	363.5	183.2	6.9	0.4
Ghana	1 642.9	2.1	15.9	1.8	2 906.7	2 619.0	7.3	3.9
Guinea	1 988.6	4.6	14.8	-0.1	2 743.0	2 947.0	5.4	4.6
Guinea-Bissau	159.6	-0.1	14.9	2.8	256.6	237.7	0.6	2.7
Liberia	250.0	5.2	12.0	-0.6	296.1	300.0	0.2	4.6
Mali	5 799.8	8.8	10.0	-0.1	6 415.7	5 777.9	2.7	8.7
Mauritania	144.9	-3.2	13.9	4.4	275.7	202.1	5.7	1.1
Niger	9 976.8	2.8	3.8	2.5	5 203.2	3 782.1	-0.0	5.4
Nigeria	16 627.2	-0.8	13.3	1.2	24 656.3	22 165.8	1.9	0.3
Senegal	1 139.4	-0.2	9.7	0.9	1 769.2	1 101.0	0.5	0.6
Sierra Leone	718.1	12.0	16.8	4.1	1 155.5	1 204.0	-8.9	16.6
Togo	863.1	1.9	12.3	1.3	1 045.9	1 057.9	4.3	3.3
<b>CEMAC</b>	4 018.5	4.5	12.1	1.5	5 478.3	4 872.6	4.6	6.8
<b>CEN-SAD</b>	66 275.4	2.2	13.0	1.9	86 544.7	86 377.9	2.7	3.9
<b>COMESA</b>	37 690.9	2.7	18.7	0.9	62 620.7	70 356.5	3.3	4.2
<b>ECCAS</b>	8 485.0	4.2	9.8	1.6	8 458.0	8 309.1	3.2	5.8
<b>ECOWAS</b>	44 990.7	2.3	10.7	1.0	54 190.9	48 028.5	2.4	3.2
<b>IGAD</b>	25 018.9	3.2	12.6	2.0	27 214.6	31 490.9		6.2
<b>SADC</b>	23 459.3	3.1	17.5	0.5	42 008.0	41 008.0	2.1	3.5
<b>UEMOA</b>	23 521.7	4.0	7.9	1.4	22 062.8	18 603.9	2.4	5.3
<b>UMA</b>	9 845.2	2.4	15.5	6.7	13 439.7	15 236.7	-6.9	12.6
<b>Regional Office for Asia and the Pacific</b>	375 106.3	0.5	36.4	2.1	1 268 915.1	1 365 849.7	1.5	2.5
<b>Regional Office for Europe and Central Asia</b>	151 096.4	0.0	36.0	2.9	466 580.0	543 366.9		2.4
<b>Regional Office for Latin America and the Caribbean</b>	50 741.7	0.7	38.0	2.5	193 900.4	193 029.1	3.7	3.5
<b>Regional Office for the Near East</b>	38 551.9	2.3	19.4	10.3	70 082.6	74 896.0	1.1	5.4
<b>World</b>	707 328.2	0.6	36.6	5.0	2 474 121.9	2 589 143.3		2.4

TABLE 21: Coarse grain producers and their productivity

	Coarse grains							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	90 371.3	2.6	12.5	1.6	115 310.9	112 817.9		3.9
<b>North Africa</b>	5 174.6	1.9	24.4	1.4	12 647.6	12 605.0	1.1	3.6
Algeria	912.1	4.9	12.9	1.6	1 396.9	1 173.1	-14.9	6.6
Egypt	1 159.7	0.8	68.4	0.3	7 943.6	7 932.8	3.0	1.1
Libya	215.0	1.4	5.1	0.2	111.9	109.1	-3.9	1.6
Morocco	2 291.7	-0.6	11.6	8.5	2 907.7	2 653.6	-14.0	7.8
Sudan								
Tunisia	596.1	8.9	12.4	1.4	287.5	736.5	-6.7	10.4
<b>Regional Office for Africa</b>	85 191.7	2.6	11.8	1.8	102 648.1	100 196.3	2.5	3.9
<b>Central Africa</b>	5 469.5	2.6	10.8	2.0	6 308.0	5 881.8	3.5	4.7
Cameroon	1 621.8	7.7	17.3	0.4	2 857.9	2 813.0	4.8	8.1
Central African Republic	145.2	-1.2	15.1	4.6	210.0	219.0	5.8	3.4
Chad	1 880.0	-0.6	7.3	1.9	1 970.0	1 379.0	4.6	1.3
Congo	30.1	3.4	8.4	0.7	23.3	25.4	6.5	4.1
Democratic Republic of the Congo	1 765.0	1.5	7.9	-0.0	1 201.7	1 398.0	1.2	1.4
Equatorial Guinea								
Gabon	26.0	4.7	16.7	0.9	41.5	43.5	1.3	5.6
Sao Tome and Principe	1.3	1.2	30.0	3.3	3.6	3.9	-1.9	4.5
<b>East Africa</b>	27 973.6	3.0	12.1	1.6	29 466.0	33 943.9	2.3	4.4
Burundi	207.0	1.4	11.0	-0.3	221.1	227.3	-2.6	1.1
Djibouti	0.0	0.0	20.0	1.6	0.0	0.0	1.0	1.6
Eritrea	420.9	3.0	5.4	-0.7	210.9	229.3		2.3
Ethiopia	8 107.6	1.8	18.3	4.5	12 355.5	14 815.1		6.4
Kenya	2 520.0	2.8	14.6	-0.9	3 749.9	3 678.9	-0.7	1.8
Rwanda	348.1	1.6	19.7	8.4	601.1	686.1	-1.0	10.1
Somalia	565.0	0.7	4.5	-5.6	235.0	256.0	-3.7	-4.9
South Sudan								
Sudan (former)	9 739.8	1.5	5.4	-1.0	3 136.0	5 281.0	8.7	0.5
Uganda	1 599.0	1.9	20.5	2.2	3 032.3	3 280.0	2.7	4.2
United Republic of Tanzania	4 466.1	9.8	12.3	-4.9	5 924.2	5 490.1	-1.0	4.4
<b>Southern Africa</b>	12 976.7	3.0	18.7	2.5	24 950.0	24 287.6	2.8	5.7
Angola	1 916.0	7.5	6.9	1.1	1 113.5	1 323.4	7.5	8.7
Botswana	173.0	15.4	3.9	-3.3	50.3	67.2	-7.6	11.5
Comoros	2.6	4.9	26.2	1.0	6.5	6.8	0.6	6.0
Lesotho	136.5	-5.1	6.1	-3.5	153.1	83.9	-4.3	-8.5
Madagascar	304.2	4.5	14.1	4.3	413.1	429.9	0.9	9.1
Malawi	1 811.3	1.7	21.0	6.2	3 497.8	3 805.4	6.5	8.0
Mauritius	0.0	-2.3	74.4	0.3	0.3	0.3	-12.1	-1.9
Mozambique	2 565.4	5.3	10.3	1.7	2 010.3	2 640.2	8.3	7.0
Namibia	298.8	0.8	4.5	2.1	110.0	135.1	2.3	3.0
Seychelles								
South Africa	2 604.7	-2.7	41.9	5.8	13 266.4	10 911.0	2.1	2.9
Swaziland	68.8	1.6	12.4	-1.3	68.4	85.3	0.7	0.3
Zambia	1 166.0	5.9	26.4	7.3	2 873.7	3 076.0	-0.2	13.6
Zimbabwe	1 929.2	2.2	8.9	-1.7	1 386.5	1 723.0	0.2	0.4
<b>West Africa</b>	38 772.0	2.2	9.3	0.2	41 924.3	36 083.0	2.3	2.1
Benin	961.6	1.2	13.8	2.9	1 208.5	1 324.2	5.8	4.1
Burkina Faso	3 548.2	1.2	9.7	0.2	4 289.9	3 425.5	4.0	1.3
Cabo Verde	31.3	0.2	1.8	-12.0	7.0	5.6	7.9	-11.8
Côte d'Ivoire	474.4	1.2	15.5	-0.4	755.6	734.4	1.8	0.9
Gambia	168.9	1.7	7.8	-4.0	263.6	132.1	7.5	-2.4
Ghana	1 445.4	1.6	14.9	3.1	2 415.1	2 155.0	6.7	4.8
Guinea	1 153.6	7.5	11.1	-1.0	1 244.0	1 277.0	7.5	6.4
Guinea-Bissau	53.3	-5.3	8.1	-0.3	47.4	43.0	5.0	-5.6
Liberia								
Mali	4 959.5	8.7	8.1	0.6	4 086.3	4 002.6	0.5	9.4
Mauritania	112.0	-4.7	3.4	-0.5	138.8	38.1	7.3	-5.2
Niger	9 952.4	2.4	3.8	-0.4	5 164.6	3 745.3	0.0	2.0
Nigeria	13 948.6	-0.1	12.5	0.2	20 073.8	17 433.4	1.8	0.1
Senegal	1 030.2	-0.4	6.7	-1.2	1 165.2	695.2	0.4	-1.6
Sierra Leone	114.2	12.5	11.0	1.2	128.8	126.0	-8.9	13.8
Togo	818.4	1.9	11.6	0.4	935.8	945.7	4.0	2.3
<b>CEMAC</b>	3 703.1	3.1	12.1	1.7	5 102.6	4 479.9	4.7	5.7
<b>CEN-SAD</b>	54 491.1	1.8	9.8	1.0	57 553.4	53 565.5	2.5	2.1
<b>COMESA</b>	31 364.5	1.9	14.9	1.9	40 810.3	46 764.3	3.1	4.6
<b>ECCAS</b>	7 592.5	3.8	9.8	1.8	7 642.6	7 432.6	3.7	5.3
<b>ECOWAS</b>	38 660.0	2.2	9.3	0.2	41 785.5	36 044.9	2.3	2.2
<b>IGAD</b>	22 952.4	1.8	12.0	1.2	22 719.5	27 540.3		4.2
<b>SADC</b>	19 205.2	4.4	16.2	2.2	32 069.4	31 168.9	2.3	5.3
<b>UEMOA</b>	21 797.9	3.4	6.8	0.4	17 653.1	14 915.8	2.2	3.8
<b>UMA</b>	4 127.0	2.0	11.4	3.0	4 842.8	4 710.4	-10.0	7.7
<b>Regional Office for Asia and the Pacific</b>	103 968.3	0.5	33.6	2.9	315 063.1	349 338.4	0.6	4.0
<b>Regional Office for Europe and Central Asia</b>	65 345.5	-1.3	39.2	3.6	215 550.4	255 874.5		1.0
<b>Regional Office for Latin America and the Caribbean</b>	35 959.6	0.9	37.7	2.9	137 614.2	135 733.0	4.4	3.1
<b>Regional Office for the Near East</b>	19 837.5	1.1	12.9	5.7	25 377.4	25 687.2	1.1	2.2
<b>World</b>	323 285.8	0.9	36.0	3.3	1 121 167.5	1 165 188.4		2.8

TABLE 22: Rice producers and their productivity

	Rice							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>	595.9	-1.0	95.5	1.8	4 380.2	5 693.1	6.7	-0.5
Algeria	0.2	-0.9	15.3	-0.5	0.2	0.3	-14.6	-1.3
Egypt	593.2	-1.0	95.7	0.5	4 329.5	5 675.0	6.6	-0.5
Libya								
Morocco	2.5	-6.9	70.2	4.1	50.5	17.8	22.4	-3.1
Sudan								
Tunisia								
<b>Regional Office for Africa</b>	10 222.6	4.5	19.9	2.3	21 533.4	20 368.4	2.6	6.1
<b>Central Africa</b>	813.8	5.2	9.0	0.1	682.5	735.0	0.3	4.1
Cameroon	155.1	20.3	11.2	-8.6	153.1	174.1	1.0	10.0
Central African Republic	25.0	4.4	16.0	0.6	39.0	40.0	11.4	5.1
Chad	130.0	3.4	13.3	2.3	170.0	172.6	3.4	5.8
Congo	3.1	4.9	5.4	-2.3	1.6	1.7	-0.6	2.5
Democratic Republic of the Congo	500.0	1.0	6.9	-0.8	317.2	345.0	-1.5	0.2
Equatorial Guinea								
Gabon	0.6	1.8	27.6	3.0	1.5	1.7	2.3	4.9
Sao Tome and Principe								
<b>East Africa</b>	1 319.9	8.8	22.0	6.0	3 251.0	2 901.8	1.6	10.2
Burundi	28.2	4.7	32.4	0.6	83.0	91.4	2.6	5.3
Djibouti								
Eritrea								
Ethiopia	29.9	12.5	30.3	4.7	103.1	90.4		17.7
Kenya	28.0	6.6	39.7	0.5	85.5	111.2	2.5	7.1
Rwanda	14.6	11.8	55.2	6.6	67.3	80.5	2.3	19.2
Somalia	3.1	10.9	70.2	12.1	20.4	21.9	-18.2	24.3
South Sudan								
Sudan (former)	6.7	1.9	37.2	8.8	23.4	25.0	23.1	10.9
Uganda	90.0	2.0	25.9	5.0	218.1	233.0	7.3	7.2
United Republic of Tanzania	1 119.3	9.4	20.1	0.6	2 650.1	2 248.3	0.5	10.1
<b>Southern Africa</b>	1 840.3	2.2	26.0	0.7	5 202.5	4 792.0	0.8	5.1
Angola	26.0	17.8	8.9	-3.7	17.7	23.2	6.8	13.5
Botswana								
Comoros	21.0	2.3	12.6	1.4	24.0	26.5	1.6	3.8
Lesotho								
Madagascar	1 464.0	1.8	29.4	3.3	4 738.0	4 300.2	0.2	5.1
Malawi	61.6	3.2	19.1	1.4	110.1	117.7	5.2	4.6
Mauritius	0.1		26.3		0.0	0.3		
Mozambique	238.8	2.4	11.4	1.3	257.5	271.4	6.5	3.8
Namibia								
Seychelles								
South Africa	1.0	-0.1	25.0	-1.5	2.9	2.5	2.9	-1.5
Swaziland	0.0	-4.0	28.8	-1.5	0.1	0.1	-25.7	-5.4
Zambia	27.5	7.6	18.0	4.3	51.7	49.4	4.2	12.2
Zimbabwe	0.3	1.8	20.9	0.4	0.6	0.6	0.7	2.2
<b>West Africa</b>	6 248.6	4.1	19.1	1.1	12 397.4	11 939.5	3.5	5.6
Benin	83.0	12.2	26.5	2.1	125.0	220.0	16.2	14.6
Burkina Faso	136.3	11.7	17.7	-3.3	270.7	240.9	8.0	8.0
Cabo Verde								
Côte d'Ivoire	379.7	1.0	18.5	0.1	722.6	702.4	-1.0	1.1
Gambia	42.0	9.6	12.2	-5.3	99.9	51.1	4.8	3.8
Ghana	197.5	5.0	23.5	0.8	491.6	464.0	11.9	5.8
Guinea	835.0	2.1	20.0	1.4	1 499.0	1 670.0	4.4	3.5
Guinea-Bissau	106.3	3.3	18.3	2.3	209.2	194.7	-1.5	5.7
Liberia	250.0	5.2	12.0	-0.6	296.1	300.0	0.2	4.6
Mali	830.4	8.1	21.0	-0.0	2 305.6	1 741.5	10.2	8.1
Mauritania	31.1	5.1	51.9	1.9	134.4	161.1	3.9	7.0
Niger	20.0	-0.9	15.2	-5.2	30.0	30.5	-1.8	-6.0
Nigeria	2 579.5	1.5	17.7	1.5	4 472.5	4 567.3	2.8	3.0
Senegal	109.2	2.2	37.2	4.3	604.0	405.8	1.1	6.5
Sierra Leone	603.9	11.5	17.9	4.6	1 026.7	1 078.0	-8.9	16.6
Togo	44.7	3.0	25.1	2.5	110.1	112.2	9.5	5.5
<b>CEMAC</b>	313.8	11.9	12.4	0.2	365.2	390.0	3.6	7.6
<b>CEN-SAD</b>	6 164.1	3.9	26.1	3.1	15 420.8	16 087.3	5.0	3.7
<b>COMESA</b>	2 865.1	1.4	38.9	2.7	10 151.6	11 146.5		2.4
<b>ECCAS</b>	868.0	5.6	9.8	-0.0	783.2	849.7	0.6	4.5
<b>ECOWAS</b>	6 217.5	4.1	18.9	0.9	12 262.9	11 778.4	3.5	5.6
<b>IGAD</b>								
<b>SADC</b>	3 438.7	4.4	21.4	0.6	8 145.9	7 358.8	0.6	6.4
<b>UEMOA</b>	1 709.6	6.1	21.3	1.0	4 377.2	3 648.0	4.7	6.6
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>	144 342.4	0.5	45.2	2.1	632 301.3	652 582.7		1.8
<b>Regional Office for Europe and Central Asia</b>								
<b>Regional Office for Latin America and the Caribbean</b>	5 909.4	-0.3	49.3	2.4	25 828.5	29 156.0	4.6	2.4
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 23: Wheat producers and their productivity

	Wheat							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>								
Algeria	1 672.4	6.6	15.3	4.7	2 605.2	2 554.9	0.1	11.6
Egypt	1 284.9	2.0	65.4	0.3	7 177.4	8 407.1	4.4	2.3
Libya	150.0	-0.4	11.1	3.1	106.0	166.0	-0.3	2.6
Morocco	3 088.0	0.6	19.5	13.7	4 876.1	6 017.8	-9.2	14.3
Sudan								
Tunisia	772.2	0.7	20.8	5.3	822.0	1 605.5	-2.8	6.0
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon	0.7	10.5	14.0	-2.1	0.9	1.0	0.5	8.2
Central African Republic								
Chad	0.9	-6.7	19.8	3.0	9.5	1.7	2.5	-4.0
Congo								
Democratic Republic of the Congo	7.8	0.6	13.3	0.3	8.8	10.4	3.4	0.9
Equatorial Guinea								
Gabon								
Sao Tome and Principe								
<b>East Africa</b>								
Burundi	11.5	2.3	8.5	2.1	9.0	9.8	-3.4	4.4
Djibouti								
Eritrea	25.7	0.9	11.2	6.0	32.7	28.8		6.9
Ethiopia	1 553.2	3.5	18.4	4.3	3 075.6	2 855.7		7.9
Kenya	131.5	-0.0	20.4	2.5	512.0	268.5	-2.0	2.5
Rwanda	44.3	14.4	20.5	11.1	77.2	90.7	-5.2	27.2
Somalia	2.7	0.2	3.9	0.6	1.2	1.0	0.4	0.8
South Sudan								
Sudan (former)	182.7	6.4	16.0	-3.4	403.0	292.0	-6.3	2.9
Uganda	13.0	5.8	17.7	0.3	20.0	23.0	11.6	6.1
United Republic of Tanzania	108.3	3.8	10.4	7.8	62.4	112.7	-11.1	11.9
<b>Southern Africa</b>								
Angola	3.6	4.1	11.0	-3.9	4.0	4.0	4.8	0.0
Botswana	0.0				0.0	0.0	-4.4	
Comoros								
Lesotho	20.1	-1.5	10.0	3.9	20.1	20.1	-7.3	2.3
Madagascar	4.6	1.1	22.0	-0.1	11.9	10.0	6.1	1.0
Malawi	1.2	-5.5	15.2	6.1	2.3	1.8	1.0	0.2
Mauritius								
Mozambique	11.9	20.8	17.0	5.0	17.9	20.4	-14.1	26.8
Namibia	2.2	6.8	63.6	6.4	12.5	14.0	-2.5	13.6
Seychelles								
South Africa	604.7	-3.9	33.2	2.2	1 430.0	2 005.0	3.6	-1.7
Swaziland	0.3	4.6	19.1	2.2	0.4	0.6	-14.5	6.9
Zambia	37.6	10.9	63.1	0.1	172.3	237.3	3.1	11.0
Zimbabwe	13.0	-10.2	33.8	-4.2	50.1	44.0	-3.4	-14.0
<b>West Africa</b>								
Benin								
Burkina Faso								
Cabo Verde								
Côte d'Ivoire								
Gambia								
Ghana								
Guinea								
Guinea-Bissau								
Liberia								
Mali	9.8	12.7	34.4	3.5	23.8	33.8	11.6	16.7
Mauritania	1.8	16.9	16.0	1.0	2.4	2.9	-1.8	18.0
Niger	4.4	-2.6	14.3	-2.3	8.7	6.3	-1.7	-4.9
Nigeria	99.0	6.0	16.7	1.6	110.0	165.0	3.9	7.7
Senegal								
Sierra Leone								
Togo								
<b>CEMAC</b>								
<b>CEN-SAD</b>								
COMESA	3 461.3	2.9	36.0	1.3	11 658.8	12 445.7		3.9
<b>ECCAS</b>								
<b>ECOWAS</b>								
IGAD	1 908.8	3.5	18.2	1.7	4 044.6	3 469.0		7.1
SADC	815.4	-1.7	30.4	2.1	1 792.7	2 480.2	2.7	0.3
<b>UEMOA</b>								
UMA	5 684.4	2.3	18.2	6.0	8 411.7	10 347.1	-4.8	12.2
<b>Regional Office for Asia and the Pacific</b>								
Regional Office for Europe and Central Asia	84 730.8	0.9	33.2	2.2	245 028.8	281 512.1		2.7
<b>Regional Office for Latin America and the Caribbean</b>								
Regional Office for the Near East	17 555.0	2.2	23.2	2.5	36 998.6	40 794.5	0.4	6.6
<b>World</b>								

TABLE 24: Oilcrop producers and their productivity

	Oilcrops							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11 percent	thousand hg/ha 2011	2000-11 percent	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	34 527.9	2.8	3.0	0.8	9 981.3	10 341.5	3.7	4.6
<b>North Africa</b>	3 703.4	2.9	2.4	1.9	920.8	892.8	0.5	5.9
Algeria	331.2	5.3	4.6	3.4	84.4	152.5	-1.0	8.9
Egypt	390.4	0.1	5.9	0.5	222.2	231.9	4.0	0.6
Libya	226.0	4.3	1.6	-5.6	46.2	35.7	8.2	-1.5
Morocco	958.9	4.3	3.6	6.5	371.8	344.4	-4.0	11.0
Sudan								
Tunisia	1 796.8	2.2	0.7	-2.1	196.2	128.4	-3.7	0.0
<b>Regional Office for Africa</b>	30 822.9	2.7	3.1	1.1	9 060.0	9 448.0	4.0	4.5
<b>Central Africa</b>	2 868.7	0.9	4.4	1.1	1 211.2	1 255.5	1.4	4.2
Cameroon	867.9	3.5	6.9	4.1	576.1	596.3	1.1	7.7
Central African Republic	222.0	0.0	3.5	1.7	69.6	77.3	1.6	1.7
Chad	787.8	-1.1	2.0	1.6	147.9	154.4	9.5	0.5
Congo	66.6	1.8	5.7	1.3	38.0	38.1	-0.3	3.2
Democratic Republic of the Congo	871.4	0.0	4.2	0.9	355.9	363.2	-1.8	0.9
Equatorial Guinea	7.4	0.9	9.6	-0.2	7.1	7.1	-1.7	0.7
Gabon	30.5	2.1	3.6	-3.6	9.1	10.9	3.0	-1.6
Sao Tome and Principe	15.2	1.3	5.4	2.2	7.5	8.2	2.4	3.5
<b>East Africa</b>	9 035.1	3.7	2.4	4.6	1 525.5	2 123.8	8.0	9.6
Burundi	34.7	6.2	4.6	4.0	17.0	15.8	-3.1	10.4
Djibouti								
Eritrea	63.2	3.7	0.7	-5.3	4.5	4.2		-1.9
Ethiopia	886.3	6.0	2.8	6.5	247.8	252.2		12.9
Kenya	246.5	1.3	1.7	-1.0	36.7	41.9	3.3	0.3
Rwanda	70.8	4.6	1.6	3.6	14.6	11.2	-2.2	8.4
Somalia	105.9	2.4	3.7	8.3	36.9	39.1	-5.5	10.9
South Sudan								
Sudan (former)	3 412.2	-0.8	1.8	3.4	379.0	601.7	12.6	2.6
Uganda	1 299.9	3.7	2.8	4.2	329.1	365.4	3.7	8.1
United Republic of Tanzania	2 915.6	8.6	2.7	6.0	460.0	792.2	2.4	15.1
<b>Southern Africa</b>	4 464.0	4.9	2.6	-0.2	921.1	1 177.9	1.1	5.1
Angola	384.8	12.4	3.0	-6.6	109.9	117.2	1.6	4.9
Botswana	15.7	8.0	2.4	-3.9	2.7	3.8	15.4	3.8
Comoros	34.7	0.9	3.3	0.5	11.1	11.4	1.5	1.3
Lesotho								
Madagascar	114.3	-0.5	2.4	-0.3	26.7	26.9	0.2	-0.8
Malawi	443.3	6.7	2.6	2.8	109.8	115.5	10.4	9.6
Mauritius	0.7	0.6	5.2	0.2	0.4	0.3	-9.1	0.8
Mozambique	1 122.6	4.6	1.4	-2.0	157.5	161.2	1.6	2.4
Namibia	0.9	-13.4	1.7	0.3	0.2	0.2	1.3	-13.1
Seychelles	0.6	-1.5	6.1	0.2	0.3	0.4	-7.1	-1.3
South Africa	1 178.5	5.7	4.5	-0.7	351.5	532.8	-1.0	5.0
Swaziland	10.4	-10.2	0.9	2.3	1.3	1.0	-8.2	-8.1
Zambia	446.1	5.8	2.9	6.5	88.0	130.0	4.0	12.7
Zimbabwe	711.5	-0.5	1.1	-3.8	61.6	77.2	1.9	-4.3
<b>West Africa</b>	14 455.1	1.8	3.4	-0.3	5 402.2	4 890.9	4.2	2.1
Benin	519.2	-0.1	2.3	-0.1	138.1	121.8	6.3	-0.2
Burkina Faso	965.1	6.1	1.8	0.7	213.8	177.5	0.2	6.8
Cabo Verde	1.8	0.5	4.1	-1.0	0.7	0.8	-2.4	-0.5
Côte d'Ivoire	637.6	0.6	7.7	1.8	467.3	493.9	0.5	2.4
Gambia	124.5	-0.6	2.4	-3.4	46.8	30.5	6.0	-3.9
Ghana	827.8	4.6	4.1	-1.5	353.9	340.9	3.5	3.0
Guinea	581.0	0.9	2.9	0.8	169.6	170.1	5.0	1.7
Guinea-Bissau	54.8	3.4	4.6	-1.6	26.6	25.3	1.6	1.7
Liberia	34.4	-0.3	14.5	0.3	50.0	50.0	5.9	0.0
Mali	938.8	5.6	2.2	-0.1	180.7	208.9	1.1	5.4
Mauritania	5.3	-4.6	1.9	-0.0	1.2	1.0	0.8	-4.6
Niger	892.0	6.1	1.9	7.1	169.1	167.5	21.3	13.7
Nigeria	7 588.0	0.7	3.7	0.7	3 036.5	2 776.0	4.9	1.3
Senegal	926.6	-1.8	1.9	-3.6	407.8	179.5	4.0	-5.4
Sierra Leone	157.9	11.6	5.9	-5.5	89.7	93.0	-3.1	5.5
Togo	200.4	-0.9	2.7	3.9	50.3	54.3	0.6	3.0
<b>CEMAC</b>	1 982.1	1.2	4.5	1.0	847.8	884.1	3.5	5.6
<b>CEN-SAD</b>	21 865.0	1.5	2.9	0.5	6 716.1	6 347.4	4.7	2.6
<b>COMESA</b>	9 262.9	1.6	2.5	1.5	1 952.1	2 285.9	5.3	4.8
<b>ECCAS</b>	3 288.3	2.3	4.2	0.9	1 338.1	1 388.5	1.4	4.3
<b>ECOWAS</b>	14 449.8	1.8	3.4	-0.3	5 401.0	4 889.9	4.2	2.1
<b>IGAD</b>	6 013.9	1.4	2.2	4.6	1 034.0	1 304.5		6.3
<b>SADC</b>	8 216.3	5.7	2.8	0.3	1 725.8	2 321.9	0.5	7.9
<b>UEMOA</b>	5 134.5	3.0	2.8	1.0	1 653.7	1 428.6	3.0	3.5
<b>UMA</b>	3 318.2	3.3	2.0	2.3	699.8	661.9	-1.8	7.7
<b>Regional Office for Asia and the Pacific</b>	114 835.8	1.8	8.1	2.3	85 313.4	93 018.4	4.9	5.5
<b>Regional Office for Europe and Central Asia</b>	41 076.2	4.2	6.5	2.5	22 841.5	26 526.4		6.8
<b>Regional Office for Latin America and the Caribbean</b>	55 340.8	5.3	5.7	2.7	29 614.2	31 404.5	4.9	6.7
<b>Regional Office for the Near East</b>	8 720.6	1.0	2.5	1.5	1 912.1	2 152.6	5.8	3.9
<b>World</b>	278 924.6	2.5	6.4	2.4	169 622.8	179 676.1	4.4	5.2

TABLE 25: Pulse producers and their productivity

	Pulses							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	22 429.7	4.2	6.2	1.5	15 292.0	13 887.6		5.8
<b>North Africa</b>	724.3	0.9	11.8	3.8	769.7	852.0	-3.6	5.7
Algeria	80.0	2.2	9.3	9.4	72.4	74.5	-4.6	11.7
Egypt	102.0	-3.1	29.7	0.0	315.4	302.7	-2.2	-3.1
Libya	4.2	-5.7	21.2	3.0	8.6	8.9	0.5	-2.9
Morocco	429.7	1.6	7.9	10.0	282.4	339.6	-11.6	11.7
Sudan								
Tunisia	108.4	1.2	11.7	6.3	91.0	126.4	-0.5	7.6
<b>Regional Office for Africa</b>	21 702.8	4.4	6.0	1.0	14 520.3	13 033.2	3.2	5.9
<b>Central Africa</b>	1 274.3	4.2	7.5	1.3	899.2	950.1	7.7	5.1
Cameroon	618.8	7.0	9.0	0.3	532.3	556.0	13.6	7.3
Central African Republic	34.0	1.9	10.0	0.6	31.3	34.0	5.4	2.5
Chad	172.0	0.7	7.1	1.6	121.6	122.0	9.9	2.4
Congo	14.0	2.5	7.1	-0.7	9.6	10.0	2.4	1.7
Democratic Republic of the Congo	435.2	1.9	5.2	-0.3	204.0	227.7	-0.8	1.5
Equatorial Guinea								
Gabon	0.3	-2.4	11.7	4.6	0.3	0.4	3.6	2.1
Sao Tome and Principe								
<b>East Africa</b>	6 843.6	2.6	8.4	1.7	5 512.5	5 781.3	1.7	4.4
Burundi	309.5	1.6	7.7	-0.8	237.6	238.6	-5.1	0.8
Djibouti	7.2	-1.4	3.0	0.8	1.8	2.1	1.4	-0.6
Eritrea	55.6	-5.3	7.5	7.5	37.8	41.6		1.8
Ethiopia	1 359.7	1.7	14.5	4.6	1 888.0	1 968.6		6.4
Kenya	1 477.0	2.3	5.2	2.1	593.9	770.9	-4.7	4.4
Rwanda	383.8	0.5	9.5	3.7	365.5	365.1	1.1	4.3
Somalia	85.6	3.8	3.0	1.2	21.3	25.8	0.7	5.0
South Sudan								
Sudan (former)	346.6	7.3	9.2	-4.8	290.0	319.7	9.7	2.2
Uganda	1 189.9	2.8	5.5	-1.7	666.0	652.5	1.5	1.1
United Republic of Tanzania	1 628.7	3.2	8.6	1.3	1 410.7	1 396.5	4.9	4.6
<b>Southern Africa</b>	3 025.3	11.0	5.2	-0.6	1 393.5	1 573.2	1.3	9.2
Angola	786.9	13.5	3.9	0.0	250.1	303.5	8.6	13.5
Botswana	34.7	5.8	1.1	-17.6	3.9	3.8	-0.3	-12.9
Comoros	15.5	2.1	8.7	0.8	12.4	13.4	2.8	2.9
Lesotho	19.0	-0.4	4.1	-5.7	10.3	7.8	3.3	-6.1
Madagascar	121.5	1.7	10.4	1.0	116.9	126.3	5.5	2.8
Malawi	685.4	3.6	7.5	3.0	435.6	512.9	-0.1	6.7
Mauritius								
Mozambique	1 136.6	17.1	4.0	-1.9	415.0	459.1	0.8	14.9
Namibia	17.6	3.7	10.8	-0.2	19.1	18.9	5.0	3.5
Seychelles								
South Africa	65.0	-3.3	9.8	-1.5	73.7	63.4	-3.5	-4.7
Swaziland	6.4	-1.5	4.5	0.2	3.2	2.9	-2.5	-1.3
Zambia	60.0	5.0	5.0	0.9	27.0	30.2	1.1	5.9
Zimbabwe	76.8	1.0	4.0	-5.6	26.3	31.0	0.4	-4.7
<b>West Africa</b>	10 559.6	3.6	4.5	0.9	6 715.2	4 728.6	4.7	6.6
Benin	218.9	4.2	9.2	1.9	202.7	200.6	6.2	6.2
Burkina Faso	998.9	10.9	5.1	-0.6	704.1	507.3	-1.4	10.2
Cabo Verde	16.2	-5.6	1.8	3.7	2.8	2.9	-6.7	-2.2
Côte d'Ivoire	57.1	4.1	8.4	1.4	47.0	48.0	13.6	5.6
Gambia	11.0	0.9	2.0	-2.0	2.1	2.2	-3.9	-1.1
Ghana	250.0	4.1	1.0	0.2	23.1	24.0	0.5	4.3
Guinea	60.0	-0.7	9.2	0.7	55.9	55.0	-0.1	0.0
Guinea-Bissau	9.3	8.1	3.6	-4.3	3.3	3.4	0.3	3.5
Liberia	4.9	-1.0	7.3	1.2	3.5	3.6	1.6	0.3
Mali	288.1	0.2	5.5	2.7	155.3	158.9	14.5	2.8
Mauritania	122.2	2.1	3.9	0.0	56.9	47.9	4.8	2.1
Niger	4 774.3	5.8	3.3	10.1	1 832.1	1 572.3	2.7	16.5
Nigeria	3 320.0	-1.1	5.8	-0.3	3 424.2	1 916.8	4.7	-1.4
Senegal	94.9	-3.9	3.0	-0.7	49.0	28.3	14.3	-4.6
Sierra Leone	119.6	6.2	6.2	-1.0	70.4	73.9	1.1	5.1
Togo	214.2	3.2	3.9	2.0	82.8	83.5	8.1	5.3
<b>CEMAC</b>	839.1	5.4	8.6	1.5	695.1	722.4	11.9	6.2
<b>CEN-SAD</b>	11 722.1	3.5	5.1	1.8	7 813.1	5 959.0	4.0	6.1
<b>COMESA</b>	6 636.3	2.3	8.5	1.2	5 229.9	5 614.9	-0.1	4.0
<b>ECCAS</b>	2 370.7	7.0	6.3	1.0	1 386.9	1 492.2	4.5	6.1
<b>ECOWAS</b>	10 437.4	3.7	4.5	1.0	6 658.3	4 680.7	4.7	6.7
<b>IGAD</b>	4 521.6	2.6	8.4	1.8	3 498.7	3 781.2		4.6
<b>SADC</b>	5 073.8	7.7	6.3	-0.5	2 995.7	3 184.0	2.8	6.7
<b>UEMOA</b>	6 655.7	6.0	3.9	1.5	3 076.2	2 602.3	5.3	12.8
<b>UMA</b>	744.5	1.6	8.0	5.6	511.2	597.3	-4.8	9.9
<b>Regional Office for Asia and the Pacific</b>	43 794.6	2.9	8.3	0.5	32 612.4	36 302.9		3.4
<b>Regional Office for Europe and Central Asia</b>	4 679.5	0.7	18.3	2.9	8 312.5	8 578.4		1.5
<b>Regional Office for Latin America and the Caribbean</b>	6 887.8	-0.8	9.2	1.0	6 620.3	6 337.9	1.9	0.9
<b>Regional Office for the Near East</b>	2 387.0	0.7	9.7	-2.5	2 170.8	2 312.6	2.2	3.5
<b>World</b>	79 398.6	2.6	8.6	0.7	69 626.9	68 218.5		2.9

TABLE 26: Root and tuber producers and their productivity

	Roots and tubers							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	25 661.7	2.1	100.7	1.8	239 052.6	258 415.0	5.5	4.3
<b>North Africa</b>	410.7	5.0	268.9	2.7	9 713.5	11 041.5	2.3	8.2
Algeria	131.9	5.6	292.8	5.3	3 300.3	3 862.2	4.1	11.1
Egypt	177.3	6.7	266.3	1.0	4 137.7	4 721.2	1.2	7.8
Libya	18.6	6.3	189.2	-0.5	290.0	352.0	2.7	5.8
Morocco	58.7	-0.4	296.3	4.6	1 615.5	1 739.1	2.0	4.2
Sudan								
Tunisia	24.2	1.4	151.7	0.7	370.0	367.0	2.9	2.2
<b>Regional Office for Africa</b>	25 250.5	2.1	98.0	1.6	229 331.6	247 366.5	5.5	4.1
<b>Central Africa</b>	3 819.8	2.0	72.6	0.0	26 645.8	27 749.4	-0.4	1.9
Cameroon	635.4	4.5	105.7	1.4	6 294.7	6 714.3	2.9	6.0
Central African Republic	347.9	2.1	36.9	-0.2	1 233.2	1 282.5	2.4	1.9
Chad	111.0	2.2	71.3	1.0	809.5	791.0	-2.0	3.2
Congo	164.1	4.6	75.2	-1.4	1 230.3	1 233.9	1.6	3.1
Democratic Republic of the Congo	2 404.2	1.1	70.4	-1.1	16 308.2	16 936.6	-1.4	0.0
Equatorial Guinea	46.0	2.3	41.7	3.1	188.1	192.0	1.3	5.4
Gabon	106.3	3.1	52.8	-0.9	541.9	560.6	1.6	2.3
Sao Tome and Principe	4.9	2.5	78.5	-1.1	40.0	38.6	15.9	1.3
<b>East Africa</b>	4 693.0	1.7	77.1	2.4	35 337.9	36 182.8	1.8	3.6
Burundi	224.7	0.4	69.5	0.2	1 663.2	1 560.2	0.3	0.6
Djibouti								
Eritrea	18.1	-7.4	35.4	1.1	65.2	64.1		-6.3
Ethiopia	859.1	3.3	73.0	-0.7	6 414.7	6 271.5		2.6
Kenya	249.1	0.6	153.8	7.3	3 896.6	3 831.5	0.1	8.0
Rwanda	509.4	1.6	113.9	4.8	5 213.3	5 802.0	7.2	6.5
Somalia	10.1	2.6	94.8	-0.5	88.0	95.3	4.1	2.1
South Sudan								
Sudan (former)	109.8	2.5	63.3	-0.0	709.6	694.6	9.4	2.5
Uganda	1 068.7	0.4	75.6	-0.1	8 831.3	8 076.8	3.9	0.3
United Republic of Tanzania	1 644.2	2.2	59.5	2.1	8 456.1	9 786.8	-3.3	4.3
<b>Southern Africa</b>	4 333.0	4.2	102.9	2.1	43 161.1	44 592.7	8.8	7.2
Angola	1 335.4	7.4	121.5	4.2	15 686.5	16 219.9	10.0	12.0
Botswana	8.5	-2.3	114.3	3.6	92.9	97.0	2.6	1.2
Comoros	15.6	0.8	58.9	1.4	87.1	91.6	2.6	2.2
Lesotho	6.8	2.3	164.7	0.0	99.0	112.0	6.8	2.3
Madagascar	752.4	3.4	66.8	0.1	4 395.5	5 027.1	0.9	3.5
Malawi	380.4	0.5	194.1	3.4	7 674.9	7 383.6	25.6	3.9
Mauritius	1.1	4.6	204.6	-0.3	23.4	23.3	-2.4	4.3
Mozambique	1 426.9	3.4	78.2	2.6	10 845.2	11 152.0	2.2	6.0
Namibia	41.2	2.9	86.9	0.2	342.5	357.6	1.9	3.1
Seychelles	0.0	-5.2	125.0	7.5	0.2	0.2	1.4	1.9
South Africa	82.0	0.5	274.5	1.6	2 156.0	2 251.2	3.0	2.2
Swaziland	13.2	1.9	50.6	0.2	64.8	66.9	2.0	2.1
Zambia	217.4	2.3	70.3	2.8	1 427.5	1 528.6	2.2	5.2
Zimbabwe	52.1	1.8	54.1	0.9	265.6	281.5	5.0	2.7
<b>West Africa</b>	12 404.7	1.5	111.9	1.7	124 186.8	138 841.6	7.2	3.7
Benin	400.4	0.3	151.0	3.2	6 147.7	6 044.7	7.5	3.5
Burkina Faso	25.2	7.5	97.7	2.2	196.1	246.0	3.6	9.8
Cabo Verde	1.2	-0.1	111.4	2.8	13.5	13.7	-6.2	2.7
Côte d'Ivoire	1 271.2	3.8	63.1	-2.1	7 828.8	8 018.0	3.6	1.7
Gambia	2.6	0.5	36.8	1.9	8.2	9.7	1.7	2.3
Ghana	1 571.1	2.2	139.8	2.5	20 939.5	21 966.1	11.6	4.7
Guinea	193.8	0.6	72.4	1.4	1 291.9	1 403.2	3.5	2.0
Guinea-Bissau	21.1	4.6	87.7	1.2	161.3	184.6	3.5	5.9
Liberia	69.2	-0.7	81.4	1.5	558.0	563.1	1.5	0.8
Mali	23.2	9.1	217.4	3.3	415.5	504.4	10.2	12.7
Mauritania	3.1	0.7	22.2	-0.3	6.9	7.0	0.9	0.5
Niger	11.9	1.4	151.7	-3.1	183.7	180.4	2.0	-1.7
Nigeria	8 441.4	1.0	115.1	2.7	84 052.3	97 184.7	6.8	3.7
Senegal	22.8	-3.0	91.3	4.4	266.2	208.0	7.8	1.3
Sierra Leone	104.8	5.5	53.0	1.2	472.0	555.4	6.8	6.7
Togo	241.7	1.8	72.5	1.0	1 645.2	1 752.6	2.5	2.8
<b>CEMAC</b>	1 410.7	3.5	76.4	0.5	10 297.7	10 774.2	2.1	4.7
<b>CEN-SAD</b>	13 097.7	1.6	112.7	1.6	132 280.1	147 616.2	6.9	3.9
<b>COMESA</b>	7 071.1	1.7	88.7	1.9	61 468.6	62 713.5	3.9	2.9
<b>ECCAS</b>	5 379.9	3.3	84.6	0.8	43 995.6	45 529.5	1.3	5.4
<b>ECOWAS</b>	12 401.6	1.5	111.9	1.8	124 179.9	138 834.6	7.2	3.7
<b>IGAD</b>	2 314.8	1.6	82.2	2.1	20 005.3	19 033.8		2.7
<b>SADC</b>	8 365.8	2.9	85.1	2.0	67 838.3	71 224.5	3.4	5.1
<b>UEMOA</b>	2 017.4	2.9	85.0	1.5	16 844.5	17 138.7	4.9	2.9
<b>UMA</b>	236.5	3.7	267.5	3.1	5 582.7	6 327.3	3.1	8.4
<b>Regional Office for Asia and the Pacific</b>	19 840.8	-0.2	182.2	2.3	332 905.7	361 493.8	2.7	1.7
<b>Regional Office for Europe and Central Asia</b>	6 835.7	-2.6	210.1	2.2	121 002.2	143 608.2		-0.2
<b>Regional Office for Latin America and the Caribbean</b>	4 247.1	0.6	133.7	1.0	55 490.8	56 775.0	1.0	1.4
<b>Regional Office for the Near East</b>	808.5	3.0	233.1	2.2	16 863.8	18 845.7	4.2	5.7
<b>World</b>	54 932.8	0.8	147.6	1.7	749 787.2	810 845.4	2.8	2.1

TABLE 27: Vegetable producers and their productivity

	Vegetables (including melons)							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	2000-11	thousand hg/ha 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	6 877.8	2.0	103.1	1.6	70 869.8	70 879.7	4.4	3.5
<b>North Africa</b>	1 482.3	1.9	229.3	2.3	34 011.9	33 986.8	4.1	3.6
Algeria	308.9	2.7	180.6	4.4	5 215.6	5 578.9	5.1	7.3
Egypt	776.3	2.0	244.1	0.2	19 487.1	18 945.5	4.9	2.2
Libya	65.8	-0.5	148.8	1.3	947.4	979.0	2.4	0.8
Morocco	192.3	1.7	292.4	3.6	5 397.7	5 624.6	0.5	5.4
Sudan								
Tunisia	138.9	1.0	205.8	2.0	2 964.1	2 858.8	2.9	3.0
<b>Regional Office for Africa</b>	5 387.9	2.1	68.4	1.3	36 810.0	36 846.1	4.7	3.4
<b>Central Africa</b>	649.3	3.7	51.0	0.5	3 062.8	3 312.2	5.8	4.7
Cameroon	509.6	4.1	45.8	1.5	2 114.5	2 334.8	9.0	5.7
Central African Republic	11.4	0.9	85.8	0.6	95.0	98.2	3.0	1.5
Chad	9.8	-0.4	105.3	0.1	99.2	103.6	3.7	-0.3
Congo	16.5	3.3	84.6	0.3	138.2	139.3	2.1	3.6
Democratic Republic of the Congo	90.1	2.1	63.8	0.5	556.8	575.3	-1.6	2.5
Equatorial Guinea								
Gabon	10.3	6.1	48.2	-2.8	48.0	49.6	1.7	3.1
Sao Tome and Principe	1.5	2.3	75.8	3.0	11.0	11.4	9.0	5.4
<b>East Africa</b>	1 464.5	4.2	77.3	1.2	11 368.8	11 327.7	4.8	4.7
Burundi	44.8	6.7	97.0	-1.1	430.0	435.0	1.3	5.6
Djibouti	4.8	-0.6	74.2	3.9	37.4	35.2	1.5	3.3
Eritrea	14.5	2.5	36.2	3.6	55.8	52.5		6.2
Ethiopia	349.1	3.2	46.5	2.8	1 673.6	1 622.7		6.1
Kenya	161.8	0.7	124.5	1.7	2 527.3	2 014.9	7.7	2.4
Rwanda	94.2	4.8	67.9	2.8	657.6	639.8	6.6	7.8
Somalia	23.2	5.8	47.7	-2.2	114.4	110.5	0.4	3.4
South Sudan								
Sudan (former)	229.4	1.9	138.9	1.9	2 996.4	3 186.3	6.2	3.8
Uganda	195.5	7.3	55.6	-0.8	986.0	1 085.9	2.8	6.4
United Republic of Tanzania	347.3	6.1	61.8	-0.6	1 890.3	2 144.9	-0.0	5.5
<b>Southern Africa</b>	554.3	4.8	93.0	1.3	4 991.7	5 155.3	0.6	3.6
Angola	75.4	4.3	50.0	-1.0	364.6	376.8	0.6	3.2
Botswana	3.6	0.4	110.6	7.7	39.8	40.2	-0.1	8.2
Comoros	0.8	-1.1	78.4	1.3	7.0	6.5	2.3	0.2
Lesotho	3.3	1.2	93.4	2.8	31.3	30.9	-2.1	4.0
Madagascar	49.1	-1.7	89.5	4.0	393.3	439.1	0.4	2.3
Malawi	75.6	6.1	50.1	-3.0	364.5	378.8	0.6	2.9
Mauritius	5.5	-0.3	128.3	-2.2	72.4	71.1	7.6	-2.5
Mozambique	99.6	15.2	47.8	-1.3	449.7	476.0	-5.4	13.8
Namibia	5.9	4.8	101.2	4.0	60.0	59.9	9.9	9.0
Seychelles	0.6	7.8	50.0	-4.2	2.6	2.8	1.6	3.3
South Africa	149.9	1.4	173.9	0.5	2 619.8	2 607.4	0.7	2.0
Swaziland	1.6	2.1	78.9	-0.6	12.5	12.6	-1.5	1.5
Zambia	53.0	3.0	80.3	1.3	365.9	425.6	-0.2	4.3
Zimbabwe	30.3	1.8	75.0	2.1	208.5	227.6	-0.4	3.9
<b>West Africa</b>	2 719.9	-0.0	62.7	2.2	17 386.8	17 050.9	5.6	2.2
Benin	81.3	-0.6	44.2	0.8	371.8	359.0	5.1	0.1
Burkina Faso	29.7	-4.9	94.1	2.7	298.7	279.8	4.7	-2.3
Cabo Verde	1.3	2.7	209.0	2.5	26.1	27.2	9.6	5.3
Côte d'Ivoire	159.1	-4.4	41.6	2.3	643.3	661.4	3.6	-2.2
Gambia	2.0	1.5	60.0	1.1	12.2	12.0	0.2	2.6
Ghana	76.9	-6.2	87.4	7.7	636.3	671.7	4.3	1.0
Guinea	191.5	-3.4	28.3	3.9	563.9	542.7	1.7	0.3
Guinea-Bissau	5.8	1.7	59.6	1.1	37.0	34.6	2.0	2.8
Liberia	22.3	-3.0	49.1	2.6	106.9	109.4	4.9	-0.5
Mali	83.3	1.5	105.2	1.6	824.1	876.1	2.4	3.1
Mauritania	1.5	-14.7	31.2	15.6	5.2	4.8	-2.9	-1.4
Niger	79.8	3.9	112.6	-2.6	796.7	898.9	8.0	1.2
Nigeria	1 869.4	0.7	61.2	1.9	11 830.2	11 439.6	6.4	2.6
Senegal	42.5	4.0	153.6	0.4	726.0	653.1	7.5	4.4
Sierra Leone	45.6	4.6	74.4	1.2	364.7	339.6	-0.3	5.8
Togo	27.8	-3.7	50.8	4.3	143.7	141.0	-1.6	0.4
<b>CEMAC</b>	557.6	4.0	48.9	0.1	2 495.0	2 725.5	7.8	5.1
<b>CEN-SAD</b>	3 992.8	0.8	121.4	1.7	48 993.0	48 476.9	4.7	2.7
<b>COMESA</b>	2 242.8	2.8	138.8	0.8	31 781.9	31 136.5	4.7	2.9
<b>ECCAS</b>	769.5	3.9	53.6	0.2	3 857.4	4 124.0	4.8	4.6
<b>ECOWAS</b>	2 718.4	-0.0	62.7	1.9	17 381.6	17 046.1	5.6	2.2
<b>IGAD</b>	978.2	3.3	82.9	1.7	8 390.9	8 108.0		4.3
<b>SADC</b>	990.8	5.0	79.4	1.1	7 431.8	7 869.0	0.2	4.0
<b>UEMOA</b>	509.3	-0.7	76.7	0.9	3 841.3	3 903.9	4.9	1.2
<b>UMA</b>	707.6	1.8	212.6	3.4	14 529.9	15 046.1	2.6	5.3
<b>Regional Office for Asia and the Pacific</b>	40 228.5	2.6	199.5	1.9	765 574.7	802 500.3	8.4	4.0
<b>Regional Office for Europe and Central Asia</b>	6 180.7	-0.2	239.4	2.4	139 087.9	147 958.1		1.9
<b>Regional Office for Latin America and the Caribbean</b>	2 643.6	1.3	163.6	1.8	43 185.2	43 247.7	4.8	2.3
<b>Regional Office for the Near East</b>	3 318.6	2.3	225.3	1.8	70 058.3	74 754.6	4.1	4.5
<b>World</b>	56 733.7	2.1	192.2	1.7	1 048 660.4	1 090 425.0	6.7	3.4

TABLE 28: Sugar producers and their productivity

	Sugar							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>								
Algeria								
Egypt	152.0	9.3	492.5	−0.3	7 840.3	7 486.1	17.5	9.0
Libya								
Morocco	47.1	−1.3	644.8	1.7	2 435.9	3 035.1	−0.3	0.5
Sudan								
Tunisia	0.0				0.0	0.0	−23.0	
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon								
Central African Republic								
Chad								
Congo								
Democratic Republic of the Congo								
Equatorial Guinea								
Gabon								
Sao Tome and Principe								
<b>East Africa</b>								
Burundi								
Djibouti								
Eritrea								
Ethiopia								
Kenya								
Rwanda								
Somalia								
South Sudan								
Sudan (former)								
Uganda								
United Republic of Tanzania								
<b>Southern Africa</b>								
Angola								
Botswana								
Comoros								
Lesotho								
Madagascar								
Malawi								
Mauritius								
Mozambique								
Namibia								
Seychelles								
South Africa								
Swaziland								
Zambia								
Zimbabwe								
<b>West Africa</b>								
Benin								
Burkina Faso								
Cabo Verde								
Côte d'Ivoire								
Gambia								
Ghana								
Guinea								
Guinea-Bissau								
Liberia								
Mali	0.3		142.9		3.9	4.0		
Mauritania								
Niger								
Nigeria								
Senegal								
Sierra Leone								
Togo								
<b>CEMAC</b>								
<b>CEN-SAD</b>								
<b>COMESA</b>								
<b>ECCAS</b>								
<b>ECOWAS</b>								
<b>IGAD</b>								
<b>SADC</b>								
<b>UEMOA</b>								
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>								
<b>Regional Office for Europe and Central Asia</b>	3 927.5				169 526.9	213 754.0		
<b>Regional Office for Latin America and the Caribbean</b>								
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 29: Treenut producers and their productivity

	Treenuts							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>								
Algeria	39.8	3.5	5.6	-4.9	57.0	22.4	8.5	-1.5
Egypt	5.0	-2.8	73.3	5.8	41.7	36.8	16.9	2.8
Libya	43.8	-1.6	8.7	5.1	29.5	37.9	-2.3	3.5
Morocco	151.4	0.5	7.0	3.1	97.8	106.1	1.9	3.6
Sudan								
Tunisia	227.2	0.2	2.8	0.1	54.4	63.2	1.6	0.2
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon	0.3	8.1	11.7	-4.4	0.3	0.3	0.3	3.4
Central African Republic								
Chad								
Congo								
Democratic Republic of the Congo								
Equatorial Guinea								
Gabon								
Sao Tome and Principe								
<b>East Africa</b>								
Burundi								
Djibouti								
Eritrea								
Ethiopia	60.3	0.0	10.5	-1.0	53.1	63.2		-0.9
Kenya	34.5	-0.7	12.9	6.5	37.4	44.6	10.0	5.7
Rwanda								
Somalia								
South Sudan								
Sudan (former)								
Uganda								
United Republic of Tanzania	412.6	14.2	3.5	-11.9	94.4	145.2	19.5	0.6
<b>Southern Africa</b>								
Angola	2.8	0.0	7.4	6.0	1.8	2.1	3.0	6.0
Botswana								
Comoros								
Lesotho								
Madagascar	15.4	-0.6	4.5	0.9	5.8	6.9	2.0	0.2
Malawi	3.2	4.4	10.2	0.7	2.8	3.3	1.1	5.1
Mauritius					0.0	0.0	-6.7	1.7
Mozambique	140.0	6.6	8.1	-0.4	96.6	112.8	9.9	6.3
Namibia								
Seychelles								
South Africa	4.2	3.7	36.9	-0.1	13.0	15.5	18.0	3.6
Swaziland	0.8	1.3	15.1	-3.8	1.0	1.2		-2.6
Zambia								
Zimbabwe	2.0	6.5	11.3	1.6	1.9	2.3	2.4	8.3
<b>West Africa</b>								
Benin	484.8	9.0	2.8	2.3	121.2	135.9	27.3	11.5
Burkina Faso	11.7	0.5	6.1	2.9	6.2	7.2	10.6	3.4
Cabo Verde								
Côte d'Ivoire	887.7	15.8	4.7	1.5	400.6	417.5	18.8	17.6
Gambia								
Ghana	68.5	11.7	5.4	2.1	31.3	37.1	28.8	14.0
Guinea	7.3	15.5	11.5	2.3	7.1	8.5	-3.9	18.2
Guinea-Bissau	222.5	0.5	5.8	4.8	108.0	128.7	9.3	5.3
Liberia	2.8	0.9	9.4	0.6	2.8	2.6	0.1	1.5
Mali	11.1	4.0	5.0	-0.5	4.6	5.6	13.5	3.4
Mauritania								
Niger								
Nigeria	367.9	3.2	22.9	2.2	837.0	842.0	29.4	5.4
Senegal	19.0	-2.9	5.3	0.8	9.3	10.0	14.7	-2.2
Sierra Leone								
Togo	0.6	7.6	17.0	2.8	0.8	1.0	-5.9	10.6
<b>CEMAC</b>								
<b>CEN-SAD</b>								
<b>COMESA</b>								
<b>ECCAS</b>								
ECOWAS	2 083.9	9.9	7.7	2.1	1 528.9	1 596.0	25.4	9.3
<b>IGAD</b>								
<b>SADC</b>								
UEMOA	1 637.5	11.3	4.3	2.3	650.7	705.9	16.5	13.6
UMA	462.3	0.4	5.0	1.6	238.6	229.6	2.1	2.2
<b>Regional Office for Asia and the Pacific</b>								
Regional Office for Europe and Central Asia	1 743.0	0.6	12.0	2.3	2 160.3	2 090.8		1.3
<b>Regional Office for Latin America and the Caribbean</b>								
Regional Office for the Near East	1 005.3	0.7	16.6	10.6	1 565.4	1 664.6	4.6	9.0
<b>World</b>								

TABLE 30: Fruit producers and their productivity

	Fruit (excluding melons)							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha 2011	2000-11 percent	thousand hg/ha 2011	2000-11 percent	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>	11 309.6	1.7	78.6	1.6	85 723.5	88 925.1	2.9	4.2
<b>North Africa</b>	1 654.4	2.7	114.7	1.5	17 772.5	18 973.1	3.7	4.2
Algeria	499.8	4.9	74.0	4.0	3 304.2	3 697.9	3.9	9.0
Egypt	490.9	1.5	202.1	1.7	9 581.2	9 922.3	4.2	3.3
Libya	64.9	1.9	62.0	0.4	386.1	402.5	0.1	2.3
Morocco	365.6	2.3	99.5	0.5	3 279.8	3 637.8	2.9	2.8
Sudan								
Tunisia	233.2	1.6	56.3	0.7	1 221.3	1 312.5	3.8	2.4
<b>Regional Office for Africa</b>	9 646.2	1.5	72.4	1.7	67 885.9	69 884.2	2.6	4.2
<b>Central Africa</b>	1 047.2	1.3	89.4	2.0	8 563.0	9 361.8	-0.6	5.9
Cameroon	401.2	2.3	130.1	6.6	4 863.6	5 219.0	1.3	9.1
Central African Republic	63.2	-0.3	44.4	1.0	274.6	280.3	2.5	0.7
Chad	35.9	3.3	33.2	-1.4	117.7	119.5	-0.8	1.8
Congo	37.5	2.4	72.6	-0.5	262.0	272.3	5.1	1.8
Democratic Republic of the Congo	422.0	0.3	72.1	1.8	2 540.7	3 044.6	-3.5	2.1
Equatorial Guinea	12.9	1.3	54.2	1.5	69.2	69.8	2.3	2.9
Gabon	68.6	1.7	46.4	-1.0	398.2	318.5	2.1	0.7
Sao Tome and Principe	5.8	2.0	65.2	0.7	37.0	37.9	12.4	2.7
<b>East Africa</b>	4 111.7	1.6	65.3	1.0	26 733.4	26 839.9	1.9	3.3
Burundi	393.5	0.7	49.9	1.2	2 027.7	1 964.7	-0.2	1.9
Djibouti					3.4	3.4	5.9	-0.1
Eritrea	0.7	5.7	78.9	-2.5	5.4	5.3		3.1
Ethiopia	76.0	4.2	89.2	1.1	603.8	677.5		5.3
Kenya	197.1	2.6	145.9	-0.0	3 270.7	2 876.3	5.1	2.6
Rwanda	386.3	0.2	88.1	3.4	3 080.8	3 402.6	-2.0	3.6
Somalia	23.2	0.8	96.4	0.5	230.0	223.3	-4.4	1.3
South Sudan								
Sudan (former)	241.2	5.1	120.1	2.5	2 813.3	2 896.3	6.7	7.6
Uganda	1 863.2	0.6	54.9	-0.5	10 203.8	10 233.1	1.8	0.1
United Republic of Tanzania	930.5	3.4	49.0	4.9	4 494.5	4 557.4	3.1	8.5
<b>Southern Africa</b>	1 004.0	3.1	125.6	1.6	11 637.7	12 614.0	2.6	6.7
Angola	161.5	10.5	203.0	8.5	2 640.9	3 279.1	1.0	19.9
Botswana	2.1	-0.9	31.0	-3.4	5.9	6.6	-0.9	-4.2
Comoros	8.8	-1.8	77.3	2.6	77.7	68.2	2.0	0.8
Lesotho	4.3	2.9	35.9	-2.4	14.5	15.3	-2.0	0.5
Madagascar	239.5	2.9	50.5	-0.0	1 181.5	1 210.2	1.1	2.8
Malawi	101.5	-0.1	103.8	3.2	1 061.4	1 053.7	4.6	3.1
Mauritius	1.6	7.1	160.3	-0.5	22.8	26.5	4.6	6.6
Mozambique	105.0	6.8	64.2	1.1	647.3	673.6	-2.7	7.9
Namibia	8.7	10.3	50.1	-0.9	42.2	43.8	5.3	9.3
Seychelles	0.2	1.2	156.7	-0.9	2.5	2.7	1.9	0.3
South Africa	294.3	-0.3	195.4	1.4	5 465.5	5 751.3	3.2	1.1
Swaziland	15.4	3.2	82.0	-1.2	120.7	126.0	-3.7	1.9
Zambia	24.9	1.7	44.5	-0.8	112.2	111.1	-0.3	0.9
Zimbabwe	36.2	-1.1	68.0	1.7	242.4	246.0	2.9	0.6
<b>West Africa</b>	3 483.2	0.9	60.5	1.9	20 951.7	21 068.5	4.6	2.9
Benin	50.8	4.0	66.8	2.8	444.1	339.5	-1.0	6.9
Burkina Faso	16.4	-2.9	59.7	3.6	93.8	97.7	2.7	0.7
Cabo Verde	1.5	-0.5	130.4	1.9	18.9	19.5	1.4	1.4
Côte d'Ivoire	573.0	0.2	38.4	-0.8	2 190.0	2 202.1	4.1	-0.6
Gambia	1.7	1.6	50.4	2.6	8.6	8.8	4.8	4.2
Ghana	402.4	2.1	114.4	4.0	4 483.1	4 603.3	10.0	6.1
Guinea	287.1	0.3	43.1	1.7	1 218.7	1 237.3	1.5	2.0
Guinea-Bissau	22.9	0.9	43.7	1.1	96.2	100.1	2.7	2.1
Liberia	37.0	0.8	51.5	0.2	188.7	190.3	4.8	1.0
Mali	59.8	1.9	72.3	3.1	430.5	432.2	5.0	5.0
Mauritania	9.4	4.7	26.0	-4.6	24.0	24.5	7.5	-0.2
Niger	91.8	17.6	53.1	1.4	504.3	487.5	4.9	19.2
Nigeria	1 839.0	-0.1	58.7	1.5	10 762.9	10 790.0	3.8	1.4
Senegal	33.8	4.9	67.7	0.2	195.6	228.9	2.6	5.1
Sierra Leone	47.4	2.6	51.7	0.8	232.5	245.2	1.1	3.4
Togo	9.2	-3.8	67.1	3.5	59.9	61.7	3.4	-0.4
<b>CEMAC</b>	619.4	2.0	101.4	2.3	5 985.3	6 279.3	1.7	7.8
<b>CEN-SAD</b>	4 712.8	1.4	82.0	1.5	37 680.5	38 658.7	4.3	3.3
<b>COMESA</b>	4 563.9	1.2	83.9	0.8	37 338.1	38 272.9	2.0	2.5
<b>ECCAS</b>	1 602.2	2.1	91.2	3.7	13 231.6	14 605.7	-0.4	8.5
<b>ECOWAS</b>	3 473.8	0.9	60.6	2.1	20 927.8	21 044.1	4.6	2.9
<b>IGAD</b>	2 401.4	1.3	70.4	0.4	17 130.3	16 915.1		2.1
<b>SADC</b>	2 347.7	2.7	85.8	1.7	18 595.2	20 147.8	1.5	6.4
<b>UEMOA</b>	857.6	2.5	46.1	2.1	4 014.3	3 949.7	3.8	3.6
<b>UMA</b>	1 173.0	3.3	77.4	0.9	8 215.3	9 075.2	3.2	5.3
<b>Regional Office for Asia and the Pacific</b>	26 853.4	2.7	114.1	0.6	292 685.3	306 370.0	6.9	5.2
<b>Regional Office for Europe and Central Asia</b>	9 517.2	-0.6	98.1	1.4	89 393.8	93 317.7		0.5
<b>Regional Office for Latin America and the Caribbean</b>	7 435.5	0.7	155.9	1.1	111 885.6	115 885.2	3.0	1.7
<b>Regional Office for the Near East</b>	3 890.9	1.4	107.0	1.0	40 936.4	41 625.6	4.6	2.5
<b>World</b>	56 642.1	1.6	112.6	1.0	612 512.7	637 575.6	4.0	3.4

TABLE 31: Citrus fruit producers and their productivity

	Citrus fruit							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>	368.3	2.3	190.2	2.0	6 148.4	7 006.5	1.7	4.2
Algeria	55.7	2.7	198.9	6.0	788.7	1 107.3	4.4	8.9
Egypt	166.2	1.7	224.5	2.5	3 523.0	3 730.7	0.6	4.2
Libya	7.6	1.4	101.8	-0.0	74.9	77.4	-3.9	1.4
Morocco	105.4	2.9	155.8	-1.5	1 359.7	1 642.2	3.2	1.3
Sudan								
Tunisia	33.4	3.1	134.3	1.0	402.2	448.9	0.2	4.1
<b>Regional Office for Africa</b>	1 190.5	1.2	78.0	2.0	8 914.4	9 291.4	5.2	3.2
<b>Central Africa</b>	22.0	0.0	137.8	1.7	244.8	303.1	0.6	1.9
Cameroon					0.1	0.1	7.6	6.0
Central African Republic	7.0	0.1	54.7	2.1	31.1	38.6	3.9	2.2
Chad								
Congo	1.9	1.7	83.6	0.6	13.5	16.2	15.1	2.3
Democratic Republic of the Congo	12.8	-0.3	193.2	2.1	199.0	247.0	-0.8	1.8
Equatorial Guinea								
Gabon	0.2	0.2	53.2	1.6	1.2	1.2	1.6	1.9
Sao Tome and Principe								
<b>East Africa</b>	93.3	6.9	104.5	2.1	962.6	976.6	9.7	8.2
Burundi								
Djibouti					1.6	1.5	6.0	-1.4
Eritrea								
Ethiopia	6.9	3.6	88.4	3.2	62.7	61.0		7.0
Kenya	23.4	0.7	115.5	2.8	260.5	269.9	16.6	3.5
Rwanda	4.3	25.5	38.9	9.5	15.0	16.6		37.5
Somalia	4.1	-0.0	59.6	1.5	22.9	24.7	-7.4	1.4
South Sudan								
Sudan (former)	42.1	10.7	132.7	-0.1	554.5	557.8	6.6	10.7
Uganda								
United Republic of Tanzania	12.6	3.1	35.8	-2.0	45.4	45.1	1.3	1.1
<b>Southern Africa</b>	156.0	1.2	190.8	1.3	2 709.4	2 976.5	4.8	3.4
Angola	21.2	4.2	125.9	7.3	247.6	266.9	0.3	11.8
Botswana	0.1	-1.3	46.2	1.3	0.5	0.6	1.0	0.0
Comoros								
Lesotho								
Madagascar	15.7	-1.6	65.2	2.1	86.4	102.5	-0.2	0.4
Malawi	0.5	1.1	53.0	-0.2	2.5	2.6	0.0	0.9
Mauritius	0.2	4.9	32.0	-2.4	0.5	0.5	10.6	2.4
Mozambique	11.0	5.5	47.1	-0.3	46.5	51.7	-4.9	5.2
Namibia	0.2	2.0	60.1	0.2	1.2	1.3		2.2
Seychelles	0.0	5.4	119.2	-3.7	0.1	0.1	1.0	1.5
South Africa	75.3	0.7	309.7	2.0	2 124.9	2 331.1	5.8	2.7
Swaziland	12.2	3.0	67.5	-2.0	81.3	82.4	-1.5	0.9
Zambia	0.9	-2.3	45.7	4.3	3.5	4.3	-1.1	1.9
Zimbabwe	18.6	-0.9	71.0	1.1	114.5	132.4	4.7	0.2
<b>West Africa</b>	919.2	0.6	54.8	5.2	4 997.6	5 035.2	5.2	2.1
Benin	4.8	1.0	28.2	-2.0	13.4	13.5	3.4	-1.0
Burkina Faso	0.2	-2.3	63.2	2.2	1.4	1.4	3.4	-0.1
Cabo Verde								
Côte d'Ivoire	9.9	2.1	109.3	1.0	106.5	107.7	4.5	3.1
Gambia								
Ghana	23.2	-6.5	278.4	13.5	626.0	645.0	16.4	6.1
Guinea	44.6	0.8	53.4	0.4	236.4	238.0	0.0	1.1
Guinea-Bissau	2.0	-2.1	52.5	2.4	10.1	10.3	3.4	0.2
Liberia	2.2	-3.7	36.0	2.9	7.8	8.0	3.4	-0.9
Mali	8.5	1.5	54.1	5.7	43.0	46.0	3.8	7.3
Mauritania								
Niger								
Nigeria	795.0	0.8	47.8	0.7	3 800.0	3 800.0	4.5	1.4
Senegal	8.0	5.7	62.5	-1.1	40.0	50.0	1.0	4.4
Sierra Leone	17.8	2.3	57.0	-0.3	99.2	101.3	1.6	2.0
Togo	3.1	-3.5	44.6	3.2	13.8	14.0	3.1	-0.4
<b>CEMAC</b>					45.8	56.1	7.1	2.3
<b>CEN-SAD</b>	1 240.5	1.4	91.2	3.1	10 730.9	11 318.9	3.4	3.2
<b>COMESA</b>	311.4	2.8	169.8	1.2	4 979.8	5 286.8		4.6
<b>ECCAS</b>								
<b>ECOWAS</b>	919.2	0.6	54.8	5.2	4 997.6	5 035.2	5.2	2.1
<b>IGAD</b>								
<b>SADC</b>	181.4	1.3	180.2	1.3	2 953.8	3 268.6	4.3	3.2
<b>UEMOA</b>	36.5	1.9	66.6	1.7	228.2	242.9	3.5	3.6
<b>UMA</b>	202.1	2.8	162.1	1.8	2 625.4	3 275.8	2.9	4.3
<b>Regional Office for Asia and the Pacific</b>	3 863.9	4.1	125.4	2.3	47 928.5	48 456.5		8.1
<b>Regional Office for Europe and Central Asia</b>								
<b>Regional Office for Latin America and the Caribbean</b>	2 121.5	0.1	178.9	1.6	36 330.1	37 949.7	3.8	0.1
<b>Regional Office for the Near East</b>	702.3	1.4	173.2	1.0	11 645.8	12 163.4	3.7	2.5
<b>World</b>								

TABLE 32: Fibre crop producers and their productivity

	Fibre crops							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>	236.6	-0.1	6.3	-4.8	149.6	149.6	-2.9	-4.3
Algeria	0.2	7.7	1.0	-5.4	0.0	0.0	-0.5	1.9
Egypt	229.5	-0.2	6.4	-4.2	147.5	147.4	-2.8	-4.3
Libya								
Morocco	4.1	3.8	3.7	-6.2	1.5	1.5	-15.7	-2.6
Sudan								
Tunisia	2.7	2.9	2.4	-4.2	0.6	0.6	8.2	-1.4
<b>Regional Office for Africa</b>	4 089.9	1.1	3.1	1.1	1 197.8	1 264.1	3.7	0.2
<b>Central Africa</b>	459.4	-2.3	2.4	-2.1	104.3	110.7	2.8	-3.4
Cameroon	180.2	-0.9	3.6	-1.5	62.1	65.1	6.2	-2.4
Central African Republic	27.3	-4.9	1.6	-3.0	4.2	4.3	-3.1	-7.8
Chad	175.0	-4.2	1.6	-2.3	25.5	28.0	-0.4	-6.4
Congo								
Democratic Republic of the Congo	75.0	-0.3	1.7	-0.4	12.3	13.1	-0.1	-0.6
Equatorial Guinea	1.8	0.0	1.3	-4.9	0.2	0.2	-3.0	-4.9
Gabon								
Sao Tome and Principe								
<b>East Africa</b>	980.5	0.7	2.6	4.3	246.9	252.0	-2.9	2.7
Burundi	4.5	2.0	1.8	-4.9	0.7	0.8	-6.6	-3.0
Djibouti								
Eritrea								
Ethiopia	413.5	3.8	1.1	-1.5	36.8	43.6		2.2
Kenya	61.5	-0.1	5.7	3.8	27.8	34.8	-7.1	3.7
Rwanda	0.0				0.0	0.0		
Somalia	16.5	2.9	1.3	-1.0	1.8	2.1	7.2	2.0
South Sudan								
Sudan (former)	42.0	-12.0	6.5	6.9	19.9	27.3	-8.7	-5.9
Uganda	160.0	-4.0	3.0	12.0	25.8	47.6	13.7	7.6
United Republic of Tanzania	282.6	0.9	3.4	1.7	134.1	95.8	-2.4	2.6
<b>Southern Africa</b>	827.7	2.4	2.9	4.2	137.1	242.9	3.3	1.0
Angola	4.8	-7.7	5.3	0.3	2.3	2.5	-0.4	-7.3
Botswana	0.4	-8.0	5.0	-4.4	0.2	0.2	1.8	-12.0
Comoros	0.0				0.0	0.0		
Lesotho								
Madagascar	34.2	-3.9	8.1	1.4	24.8	27.8	-1.0	-2.5
Malawi	60.2	3.6	2.3	-0.2	8.0	14.1	1.2	3.4
Mauritius	0.1	0.6	6.0	-1.6	0.1	0.1	1.8	-1.1
Mozambique	198.4	5.1	2.0	3.8	24.4	40.6	2.2	9.1
Namibia	0.0				0.0	0.0	45.2	
Seychelles								
South Africa	11.1	-13.9	20.5	12.2	12.7	22.6	-5.8	-3.4
Swaziland	2.5	-19.7	2.3	5.4	0.6	0.6	-11.5	-15.4
Zambia	121.9	7.5	3.4	-0.5	24.0	42.0	6.2	7.0
Zimbabwe	394.1	0.5	2.3	-3.5	40.0	92.3	6.6	-3.0
<b>West Africa</b>	1 822.3	1.5	3.6	-1.5	709.5	658.5	5.7	-0.4
Benin	208.1	-3.8	3.7	-2.3	76.3	76.3	9.9	-6.1
Burkina Faso	395.1	6.0	4.4	-1.5	190.0	175.0	3.5	4.4
Cabo Verde								
Côte d'Ivoire	250.0	-1.4	3.1	-6.0	82.2	76.5	5.1	-7.3
Gambia	1.3	10.0	1.3	-1.5	0.2	0.2	-20.0	8.4
Ghana	26.0	-5.8	3.6	2.3	9.3	9.3	10.8	-3.7
Guinea	44.0	-1.8	3.0	-5.3	13.4	13.4	29.7	-7.0
Guinea-Bissau	4.7	4.5	3.2	-2.6	1.5	1.5	2.1	1.8
Liberia								
Mali	492.8	7.2	3.0	-3.4	82.5	149.6	-1.4	3.6
Mauritania								
Niger	10.0	0.0	3.3	-2.7	1.2	3.3	17.2	-2.7
Nigeria	260.6	-6.4	3.9	3.2	221.2	101.4	4.4	-3.4
Senegal	30.0	2.7	4.3	0.8	10.0	13.0	-4.5	3.6
Sierra Leone					7.8	9.0	1.3	4.1
Togo	99.8	-3.1	3.0	-1.3	14.0	30.0	3.8	-4.3
<b>CEMAC</b>	384.4	-2.7	2.5	-2.5	92.0	97.6	3.1	-3.8
<b>CEN-SAD</b>	2 275.4	0.6	3.7	-1.1	897.2	856.4	2.2	-1.4
<b>COMESA</b>	1 598.9				368.2	491.6		
<b>ECCAS</b>	468.7	-2.3	2.4	-1.6	107.3	114.0	2.6	-3.5
<b>ECOWAS</b>	1 822.3	1.5	3.6	-1.5	709.5	658.5	5.7	-0.4
<b>IGAD</b>								
<b>SADC</b>	1 185.3	1.9	3.0	3.9	283.5	351.8	1.9	1.4
<b>UEMOA</b>	1 490.4	3.0	3.5	-2.2	457.7	525.2	4.8	0.4
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>								
<b>Regional Office for Europe and Central Asia</b>	3 451.7				2 998.3	3 162.5		
<b>Regional Office for Latin America and the Caribbean</b>	2 985.1	4.6	9.8	0.9	1 948.2	2 911.1	-1.7	6.4
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 33: Jute and jute-like producers and their productivity

	Jute and jute-like							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total	p.a. growth		
	thousand ha 2011	percent 2000-11	thousand hg/ha 2011	percent 2000-11	thousand tonnes 2010	thousand tonnes 2011	percent 1990-2000	percent 2000-11
<b>Africa</b>								
<b>North Africa</b>								
Algeria								
Egypt	0.9	−0.5	23.3	0.1	2.2	2.1	−5.8	−0.4
Libya								
Morocco								
Sudan								
Tunisia								
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon	0.2	2.3	3.3	−3.6	0.1	0.1	−1.2	−1.3
Central African Republic	0.5	0.7	2.1	1.0	0.1	0.1	1.4	1.7
Chad								
Congo								
Democratic Republic of the Congo	9.0	−0.2	7.1	1.2	5.6	6.4	3.5	1.0
Equatorial Guinea								
Gabon								
Sao Tome and Principe								
<b>East Africa</b>								
Burundi								
Djibouti								
Eritrea								
Ethiopia	1.9	2.3	2.9	−5.0	0.5	0.6		−2.8
Kenya								
Rwanda								
Somalia								
South Sudan								
Sudan (former)					3.2	3.2	1.0	−0.3
Uganda								
United Republic of Tanzania								
<b>Southern Africa</b>								
Angola	1.2	1.6	7.5	−2.6	0.8	0.9	−0.6	−1.0
Botswana								
Comoros								
Lesotho								
Madagascar	0.6	−2.1	4.7	−4.6	0.2	0.3	−0.2	−6.6
Malawi								
Mauritius								
Mozambique	7.1	1.5	5.5	−0.0	3.7	3.9	−0.7	1.5
Namibia								
Seychelles								
South Africa	1.1	0.0	7.8	−2.2	0.7	0.9	−0.1	−2.2
Swaziland								
Zambia								
Zimbabwe	4.1	2.5	5.6	−1.6	2.0	2.3	3.3	0.8
<b>West Africa</b>								
Benin								
Burkina Faso								
Cabo Verde								
Côte d'Ivoire								
Gambia								
Ghana								
Guinea								
Guinea-Bissau								
Liberia								
Mali	2.8	1.5	5.7	2.2	1.5	1.6	−7.5	3.8
Mauritania								
Niger								
Nigeria	1.0	0.0	13.9	4.3	1.2	1.4	0.1	4.3
Senegal								
Sierra Leone								
Togo								
<b>CEMAC</b>								
<b>CEN-SAD</b>								
<b>COMESA</b>								
<b>ECCAS</b>								
<b>ECOWAS</b>								
<b>IGAD</b>								
<b>SADC</b>								
<b>UEMOA</b>								
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>								
<b>Regional Office for Europe and Central Asia</b>								
<b>Regional Office for Latin America and the Caribbean</b>								
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 34: Meat producers

	Total meat production									
	total		beef and buffalo		pig		sheep and goat		poultry	
	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11
<b>Africa</b>	16 536.9	3.5	5 773.2	2.9	1 282.9	5.8	2 758.0	2.8	4 930.5	5.0
<b>North Africa</b>	4 223.3	3.6	1 239.5	3.3	1.3	-5.7	668.2	3.0	2 104.8	4.5
Algeria	689.0	1.8	125.4	-0.5	0.1	-0.9	270.2	4.0	280.0	1.3
Egypt	1 993.7	3.8	850.3	4.2	0.5	-16.0	127.2	4.9	900.8	3.9
Libya	180.1	2.3	8.0	-0.2			43.5	3.4	123.5	2.1
Morocco	1 083.0	5.2	198.7	3.2	0.6	0.4	167.0	1.2	650.5	7.8
Sudan										
Tunisia	277.4	0.9	57.2	-0.4	0.1	-3.3	60.3	-0.4	150.0	2.3
<b>Regional Office for Africa</b>	12 271.1	3.4	4 531.9	2.8	1 266.8	5.8	2 089.0	2.8	2 804.0	5.3
<b>Central Africa</b>	994.1	3.1	323.5	2.5	85.3	4.2	126.5	2.6	103.4	8.2
Cameroon	330.9	4.0	118.0	2.2	39.0	8.4	37.1	1.4	70.0	11.5
Central African Republic	164.6	3.2	88.0	2.5	15.9	2.6	23.6	6.9	5.9	5.7
Chad	150.7	2.5	97.2	2.5	0.6	3.2	41.5	2.8	5.3	1.2
Congo	57.3	7.5	6.4	13.3	1.9	2.8	1.5	2.9	6.5	1.0
Democratic Republic of the Congo	252.8	1.4	12.6	-0.6	24.5	-0.6	21.7	-0.1	11.0	-0.5
Equatorial Guinea	0.6	0.8	0.0	0.7	0.2	0.8	0.1	0.6	0.2	1.0
Gabon	36.1	1.2	1.1	0.3	3.2	0.2	1.0	0.6	3.8	0.0
Sao Tome and Principe	1.1	2.4	0.1	2.2	0.1	3.4	0.0	1.3	0.8	2.4
<b>East Africa</b>	3 289.4	2.6	1 743.7	3.0	155.8	3.5	723.9	1.7	260.5	3.7
Burundi	24.4	2.1	9.9	1.3	2.1	2.8	3.2	-0.2	7.1	1.9
Djibouti	11.3	0.0	6.0	0.0			4.6	0.1		
Eritrea	42.6	2.6	25.9	4.3			12.4	0.2	1.7	-0.8
Ethiopia	737.1	4.4	412.0	3.1	1.8	2.3	153.0	8.6	65.2	5.1
Kenya	635.9	4.6	458.0	5.4	12.8	1.0	90.2	2.5	21.5	4.5
Rwanda	69.8	5.9	34.8	6.6	7.8	8.2	9.4	9.6	2.5	5.2
Somalia	190.6	1.0	59.6	-0.3	0.1	-1.6	83.2	1.9	3.5	0.9
South Sudan										
Sudan (former)	795.5	-0.4	345.0	1.4			279.0	-2.8	40.0	4.0
Uganda	381.1	3.3	129.8	2.7	117.0	3.8	42.0	3.1	62.1	3.2
United Republic of Tanzania	401.0	1.6	262.6	1.2	14.1	1.0	47.1	1.6	56.8	2.6
<b>Southern Africa</b>	4 411.7	3.9	1 430.9	2.0	660.3	7.7	309.1	2.2	1 836.8	5.4
Angola	229.7	4.0	100.3	0.6	76.4	9.2	21.6	6.4	22.5	10.2
Botswana	86.3	3.4	47.0	4.5	0.5	-5.8	7.5	0.6	6.2	-3.1
Comoros	2.2	1.3	1.2	1.9			0.5	0.7	0.5	0.4
Lesotho	29.0	0.5	12.5	1.9	3.6	-3.6	6.3	0.3	1.6	-1.3
Madagascar	313.9	2.3	165.8	1.0	55.4	9.2	12.6	4.8	72.2	1.0
Malawi	129.5	6.8	34.1	6.3	44.2	6.9	28.9	11.4	22.4	3.5
Mauritius	51.1	6.3	2.4	-2.9	0.8	-0.7	0.1	-5.1	47.1	7.6
Mozambique	185.5	-0.4	19.2	4.4	97.8	-2.0	25.0	-0.1	43.0	2.5
Namibia	77.3	-2.1	34.3	-5.5	4.6	9.1	16.1	-0.8	16.0	4.4
Seychelles	1.4	-3.7	0.0	-22.0	0.5	-6.6	0.0	0.5	0.9	-1.1
South Africa	2 854.6	4.7	828.6	2.6	320.0	10.8	165.4	0.7	1 492.5	5.6
Swaziland	26.0	0.2	16.4	-0.6	1.9	3.9	2.2	-3.3	5.5	4.3
Zambia	178.5	2.5	67.2	2.2	23.1	7.8	9.5	5.8	43.0	1.9
Zimbabwe	246.6	2.5	102.0	0.1	31.5	3.4	13.4	-0.3	63.4	8.7
<b>West Africa</b>	3 575.9	3.7	1 033.8	3.8	365.5	3.9	929.5	3.9	603.2	5.4
Benin	75.1	4.0	30.1	4.8	4.8	2.2	8.3	2.4	23.8	6.2
Burkina Faso	256.7	4.2	122.5	5.4	31.8	4.3	53.6	3.0	38.2	3.4
Cabo Verde	11.3	3.3	0.9	6.2	8.6	2.6	1.0	7.3	0.7	4.2
Côte d'Ivoire	249.5	1.9	29.2	-1.2	7.2	1.1	12.3	1.5	33.7	3.9
Gambia	8.6	2.0	3.8	0.9	0.8	7.0	1.5	7.1	1.2	2.4
Ghana	237.8	2.7	20.6	-1.3	19.1	5.2	37.8	6.2	41.0	7.0
Guinea	91.5	5.4	58.3	5.7	1.7	0.7	16.6	7.0	9.0	7.2
Guinea-Bissau	25.8	3.3	6.5	3.4	15.0	3.2	2.4	3.7	1.9	4.3
Liberia	32.5	3.7	1.1	1.1	9.7	7.5	1.9	3.4	11.8	5.4
Mali	366.5	6.3	156.0	9.7	2.6	2.9	123.0	5.9	41.2	3.2
Mauritania	101.5	2.1	27.0	2.3			45.0	2.5	4.5	0.9
Niger	318.0	3.2	136.7	1.3	1.4	0.3	109.4	5.0	12.0	0.8
Nigeria	1 508.6	3.3	357.5	2.3	239.4	3.9	463.7	3.0	285.0	5.4
Senegal	187.2	4.4	65.1	3.2	11.1	1.7	38.2	4.5	55.8	8.3
Sierra Leone	39.4	4.6	9.0	4.3	2.1	-0.6	3.4	10.4	13.8	2.4
Togo	66.0	5.3	9.4	3.2	10.1	4.7	11.3	4.3	29.6	8.6
<b>CEMAC</b>	740.2	3.7	310.8	2.6	60.7	6.2	104.7	3.2	91.7	9.3
<b>CEN-SAD</b>	8 263.5	3.3	2 684.7	3.3	372.9	3.8	1 709.4	2.3	2 470.8	5.1
<b>COMESA</b>	6 073.6	3.1	2 681.5	3.4	323.9	5.0	853.2	2.6	1 490.5	3.8
<b>ECCAS</b>	1 248.2	3.2	433.8	2.0	163.9	6.5	151.2	3.1	133.0	8.2
<b>ECOWAS</b>	3 474.4	3.7	1 006.8	3.9	365.5	3.9	884.5	3.9	598.7	5.5
<b>IGAD</b>	2 794.1	2.6	1 436.4	3.3			664.3	1.6	194.1	4.1
<b>SADC</b>	5 063.3	3.6	1 704.9	1.9	698.9	7.3	377.4	2.0	1 904.1	5.3
<b>UEMOA</b>	1 544.8	4.2	555.5	4.9	84.0	3.3	358.5	4.7	236.2	5.4
<b>UMA</b>	2 331.1	3.3	416.2	1.5			586.0	2.6	1 208.5	5.0
<b>Regional Office for Asia and the Pacific</b>	129 303.1	3.5	19 607.6	2.0	63 596.5	3.4	7 753.5	2.2	35 422.1	5.3
<b>Regional Office for Europe and Central Asia</b>	63 842.0	1.8	13 132.1	0.5	27 807.7	1.2	2 200.7	0.6	19 312.9	5.3
<b>Regional Office for Latin America and the Caribbean</b>	47 166.0	3.6	17 021.0	2.1	6 884.8	2.9	446.2	0.9	22 242.2	5.5
<b>Regional Office for the Near East</b>	9 808.7	3.0	2 238.8	2.7			1 823.3	0.8	5 269.5	4.9
<b>World</b>	298 871.1	2.7	66 333.8	1.4	110 270.2	2.6	13 407.0	2.0	102 249.0	4.3

TABLE 35: Eggs, milk, and processed milk

	Production							
	eggs		milk		butter and ghee	cheese	evaporat and condensed milk	skim milk and buttermilk
	thousand tonnes 2011	p.a. growth percent 2000-11	million tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011
<b>Africa</b>	2 771.2	4.1	41.6	4.9				
<b>North Africa</b>	920.6	3.5	12.4	4.6				
Algeria	195.0	6.2	3.0	6.4	2.7	1.5		
Egypt	305.5	5.1	5.8	3.9	127.6	644.5		
Libya	62.5	0.4	0.2	0.9				
Morocco	265.0	1.1	2.3	5.7	33.5	44.3		
Sudan								
Tunisia	92.6	1.1	1.1	1.6	6.5	4.1		
<b>Regional Office for Africa</b>	1 843.9	4.4	29.2	5.0				
<b>Central Africa</b>	34.9	1.6	0.6	2.1				
Cameroon	15.0	1.3	0.2	2.2				
Central African Republic	2.3	1.1	0.1	1.8				
Chad	4.0	0.8	0.3	2.1	0.5			
Congo	1.6	3.2	0.0	2.1				
Democratic Republic of the Congo	8.9	2.2	0.0	4.3				
Equatorial Guinea	0.4	3.3						
Gabon	2.1	0.7	0.0	-0.3				
Sao Tome and Principe	0.6	3.9	0.0	2.0				
<b>East Africa</b>	240.0	2.4	19.1	5.6				
Burundi	3.0	0.2	0.1	7.6	0.2			
Djibouti			0.0	1.2				
Eritrea	2.2	2.6	0.1	4.7	1.4	0.6		
Ethiopia	39.6	3.0	4.4	14.2	17.6	5.8		
Kenya	94.4	4.1	4.3	5.5	14.7	0.3	0.8	2.5
Rwanda	2.9	2.5	0.2	5.3	0.7			
Somalia	2.4	-0.4	2.6	2.1	9.5			
South Sudan								
Sudan (former)	38.0	1.0	4.3	-2.7	17.0	155.7		
Uganda	23.1	1.1	1.2	8.0	0.0		0.0	
United Republic of Tanzania	34.2	-0.3	1.8	7.8	31.5	13.0		
<b>Southern Africa</b>	684.9	5.4	4.9	1.5				
Angola	4.5	0.4	0.2	-0.5	0.5	1.2		
Botswana	4.5	3.1	0.1	-0.4	1.1	2.6		
Comoros	0.8	0.4	0.0	1.2				
Lesotho	1.7	1.1	0.0	2.1				
Madagascar	20.6	0.5	0.6	0.4			1.7	
Malawi	20.2	0.3	0.1	3.4				
Mauritius	10.5	-1.6	0.0	0.6				
Mozambique	41.6	34.1	0.1	0.7				
Namibia	4.4	6.2	0.1	2.4	0.6	0.4		
Seychelles	1.3	-4.3	0.0	-26.6				
South Africa	490.0	4.0	3.3	2.3	12.4	44.2	56.4	15.0
Swaziland	1.2	0.9	0.0	1.1	0.2			
Zambia	54.0	3.0	0.1	1.5	0.3	1.1		
Zimbabwe	29.6	2.7	0.4	-1.6	2.1	2.5	5.7	1.1
<b>West Africa</b>	884.2	4.2	4.5	6.9				
Benin	14.4	6.9	0.0	2.9				
Burkina Faso	52.0	2.6	0.3	3.9	1.0			
Cabo Verde	2.2	1.4	0.0	8.4				
Côte d'Ivoire	32.0	-0.3	0.0	1.7				
Gambia	0.9	2.2	0.0	1.6				
Ghana	39.8	5.6	0.0	1.3				
Guinea	25.0	6.8	0.1	4.7	0.3			
Guinea-Bissau	1.4	3.2	0.0	2.5				
Liberia	5.6	2.4	0.0	-0.2				
Mali	14.0	1.5	1.8	12.4				
Mauritania	5.5	1.4	0.4	1.7	0.9	5.6		
Niger	7.9	0.2	1.0	3.8	13.0	55.6		
Nigeria	636.0	4.3	0.6	3.4	12.7	10.2		
Senegal	28.9	9.7	0.2	4.1	0.7			
Sierra Leone	9.2	1.2	0.0	6.9				
Togo	9.3	3.6	0.0	1.0	0.0			
<b>CEMAC</b>	25.4	1.3	0.6	2.1				
<b>CEN-SAD</b>	1 626.8	3.4	20.8	3.0				
<b>COMESA</b>	718.4	3.4	21.8	5.0				
<b>ECCAS</b>	42.4	1.4	0.9	2.0				
<b>ECOWAS</b>	878.7	4.2	4.1	7.4				
<b>IGAD</b>	199.8	2.9	17.0	5.3	60.3			
<b>SADC</b>	727.2	5.1	6.8	3.3				
<b>UEMOA</b>	160.0	3.5	3.3	8.3				
<b>UMA</b>	620.6	2.6	7.0	5.0	43.5	55.6		
<b>Regional Office for Asia and the Pacific</b>	43 830.4	2.7	304.7	4.4				
<b>Regional Office for Europe and Central Asia</b>	12 239.2	1.6	249.8	0.6	2 599.7	10 609.2	2 079.9	1 411.8
<b>Regional Office for Latin America and the Caribbean</b>	7 495.4	3.6	81.8	3.4				
<b>Regional Office for the Near East</b>	2 384.0	3.2	30.4	2.8	411.3	1 386.9		
<b>World</b>	70 615.6	2.5	739.4	2.8				

TABLE 36: Fish production

	Fish production									
	capture					aquaculture				
	total		inland	marine	p.a. growth percent	total		inland	marine	p.a. growth percent
	thousand tonnes 2010	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011	2000-11	thousand tonnes 2010	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011	2000-11
<b>Africa</b>	7 695.9	7 618.2	2 703.7	4 914.6	2.0	1 425.7	1 539.9	1 387.8		
<b>North Africa</b>	1 770.2	1 574.6	262.9	1 311.7	0.1	928.5	998.8	990.9		10.2
Algeria	93.6	101.8		101.8	-1.0	1.8	2.2	2.0	0.2	18.4
Egypt	385.2	375.4	253.1	122.3	-0.2	919.6	986.8	986.8		10.2
Libya	50.0	30.0	0.0	30.0	-4.5	0.2	0.2	0.0	0.2	8.3
Morocco	1 143.7	964.7	9.0	955.7	0.5	1.5	1.4	1.1	0.3	-2.7
Sudan										
Tunisia	97.8	102.8	0.9	102.0	0.7	5.4	8.1	0.9	7.2	16.2
<b>Regional Office for Africa</b>	5 901.4	6 010.6	2 440.7	3 569.8	2.3	497.0	540.9	396.9		22.8
<b>Central Africa</b>	570.2	587.2	444.4	142.9	0.9	4.2	4.2	4.2		7.9
Cameroon	140.0	140.0	75.0	65.0	2.0	0.8	0.8	0.8		29.2
Central African Republic	35.0	35.0	35.0		8.0	0.2	0.2	0.2		3.2
Chad	50.0	60.0	60.0		-2.9					
Congo	65.2	73.2	33.4	39.8	4.3	0.1	0.1	0.1		0.3
Democratic Republic of the Congo	236.0	236.0	230.0	6.0	-0.4	3.0	3.0	3.0		3.3
Equatorial Guinea	7.4	7.1	1.0	6.1	6.3	0.0	0.0	0.0		
Gabon	32.0	32.0	10.0	22.0	-3.6	0.2	0.2	0.2		-10.7
Sao Tome and Principe	4.6	3.9	0.0	3.9	-0.3					
<b>East Africa</b>	1 081.8	1 148.5	1 020.8	127.7	2.7	242.6	248.4	111.4		27.2
Burundi	17.3	10.7	10.7		-4.3	0.0	0.0	0.0		0.0
Djibouti	1.6	1.7	0.0	1.7	6.9					
Eritrea	3.3	2.6	0.0	2.6	-13.3					
Ethiopia	18.1	24.0	24.0		4.0	0.0	0.0	0.0		4.8
Kenya	140.4	181.6	174.4	7.2	-1.5	12.2	22.1	22.1		40.8
Rwanda	13.0	17.2	17.2		8.9	0.6	0.6	0.6		8.0
Somalia	30.0	30.0	0.2	29.8	2.0					
South Sudan										
Sudan (former)	71.4	71.0	66.0	5.0	2.7	2.2	2.2	2.2		7.4
Uganda	413.8	437.4	437.4		6.5	95.0	85.7	85.7		52.6
United Republic of Tanzania	373.1	372.3	291.0	81.3	0.4	132.5	137.6	0.6	137.0	9.6
<b>Southern Africa</b>	1 909.9	1 799.4	279.7	1 519.7	1.0	34.6	41.4	34.5		9.4
Angola	263.0	262.5	10.0	252.5	0.8	0.3	0.4	0.4		49.3
Botswana	0.1	0.2	0.2		3.2					
Comoros	52.3	25.1	0.0	25.1	6.0					
Lesotho	0.0	0.0	0.0		3.1	0.3	0.3	0.3		39.0
Madagascar	129.6	127.1	30.8	96.2	0.4	10.9	10.5	8.8	1.7	2.6
Malawi	98.3	82.4	82.4		4.6	2.6	3.4	3.4		18.5
Mauritius	7.2	5.0	0.0	5.0	-5.8	0.6	0.5	0.1	0.5	18.0
Mozambique	164.7	189.0	72.6	116.5	14.8	0.9	0.8	0.3	0.5	
Namibia	379.3	413.9	2.8	411.1	-3.2	0.7	0.6	0.1	0.5	20.9
Seychelles	87.1	75.4	0.0	75.4	7.9	0.0	0.0	0.0		
South Africa	641.3	538.8	0.9	537.9	-1.9	5.1	6.5	2.7	3.7	7.8
Swaziland	0.1	0.1	0.1		0.0	0.2	0.2	0.2		11.1
Zambia	76.4	69.4	69.4		0.4	10.3	10.5	10.5		8.6
Zimbabwe	10.5	10.5	10.5		-2.0	2.7	7.6	7.6		12.2
<b>West Africa</b>	2 339.5	2 475.4	695.8	1 779.6	3.4	215.6	246.9	246.8		21.0
Benin	39.8	38.8	31.1	7.7	1.7	0.4	0.4	0.4		
Burkina Faso	14.5	15.0	15.0		5.3	0.4	0.3	0.3		44.0
Cabo Verde	19.5	22.5	0.0	22.5	7.1					
Côte d'Ivoire	69.5	71.7	6.4	65.3	-1.0	1.7	3.4	3.4		9.9
Gambia	46.4	45.0	4.4	40.6	4.1	0.0	0.0	0.0	0.0	15.8
Ghana	351.2	333.5	90.0	243.5	-2.7	10.2	19.1	19.1		13.0
Guinea	113.5	115.0	18.0	97.0	2.1	0.0	0.0	0.0		
Guinea-Bissau	6.8	6.8	0.1	6.6	0.6					
Liberia	8.0	8.0	0.8	7.2	-3.3	0.0	0.0	0.0		-0.9
Mali	100.0	108.1	108.1		-0.1	2.1	2.1	2.1		47.0
Mauritania	276.2	372.0	15.0	357.0	11.3					
Niger	40.0	53.2	53.2		11.4	0.1	0.1	0.1		17.1
Nigeria	617.0	635.5	301.3	334.2	3.4	200.5	221.1	221.1		21.6
Senegal	409.5	427.1	33.4	393.7	-0.2	0.1	0.3	0.2	0.1	11.2
Sierra Leone	200.0	199.0	14.0	185.0	9.3	0.0	0.0	0.0		3.8
Togo	27.5	24.1	5.0	19.1	0.7	0.1	0.0	0.0		0.0
<b>CEMAC</b>	329.6	347.3	214.4	133.0	1.8	1.2	1.2	1.2		18.8
<b>CEN-SAD</b>	3 850.3	3 664.2	1 087.0	2 577.2	1.3	1 144.7	1 245.8	1 237.9		12.3
<b>COMESA</b>	1 811.5	1 782.4	1 405.9		2.1	1 060.1	1 133.6	1 131.2		13.9
<b>ECCAS</b>	850.5	860.4	465.0	395.4	0.8	4.6	4.7	4.7		11.4
<b>ECOWAS</b>	2 063.2	2 103.4	680.8	1 422.6	2.0	215.6	246.9	246.8		21.0
<b>IGAD</b>	678.5	748.4	702.0		3.8					
<b>SADC</b>	2 466.6	2 382.7	800.7		0.7	170.0	182.0	38.1		9.4
<b>UEMOA</b>	707.6	744.9	252.4		0.8	4.8	6.6	6.4		24.1
<b>UMA</b>	1 661.3	1 571.3	24.9	1 546.4	2.9	8.9	12.0	4.1	8.0	14.3
<b>Regional Office for Asia and the Pacific</b>	52 193.1	52 427.4	7 584.2	40 830.9	1.6	71 078.9	76 070.0	40 619.5		7.9
<b>Regional Office for Europe and Central Asia</b>	14 138.8	13 647.7	470.0		-1.3	2 665.7	2 824.5	578.3		4.0
<b>Regional Office for Latin America and the Caribbean</b>	12 195.8	16 669.0	508.0	16 161.0	-1.1	1 933.3	2 396.8	1 009.3		10.9
<b>Regional Office for the Near East</b>	3 096.1	3 029.1	453.1	2 576.0	2.2	1 208.3	1 305.9	1 295.8		11.9
<b>World</b>	89 956.7	94 497.1	11 053.9	79 033.6	0.6	78 066.9	83 704.6	43 994.8		

TABLE 37: Volume of total cereal trade

	Cereals							
	imports				exports			
	thousand tonnes 2000	thousand tonnes 2009	thousand tonnes 2010	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2009	thousand tonnes 2010	thousand tonnes 2011
<b>Africa</b>	45 125.0	63 896.6	66 449.8	70 899.3	2 125.1	3 555.8	3 982.9	5 009.8
<b>North Africa</b>	27 587.8	31 994.8	36 411.0	38 335.6	725.9	913.0	847.3	420.2
Algeria	7 508.9	7 910.3	7 930.0	11 091.7	0.0	6.0	8.4	0.0
Egypt	9 654.8	14 584.9	16 814.0	16 999.5	395.3	773.5	704.2	217.6
Libya	2 718.7	3 103.5	2 903.9	1 882.1	0.7	4.1	0.0	0.0
Morocco	5 215.0	4 415.1	5 510.6	5 602.8	98.5	99.6	122.5	17.1
Sudan								
Tunisia	2 490.3	1 981.0	3 252.5	2 759.6	231.5	29.7	12.3	185.4
<b>Regional Office for Africa</b>	17 536.8	31 901.7	30 038.8	32 563.3	1 399.2	2 642.8	3 135.6	4 589.6
<b>Central Africa</b>	1 127.6	2 068.7	2 033.4	2 458.6	1.4	25.7	30.5	22.4
Cameroon	396.6	907.4	779.5	946.1	1.0	0.1	6.0	1.7
Central African Republic	41.3	41.6	37.8	43.7	0.0	0.0	0.0	0.0
Chad	50.6	192.7	183.6	167.0	0.0	0.0	0.0	0.0
Congo	218.3	233.8	201.7	380.0	0.0	4.3	4.6	0.7
Democratic Republic of the Congo	288.7	490.2	643.4	717.0	0.1	21.3	20.0	20.0
Equatorial Guinea	14.4	25.0	29.3	32.9				
Gabon	107.4	159.6	145.3	157.1	0.3	0.0	0.0	0.0
Sao Tome and Principe	10.4	18.4	12.8	14.8	0.0	0.0	0.0	0.0
<b>East Africa</b>	5 169.7	10 413.5	8 843.1	9 598.9	187.9	197.3	585.8	508.8
Burundi	38.0	69.6	61.7	47.1	0.0	0.5	0.8	1.4
Djibouti	68.6	560.6	183.3	619.5	0.0	0.0	0.0	0.0
Eritrea	292.9	252.2	219.9	303.2	0.0	0.0	0.0	0.0
Ethiopia	1 271.6	2 229.2	2 134.1	1 850.8	4.4	0.1	59.2	83.1
Kenya	1 165.0	2 710.8	1 420.0	2 229.0	19.0	18.9	83.3	79.6
Rwanda	41.3	131.2	231.8	205.4	0.0	0.4	2.1	16.4
Somalia	261.1	610.9	362.7	469.2	0.0	0.0	0.0	0.0
South Sudan								
Sudan (former)	1 312.5	2 384.8	2 539.5	2 140.6	52.7	1.2	5.3	32.6
Uganda	172.3	513.7	463.7	531.2	7.6	105.1	210.6	126.1
United Republic of Tanzania	546.4	950.6	1 226.3	1 202.8	104.3	71.3	224.5	169.6
<b>Southern Africa</b>	4 177.7	6 968.1	6 455.9	7 544.3	1 069.9	1 968.1	1 634.4	3 766.5
Angola	540.9	819.6	786.8	877.5	0.0	0.5	0.5	0.5
Botswana	178.9	208.5	292.0	201.8	3.3	6.9	4.7	2.8
Comoros	27.7	46.4	67.3	52.1	0.0	0.0	0.0	0.0
Lesotho	194.8	291.8	256.0	256.2	1.4	0.1	0.1	0.1
Madagascar	314.7	221.3	283.7	378.1	3.3	0.8	1.6	2.9
Malawi	72.2	214.6	199.1	169.4	11.0	15.4	26.1	387.8
Mauritius	288.1	328.3	326.8	291.0	38.8	33.3	36.9	23.3
Mozambique	426.1	1 018.8	958.2	891.4	0.0	15.8	62.2	61.0
Namibia	156.9	131.2	161.3	79.5	2.3	0.2	0.3	0.5
Seychelles	12.2	17.5	18.3	13.7	0.0	0.0	0.0	0.0
South Africa	1 710.4	2 153.1	2 106.0	3 013.2	815.8	1 822.5	1 376.3	2 715.9
Swaziland	76.5	169.9	174.3	179.9	4.1	0.8	0.7	0.8
Zambia	69.4	70.4	17.5	27.6	20.0	71.4	124.7	569.7
Zimbabwe	109.0	1 276.7	808.7	1 112.9	170.0	0.4	0.3	1.3
<b>West Africa</b>	7 061.8	12 451.4	12 706.4	12 961.5	140.1	451.7	884.8	291.9
Benin	94.2	714.3	649.1	441.9	2.1	143.4	581.9	10.7
Burkina Faso	263.2	375.0	354.8	432.6	59.2	17.7	35.0	24.8
Cabo Verde	63.9	135.3	84.5	73.0	0.0	0.0	0.0	0.0
Côte d'Ivoire	746.6	1 664.7	1 409.2	1 441.9	2.5	126.9	104.0	105.9
Gambia	122.3	206.6	274.6	164.0	0.2	1.1	0.1	1.9
Ghana	450.8	804.5	685.4	944.8	2.4	0.4	8.8	0.2
Guinea	288.2	402.9	430.7	260.8	0.1	15.1	10.1	10.1
Guinea-Bissau	88.8	90.7	63.4	74.0	0.0	0.0	0.0	0.0
Liberia	216.5	357.1	339.3	168.7	0.0	0.1	0.1	0.1
Mali	113.8	242.2	213.7	239.1	12.8	0.2	1.5	2.8
Mauritania	274.0	588.0	459.4	439.1				
Niger	256.8	257.9	326.3	272.0	0.1	10.9	40.9	8.1
Nigeria	3 051.1	4 981.1	5 872.2	6 245.1	29.3	0.3	0.3	2.0
Senegal	793.6	1 332.1	1 273.1	1 365.5	0.5	103.6	72.8	121.7
Sierra Leone	141.8	135.4	142.4	217.7	0.0	0.0	0.0	0.0
Togo	96.4	163.5	128.3	181.3	30.7	32.1	29.5	3.7
<b>CEMAC</b>	828.5	1 560.2	1 377.2	1 726.8	1.3	4.4	10.6	2.5
<b>CEN-SAD</b>	28 569.3	39 498.9	43 806.8	43 227.9	918.5	1 344.8	1 719.1	734.7
<b>COMESA</b>	17 994.1	29 375.8	29 511.0	29 750.3	726.8	1 047.1	1 275.9	1 562.6
<b>ECCAS</b>	1 706.5	2 957.9	2 881.9	3 383.2	1.4	26.7	31.8	24.3
<b>ECOWAS</b>	6 787.8	11 863.4	12 247.0	12 522.4	140.1	451.7	884.8	291.9
<b>IGAD</b>	4 544.1	9 262.1	7 323.3	8 143.6	83.6	125.2	358.4	321.5
<b>SADC</b>	4 985.0	8 362.4	8 258.4	9 412.0	1 174.3	2 060.7	1 878.9	3 956.0
<b>UEMOA</b>	2 453.4	4 840.5	4 418.0	4 448.3	108.0	434.8	865.6	277.7
<b>UMA</b>	18 207.0	17 997.8	20 056.4	21 775.3	330.6	139.4	143.1	202.5
<b>Regional Office for Asia and the Pacific</b>	85 147.4	86 287.1	90 411.0	90 783.1	58 783.7	74 750.4	71 967.3	86 798.4
<b>Regional Office for Europe and Central Asia</b>	64 609.5	85 544.0	84 544.8	88 890.3	82 249.3	144 818.9	131 167.7	126 372.3
<b>Regional Office for Latin America and the Caribbean</b>	43 983.9	46 538.7	49 685.7	51 468.6	26 006.6	33 720.0	43 685.7	49 072.7
<b>Regional Office for the Near East</b>	61 417.3	77 898.1	79 128.3	75 818.5	1 548.2	2 695.8	3 414.8	1 111.9
<b>World</b>	271 019.8	328 858.6	336 408.2	343 234.5	273 088.0	330 193.0	340 306.1	349 647.4

TABLE 38: Volume of total oilseeds, and sugar and honey trade

	Oilseeds				Sugar and honey			
	imports		exports		imports		exports	
	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011
<b>Africa</b>	1 034.7	2 117.1	1 090.5	1 274.4	5 150.3	10 837.1	4 477.6	3 744.9
<b>North Africa</b>	766.5	1 807.0	34.5	52.8	2 295.5	4 389.0	355.1	858.7
Algeria	3.4	51.3	0.0	0.0	844.6	1 589.7	0.4	350.5
Egypt	380.8	1 213.7	11.8	52.2	443.1	1 294.1	217.0	442.0
Libya	29.6	1.6	22.7	0.1	166.7	159.0	0.1	0.0
Morocco	322.2	58.1	0.1	0.1	563.0	870.5	135.8	45.4
Sudan								
Tunisia	30.6	482.3	0.0	0.3	278.1	475.7	1.8	20.8
<b>Regional Office for Africa</b>	268.2	310.2	1 056.0	1 221.6	2 854.6	6 448.1	4 122.5	2 886.2
<b>Central Africa</b>	8.6	3.6	8.7	0.7	168.4	376.7	35.4	17.1
Cameroon	7.8	0.4	1.4	0.1	51.5	100.2	1.1	5.6
Central African Republic	0.0	0.0	0.1	0.0	9.4	13.5	0.0	0.0
Chad	0.0	0.0	7.0	0.5	25.9	91.7	0.0	0.0
Congo	0.1	0.1	0.0	0.0	29.6	2.9	32.5	7.5
Democratic Republic of the Congo	0.1	1.3	0.0	0.0	47.7	157.1	0.0	3.5
Equatorial Guinea					1.5	7.1		
Gabon	0.6	1.7	0.0	0.1	1.0	1.9	1.8	0.5
Sao Tome and Principe	0.0	0.0	0.2	0.0	1.7	2.2		
<b>East Africa</b>	15.9	89.6	332.4	512.8	557.4	1 917.9	351.6	346.9
Burundi	0.9	1.2	0.0	0.0	1.9	22.6	5.0	0.3
Djibouti	0.0	1.2	0.0	0.2	14.2	152.1	0.0	87.4
Eritrea			0.5	0.4	8.9	78.3	0.0	0.0
Ethiopia	1.7	3.6	38.3	275.6	23.8	252.1	71.2	0.7
Kenya	4.9	40.2	1.1	10.6	118.8	303.6	19.8	58.4
Rwanda	0.0	13.1	0.0	0.0	8.0	51.0	0.0	0.0
Somalia	0.0	0.0	0.0	0.0	151.8	129.0	0.0	0.0
South Sudan								
Sudan (former)	2.3	13.5	267.4	113.9	30.0	569.3	237.9	61.1
Uganda	0.2	4.0	6.5	25.0	64.5	178.4	1.9	111.0
United Republic of Tanzania	5.9	12.8	18.5	87.1	135.5	181.7	15.8	27.9
<b>Southern Africa</b>	207.2	126.5	178.4	229.7	636.7	1 081.6	3 626.8	2 133.8
Angola	0.1	1.7	0.0	0.0	90.9	259.3	0.0	0.0
Botswana	0.9	3.6	1.8	11.3	56.3	79.1	1.5	2.2
Comoros	0.0	0.3	0.0	0.0	2.3	5.6	0.0	0.0
Lesotho	1.5	1.7			26.7	31.4		
Madagascar	0.0	0.2	0.5	2.3	31.6	114.5	1.0	20.3
Malawi	6.2	18.2	3.3	42.5	7.9	3.5	48.2	294.3
Mauritius	1.8	2.2	0.0	0.1	40.6	45.5	502.4	499.2
Mozambique	0.3	7.5	18.9	46.4	238.1	58.6	68.6	288.7
Namibia	0.6	1.0	0.0	0.0	71.8	22.4	6.3	0.6
Seychelles	1.4	2.0	0.0	0.0	3.4	2.4	0.0	0.0
South Africa	178.4	69.6	38.3	91.4	38.0	378.7	1 686.2	286.9
Swaziland	4.1	4.3	12.5	0.9	14.4	9.9	947.2	312.0
Zambia	8.2	7.7	12.0	18.1	3.7	8.6	87.9	319.8
Zimbabwe	3.7	6.5	91.1	16.6	10.9	62.0	277.6	110.0
<b>West Africa</b>	36.5	90.5	536.5	478.4	1 492.2	3 071.9	108.8	388.4
Benin	0.7	2.5	119.6	23.9	18.6	119.8	0.2	84.2
Burkina Faso	0.1	8.8	27.1	160.8	11.1	68.7	2.9	0.0
Cabo Verde	0.8	0.0	0.0	0.0	13.9	19.9	0.0	0.0
Côte d'Ivoire	1.7	1.9	50.2	37.0	33.5	22.9	81.1	11.2
Gambia	9.0	0.0	27.0	2.2	84.2	73.6	0.3	18.3
Ghana	0.4	14.3	48.3	38.4	134.4	481.1	3.6	225.8
Guinea	0.0	0.1	13.4	1.2	58.8	128.5	0.0	0.0
Guinea-Bissau	0.0	0.6	3.7	0.0	11.1	12.7	0.0	9.2
Liberia	0.0	0.5	0.0	0.0	11.8	15.4	0.0	0.0
Mali	0.4	11.0	12.7	33.0	95.4	91.8	0.0	0.0
Mauritania	0.1	0.1	0.0	0.0	206.4	202.9	0.0	0.0
Niger	0.7	0.6	4.6	2.6	51.9	60.0	2.0	16.2
Nigeria	19.1	34.2	199.4	150.0	705.7	1 535.9	1.3	2.3
Senegal	0.5	15.6	3.4	19.3	23.7	148.0	15.1	4.3
Sierra Leone	0.0	0.0	0.0	0.0	12.9	22.5	0.0	0.0
Togo	2.9	0.1	26.9	9.9	19.0	68.1	2.3	16.8
<b>CEMAC</b>	8.4	2.2	8.5	0.7	119.0	217.3	35.4	13.6
<b>CEN-SAD</b>	801.0	1 861.0	832.6	644.9	2 906.5	6 559.3	701.4	1 045.0
<b>COMESA</b>	445.9	1 334.8	467.8	558.7	1 042.4	3 469.5	2 417.1	2 320.1
<b>ECCAS</b>	9.7	6.5	8.7	0.7	261.2	658.5	40.4	17.4
<b>ECOWAS</b>	36.4	90.4	536.5	478.4	1 285.7	2 869.0	108.8	388.4
<b>IGAD</b>	9.1	62.5	313.9	425.6	412.0	1 662.7	330.8	318.6
<b>SADC</b>	213.3	140.4	196.8	316.8	817.6	1 414.8	3 642.6	2 165.3
<b>UEMOA</b>	7.0	41.2	248.4	286.5	264.2	592.0	103.5	141.9
<b>UMA</b>	385.8	593.3	22.7	0.6	2 058.8	3 297.7	138.0	416.7
<b>Regional Office for Asia and the Pacific</b>	28 711.6	71 606.6	5 406.5	5 458.7	18 284.5	21 563.1	13 966.0	15 656.7
<b>Regional Office for Europe and Central Asia</b>	26 913.0	34 699.6	10 010.2	16 697.5	20 140.5	25 011.2	14 318.4	13 673.1
<b>Regional Office for Latin America and the Caribbean</b>	7 883.2	7 069.5	18 651.6	51 548.5	1 836.1	5 393.5	16 386.6	33 548.6
<b>Regional Office for the Near East</b>	1 700.7	4 934.7	339.4	201.2	6 967.1	12 436.2	1 327.0	2 101.9
<b>World</b>	68 961.3	121 238.8	67 741.0	121 908.8	49 827.8	74 548.3	51 314.1	71 486.3

TABLE 39: Volume of total meat and dairy products trade

	Total meat				Dairy products (milk equivalent)			
	imports		exports		imports		exports	
	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011
<b>Africa</b>	778.1	2 011.0	118.5	156.6	4 870.7	8 959.2	356.5	1 010.2
<b>North Africa</b>	234.8	338.5	1.7	9.1	2 759.9	5 561.6	69.3	695.0
Algeria	18.6	65.6	0.0	0.0	1 552.5	2 792.8	0.0	1.2
Egypt	205.7	243.8	0.8	3.1	727.8	2 120.9	17.7	643.3
Libya	3.3	9.1	0.0	0.0	157.0	288.7	0.4	0.1
Morocco	2.8	14.3	0.3	0.6	254.1	280.1	9.6	8.1
Sudan								
Tunisia	4.5	5.8	0.6	5.3	68.5	79.2	41.6	42.3
<b>Regional Office for Africa</b>	543.1	1 672.3	116.7	147.5	2 110.1	3 396.9	287.2	315.2
<b>Central Africa</b>	99.4	310.4	0.2	0.0	189.4	299.5	5.2	5.3
Cameroon	15.6	3.1	0.0	0.0	48.9	82.8	4.2	4.6
Central African Republic	0.1	0.3	0.0	0.0	2.8	3.9	0.1	0.0
Chad	0.1	0.1	0.2	0.0	4.7	9.4	0.0	0.0
Congo	18.6	99.5	0.0	0.0	46.4	56.9	0.0	0.2
Democratic Republic of the Congo	19.0	95.7	0.0	0.0	40.7	93.3	0.0	0.0
Equatorial Guinea	4.7	26.0			1.7	0.2		
Gabon	41.1	83.6	0.0	0.0	42.8	51.1	0.9	0.1
Sao Tome and Principe	0.2	2.0			1.4	1.9	0.0	0.4
<b>East Africa</b>	2.3	11.7	10.8	26.6	165.4	325.2	8.6	72.4
Burundi	0.0	0.1	0.0	0.0	5.1	7.0	0.0	0.0
Djibouti	0.7	1.9	0.0	0.0	43.1	20.1	0.0	0.4
Eritrea	0.1	0.0			15.2	0.2	0.7	0.7
Ethiopia	0.1	0.1	1.2	18.3	8.3	10.6	0.0	4.4
Kenya	0.2	0.4	0.7	3.4	14.7	43.4	2.8	34.4
Rwanda	0.1	0.2	0.0	0.0	4.2	6.6	0.0	0.6
Somalia	0.0	0.0	0.0	0.0	5.0	8.9	0.0	0.0
South Sudan								
Sudan (former)	0.3	5.2	8.6	4.5	43.5	193.6	1.6	0.1
Uganda	0.1	1.0	0.0	0.3	2.3	11.6	1.0	31.3
United Republic of Tanzania	0.6	2.7	0.3	0.0	23.9	23.3	2.4	0.7
<b>Southern Africa</b>	324.7	889.7	104.2	63.9	675.6	740.3	202.4	128.9
Angola	81.3	391.3	0.0	0.0	19.9	43.0	0.0	0.0
Botswana	3.4	8.5	21.2	13.9	147.5	95.3	0.4	0.5
Comoros	2.5	10.0	0.0	0.0	1.9	3.9	0.0	0.0
Lesotho	6.2	7.8	0.0	0.0	5.6	6.3		
Madagascar	0.2	1.2	0.1	0.0	22.2	31.3	0.3	0.0
Malawi	0.0	0.2	0.0	0.0	8.2	28.7	0.0	5.8
Mauritius	15.8	14.6	0.5	0.3	128.8	135.2	1.1	3.7
Mozambique	5.3	18.4	0.0	0.0	36.0	36.3	0.0	0.7
Namibia	32.0	18.0	32.9	22.1	36.6	24.4	3.7	0.2
Seychelles	2.1	4.7	0.0	0.1	8.3	6.3	0.0	0.0
South Africa	170.6	378.8	22.0	27.0	180.3	198.7	130.3	112.4
Swaziland	4.6	2.6	7.5	0.1	60.4	21.2	7.1	0.0
Zambia	0.4	1.9	0.1	0.1	12.2	28.4	0.6	5.4
Zimbabwe	0.3	31.5	20.0	0.3	7.6	81.3	58.8	0.1
<b>West Africa</b>	116.7	460.5	1.5	57.0	1 079.8	2 031.9	71.1	108.5
Benin	56.8	155.6	0.9	54.5	29.2	40.9	0.0	0.4
Burkina Faso	0.1	0.3	0.0	0.0	45.9	49.7	0.2	0.3
Cabo Verde	2.7	11.6	0.0	0.0	23.1	40.7	0.0	0.0
Côte d'Ivoire	10.3	18.1	0.1	0.1	123.6	112.5	59.8	10.9
Gambia	2.0	6.8	0.0	0.5	24.8	103.1	0.1	13.7
Ghana	22.1	179.2	0.2	0.0	89.3	207.7	2.1	7.2
Guinea	1.8	12.3	0.0	0.1	40.4	49.7	0.0	0.2
Guinea-Bissau	1.0	1.5	0.0	0.0	3.1	7.0	0.0	0.0
Liberia	5.5	27.2	0.0	0.0	7.0	10.0	0.0	0.0
Mali	0.2	1.7	0.0	0.1	66.5	69.2	0.0	0.5
Mauritania	2.8	11.5	0.0	0.0	31.2	182.4	0.1	0.0
Niger	0.1	0.5	0.1	0.0	30.8	71.6	1.2	2.5
Nigeria	0.3	2.8	0.0	0.0	427.8	881.2	0.0	9.3
Senegal	1.8	7.0	0.1	0.3	121.5	173.2	4.8	30.5
Sierra Leone	1.3	11.3	0.0	0.0	2.4	9.8		
Togo	8.0	13.0	0.2	1.4	13.3	23.3	2.8	33.1
<b>CEMAC</b>	80.2	212.6	0.2	0.0	147.3	204.3	5.2	4.9
<b>CEN-SAD</b>	329.5	715.6	12.0	70.6	2 308.8	4 767.9	142.6	803.3
<b>COMESA</b>	255.6	424.4	39.3	30.6	1 311.6	3 132.2	92.2	730.3
<b>ECCAS</b>	180.7	701.8	0.2	0.0	214.4	349.5	5.2	5.3
<b>ECOWAS</b>	113.9	449.0	1.5	57.0	1 048.6	1 849.5	71.0	108.5
<b>IGAD</b>	1.6	8.7	10.4	26.6	132.2	288.3	6.2	71.2
<b>SADC</b>	341.9	978.1	104.5	63.9	738.3	853.0	204.8	129.6
<b>UEMOA</b>	78.3	197.8	1.3	56.4	433.9	547.3	68.8	78.2
<b>UMA</b>	31.9	106.2	0.9	6.0	2 063.2	3 623.2	51.7	51.7
<b>Regional Office for Asia and the Pacific</b>	6 190.9	9 817.4	4 121.5	5 067.9	12 510.4	23 445.3	15 810.3	16 051.4
<b>Regional Office for Europe and Central Asia</b>	10 721.7	18 661.5	10 998.0	18 942.4	37 263.0	54 808.8	50 444.3	70 629.3
<b>Regional Office for Latin America and the Caribbean</b>	1 811.9	3 301.8	2 418.4	7 838.4	6 861.9	7 310.7	2 029.1	4 711.4
<b>Regional Office for the Near East</b>	1 174.4	3 176.3	49.2	213.3	6 638.0	12 710.8	541.1	4 571.4
<b>World</b>	23 347.1	39 266.2	24 457.2	42 014.0	69 181.6	103 361.9	72 773.4	105 486.8

TABLE 40: Value of fish trade

	Fish							
	imports				exports			
	million US\$ 2000	million US\$ 2009	million US\$ 2010	million US\$ 2011	million US\$ 2000	million US\$ 2009	million US\$ 2010	million US\$ 2011
<b>Africa</b>	956.8	3 406.9	3 636.7	4 582.4	2 697.2	4 884.7	4 975.0	5 042.5
<b>North Africa</b>	213.1	763.8	811.3	896.6	1 053.9	1 725.4	1 719.3	1 778.0
Algeria	12.5	53.9	50.4	58.5	4.2	8.5	5.9	5.9
Egypt	170.9	475.5	499.9	530.9	1.2	14.1	15.2	23.6
Libya	9.1	51.9	70.8	77.8	11.8	4.8	4.8	4.5
Morocco	9.1	115.8	123.4	155.8	950.4	1 547.8	1 539.4	1 523.4
Sudan								
Tunisia	11.6	66.6	66.8	73.6	86.2	150.2	154.0	220.6
<b>Regional Office for Africa</b>	743.5	2 643.1	2 825.3	3 685.7	1 639.3	3 149.8	3 246.0	3 254.8
<b>Central Africa</b>	87.4	424.3	437.1	577.5	18.0	6.1	5.8	4.1
Cameroon	27.7	243.3	188.2	323.8	0.9	2.2	2.9	1.3
Central African Republic	0.2	3.0	4.0	3.1	0.0			
Chad	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0
Congo	20.7	51.3	57.0	68.9	2.2	1.1	1.0	1.0
Democratic Republic of the Congo	26.2	81.0	144.6	114.9	0.6	0.6	0.7	0.7
Equatorial Guinea	2.7	25.5	19.0	23.2	1.6	0.1	0.0	0.0
Gabon	9.8	19.6	23.6	42.8	12.6	2.1	1.1	1.1
Sao Tome and Principe	0.1	0.2	0.2	0.3	0.1	0.0	0.0	0.0
<b>East Africa</b>	8.0	30.6	32.6	45.9	167.2	317.5	308.0	293.5
Burundi	0.1	0.2	0.4	1.2	0.1	0.2	0.2	0.2
Djibouti	1.5	2.4	1.2	2.2	0.0	0.0	0.1	0.2
Eritrea	0.1	0.1	0.2	0.0	2.1	1.6	1.6	1.7
Ethiopia	0.1	1.1	1.2	1.6	0.0	0.3	0.4	0.4
Kenya	4.6	6.6	7.8	11.6	38.9	57.1	63.8	54.8
Rwanda	0.1	5.5	6.4	11.1		0.3	0.8	0.1
Somalia	0.1	5.5	3.5	4.0	2.3	3.1	3.0	3.1
South Sudan								
Sudan (former)	0.9	4.6	7.1	9.0	0.2	0.2	0.6	0.3
Uganda	0.1	0.8	1.5	2.8	28.9	109.2	129.2	138.0
United Republic of Tanzania	0.4	4.0	3.3	2.2	94.7	145.5	108.3	94.8
<b>Southern Africa</b>	209.0	839.4	843.4	1 062.1	859.1	1 846.2	2 082.8	2 254.7
Angola	16.3	109.2	119.0	179.8	10.8	9.4	16.7	12.4
Botswana	11.3	9.3	13.1	11.2	0.0	0.3	0.1	0.2
Comoros	0.3	1.2	2.0	1.7	0.0			
Lesotho	9.2	2.1	2.1	2.1				
Madagascar	6.7	18.0	27.3	43.3	37.3	115.2	113.4	159.7
Malawi	0.6	2.7	2.0	1.7	0.1	0.2	0.3	0.5
Mauritius	41.7	235.5	234.2	298.6	36.7	284.5	265.5	342.2
Mozambique	9.4	39.8	35.5	58.3	99.6	66.7	57.0	52.2
Namibia	24.2	55.6	51.5	48.9	283.3	714.4	783.2	772.7
Seychelles	11.5	87.4	78.9	95.9	113.5	210.2	275.4	301.1
South Africa	59.1	260.6	241.3	270.5	270.4	441.8	565.7	599.9
Swaziland	8.3	3.6	3.4	3.6	2.6	0.2	0.2	0.1
Zambia	1.7	8.4	11.7	19.1	0.4	1.2	2.1	8.8
Zimbabwe	8.6	6.0	21.3	27.3	4.3	2.2	3.2	4.8
<b>West Africa</b>	439.0	1 348.8	1 512.2	2 000.2	594.9	980.0	849.5	702.5
Benin	8.7	27.7	27.5	31.6	1.5	0.2	1.3	1.9
Burkina Faso	1.4	9.1	9.1	10.0	0.0	1.0	0.7	0.6
Cabo Verde	0.6	3.0	2.4	3.7	1.3	14.9	37.5	56.0
Côte d'Ivoire	132.1	363.5	289.0	337.4	128.9	170.3	23.9	2.1
Gambia	0.5	0.8	1.5	0.8	3.6	5.2	6.8	5.4
Ghana	83.6	121.4	146.4	281.4	78.5	53.9	34.9	31.6
Guinea	8.2	8.8	7.4	10.8	2.2	9.3	10.0	12.0
Guinea-Bissau	0.3	1.5	1.0	1.2	2.9	3.2	3.4	3.6
Liberia	2.8	2.6	5.4	9.6	0.0	1.0	1.2	0.4
Mali	1.7	9.4	12.1	11.1	0.4	0.1	0.1	0.3
Mauritania	0.0	0.4	0.8	0.7	87.2	126.4	152.2	182.2
Niger	0.5	1.4	1.8	1.2	1.6	0.3	0.6	0.8
Nigeria	181.6	783.9	973.7	1 246.7	12.5	337.0	323.9	83.8
Senegal	1.6	1.1	5.8	17.4	260.3	242.2	239.2	307.5
Sierra Leone	3.5	4.1	4.1	4.1	11.1	9.8	9.8	9.8
Togo	12.0	10.1	24.4	32.6	3.0	5.2	4.1	4.5
<b>CEMAC</b>	61.1	343.1	292.4	462.3	17.3	5.5	5.0	3.4
<b>CEN-SAD</b>	634.0	2 063.5	2 281.0	2 843.7	1 558.6	2 551.2	2 368.5	2 229.6
<b>COMESA</b>	293.2	992.3	1 122.1	1 254.5	278.7	802.0	877.5	1 041.7
<b>ECCAS</b>	103.8	533.6	556.5	758.5	29.0	15.8	22.6	16.7
<b>ECOWAS</b>	439.0	1 348.3	1 511.4	1 999.5	507.8	853.6	697.3	520.3
<b>IGAD</b>	7.4	21.0	22.5	31.3	72.4	171.5	198.7	198.4
<b>SADC</b>	235.4	923.2	989.3	1 177.5	954.4	1 992.3	2 191.8	2 350.2
<b>UEMOA</b>	158.2	423.8	370.6	442.5	398.6	422.4	273.2	321.2
<b>UMA</b>	42.3	288.7	312.2	366.4	1 139.9	1 837.8	1 856.3	1 936.7
<b>Regional Office for Asia and the Pacific</b>	20 975.7	28 093.6	32 446.0	38 951.7	19 834.0	35 430.0	42 662.0	51 368.6
<b>Regional Office for Europe and Central Asia</b>	21 967.8	46 172.3	49 713.8	56 548.3	18 231.7	35 791.9	40 469.7	45 602.9
<b>Regional Office for Latin America and the Caribbean</b>	1 061.5	3 019.9	3 544.2	4 098.5	6 821.2	11 241.0	11 546.2	14 436.6
<b>Regional Office for the Near East</b>	598.2	1 789.9	2 151.9	2 478.8	1 358.6	2 388.6	2 632.0	2 747.3
<b>World</b>	60 089.2	99 895.9	111 137.9	128 985.4	55 759.5	96 372.7	109 629.6	128 161.4

**PART**

# 4

## **Sustainability dimensions**

## Land and Forestry

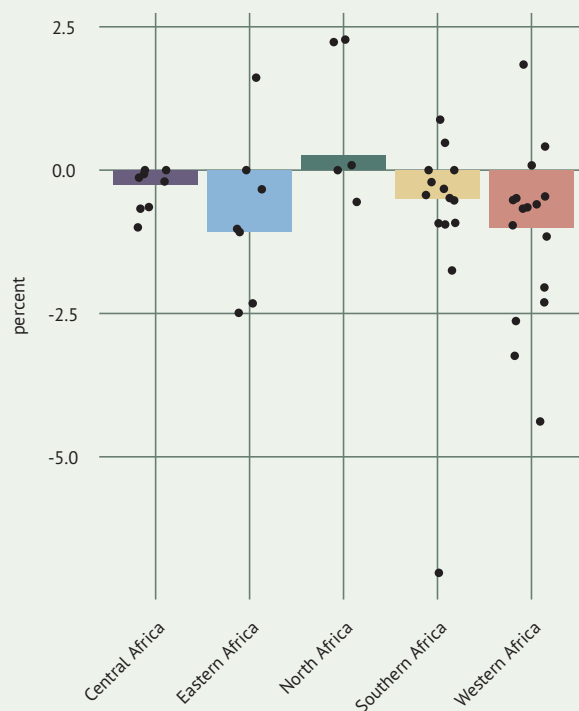
Forests play an essential role in mitigating climate change and providing products and ecosystem services that are essential to the prosperity of humankind. The latest estimate of the world's total forest area is over four billion hectares, corresponding to about 30 percent of the total land area or an average of 0.6 hectares per capita. The five most forest-rich countries (the Russian Federation, Brazil, Canada, the United States of America and China) presently account for more than half of the planet's total forest area. Ten countries or areas have no forest at all, and an additional 54 have forest on less than 10 percent of their total land area. Changes in land cover have caused the most pressing environmental issue in recent decades. Deforestation and land use intensification, especially its impact on soil degradation, are at the heart of the issue. However, in much of the world, the current picture of land cover change shows a continuing slowdown in converting forests to areas for crop or livestock production and the steady growth of protected areas. At the global level, deforestation has decreased from an estimated 16 million hectares per annum in the last decade.

In Africa forests accounted for 25.3 percent of total land area in 1990, and it has dropped to 22 percent in 2011 (table 41). For RAF, the forest represented 32.1 in 1990 but fell to 27.9 by 2011. This could be explained by the reduction in the forests in all the sub-regions, particularly the huge decline in East Africa where the percentage of forests fell from 28.6 percent in 1990 to 17.5 percent in 2011. West Africa also experienced a huge drop in annual growth rate in forest area roughly equal to that of East Africa (chart 93).

In 2011, Map 53 shows that Angola, Congo, Democratic Republic of the Congo, Gabon, Liberia, Mozambique and Zambia had the biggest forest area as share of total land area (44 percent to 88.5 percent).

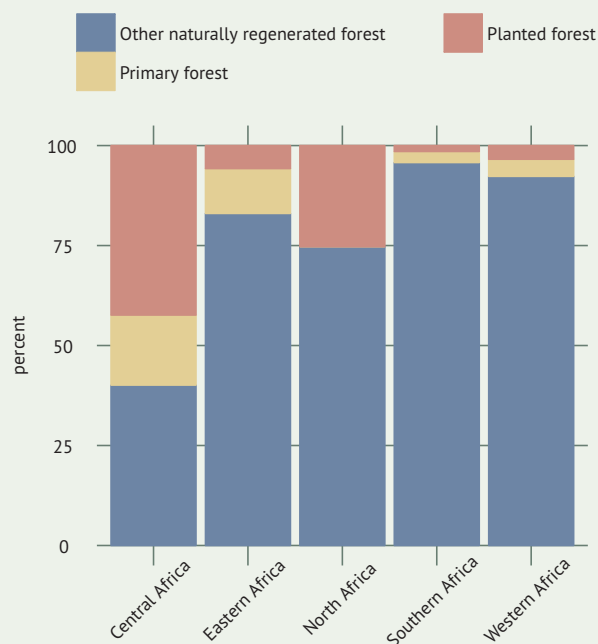
In 2010, the RAF forest area comprised 9.9 percent of primary forest, 87.4 percent of other naturally regenerated forest and only 2.7 percent of planted forest. Other naturally regenerated forest was the most represented in all of the sub-regions except Central Africa. Indeed in Southern Africa, it was 95.8 percent and was the most represented compared to the other sub-regions of RAF. Similarly for West Africa, it was almost 92 percent. However, Central Africa recorded more planted forest and primary forest than the other sub-regions (chart 94).

CHART 93: Annual growth rate in forest area (1990-2011)



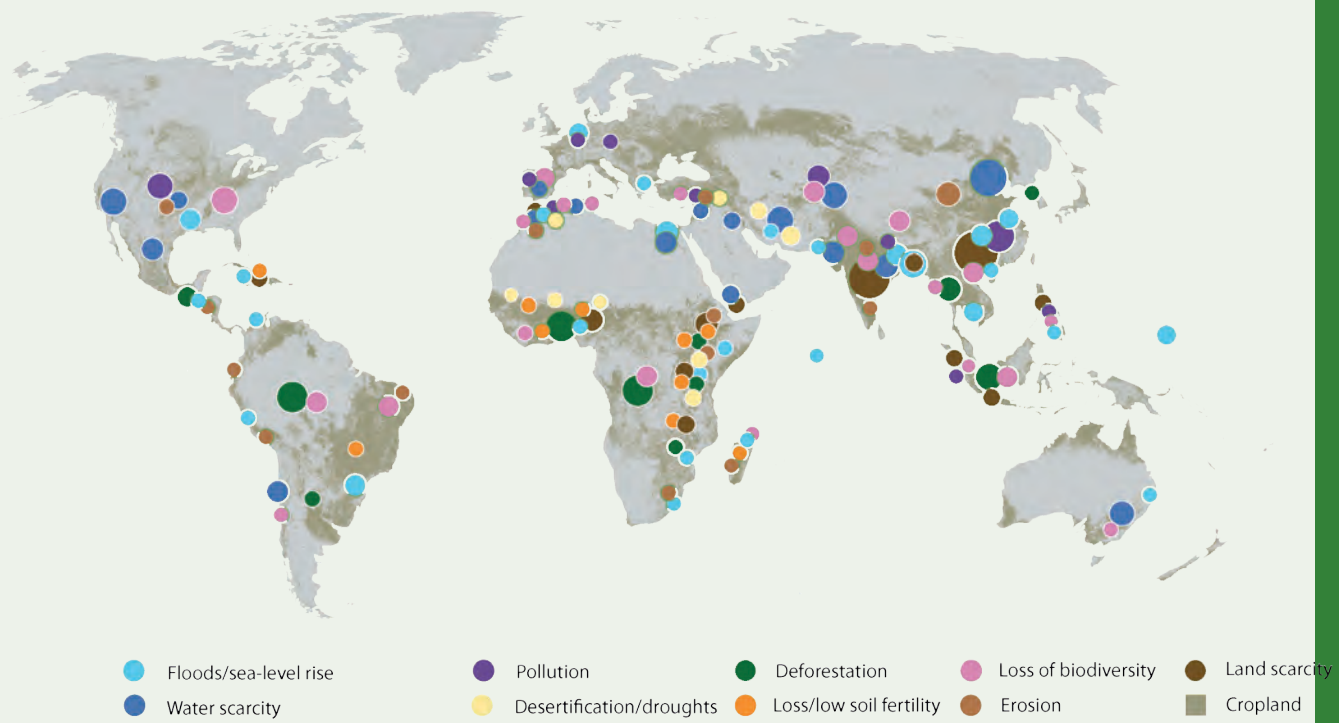
Source: FAO, Statistics Division (FAOSTAT).

CHART 94: Forest characteristics (2010)



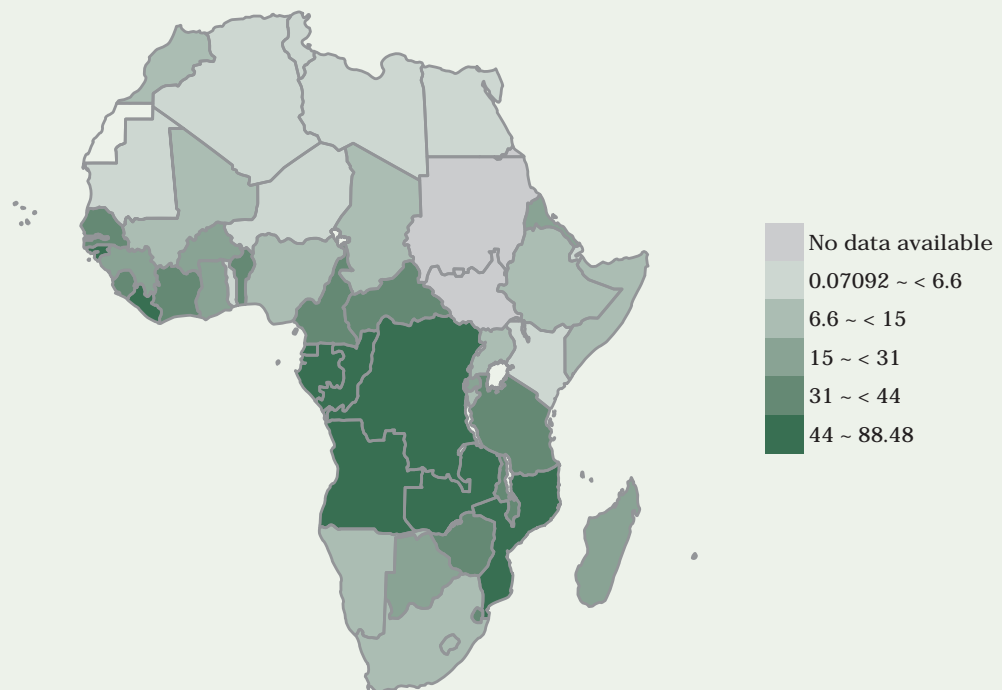
Source: Global Forest Resources Assessment.

MAP 52: Global distribution of risks associated with main agricultural production systems



Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

MAP 53: Forest area as share of total land area (percent, 2011)



Source: FAO, Statistics Division (FAOSTAT).

The total production of round wood was about 655 billion cubic meters in 2011-12, and comprised 45 percent of industrial roundwood and 55 percent wood fuel. The highest production was recorded in RAP, followed by RAF (table 42). RAP first, and then REU, RAF and RLAC had a trade surplus of roundwood as they exported more roundwood than they imported. Therefore during 2011, they recorded a positive balance for round wood. On the other hand, RNE had a deficit of about 790 500 cubic meters. Within RAF, with the exception of East Africa, all other sub-regions had a trade surplus. North Africa however, had deficit of about 520 000 cubic meter.

In 2011-12, with a total production of about 1.65 billion cubic meters of industrial roundwood, RAF accounted for only 4 percent, while REU alone accounted for 33 percent and RAP 30 percent. Over the period 1962-2012, this production recorded a strong growth in RLAC (4.2 percent) compared to RAF, where growth was 2.5 percent. Within RAF, Southern Africa had the largest production (34 percent), followed by West Africa (25 percent), with the other sub-regions sharing the remainder: 21 percent for Central Africa and 19 percent for East Africa (table 42).

In 2011, wood fuel production was about 1.88 billion cubic meters, and the RAP region accounted for roughly 42 percent, while RAF was 31 percent. Within RAF, East Africa was the biggest producer of wood fuel, with 39 percent of production in the region, followed by West Africa (31 percent), Central Africa (17 percent) and Southern Africa (13 percent). From 1962 to 2012, production grew at an average rate of 2.2 percent in RAF, which was the highest rate compared to the other regions. (Table 42)

With regard to sawnwood, in 2011-12, RAF had the lowest production. Within RAF, West Africa was the biggest producer with 46 percent of production in the region followed by Southern Africa 30 percent. Central Africa (17 percent) and East Africa (7 percent) were the lowest producers of sawnwood in 2011 (Table 43).

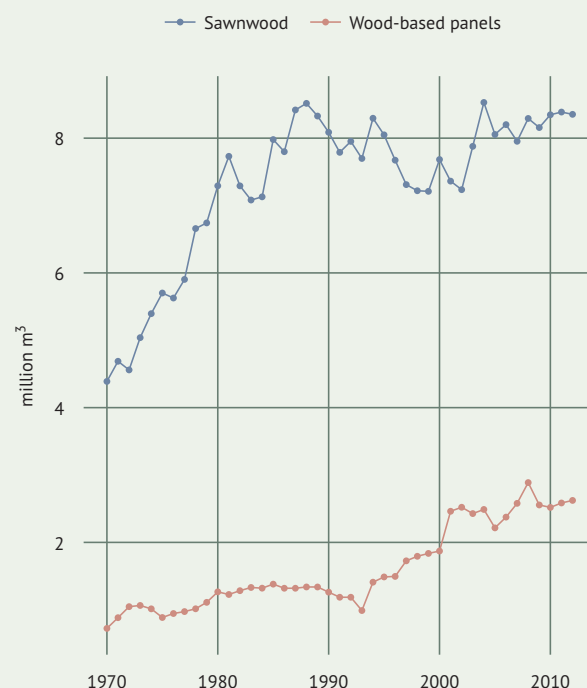
In 2012, the biggest producers of roundwood, whose production ranged between 15 300 and 106 901 thousand cubic meters, were Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Kenya, Mozambique, Nigeria, South Africa, Sudan, Tanzania and Uganda (map 54).

Central Africa and Southern Africa experienced significant growth in the exports of forest products between 2000 and 2012. In West Africa, North Africa and East Africa, the jump was less significant (chart 97).

## Further reading

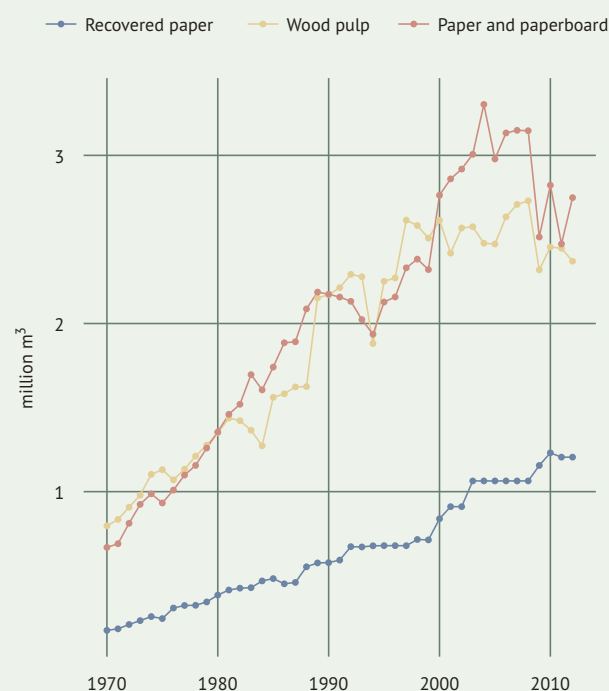
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 ([www.fao.org/nr/solaw/solaw-home/en/](http://www.fao.org/nr/solaw/solaw-home/en/))
- UN International Year of Forests 2011 ([www.fao.org/forestry/iyf2011/en/](http://www.fao.org/forestry/iyf2011/en/))
- FAO Land degradation assessment ([www.fao.org/nr/land/degradation/en/](http://www.fao.org/nr/land/degradation/en/))
- Global Forest Resources Assessment 2010 ([www.fao.org/forestry/fra/fra2010/en/](http://www.fao.org/forestry/fra/fra2010/en/))

CHART 95: Africa production of selected forest products (1970-2012)

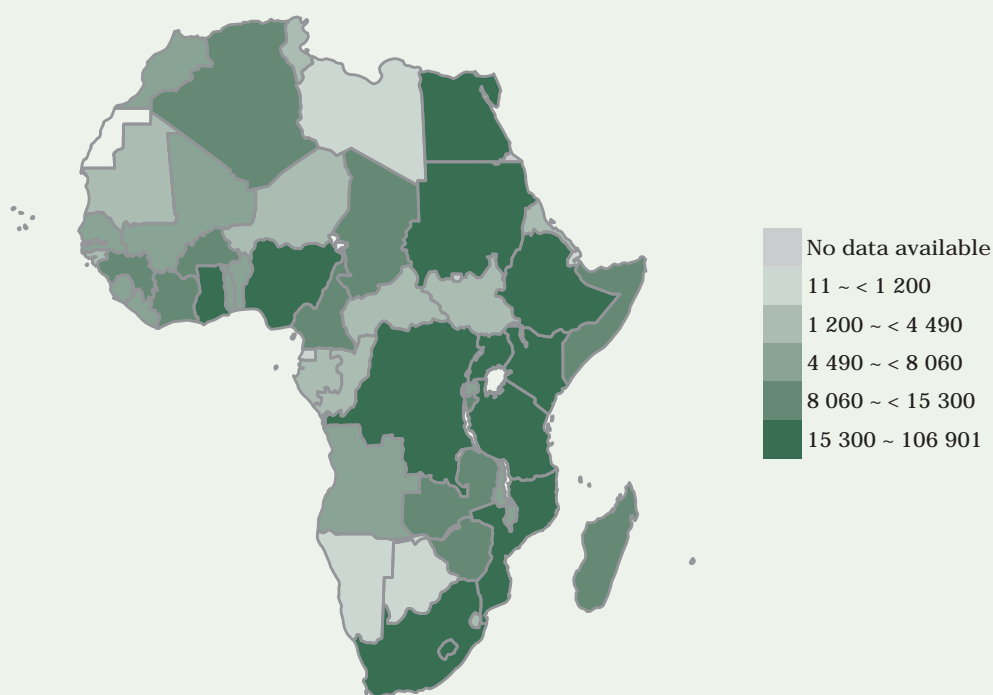


Source: FAO, Statistics Division (FAOSTAT).

CHART 96: Africa production of selected forest products (1970-2012)

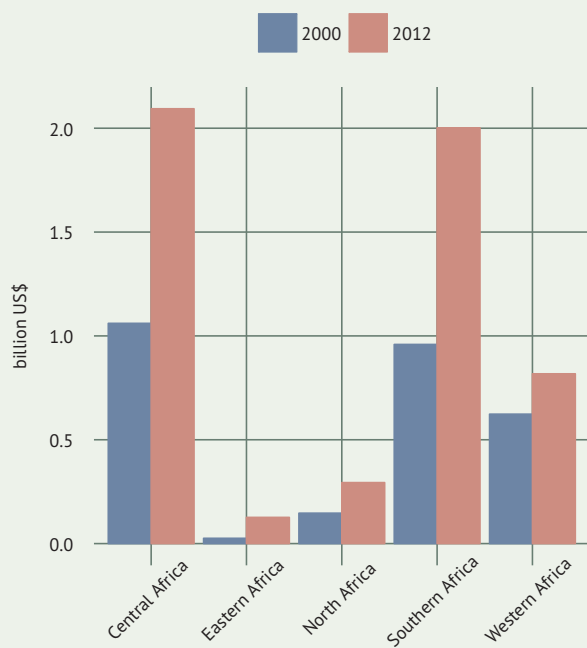


Source: FAO, Statistics Division (FAOSTAT).

MAP 54: Roundwood production (thousand m<sup>3</sup>, 2012)

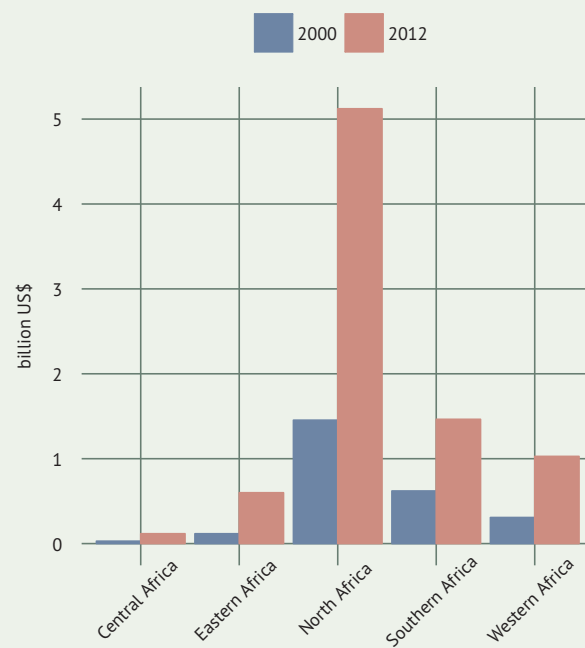
Source: FAO, Statistics Division (FAOSTAT).

CHART 97: Exports of forest products (2000 and 2012)



Source: FAO, Statistics Division (FAOSTAT).

CHART 98: Imports of forest products (2000 and 2012)



Source: FAO, Statistics Division (FAOSTAT).

## Water

A very small proportion of the planet's water is available for human use. Around 2.5 percent of the world's water is fresh-water. Out of this, more than two-thirds is locked away in glaciers, ice caps and permafrost, and one-third in ground-water. The remaining 1.3 percent of the world's total fresh-water is surface water in rivers and other forms such as ice and snow, and lakes and swamps.

In Africa during the period 2000-10, the total per capita water withdrawal was high (more than 330 to 1 037 cubic meters per annum per capita) for some countries like Egypt, Libya, Mali, Madagascar, Mauritania, Morocco, Somalia and Zimbabwe (map 55).

Concerning agriculture, countries that withdrew sizeable amounts of water for agriculture from 2000-10 include Somalia, Madagascar, Sudan (former), Swaziland, Eritrea, Mauritania, Ethiopia, Senegal and Cape Verde (Chart 99)

For Africa, countries whose share of freshwater resources withdrawn by agriculture is large, therefore more than 15 percent in 2005, include all countries of North Africa, Somalia, South Africa, Sudan and Zimbabwe). Countries whose share of freshwater resources withdrawn by agriculture was between 5 and 15 percent were Burkina Faso, Djibouti, Eritrea, Kenya, Mali, Mauritania, Niger and Senegal. And those whose rates are less than 0.5 percent were Angola, Benin, Gambia, Lesotho, Liberia, Mozambique, Sierra Leone and almost all the countries of Central Africa (map 56).

More than 20 percent of the water withdrawn was by the industrial sector: Lesotho (exceptional 40 percent), Angola, Seychelles, Liberia, the Gambia, Chad, Benin and Congo (Chart 100).

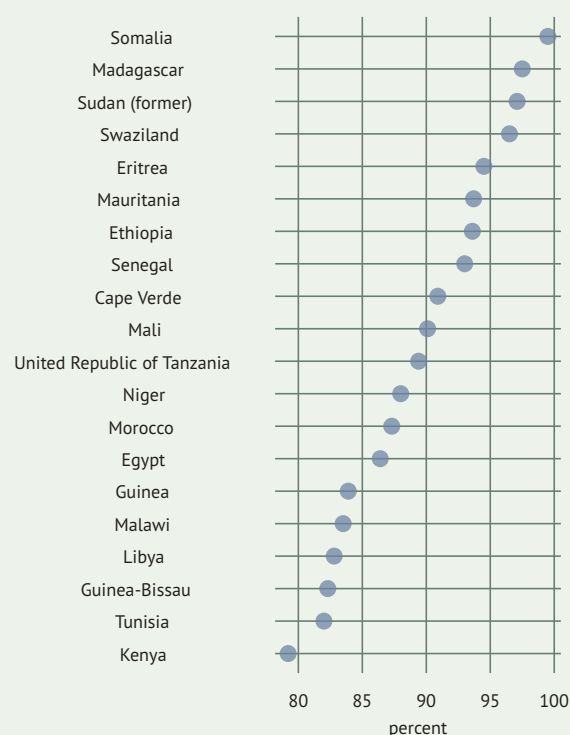
During the period 2000-10, Egypt, Libya, Madagascar, Mali, Mauritania, Morocco, Somalia and Zimbabwe recorded the largest total per capita water withdrawal, which was estimated between 330 and 1 037 m<sup>3</sup>/yr/cap (Map 55).

Map 56 shows that Algeria, Egypt, Morocco, Libya, Somalia, Tunisia and Zimbabwe had the highest percentage of fresh-water resources withdrawn by agriculture (2000-10).

## Further reading

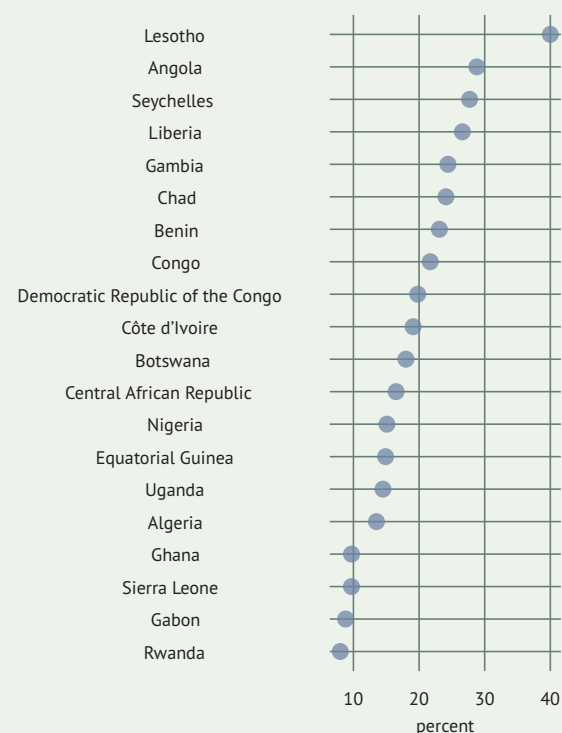
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 ([www.fao.org/nr/solaw/solaw-home/en/](http://www.fao.org/nr/solaw/solaw-home/en/))
- FAO Water ([www.fao.org/nr/water/](http://www.fao.org/nr/water/))
- FAO AQUASTAT ([www.fao.org/nr/aquastat/](http://www.fao.org/nr/aquastat/))

CHART 99: Freshwater withdrawal by agricultural sector, shares of total (2000-2010\*)

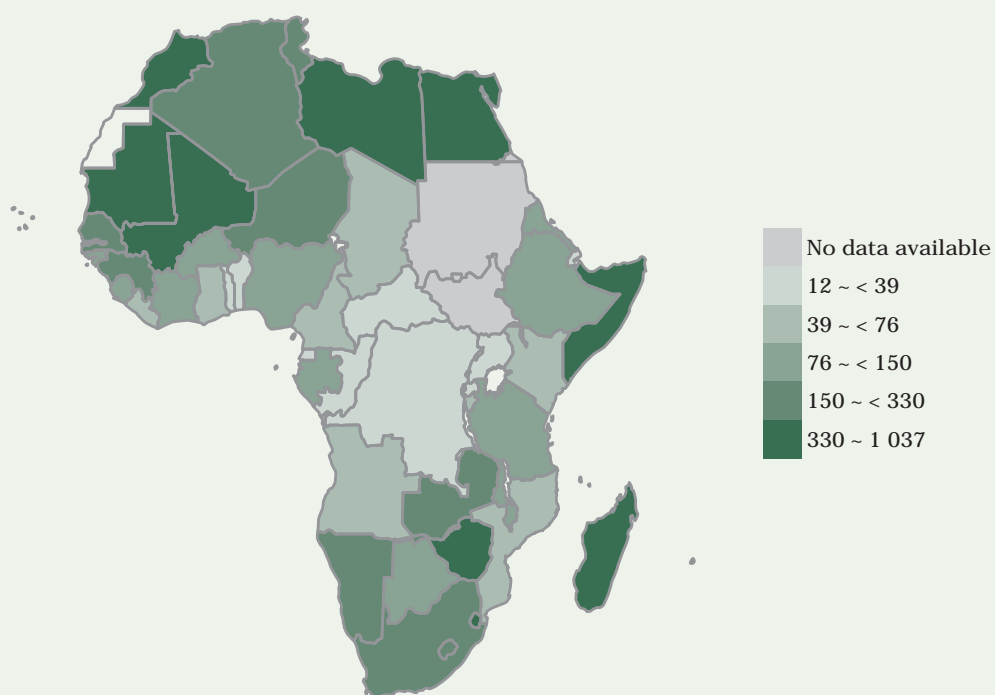


Source: Land and Water Division (AQUASTAT).

CHART 100: Freshwater withdrawal by industrial sector, shares of total (2000-2010\*)

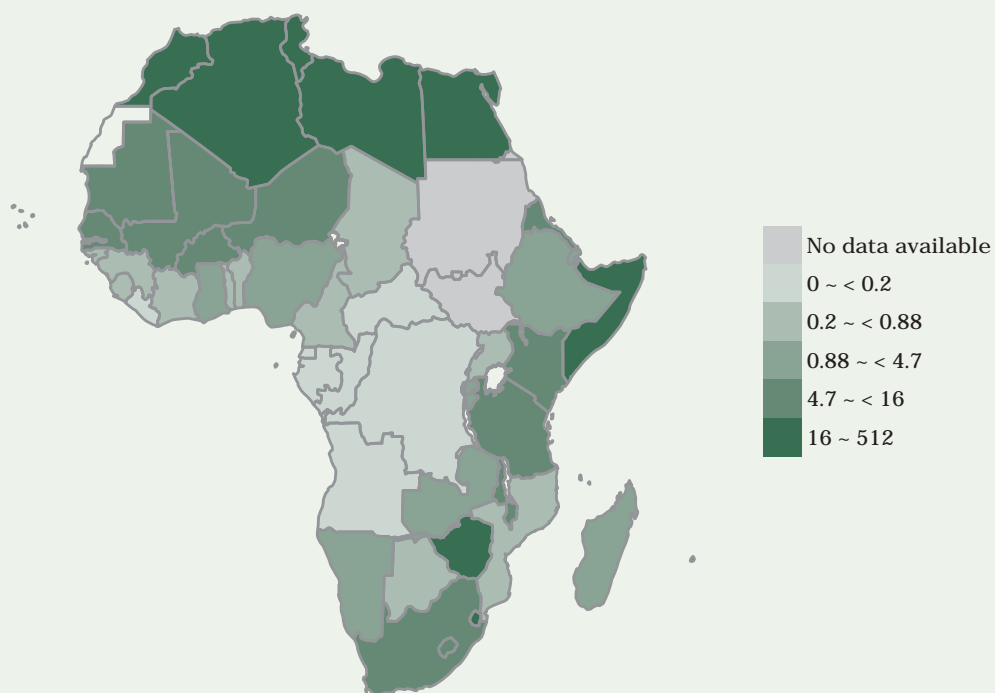


Source: Land and Water Division (AQUASTAT).

MAP 55: Total water withdrawal per capita (m<sup>3</sup>/yr/cap, 2000-2010\*)

Source: Land and Water Division (AQUASTAT).

MAP 56: Renewable freshwater resources withdrawn by agriculture (percent, 2000-2010\*)



Source: Land and Water Division (AQUASTAT).

## Biodiversity

Biodiversity concerns the degree of variation of life forms within a given ecosystem and is ultimately a measure of the health of the environment. Biodiversity for food and agriculture includes the components of biological diversity that are essential for feeding human populations and improving the quality of life. It includes the variety and variability of ecosystems, animals, plants and microorganisms, at the genetic, species and ecosystem levels, which are necessary to sustain human life as well as the key functions of ecosystems. It is the result of thousands of years of farmers' and breeders' activities, land and forest utilization, and fisheries and aquaculture activities combined with millions of years of natural selection.

Approximately 2 600 plant species threatened, 2 000 fish species and 811 bird species.

Protected land as a percent of total land area increased during the period 1990-2010 in all parts of Africa and on average in the world. Southern Africa had the biggest share (more than 15 percent), followed by Central Africa, East Africa, and West Africa. At less than 5 percent, North Africa had the lowest portion.

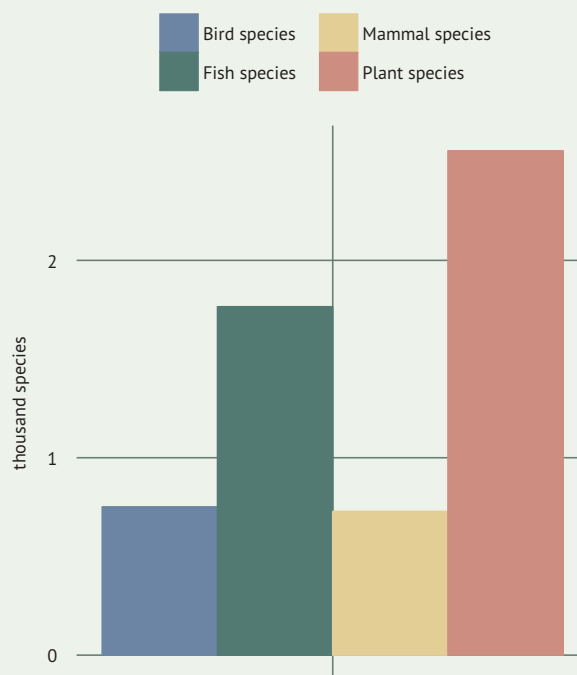
With regard to the distribution of this indicator by country, Map 57 shows that countries such as Benin, Botswana, Côte d'Ivoire, Ethiopia, Senegal, Tanzania, Zambia and Zimbabwe had between 18 and 42 percent of their terrestrial areas protected.

Countries with a large portion of protected marine areas – therefore from 8 to 42 percent of territorial waters – include Congo, Egypt, Kenya, Mauritania, Namibia and Tanzania.

## Further reading

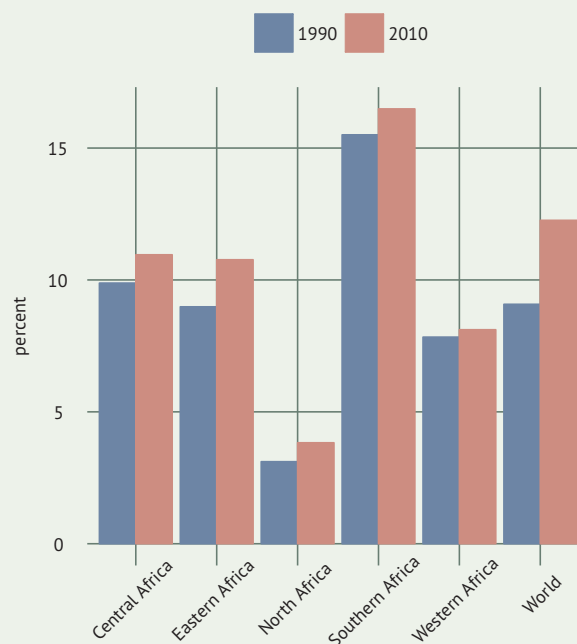
- FAO Biodiversity ([www.fao.org/biodiversity](http://www.fao.org/biodiversity))
- UN International Year of Biodiversity 2010 ([www.fao.org/biodiversity/2010-international-year-of-biodiversity](http://www.fao.org/biodiversity/2010-international-year-of-biodiversity))
- FAO/INFOODS: Nutrition and Biodiversity ([www.fao.org/infoods/infoods/food-biodiversity/en/](http://www.fao.org/infoods/infoods/food-biodiversity/en/))

CHART 101: Species threatened in Africa (2012)



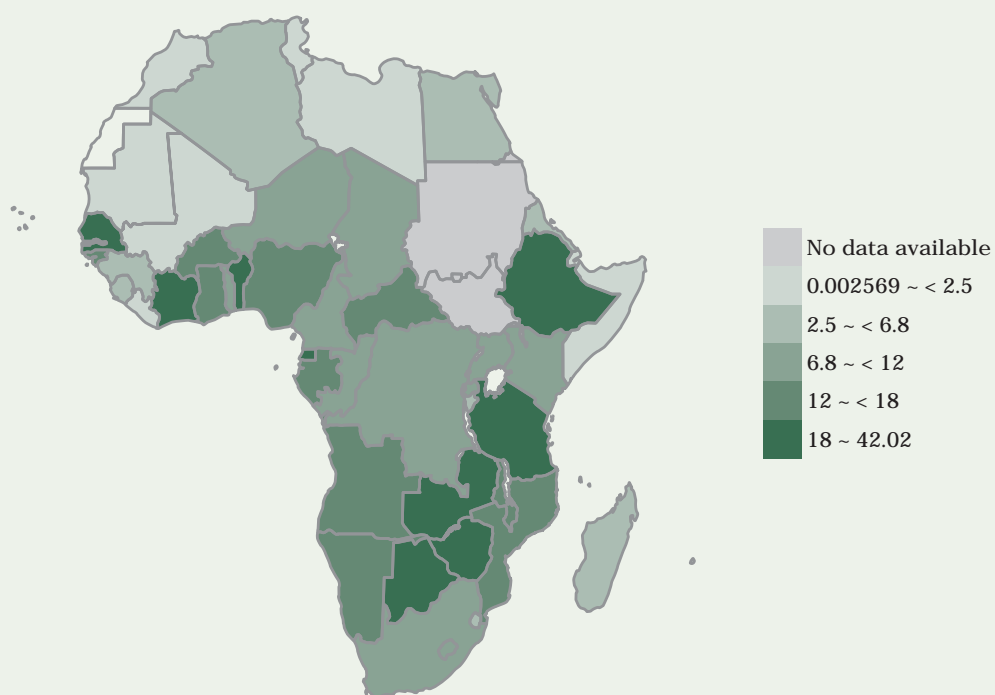
Source: World Bank (WDI).

CHART 102: Terrestrial protected areas, share of total land area (1990 and 2010)



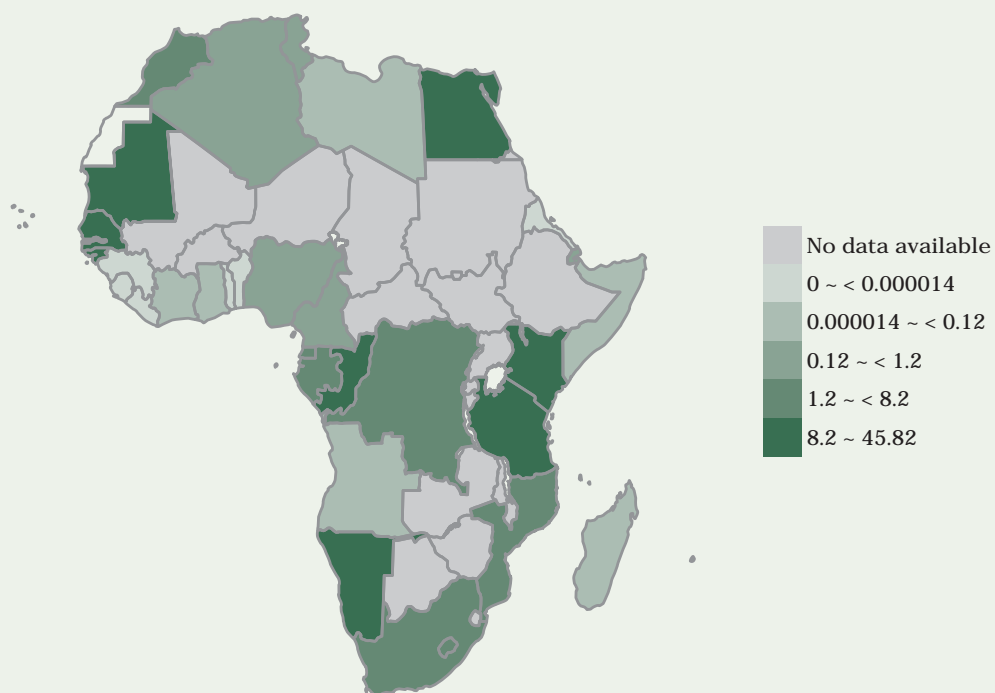
Source: World Bank (WDI).

MAP 57: Terrestrial protected areas, share of total land area (percent, 2010)



Source: World Bank (WDI).

MAP 58: Marine protected areas, share of territorial waters (percent, 2010)



Source: World Bank (WDI).

## Agri-environmental indicators

Agriculture has a significant and complex impact on the environment. Indeed, the management of agricultural land, increasing arable land, the use of fertilizers and pesticides, irrigation systems practiced, etc. have effects that can in the long term adversely affect the environment. Similarly, the types of farming practiced can have a devastating effect. It is therefore necessary to define appropriate agri-environmental indicators to monitor and measure the environmental impact of these activities in terms of agricultural and environmental policies of countries to ensure sustainable development of the environment. Taking into account the availability of data, some agri-environmental indicators adopted by the FAO were analyzed in this part of the year-book. They concern:

- Livestock density per ha of agricultural land, cattle and buffaloes, sheep and goats

In East Africa, this indicator was the highest for cattle and buffaloes in 2011 compared to all other regions of Africa. Similarly the region was also highest for sheep and goats. Indeed, sheep and goat density per ha of agricultural land was more significant (over 0.75 head/ha) in East Africa, North Africa and West Africa than the others sub-regions, (chart 103).

- Agricultural land's portion of total land area

This indicator was higher (over 50 percent) for Southern Africa than the other sub-regions; however its growth was slow from 1995 to 2011. Trends in East Africa (around 50 percent) were similar to Southern Africa, whereas the other parts of Africa lagged far behind with less than 20 percent (chart 104).

- Nitrogen fertilizer consumption per ha of arable land and land under permanent crops

In 2009 Morocco, Tunisia, Libya, Egypt, Zambia, Zimbabwe and South Africa recorded the highest level of nitrogen fertilizer consumption per ha of arable land and land under permanent crops. The indicator for these countries varied between 15 kg/ha and 326.8 kg/ha.

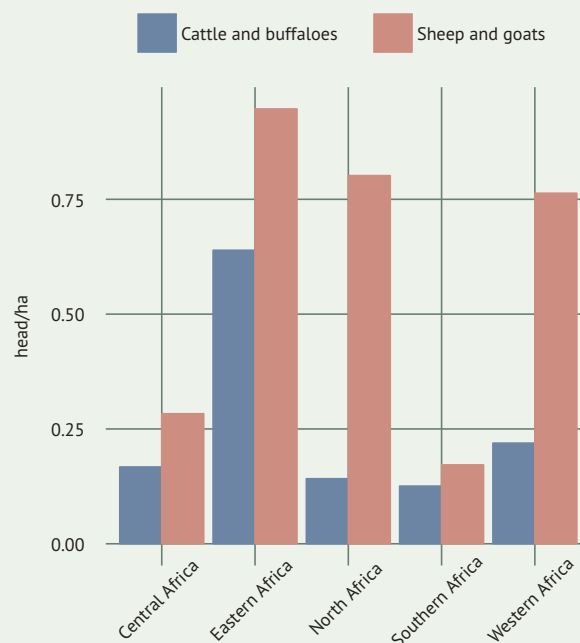
- Organic water pollutant (BOD) emissions

In 2005, South Africa was the leader in organic water pollutant emissions with almost 0.2 million kg/day. Madagascar and Morocco were next, in the range of 0.05 to 0.10 million kg / day (chart 105). In terms of per worker, Botswana and Tanzania experienced roughly 0.35 kg/day/worker, which were the highest level of emissions compared to the other countries. Ethiopia and Eritrea came next, with emissions per worker between, 0.20 and 0.25 kg/day (chart 106).

## Further reading

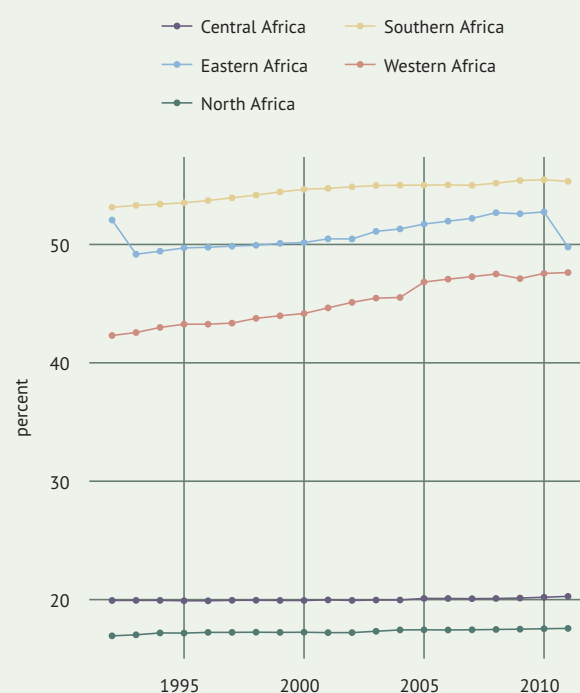
- OECD ([www.oecd.org/agriculture/env/indicators](http://www.oecd.org/agriculture/env/indicators))
- EUROSTAT ([http://epp.eurostat.ec.europa.eu/portal/page/portal/agri\\_environmental\\_indicators/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/agri_environmental_indicators/introduction))

CHART 103: Livestock density per ha of agricultural land, cattle and buffaloes, sheep and goats (2011)



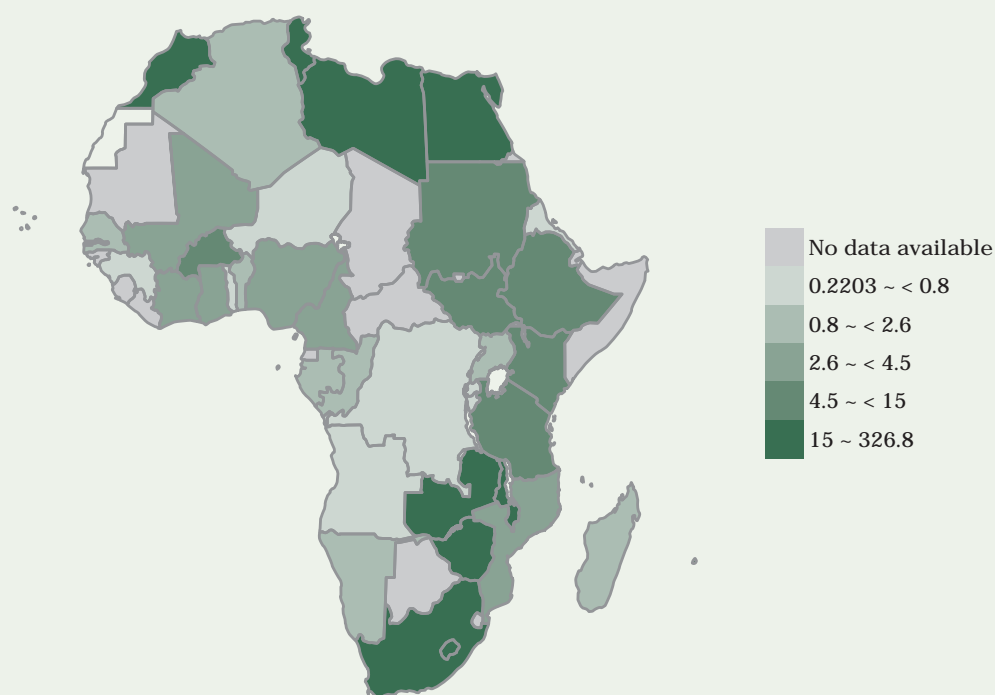
Source: FAO, Statistics Division (FAOSTAT).

CHART 104: Agricultural land, share of total land area (1992-2011)



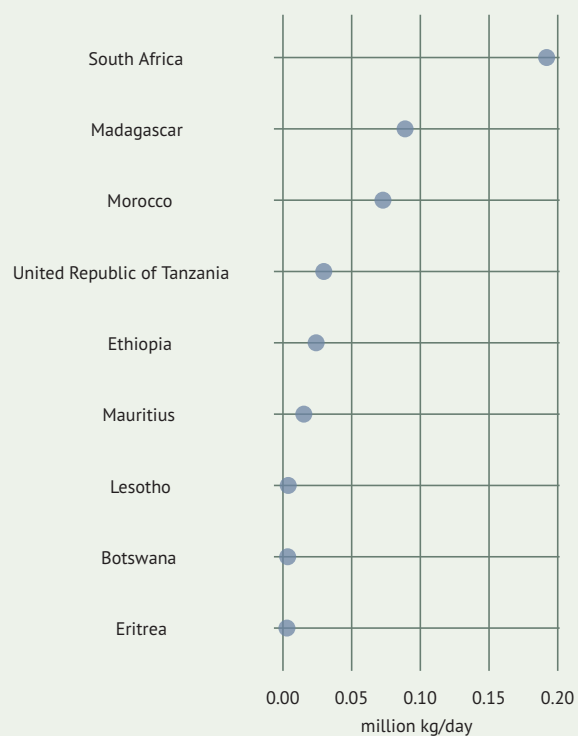
Source: FAO, Statistics Division (FAOSTAT).

MAP 59: Nitrogen fertilizer consumption per ha of arable area and permanent crops (kg/ha, 2009)



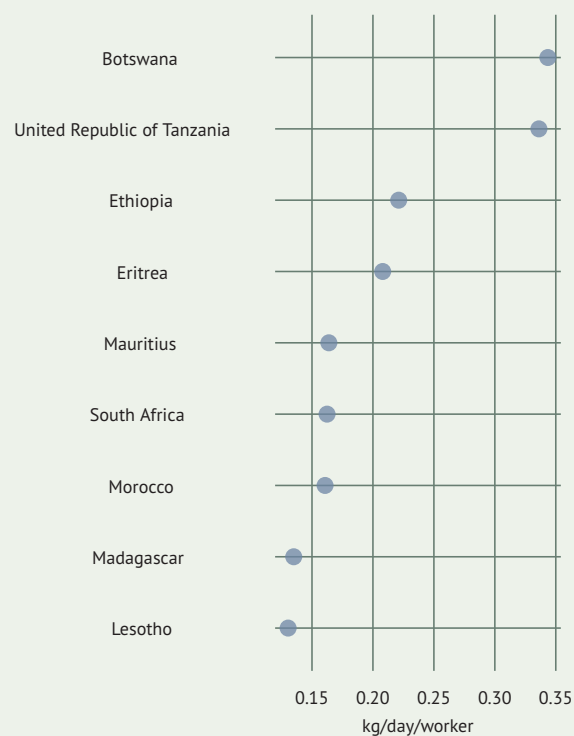
Source: FAO, Statistics Division (FAOSTAT).

CHART 105: Organic water pollutant (BOD) emissions (2005)



Source: World Bank (WDI).

CHART 106: Organic water pollutant (BOD) emissions per worker (2005)



Source: World Bank (WDI).

## Organic farming

Organic agriculture is a production management system that aims to promote and enhance ecosystem health, including biological cycles and soil biological activity. It is based on minimizing the use of external inputs and represents a deliberate attempt to make the best use of local natural resources. Methods are used to minimize air, soil and water pollution. Organic agriculture comprises a range of land, plant and animal management procedures, governed by a set of rules and limits usually enforced by inspection and certification schemes. Synthetic pesticides, mineral fertilizers, synthetic preservatives, pharmaceuticals, Genetically Modified Organisms (GMOs), sewage sludge and irradiation are prohibited in all organic standards.

East Africa is the part of Africa with a large organic area (more than 0.75 million ha), whereas the other sub-region were under 0.25 million of ha. Central Africa had the smallest organic agriculture area (Chart 107).

In 2011, countries such as Democratic Republic of the Congo, Egypt, South Africa, Tanzania, Tunisia, and Uganda devoted more land to organic agriculture ranking between over 34 500 to 228 400 ha (map 60).

The countries with the highest portion of organic agricultural land were Egypt, Tanzania, Tunisia and Uganda (map 61).

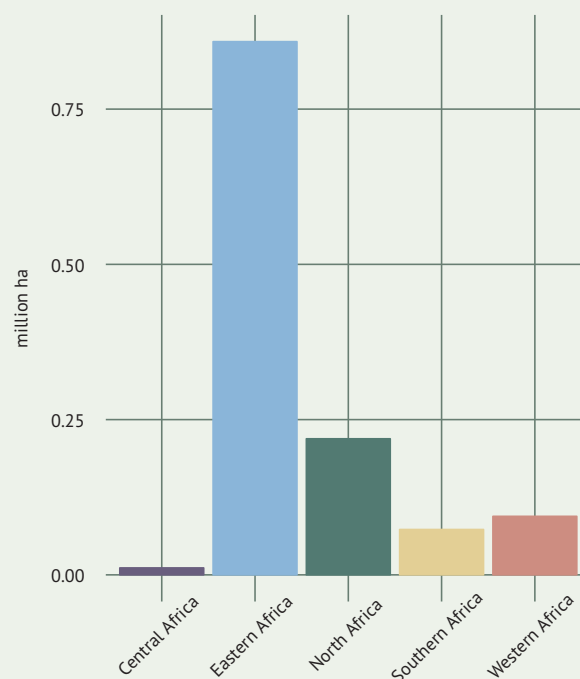
“The majority of certified organic produce in Africa is destined for export markets. The major crops are coffee, olives, cocoa, oilseeds and cotton. The European Union is Africa’s largest market for agricultural products. There is a growing recognition among policy makers that organic agriculture has a significant role to play in addressing the pressing problems of food insecurity, poverty and climate change in Africa”.<sup>6</sup>

## Further reading

- FAO Organic Agriculture ([www.fao.org/organicag/en/](http://www.fao.org/organicag/en/))
- FAO Organic Agriculture and Environmental Stability of the Food Supply - FAO (<ftp://ftp.fao.org/docrep/fao/meeting/012/ah950e.pdf>)

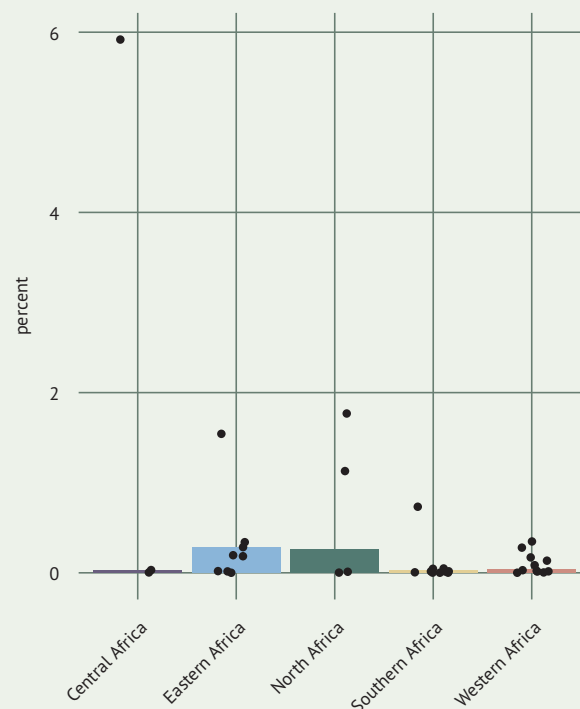
<sup>6</sup> FiBL & IFOAM (2013): The World of Organic Agriculture 2013. Frick and Bonn

CHART 107: Organic agriculture area (2011)



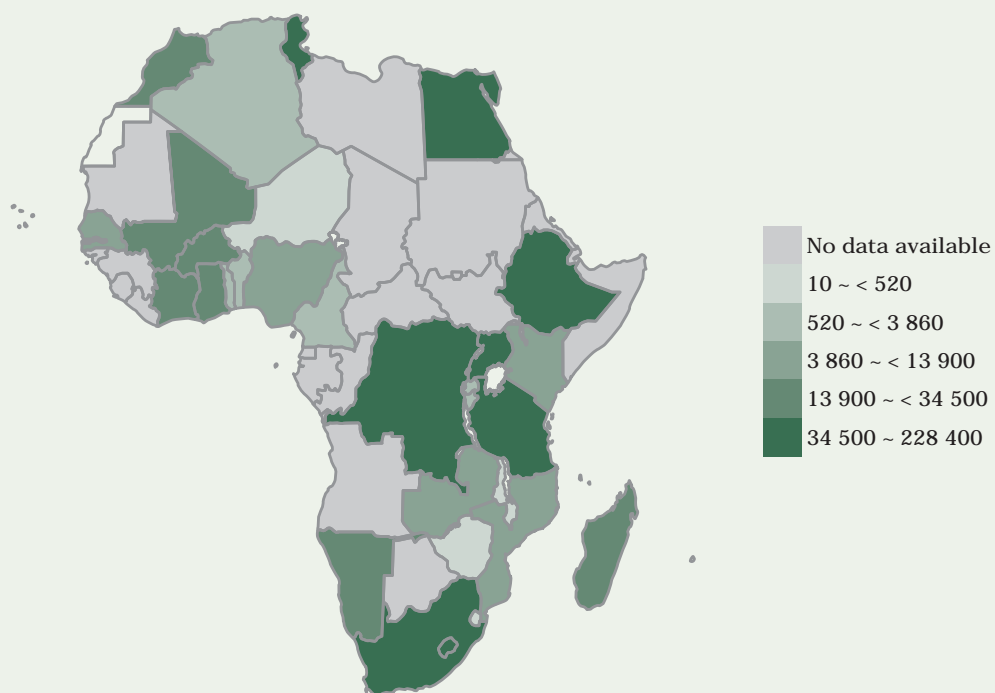
Source: FAO, Statistics Division (FAOSTAT).

CHART 108: Organic agriculture, share of total agricultural area (2011)



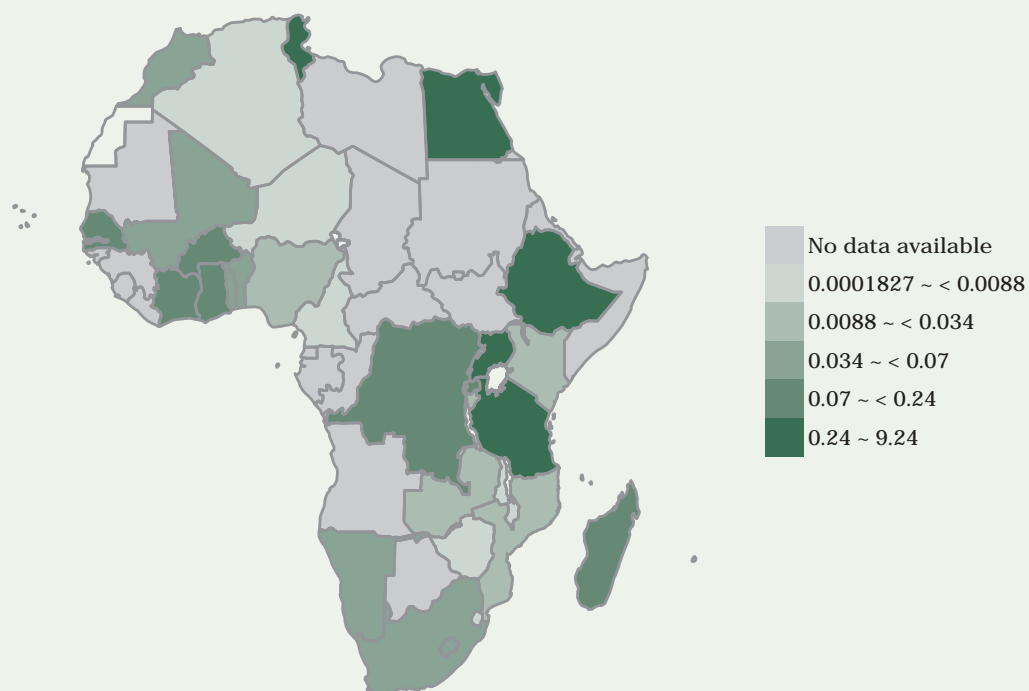
Source: FAO, Statistics Division (FAOSTAT).

MAP 60: Organic agriculture area (ha, 2011)



Source: FAO, Statistics Division (FAOSTAT).

MAP 61: Organic agriculture, share of total agricultural area (percent, 2011)



Source: FAO, Statistics Division (FAOSTAT).

## Bio-based economy

There is general consensus on the definition of the bio-based economy provided in the European Commission's background paper<sup>7</sup> for public consultation:

...a low waste production chain starting from the use of land and sea, through the transformation and production of bio-based products adapted to the requirements of end-users. More precisely, a bio-based economy integrates the full range of natural and renewable biological resources – land and sea resources, biodiversity and biological materials (plant, animal and microbial), through to the processing and the consumption of these bio-resources. The bio-economy encompasses the agriculture, forestry, fisheries, food and biotechnology sectors, as well as a wide range of industrial sectors, ranging from the production of energy and chemicals to building and transport. It comprises a broad range of generic and specific technological solutions (already available or still to be developed) which could be applied across these sectors to enable growth and sustainable development, for example in terms of food security and requirements for industrial material for future generations.

From 2005 to 2010, among the bioenergy crops, maize was the largest in the world, followed closely by oil crops. Sugar was the third largest. However, some bioenergy crops such as wheat and cassava were quite insignificant because very small areas were allocated for their production (chart 109).

Biofuel production (1990-2009) was higher in West Africa, where in 1990, production was more than 60 thousand kilotons of oil equivalent, and it grew rapidly to reach roughly 100 thousand kilotons by 2009. After West Africa was East Africa, with a biofuel production ranging between 30 to 60 thousand kilotons. Next in size was South Africa (30 to 40), Central Africa (15 to 30), and then North Africa with the lowest biofuel production of less than 5 thousand kilotons from 1990 to 2009 (chart 110).

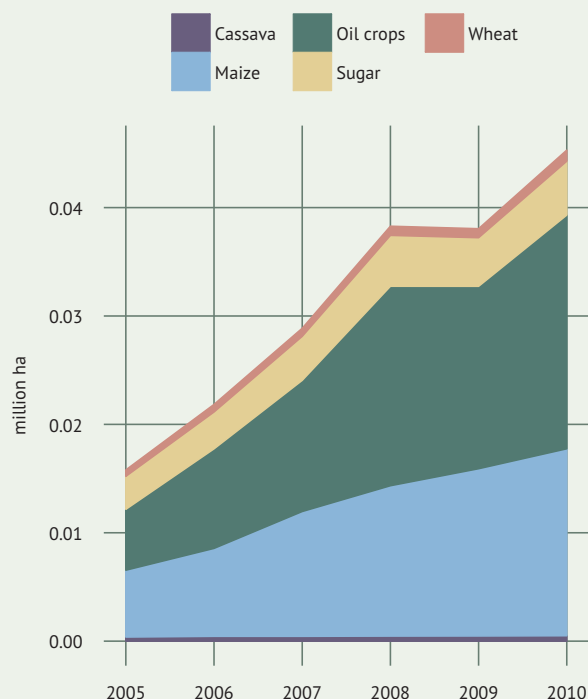
The leading biofuel producing countries in 2009 were Angola, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Mozambique, Nigeria, South Africa, Tanzania, and Zambia. Their production ranged between 6 280 and 91 907 kilotons of oil equivalent, (map 62).

## Further reading

- FAO Bioenergy ([www.fao.org/bioenergy](http://www.fao.org/bioenergy))
- UN International Year of Natural Fibres ([www.naturalfibres2009.org/en/index.html](http://www.naturalfibres2009.org/en/index.html))

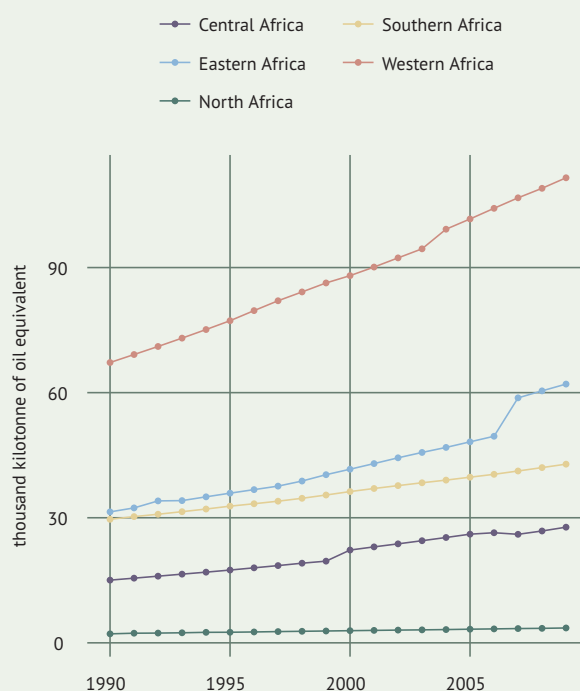
<sup>7</sup> <http://ec.europa.eu/research/consultations/bioeconomy/bio-based-economy-for-europe-part2.pdf>

CHART 109: World area under bioenergy crops (2005-2010)



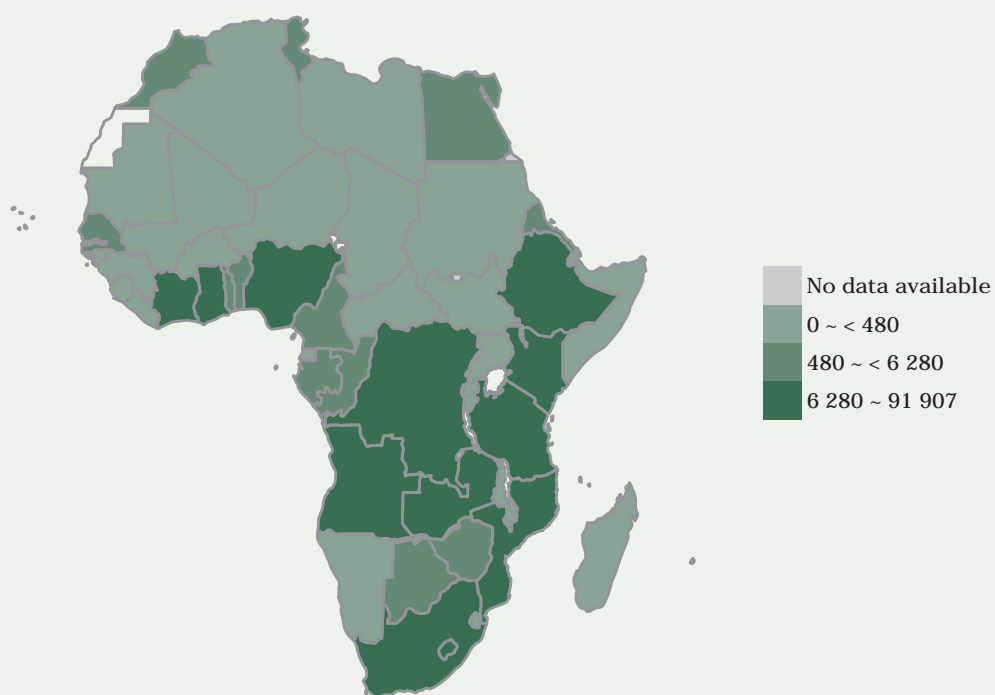
Source: FAO.

CHART 110: Biofuel production (1990-2009)



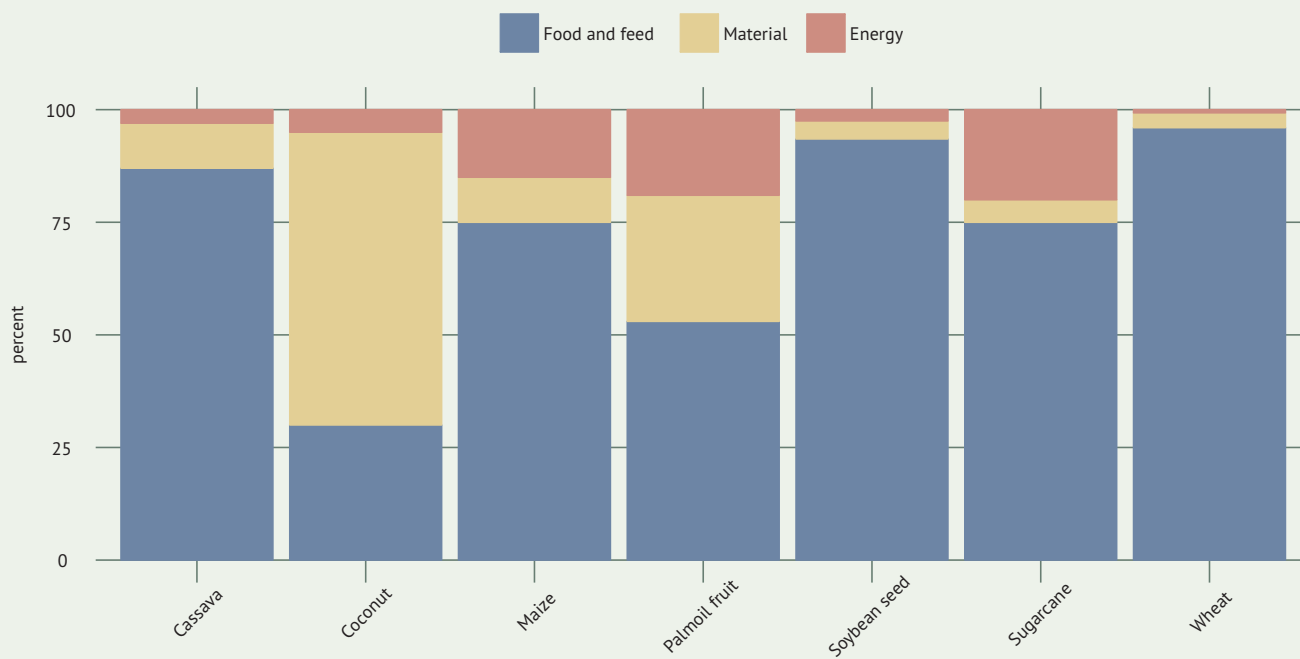
Source: IEA.

MAP 62: Biofuel production (kilotonne of oil equivalent, 2009)



Source: IEA.

CHART 111: Share of food crop usage in world bio-based economy (2009)



Source: FAO, Statistics Division.

## Climate change

Climate change generally refers to a long-term increase in global temperatures. Global atmospheric temperature is predicted to rise by roughly 4°C by 2080, consistent with a doubling of atmospheric CO<sub>2</sub> concentration. Mean temperatures are expected to rise at a faster rate in the upper latitudes, with slower rates in equatorial regions. Mean temperature rise at altitude is expected to be higher than at sea level, resulting in intensification of convective precipitation and acceleration of snowmelt and glacier retreat. In response to global warming, the hydrological cycle is expected to accelerate, as rising temperatures increase the rate of evaporation from land and sea. Thus rainfall is predicted to rise in the tropics and higher latitudes, but decrease in the already dry semi-arid to arid mid-latitudes and in the interior of large continents. Water-scarce areas of the world will generally become drier and hotter. Both rainfall and temperatures are predicted to become more variable, with a consequent higher incidence of droughts and floods, sometimes in the same place.

Since 1900, the global land-ocean temperature index has increased rapidly. Indeed, from 1950 to 2000, chart 112 highlights a strong ascending slope, hence strong increase in global temperatures. If current trends continue over the next decades, the world could see a further increase in the global land-ocean temperature index.

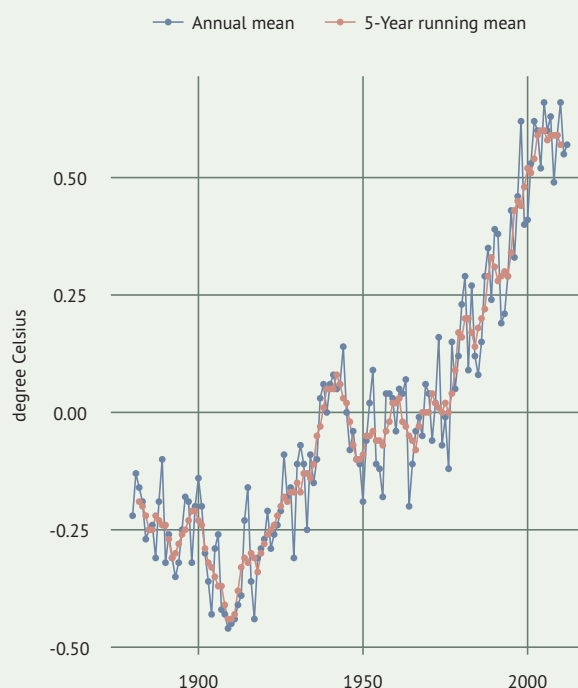
Climate change according to scientists is believed to cause the increased frequency and also severity of natural disasters. However, the causes of climate change remain complex and an often controversial topic.

The poorest and most food-insecure regions around the globe will be the most vulnerable under climate change. First, already scarce land and water resources will likely become even scarcer, and secondly insufficient technical and financial means will make adaptation to the new climate very difficult.

## Further reading

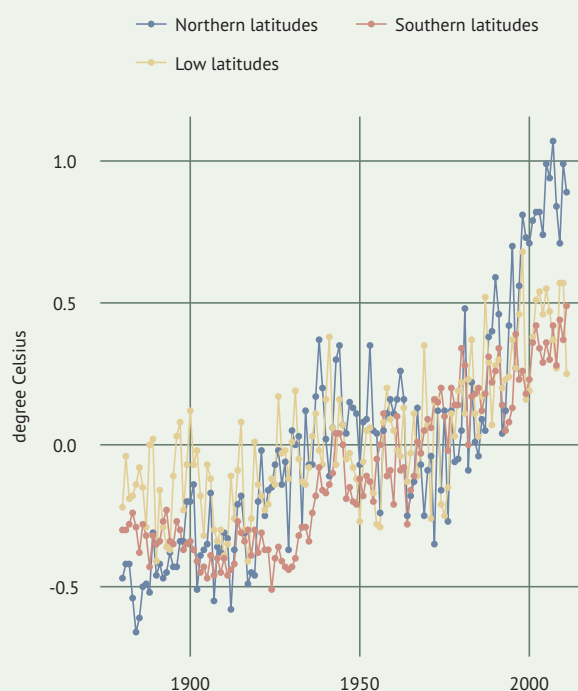
- FAO Climate Change ([www.fao.org/climatechange/](http://www.fao.org/climatechange/))
- FAO Climate Change, Water and Food Security 2011
- FAO Energy-smart food for people and climate ([www.fao.org/docrep/014/i2454e/i2454e00.pdf](http://www.fao.org/docrep/014/i2454e/i2454e00.pdf))
- Intergovernmental Panel on Climate Change (IPCC) ([www.ipcc.ch/](http://www.ipcc.ch/))
- NASA (<http://data.giss.nasa.gov/gistemp/>)

CHART 112: Global land-ocean temperature index, base period 1951-1980 (1880-2012)



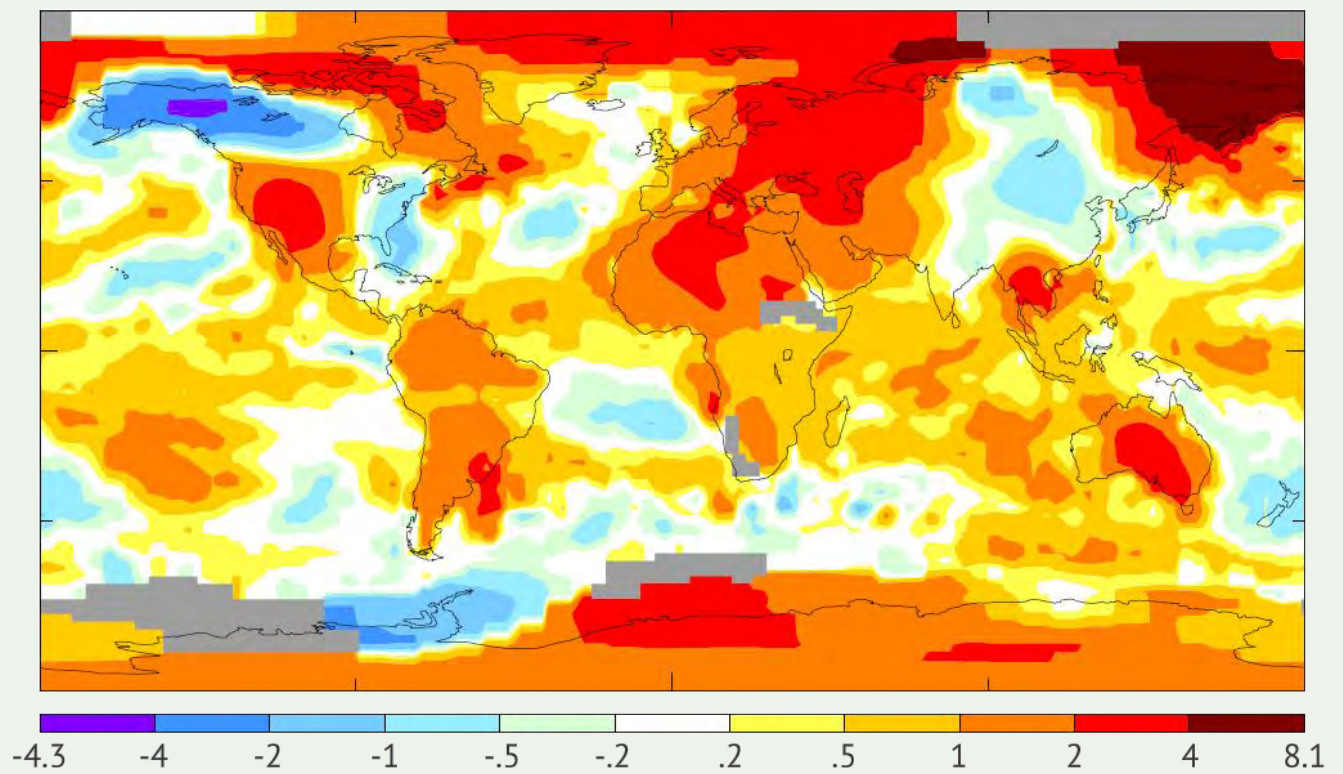
Source: NASA.

CHART 113: Global land-ocean temperature index for three latitude bands, base period 1951-1981 (1880-2011)



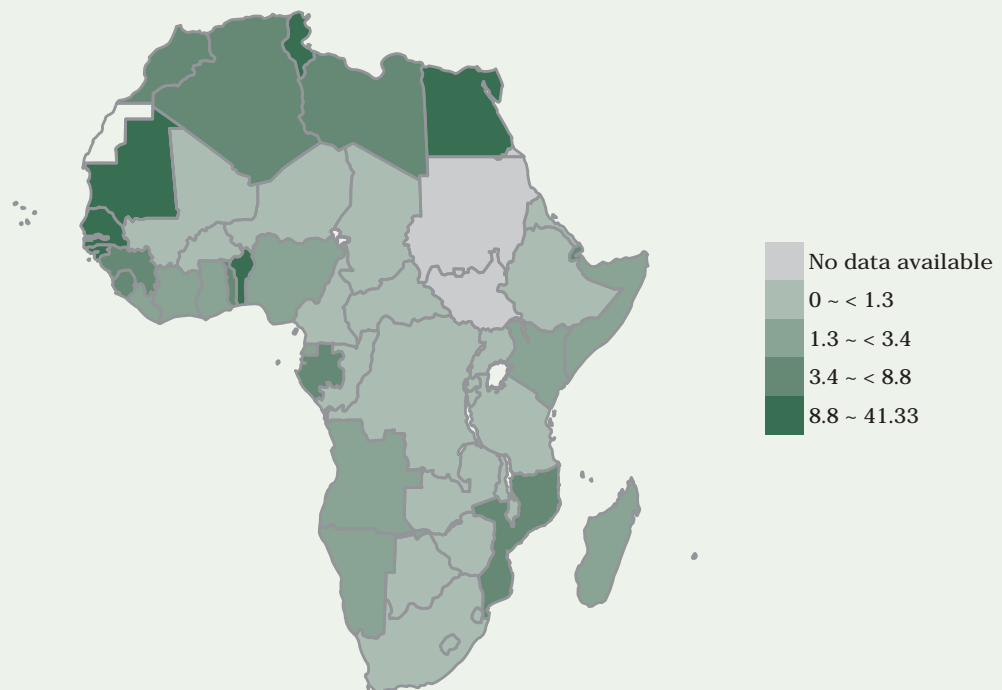
Source: NASA.

MAP 63: Surface temperature, anomaly versus 1951-1980 (degrees Celsius, 2012)



Source: NASA, GISS Surface Temperature Analysis.

MAP 64: Share of population living in areas with elevation of 5 meters or less (percent, 2000)



Source: World Bank (WDI).

## Greenhouse gas emissions

Greenhouse gas (GHG) emissions from agriculture, including crop and livestock production, forestry and associated land use changes, are responsible for a significant fraction of anthropogenic emissions, up to 30 percent globally according to the Intergovernmental Panel on Climate Change (IPCC). GHG emissions presented in this section are available from the newly launched FAOSTAT Emissions database.

Regarding agricultural emissions, CO<sub>2</sub> equivalent (CO<sub>2</sub> eq) emissions in 2010 was mainly due first, to enteric fermentation representing more than 200 thousand gigagrams CO<sub>2</sub> eq, and secondly, to manure left on pasture (chart 116). RAP was the largest emitter of CO<sub>2</sub> in the world. Indeed, it was the largest producer of CO<sub>2</sub> eq due to the enteric fermentation, manure management, rice cultivation, synthetic fertilizers, left manure on pasture, crop residues and due to burning crop residues, (Table 49).

RAF's emissions were low compared to other regions. Indeed RAF was the fourth largest GHG emitter from enteric fermentation and from manure management.

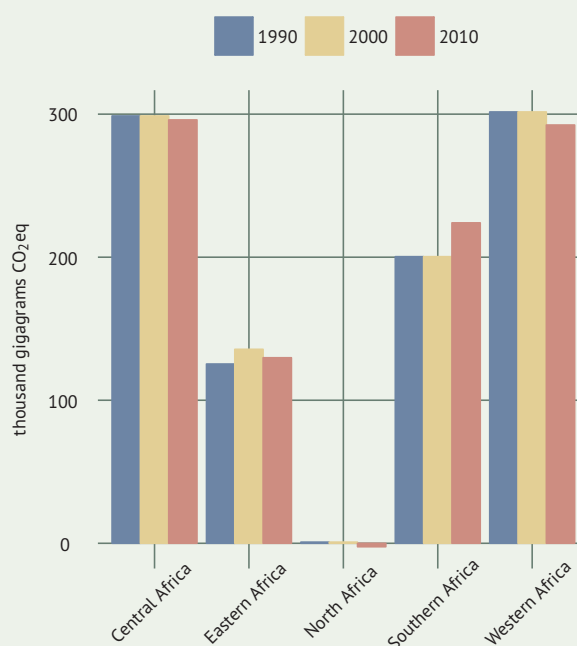
Compared with the other sub-regions, greenhouse gas emissions from cultivated organic soils of East Africa was roughly 35 thousand gigagrams CO<sub>2</sub> eq in 2010. In fact for Central Africa, Southern Africa and West Africa, greenhouse gas emissions from cultivated organic soils was lower than 5 thousand gigagrams CO<sub>2</sub> eq (chart 115).

The countries in which the total agricultural greenhouse gas emissions was the highest (ranging between 16 100 and 75 982 gigagrams CO<sub>2</sub> eq, 2010) were Burkina Faso, Mali, Niger and Nigeria in West Africa, Egypt in North Africa, Ethiopia, Kenya, Somalia, Tanzania and Uganda in East Africa, and South Africa and Madagascar in Southern Africa (map 65).

## Further reading

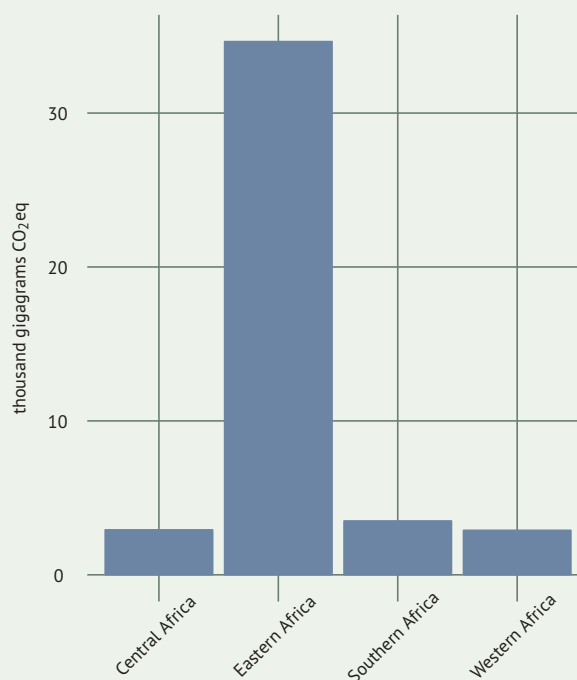
- IPCC ([www.ipcc.ch/](http://www.ipcc.ch/))
- FAOSTAT (<http://faostat.fao.org/>)
- Monitoring and Assessment of GHG Emissions and Mitigation Potentials in Agriculture, MICCA ([www.fao.org/climatechange/micca/ghg/en/](http://www.fao.org/climatechange/micca/ghg/en/))

CHART 114: Net emissions/removals from net forest conversions (1990, 2000 and 2010)



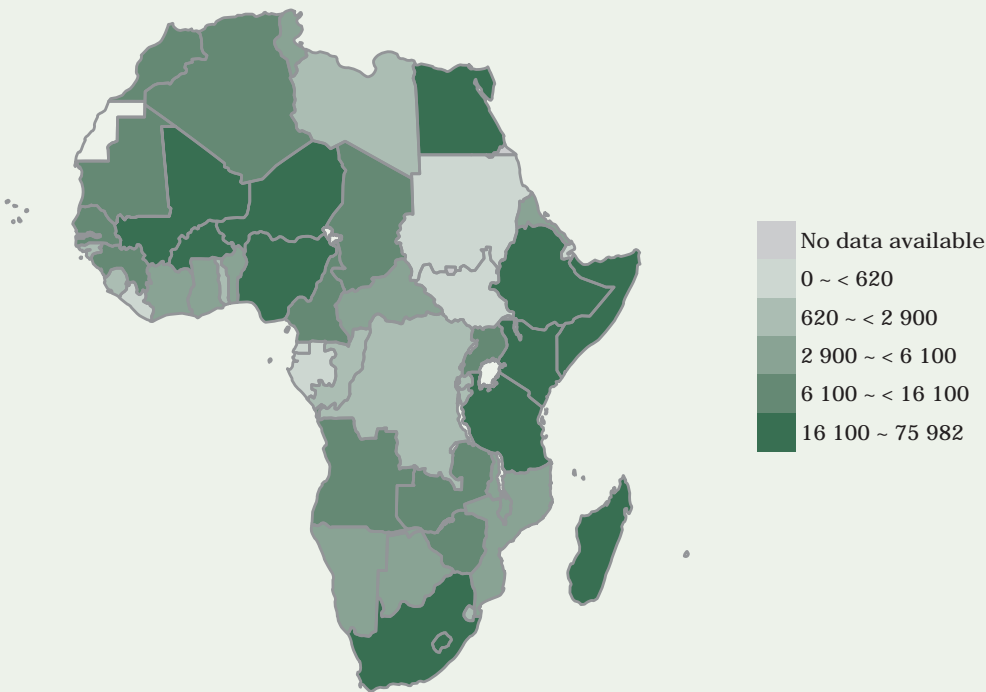
Source: FAO, Statistics Division (FAOSTAT).

CHART 115: Greenhouse gas emissions from cultivated organic soils (2010)



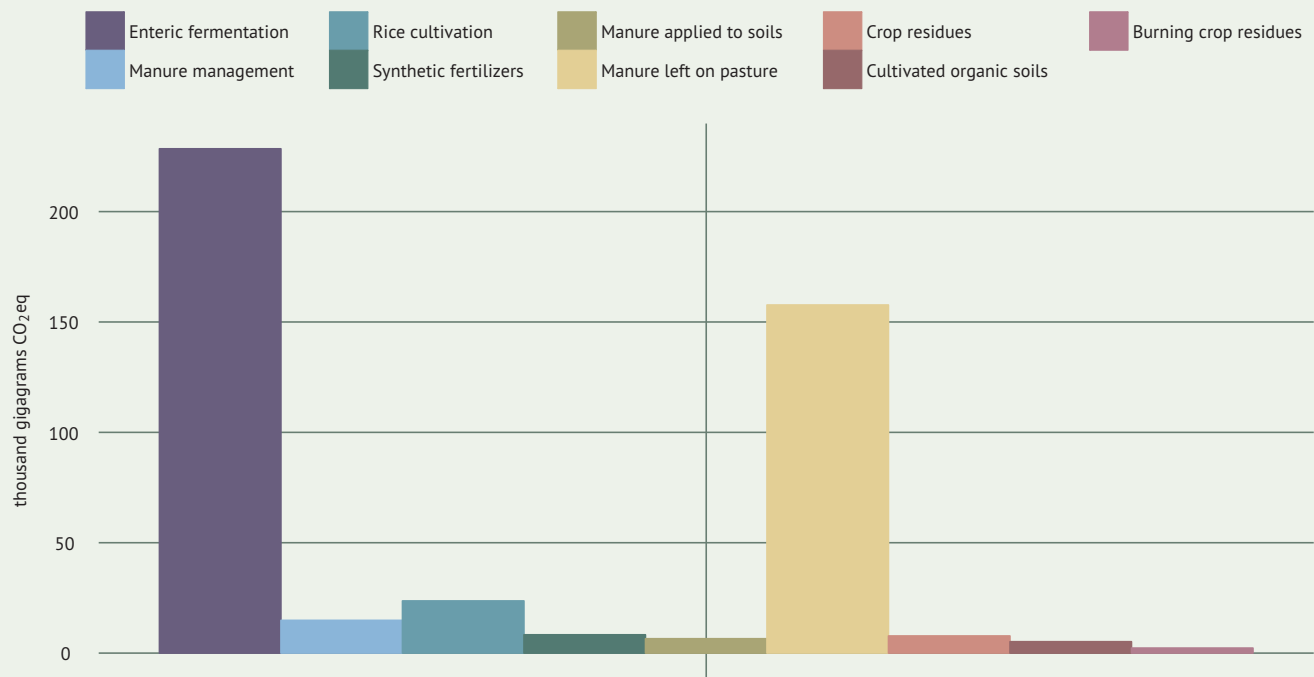
Source: FAO, Statistics Division (FAOSTAT).

MAP 65: Total agricultural greenhouse gas emissions (gigagrams CO<sub>2</sub>eq, 2010)



Source: FAO, Statistics Division (FAOSTAT).

CHART 116: Africa agricultural greenhouse gas emissions by sector (2010)



Source: FAO, Statistics Division (FAOSTAT).

TABLE 41: Land and Forestry

	Forest area				Forest characteristics					
	total		% total land		primary forest		other naturally regenerated forest		planted forest	
	thousand ha 1990	thousand ha 2011	percent 1990	percent 2011	percent 1990	percent 2010	percent 1990	percent 2010	percent 1990	percent 2010
<b>Africa</b>	749 238	601 104	25.3	22.0	2.2	9.4	97.4	87.7	0.4	13.0
<b>North Africa</b>	7 620	7 934	1.3	1.4	0.0	0.0	82.1	74.7	17.9	25.3
Algeria	1 667	1 483	0.7	0.6	0.0	0.0	80.0	72.9	20.0	27.1
Egypt	44	71	0.0	0.1	0.0	0.0	0.0	0.0	100.0	100.0
Libya	217	217	0.1	0.1	0.0	0.0	0.0	0.0	100.0	100.0
Morocco	5 049	5 141	11.3	11.5	0.0	0.0	90.5	87.9	9.5	12.1
Sudan										
Tunisia	643	1 022	4.1	6.6	0.0	0.0	54.4	31.4	45.6	68.6
<b>Regional Office for Africa</b>	724 070	592 369	32.1	27.9	2.2	11.9	97.4	85.6	0.4	13.1
<b>Central Africa</b>	267 605	253 581	51.0	48.3	39.3	30.3	60.6	69.5	0.2	42.4
Cameroon	24 316	19 696	51.4	41.7						
Central African Republic	23 203	22 575	37.2	36.2	16.8	10.5	83.2	89.5	0.0	0.0
Chad	13 110	11 446	10.4	9.1	1.6	1.6	98.3	98.3	0.1	0.1
Congo	22 726	22 399	66.5	65.6	33.2	33.2	66.6	66.5	0.2	0.3
Democratic Republic of the Congo	160 363	153 824	70.7	67.9					100.0	100.0
Equatorial Guinea	1 860	1 614	66.3	57.5	0.0	0.0	100.0	100.0	0.0	0.0
Gabon	22 000	22 000	85.4	85.4	95.2	65.2	4.7	34.7	0.1	0.1
Sao Tome and Principe	27	27	28.1	28.1	40.7	40.7	59.3	59.3	0.0	0.0
<b>East Africa</b>	135 230	60 354	28.6	17.5	10.6	11.2	85.1	83.0	4.3	5.8
Burundi	289	170	11.3	6.6	38.1	23.3	61.9	36.6	0.0	40.1
Djibouti	6	6	0.2	0.2	0.0	0.0	100.0	100.0	0.0	0.0
Eritrea		1 528		15.1	0.0	0.0	99.4	97.8	0.6	2.2
Ethiopia		12 155		12.2	0.0	0.0	96.8	95.8	3.2	4.2
Kenya	3 708	3 456	6.5	6.1	18.7	18.9	74.9	75.5	6.4	5.7
Rwanda	318	445	12.9	18.0	2.2	1.6	19.8	12.6	78.0	85.7
Somalia	8 282	6 670	13.2	10.6	0.0	0.0	100.0	100.0	0.0	0.0
South Sudan										
Sudan (former)	76 381		32.1		20.0	20.0	72.9	71.3	7.1	8.7
Uganda	4 751	2 900	23.8	14.5	0.0	0.0	99.3	98.3	0.7	1.7
United Republic of Tanzania	41 495	33 025	46.8	37.3	0.0	0.0	99.6	99.3	0.4	0.7
<b>Southern Africa</b>	229 231	205 844	35.3	31.7	3.0	2.8	95.9	95.8	1.1	1.5
Angola	60 976	58 355	48.9	46.8	0.0	0.0	99.8	99.8	0.2	0.2
Botswana	13 718	11 233	24.2	19.8	0.0	0.0	100.0	100.0	0.0	0.0
Comoros	12	3	6.4	1.4	0.0	0.0	83.3	66.7	16.7	33.3
Lesotho	40	44	1.3	1.5	0.0	0.0	85.0	76.4	15.0	23.6
Madagascar	13 692	12 496	23.5	21.5	24.6	24.2	73.7	72.5	1.7	3.3
Malawi	3 896	3 204	41.3	34.0	44.3	28.9	52.3	59.9	3.4	11.3
Mauritius	39	35	19.1	17.3	0.0	0.0	61.3	57.7	38.7	42.3
Mozambique	43 378	38 811	55.2	49.4	0.0	0.0	99.9	99.8	0.1	0.2
Namibia	8 762	7 216	10.6	8.8	0.0	0.0	100.0	100.0	0.0	0.0
Seychelles	41	41	88.5	88.5	4.9	4.9	83.3	83.3	11.8	11.8
South Africa	9 241	9 241	7.6	7.6	10.2	10.2	72.2	70.7	17.6	19.1
Swaziland	472	567	27.4	33.0	0.0	0.0	66.1	75.1	33.9	24.9
Zambia	52 800	49 301	71.0	66.3	0.0	0.0	99.9	99.9	0.1	0.1
Zimbabwe	22 164	15 297	57.3	39.5	3.6	5.1	95.7	94.2	0.7	0.7
<b>West Africa</b>	92 004	72 590	15.2	12.0	0.2	4.3	99.7	92.3	0.0	3.4
Benin	5 761	4 511	51.1	40.0	0.0	0.0	99.8	99.6	0.2	0.4
Burkina Faso	6 847	5 589	25.0	20.4	0.0	0.0	99.9	98.1	0.1	1.9
Cabo Verde	58	85	14.3	21.0	0.0	0.0	0.0	0.0	100.0	100.0
Côte d'Ivoire	10 222	10 403	32.1	32.7	6.1	6.0	92.4	90.8	1.5	3.2
Gambia	442	482	43.7	47.6	0.3	0.2	99.4	99.5	0.3	0.3
Ghana	7 448	4 825	32.7	21.2	5.3	8.0	94.0	86.7	0.7	5.3
Guinea	7 264	6 508	29.6	26.5	0.9	1.0	98.3	97.6	0.8	1.4
Guinea-Bissau	2 216	2 012	78.8	71.6	0.0	0.0	100.0	100.0	0.0	0.0
Liberia	4 929	4 299	51.2	44.6	3.6	4.0	96.3	95.8	0.2	0.2
Mali	14 072	12 411	11.5	10.2	0.0	0.0	100.0	95.8	0.0	4.2
Mauritania	415	237	0.4	0.2	0.0	0.0	98.8	91.3	1.2	8.7
Niger	1 945	1 192	1.5	0.9	11.3	18.3	86.2	69.4	2.5	12.3
Nigeria	17 234	8 631	18.9	9.5	9.0	0.0	89.5	95.8	1.5	4.2
Senegal	9 348	8 433	48.6	43.8	18.8	18.3	79.0	76.2	2.2	5.5
Sierra Leone	3 118	2 706	43.5	37.8	7.2	4.1	92.6	95.3	0.2	0.5
Togo	685	267	12.6	4.9	0.0	0.0	96.5	85.4	3.5	14.6
<b>CEMAC</b>	107 215	99 730	36.0	33.4	39.3	30.3	60.6	69.5	0.1	0.2
<b>CEN-SAD</b>	211 214	114 438	16.2	10.6	1.0	10.6	98.7	84.0	0.3	5.4
<b>COMESA</b>	355 928	255 715	31.9	29.1	11.2	11.3	84.9	83.7	3.8	29.2
<b>ECCAS</b>	328 870	312 106	50.4	47.9	22.7	17.6	77.2	82.2	0.2	29.9
<b>ECOWAS</b>	91 589	72 353	18.2	14.4	0.2	4.3	99.7	92.3	0.0	3.4
<b>IGAD</b>		26 714		10.6	14.5	15.1	79.8	77.8	5.6	7.1
<b>SADC</b>	431 077	392 689	44.7	40.7	2.5	2.4	96.5	96.2	1.0	20.8
<b>UEMOA</b>	51 096	44 817	14.7	12.9	0.1	5.3	99.9	91.0	0.0	3.7
<b>UMA</b>	7 991	8 101	1.4	1.4	0.0	0.0	83.4	75.9	16.6	24.1
<b>Regional Office for Asia and the Pacific</b>	744 278	1 567 564	24.3	31.3	41.8	36.4	55.1	53.1	3.2	10.5
<b>Regional Office for Europe and Central Asia</b>		1 031 346		38.3	22.4	23.1	70.2	68.1	7.4	8.8
<b>Regional Office for Latin America and the Caribbean</b>	1 039 686	942 806	51.6	46.8	75.1	72.9	24.0	25.0	0.9	2.0
<b>Regional Office for the Near East</b>	98 673	22 656	6.8	1.9	16.1	15.7	75.7	73.9	8.2	10.4
<b>World</b>	4 168 399	3 957 571	32.0	31.0	28.0	38.2	69.1	52.9	3.0	9.9

TABLE 42: Forestry production and trade

	Production of selected forest products							
	industrial roundwood		woodfuel		roundwood			
	total	p.a.	total	p.a.	total	p.a.	export	import
	thousand m <sup>3</sup> 2011-12	growth percent 1962-2012	thousand m <sup>3</sup> 2011-12	growth percent 1962-2012	thousand m <sup>3</sup> 2011-12	growth percent 1962-2012	thousand m <sup>3</sup> 2011-12	thousand m <sup>3</sup> 2011-12
<b>Africa</b>	72 357		636 853	2.1	709 211	2.1	3 918.7	703.8
<b>North Africa</b>	3 286	1.8	50 408	1.3	53 693	1.3	18.1	537.0
Algeria	139	0.2	8 317	2.1	8 455	2.1	0.3	6.4
Egypt	268	3.1	17 601	1.1	17 869	1.1	2.8	269.3
Libya	116	3.4	975	2.4	1 091	2.5	0.0	5.1
Morocco	372	0.2	6 741	0.5	7 113	0.5	5.1	244.5
Sudan	2 173		14 583		16 756		9.8	0.6
Tunisia	218	2.9	2 191	1.1	2 409	1.2	0.1	11.2
<b>Regional Office for Africa</b>	69 067	2.5	586 388	2.2	655 455	2.1	3 898.2	166.3
<b>Central Africa</b>	14 392	2.1	101 280	2.5	115 672	2.5	2 331.9	9.2
Cameroon	2 175	2.1	10 081	0.8	12 256	1.0	514.1	5.2
Central African Republic	732	2.0	2 000	0.5	2 732	0.8	176.0	0.0
Chad	761	1.8	7 300	2.0	8 061	2.0	0.0	1.4
Congo	2 194	2.9	1 379	1.0	3 573	2.0	985.0	1.5
Democratic Republic of the Congo	4 592	2.2	78 894	2.9	83 486	2.9	260.0	0.7
Equatorial Guinea	525	0.7	447	0.7	972	0.7	329.7	0.4
Gabon	3 400	1.6	1 070	2.2	4 470	1.7	67.0	0.0
Sao Tome and Principe	13		109	1.7	122	1.9	0.1	0.0
<b>East Africa</b>	12 794	3.6	228 669	2.1	241 463	2.1	27.3	44.0
Burundi	883	7.3	9 536	2.0	10 419	2.2	2.8	0.3
Djibouti	0		367		367	10.1	0.0	1.4
Eritrea	1		1 264		1 265		0.2	0.0
Ethiopia	2 935		103 966		106 901		0.1	4.8
Kenya	1 246	2.0	26 400	2.3	27 646	2.3	3.5	12.6
Rwanda	1 212	6.5	5 000	1.1	6 212	1.5	0.1	8.8
Somalia	110	1.9	13 957	3.3	14 067	3.3	0.6	1.5
South Sudan	0		4 383		4 383		0.0	0.0
Sudan (former)								
Uganda	4 093	3.3	40 726	2.1	44 819	2.2	10.3	9.4
United Republic of Tanzania	2 314	2.2	23 069	1.3	25 383	1.3	9.7	4.9
<b>Southern Africa</b>	24 462	2.3	74 753	2.8	99 215	2.4	454.2	51.1
Angola	1 096	0.9	4 194	2.6	5 290	2.1	7.1	6.4
Botswana	105	2.3	690	0.4	795	0.5	0.0	0.4
Comoros	25		280	3.7	304	3.9	0.0	0.0
Lesotho	0		2 108	0.7	2 108	0.7	0.0	0.0
Madagascar	281	-0.8	13 045	3.6	13 326	3.3	1.8	3.5
Malawi	1 400	4.6	5 528	1.0	6 928	1.4	5.8	0.0
Mauritius	4	-3.4	7	-3.9	11	-3.7	0.4	15.3
Mozambique	1 416	1.0	16 724	1.8	18 140	1.8	265.5	13.0
Namibia	0		833	1.8	833	1.8	17.4	8.6
Seychelles	10		3		13		0.4	0.1
South Africa	17 952	2.4	12 000	6.4	29 952	3.2	154.1	2.8
Swaziland	330	1.7	1 093		1 423	4.7	0.0	0.0
Zambia	1 325	3.0	9 382	2.1	10 707	2.1	1.0	0.4
Zimbabwe	518	2.0	8 867	1.6	9 385	1.6	0.7	0.5
<b>West Africa</b>	17 418	2.3	181 687	1.8	199 105	1.7	1 084.7	62.1
Benin	427	2.3	6 363	0.5	6 790	0.6	241.2	0.1
Burkina Faso	1 171	3.6	13 145	1.5	14 316	1.6	0.5	0.4
Cabo Verde	0		200	1.8	200	1.8	5.3	1.8
Côte d'Ivoire	1 469	-0.3	9 035	0.7	10 504	0.5	156.7	0.0
Gambia	113	6.4	713	2.4	825	2.7	2.8	0.8
Ghana	1 289	-0.8	40 203	3.7	41 492	3.2	269.7	18.7
Guinea	651	1.8	12 063	0.7	12 714	0.7	38.1	0.3
Guinea-Bissau	132	0.6	2 675	3.9	2 807	3.6	14.5	0.0
Liberia	538	2.8	7 508	4.5	8 046	4.3	139.0	0.0
Mali	413	1.6	5 445	1.5	5 857	1.5	2.5	0.8
Mauritania	3	0.0	1 919	2.1	1 922	2.1	0.3	31.5
Niger	701	3.4	2 857	0.5	3 558	0.8	0.2	1.1
Nigeria	9 418	2.9	63 999	1.1	73 417	1.3	96.5	1.9
Senegal	804	2.2	5 478	1.2	6 282	1.3	1.1	4.3
Sierra Leone	124	-0.1	5 660	0.0	5 783	0.0	19.0	0.1
Togo	166	1.5	4 424	0.5	4 590	0.5	97.3	0.2
<b>CEMAC</b>	9 787	2.0	22 276	1.3	32 063	1.4	2 071.8	8.5
<b>CEN-SAD</b>	21 540	2.2	239 146	1.9	260 686	1.8	1 235.6	563.4
<b>COMESA</b>	21 412		341 901		363 313	2.4	299.7	333.0
<b>ECCAS</b>	16 371	2.3	115 011	2.5	131 382	2.4	2 341.8	15.9
<b>ECOWAS</b>	17 415	2.3	179 767	1.8	197 182	1.7	1 084.4	30.6
<b>IGAD</b>	10 558		205 646		216 204		24.5	30.4
<b>SADC</b>	31 344	2.3	176 436	2.7	207 780	2.5	724.0	56.7
<b>UEMOA</b>	5 283	1.9	49 421	1.2	54 704	1.2	514.0	6.9
<b>UMA</b>	848	1.3	20 143	1.5	20 991	1.4	5.8	298.7
<b>Regional Office for Asia and the Pacific</b>	492 829		791 993	0.4	1 284 822	0.6	45 379.5	60 337.6
<b>Regional Office for Europe and Central Asia</b>	548 725		158 139		706 864		61 838.4	55 978.3
<b>Regional Office for Latin America and the Caribbean</b>	221 276	4.2	289 182	1.2	510 458	2.1	1 430.0	242.5
<b>Regional Office for the Near East</b>	4 059		53 680	1.3	57 738	1.2	40.9	964.5
<b>World</b>	1 652 146		1 882 369	1.1	3 534 516	1.1	116 680.1	124 720.0

TABLE 43: Forestry production: finished products

	Production of selected forest products							
	sawnwood		wood-based panels		wood pulp		paper and paperboard	
	total	p.a.	total	p.a.	total	p.a.	total	p.a.
	thousand m <sup>3</sup>	growth percent	thousand m <sup>3</sup>	growth percent	thousand tonnes	growth percent	thousand tonnes	growth percent
	2011-12	1962-2012	2011-12	1962-2012	2011-12	1962-2012	2011-12	1962-2012
<b>Africa</b>	8 566		2 871		2 633		3 747	
<b>North Africa</b>	210		248		262		999	
Algeria	13	-3.0	48		0		46	1.2
Egypt	12		59	3.2	41		660	4.1
Libya	31	4.2	0		0		6	1.8
Morocco	83	2.7	35	3.4	221	4.7	127	2.2
Sudan	51		2		0		3	
Tunisia	20	4.3	104		0		157	7.8
<b>Regional Office for Africa</b>	8 353		2 623		2 371		2 748	
<b>Central Africa</b>	1 923		595		0		6	
Cameroon	993	5.0	78	3.7	0		0	
Central African Republic	54	0.6	5		0		0	
Chad	2		0		0		0	
Congo	214	3.8	93	4.9	0		3	
Democratic Republic of the Congo	150	0.1	4	-4.8	0		3	3.3
Equatorial Guinea	4	-3.1	28		0		0	
Gabon	500	5.2	387	3.3	0		0	
Sao Tome and Principe	5		0		0		0	
<b>East Africa</b>	533		214		56		106	
Burundi	83		0		0		0	
Djibouti	0		0		0		0	
Eritrea	0		0		0		0	
Ethiopia	18		103		0		78	
Kenya	142	2.1	83		0		0	
Rwanda	135		0		0		0	
Somalia	14	2.1	0		0		0	
South Sudan	0		0		0		0	
Sudan (former)								
Uganda	117	2.9	24	3.4	0		3	
United Republic of Tanzania	24	-2.9	5	4.2	56		25	
<b>Southern Africa</b>	2 357		742		2 292		2 616	
Angola	5	-5.3	11		15	0.1	0	
Botswana	0		0		0		0	
Comoros	0		0		0		0	
Lesotho	0		0		0		0	
Madagascar	104	1.1	1		1		10	
Malawi	45	2.8	18		0		0	
Mauritius	2	-1.6	0		0		0	
Mozambique	198	0.8	2	-0.7	0		2	
Namibia	0		0		0		0	
Seychelles	1		0		0		0	
South Africa	1 567	1.8	617	3.7	2 276	3.7	2 442	4.9
Swaziland	102	1.9	8		0		49	
Zambia	157	3.0	18		0		4	
Zimbabwe	177	2.1	68		0		109	5.9
<b>West Africa</b>	3 540		1 071		23		20	
Benin	84	4.3	0		0		0	
Burkina Faso	5		0		0		0	
Cabo Verde	0		0		0		0	
Côte d'Ivoire	700	3.3	477	8.0	0		0	
Gambia	1	2.4	0		0		0	
Ghana	515	0.4	451	6.8	0		0	
Guinea	30	1.0	42		0		0	
Guinea-Bissau	16	1.5	0		0		0	
Liberia	80	1.5	0		0		0	
Mali	13	0.5	0		0		0	
Mauritania	14		2		0		1	
Niger	4		0		0		0	
Nigeria	2 002	4.2	97	2.7	23		19	
Senegal	25	1.0	0		0		0	
Sierra Leone	5	-1.3	0		0		0	
Togo	46	6.5	2		0		0	
<b>CEMAC</b>	1 767	4.8	591		0		3	
<b>CEN-SAD</b>	3 764		1 232		285		972	
<b>COMESA</b>	1 327		388		42		925	
<b>ECCAS</b>	2 011	4.4	606		15		6	
<b>ECOWAS</b>	3 526	3.3	1 069		23		19	
<b>IGAD</b>	342		211		0		84	
<b>SADC</b>	2 531	1.7	752		2 348		2 644	
<b>UEMOA</b>	893	3.4	479		0		0	
<b>UMA</b>	161	2.8	189		221		337	4.7
<b>Regional Office for Asia and the Pacific</b>	140 473		165 941		39 878		184 549	
<b>Regional Office for Europe and Central Asia</b>	143 131		81 610		47 314		107 209	
<b>Regional Office for Latin America and the Caribbean</b>	42 296	2.6	17 538		22 174		20 078	
<b>Regional Office for the Near East</b>	285		1 743		508		3 290	
<b>World</b>	408 768		299 008		173 722		399 734	

TABLE 44: Water withdrawal and pressure on renewable water resources

	Years	Water withdrawal by sector			Water withdrawal		% of renewable freshwater resources	
	year	agricultural percent	% of total		total million m <sup>3</sup> /yr 2010*	per capita m <sup>3</sup> /yr/cap 2010*	withdrawn	
			industrial	municipal			total	by
			percent	percent			percent	agriculture percent
	1975-2010	2010*	2010*	2010*			2010*	2010*
<b>Africa</b>								
<b>North Africa</b>								
Algeria	2000	63.9	13.5	22.5	6 161	196	52.7	33.8
Egypt	2000	86.4	5.9	7.8	68 300	973	94.7	103.0
Libya	2000	82.8	3.1	14.1	4 326	796	609.7	512.0
Morocco	2000	87.3	2.9	9.8	12 607	428	43.5	38.0
Sudan								
Tunisia	2000	82.0	4.2	13.8	2 640	296	61.3	47.1
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon	2000	76.1	7.1	16.8	959	58	0.3	0.3
Central African Republic	2000	1.5	16.5	82.0	67	17	0.0	0.0
Chad	2000	51.8	24.1	24.1	367	42	0.9	0.4
Congo	2002	8.7	21.7	69.6	46	14	0.0	0.0
Democratic Republic of the Congo	2000	17.7	19.8	62.6	622	12	0.0	0.0
Equatorial Guinea	2000	5.7	14.9	79.3	17	31	0.1	0.0
Gabon	2000	38.5	8.8	52.8	130	101	0.1	0.0
Sao Tome and Principe								
<b>East Africa</b>								
Burundi	2000	77.1	5.9	17.0	288	43	2.3	1.8
Djibouti	2000	15.8	0.0	84.2	19	25	6.3	1.0
Eritrea	2004	94.5	0.2	5.3	582	121	9.2	8.7
Ethiopia	2002	93.6	0.4	6.0	5 558	81	4.6	4.3
Kenya	2003	79.2	3.7	17.2	2 735	73	8.9	7.1
Rwanda	2000	68.0	8.0	24.0	150	17	1.6	1.1
Somalia	2003	99.5	0.1	0.5	3 298	378	22.4	22.3
South Sudan								
Sudan (former)	2000	97.1	0.6	2.3	37 140	1 037	57.6	55.9
Uganda	2002	37.8	14.5	47.7	317	12	0.5	0.2
United Republic of Tanzania	2002	89.4	0.5	10.2	5 184	145	5.4	4.8
<b>Southern Africa</b>								
Angola	2000	32.8	28.8	38.4	641	43	0.4	0.1
Botswana	2000	41.2	18.0	40.7	194	107	1.6	0.7
Comoros	1999	47.0	5.0	48.0	10	17	0.8	0.4
Lesotho	2000	20.0	40.0	40.0	50	25	1.0	0.2
Madagascar	2000	97.5	0.9	1.6	14 680	899	4.4	4.2
Malawi	2000	83.5	4.1	12.3	970	82	5.6	4.7
Mauritius	2003	67.7	2.8	29.5	725	568	26.4	17.9
Mozambique	2000	73.9	3.3	22.8	744	39	0.3	0.3
Namibia	2000	71.0	4.7	24.3	300	152	1.7	1.2
Seychelles	2003	6.6	27.7	65.7	14	161		
South Africa	2000	62.7	6.0	31.2	12 496	272	25.0	15.7
Swaziland	2000	96.5	1.2	2.3	1 042	962	23.1	22.3
Zambia	2000	75.9	7.5	16.7	1 740	163	1.7	1.3
Zimbabwe	2002	78.9	7.1	14.0	4 205	334	21.0	16.6
<b>West Africa</b>								
Benin	2001	45.4	23.1	31.5	130	19	0.5	0.2
Burkina Faso	2000	70.1	1.6	28.3	985	76	7.9	5.5
Cabo Verde	2000	90.9	1.8	7.3	22	49	6.8	6.7
Côte d'Ivoire	2000	42.6	19.1	38.3	1 409	82	1.7	0.7
Gambia	2000	28.1	24.4	47.5	71	52	0.9	0.3
Ghana	2000	66.4	9.7	23.9	982	49	1.8	1.2
Guinea	2000	83.9	3.2	12.9	1 620	188	0.7	0.6
Guinea-Bissau	2000	82.3	4.6	13.1	175	136	0.6	0.5
Liberia	2000	33.6	26.6	39.8	179	60	0.1	0.0
Mali	2000	90.1	0.9	9.0	6 546	545	6.5	5.9
Mauritania	2000	93.7	1.6	4.7	1 601	572	14.0	13.2
Niger	2000	88.0	1.2	10.8	2 364	202	7.0	6.2
Nigeria	2000	53.5	15.1	31.5	10 306	79	3.6	1.9
Senegal	2002	93.0	2.6	4.4	2 221	222	5.7	5.3
Sierra Leone	2000	71.0	9.7	19.4	493	110	0.3	0.2
Togo	2002	45.0	2.4	52.7	169	33	1.2	0.5
<b>CEMAC</b>								
<b>CEN-SAD</b>								
<b>COMESA</b>								
<b>ECCAS</b>								
<b>ECOWAS</b>								
<b>IGAD</b>								
<b>SADC</b>								
<b>UEMOA</b>								
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>								
<b>Regional Office for Europe and Central Asia</b>								
<b>Regional Office for Latin America and the Caribbean</b>								
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 45: Species threatened and nationally protected areas

	Threatened species				Nationally protected areas			
	mammals	birds	fish	higher plants	terrestrial		territorial waters	
	species 2012	species 2012	species 2012	species 2012	% of total land area percent 1990	percent 2010	% of territorial waters percent 1990	percent 2010
<b>Africa</b>	817	811	1 945	2 608	9.2	10.2		
<b>North Africa</b>	89	60	180	53	3.1	3.8		
Algeria	14	11	36	13	6.3	6.3	0.2	0.3
Egypt	18	10	40	2	1.9	5.9	4.4	9.3
Libya	12	4	24	3	0.1	0.1	0.0	0.1
Morocco	17	11	45	29	1.2	1.5	0.8	1.3
Sudan	15	17						
Tunisia	13	7	35	6	1.3	1.3	1.1	1.2
<b>Regional Office for Africa</b>	728	751	1 765	2 555	10.8	11.7		
<b>Central Africa</b>	138	111	346	738	9.9	11.0		
Cameroon	38	24	111	376	7.0	9.2	0.4	0.4
Central African Republic	8	13	3	17	17.5	17.7		
Chad	13	11	1	3	9.4	9.4		
Congo	11	4	45	37	5.4	9.4	0.0	32.8
Democratic Republic of the Congo	30	35	83	85	10.0	10.0	3.8	4.4
Equatorial Guinea	19	6	28	67	7.3	19.2	0.0	2.6
Gabon	14	5	61	119	4.6	15.1	0.2	7.3
Sao Tome and Principe	5	13	14	34				
<b>East Africa</b>	182	203	428	539	9.0	10.8		
Burundi	11	12	17	3	3.8	4.8		
Djibouti	8	9	17	2	0.0	0.0	0.2	0.2
Eritrea	10	14	19	4		5.0	0.0	0.0
Ethiopia	33	26	14	25		18.4		
Kenya	28	34	68	128	11.6	11.8	5.2	10.5
Rwanda	20	14	9	5	9.9	10.0		
Somalia	15	14	28	23	0.6	0.6	0.0	0.0
South Sudan	0	14						
Sudan (former)			20	17	4.2	4.2	0.0	0.0
Uganda	22	22	61	37	7.9	10.3		
United Republic of Tanzania	35	44	175	295	26.6	27.5	3.7	10.0
<b>Southern Africa</b>	175	241	462	720	15.5	16.5		
Angola	15	25	39	33	12.4	12.4	0.1	0.1
Botswana	7	10	2	1	30.3	30.9		
Comoros	5	9	6	4	0.0		0.0	
Lesotho	2	7	1	4	0.5	0.5		
Madagascar	65	35	86	358	2.2	3.1	0.0	0.1
Malawi	7	15	101	16	15.0	15.0		
Mauritius	6	11	15	88	1.7	4.5	0.3	0.3
Mozambique	12	26	54	42	14.8	15.8	1.8	3.3
Namibia	12	26	28	25	14.4	14.9	0.5	8.2
Seychelles	5	10	18	55	42.0	42.0	0.5	0.5
South Africa	24	41	85	67	6.5	6.9	0.7	6.5
Swaziland	6	11	4	3	3.0	3.0		
Zambia	9	15	20	10	36.0	36.0		
Zimbabwe			3	14	18.0	28.0		
<b>West Africa</b>	233	196	529	558	7.8	8.1		
Benin	11	9	27	13	23.8	23.8	0.0	0.0
Burkina Faso	9	9	4	3	13.7	14.2		
Cabo Verde	3	4	24	3	2.5	2.5	0.0	0.0
Côte d'Ivoire	23	20	45	104	22.6	22.6	0.1	0.1
Gambia	10	10	23	4	1.5	1.5	0.1	0.1
Ghana	16	17	44	115	14.6	14.7	0.0	0.0
Guinea	21	17	66	22	6.8	6.8	0.0	0.0
Guinea-Bissau	12	9	31	4	7.6	16.1	2.7	45.8
Liberia	18	13	53	47	1.6	1.8	0.0	0.0
Mali	12	13	2	7	2.3	2.4		
Mauritania	16	13	32	0	0.5	0.5	32.1	32.1
Niger	12	9	4	2	7.1	7.1		
Nigeria	26	18	59	167	11.6	12.8	0.2	0.2
Senegal	16	13	45	9	24.1	24.1	5.8	12.4
Sierra Leone	17	13	47	48	4.9	4.9	0.0	0.0
Togo	11	9	23	10	11.3	11.3	0.0	0.0
<b>CEMAC</b>	103	63	249	619	9.8	11.7		
<b>CEN-SAD</b>	327	295	645	643	6.2	6.7		
<b>COMESA</b>	310	317	625	859	7.9	9.6		
<b>ECCAS</b>	164	148	402	774	10.3	11.2		
<b>ECOWAS</b>	217	183	497	558	9.3	9.7		
<b>IGAD</b>	131	150	227	236		7.8		
<b>SADC</b>	235	311	714	1 096	15.2	16.0		
<b>UEMOA</b>	106	91	181	152	8.9	9.1		
<b>UMA</b>	72	46	172	51	2.9	2.9		
<b>Regional Office for Asia and the Pacific</b>	1 147	1 204	1 549	2 978	9.0	10.5		
<b>Regional Office for Europe and Central Asia</b>	328	478	1 047	648		9.0		
<b>Regional Office for Latin America and the Caribbean</b>	599	960	1 051	4 090	9.7	20.2		
<b>Regional Office for the Near East</b>	219	209	460	245	3.9	7.9		
<b>World</b>	3 075	3 753	6 229	11 212	9.1	12.3		

TABLE 46: Agri-environmental indicators

	Stock of						Organic water pollutant (BOD) emissions	
	cattle and buffaloes		sheep and goats		poultry birds		kg/day	kg/day/worker 2005-06*
	per ha of agricultural area head/ha	head/ha	per ha of agricultural area head/ha	head/ha	per ha of agricultural area head/ha	head/ha		
	2000	2011	2000	2011	2000	2011	2005-06*	
<b>Africa</b>	0.2	0.2	0.4	0.5	1.1	1.7		
<b>North Africa</b>	0.1	0.1	0.7	0.8	4.6	5.7		
Algeria	0.0	0.0	0.5	0.7	2.8	3.1		
Egypt	2.1	2.3	2.4	2.6	36.1	39.7		
Libya	0.0	0.0	0.3	0.6	1.6	2.2		
Morocco	0.1	0.1	0.7	0.8	4.5	6.1	79 829.1	0.2
Sudan								
Tunisia	0.1	0.1	0.9	0.8	6.7	8.3		
<b>Regional Office for Africa</b>	0.2	0.3	0.4	0.5	0.8	1.3		
<b>Central Africa</b>	0.2	0.2	0.2	0.3	0.6	0.8		
Cameroon	0.6	0.5	0.9	0.9	2.4	4.8		
Central African Republic	0.6	0.8	0.6	1.2	0.8	1.3		
Chad	0.1	0.2	0.2	0.2	0.1	0.1		
Congo	0.0	0.0	0.0	0.0	0.2	0.3		
Democratic Republic of the Congo	0.0	0.0	0.2	0.2	0.8	0.8		
Equatorial Guinea	0.0	0.0	0.1	0.2	1.0	1.3		
Gabon	0.0	0.0	0.1	0.1	0.6	0.6		
Sao Tome and Principe	0.1	0.1	0.2	0.2	7.8	9.8		
<b>East Africa</b>	0.4	0.6	0.6	0.9	0.5	1.0		
Burundi	0.2	0.3	0.5	1.2	1.8	2.3		
Djibouti	0.2	0.2	0.6	0.6				
Eritrea	0.3	0.3	0.5	0.5	0.2	0.2	2 774.9	0.2
Ethiopia	1.1	1.5	0.6	1.4	0.9	1.4	26 759.0	0.2
Kenya	0.4	0.7	0.7	1.7	1.0	1.4		
Rwanda	0.4	0.6	0.6	2.0	0.8	2.3		
Somalia	0.1	0.1	0.6	0.5	0.1	0.1		
South Sudan								
Sudan (former)	0.3		0.6		0.3			
Uganda	0.5	0.6	0.6	0.8	2.2	2.5		
United Republic of Tanzania	0.5	0.6	0.5	0.6	0.9	0.9	30 022.3	0.3
<b>Southern Africa</b>	0.1	0.1	0.2	0.2	0.8	1.1		
Angola	0.1	0.1	0.0	0.1	0.1	0.3		
Botswana	0.1	0.1	0.1	0.1	0.1	0.2	5 016.0	0.3
Comoros	0.4	0.3	0.9	0.9	3.4	3.4		
Lesotho	0.3	0.3	0.8	0.9	0.4	0.2	4 021.7	0.1
Madagascar	0.3	0.2	0.0	0.0	0.8	0.9	92 769.7	0.1
Malawi	0.2	0.2	0.4	0.8	3.1	3.0		
Mauritius	0.3	0.1	0.8	0.5	76.7	161.3	15 436.0	0.2
Mozambique	0.0	0.0	0.1	0.1	0.7	0.8		
Namibia	0.1	0.1	0.1	0.1	0.1	0.1		
Seychelles	0.4	0.2	1.3	1.8	138.8	118.3		
South Africa	0.1	0.1	0.4	0.3	1.3	2.0	191 580.5	0.2
Swaziland	0.5	0.5	0.4	0.2	2.5	2.9		
Zambia	0.1	0.1	0.1	0.1	1.3	1.5		
Zimbabwe	0.4	0.3	0.2	0.2	1.2	2.1		
<b>West Africa</b>	0.2	0.2	0.6	0.8	1.1	1.8		
Benin	0.5	0.6	0.6	0.7	3.7	5.0		
Burkina Faso	0.5	0.7	1.6	1.8	2.3	3.4		
Cabo Verde	0.3	0.6	1.7	3.4	6.8	9.3		
Côte d'Ivoire	0.1	0.1	0.1	0.1	1.5	2.1		
Gambia	0.7	0.6	0.5	0.9	1.1	1.5		
Ghana	0.1	0.1	0.4	0.6	1.4	3.3		
Guinea	0.2	0.3	0.1	0.2	0.9	1.1		
Guinea-Bissau	0.3	0.4	0.4	0.7	0.8	1.1		
Liberia	0.0	0.0	0.2	0.2	1.6	2.8		
Mali	0.2	0.2	0.4	0.7	0.6	0.9		
Mauritania	0.0	0.0	0.3	0.4	0.1	0.1		
Niger	0.1	0.2	0.5	0.5	0.3	0.4		
Nigeria	0.2	0.2	1.0	1.3	1.6	2.7		
Senegal	0.3	0.4	1.0	1.1	2.8	4.6		
Sierra Leone	0.1	0.2	0.1	0.5	2.5	3.3		
Togo	0.1	0.1	0.8	1.1	2.5	6.2		
<b>CEMAC</b>	0.2	0.2	0.2	0.3	0.5	0.8		
<b>CEN-SAD</b>	0.2	0.2	0.6	0.7	1.3	2.4		
<b>COMESA</b>	0.3	0.5	0.5	0.7	1.2	2.1		
<b>ECCAS</b>	0.1	0.1	0.2	0.2	0.4	0.7		
<b>ECOWAS</b>	0.2	0.2	0.6	0.8	1.3	2.1		
<b>IGAD</b>	0.4	0.7	0.6	1.0	0.5			
<b>SADC</b>	0.2	0.2	0.2	0.2	0.8	1.1		
<b>UEMOA</b>	0.2	0.3	0.5	0.7	1.1	1.6		
<b>UMA</b>	0.0	0.1	0.5	0.6	2.5	3.2		
<b>Regional Office for Asia and the Pacific</b>	0.3	0.4	0.5	0.5	3.9	6.5		
<b>Regional Office for Europe and Central Asia</b>	0.2	0.2	0.3	0.3	2.8	3.3		
<b>Regional Office for Latin America and the Caribbean</b>	0.5	0.6	0.2	0.2	3.1	4.2		
<b>Regional Office for the Near East</b>	0.1	0.1	0.5	0.8	1.9	6.9		
<b>World</b>	0.3	0.3	0.4	0.4	3.3	4.8		

TABLE 47: Water pollution

	Water pollution							
	% of total BOD emissions							
	chemical industry	clay and glass industry	food industry	metal industry	other industry	paper and pulp industry	textile industry	wood industry
	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*
<b>Africa</b>								
<b>North Africa</b>								
Algeria								
Egypt								
Libya								
Morocco	8.7	9.5	17.4	1.0	16.7	2.8	42.1	1.9
Sudan								
Tunisia								
<b>Regional Office for Africa</b>								
<b>Central Africa</b>								
Cameroon								
Central African Republic								
Chad								
Congo								
Democratic Republic of the Congo								
Equatorial Guinea								
Gabon								
Sao Tome and Principe								
<b>East Africa</b>								
Burundi								
Djibouti								
Eritrea	9.5	13.2	30.0	0.2	17.8	4.1	25.1	
Ethiopia	10.6	8.5	30.7	1.8	11.3	6.8	28.8	1.5
Kenya								
Rwanda								
Somalia								
South Sudan								
Sudan (former)								
Uganda								
United Republic of Tanzania	8.6	1.9	61.2	2.6	5.3	4.8	12.7	2.9
<b>Southern Africa</b>								
Angola								
Botswana		0.6	56.7		36.9	2.4	3.4	
Comoros								
Lesotho	1.1	1.2	3.4	0.9	1.9	0.5	91.0	
Madagascar	12.4	2.8	7.6	0.3	10.0	1.6	58.9	6.3
Malawi								
Mauritius	6.1		15.1	0.4	11.0	3.8	63.1	0.6
Mozambique								
Namibia								
Seychelles								
South Africa	11.4	5.2	14.7	5.8	39.6	7.0	11.9	4.3
Swaziland								
Zambia								
Zimbabwe								
<b>West Africa</b>								
Benin								
Burkina Faso								
Cabo Verde								
Côte d'Ivoire								
Gambia								
Ghana								
Guinea								
Guinea-Bissau								
Liberia								
Mali								
Mauritania								
Niger								
Nigeria								
Senegal								
Sierra Leone								
Togo								
<b>CEMAC</b>								
<b>CEN-SAD</b>								
<b>COMESA</b>								
<b>ECCAS</b>								
<b>ECOWAS</b>								
<b>IGAD</b>								
<b>SADC</b>								
<b>UEMOA</b>								
<b>UMA</b>								
<b>Regional Office for Asia and the Pacific</b>								
<b>Regional Office for Europe and Central Asia</b>								
<b>Regional Office for Latin America and the Caribbean</b>								
<b>Regional Office for the Near East</b>								
<b>World</b>								

TABLE 48: Renewable feedstocks

	Production		Organic agriculture % of total area	Production			
	biofuel			natural fibre		recovered paper	
	thousand kilotonne of oil equivalent 2000	thousand kilotonne of oil equivalent 2009	percent	total		thousand tonnes	thousand tonnes
				thousand tonnes	thousand tonnes		
			2011	1993	2011	2000	2012
Africa	191.1	247.7				1 298.7	1 698.2
North Africa	2.9	3.6		432.5	149.6	460.0	493.0
Algeria	0.1	0.1	0.0	0.0	0.0	37.0	32.0
Egypt	1.3	1.6	2.2	429.6	147.4	350.0	380.0
Libya	0.1	0.2				0.0	0.0
Morocco	0.4	0.5	0.1	2.3	1.5	35.0	35.0
Sudan	0.0	0.0				0.0	6.0
Tunisia	0.9	1.3	1.8	0.5	0.6	38.0	40.0
Regional Office for Africa	188.2	244.2		1 062.7	1 264.1	838.7	1 205.2
Central Africa	22.3	27.7		110.5	110.7	0.0	0.0
Cameroon	5.0	4.4	0.0	51.9	65.1	0.0	0.0
Central African Republic	0.0	0.0		7.0	4.3	0.0	0.0
Chad	0.0	0.0		37.1	28.0	0.0	0.0
Congo	0.6	0.7				0.0	0.0
Democratic Republic of the Congo	15.8	21.5	0.2	14.1	13.1	0.0	0.0
Equatorial Guinea	0.0	0.0		0.4	0.2	0.0	0.0
Gabon	0.9	1.1				0.0	0.0
Sao Tome and Principe	0.0	0.0	9.2			0.0	0.0
East Africa	41.6	62.1		221.3	252.0	40.5	40.5
Burundi	0.0	0.0	0.0	3.6	0.8	0.0	0.0
Djibouti	0.0	0.0				0.0	0.0
Eritrea	0.5	0.6				0.0	0.0
Ethiopia	17.4	30.1	0.4	22.7	43.6	2.5	2.5
Kenya	11.2	14.2	0.0	40.5	34.8	38.0	38.0
Rwanda	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Somalia	0.0	0.0		1.7	2.1	0.0	0.0
South Sudan	0.0	0.0				0.0	0.0
Sudan (former)				51.6	27.3		
Uganda	0.0	0.0	1.6	11.1	47.6	0.0	0.0
United Republic of Tanzania	12.5	17.2	0.3	90.1	95.8	0.0	0.0
Southern Africa	36.3	42.8		182.7	242.9	784.2	1 150.7
Angola	5.5	7.2		5.8	2.5	0.0	0.0
Botswana	0.5	0.5		0.4	0.2	0.0	0.0
Comoros	0.0	0.0	1.7	0.0	0.0	0.0	0.0
Lesotho	0.0	0.0	0.0			0.0	0.0
Madagascar	0.0	0.0	0.1	37.4	27.8	2.2	2.2
Malawi	0.0	0.0	0.0	11.9	14.1	0.0	0.0
Mauritius	0.0	0.0	0.0	0.1	0.1	3.0	3.0
Mozambique	6.4	8.0	0.0	20.5	40.6	5.0	5.0
Namibia	0.2	0.2	0.0	0.1	0.0	0.0	0.0
Seychelles	0.0	0.0				0.0	0.0
South Africa	12.9	14.4	0.0	16.1	22.6	690.0	1 064.5
Swaziland	0.0	0.0	0.0	4.9	0.6	6.0	6.0
Zambia	5.1	6.4	0.0	16.1	42.0	0.0	0.0
Zimbabwe	5.6	6.2	0.0	69.4	92.3	78.0	70.0
West Africa	88.1	111.5		548.3	658.5	14.0	14.0
Benin	1.4	2.0	0.0	115.6	76.3	0.0	0.0
Burkina Faso	0.0	0.0	0.2	61.0	175.0	0.0	0.0
Cabo Verde	0.0	0.0				0.0	0.0
Côte d'Ivoire	4.2	7.8	0.1	105.6	76.5	6.0	6.0
Gambia	0.0	0.0	0.0	1.4	0.2	0.0	0.0
Ghana	5.3	6.5	0.1	16.0	9.3	0.0	0.0
Guinea	0.0	0.0		8.5	13.4	0.0	0.0
Guinea-Bissau	0.0	0.0		0.7	1.5	0.0	0.0
Liberia	0.0	0.0				0.0	0.0
Mali	0.0	0.0	0.0	102.2	149.6	0.0	0.0
Mauritania	0.0	0.0				0.0	0.0
Niger	0.0	0.0	0.0	1.5	3.3	0.0	0.0
Nigeria	74.2	91.9	0.0	70.9	101.4	8.0	8.0
Senegal	1.2	1.2	0.1	20.0	13.0	0.0	0.0
Sierra Leone	0.0	0.0		4.8	9.0	0.0	0.0
Togo	1.8	2.2	0.0	40.0	30.0	0.0	0.0
CEMAC	6.5	6.3		96.4	97.6	0.0	0.0
CEN-SAD	91.4	115.6		1 069.5	856.4	437.0	475.0
COMESA	57.1	80.6	0.3	712.9	491.6	479.7	507.7
ECCAS	27.8	34.9		119.8	114.0	0.0	0.0
ECOWAS	88.1	111.5	0.0	548.3	658.5	14.0	14.0
IGAD	29.2	44.8				40.5	46.5
SADC	64.5	81.5	0.1	286.9	351.8	784.2	1 150.7
UEMOA	8.6	13.2	0.1	446.6	525.2	6.0	6.0
UMA	1.6	2.0				110.0	107.0
Regional Office for Asia and the Pacific	521.2	560.7	0.8			42 391.1	90 639.3
Regional Office for Europe and Central Asia	69.9	104.7	1.4		3 162.5	44 836.7	56 745.3
Regional Office for Latin America and the Caribbean	90.7	123.6	0.9	1 273.2	2 911.1	5 533.0	10 311.2
Regional Office for the Near East	3.5	4.2				753.0	2 247.0
World	942.0	1 120.4				142 813.5	212 515.9

TABLE 49: Agricultural emissions

	Enteric fermentation	Manure management	Rice cultivation	Synthetic fertilizers	Manure applied to soils	Manure left on pasture	Crop residues	Cultivated organic soils	Burning crop residues
	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010	gigagrams CO <sub>2</sub> eq 2010
<b>Africa</b>	251 440	16 358	26 391	19 433	7 212	173 124	9 823	5 177	2 572.5
<b>North Africa</b>	22 815	1 486	2 746	11 124	672	15 291	2 044	0	283.8
Algeria	4 621	246	1	294	146	3 900	366	0	53.6
Egypt	9 828	721	2 702	9 198	170	3 962	997	0	118.4
Libya	1 265	66	0	305	37	1 134	24	0	3.9
Morocco	5 257	324	44	881	220	4 650	576	0	95.6
Sudan	0	0	0	0	0	0	0	0	0.0
Tunisia	1 844	129	0	447	100	1 645	81	0	12.3
<b>Regional Office for Africa</b>	228 466	14 842	23 645	8 309	6 520	157 705	7 777	5 177	2 287.6
<b>Central Africa</b>	16 557	1 376	508	104	602	11 384	483	281	194.3
Cameroon	4 304	455	78	75	235	3 345	188	115	57.8
Central African Republic	3 198	296	25	0	142	2 377	15	0	6.9
Chad	7 688	355	191	0	70	4 447	125	0	16.8
Congo	264	26	4	1	12	206	2	121	1.6
Democratic Republic of the Congo	1 032	204	210	24	118	937	150	3	109.4
Equatorial Guinea	5	1	0	0	1	6	0	1	0.0
Gabon	62	38	1	4	24	60	2	42	1.6
Sao Tome and Principe	5	1	0	0	1	6	0	0	0.1
<b>East Africa</b>	102 354	4 760	4 072	1 893	1 884	65 292	1 998	3 359	615.2
Burundi	701	67	37	8	37	568	31	326	9.1
Djibouti	374	16	0	0	3	230	0	0	0.0
Eritrea	2 315	94	0	2	34	1 417	25	0	2.1
Ethiopia	44 008	1 765	140	1 008	578	29 216	763	1 293	159.9
Kenya	16 949	695	30	457	300	11 234	286	42	134.0
Rwanda	1 333	159	19	1	87	1 007	91	290	13.6
Somalia	12 752	627	9	0	81	4 561	37	0	13.1
South Sudan	0	0	0	0	0	0	0	0	0.0
Sudan (former)									
Uganda	7 303	641	128	41	392	5 308	248	691	62.6
United Republic of Tanzania	16 620	695	3 708	377	374	11 751	517	717	220.9
<b>Southern Africa</b>	38 142	3 184	7 382	4 460	1 637	28 965	1 929	1 260	774.9
Angola	3 576	450	141	30	236	2 654	133	12	99.7
Botswana	2 148	90	0	0	28	1 502	6	0	3.6
Comoros	52	2	112	0	1	41	3	0	0.8
Lesotho	728	27	0	0	17	499	14	0	9.3
Madagascar	7 258	508	6 719	29	261	5 178	318	140	73.9
Malawi	1 194	348	87	556	205	1 000	262	58	106.8
Mauritius	11	12	0	35	12	79	0	0	2.4
Mozambique	1 501	285	272	280	174	1 285	181	0	113.9
Namibia	2 196	98	0	0	31	1 596	8	0	1.8
Seychelles	1	1	0	0	1	2	0	0	0.0
South Africa	12 667	843	7	2 570	402	9 986	733	26	198.7
Swaziland	486	25	0	0	13	354	5	0	5.6
Zambia	2 381	225	45	501	119	1 878	153	1 023	71.0
Zimbabwe	3 942	268	0	460	137	2 912	114	0	87.5
<b>West Africa</b>	71 413	5 522	11 683	1 852	2 396	52 064	3 368	278	703.3
Benin	1 643	140	23	0	66	1 265	102	0	57.7
Burkina Faso	8 541	765	700	265	352	6 269	310	0	54.3
Cabo Verde	71	41	0	0	25	53	1	0	2.2
Côte d'Ivoire	1 424	139	253	175	82	1 260	101	180	34.6
Gambia	381	22	456	12	7	262	27	0	6.3
Ghana	1 960	196	256	80	109	1 762	162	15	68.7
Guinea	3 765	170	2 007	16	68	2 771	184	70	60.5
Guinea-Bissau	580	86	148	0	47	424	18	0	3.9
Liberia	96	50	62	0	32	113	34	12	9.7
Mali	10 975	514	1 009	576	171	7 409	384	0	57.0
Mauritania	4 067	194	151	0	34	2 136	24	0	2.4
Niger	11 456	536	41	31	121	7 061	444	0	1.8
Nigeria	21 433	2 225	5 593	517	1 086	17 476	1 310	0	274.9
Senegal	3 686	260	216	173	100	2 730	103	0	13.0
Sierra Leone	680	55	755	0	18	442	87	0	21.2
Togo	655	130	11	7	77	632	76	0	35.2
<b>CEMAC</b>	15 521	1 171	298	80	484	10 441	332	278	84.7
<b>CEN-SAD</b>	108 082	7 748	12 606	12 669	3 126	71 568	5 041	208	908.2
<b>COMESA</b>	100 433	5 820	10 230	12 623	2 504	66 457	3 471	3 866	961.0
<b>ECCAS</b>	20 834	1 894	686	142	875	14 606	647	618	303.0
<b>ECOWAS</b>	67 346	5 328	11 531	1 852	2 362	49 928	3 344	278	700.9
<b>IGAD</b>	83 701	3 839	307	1 508	1 387	51 966	1 359	2026	371.6
<b>SADC</b>	55 742	4 081	11 189	4 861	2 127	41 612	2 593	1 980	1 104.4
<b>UEMOA</b>	38 959	2 570	2 402	1 228	1 017	27 049	1 538	180	257.4
<b>UMA</b>	17 054	960	195	1 927	536	13 465	1 071	0	167.8
<b>Regional Office for Asia and the Pacific</b>	809 434	169 122	457 990	435 707	127 041	264 047	74 036	56 496	9 150.0
<b>Regional Office for Europe and Central Asia</b>	274 240	99 643	7 909	100 457	48 548	49 963	27 897	29 124	3 218.1
<b>Regional Office for Latin America and the Caribbean</b>	526 629	22 670	17 027	47 721	23 512	208 745	19 177	1 605	2 756.6
<b>Regional Office for the Near East</b>	57 726	6 346	5 781	17 311	4 986	37 525	4 417	0	634.5
<b>World</b>	1 960 484	348 079	519 531	682 636	220 255	741 025	152 903	99 048	19 701.7

PART

# 5

Metadata

RAF geographical composition				
North Africa	West Africa	Central Africa	East Africa	Southern Africa
Algeria	Benin	Cameroon	Burundi	Angola
Egypt	Burkina Faso	Central African Republic	Djibouti	Botswana
Libyan Arab Jamahiriya	Cape Verde	Chad	Eritrea	Comoros
Morocco	Côte d'Ivoire	Congo	Ethiopia	Lesotho
Sudan	Gambia	Democratic Republic of the Congo	Kenya	Madagascar
Tunisia	Ghana	Equatorial Guinea	Rwanda	Malawi
	Guinea	Gabon	Somalia	Mauritius
	Guinea-Bissau	Sao Tome and Principe	South Sudan	Mozambique
	Liberia		Sudan (former)	Namibia
	Mali		Uganda	Seychelles
	Mauritania		United Republic of Tanzania	South Africa
	Niger			Swaziland
	Nigeria			Zambia
	Senegal			Zimbabwe
	Sierra Leone			
	Togo			

## Metadata

### Aggregation

Two types of aggregation are used in the book, namely sum and weighted mean. Two restrictions are imposed when computing the aggregation. Sufficiency condition: the aggregation is computed only when sufficient countries has reported data. The current threshold is set at 50% of the variable and the weighting variable if present. Comparability condition: Since aggregation are usually computed over years, this condition is designed to ensure that the number of reporting entities are comparable over the years. The current restriction is that the number of reporting entities does not vary above 15 countries in order to account for transition in countries.

### Agricultural area (ha)

Agricultural area, this category is the sum of areas under a) arable land - land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for "Arable land" are not meant to indicate the amount of land that is potentially cultivable; (b) permanent crops - land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"); and (c) permanent meadows and pastures - land used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land). Data are expressed in 1000 hectares.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

### Agricultural area organic (ha)

Sum of areas under "Agricultural area certified organic" and "Agricultural area in conversion to organic". Agricultural area certified organic is the land area exclusively dedicated to organic agriculture and managed by applying organic agriculture methods. It refers to the land area fully converted to organic agriculture. It is the portion of land area (including arable lands, pastures or wild areas) managed (cultivated) or wild harvested in accordance with specific organic standards or technical regulations and that has been inspected and approved by a certification body. Agricultural area in conversion to organic is the land area which is going through the organic conversion process, usually two years period of conversion to organic land.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

### Agricultural population, total

Agricultural population is defined as all persons depending for their livelihood on agriculture, hunting, fishing and forestry. It comprises all persons economically active in agriculture as well as their non-working dependents. It is not necessary that this referred population exclusively come from rural population.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

### Agricultural production indices

The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 1999-2001. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed. All the indices at the country, regional and world levels are calculated by the Laspeyres formula. Production quantities of each commodity are weighted by 1999-2001 average international commodity prices and summed for each year. To obtain the index, the aggregate for a given year is divided by the average aggregate for the base period 1999-2001. Since the FAO indices are based on the concept of agriculture as a single enterprise, amounts of seed and

feed are subtracted from the production data to avoid double counting, once in the production data and once with the crops or livestock produced from them. Deductions for seed (in the case of eggs, for hatching) and for livestock and poultry feed apply to both domestically produced and imported commodities. They cover only primary agricultural products destined to animal feed (e.g. maize, potatoes, milk, etc.). Processed and semi-processed feed items such as bran, oilcakes, meals and molasses have been completely excluded from the calculations at all stages. It should be noted that when calculating indices of agricultural, food and nonfood production, all intermediate primary inputs of agricultural origin are deducted. However, for indices of any other commodity group, only inputs originating from within the same group are deducted; thus, only seed is removed from the group "crops" and from all crop subgroups, such as cereals, oil crops, etc.; and both feed and seed originating from within the livestock sector (e.g. milk feed, hatching eggs) are removed from the group "livestock products". For the main two livestock subgroups, namely, meat and milk, only feed originating from the respective subgroup is removed. Indices which take into account deductions for feed and seed are referred to as "net". Indices calculated without any deductions for feed and seed are referred to as "gross". The "international commodity prices" are used in order to avoid the use of exchange rates for obtaining continental and world aggregates, and also to improve and facilitate international comparative analysis of productivity at the national level. These "international prices", expressed in so-called "international dollars", are derived using a Geary-Khamis formula for the agricultural sector. This method assigns a single "price" to each commodity. For example, one metric ton of wheat has the same price regardless of the country where it was produced. The currency unit in which the prices are expressed has no influence on the indices published. The commodities covered in the computation of indices of agricultural production are all crops and livestock products originating in each country. Practically all products are covered, with the main exception of fodder crops. The category of food production includes commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities because, although edible, they have practically no nutritive value. Prices applied to meat in reality represent the prices of animals for slaughtering in terms of live weight. For example, if the price of one metric ton (1000 kg) of pigs alive is 825 dollars and the ratio meat to live weight is 75 to 100, the price applicable to 750 kg of pig meat will be 825 dollars, corresponding to 1100 dollars per metric tons. The indices are calculated from production data presented on a calendar year basis. The FAO indices may differ from those produced by the countries themselves because of differences in concepts of production, coverage, weights, time reference of data and methods of calculation.

### Agricultural tractors, total (tractors)

Agricultural tractors generally refer to wheel and crawler or track-laying type tractors (excluding garden tractors) used in agriculture. Data are expressed in numbers in use in the agricultural sector.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

### Agricultural water withdrawal, share of total water withdrawal (percent)

Agricultural water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

### Agriculture value added per worker (constant 2000 US\$)

Agriculture value added per worker is a measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1-5) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production. Data are in constant 2000 U.S. dollars.

Source: World Bank (WDI)

Owner: Derived from World Bank national accounts files and Food and Agriculture Organization, Production Yearbook and data files.

**Agriculture, Forestry, Fishing, and Hunting, Cash (Budg. Cen. Govt.) (share of agricultural GDP)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Agriculture, Forestry, Fishing, and Hunting, Cash (Budg. Cen. Govt.) (share of total outlays)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Agriculture, Forestry, Fishing, and Hunting, Noncash (Budg. Cen. Govt.) (share of agricultural GDP)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Agriculture, Forestry, Fishing, and Hunting, Noncash (Budg. Cen. Govt.) (share of total outlays)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Agriculture, value added (percent of GDP)**

Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

Source: World Bank (WDI)

Owner: World Bank national accounts data, and OECD National Accounts data files.

**All GHG agricultural sectors, total emissions in CO<sub>2</sub>eq (gigagrams)**

Agriculture Total contains all the emissions produced in the different agricultural emissions sub-domains, providing a picture of the contribution to the total amount of GHG emissions from agriculture. GHG Emissions from agriculture consist of non-CO<sub>2</sub> gases, namely methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), produced by crop and livestock production and management activities.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Aquaculture fish production (tonnes)**

Aquaculture is defined as the farming of aquatic organisms. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. For statistical purposes, aquatic organisms which are harvested by an individual or corporate body which has owned them throughout their rearing period contribute to aquaculture, while aquatic organisms which are exploitable by the public as a common property resource, with or without appropriate licenses, are the harvest of fisheries. In the case of capture-based aquaculture, only the incremental growth (or weight gain) in captivity, could and should be reported as the production from aquaculture. Data included here covers an aquaculture production of fish, molluscs, crustaceans and miscellaneous aquatic animals but excluding production for marine mammals, crocodiles, corals, pearls, sponges and aquatic plants.

Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Owner: FAO

**Aquaculture fish production inland (tonnes)**

Aquaculture production from inland areas.

Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Owner: FAO

**Aquaculture fish production marine (tonnes)**

Aquaculture production from marine areas.

Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Owner: FAO

**Arable land (ha)**

Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for 'Arable land' are not meant to indicate the amount of land that is potentially cultivable.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Arable land and permanent crops (ha)**

Arable land and Permanent crops, this category is the sum of areas under 'Arable land' and 'Permanent crops'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Area under bioenergy crops (ha)**

The assumed land area required to produce a given annual quantity of biofuel production.

Source: FAO

Owner: Based on IEA biofuel production data

**Artificial sweeteners**

High-intensity or low-caloric sweetening agents that are produced chemically.

**Average dietary supply adequacy (index)**

The indicator expresses the Dietary Energy Supply (DES) as a percentage of the Average Dietary Energy Requirement (ADER) in the country. Each country's or region's average supply of calories for food consumption is normalized by the average dietary energy requirement estimated for its population, to provide an index of adequacy of the food supply in terms of calories. Analyzed together with the prevalence of undernourishment, it allows discerning whether undernourishment is mainly due to insufficiency of the food supply or to particularly bad distribution. The indicator is calculated as an average over 3 years to reduce the impact of possible errors in estimated DES, due to the difficulties in properly accounting of stock variations in major food. It thus provides an indicator of structural food supply adequacy.

Source: FAO, Statistics Division

Owner: FAO

**Average fat supply (g/cap/day)**

National average fat supply (expressed in grams per caput per day).

Source: FAO, Statistics Division

Owner: FAO

**Average protein supply (g/cap/day)**

National average protein supply (expressed in grams per caput per day). As other indicators based on Food balance Sheets data, it is calculated on 3 year averages, to reduce the impact of errors in recording of annual stock variations.

Source: FAO, Statistics Division

Owner: FAO

**Average supply of protein of animal origin (g/cap/day)**

National average protein supply (expressed in grams per caput per day). It includes the following groups: Meat; Offals; Animal Fats and Products; Milk and Products; Eggs, Fish, Seafood and Products; and Aquatic Products, other. The indicator is calculated on 3 year averages.

*Source:* FAO, Statistics Division

*Owner:* FAO

**Beef and buffalo meat (tonnes)**

See 'Buffalos', 'Meat, total', and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Biofuel production (energy, kilotonne of oil equivalent)**

Sum of ethanol and biodiesel production, reported in kilotonne of oil equivalent.

*Source:* IEA

*Owner:* Energy Balances of OECD Countries and Energy Balances of Non-OECD Countries, 2011 editions

**Bird species, threatened**

Birds are listed for countries included within their breeding or wintering ranges. Threatened species are the number of species classified by the IUCN as endangered, vulnerable, rare, indeterminate, out of danger, or insufficiently known.

*Source:* World Bank (WDI)

*Owner:* United Nations Environmental Program and the World Conservation Monitoring Centre, and International Union for Conservation of Nature, Red List of Threatened Species.

**Buffaloes**

Indian, Asiatic, pigmy, water buffalo (*Bubalus bubalus*; *B. arnee*; *B. depressicornis*); African buffalo (genus *Syncerus*); American bison (*Bison bison*); European bison (*Bison bonasus*); beefalo (cross between a bison and a domesticated beef animal). See 866. Excludes wild bisons and buffaloes.

**Burning crop residues, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse Gas (GHG) emissions from burning crop residues consist of methane and nitrous oxide gases produced by the combustion of a percentage of the crop residues burnt on-site.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Butter and ghee production (tonnes)**

See 'Butter, ghee' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Butter, Ghee**

Default composition: 886 Butter, cow milk, 887 Ghee, butteroil of cow milk, 952 Butter, buffalo milk, 953 Ghee, of buffalo milk, 983 Butter and ghee, sheep milk, 1022 Butter of goat milk

**Capture fish production (tonnes)**

Capture fishery is defined as the hunting, collecting and gathering activities directed at removing or collecting live wild aquatic organisms. The capture production statistics here indicates the nominal catches of aquatic organisms, killed, caught, trapped or collected for all commercial, industrial, recreational and subsistence purposes in live weight equivalent. Data included here covers capture production of fish, molluscs, crustaceans and miscellaneous aquatic animals but excluding production for marine mammals, crocodiles, corals, pearls, sponges and aquatic plants.

*Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

*Owner:* FAO

**Capture fish production inland (tonnes)**

Capture fishery production from inland areas.

*Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

*Owner:* FAO

**Capture fish production marine (tonnes)**

Capture fishery production from marine areas.

*Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

*Owner:* FAO

**Cassava**

Manioc, mandioca, yuca (*Manihot esculenta*, syn. *M. utilissima*); yuca dulce (*M. palmata*, syn. *M. dulcis*). A semi-permanent crop grown in tropical and subtropical regions. Sometimes bitter and sweet cassavas are referred to as separate species, the former being *M. esculenta* and the latter *M. palmata*, but this is incorrect since the toxicity varies according to location. Cassava is the staple food in many tropical countries. It is not traded internationally in its fresh state because tubers deteriorate very rapidly.

**Cattle**

Common ox (*Bos taurus*); zebu, humped ox (*Bos indicus*); Asiatic ox (subgenus *Bibos*); Tibetan yak (*Poephagus grunniens*). Animals of the genus listed, regardless of age, sex, or purpose raised. Data are expressed in number of heads.

**Cattle and buffaloes (heads)**

See 'Cattle' and 'Buffaloes'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cereal exports (tonnes)**

Exports (volume) of cereals.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cereal import dependency ratio (percent)**

Cereal imports/(cereal production+cereal import-cereal export). The indicator is calculated on 3 year averages.

*Source:* FAO, Statistics Division

*Owner:* FAO

**Cereal imports (tonnes)**

Imports (volume) of cereals.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cereals**

Cereals include Wheat, Rice Paddy, Barley, Maize, Popcorn, Rye, Oats, Millets, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary Seed, Mixed Grain and Cereals Nes.

**Cereals harvested area (ha)**

See 'Cereals' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cereals production (tonnes)**

See 'Cereals' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cereals yield (hg/ha)**

See 'Cereals' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Cheese (all kinds) production (tonnes)**

All kinds of cheese. See also 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Chickens**

Fowl (*Gallus domesticus*); Guinea fowl (*Numida meleagris*). Domesticated birds only. Data are expressed in thousands.

**Chickens (heads)**

See 'Chickens' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Children in employment, total (share of children ages 7-14)**

Children in employment refer to children involved in economic activity for at least one hour in the reference week of the survey.

Source: World Bank (WDI)

Owner: Understanding Children's Work project based on data from ILO, UNICEF and the World Bank.

**Citrus**

Including inter alia: bergamot (*Citrus bergamia*); citron (*C. medica* var. *cedrata*); chinotto (*C. myrtifolia*); kumquat (*Fortunella japonica*). Some minor varieties of citrus are used primarily in the preparation of perfumes and soft drinks.

**Citrus fruit harvested area (ha)**

See 'Fruit, citrus nes' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Citrus fruit production (tonnes)**

See 'Fruit, citrus nes' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Citrus fruit yield (hg/ha)**

See 'Fruit, citrus nes' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Coarse grain**

Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

**Coarse grain harvested area (ha)**

See 'Coarse grain' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Coarse grain production (tonnes)**

See 'Coarse grain' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Coarse grain yield (hg/ha)**

See 'Coarse grain' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Cocoa, beans**

Theobroma cacao. The seeds contained in the fruit of the cacao-tree, including whole or broken, raw or roasted.

**Cocoa, paste**

Obtained by grinding roasted cocoa beans. Also called liquor. Not defatted.

**Coconut Oil**

Default composition: Oil, coconut (copra)

**Coconuts**

*Cocos nucifera* Husked coconut. In shell, covered by the endocarp, while exocarp (the smooth outer skin) and mesocarp (the fibrous covering) are removed. Immature nuts contain a milky juice that is consumed as a refreshing drink. Mature nuts are consumed as such, or processed for copra or desiccated coconut. The flesh, from which copra/oil is extracted, constitutes 40-70% of the weight of the husked coconut. The oil content is about 36% of the flesh.

**Cotton lint**

*Gossypium* spp. Fibres from ginning seed cotton that have not been carded or combed. Trade data also include fibres that have been cleaned, bleached, dyed or rendered absorbent.

**Cottonseed Oil**

Default composition: Oil, cottonseed

**CPIA business regulatory environment rating (1=low to 6=high)**

Business regulatory environment assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive.

Source: World Bank (WDI)

Owner: World Bank Group, CPIA database (<http://www.worldbank.org/ida>).

**Crop area**

Crop area is a surface of land on which a crop is grown. In general, the area measured for cadastral purposes includes, in addition to the area cultivated, headlands, ditches and other non-cultivated areas. Such an area can be called gross area as against the net area which includes only the portion of the gross area actually cultivated. For various reasons, e.g. natural calamities or economic considerations, certain areas planted or sown with a given crop are not harvested or are harvested before the crop reaches maturity. Hence the need for the concept of area to be sub-divided into sown or planted area and harvested area. Sown area data are necessary to estimate quantities used for seeding purposes; harvested area, to provide reliable and accurate yield and production data. A peculiarity of permanent crops is that number of trees or plants is reported in addition to or, instead of, the area planted. This is particularly so as regards plants growing outside of compact plantations, which are either interplanted with other crops or are scattered. Both area and number of trees are also divided into productive or bearing and non-productive or non-bearing areas or trees. In most cases, non-bearing refers to young plants that are not yet bearing.

**Crop production**

Crop production data refer to the actual harvested production from the field or orchard and gardens, excluding harvesting and threshing losses and that part of crop not harvested for any reason. Production therefore includes the quantities of the commodity sold in the market (marketed production) and the quantities consumed or used by the producers (auto-consumption). When the production data available refers to a production period falling into two successive calendar years and it is not possible to allocate the relative production to each of them, it is usual to refer production data to that year into which the bulk of the production falls. Crop production data are recorded in tonnes (t). In many countries, crop production data are obtained as a function of the estimated yield and the total area. If such a compilation method of production statistics is enforced by the country, it must be ensured that the total area does not refer to sown or planted area, which would give then the <U+393C><U+3E31>biological production', but to the actually harvested area during the year.\

**Crop residues, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse Gas (GHG) emissions from crop residues consist of nitrous oxide gas from decomposition of nitrogen in crop residues left on managed soils.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Crop yield**

Harvested production per unit of harvested area for crop products. In most of the cases yield data are not recorded but obtained by dividing the production data by the data on area harvested. Data on yields of permanent crops are not as reliable as those for temporary crops either because most of the area information may correspond to planted area, as for grapes, or because of the scarcity and unreliability of the area figures reported by the countries, as for example for cocoa and coffee.

**Crops net per capita production index number (2004-2006 = 100)**

See 'Agricultural production indices'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Cultivated organic soils, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions data from cultivated organic soils are those associated with nitrous oxide gas from drained organic soils. Computed at Tier 1 and complemented by geo-spatial data, following the 2006 IPCC Guidelines for National GHG Inventories (IPCC, 2006). Available by country, with global coverage and relative to the period 1990-2010 with annual updates.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Dairy products (milk equivalent) exports (tonnes)**

Exports (volume) of dairy products (milk equivalent).

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Dairy products (milk equivalent) imports (tonnes)**

Imports (volume) of dairy products (milk equivalent).

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Depth of the food deficit (kcal/cap/day)**

The depth of the food deficit indicates how many calories would be needed to lift the undernourished from their status, everything else being constant. The average intensity of food deprivation of the undernourished, estimated as the difference between the average dietary energy requirement and the average dietary energy consumption of the undernourished population (food-deprived), is multiplied by the number of undernourished to provide an estimate of the total food deficit in the country, which is then normalized by the total population. The indicator is calculated as an average over 3 years.

Source: FAO, Statistics Division

Owner: FAO

**Domestic food price volatility (index)**

The Domestic Food Price Volatility is a measure of variation of the Domestic Food Price Level Index. It has been computed as the Standard Deviation (SD) of the deviations from the trend over the previous five years.

Source: FAO, Statistics Division

Owner: ILO and World Bank ICP (International Comparison Project)

**Droughts, floods, extreme temperatures (percent of population affected, average 1990-2009)**

Droughts, floods and extreme temperatures is the annual average percentage of the population that is affected by natural disasters classified as either droughts, floods, or extreme temperature events. A drought is an extended period of time characterized by a deficiency in a region's water supply that is the result of constantly below average precipitation. A drought can lead to losses to agriculture, affect inland navigation and hydropower plants, and cause a lack of drinking water and famine. A flood is a significant rise of water level in a stream, lake, reservoir or coastal region. Extreme temperature events are either cold waves or heat waves. A cold wave can be both a prolonged period of excessively cold weather and the sudden invasion of very cold air over a large area. Along with frost it can cause damage to agriculture, infrastructure, and property. A heat wave is a prolonged period of excessively hot and sometimes also humid weather relative to normal climate patterns of a certain region. Population affected is the number of people injured, left homeless or requiring immediate assistance during a period of emergency resulting from a natural disaster; it can also include displaced or evacuated people. Average percentage of population affected is calculated by dividing the sum of total affected for the period stated by the sum of the annual population figures for the period stated.

Source: World Bank (WDI)

Owner: EM-DAT: The OFDA/CRED International Disaster Database: [www.emdat.be](http://www.emdat.be), Universite Catholique de Louvain, Brussels (Belgium), World Bank.

**Egg production**

Covers all domestic birds which have contributed to egg production during the year, wherever they lay and the corresponding total production, including eggs intended to be used for hatching but excluding waste on farms.

**Eggs**

Default composition: 1062 Eggs, hen, in shell, 1063 Eggs, liquid, 1064 Eggs, dried, 1091 Eggs, other bird, in shell; nutrient data only: 916 Egg albumine

**Eggs primary production (tonnes)**

See 'Eggs' and 'Egg production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Emissions**

The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.

**Employees, agriculture, female (share of female employment)**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

Source: World Bank (WDI)

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Employees, agriculture, male (share of male employment)**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

Source: World Bank (WDI)

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Employment in agriculture (share of total employment)**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

Source: World Bank (WDI)

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Employment, total**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

Source: World Bank

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Enteric fermentation, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions from enteric fermentation consist of methane gas produced in digestive systems of ruminants and to a lesser extent of non-ruminants.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Environmental Protection, Cash (Budg. Cen. Govt.) (share of total outlays)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Environmental Protection, Noncash (Budg. Cen. Govt.) (share of total outlays)**

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Evaporated and condensed milk production (tonnes)**

See 'Milk excluding butter' and 'Milk production (tonnes)'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Export of forest products (USD)**

Forest materials for commercial use.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Export of roundwood (m<sup>3</sup>)**

See 'Roundwood'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of beverages (US\$)**

Value of exports of beverages in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of cereals and prep. (US\$)**

Value of exports of cereals and prep. in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of coffe, tea, cocoa, and spices (US\$)**

Value of exports of coffe, tea, cocoa, and spices in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of dairy products (milk equivalent) (US\$)**

Value of exports of milk equivalent in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of fish (US\$)**

Value of exports of fish in current US\$ (data reported include fish, molluscs, crustaceans, and miscellaneous aquatic animals but excluding marine mammals, crocodiles, corals, pearls, sponges and aquatic plants, miscellaneous aquatic animal products and fish waste).

Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Owner: FAO

**Exports of fruit and vegetables (US\$)**

Value of exports of fruit and vegetables in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of meat and meat prep. (US\$)**

Value of exports of meat and meat prep. in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of oilseeds (US\$)**

Value of exports of oilseeds in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of sugar and honey (US\$)**

Value of exports of sugar and honey in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Exports of veg. oils (US\$)**

Value of exports of veg. oils in current US\$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Fat supply quantity in crops primary equivalent (g/cap/day)**

Fat supply quantity in crops primary equivalent.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Fats, Animals, Raw**

Default composition: 869 Fat, cattle, 871 Fat, cattle butcher, 949 Fat, buffaloes, 979 Fat, sheep, 994 Grease incl. lanolin wool, 1019 Fat, goats, 1037 Fat, pigs, 1040 Fat, pig butcher, 1043 Lard, 1065 Fat, poultry, 1066 Fat, poultry, rendered, 1129 Fat, camels, 1160 Fat, other camelids, 1168 Oils, fats of animal nes, 1221 Lard stearine oil, 1222 Degras, 1225 Tallow, 1243 Fat, nes, prepared

**FDI inward flows - Agriculture, hunting, forestry, fishing (current USD)**

Inflows of foreign direct investment (FDI) in agriculture, hunting, forestry, and fishing.

Source: Foreign agriculture investment database

Owner: UNCTAD

**FDI inward flows - Agriculture, hunting, forestry, fishing + Food, beverages, tobacco (current USD)**

Inflows of foreign direct investment (FDI) in agriculture, hunting, forestry, and fishing + food, beverages, tobacco.

Source: Foreign agriculture investment database

Owner: UNCTAD

**FDI inward flows - Food, beverages, tobacco (current USD)**

Inflows of foreign direct investment (FDI) in food, beverages, tobacco.

Source: Foreign agriculture investment database

Owner: UNCTAD

**Female employment, total**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

*Source:* World Bank

*Owner:* International Labour Organization, Key Indicators of the Labour Market database.

**Fertilizers consumption**

Mineral fertilizers made their appearance with the Industrial revolution and had an important role in sustaining the growing population of earth: half the population of earth are now estimated to be fed with crops grown using synthetic fertilizers (Erisman et al. 2008). Fertilizers can have a negative impact on the environment, leading to eutrophication and poisoning of water, and pollution of soil (e.g. heavy metals, soil acidification, POP-Persistent Organic Pollutants). Also, the production of fertilizers is energy intensive and mineable phosphorus reserves are finite.

**Fertilizers Manufactured, nes**

Mineral or chemical fertilizers not elsewhere specified.

**Fertilizers, Organic**

Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products.

**Fibre crop harvested area (ha)**

See 'Fibre crops' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Fibre crop yield (hg/ha)**

See 'Fibre crops' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Fibre crops**

Natural fibre crops include Agave Fibres Nes, Cotton lint, Fibre Crops Nes, Flax fibre and tow, Hemp Tow Waste, Jute, Manila Fibre (Abaca), Other Bastfibres, Ramie, Seed cotton and Sisal.

**Fibre crops production (tonnes)**

See 'Fibre crops' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Fish species, threatened**

Fish species are based on Froese, R. and Pauly, D. (eds). 2008. Threatened species are the number of species classified by the IUCN as endangered, vulnerable, rare, indeterminate, out of danger, or insufficiently known.

*Source:* World Bank (WDI)

*Owner:* Froese, R. and Pauly, D. (eds). 2008. FishBase database, www.fishbase.org.

**Fixed broadband Internet subscribers (per 100 people)**

Fixed broadband Internet subscribers are the number of broadband subscribers with a digital subscriber line, cable modem, or other high-speed technology.

*Source:* World Bank (WDI)

*Owner:* International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates.

**Food**

Data refer to the total amount of the commodity available as human food during the reference period. Data include the commodity in question, as well as any commodity derived therefrom as a result of further processing. Food from maize, for example, comprises the amount of maize, maize meal and any other products derived therefrom available for human consumption. Food from milk relates to the amounts of milk as such, as well as the fresh milk equivalent of dairy products.

**Food net per capita production index number (2004-2006 = 100)**

See 'Agricultural production indices'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Food Price Level Index (index)**

The Domestic Food Price Level Index is calculated by dividing the Food Purchasing Power Parity (FPPP) by the General PPP, thus providing an index of the price of food in the country relative to the price of the generic consumption basket. Data are available for 2005 from the ICP Program. It is then extended to other years by adjusting both numerator and denominator using the relative changes in Food CPI and General CPI as provided by ILO.

*Source:* FAO, Statistics Division

*Owner:* ILO and World Bank ICP (International Comparison Project)

**Food production**

For primary commodities, production relates to the total domestic production whether inside or outside the agricultural sector, i.e. including non-commercial production and production in kitchen gardens. Unless otherwise indicated, production is reported at the farm level for primary crops (i.e. excluding harvesting losses for crops) and livestock items and in terms of live weight (i.e. the actual ex-water weight of the catch at the time of capture) for primary fish items. Production of processed commodities relates to the total output of the commodity at the manufacture level (i.e. it comprises output from domestic and imported raw materials of originating products). Reporting units are chosen accordingly, e.g. cereals are reported in terms of grains and paddy rice. As a general rule, all data on meat are expressed in terms of carcass weight. Usually the data on production relate to that which takes place during the reference period. However, production of certain crops may relate to the harvest of the year preceding the utilization period if harvesting takes place late in the year. In such instances, the production of a given year largely moves into consumption in the subsequent year. In the Food Balance Sheets a distinction is made between "output" and "input". The production of primary as well as of derived products is reported under "output". For derived commodities, the amounts of the originating commodity that are required for obtaining the output of the derived product are indicated under "input", and are expressed in terms of the originating commodity. The various factors used, i.e. milling rates, extraction rates, conversion or processing factors, carcass weights, milk yield, egg weights etc., should indicate the average national rate at which these commodities are generally converted.

**Food supply in crops primary equivalent (kcal/cap/day)**

Food supply in crops primary equivalent.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Foreign direct investment, net inflows (percent of GDP)**

Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.

*Source:* World Bank (WDI)

*Owner:* International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, Global Development Finance, and World Bank and OECD GDP estimates.

**Forest area (ha)**

Forest area is the land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 metres (m) in situ. Areas under reforestation that have not yet reached but are expected to reach a canopy cover of 10 percent and a tree height of 5 m are included, as are temporarily unstocked areas, resulting from human intervention or natural causes, which are expected to regenerate. Includes: areas with bamboo and palms provided that height and canopy cover criteria are met; forest roads, firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific scientific, historical, cultural or spiritual interest; windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 ha and width of more than 20 m; plantations primarily used for forestry or protective purposes, such as: rubber-wood plantations and cork, oak stands. Excludes: tree stands in agricultural production systems, for example in fruit plantations and agroforestry systems. The term also excludes trees in urban parks and gardens.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Freshwater Fish**

Default composition: 1501 Frwtr Diad F, 1502 Frwtr Fz Whl, 1503 Frwtr Fillet, 1504 Frwtr Fz Flt, 1505 Frwtr Cured, 1506 Frwtr Canned, 1507 Frwtr Pr nes, 1508 Frwtr Meals

**Fruit harvested area (ha)**

See 'Fruit, excluding melons' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Fruit production, excluding melons (tonnes)**

See 'Fruit, excluding melons' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Fruit yield (hg/ha)**

See 'Fruit, excluding melons' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Fruit, citrus nes**

Including inter alia: bergamot (Citrus bergamia); citron (C. medica var. cedrata); chinotto (C. myrtifolia); kumquat (Fortunella japonica). Some minor varieties of citrus are used primarily in the preparation of perfumes and soft drinks.

**Fruit, excluding melons**

Fruit Crops consist of fruits and berries that, with few exceptions, are characterized by their sweet taste. Nearly all are permanent crops, mainly from trees, bushes and shrubs, as well as vines and palms. Fruits and berries grow on branches, stalks or the trunks of plants, usually singly, but sometimes grouped in bunches or clusters (e.g. bananas and grapes). Commercial crops are cultivated in plantations, but significant quantities of fruits are also collected from scattered plants that may or may not be cultivated.

**Fruit, fresh nes**

Including inter alia: azarole (Crataegus azarolus); babaco (Carica pentagona); elderberry (Sambucus nigra); jujube (Zizyphus jujuba); litchi (nephelium litchi); loquat (Eriobotrya japonica); medlar (Mespilus germanica); pawpaw (Asimina triloba); pomegranate (Punica granatum); prickly pear (Opuntia ficus-indica); rose hips (Rosa spp.); rowanberry (Sorbus aucuparia); service-apple (Sorbus domestica); tamarind (Tamarindus indica); tree-strawberry (Arbutus unedo). Other fresh fruit that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report fresh fruit under this heading that are classified separately by FAO.

**GDP (current US\$)**

GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.

Source: World Bank (WDI)

Owner: World Bank national accounts data, and OECD National Accounts data files.

**GINI index**

Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

Source: World Bank (WDI)

Owner: World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

**Global 5-Year running mean land-ocean temperature index (degree Celsius)**

Global 5-years running mean land-ocean temperature index, with base period 1951-1980.

Source: NASA

Owner: Hansen et al. 2007

**Global annual mean land-ocean temperature index (degree Celsius)**

Global annual mean land-ocean temperature index, with base period 1951-1980.

Source: NASA

Owner: Hansen et al. 2006

**Global annual mean land-ocean temperature index, low latitudes 23.6N-23.6S (degree Celsius)**

Global annual mean land-ocean temperature index, low latitudes 23.6N-23.6S with base period 1951-1980.

Source: NASA

Owner: Hansen et al. 2009

**Global annual mean land-ocean temperature index, northern latitudes 90N-23.6N (degree Celsius)**

Global annual mean land-ocean temperature index, northern latitudes 90N-23.6N with base period 1951-1980.

Source: NASA

Owner: Hansen et al. 2008

**Global annual mean land-ocean temperature index, southern latitudes 23.6S-90S (degree Celsius)**

Global annual mean land-ocean temperature index, southern latitudes 23.6S-90S with base period 1951-1980.

Source: NASA

Owner: Hansen et al. 2010

**GNI per capita, Atlas method (current US\$)**

GNI per capita (formerly GNP per capita) is the gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. GNI, calculated in national currency, is usually converted to U.S. dollars at official exchange rates for comparisons across economies, although an alternative rate is used when the official exchange rate is judged to diverge by an exceptionally large margin from the rate actually applied in international transactions. To smooth fluctuations in prices and exchange rates, a special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom, and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom, and the United States.

*Source:* World Bank (WDI)

*Owner:* World Bank national accounts data, and OECD National Accounts data files.

**Goats**

Includes Hircus, Ibex, Nubiana, Pyrenaica, Tibetana, Kashmir and Angora.

**Government expenditure**

Data presented on government expenditure refers to Core Areas of Government Functions Relevant to the Agriculture Sector based on the Classification of Functions of Government (COFOG) as outlined in the IMF's Government Finance Statistics Manual, 2001 (GFSM 2001). COFOG is essential for making international comparisons of the extent to which governments are involved in economic and social functions because it avoids problems associated with organizational changes in a single government, and problems of organizational differences among countries. Statistics on expenditures in agriculture, forestry and fisheries and on environmental protection can be used to study the effectiveness of government programs that support an enabling environment for essential public goods with high economic and social returns. COFOG provides key aggregates that could be used as indicators or measures of results / outcomes.

**Government expenditure allocated to agricultural and rural development**

Data on government expenditure on agriculture refers to all non-repayable payments, whether capital or current, required or not by government for the agricultural and rural development sector.

**Grain, mixed**

A mixture of cereal species that are sown and harvested together. The mixture wheat/rye is known as meslin, but in trade is usually classified with wheat.

**Grapes**

Default composition: 560 Grapes, 561 Raisins, 562 Juice, grape, 563 Grapes, must

**Gross capital stock (constant 2005 prices)**

The estimate of capital stock in agriculture refers to a value that is attached to the total physical capital capacity available for repeated use in the production of other goods, in existence at specific point in time in the economy of agriculture sector. The estimates of investment in agriculture have indirectly been derived by the FAO, Statistics Division using physical data on livestock, tractors, irrigated land and land under permanent crops etc., and the average prices for the year 1995. These data enabled the derivation of the capital stock in agriculture which is the gross, and the annual change in the latter is taken to reflect investment in agriculture.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, land development (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, livestock fixed assets (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, livestock inventory (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, machinery & equipment (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, plantation crops (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Gross capital stock, structures for livestock (constant 2005 prices)**

See 'Gross capital stock (constant 2005 prices)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Groundnut Oil**

Default composition: 244 Oil, groundnut

**Health expenditure, total (percent of GDP)**

Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

*Source:* World Bank (WDI)

*Owner:* World Health Organization National Health Account database (see <http://apps.who.int/nha/database> for the most recent updates).

**Honey, natural**

Honey produced by bees (*Apis mellifera*) or by other insects.

**Import of forest products (USD)**

Forest materials for commercial use.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Import of roundwood (m<sup>3</sup>)**

See 'Roundwood'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Import value index (2004-2006 = 100)**

Value indices represent the change in the current values of Import c.i.f. (cost, insurance and freight) all expressed in US dollars. For countries which report import values on an f.o.b. (free on board) basis, these are adjusted to approximate c.i.f. values (by a standard factor of 112 percent).

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### Imports of fish (US\$)

Value of imports of fish in current US\$ (data reported include fish, molluscs, crustaceans, and miscellaneous aquatic animals but excluding production for marine mammals, crocodiles, corals, pearls, sponges and aquatic plants, miscellaneous aquatic animal products and fish waste).

*Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

*Owner:* FAO

### Income share held by highest 20% (percent)

Percentage share of income or consumption is the share that accrues to subgroups of population indicated by deciles or quintiles. Percentage shares by quintile may not sum to 100 because of rounding.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

### Income share held by lowest 20% (percent)

Percentage share of income or consumption is the share that accrues to subgroups of population indicated by deciles or quintiles. Percentage shares by quintile may not sum to 100 because of rounding.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

### Industrial roundwood

The wood removed (volume of roundwood under bark) for production of goods and services other than energy production (wood-fuel). It represents the sum of: sawlogs and veneer logs; pulpwood, round and split; and other industrial roundwood. See <http://www.fao.org/forestry/62283/en/> for further information.

### Industrial roundwood production (m<sup>3</sup>)

See 'Industrial roundwood' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### Industrial water withdrawal, share of total water withdrawal (percent)

Industrial water withdrawal as percentage of total water withdrawal.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

### Industry, value added (percent of GDP)

Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

*Source:* World Bank (WDI)

*Owner:* World Bank national accounts data, and OECD National Accounts data files.

### Internally displaced persons, total

Internally Displaced Persons (IDPs) are people or groups of individuals who have been forced to leave their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural- or human-made disasters, and who have not crossed an international border. For purposes of UNHCR's statistics, this population only includes conflict-generated IDPs to whom the Office extends protection and/or assistance. As such, UNHCR statistics do not provide a comprehensive picture of global internal displacement. Moreover, UNHCR's IDP statistics are not necessarily representative of the entire IDP population in a given country but are exclusively limited to the ones who are protected and/or assisted by the Office. For global IDP estimates, consult the Internal Displacement Monitoring Centre (IDMC) of the Norwegian Refugee Council (NRC) website. The 2007 IDP population category also includes people in IDP-like situations. This sub-category is descriptive in nature and includes groups of persons who are inside their country of nationality or habitual residence and who face protection risks similar to those of IDPs but who, for practical or other reasons, could not be reported as such.

*Source:* Statistical Online Population Database

*Owner:* UNHCR

### Irrigation potential (ha)

Area of land which is potentially irrigable. Country/regional studies assess this value according to different methods. For example, some consider only land resources, others consider land resources plus water availability, others include economical aspects in their assessments (such as distance and/or difference in elevation between the suitable land and the available water) or environmental aspects, etc. If available, this information is given in the individual country profiles. The figure includes the area already under agricultural water management.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

### Jute and jute-like

White jute (*Corchorus capsularis*); red jute, tossa (*C. olitorius*). Trade data cover raw or processed jute (but not spun), tow and waste, yarn waste and garnetted stock and may include jute-like fibres.

### Jute and jute-like harvested area (ha)

See 'Jute and jute-like' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### Jute and jute-like production (tonnes)

See 'Jute and jute-like' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### Jute and jute-like yield (hg/ha)

See 'Jute and jute-like' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### Labor participation rate, female (share of female population ages 15+)

Labor force participation rate is the proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period.

*Source:* World Bank (WDI)

*Owner:* International Labour Organization, Key Indicators of the Labour Market database.

**Labor participation rate, male (share of male population ages 15+)**

Labor force participation rate is the proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period.

Source: World Bank (WDI)

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Land area (sq. km)**

Land area is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

Source: World Bank (WDI)

Owner: Food and Agriculture Organization, electronic files and web site.

**Life expectancy at birth, total (years)**

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Source: World Bank (WDI)

Owner: UNPD World Population Prospects 2010

**Literacy rate, adult female (percent of females ages 15 and above)**

Adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.

Source: World Bank (WDI)

Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

**Livestock**

Animals such as cattle and sheep which are kept on the holding or otherwise for agricultural production.

**Maize**

Zea mays Corn, Indian corn, mealies. A grain with a high germ content. At the national level, hybrid and ordinary maize should be reported separately owing to widely different yields and uses. Used largely for animal feed and commercial starch production.

**Male employment, total**

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind.

Source: World Bank

Owner: International Labour Organization, Key Indicators of the Labour Market database.

**Mammal species, threatened**

Mammal species are mammals excluding whales and porpoises. Threatened species are the number of species classified by the IUCN as endangered, vulnerable, rare, indeterminate, out of danger, or insufficiently known.

Source: World Bank (WDI)

Owner: United Nations Environmental Program and the World Conservation Monitoring Centre, and International Union for Conservation of Nature, Red List of Threatened Species.

**Manufactures Unit Value (MUV) (index)**

The MUV is a composite index of prices for manufactured exports from the fifteen major developed and emerging economies to low- and middle-income economies, valued in U.S. dollars. For the MUV (15) index, unit value indexes in local currency for each country are converted to U.S. dollars using market exchange rates and are combined using weights determined by the share of each country's exports in G15 exports to low- and middle-income countries.

The shares are calculated using SITC revision 3 Manufactures exports data from UN COMTRADE in 2005, the base year. The primary manufacturing prices index source is OECD's Domestic Producer Price Index (PPI) for manufacturing. Whenever PPI is not available, export price indexes or the export unit values are used as proxies. The countries and relative weights (in parentheses) are: Brazil (2.95%), Canada (0.93%), China (11.79%), France (5.87%), Germany (13.29%), India (1.77%), Italy (6.07%), Japan (16.70%), Mexico (0.93%), South Africa (0.75%), South Korea (10.95%), Spain (2.30%), Thailand (2.51%), United Kingdom (3.50%), and United States (19.68%).

Source: World Bank

Owner: World Bank, Development Prospects Group; Historical US GDP deflator: US Department of Commerce.

**Manure applied to soils, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions from manure applied to soils consist of nitrous oxide gas from nitrogen additions to managed soils from treated manure.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Manure left on pasture, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse Gases (GHG) emissions data from manure left on pasture consist of nitrous oxide gas from nitrogen additions to managed soils from grazing livestock.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Manure management, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions from manure management consist of methane and nitrous oxide gases from aerobic and anaerobic decomposition processes.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Marine protected areas (share of territorial waters)**

Marine protected areas are areas of intertidal or subtidal terrain—and overlying water and associated flora and fauna and historical and cultural features—that have been reserved by law or other effective means to protect part or all of the enclosed environment.

Source: World Bank (WDI)

Owner: United Nations Environmental Program and the World Conservation Monitoring Centre, as compiled by the World Resources Institute, based on data from national authorities, national legislation and international agreements.

**Meat, ass**

Including frog legs, marine mammals, etc. Some countries include under this heading meats that are listed above, but which are not reported separately. Fresh, chilled or frozen.

**Meat, beef, preparations**

Meat and offal (o/t liver) that are boiled, steamed, grilled, fried, roasted or otherwise cooked. Includes prepared meals that contain more than 20% of meat and offal by weight.

**Meat, total**

Meat from animals, fresh, chilled or frozen, with bone in. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats.

**Meat, total (tonnes)**

See 'Meat, total' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

## **Milk**

Whole fresh milk production from Buffalos, Camels, Cows, Goats and Sheep.

### **Milk excluding butter**

Default composition: 882 Milk, whole fresh cow, 888 Milk, skimmed cow, 889 Milk, whole condensed, 890 Whey, condensed, 891 Yoghurt, 892 Yoghurt, concentrated or not, 893 Buttermilk, curdled, acidified milk, 894 Milk, whole evaporated, 895 Milk, skimmed evaporated, 896 Milk, skimmed condensed, 897 Milk, whole dried, 898 Milk, skimmed dried, 899 Milk, dry buttermilk, 900 Whey, dry, 901 Cheese, whole cow milk, 904 Cheese, skimmed cow milk, 905 Whey, cheese, 907 Cheese, processed, 908 Milk, reconstituted, 917 Casein, 951 Milk, whole fresh buffalo, 954 Milk, skimmed buffalo, 955 Cheese, buffalo milk, 982 Milk, whole fresh sheep, 984 Cheese, sheep milk, 985 Milk, skimmed sheep, 1020 Milk, whole fresh goat, 1021 Cheese of goat milk, 1023 Milk, skimmed goat, 1130 Milk, whole fresh camel; nutrient data only: 903 Whey, fresh, 909 Milk, products of natural constituents, 910 Ice cream and edible ice

### **Milk production (tonnes)**

Production data of milk indicates the quantity of milk produced during the year from the animals of the species to which the Supply Utilization Accounts refer. Milk production data is reported according to the concept of net milk production: total production of whole fresh milk, excluding the milk sucked by young animals but including amounts fed to livestock.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### **Mobile cellular subscriptions (per 100 people)**

Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and pre-paid subscriptions are included.

*Source:* World Bank (WDI)

*Owner:* International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates.

### **Mortality rate, infant (per 1000 live births)**

Infant mortality rate is the number of infants dying before reaching one year of age, per 1000 live births in a given year.

*Source:* World Bank (WDI)

*Owner:* UNICEF, WHO, World Bank and UNPD

### **Mortality rate, under-5 (per 1,000 live births)**

Under-five mortality rate is the probability per 1,000 that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates.

*Source:* World Bank (WDI)

*Owner:* Level & Trends in Child Mortality. Report 2011. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA, UNPD).

### **Municipal water withdrawal, share of total water withdrawal (percent)**

Municipal water withdrawal as percentage of total water withdrawal.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

## **Natural Phosphates**

Products obtained by grinding soft mineral phosphates and containing tricalcium phosphate and calcium carbonate as essential ingredients. The minimum content of nutrients is 25% P<sub>2</sub>O<sub>5</sub> (Phosphorus expressed as P<sub>2</sub>O<sub>5</sub> soluble in mineral acids, at least 55% of the declared content of P<sub>2</sub>O<sub>5</sub> being soluble in 2% formic acid).

## **Natural Sodium Nitrate**

Chemically obtained product containing sodium nitrate as its essential ingredient. The minimum content of nutrients is 15% N (Nitrogen expressed as nitric nitrogen).

### **Net forest conversion, net emissions/removal in CO<sub>2</sub>eq (gigagrams)**

GHG emissions data from forest land are currently limited to emissions from net forest conversion to non-forest land. They consist of the balance of CO<sub>2</sub> sources and sinks associated with deforestation and afforestation activities within a country.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### **Net official development assistance and official aid received (current US\$)**

Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is provided under terms and conditions similar to those for ODA. Part II of the DAC List was abolished in 2005. The collection of data on official aid and other resource flows to Part II countries ended with 2004 data. Data are in current U.S. dollars.

*Source:* World Bank (WDI)

*Owner:* Development Assistance Committee of the Organisation for Economic Co-operation and Development, Geographical Distribution of Financial Flows to Developing Countries, Development Co-operation Report, and International Development Statistics database. Data

### **Nitrogen and phosphate fertilizers consumption (tonnes of K<sub>2</sub>O total nutrients)**

Nitrogen and phosphate fertilizers consumption.

*Source:* FAO, Statistics Division

*Owner:* FAO

### **Nitrogen fertilizers consumption (tonnes of N total nutrients)**

Nitrogen fertilizers consumption.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

### **Number of people undernourished, total**

Estimated number of people at risk of undernourishment. It is calculated by applying the estimated prevalence of undernourishment to the total population in each period.

*Source:* FAO, Statistics Division

*Owner:* FAO

### **ODA received for agriculture sector (US\$)**

See 'Official Development Assistance'

*Source:* FAO, Statistics Division

*Owner:* The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

**ODA received for fishing sector (US\$)**

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

**ODA received for forestry sector (US\$)**

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

**Official Development Assistance**

The concessional (Official Development Assistance, ODA) and non-Concessional commitments made by bilateral and multilateral donors to developing countries is referred to as 'External Assistance to Agriculture'. The term 'Agriculture' is generally used in the broad sense to cover agriculture, forestry, fisheries, land and water, agro-industries, environment, manufacturing of agricultural inputs and machinery, regional and river development, and rural development. The narrow concept of agriculture has also been defined to look at the contribution made to develop agriculture in a strict sense. This includes assistance provided for the development of agriculture (crop and animal husbandry), forestry, fisheries (including training, extension and research) and development of land and water resources.

**Oil-bearing crops**

Oil-bearing crops or oil crops include both annual (usually called oilseeds) and perennial plants whose seeds, fruits or mesocarp and nuts are valued mainly for the edible or industrial oils that are extracted from them. They include: Castor oil seed, Coconuts, Cottonseed, Groundnuts, with shell, Hempseed, Jojoba Seeds, Karite Nuts (Sheanuts), Linseed, Melonseed, Mustard seed, Oil palm fruit, Oilseeds, Nes, Olives, Palm kernels, Palm oil, Poppy seed, Rape-seed, Safflower seed, Seed cotton, Sesame seed, Soybeans, Sunflower seed and Tung Nuts.

**Oil-bearing crops harvested area, share of world total**

See 'Oil-bearing crops' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Oil-bearing crops production (tonnes)**

See 'Oil-bearing crops' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Oil-bearing crops yield (hg/ha)**

See 'Oil-bearing crops' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Oil, maize**

Extracted from germ by pressure or by solvents.

**Oil, palm**

Obtained from the mesocarp of the fruit of the oil palm by pressure, and also by solvent from the residues of the pressure extraction.

**Oilcrops Oil, Other**

Default composition: 263 Karite nuts (sheanuts), 265 Castor oil seed, 275 Tung nuts, 277 Jojoba seed, 280 Safflower seed, 296 Poppy seed, 299 Melonseed, 305 Tallowtree seed, 310 Kapok fruit, 311 Kapokseed in shell, 312 Kapokseed shelled, 333 Linseed, 336 Hempseed, 339 Oilseeds nes, 343 Flour, oilseeds

**Oilseeds exports (tonnes)**

Exports (volume) of oilseeds.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Oilseeds imports (tonnes)**

Imports (volume) of oilseeds.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Oilseeds nes**

Includes inter alia: beech nut (*Fagus sylvatica*);(*Aleurites moluccana*);(*Carapa guineensis*);(*Croton tiglium*);(*Bassia latifolia*);(*Guizotia abyssinica*);(*Licania rigida*);(*Perilla frutescens*);(*Jatropha curcas*);(*Shorea robusta*);(*Pongamia glabra*);(*Astrocaryum* spp.). Other oilseeds, oleaginous fruits and nuts that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report commodities under this heading that are classified individually by FAO. Also included under this code are tea seeds, grape pips and tomato seeds from which oil is extracted.

**Olive Oil**

Default composition: 261 Oil, olive, virgin, 274 Oil, olive residues

**Organic water pollutant (BOD) emissions (kg per day per worker)**

Emissions per worker are total emissions of organic water pollutants divided by the number of industrial workers. Organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: World Bank and UNIDO's industry database.

**Organic water pollutant (BOD) emissions (kg per day)**

Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: 1998 study by Hemamala Hettige, Muthukumara Mani, and David Wheeler, "Industrial Pollution in Economic Development: Kuznets Revisited" (available at [www.worldbank.org/nipr](http://www.worldbank.org/nipr)). The data were updated by the World Bank's Development Research Group using the same methodology as the initial study.

**Other land (ha)**

Other land is the land not classified as Agricultural land and Forest area. It includes built-up and related land, barren land, other wooded land, etc.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Other naturally regenerated forest (ha)**

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. Other naturally regenerated forest is forest where there are clearly visible indications of human activities.

Source: Global Forest Resources Assessment

Owner: FAO

**Others and stateless, total**

Population of concern to UNHCR, others and stateless.

Source: Statistical Online Population Database

Owner: UNHCR

**Palmkernel Oil**

Default composition: 258 Oil, palm kernel

**Paper and paperboard**

The sum of Paper and Paperboard, Newsprint, Paper and Paperboard other than Newsprint, Printing and Writing Paper, Other Paper and Paperboard, Household and Sanitary Paper, Wrapping and Packaging Paper and Paperboard and Other Paper and Paperboard Not Elsewhere Specified. See <http://www.fao.org/forestry/62283/en/> for further information.

**Paper and paperboard production (tonnes)**

See 'Paper and paperboard' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Part of equipped area actually irrigated (percent)**

Percent of area equipped for irrigation that is actually irrigated in any given year, expressed in percentage. Irrigated land that is cultivated more than once a year is counted only once.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

**Pastry**

All baked products excluding those listed under bread. Pastry products may contain ingredients other than wheat flour, such as milk, eggs, sugar, honey, starch, fats, fruit, seeds, etc.

**Per Capita food production variability (index)**

Per capita food production variability corresponds to the variability of the net food production value in constant 2004-2006 1000 International \$ (Net Food PIN) divided by the population number as from UN 2010 estimates. Variability is based on the trend of the Net Food PIN per capita over the period 1985 to 2010 and corresponds to the standard deviation of the deviation from the trend over a period of 5 years. Missing values for Eritrea/Ethiopia, former Yugoslavia and Caucasus countries for 1985 to 1992 are estimated backward using the share of the value of food production of each country in the total value of the region it belonged to prior to 1992.

Source: FAO, Statistics Division

Owner: FAO

**Per Capita food supply variability (index)**

Food supply variability correspond to the variable Food supply total in kcal/person/day as estimated by the FAO Statistic Division. The variability is obtained as the standard deviation over 5 years of the deviation from the trend of per capita food supply observed during the period 1990 to 2010.

Source: FAO, Statistics Division

Owner: FAO

**Per capita supply**

Estimates of per capita food supplies available for human consumption during the reference period in terms of quantity, caloric value, protein and fat content. Calorie supplies are reported in kilocalories (1 calorie = 4.19 kilojoules). Per capita supplies in terms of product weight are derived from the total supplies available for human consumption (i.e. Food) by dividing the quantities of Food by the total population actually partaking of the food supplies during the reference period, i.e. the present in-area (de facto) population within the present geographical boundaries of the country. In other words, nationals living abroad during the reference period are excluded, but foreigners living in the country are included. Adjustments are made wherever possible for part-time presence or absence, such as temporary migrants, tourists and refugees supported by special

schemes (if it has not been possible to allow for the amounts provided by such schemes under imports). In almost all cases, the population figures used are the mid-year estimates published by the United Nations Population Division. Per capita supply figures shown in the commodity balances therefore represent only the average supply available for the population as a whole and do not necessarily indicate what is actually consumed by individuals. Even if they are taken as approximation to per capita consumption, it is important to note that the amount of food actually consumed may be lower than the quantity shown here, depending on the degree of losses of edible food and nutrients in the household, e.g. during storage, in preparation and cooking etc. In many cases commodities are not consumed in the primary form in which they are presented in the commodity balance, e.g. cereals enter the household mainly in processed form like flour, meal, husked or milled rice. To take this fact into account, the caloric value, the protein and fat content shown against primary commodities in the commodity balances have been derived by applying the appropriate food composition factors to the quantities of the processed commodities and not by multiplying the quantities shown in the commodity balance with the food composition factors relating to primary commodities.

**Percent of adults who are underweight (percent)**

Percentage of adults who are underweight, as defined by a Body Mass Index (BMI) below the international reference standard of 18.5. To calculate an individual's BMI, weight and height data are need. The BMI is weight (kg) divided by squared height (m).

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Percent of arable land equipped for irrigation (percent)**

Percent of arable land equipped for irrigation. The indicator is calculated on 3 year averages.

Source: FAO, Statistics Division

Owner: FAO

**Percent of paved roads over total roads (percent)**

Paved roads are those surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones, as a percentage of all the country's roads, measured in length. Regional aggregates are computed as weighted average using total road network as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using the closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total length of road network of the region they belong to.

Source: FAO, Statistics Division

Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

**Percentage of children under 5 years of age who are stunted (percent)**

Percentage of stunting (height-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Percentage of children under 5 years of age who are underweight (percent)**

Percentage of underweight (weight-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Percentage of children under 5 years of age who are wasted (percent)**

Percentage of (weight-for-height less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Percentage of population with no reasonable access to improved sanitation facilities (percent)**

Access to improved sanitation facilities refers to the percentage of the population with at least adequate access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. To be effective, facilities must be correctly constructed and properly maintained.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Percentage of population with no reasonable access to improved water sources (percent)**

Access to an improved water source refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

**Permanent crops (ha)**

Permanent crops is the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Permanent meadows and pastures (ha)**

Permanent meadows and pastures is the land used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land). Data are expressed in 1000 hectares.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pesticide consumption**

Data refer to quantities of pesticides applied to crops and seeds in the agriculture sector. Figures are generally expressed in terms of active ingredients. Data are expressed in tonnes (t). However, due to some country reporting practices, the data may be reported by: consumption in formulated product (including diluents and adjuvants); sales; distribution or imports for use in the agricultural sector. In these cases it is specified in the country notes.

**Pesticides**

Pesticides refer to insecticides, fungicides, herbicides, disinfectants and any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport.

**Phosphate fertilizers consumption (tonnes of P2O5 total nutrients)**

Phosphate fertilizers consumption.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pig meat**

Meat, with the bone in, of domestic or wild pigs (e.g. wild boars), whether fresh, chilled or frozen.

**Pig meat per capita (tonne/cap)**

See 'Pig meat' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pigs**

Domestic pig (*Sus domestica*); wild boar (*Sus scrofa*). See 866. Excludes non-domesticated wild boars.

**Plant species (higher), threatened**

Higher plants are native vascular plant species. Threatened species are the number of species classified by the IUCN as endangered, vulnerable, rare, indeterminate, out of danger, or insufficiently known.

Source: World Bank (WDI)

Owner: United Nations Environmental Program and the World Conservation Monitoring Centre, and International Union for Conservation of Nature, Red List of Threatened Species.

**Planted forest (ha)**

Planted forest is forest predominantly composed of trees established through planting and/or deliberate seeding.

Source: Global Forest Resources Assessment

Owner: FAO

**Political stability and absence of violence/terrorism (index)**

Political stability and absence of violence measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

Source: FAO, Statistics Division

Owner: WorldWide Governance Indicators

**Population ages 0-14, total**

Population with age between 0 and 14 years.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

**Population ages 15-64, total**

Population with age between 15 and 64 years.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

**Population ages 65 and above, total**

Population with age above 65.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

**Population density (people per sq. km of land area)**

Population density is midyear population divided by land area in square kilometers. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Land area is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

Source: World Bank (WDI)

Owner: Food and Agriculture Organization and World Bank population estimates.

**Population living in areas where elevation is below 5 meters (share of total population)**

Population below 5m is the percentage of the total population living in areas where the elevation is 5 meters or less.

*Source:* World Bank (WDI)

*Owner:* Center for International Earth Science Information Network (CIESIN), Place II dataset.

**Population, total**

Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. The values shown are midyear estimates.

*Source:* United Nations Population Division

*Owner:* United Nations Population Division, World Population Prospects.

**Potash fertilizers consumption (tonnes of K2O total nutrients)**

Potash fertilizers consumption.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Potassium Sulphate**

Is a white crystalline salt and contains 48 to 52 per cent potash (K2O). Potassium sulfate can be extracted from naturally occurring brines or by the decomposition of potassium chloride with sulfuric acid.

**Poultry birds (heads)**

Domesticated birds for commercial use.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Poultry meat**

Poultry birds, fresh, chilled or frozen, with bone in. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats. Poultry meat includes Bird meat, nes, Chicken meat, Duck meat, Goose and guinea fowl meat and Turkey meat.

**Poultry meat (tonnes)**

See 'Poultry meat' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

**Poverty gap at \$1.25 a day PPP (percent)**

Poverty gap is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

**Poverty gap at \$2 a day PPP (percent)**

Poverty gap is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

**Poverty gap at national poverty line (percent)**

Poverty gap at national poverty line is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

*Source:* World Bank (WDI)

*Owner:* Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

**Poverty gap at rural poverty line (percent)**

Poverty gap at rural poverty line is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the national rural poverty line. This measure reflects the depth of poverty as well as its incidence.

*Source:* World Bank (WDI)

*Owner:* Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

**Poverty headcount ratio at \$1.25 a day PPP (percent of population)**

Population below \$1.25 a day is the percentage of the population living on less than \$1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

**Poverty headcount ratio at \$2 a day PPP (percent of population)**

Population below \$2 a day is the percentage of the population living on less than \$2.00 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

*Source:* World Bank (WDI)

*Owner:* World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).

**Poverty headcount ratio at national poverty line (percent of population)**

Poverty headcount ratio at national poverty line (% of population).

*Source:* World Bank (WDI)

*Owner:* Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

**Prevalence of food inadequacy (percent)**

It is conceptually analogous to the prevalence of undernourishment, but calculated setting the caloric threshold to a higher level, by using a Physical Activity Level (PAL) coefficient of 1.75, as opposed to 1.55. It measures the percentage of the population that is at risk of not covering the food requirements associated with normal physical activity, and therefore including also those who, even though cannot be considered chronically undernourished, are likely being conditioned in their economic activity by insufficient food. While the PoU is an estimator of chronic food deprivation ("hunger"), this new estimator is a less conservative measure of food inadequacy in the population. The indicator is calculated on 3 year averages.

*Source:* FAO, Statistics Division

*Owner:* FAO

**Prevalence of undernourishment (percent)**

Proportion of the population estimated to be at risk of caloric inadequacy. This is the traditional FAO hunger indicator, adopted as official Millennium Development Goal indicator for goal 1, target 1.9. The indicator is calculated on 3 year averages.

Source: FAO, Statistics Division

Owner: FAO

**Primary completion rate, total (percent of relevant age group)**

Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

Source: World Bank (WDI)

Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

**Primary forest (ha)**

Primary forest is naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.

Source: Global Forest Resources Assessment

Owner: FAO

**Production**

Figures relate to the total domestic production whether inside or outside the agricultural sector, i.e. it includes non-commercial production and production from kitchen gardens. Unless otherwise indicated, production is reported at the farm level for crop and livestock products (i.e. in the case of crops, excluding harvesting losses) and in terms of live weight for fish items (i.e. the actual ex-water weight at the time of the catch). All data shown relate to total meat production from both commercial and farm slaughter. Data are expressed in terms of dressed carcass weight, excluding offal and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight.

**Production - Livestock primary**

Livestock primary products include products from live and slaughtered animals. Products from slaughtered animals include meat, offals, raw fats, fresh hides and skins. Products from live animals include milk, eggs, honey, beeswax and fibres of animal origin. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids, respectively; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight. Cow milk production relates to total production of whole fresh milk, excluding the milk sucked by young animals but including amounts fed to livestock. The concept of production of buffalo, sheep and goat milk is the same as for cow milk; however, the coverage is probably less adequate. Egg production covers all domestic birds which have contributed to egg production during the year, wherever they lay and the corresponding total production, including eggs intended to be used for hatching but excluding waste on farms.

**Protein supply quantity in crops primary equivalent (g/cap/day)**

Protein supply quantity in crops primary equivalent.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pulses**

Pulses are annual leguminous crops yielding from one to 12 grains or seeds of variable size, shape and colour within a pod. They are used for both food and feed. The term "pulses" is limited to crops

harvested solely for dry grain, thereby excluding crops harvested green for food (green peas, green beans, etc.) which are classified as vegetable crops. Also excluded are those crops used mainly for oil extraction (e.g. soybean and groundnuts) and leguminous crops (e.g. seeds of clover and alfalfa) that are used exclusively for sowing purposes. They include Bambara beans, Beans, dry, Broad beans, horse beans, dry, Chick peas, Cow peas, dry, Lentils, Lupins, Peas, dry, Pigeon peas, Pulses, nes, and Vetches.

**Pulses harvested area (ha)**

See 'Pulses' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pulses production (tonnes)**

See 'Pulses' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Pulses yield (hg/ha)**

See 'Pulses' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rail lines density (percent)**

Rail lines density corresponds to the ratio between the length of railway route available for train service, irrespective of the number of parallel tracks (rail lines, total route in km) with the area of the country. Regional aggregates are computed as weighted average using surface area as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total area of the region they belong to.

Source: FAO, Statistics Division

Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

**Rape and Mustard Oil**

Default composition: Oil, rapeseed, mustard

**Recovered paper**

Waste and scraps of paper or paperboard that have been collected for re-use as a raw material for the manufacture of paper and paperboard. It includes: paper and paperboard that has been used for its original purpose and residues from paper and paperboard production. See <http://www.fao.org/forestry/62283/en/> for further information.

**Recovered paper production (tonnes)**

See 'Recovered paper' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rice (paddy)**

Oryza spp., mainly oryza sativa. Rice grain after threshing and winnowing. Also known as rice in the husk and rough rice. Used mainly for human food.

**Rice (paddy) production (tonnes)**

See 'Rice (paddy)' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rice cultivation, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions from rice cultivation consist of methane gas from the anaerobic decomposition of organic matter in paddy fields.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rice harvested area (ha)**

See 'Rice (paddy)' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rice yield (hg/ha)**

See 'Rice (paddy)' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Road density (percent)**

Road density is the ratio of the length of the country's total road network to the country's land area. The road network includes all roads in the country: motorways, highways, main or national roads, secondary or regional roads, and other urban and rural roads. Regional aggregates are computed as weighted average using surface area as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using the closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total area of the region they belong to.

Source: FAO, Statistics Division

Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

**Root and tuber crops**

Roots and tubers are plants yielding starchy roots, tubers, rhizomes, corms and stems. They include Potatoes, Sweet Potatoes, Cassava, Yautia (Cocoyam), Taro (Cocoyam), Yams, Roots And Tubers Nes.

**Root and tuber crops production (tonnes)**

See 'Root and tuber crops' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Roots and tubers harvested area (ha)**

See 'Root and tuber crops' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Roots and tubers yield (hg/ha)**

See 'Root and tuber crops' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Roots and tubers, nes**

Including inter alia: arracacha (*Arracacia xanthorrhiza*); arrow-root (*Maranta arundinacea*); chufa (*Cyperus esculentus*); sago palm (*Metroxylon* spp.); oca and ullucu (*Oxalis tuberosa* and *Ullucus tuberosus*); yam bean, jicama (*Pachyrhizus erosus*, *P. angulatus*); mashua (*Tropaeolum tuberosum*); Jerusalem artichoke, topinambur (*Helianthus tuberosus*). Other tubers, roots or rhizomes, fresh, that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report roots and tubers under this commodity heading that are classified individually by FAO.

**Roundwood**

All roundwood felled or otherwise harvested and removed. It comprises all wood obtained from removals, i.e. the quantities removed from forests and from trees outside the forest, including wood recovered from natural, felling and logging losses during the period, calendar year or forest year. It includes: all wood removed with or without bark, including wood removed in its round form, or split, roughly squared or in other form (e.g. branches, roots, stumps and burls (where these are harvested) and wood that is roughly shaped or pointed. In the production statistics, it represents the sum of: wood fuel, including wood for charcoal; sawlogs and veneer logs; pulpwood, round and split; and other industrial roundwood. See <http://www.fao.org/forestry/62283/en/> for further information.

**Roundwood production (m<sup>3</sup>)**

See 'Roundwood' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Rural population, total**

Rural population refers to people living in rural areas as defined by national statistical offices.

Source: United Nations Population Division

Owner: United Nations Population Division, World Urbanization Prospects.

**Safflower seed**

*Carthamus tinctorius*. Valued mainly for its oil. Minor uses include as a human food and as poultry feed.

**Safflower seed**

Glycine soja. The most important oil crop. Also widely consumed as a bean and in the form of various derived products because of its high protein content, e.g. soya milk, meat, etc.

**Sawnwood**

Wood that has been produced from both domestic and imported roundwood, either by sawing lengthways or by a profile-chipping process and that, with a few exceptions, exceeds 5 mm in thickness. It includes: planks, beams, joists, boards, rafters, scantlings, laths, boxboards, sleepers and "lumber", etc., in the following forms: unplanned, planed, grooved, tongued, fingerjointed, chamfered, rabbeted, V-jointed, beaded, etc. It excludes: wooden flooring. See <http://www.fao.org/forestry/62283/en/> for further information.

**Sawnwood production (m<sup>3</sup>)**

See 'Sawnwood' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**School enrollment, primary, female (percent net)**

Net enrollment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Source: World Bank (WDI)

Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

**School enrollment, primary, male (percent net)**

Net enrollment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Source: World Bank (WDI)

Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

**Services, etc., value added (percent of GDP)**

Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for

depreciation of fabricated assets or depletion and degradation of natural resources. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

*Source:* World Bank (WDI)

*Owner:* World Bank national accounts data, and OECD National Accounts data files.

#### **Sesameseed Oil**

Default composition: Oil, sesame

#### **Share of energy supply derived from cereals, roots and tubers (percent)**

Energy supply (in kcal/caput/day) provided by cereals, roots and tubers divided by total Dietary Energy Supply (DES) (in kcal/caput/day) calculated from the corresponding categories in the FAOSTAT Food Balance Sheets. As other indicators based on Food Balance Sheets data, it is calculated on 3 year averages, to reduce the errors due to the difficulties in recording annual stock changes.

*Source:* FAO, Statistics Division

*Owner:* FAO

#### **Share of feedstocks used in bioenergy production (percent)**

Estimated shares of commodity globally used in non-food sectors, including industrial renewable materials and bioenergy.

*Source:* FAO, Statistics Division

*Owner:* FAO

#### **Share of food expenditure of the poor (percent)**

Proportion of food consumption over total consumption (food and non-food) for the lowest income quintile of the population.

*Source:* FAO, Statistics Division

*Owner:* FAO

#### **Share of freshwater resources withdrawn by agriculture (percent)**

Water withdrawn for irrigation in a given year, expressed in percent of the total actual renewable water resources (TRWR\_actual). This parameter is an indication of the pressure on the renewable water resources caused by irrigation.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

#### **Sheep**

Ovis spp.. See 'Cattle'. Includes Uriel, Argali, Bighorn, Karakul and Astrakhan.

#### **Sheep and goat meat (tonnes)**

See 'Sheep', 'Goats', 'Meat, total', and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sheep and goats (heads)**

See 'Sheep' and 'Goats'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Skim milk and buttermilk production, dry (tonnes)**

See 'Milk excluding butter' and 'Milk production (tonnes)'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Soyabean Oil**

Default composition: Oil, soybean

#### **Sugar**

Beta vulgaris var. altissima. In some producing countries, marginal quantities are consumed, either directly as food or in the preparation of jams.

#### **Sugar (Raw Equivalent)**

Default composition: 158 Sugar, cane, raw, centrifugal, 159 Sugar, beet, raw, centrifugal, 162 Sugar Raw Centrifugal, 164 Sugar refined, 168 Sugar confectionery, 171 Sugar flavoured

#### **Sugar and honey exports (tonnes)**

Exports (volume) of sugar and honey.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sugar and honey imports (tonnes)**

Imports (volume) of sugar and honey.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sugar beet**

Beta vulgaris var. altissima. In some producing countries, marginal quantities are consumed, either directly as food or in the preparation of jams.

#### **Sugar cane**

Saccharum officinarum. In some producing countries, marginal quantities of sugar cane are consumed, either directly as food or in the form of juice.

#### **Sugar harvested area (ha)**

See 'Sugar' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sugar production (tonnes)**

See 'Sugar' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sugar yield (hg/ha)**

See 'Sugar' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Sunflower seed**

Helianthus annuus. Valued mainly for its oil. Minor uses include as a human food and as feed for birds.

#### **Sunflowerseed Oil**

Default composition: Oil, sunflower

#### **Synthetic fertilizers, total emissions in CO<sub>2</sub>eq (gigagrams)**

Greenhouse gas (GHG) emissions from synthetic fertilizers consist of nitrous oxide gas from synthetic nitrogen additions to managed soils.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Telephone lines (per 100 people)**

Telephone lines are fixed telephone lines that connect a subscriber's terminal equipment to the public switched telephone network and that have a port on a telephone exchange. Integrated services digital network channels and fixed wireless subscribers are included.

*Source:* World Bank (WDI)

*Owner:* International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates.

**Terrestrial protected areas (share of total land area)**

Terrestrial protected areas are totally or partially protected areas of at least 1,000 hectares that are designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use. Marine areas, unclassified areas, littoral (intertidal) areas, and sites protected under local or provincial law are excluded.

Source: World Bank (WDI)

Owner: United Nations Environmental Program and the World Conservation Monitoring Centre, as compiled by the World Resources Institute, based on data from national authorities, national legislation and international agreements.

**Total area equipped for irrigation (ha)**

Area equipped to provide water (via irrigation) to crops. It includes areas equipped for full/partial control irrigation, equipped lowland areas, and areas equipped for spate irrigation.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

**Total female population of concern to UNHCR, total**

See 'Total population of concern to UNHCR, total'.

Source: Statistical Online Population Database

Owner: UNHCR

**Total forest (ha)**

Sum of 'Other naturally regenerated forest (ha)', 'Primary forest (ha)', and 'Planted forest (ha)'.

Source: Global Forest Resources Assessment

Owner: FAO

**Total land area (ha)**

Land area is the total area of the country excluding area under inland water bodies. Possible variations in the data may be due to updating and revisions of the country data and not necessarily to any change of area. Data are expressed in 1 000 hectares.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Total male population of concern to UNHCR, total**

See 'Total population of concern to UNHCR, total'.

Source: Statistical Online Population Database

Owner: UNHCR

**Total meat exports (tonnes)**

Exports (volume) of total meat.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Total meat imports (tonnes)**

Imports (volume) of total meat.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

**Total ODA received (US\$)**

See 'Official Development Assistance'.

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

**Total pesticides use (tonnes)**

Pesticides refer to insecticides, fungicides, herbicides, disinfectants and any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. Pesticides use data refers to quantities of pesticides applied to crops and seeds in the agriculture sector. Figures are expressed in metric tons of active ingredients. However, due to some country reporting practices, the data may be reported by: use in formulated product; sales; distribution or imports for use in the agricultural sector. In these cases it is specified in the country notes.

Source: FAO FAO, Statistics Division

Owner: FAO

**Total population of concern to UNHCR, total**

Population of concern to UNHCR includes: refugees, asylum-seekers, returned refugees, internally displaced persons (IDPs) protected/assisted by UNHCR, returned IDPs, stateless persons, and others of concern to UNHCR.

Source: Statistical Online Population Database

Owner: UNHCR

**Total public agricultural expenditures in R & D (2005 PPP US\$)**

Total public agricultural expenditures in R & D.

Source: ASTI

Owner: ASTI 2012, Eurostat 2012, OECD, 2012, and various country-level secondary sources (see for more information on data sources and estimations on <http://www.asti.cgiar.org/pdf/CountrySourcesEstimations.pdf>). Agricultural GDP from World Bank (2012).

**Total public agricultural research expenditures (share of agricultural GDP)**

Total public agricultural research expenditures as share of agricultural GDP.

Source: ASTI

Owner: ASTI 2012, Eurostat 2012, OECD, 2012, and various country-level secondary sources (see for more information on data sources and estimations on <http://www.asti.cgiar.org/pdf/CountrySourcesEstimations.pdf>). Agricultural GDP from World Bank (2012).

**Total refugees, total**

In UNHCR statistics, refugees include individuals recognized under the 1951 Convention relating to the Status of Refugees; its 1967 Protocol; the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa; those recognized in accordance with the UNHCR Statute; individuals granted complementary forms of protection; or, those enjoying 'temporary protection'. The 2007 refugee population category also includes people in a refugee-like situation, most of who were previously included in the Others of concern group. This sub-category is descriptive in nature and includes groups of persons who are outside their country or territory of origin and who face protection risks similar to those of refugees, but for whom refugee status has, for practical or other reasons, not been ascertained.

Source: Statistical Online Population Database

Owner: UNHCR

**Total share of freshwater resources withdrawn (percent)**

Total freshwater withdrawn in a given year, expressed in percentage of the actual total renewable water resources (TRWR\_actual). This

parameter is an indication of the pressure on the renewable water resources.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

#### **Total water withdrawal (m<sup>3</sup>/yr)**

Annual quantity of water withdrawn for agricultural, industrial and municipal purposes. It includes renewable freshwater resources as well as potential over-abstraction of renewable groundwater or withdrawal of fossil groundwater and potential use of desalinated water or treated wastewater. It does not include in stream uses, which are characterized by a very low net consumption rate, such as recreation, navigation, hydropower, inland capture fisheries, etc.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

#### **Total water withdrawal per capita (m<sup>3</sup>/yr/person)**

Total annual amount of water withdrawn per capita.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

#### **Trade (percent of GDP)**

Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.

*Source:* World Bank (WDI)

*Owner:* World Bank national accounts data, and OECD National Accounts data files.

#### **Treenuts harvested area (ha)**

See 'Treenuts' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Treenuts production (tonnes)**

See 'Treenuts' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Treenuts yield (hg/ha)**

See 'Treenuts' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Urban population, total**

Urban population refers to people living in urban areas as defined by national statistical offices.

*Source:* United Nations Population Division

*Owner:* United Nations Population Division, World Urbanization Prospects.

#### **Value of agricultural exports**

Value of agricultural exports should be reported in national currency, US dollars or other currency. Export values are mostly reported as FOB. In the FAOSTAT database export values are expressed in thousand US dollars.

#### **Value of agricultural imports**

Value of agricultural imports should be reported in national currency, US dollars or other currency. Import values are mostly reported as CIF. In the FAOSTAT database import values are expressed in thousand US dollars.

#### **Value of food imports over total merchandise exports (percent)**

Value of food (excl. fish) imports over total merchandise exports. The indicator is calculated on 3 year averages.

*Source:* FAO, Statistics Division

*Owner:* FAO

#### **Value of food production per capita (I\$/cap)**

The total value of Annual Food Production, as estimated by FAO and published by FAOSTAT in International Dollars (I\$) divided by the total population. It provides a cross country comparable measure of the relative economic size of the food production sector in the country. The indicator is calculated on 3 year averages.

*Source:* FAO, Statistics Division

*Owner:* FAO

#### **Vegetable production (tonnes)**

See 'Vegetable, including melons' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Vegetable, including melons**

Vegetables, as classified in this group, are mainly annual plants cultivated as field and garden crops in the open and under glass, and used almost exclusively for food. Vegetables grown principally for animal feed or seed should be excluded. Certain plants, normally classified as cereals and pulses, belong to this group when harvested green, such as green maize, green peas, etc. This grouping differs from international trade classifications for vegetables in that it includes melons and watermelons, which are normally considered to be fruit crops. But, whereas fruit crops are virtually all permanent crops, melons and watermelons are similar to vegetables in that they are temporary crops. Chillies and green peppers are included in this grouping when they are harvested for consumption as vegetables and not processed into spices. FAO production data for green peas and green beans refer to the total weight including pods, although some countries report on a shelled weight basis. The weight of the pods ranges from 40 to 50 percent for peas to up to 70 percent for broad beans. Area data on small vegetable gardens are often omitted in agricultural surveys, although production estimates may be reported. Trade data for fresh vegetables also include chilled vegetables, meaning the temperature of the products has been reduced to around 0C without the products being frozen.

#### **Vegetables harvested area (ha)**

See 'Vegetable, including melons' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Vegetables yield (hg/ha)**

See 'Vegetable, including melons' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Vegetables, fresh nes**

Including inter alia: bamboo shoots (*Bambusa* spp.); beets, chards (*Beta vulgaris*); capers (*Capparis spinosa*); cardoons (*Cynara cardunculus*); celery (*Apium graveolens*); chervil (*Anthriscus cerefolium*); cress (*Lepidium sativum*); fennel (*Foeniculum vulgare*); horseradish (*Cochlearia armoracia*); marjoram, sweet (*Majorana hortensis*); oyster plant (*Tragopogon porrifolius*); parsley (*Petroselinum crispum*); parsnips (*Pastinaca sativa*); radish (*Raphanus sativus*); rhubarb (*Rheum* spp.); rutabagas, swedes (*Brassica napus*); savory (*Satureja hortensis*); scorzonera (*Scorzonera hispanica*); sorrel (*Rumex acetosa*); soybean sprouts tarragon (*Artemisia dracunculus*); watercress (*Nasturtium officinale*). Other vegetables that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report vegetables under this heading that are classified individually by FAO.

#### **Waste**

Amount of the commodity in question lost through wastage (waste) during the year at all stages between the level at which production is recorded and the household, i.e. storage and transportation. Losses occurring before and during harvest are excluded. Waste from both edible and inedible parts of the commodity occurring in the household is also excluded. Quantities lost during the transformation of primary commodities into processed products are taken

into account in the assessment of respective extraction/conversion rates. Distribution wastes tend to be considerable in countries with hot humid climate, difficult transportation and inadequate storage or processing facilities. This applies to the more perishable food-stuffs, and especially to those which have to be transported or stored for a long time in a tropical climate. Waste is often estimated as a fixed percentage of availability, the latter being defined as production plus imports plus stock withdrawals.

#### **Water pollution, chemical industry (share of total BOD emissions)**

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC, revision 2: chemicals (35). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

*Source:* World Bank (WDI)

*Owner:* 1998 study by Hemamala Hettige, Muthukumara Mani, and David Wheeler, "Industrial Pollution in Economic Development: Kuznets Revisited" (available at [www.worldbank.org/nipr](http://www.worldbank.org/nipr)). The data were updated by the World Bank's Development Research Group using the same methodology as the initial study.

#### **Water pollution, clay and glass industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, food industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, metal industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, other industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, paper and pulp industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, textile industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water pollution, wood industry (share of total BOD emissions)**

See 'Water pollution, chemical industry (% of total BOD emissions)'

*Source:* World Bank (WDI)

*Owner:* See 'Water pollution, chemical industry (% of total BOD emissions)'

#### **Water resources per capita (m<sup>3</sup>/yr/person)**

Total annual internal renewable water resources per inhabitant.

*Source:* Land and Water Division (AQUASTAT)

*Owner:* FAO

#### **Wheat**

Triticum spp.: common (T. aestivum) durum (T. durum) spelt (T. spelta). Common and durum wheat are the main types. Among common wheat, the main varieties are spring and winter, hard and soft, and red and white. At the national level, different varieties should be reported separately, reflecting their different uses. Used mainly for human food.

#### **Wheat harvested area (ha)**

See 'Wheat' and 'Crop area'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Wheat production (tonnes)**

See 'Wheat' and 'Crop production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Wheat yield (hg/ha)**

See 'Wheat' and 'Crop yield'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Wood-based panels**

The wood-based panels category is an aggregate category. In the production and trade statistics, it represents the sum of: veneer sheets, plywood, particle board, and fibreboard. See <http://www.fao.org/forestry/62283/en/> for further information.

#### **Wood-based panels production (m<sup>3</sup>)**

See 'Wood-based panels' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Wood pulp**

Wood pulp is a fibrous material prepared from pulpwood, wood chips, particles, residues or recovered paper by mechanical and/or chemical process for further manufacture into paper, paperboard, fibreboard or other cellulose products. In the production and trade statistics, it represents the sum of: mechanical wood pulp; semi-chemical wood pulp; chemical wood pulp; and dissolving wood pulp. See <http://www.fao.org/forestry/62283/en/> for further information.

#### **Wood pulp production (tonnes)**

See 'Wood pulp' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

#### **Woodfuel**

Roundwood that will be used as fuel for purposes such as cooking, heating or power production. It includes: wood harvested from main stems, branches and other parts of trees (where these are harvested for fuel) and wood that will be used for charcoal production (e.g. in pit kilns and portable ovens). The volume of roundwood used in charcoal production, is estimated by using a factor of 6.0 to convert from the weight (MT) of charcoal produced to the solid volume (CUM) of roundwood used in production. It is reported in cubic metres underbark (i.e. excluding bark). See <http://www.fao.org/forestry/62283/en/> for further information.

#### **Woodfuel production (m<sup>3</sup>)**

See 'Woodfuel' and 'Production'.

*Source:* FAO, Statistics Division (FAOSTAT)

*Owner:* FAO

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