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Introduction

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 sanitary measures for better trade, and promoting information and knowledge management and sharing. The issue of better monitoring progress, learning from experiences and improving further activities is one of great importance to RAF and statistical data constitute important input.

The "FAO Statistical Yearbook 2012: 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, investment, rural population and well-being, poverty, rural employment, gender, 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 2012 Statistical Yearbook uses a 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 users by providing indicators for each country as well as aggregate indicators for Regional Economic Communities and for the entire African continent. Indicators for other regions of the world are presented for easy comparison.

We hope you will find this book informative and useful.

Maria Helena Semedo
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FAO Regional Representative
for Africa

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and Director,
Statistics Division

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Special thanks to all the FAO member states, particularly the African countries, for their efforts to regularly provide national agricultural data which are compiled in the FAO agricultural database.

PART

1

The setting

People and Demography

The population of all Africa was estimated at 802.5 million people in 2000 and it rose to 1 010.3 million inhabitants in 2010, which means an average annual growth rate of 2.3 percent. The population of the African region is low compared to the Asia developing regions (Asia DVG) (4 003.3 million) and the Developed Regions (DVD) (1243.8 million). However, its growth rate between 2000 and 2010 is almost double that in other parts of the world, including the Asia DVG (1.2 percent), and Latin America & the Caribbean (LAC) region (1.2 percent). The growth rate observed in Africa between 2000 and 2010 is above the world average (1.2 percent) and significantly higher than that of the DVD (0.4 percent). In the African region, the high population growth rates are recorded mainly in Central Africa (2.7 percent) followed by West Africa and East Africa (both 2.6 percent) and the region of Southern Africa (2 percent). North Africa has the lowest population growth rate (1.6 percent). (Table 1, Map 1, Chart 2)

Africa's population represented 13 percent of the total world population in 2000 and this share increased to 15 percent in 2010, an increase of two points within ten years. This population is unevenly distributed among different regions of the continent. Indeed in 2010, the population distribution was skewed in favor of West Africa (30 percent) because of the large population of Nigeria. This was followed by the East African region (27 percent), the regions of North Africa (16 percent) and Southern Africa (16 percent). Central Africa remains the least populated region (11 percent).

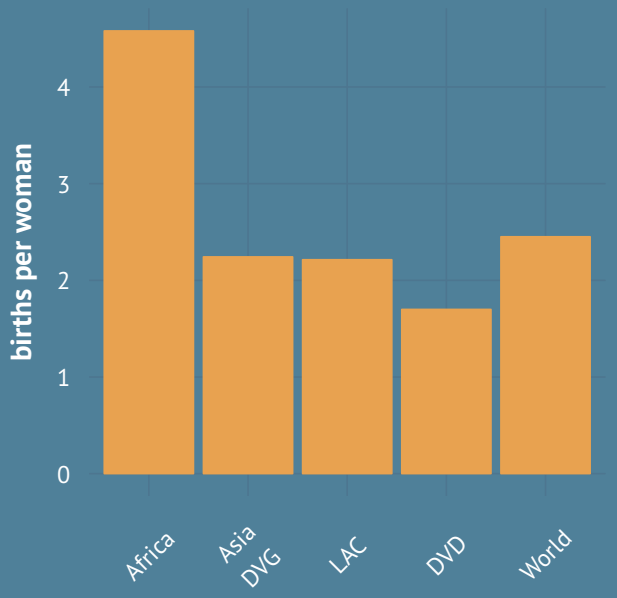
The age distribution reveals the extreme youth of the African population. In 2010, 40.3 percent of the population in Africa was under 15 years of age, while this age represented only 26.8 percent of the population for the world. In Africa, the very young are a high percentage in all regions except northern Africa, where this population is 29.3 percent. In the Asia DVG and in the LAC region, the population of youth under 15 years old is 26.3 percent and 27.9 percent, respectively. However, this part of the population is lower in the DVD (16.6 percent), where there are a large number of people over age 65 (15.9 percent), almost equal to the youth population. (Chart 5)

Essentially, much of the global population growth has taken place in least developed countries (LDCs), predominately in poor urban areas and slums. Urbanization rates in LDCs reached 4 percent per annum in the last decade. Allied to rising urbanization is an increase in population densities.

Fertility rates (as of 2010) showed that women in the African region have, on average, 4.6 children during their childbearing years. This rate is higher than the world average of 2.5 children per woman. Asia DVG, DVD and LAC regions have fertility rates below the world average. (Chart 1)

This high fertility rate underscores the importance of empowering women through education and promoting family planning, especially in Africa where population growth rates are currently the fastest. Approximately 215 million women in the poor countries who would use contraceptives lack access to them. At the same time, there are contexts in which poverty can be a reason for high fertility, given the role of children in providing a labour force for the household and support for the elderly.

CHART 1: Fertility rate (2010)



Source: World Bank (WDI)

Metalink: P1.DEM.UN.WPP.FER.TOT, p. 239

MAP 1: Population p.a. growth (%, 1990-2010)

Source: World Bank (WDI)

Metalink: P1.DEM.UN.WPP.POP.TOT.GR20, p. 246

Furthermore, in the African region, the crude death rate is highest (11.4 per 1000), compared with 8.2 per 1 000 for the world average. This high crude death rate is most pronounced in sub-Saharan Africa, where it is 15.7 per 1 000 for the Central Africa region, 13.7 per 1 000 for the Southern Africa region and 13 per 1 000 for the West Africa region. In contrast the North Africa region has recorded the lowest crude death rate which contributed to reduce the average rate in Africa.

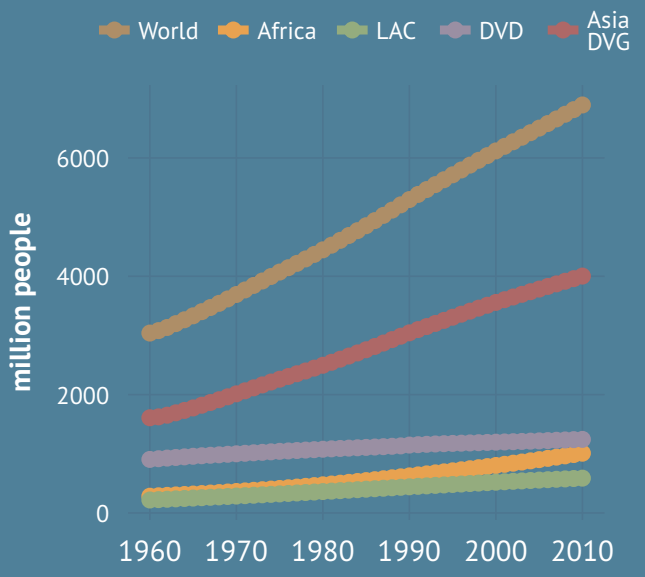
Moreover, in 2010, Africa was the continent where life expectancy at birth was the lowest (57.3 years). This low overall level of life expectancy is mainly attributable to the position of the sub-Saharan Africa region, where in the Central Africa region and Southern Africa region, it was 49.3 and 53.3 years, respectively. It should be noted that in the North Africa region the life expectancy level is 72.9 years, which contributes to the improvement of this indicator for the entire continent. For both life expectancy and crude death rate, the situation in the North Africa region is similar to that of developed regions.

In 2011, people in LDCs characterized by high fertility rates had an average life expectancy of 58 years, some 20 years less than their counterparts in developed countries. Nevertheless, this average is a significant increase over life expectancy in 1990, which stood at only 50 years. Improved access to clean water, better nutrition, better living and working conditions, and greater access to health services can account for the increase. These factors, in addition to raising life expectancy, have led to the decline in infant mortality rates, that nevertheless remains high in Africa.

In 2010, more than half of Africa's population made a living from agriculture. This proportion of the population is highest in sub-Saharan Africa where it is 55.2 percent of the total population. For Asia DVGs, LAC regions, DVDs, and the world as a whole, these proportions are relatively low, at 27.9 percent, 15.8 percent, 4 percent and 38 percent, respectively. In the East Africa region, 71.6 percent of the population is engaged in agriculture, which contributes to making this proportion higher for the whole of Africa.

The agricultural population in Africa has grown faster than in other regions: 1.5 percent in Africa and 1.4 percent in the sub-Saharan Africa region. The average growth rate worldwide is about 0.3 percent. Conversely, agricultural population is declining in the DVD and in LAC regions and shows very low growth (0.6 percent) in Asia DVG. The North Africa region has seen a negative growth rate in contrast to the situation in sub-Saharan Africa.

CHART 2: Total population (1960-2010)



Source: World Bank (WDI)

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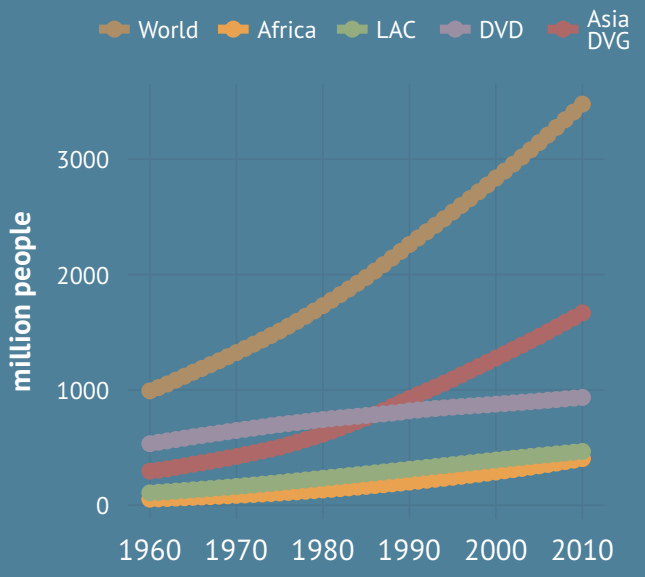
CHART 3: Total urban population (1960-2010)



Source: World Bank (WDI)

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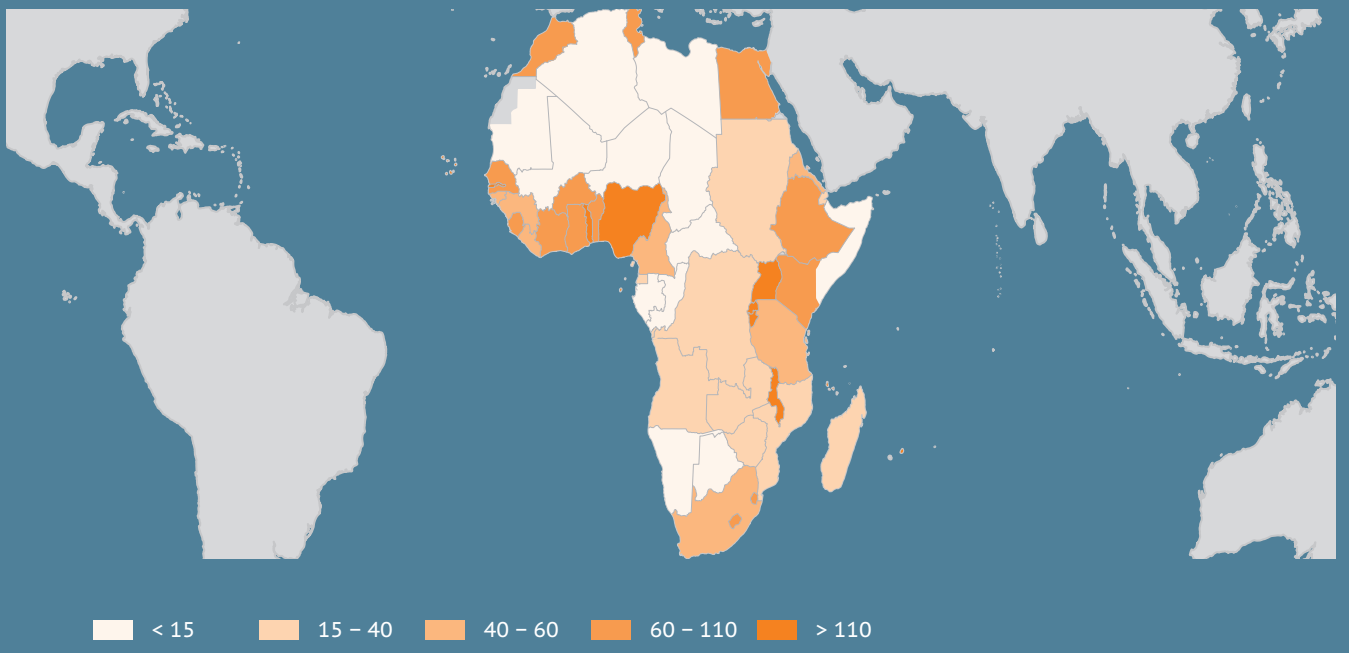
MAP 2: Population density, people per sq. km of land area (people, 2010)



Source: World Bank (WDI)

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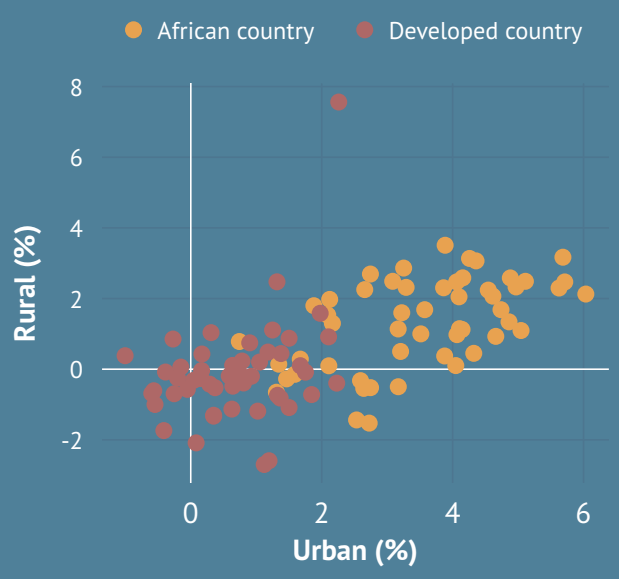
CHART 4: Rural/urban population p.a. growth (2000-2010)



Source: World Bank (WDI)

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CHART 5: Population, share of total (2010)

Source: World Bank (WDI)

Metalink: P1.DEM.UN.WPP.POP.AGE.YNG, p. 245

2

Women in agriculture

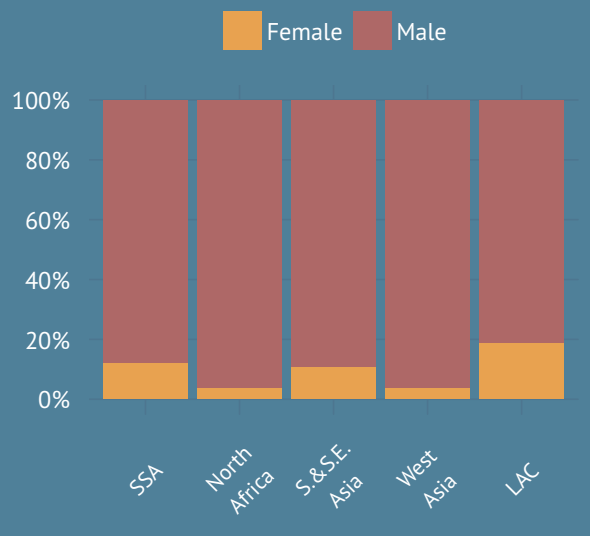
Increasing women's access to land is crucial in order to fight hunger and poverty. However, gender disparities in land access remain significant in most countries, regardless of their level of development. Chart 6 shows that in all developing regions, little space is given to women in agriculture. In sub-Saharan Africa, for example, women represented about 15 percent of agricultural holders in 2005. The proportion was almost the same as in South & Southeast Asia. This situation is worst In the Northern region of Africa, where women represent only 5 percent of agricultural holders. In Western Asia, this proportion is similar to that in North Africa. However, efforts have been made in the LAC regions to increase the share of female agricultural holders to 20 percent. (Chart 6)

In a small number of countries, the female share of the agricultural labour force (i.e. total number of women economically active in agriculture divided by the total population economically active in agriculture) is higher than 55 percent. These countries are Democratic Republic of the Congo, Gabon, Gambia, Mozambique and Rwanda, which have the highest rates. Female share of the agricultural labour force ranges from 45 percent to 55 percent in Cameroon, Chad, Kenya, Madagascar, Malawi, Tanzania, Togo, Zambia and Zimbabwe. It ranges between 35 percent and 45 percent in six countries: Botswana, Ethiopia, Lesotho, Mali, Morocco and Nigeria. In countries such as Egypt, Senegal and South Africa, female share of the agricultural labour force varies from 25 percent to 35 percent. It is very low (less than 25 percent) in Algeria and Niger. (Map 3)

Improving women's property rights in Burkina Faso would increase total household agricultural production by about 6 percent, with no additional resources—simply by reallocating resources (fertilizer and labour) from men to women. FAO estimates that equalizing access to productive resources between female and male farmers could increase agricultural output in developing countries by as much as 2.5 percent to 4 percent.[1]

According to the World Bank, "If women farmers were to have the same access as men to fertilizers and other inputs, maize yields would increase by almost one-sixth in Malawi and Ghana. And eliminating barriers that discriminate against women working in certain sectors or occupations could increase labour productivity by as much as 25 percent in some countries."[2]

CHART 6: Share of male and female agricultural holders in developing regions (2005)



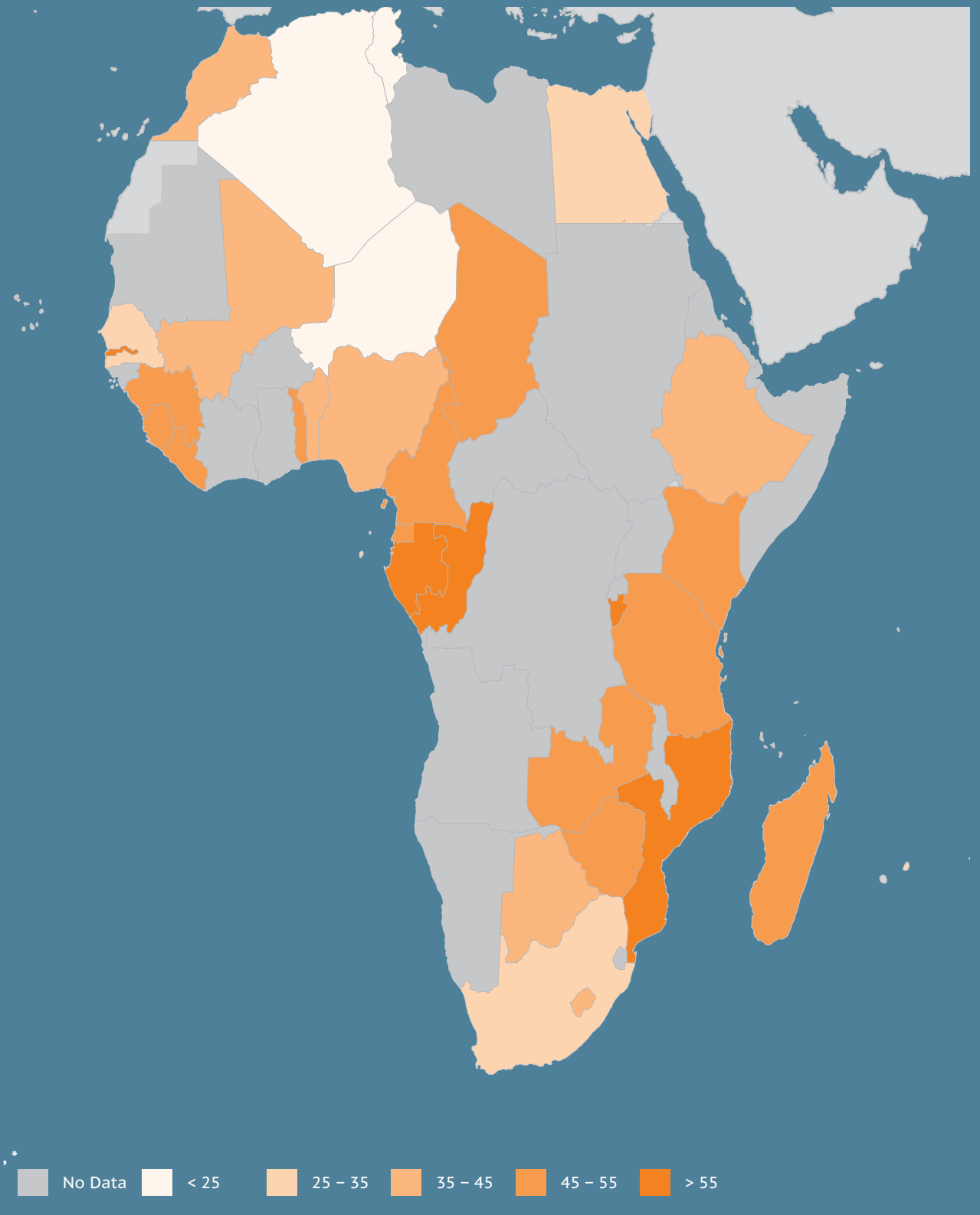
Source: Gender and Land Rights Database

Metalink: P1.RES.ILO.GEND.HLD.FM, p. 239

[1] FAO. The State of Food and Agriculture, FAO 2010–11. Women in Agriculture: Closing the Gender Gap for Development. FAO, Rome.
FAO, IFAD (International Fund for Agricultural Development), and ILO (International Labour Office). 2010. Gender Dimensions of Agricultural and Rural Employment: Differentiated Pathways out of Poverty. Status,Trends and Gaps. FAO, IFAD, and ILO, Rome.

[2] World Bank. 2012. World Development Report: Gender, Equality and Development. World Bank, Washington DC.

MAP 3: Female, share of the agricultural labour force (%, 2005-2010*)



Source: World Bank

Metalink: P1.RES.ILO.LAB.GEND, p. 239

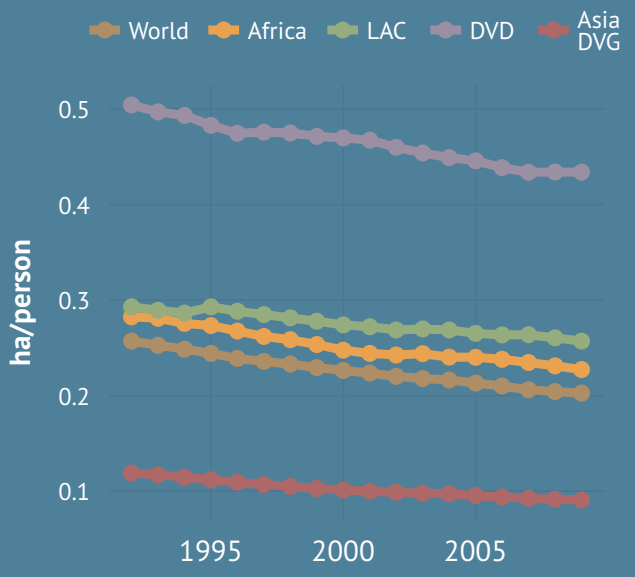
Land and water resources

After the DVD, the African continent has more land than Asia DVG or the LAC region. The agricultural land in 2009 comprised pastureland (30.6 percent), arable land (7.6 percent) and permanent crops (1.0 percent), for a total (39.2 percent) higher than world levels, in which agricultural land represents 37.6 percent of total landcover, as pastureland (25.8 percent), arable land (10.6 percent), and permanent crops (1.2 percent). This means that Africa has devoted more agricultural land to pastureland than the rest of the world but less to permanent crops and arable land. However, the Asia DVG has more agricultural land (51 percent of landcover) and devotes more agricultural land to permanent crops and arable land than the Africa region. But Asia DVG has the lowest amount of arable land per person, at approximately 0.1 hectares (ha) per person. The arable land in Africa is 0.2 ha/person; this is equal to the world average, but remains below the average for the DVD, which is twice that amount (0.4 ha/person). (Table 3)

The area in hectares per person of arable land is gradually declining in the world. This indicator is very low in Asia DVG, and is still decreasing. In Africa it was approximately 0.3 ha/person in 1990; it experienced a gradual decline and stabilized at around 0.2 ha/person in 2009. In the LAC regions, it is slightly above that of the Africa region and shows the same downward trend. The DVD level is far above levels in the developing regions. However, after just over 0.5 ha/person in 1990 in the DVD, the area of arable land has diminished to the level of about 0.4 ha/person. (Chart 7, Chart 8, Chart 9)

Within the African continent, the highest areas of arable land (greater than 0.3 ha/person), are located in two zones. The first zone is formed by Burkina Faso, Cameroon, Central African Republic, Chad, Guinea, Mali, Niger, Senegal, Sudan and Togo. A second zone is located in Southern Africa, represented by Zimbabwe. The lowest areas per person of arable land, less than 0.15 ha/person, are located mainly in Botswana, Côte D'Ivoire, Congo, Democratic Republic of the Congo, Egypt, Eritrea, Madagascar, Mauritania, Sierra Leone and Somalia. (Map 4)

CHART 7: Arable land (1992-2009)



Source: Statistics Division (FAOSTAT)

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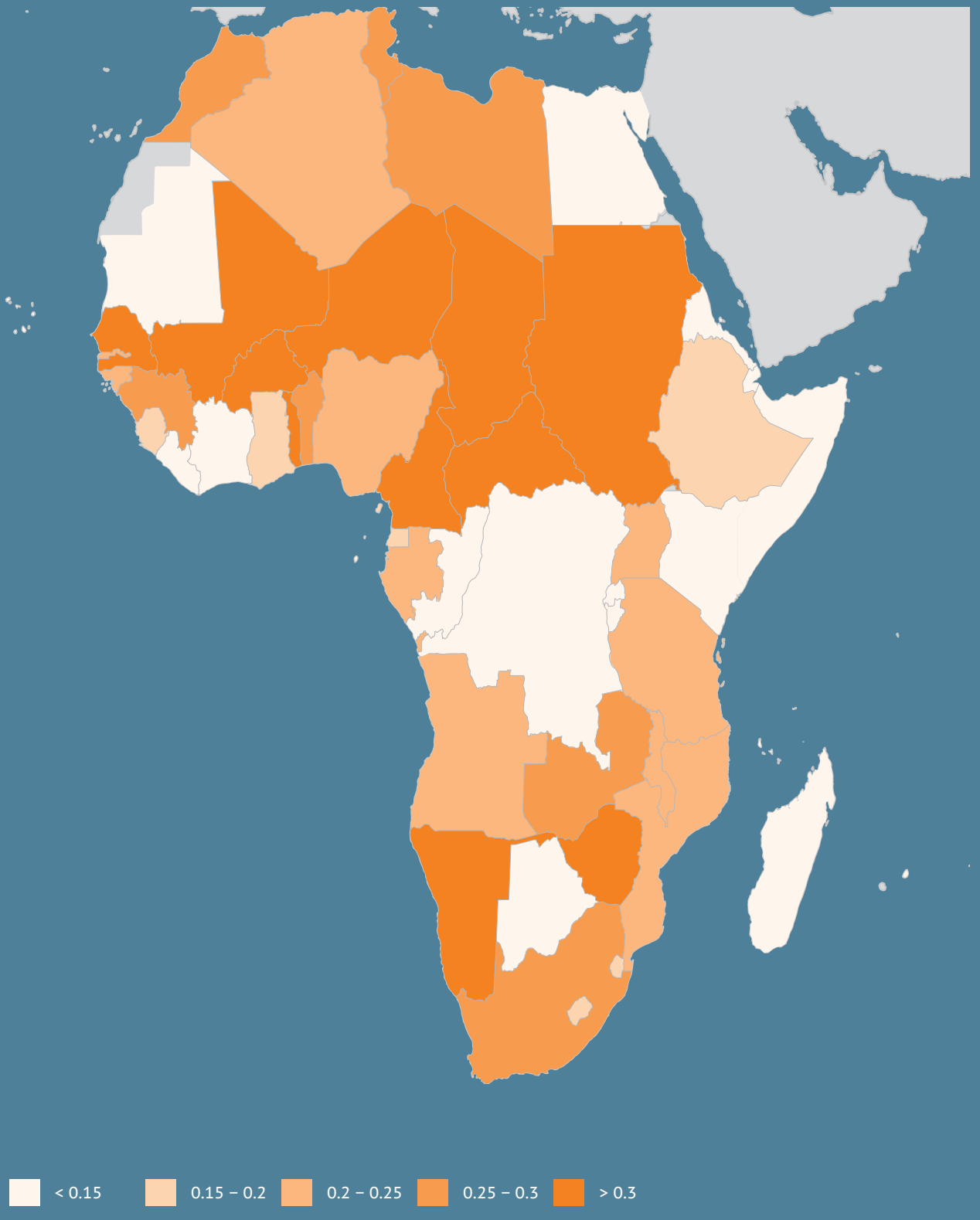
MAP 4: Arable land (ha/person, 2009)



Source: Statistics Division (FAOSTAT)

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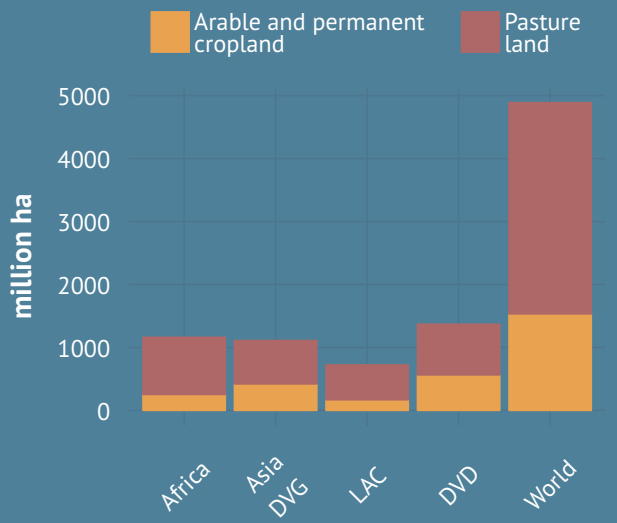
Three areas of Africa have a significant potential for renewable water resources. In 2009, they were characterized by a level of renewable water resource above 15 000 m^3/person/year. The first zone is located in West Africa and includes Guinea, Liberia, and Sierra Leone. The second is located in central Africa, formed by Cameroon, the Central Africa Republic, Congo, Democratic Republic of the Congo and Gabon. Madagascar is the third zone.

In contrast, some countries, such as those primarily from North Africa on the one hand, and the sub-Saharan African countries – including Burkina Faso, Cape Verde, Djibouti, Kenya and Rwanda – on the other, have only a very low level of renewable water resources. Indeed, their renewable water resource is below 1 000 m^3/person/year. (Map 5, Chart 10)

Chart 11 shows that the total area equipped for irrigation is very weak in Africa compared with the Asia DVG region. Indeed for about 400 million ha of arable and permanent cropland, half of this area is equipped for irrigation in the Asia DVG region, whereas in Africa, for roughly 300 million ha, less than 20 percent is equipped for irrigation. In the LAC regions, the arable and permanent cropland equipped for irrigation is also weak, as it is in Africa. (Chart 11)

CHART 8: Agricultural land area (2009)



Source: Statistics Division (FAOSTAT)

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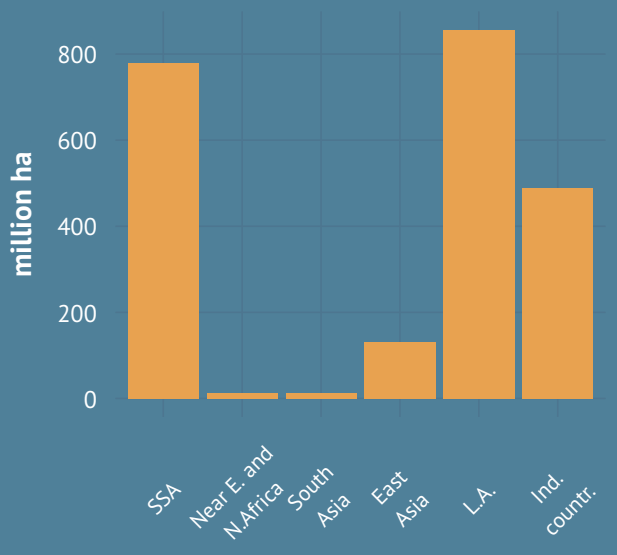
CHART 9: Arable land potential (2009)



Source: Agricultural Development Economics Division

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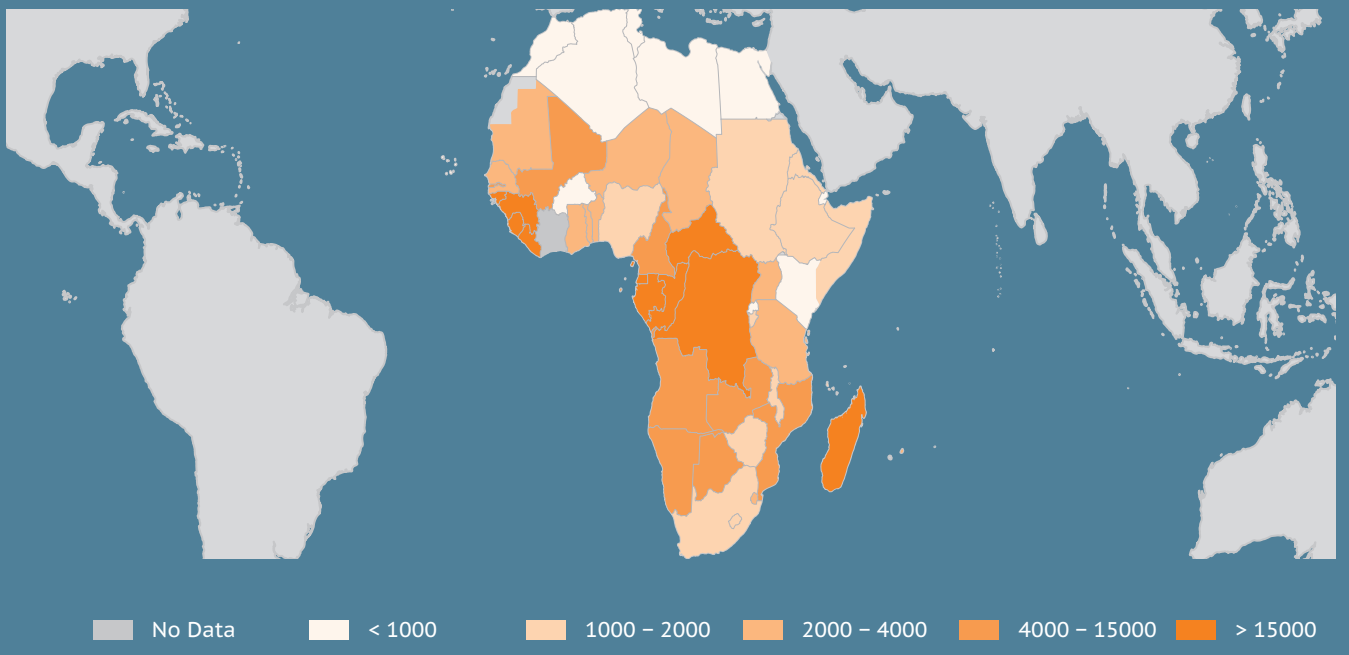
MAP 5: Water resources, renewable per capita (m^3/person/yr, 2009)



Source: Land and Water Division (AQUASTAT)

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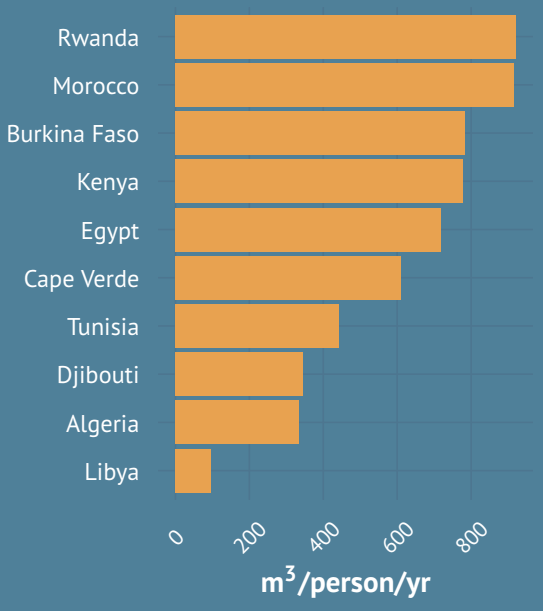
CHART 10: Water resources, renewable per capita (lowest 10) (2009)



Source: Land and Water Division (AQUASTAT)

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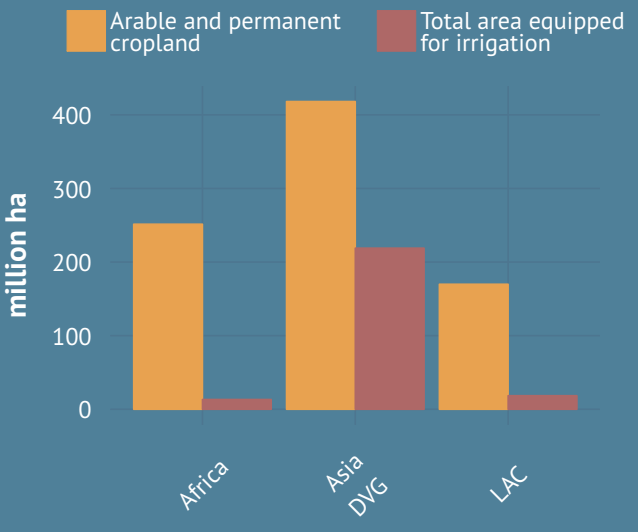
CHART 11: Total area equipped for irrigation (2008)



Source: Statistics Division (FAOSTAT)

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2

Labour

The employment to population ratio for all Africa is about 60.7 percent, nearly the same ratio as for Asia DVG and the LAC regions, which are at 61.5 percent for each region. (Table 6) For the DVD, it is about 55 percent, less than for Africa where it is a little above the mean world level of 60.3 percent. This ratio for Africa is explained mainly by the high ratios in East Africa and Central Africa. However, this indicator obscures the gender disparity. Indeed, while the employment to population ratio for men in Africa is estimated at 70.3 percent, the figure for women is only 51.3 percent.

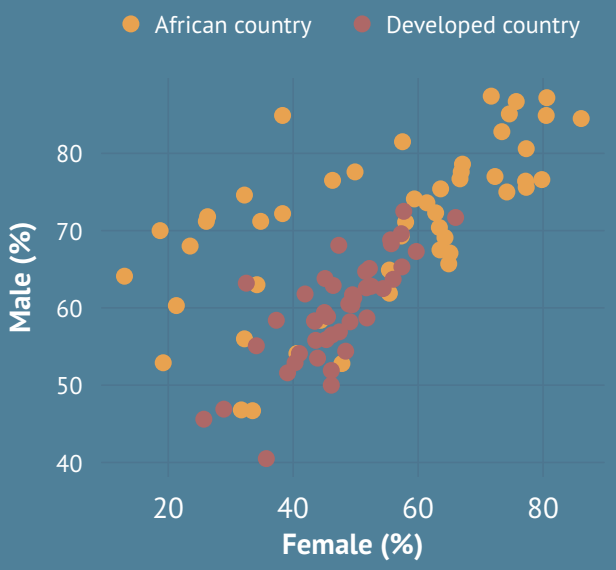
This same disparity is also observed in other regions, even in the DVD, where the employment to population ratio is evaluated at 48.9 percent for women and 62 percent for men. The gap is much larger in North Africa, where the proportions are 18.9 percent for women and 67.8 percent for men, indicating a gap of 49 points. In Asia DVG and the LAC countries, the gender gaps are also wide: 31 points and 27 points, respectively. (Table 6)

Labour force participation rates are usually highest in the poorest countries. More people are employed out of necessity than by choice, as only a fraction of the working-age population can afford not to work. In these countries, low unemployment figures in conjunction with high labour participation rates are a result of large numbers of people engaged in vulnerable employment and many in working poverty. This holds true for many economies in sub-Saharan Africa, where female participation rates are among the highest in the world.

Map 6 shows that in countries such as Burkina Faso, Ethiopia, Madagascar, Mozambique and Tanzania, over 75 percent of those employed work in agriculture, which means that employment in agriculture as a share of total employment is very high in these countries. This share varies from 60 percent to 75 percent in Cameroon, Kenya, Mali, Sierra Leone, Uganda, Zambia and Zimbabwe. In Ghana, Liberia and Niger, 45 percent to 60 percent of those employed are engaged in agriculture. In Congo, Egypt, Morocco and Senegal, 30 percent to 45 percent of employed people work in agriculture. In Algeria, Gabon, Namibia and South Africa, employment in agriculture is less than 30 percent. (Map 6)

The unemployment rate in Africa is very high (over 18 percent) in Ethiopia, Lesotho, Namibia and South Africa. It varies from 10 percent to 18 percent in Algeria, Botswana, Senegal and Zambia and from 6 percent to 10 percent in Egypt, Malawi and Mali. However, the unemployment rate is low – between 4 percent and 6 percent – in Tanzania, Uganda and Zimbabwe, and very low – less than 4 percent – in Benin, Liberia, Burkina Faso, Cameroon, Ghana, Niger, and Madagascar. (Map 7)

CHART 12: Gender employment to population ratio (2010)



Source: World Bank (WDI)

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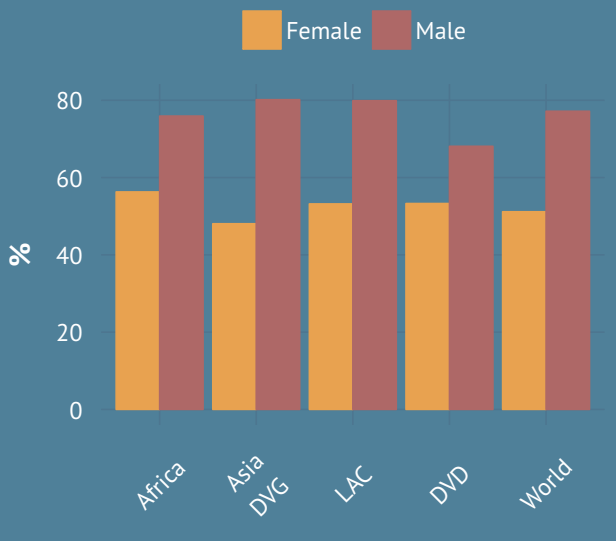
CHART 13: Labour force participation rate by gender, ages 15+ (2010)



Source: World Bank (WDI)

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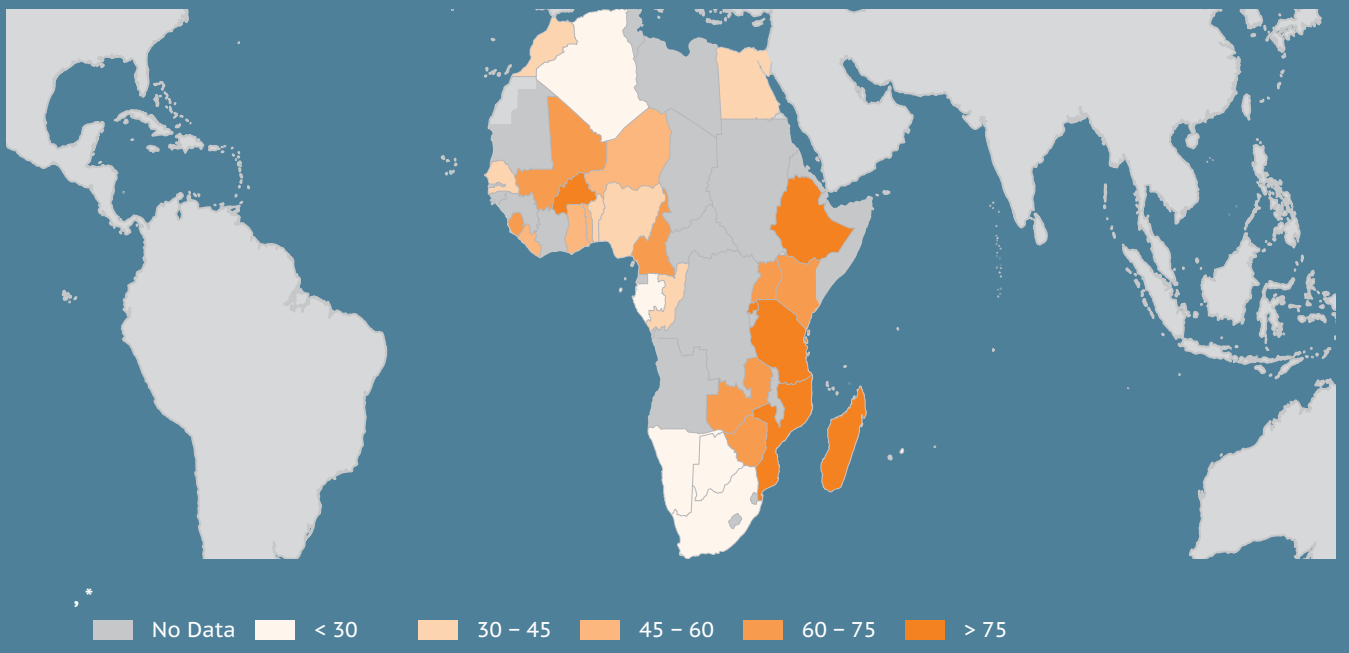
MAP 6: Employment in agriculture, share of total employment (%, 2000-2010*)



Source: World Bank (WDI)

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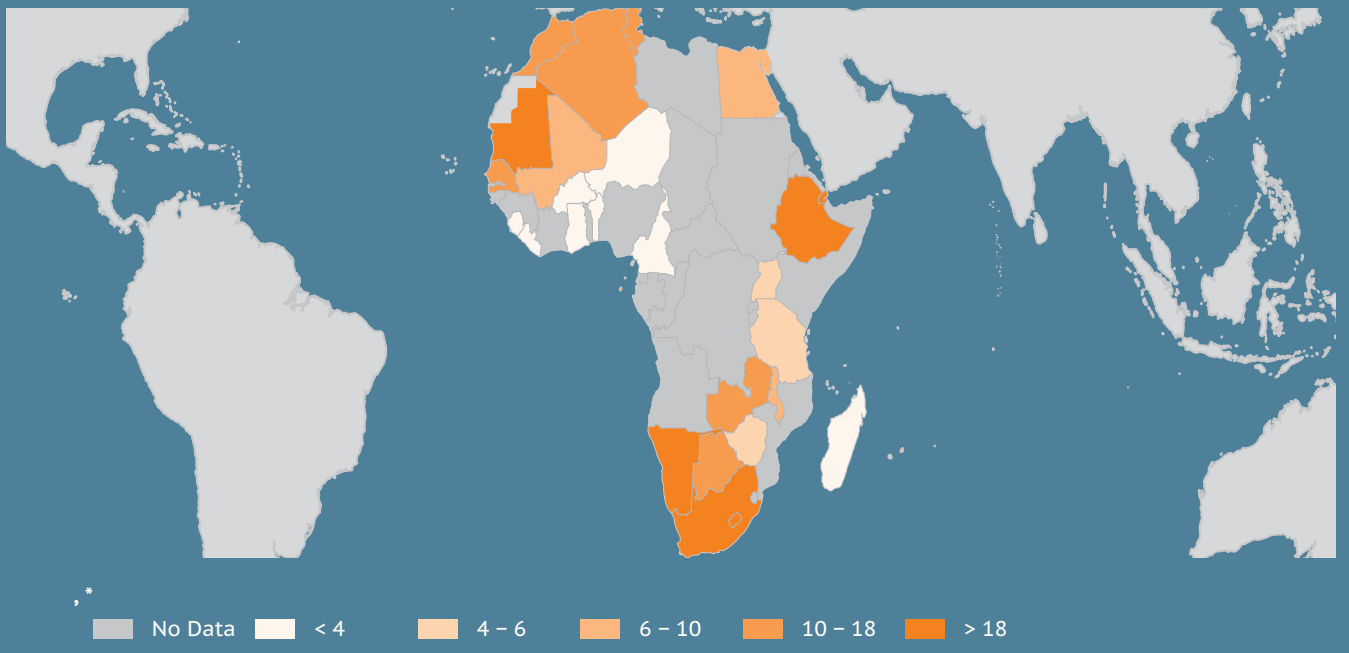
MAP 7: Unemployment rates (%, 2000-2010*)



Source: World Bank (WDI)

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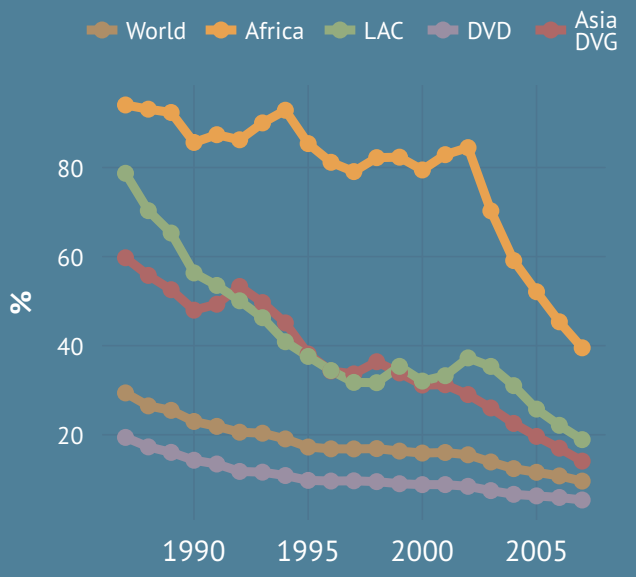
Capital and investment

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. However, there has been a global slowdown in the rate of capital formation in primary agriculture. While the rate grew annually at 1.1 percent in the period 1975-1990, the rate of capital formation was only 0.5 percent during 1991-2007. This reduction was recorded in both developed and developing countries. As a consequence, in sub-Saharan Africa and South Asia, regions where many countries experience the highest prevalence and greatest depth of hunger, the growth of the population active in agriculture has outstripped growth of agricultural capital stock.

In Africa, a few countries have shown a positive annual change in agricultural capital stock as share of GDP in 2006-2007. These include: Algeria, Libya and Tunisia in North Africa; Ghana in West Africa; Democratic Republic of the Congo and Equatorial Guinea in Central Africa; Rwanda in East Africa; and Botswana, South Africa and Zimbabwe in Southern Africa. In contrast, countries with a negative annual change in agricultural capital stock as share of GDP (less than 20 percent) are mainly located in sub-Saharan Africa. These countries are: Guinea, Mali and Niger in West Africa; Ethiopia, Sudan, and Tanzania in East Africa; and Madagascar in Southern Africa.

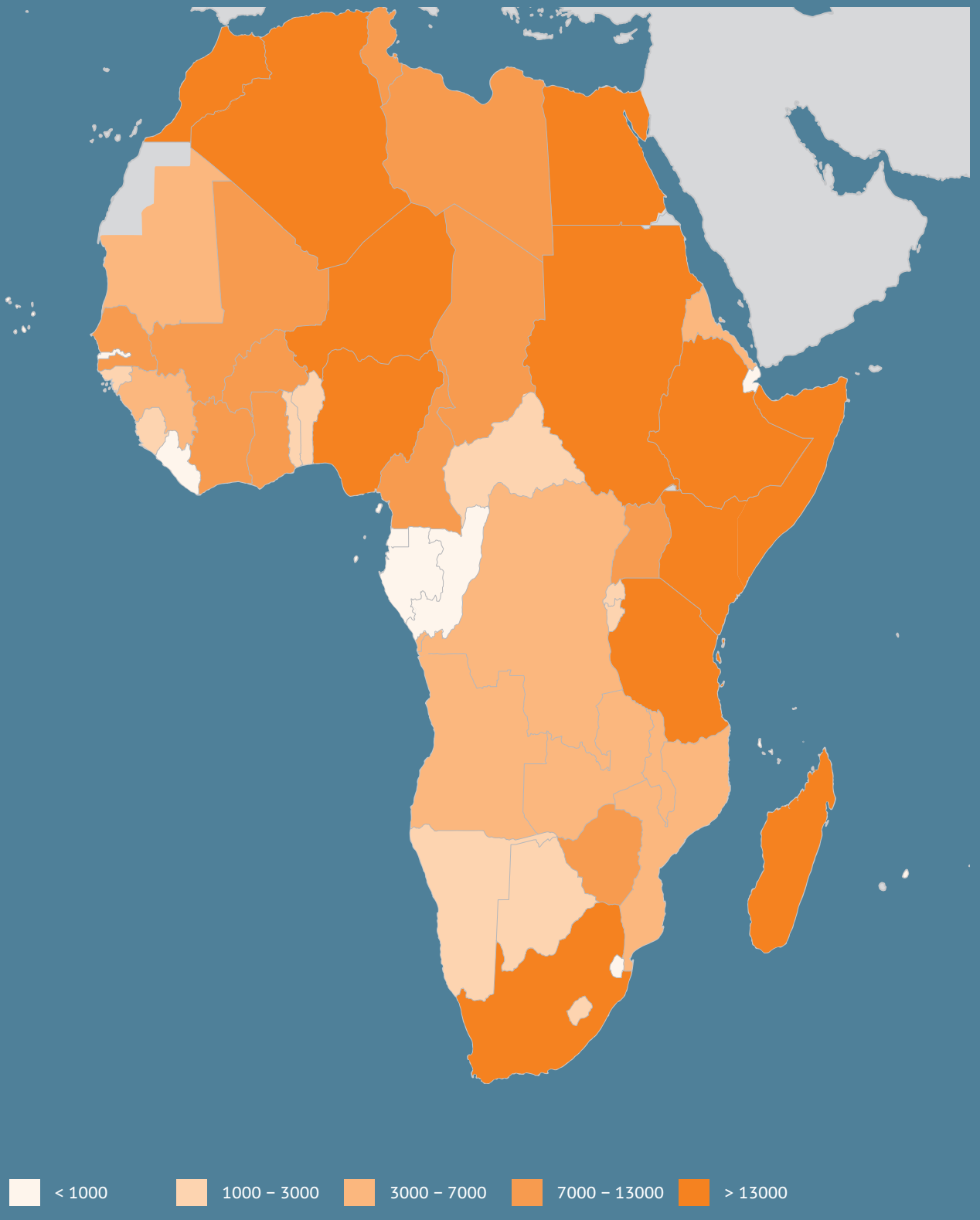
CHART 14: Change in agricultural capital stock as share of GDP (1987-2007)



Source: Statistics Division (FAOSTAT)

Metalink: P1.RES.FAO.ESS.CAP.STK.SHGDP, p. 240

MAP 8: Agricultural capital stock (million USD, 2007)



Source: Statistics Division (FAOSTAT)

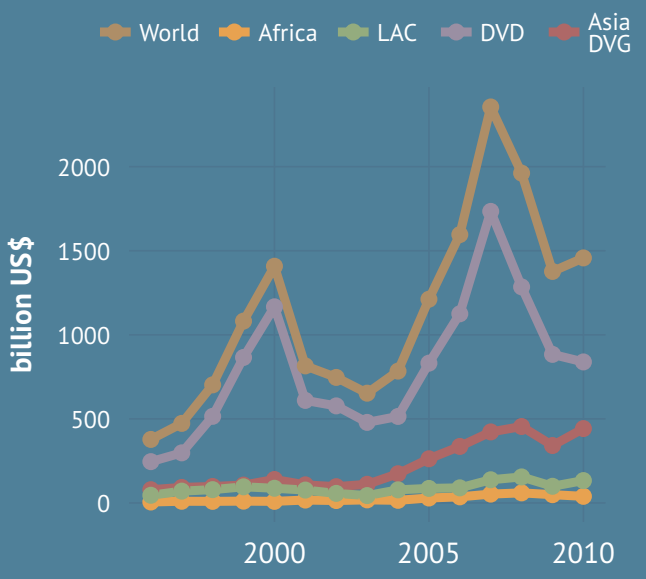
Metalink: P1.RES.FAO.ESS.CAP.STK.SHGDP.CH, p. 240

In 2000, the gross capital formation in Africa accounted for 19.6 percent of GDP; it rose to 24.1 percent of GDP in 2010, exceeding its corresponding share in the LAC region and the DVD. In 2000, this share was below the world average but it rose above the mean in 2010, which means that an effort has been made in investment and equipment in Africa. But compared with the Asia DVG, this effort is still insufficient. Indeed, for the Asia DVG region the gross capital formation represented 29.2 percent of GDP in 2000 and this share increased to 37.0 percent in 2010. (Table 9)

Chart 16 highlights the share of components in capital stock (2007). It shows that, in Africa, the most important ones are livestock fixed assets, in first place, and land development, in second. These are followed by plantation crops, livestock inventory, and structures for livestock, machinery and equipment. The LAC regions show the same pattern, whereas for Asia, structures for livestock are most important and for the DVD, it is machinery and equipment. (Chart 16)

Map 9 shows that net Official Development Assistance (ODA) received per capita is important in countries such as Congo, Eritrea, Guinea Bissau, Lesotho, Liberia, Mauritania, Namibia and Rwanda. Net ODA is less important in Angola, Côte d'Ivoire, Guinea, Madagascar, Nigeria, and South Africa, and of even less significance in North Africa. (Map 9)

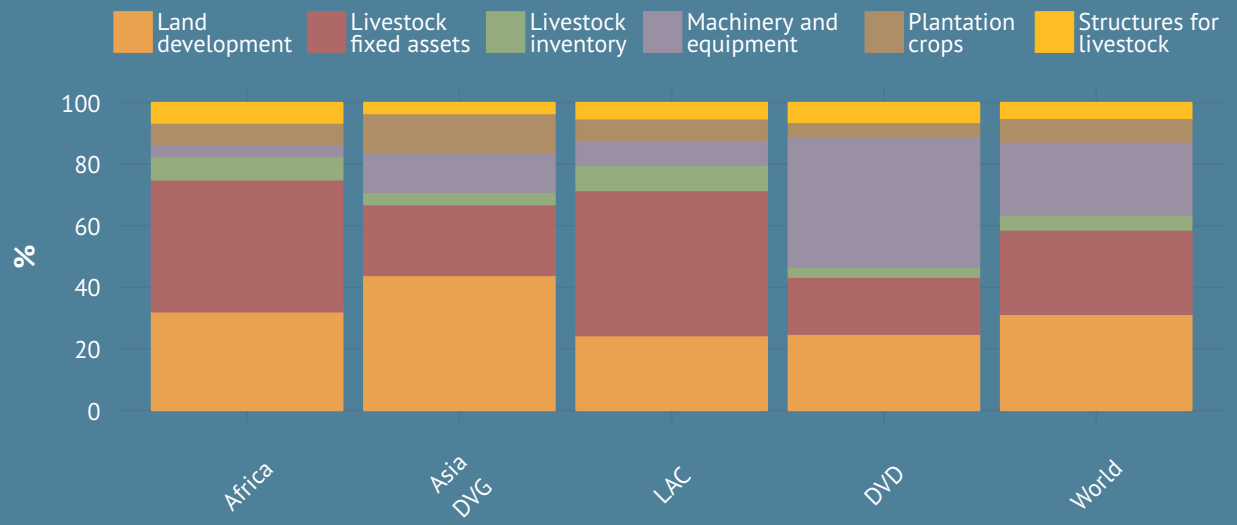
CHART 15: Foreign direct investment, BoP net inflows in current US$ (1996-2010)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.FDI.INF, p. 239

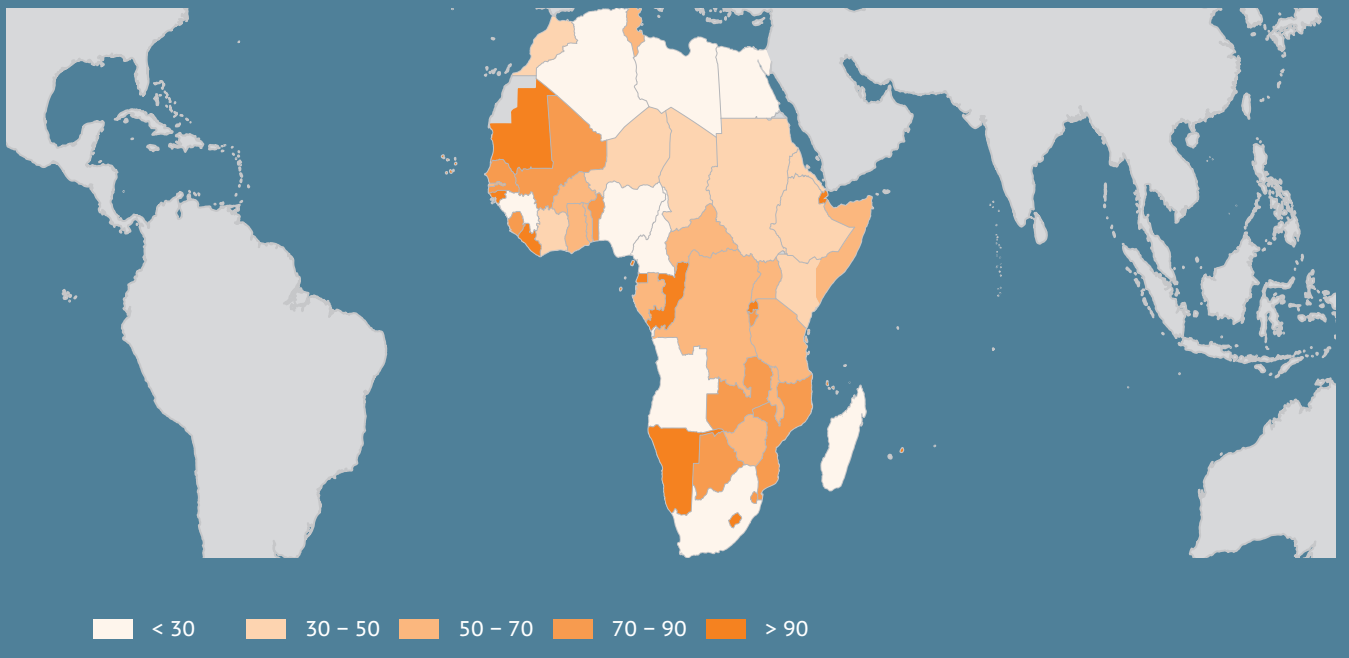
CHART 16: Share of components in capital stock (2007)



Source: Statistics Division (FAOSTAT)

Metalink: P1.RES.FAO.ESS.CAP.STK.LD.SH, p. 240

MAP 9: Net ODA received per capita, current US$ (US$, 2010)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.ODA.PCP, p. 243

Inputs

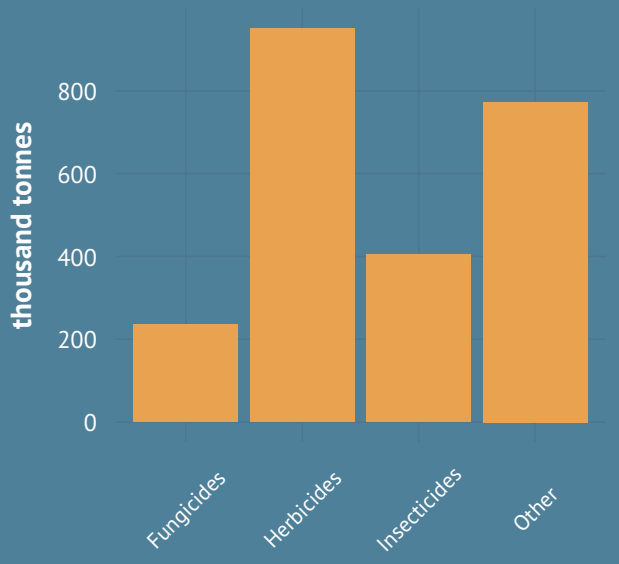
Herbicides were the pesticide most used in the world in 2007, followed by other types of pesticides, insecticides and, finally, fungicides. (Chart 17) Egypt, Tunisia, Kenya, Mauritius, and Libya are the heaviest users of fertilizer in Africa. Indeed, in these countries the consumption of fertilizer is greater than 30 kg/ha. Some countries, such as Angola, Congo, Democratic Republic of the Congo, Guinea, Namibia and Niger, have consumed very little fertilizer: less than 2 kg/ha in 2009. (Map 10)

Throughout Asia and in parts of Latin America, expanding seed and fertilizer use has been accompanied by corresponding investments in irrigation, rural roads, marketing infrastructure and financial services that have subsequently paved the way for dynamic commercial input markets. Developing such markets is vital for agricultural productivity growth, especially in sub-Saharan Africa, where large commercial input enterprises have yet to emerge because of high transaction costs, risks, and the major economies of scale involved in producing, importing, and transporting inputs such as fertilizer. A key reason for the region's low input uptake is that it is generally cheaper to expand cropland in order to achieve production targets. As a consequence, chemical fertilizer usage is much lower in sub-Saharan Africa than elsewhere.

Pesticides can increase agricultural productivity but when handled improperly they are toxic to humans and other species. Usage 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.

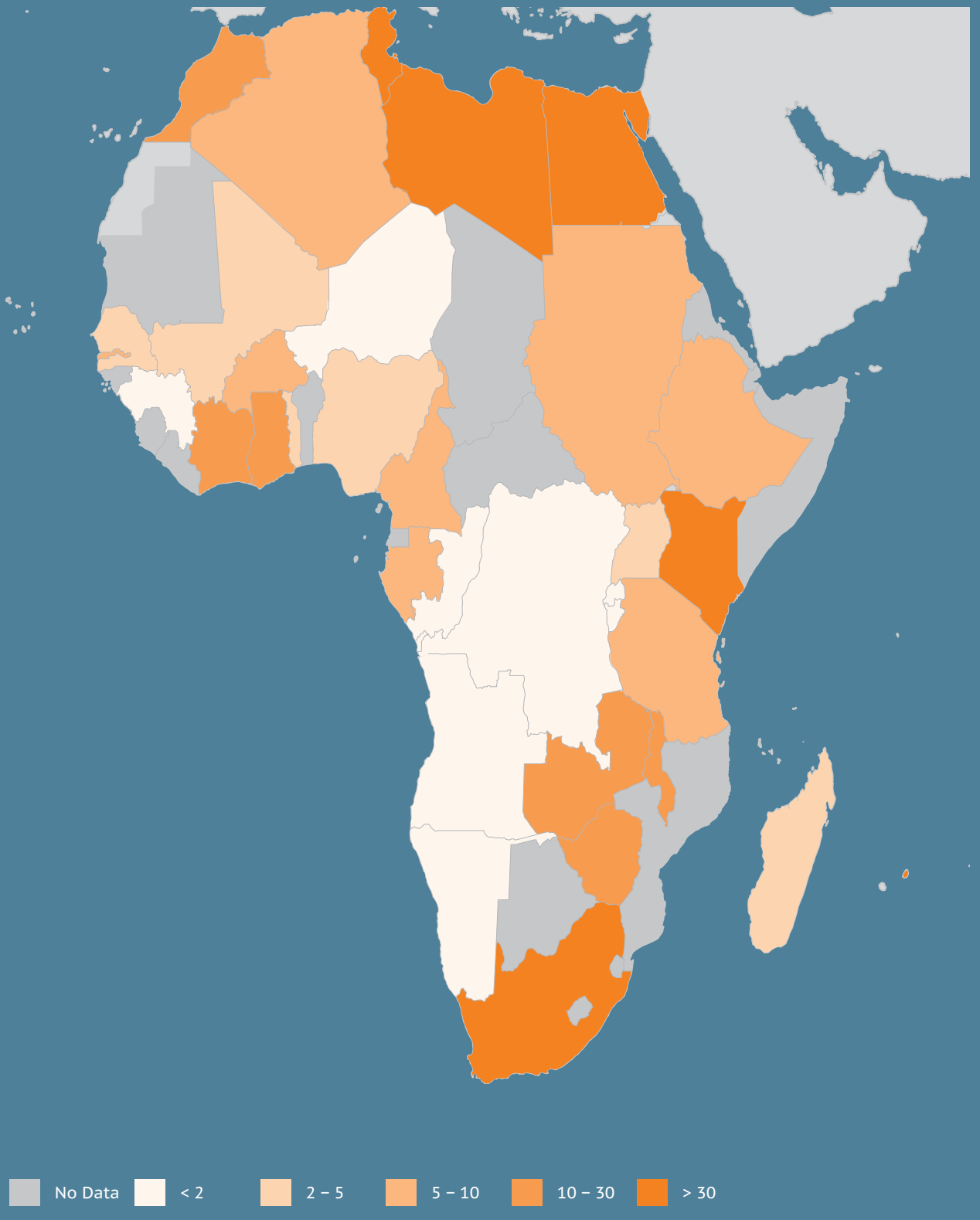
CHART 17: Global pesticide usage (2007)



Source: Statistics Division (FAOSTAT)

Metalink: P1.RES.FAO.ESS.PES.INS, p. 242

MAP 10: Fertilizer consumption, kilograms per hectare of arable land (kg/ha, 2009)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.FER.HA, p. 239

Infrastructure

One of the key factors holding back agricultural development is the absence of adequate rural infrastructure. Improvements to basic rural infrastructure, particularly roads, electrification and storage are a prerequisite for agricultural sectors to thrive. Considerable synergies can enhance infrastructure. Investments in cold storage, for instance, are only viable with reliable and sufficient rural electrification. Likewise, investments in milling facilities must be planned along with adequate dry storage, electrification and feeder roads. Roads, storage and processing facilities together foster the creation of value chains that increase efficiency and minimize losses.

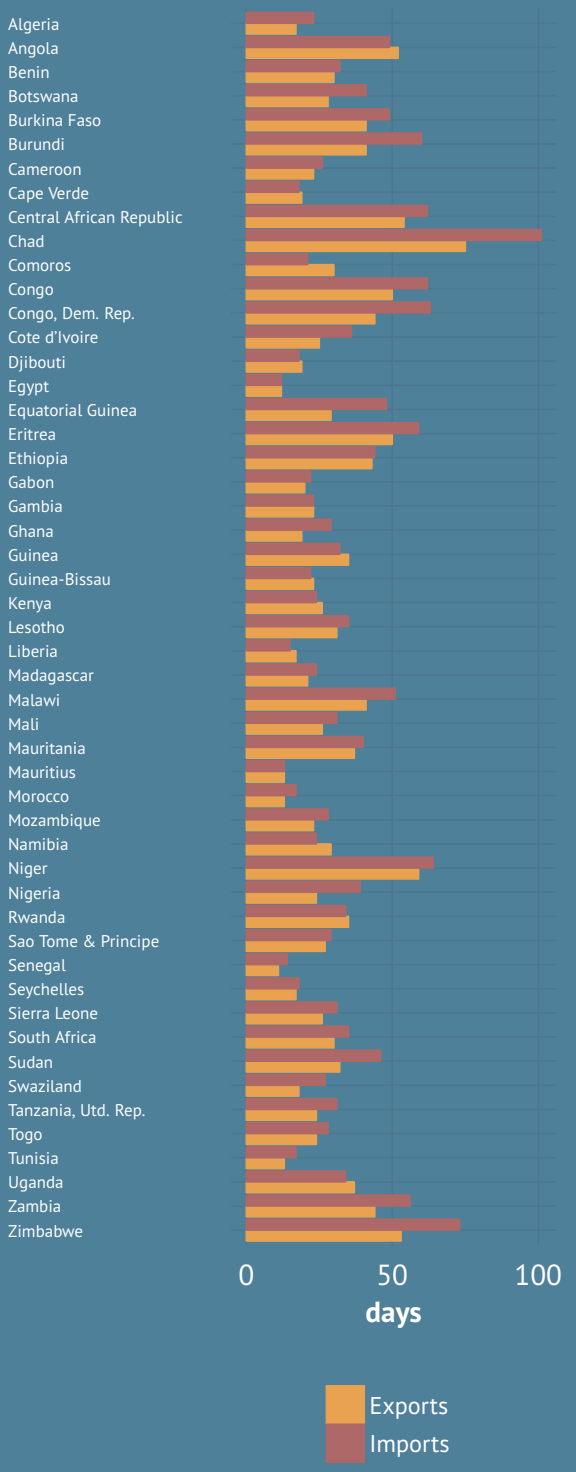
To measure the quality of infrastructure, scores ranging from 1 (lowest) to 5 (highest) were assigned to each group of regions in the world in 2010. On this basis, Africa recorded the poorest quality infrastructure, with a score slightly above 2 while other parts of the world had scores greater than or equal to 2.5. The DVD had the highest score, followed by Asia DVG and LAC regions. However, comparing the poor quality infrastructure in Africa to global levels hides differences at country level. In fact, countries like Madagascar and South Africa in Southern Africa; Benin, Cote d'Ivoire, Ghana, Nigeria and Senegal in West Africa; and Tunisia in North Africa all have scores above 2.4. In contrast, the poorest quality of infrastructure (scores less than 2) is seen in such countries as Angola, Burkina Faso, Burundi, Congo, Eritrea, Ethiopia, Guinea Bissau, Namibia, Sierra Leone, Somalia, Sudan, Togo, and Zambia. (Map 11)

In addition, Africa has less than 50 agricultural tractors per 100 square kilometres of arable land, whereas for Asia DVG, that number is about 150; for the LAC regions, it is higher than 100 and for the DVD, it reaches 300. This is clear evidence of the lack of agriculture mechanization in Africa. (Chart 20)

Countries such as Angola, Burundi, Central African Republic, Chad, Democratic Republic of the Congo, Eritrea, Niger, Zambia and Zimbabwe, have an overly long lead time to trade – at least equal to 50 days. Burkina Faso and Sudan are in this category to a lesser extent. Some countries, such as Chad and Zimbabwe, have lead times to import well beyond 50 days. This situation impedes international trade in these countries. However their lead times to export are below the lead times to import as is the case for all countries in general. (Chart 18)

In sub-Saharan Africa, whether rural or urban, the electrification rate is very low in general, compared to the countries of North Africa and the global average. Indeed, Chart 20 shows that while the electrification rate of almost 100 percent was observed in North Africa in both rural and urban areas, this rate is below 40 percent – and less than 20 percent for rural areas – in sub-Saharan Africa.

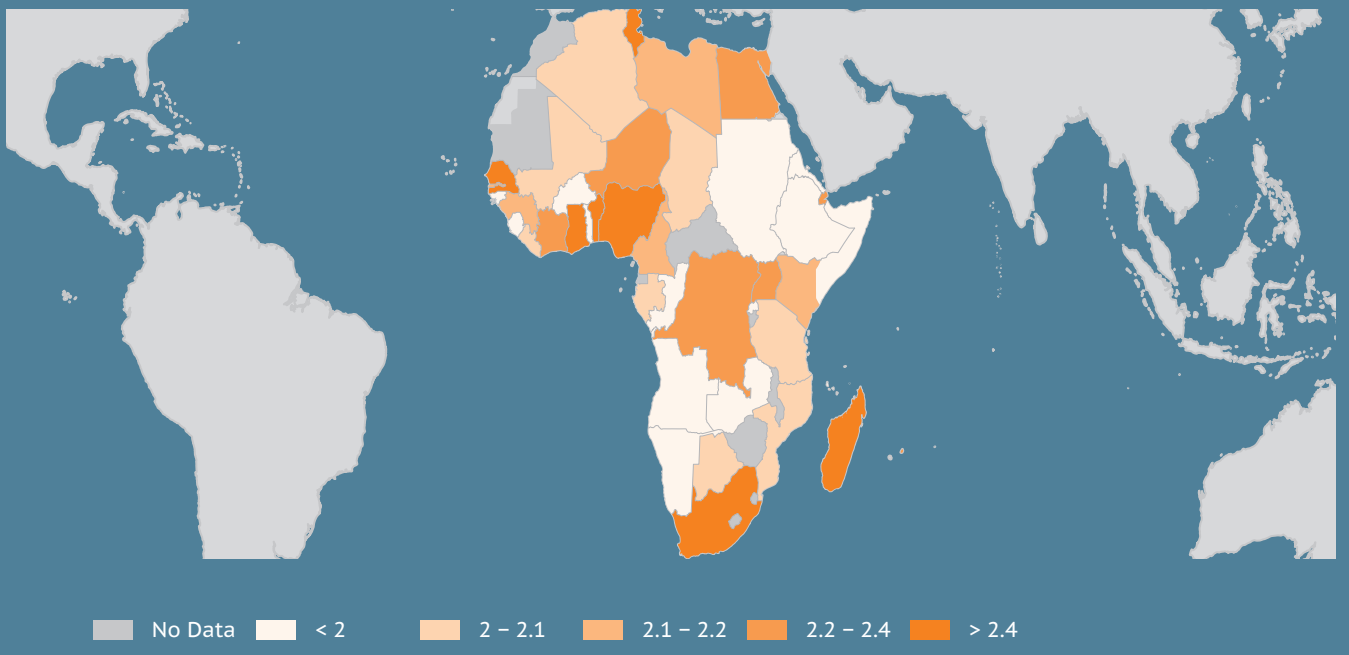
CHART 18: Lead time to trade (2010)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.EXP.DAY, p. 242

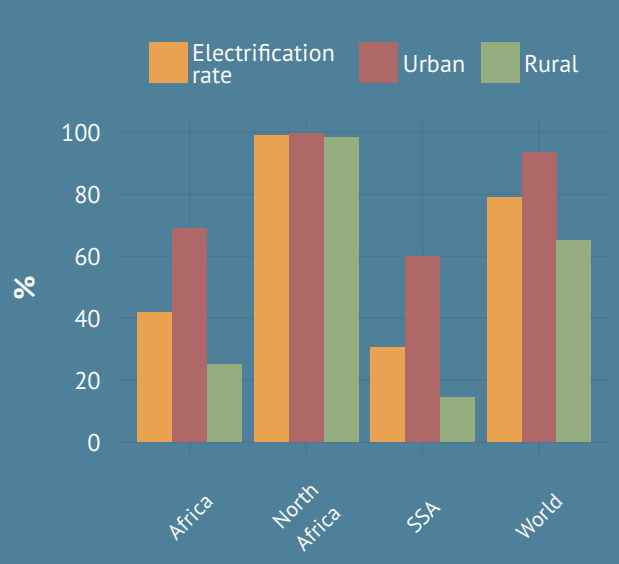
MAP 11: Quality of infrastructure, score (1 = lowest to 5 = highest) (score, 2010)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.INF.IX, p. 243

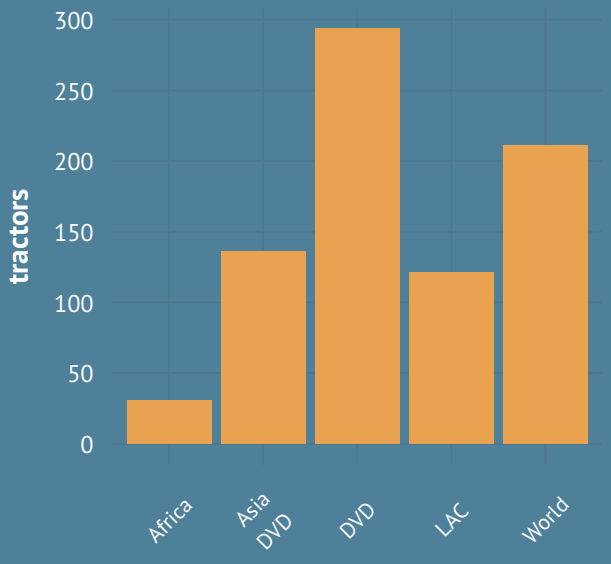
CHART 19: Electricity access (2008)



Source: World Energy Outlook 2010

Metalink: P1.RES.IEA.WEO.ELEC.AC.ER, p. 237

CHART 20: Agricultural tractors per 100 sq. km of arable land (2009)



Source: World Bank (WDI)

Metalink: P1.RES.WBK.WDI.TRA.SKM, p. 235

2

Macroeconomy

Changes in the wider economy and macroeconomic policies affect the performance of the agricultural economy. Higher economic growth raises incomes and hence demands.

Changing interest rates influence capital investments, land values and storage, while inflation affects input prices, commodity prices, real interest rates and land prices. Exchange rate fluctuations have an important bearing on international competitiveness and trade flows. Given the growing integration of the global economy, macroeconomic policies are playing an increasingly important role in determining the performance of agricultural sectors.

After the subprime mortgage-linked banking crisis in the United States of America, sharp contractions in output, employment, investment and trade prompted governments and central banks around the world to respond swiftly, with an unprecedented array of monetary and fiscal stimulus measures.

After expanding by less than 4 percent in 2010, global GDP growth in real terms was expected to slow to around 3 percent in 2011. With real growth in developed economies predicted to rise by a total of 2 percent in the current year, a prediction based on an expected 6 percent rise in the economies of developing countries. The recovery is mostly complete in all developing regions, with the pace of growth increasingly dictated by rapidly improving global trade, robust domestic demand and increasingly binding capacity constraints.

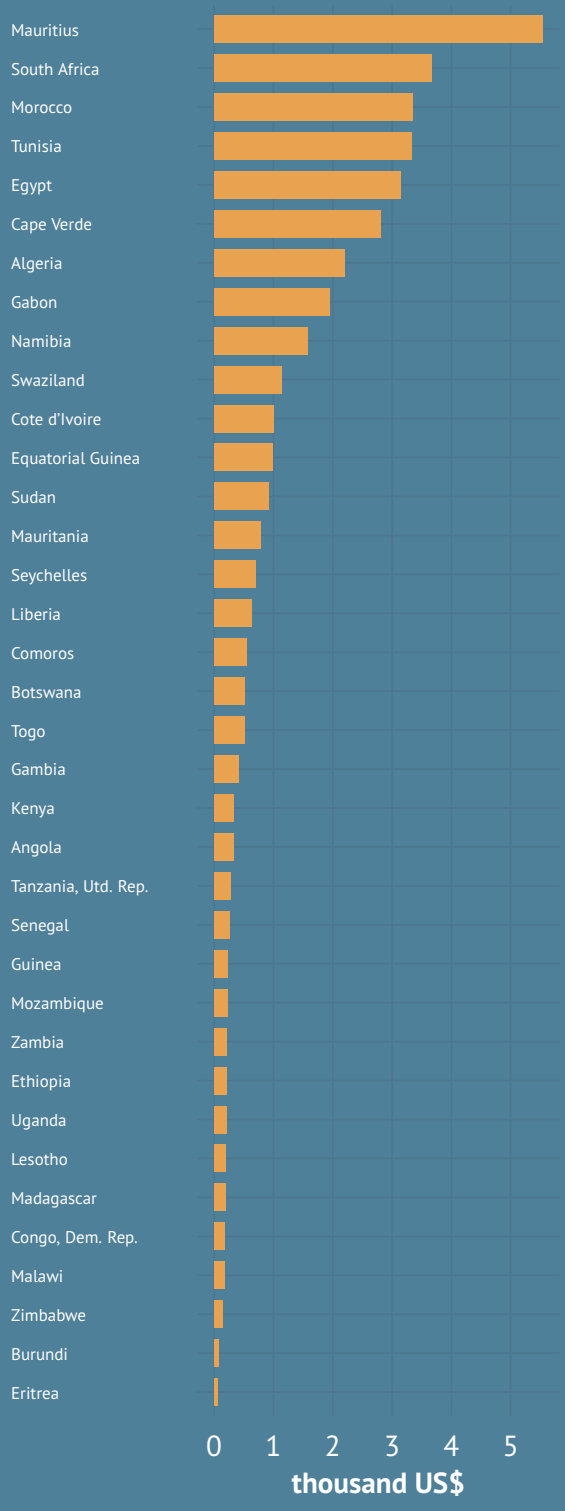
The agriculture sector, buoyed by very high commodity prices, has demonstrated astonishing resilience during the global economic turmoil. In 2009, agricultural value added at the world level rose by 4 percent, in contrast to a 5 percent fall in global sector-wide GDP. In developing countries, the increase in agricultural GDP over this period was far more pronounced, at 8 percent.

The GDP of all of Africa was estimated at USD 1 629.5 billion in 2010. Africa has the lowest overall GDP in the world. Indeed in Asia DVG, GDP is more than eight times greater than in Africa; in the LAC region it is five times greater and in the DVD it is 26 times greater than that of the African region.

The GDP per capita in the African region was USD 1 623.6 in 2010. Compared with other world regions, it is two times smaller than per capita GDP in the Asia DVG, five times smaller than in the LAC region and almost 21 times smaller than per capita GDP in DVD.

Taking into account the value added per worker in agriculture, African countries could be classified into three groups. A first group of countries has a value added of agriculture per worker higher than USD 3 000. In order of importance, these are: Mauritius, South Africa, Morocco, Tunisia and Egypt. It should be noted that Mauritius is far above the others, with more than USD 5 000 value added per worker. This is followed by the group of countries in which the value added of agriculture per worker is between USD 2 000 and 3 000; these include Algeria, Cape Verde and Gabon. Finally, the third group is composed of most other countries, with the value added per worker of less than USD 1 000. (Chart 21)

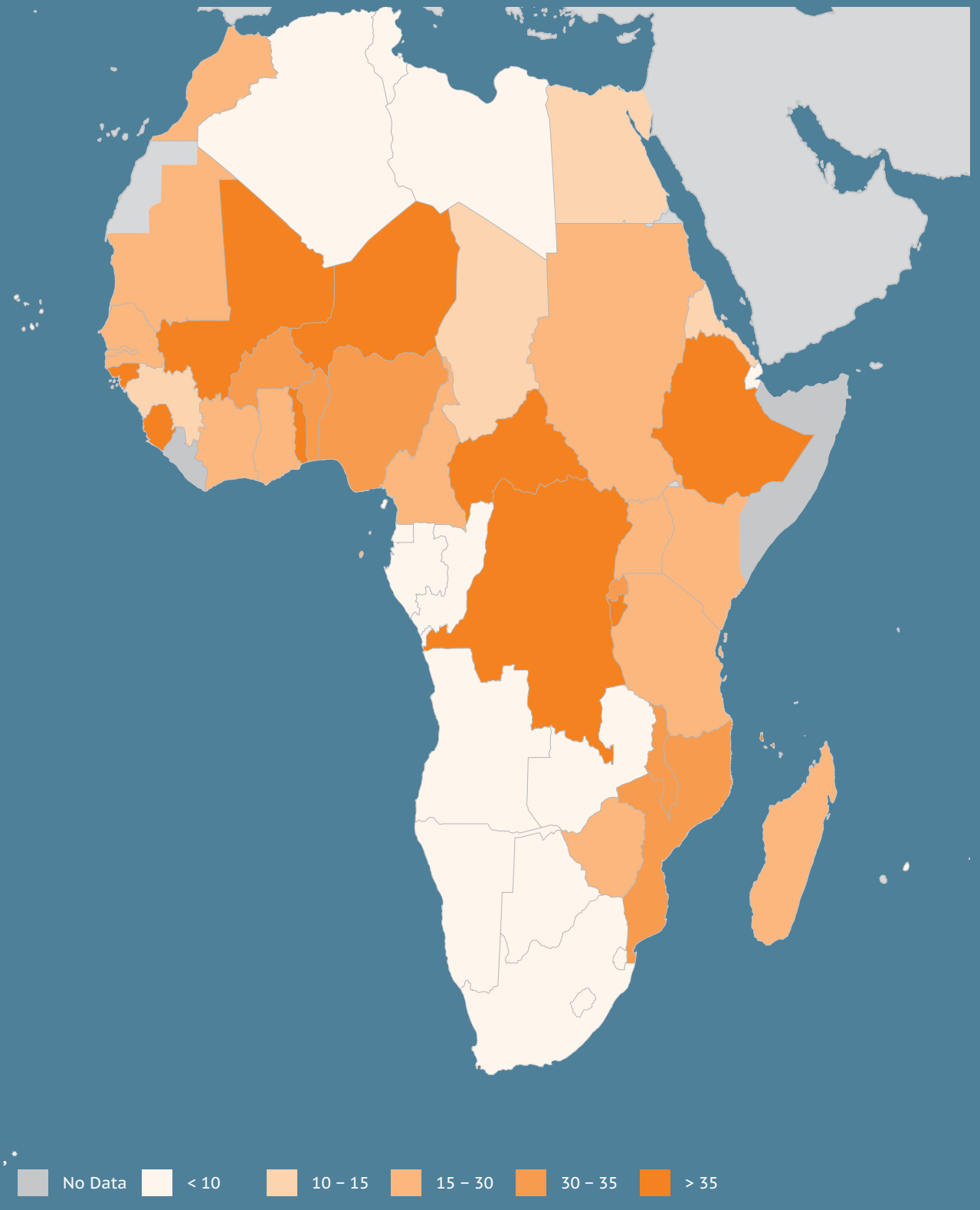
CHART 21: Agriculture value added per worker, constant 2000 US$ (2010)



Source: World Bank (WDI)

Metalink: P1.MAC.WBK.WDI.AGV.PWK, p. 235

MAP 12: Share of agriculture in GDP (%, 2000-2010*)



Source: World Bank (WDI)

Metalink: P1.MAC.WBK.WDI.AGV.GDP, p. 235

Burundi, Guinea Bissau, Mali, Niger, Sierra Leone, and Togo in West Africa, Ethiopia in East Africa, and the Central African Republic, and Democratic Republic of the Congo in Central Africa are the countries in which the share of agriculture in GDP is very important because it represented over 35 percent of GNP in 2010. However, for countries such as Angola, Botswana, Congo, Djibouti, Gabon, Equatorial Guinea, Lesotho, Namibia, South Africa, Swaziland, and Zambia in sub-Saharan Africa, and Algeria and Libya in North Africa, the share of agriculture in GDP was very low, less than 10 percent of GNP. (Map 12)

Nevertheless, the growth rate of real GDP in the African region was 4.5 percent in 2009 and this rate improved in 2010, moving to 5.6 percent. Real growth in the African region remained insufficient in 2010, however, as the global average level in the world was around 6.9 percent. Asia DVG held the real growth record: from 6.3 percent in 2009, it grew to 8.8 percent in 2010. With regard to the LAC region, after negative growth in 2009, it reached 5.8 percent in 2010, representing a significant positive difference between 2009 and 2010. However, in the DVD, the growth rate remained low, with negative GDP growth in 2009 and weak growth of 2.7 percent in 2010.

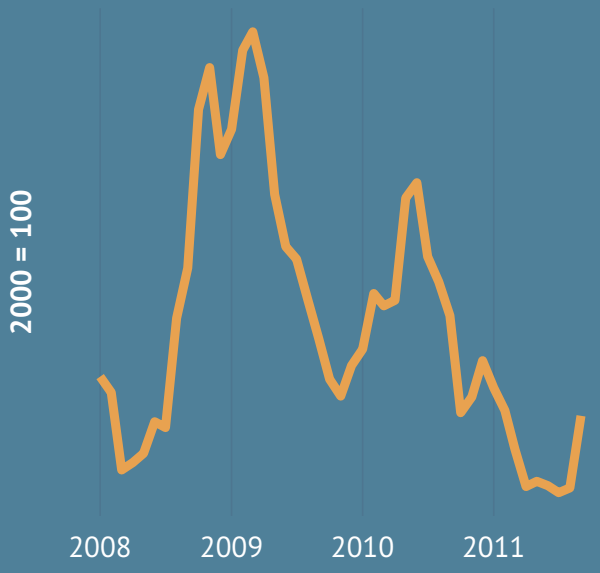
The real GDP growth in Africa in 2010 was more than 6 percent for Botswana, Congo, Ethiopia, Malawi, Mozambique, Niger, Nigeria, Rwanda, Tanzania, Zambia and Zimbabwe. In contrast, it was very low – less than 3 percent – for some countries, such as Angola, Benin, Burundi, Côte d'Ivoire, Eritrea, Guinea, Lesotho, Madagascar, South Africa and Swaziland. (Map 13)

Rising commodity prices, especially for food and fuel, combined with the rapid closing of output gaps and strong capital inflows, have contributed to an acceleration of inflation in many developing countries. While the extent of the increase and its underlying factors differ across countries, headline inflation approached 7 percent in mid-2011, representing about a 1 percent year-on-year increase. In the DVD, inflation rose to almost 3 percent in April 2011, allaying the fears of deflation that had begun to surface during the peak of the crisis.

In 2010, the consumer price index was higher (greater than 10 percent) in Angola, Egypt, Ghana, Guinea, Mozambique, Nigeria, Sierra Leone and Sudan. This means there was inflation in these countries. Conversely, for countries in the West Africa Monetary Union and those of the Central Africa Monetary Union, the consumer price index has been less than 2 percent, which means that inflation in these countries is low. (Map 14)

However, monetary authorities in many developing countries are responding to inflation pressures and the narrowing of output gaps by tightening monetary policy through increasing interest rates.

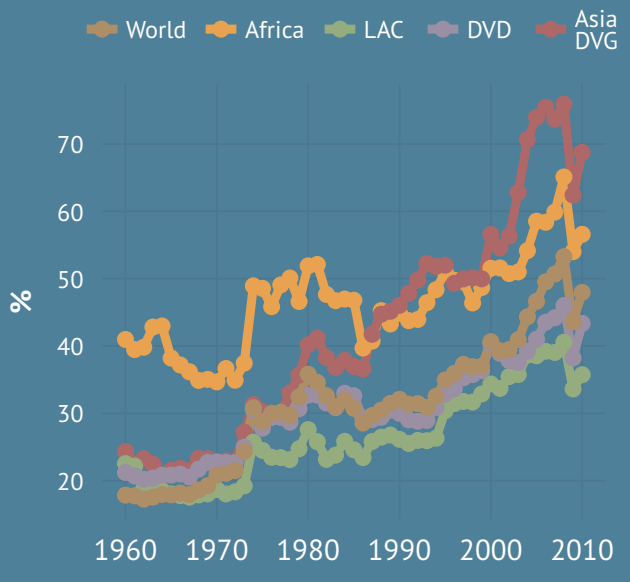
CHART 22: Monthly USD trade weighted index (2008-2011)



Source: United States Federal Reserve

Metalink: P1.MAC.USA.FR.EXR.MAJ, p. 246

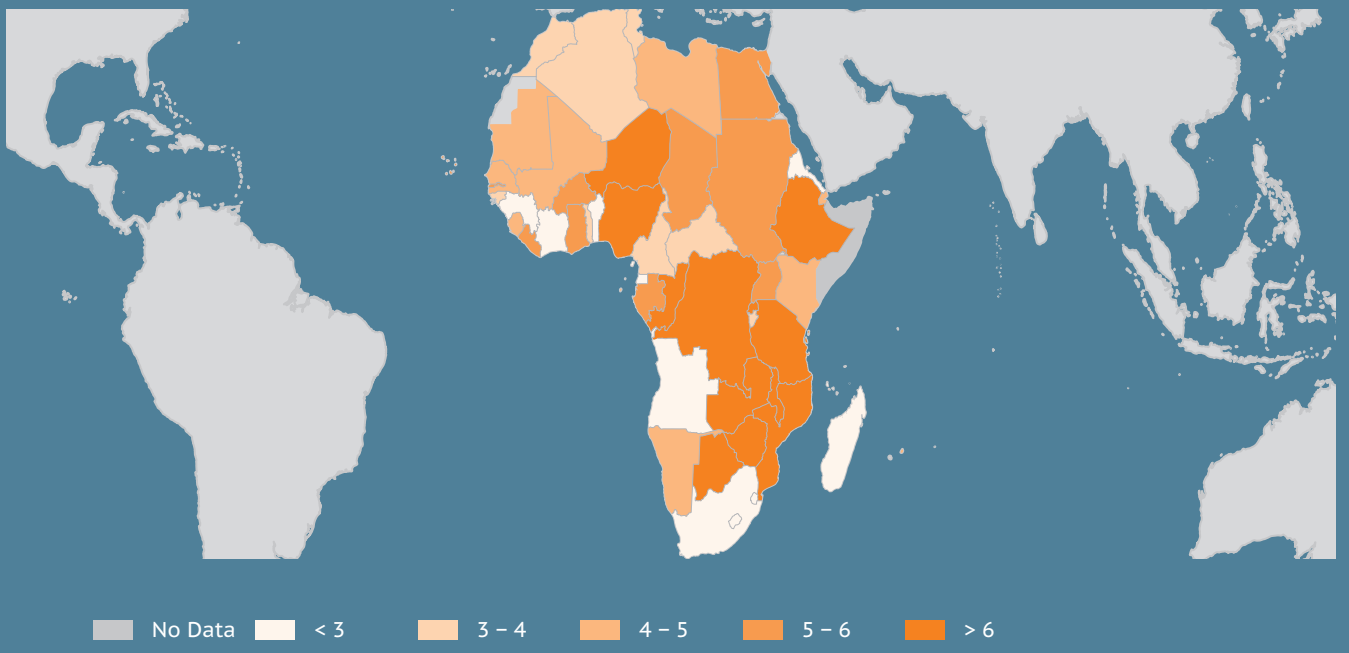
CHART 23: Merchandise trade share of GDP (1960-2010)



Source: World Bank (WDI)

Metalink: P1.MAC.WBK.WDI.MCH.GDP, p. 243

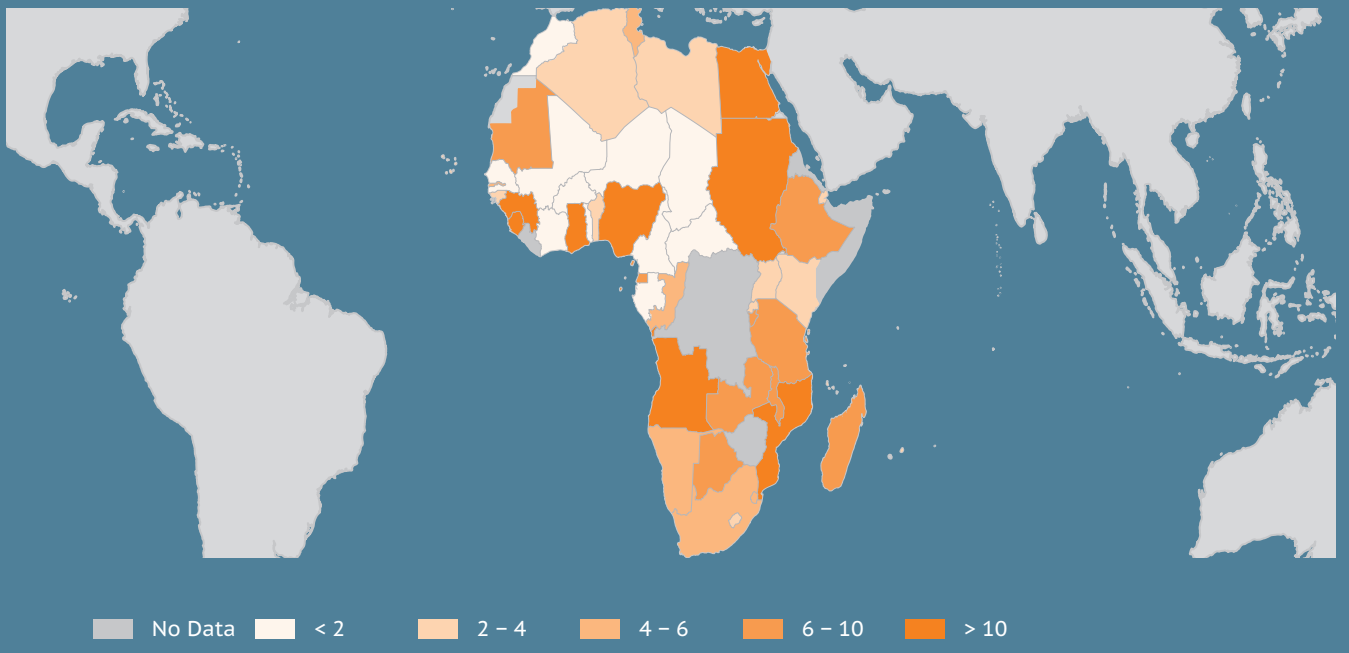
MAP 13: Real GDP growth, % p.a. (%, 2010)



Source: World Economic Outlook

Metalink: P1.MAC.IMF.WEO.GDP.RGR, p. 248

MAP 14: Inflation, consumer prices, annual (%, 2010)



Source: World Bank (WDI)

Metalink: P1.MAC.IMF.WEO.INF.PER, p. 242

TABLE 1: Population and structure

	Population				Age composition		Agricultural population		
	total		growth (p.a.)		between	over	total	share	growth (p.a.)
					0-14	65 +			
	million people	million people	%	%	%	%	million people	%	%
	2000	2010	1990-2000	2000-2010	2010	2010	2010	2010	1990-2010
NORTH AFRICA	141.8	165.4	1.7	1.6	29.3	5.1			
Algeria	30.5	35.5	1.9	1.5	27.0	4.6	7.4	20.9	0.5
Egypt	67.6	81.1	1.8	1.8	31.5	5.0	22.7	27.9	−0.4
Libyan Arab Jamahiriya	5.2	6.4	1.9	2.0	30.4	4.3	0.2	3.0	−4.1
Morocco	28.8	32.0	1.5	1.0	28.0	5.5	8.3	25.9	−1.1
Tunisia	9.6	10.5	1.6	1.0	23.5	7.0	2.2	20.4	−0.1
WEST AFRICA	235.7	304.3	2.6	2.6	43.0	3.2			
Benin	6.5	8.8	3.2	3.1	43.7	3.0	3.9	44.3	1.3
Burkina Faso	12.3	16.5	2.8	3.0	45.3	2.2	15.2	92.1	2.9
Cape Verde	0.4	0.5	2.3	1.3	31.8	5.9	0.1	16.9	−1.2
Cote d'Ivoire	16.6	19.7	2.9	1.8	40.9	3.8	7.5	37.9	0.0
Gambia	1.3	1.7	3.0	2.9	44.0	2.2	1.3	76.0	2.6
Ghana	19.2	24.4	2.6	2.4	38.6	3.8	13.1	53.8	2.1
Guinea	8.3	10.0	3.8	1.8	42.9	3.3	8.0	79.8	2.3
Guinea-Bissau	1.2	1.5	2.0	2.0	41.3	3.3	1.2	79.3	1.6
Liberia	2.8	4.0	3.0	3.4	43.5	2.8	2.5	62.0	2.4
Mali	11.3	15.4	2.7	3.1	47.2	2.2	11.5	74.9	2.3
Mauritania	2.6	3.5	2.8	2.7	39.9	2.7	1.7	50.3	2.3
Niger	10.9	15.5	3.4	3.6	49.0	2.2	12.9	82.9	3.2
Nigeria	123.7	158.4	2.4	2.5	42.8	3.4	39.4	24.9	−0.3
Senegal	9.5	12.4	2.8	2.7	43.7	2.4	8.7	70.2	2.3
Sierra Leone	4.1	5.9	0.4	3.5	43.0	1.9	3.5	60.0	1.1
Togo	4.8	6.0	2.7	2.3	39.6	3.4	3.2	53.4	1.5
CENTRAL AFRICA	82.3	107.6	3.0	2.7	44.5	3.0			
Cameroon	15.7	19.6	2.6	2.3	40.6	3.5	8.0	40.9	0.1
Central African Republic	3.7	4.4	2.3	1.7	40.4	4.0	2.8	63.2	0.9
Chad	8.2	11.2	3.2	3.2	45.4	2.9	7.4	65.7	2.0
Congo	3.1	4.0	2.8	2.6	40.6	3.7	1.3	31.9	0.6
Democratic Republic of the Congo	49.6	66.0	3.1	2.9	46.3	2.7	37.7	57.2	2.2
Equatorial Guinea	0.5	0.7	3.4	3.0	39.2	2.9	0.4	64.2	2.5
Gabon	1.2	1.5	2.9	2.0	35.5	4.3	0.4	25.7	−1.1
Sao Tome and Principe	0.1	0.2	2.0	1.6	40.3	3.9	0.1	57.4	0.9
EAST AFRICA	208.9	269.8	2.8	2.6	42.8	3.1			
Burundi	6.4	8.4	1.3	2.8	37.9	2.9	7.5	89.2	1.9
Djibouti	0.7	0.9	2.7	2.0	35.8	3.3	0.7	74.0	1.8
Eritrea	3.7	5.3	1.5	3.7	41.6	2.5	3.9	73.8	
Ethiopia	65.6	82.9	3.1	2.4	41.5	3.3	64.2	77.3	
Kenya	31.3	40.5	2.9	2.6	42.5	2.7	28.6	70.6	2.2
Rwanda	8.1	10.6	1.3	2.8	42.6	2.7	9.5	89.4	1.9
Somalia	7.4	9.3	1.2	2.3	44.9	2.7	6.1	65.6	1.1
Sudan (former)	27.6	33.6	3.0	2.0	40.1	3.6	22.4	66.8	1.0
Uganda	24.2	33.4	3.2	3.3	48.4	2.5	24.6	73.5	2.6
United Republic of Tanzania	34.0	44.8	2.9	2.8	44.7	3.1	32.9	73.3	2.3
SOUTHERN AFRICA	133.9	163.2	2.5	2.0	39.4	3.7			
Angola	13.9	19.1	3.0	3.2	46.6	2.5	13.2	69.2	2.7
Botswana	1.8	2.0	2.4	1.3	32.6	4.0	0.8	42.1	1.6
Comoros	0.6	0.7	2.5	2.7	42.6	2.7	0.5	69.4	2.1
Lesotho	2.0	2.2	1.8	1.0	37.4	4.3	0.8	38.9	0.8
Madagascar	15.4	20.7	3.1	3.0	43.1	3.1	14.5	70.1	2.5
Malawi	11.2	14.9	1.8	2.9	45.8	3.1	10.9	72.9	1.7
Mauritius	1.2	1.3	1.1	0.8	21.9	6.9	0.1	8.1	−2.5
Mozambique	18.2	23.4	3.0	2.5	44.1	3.3	17.8	76.0	2.5
Namibia	1.9	2.3	3.0	1.9	36.4	3.7	0.9	40.9	0.7
Seychelles	0.1	0.1	1.5	0.6			0.1	74.0	0.4

TABLE 1: Population and structure (continued)

	Population				Age composition		Agricultural population		
	total		growth (p.a.)		between	over	total	share	growth (p.a.)
					0-14	65 +			
	million people	million people	%	%	%	%	million people	%	%
	2000	2010	1990-2000	2000-2010	2010	2010	2010	2010	1990-2010
South Africa	44.0	50.0	2.3	1.3	30.1	4.6	4.9	9.8	−1.8
Swaziland	1.0	1.1	1.6	0.4	38.4	3.4	0.3	32.4	−0.4
Zambia	10.2	12.9	2.6	2.4	46.4	3.1	8.3	64.0	1.8
Zimbabwe	12.5	12.6	1.8	0.0	38.9	4.2	7.1	56.3	−0.1
AFRICA	802.5	1 010.3	2.5	2.3	40.3	3.5	513.4	50.8	1.5
ECOWAS	233.1	300.8	2.6	2.6	43.0	3.2			
SADC	217.0	273.3	2.7	2.3	41.9	3.3			
COMESA	342.1	433.4	2.6	2.4	40.9	3.4			
UMA	76.8	87.8	1.7	1.4	27.7	5.1			
ECCAS	102.6	135.1	2.9	2.8	44.4	2.9			
IGAD	160.4	206.0	2.9	2.5	42.6	3.1			
CEMAC	32.5	41.5	2.7	2.5	41.7	3.4			
UEMOA	73.2	95.9	2.9	2.7	44.5	2.7			
CEN-SAD	429.8	539.9	2.4	2.3	39.7	3.6			
ASIA Developing	3 557.9	4 003.3	1.6	1.2	26.3	6.2			
LAC	520.2	588.5	1.6	1.2	27.9	6.9			
DEVELOPED REGIONS	1 196.2	1 243.8	0.4	0.4	16.6	15.9			
WORLD	6 118.1	6 894.4	1.5	1.2	26.8	7.6	2 619.1	38.0	0.3

TABLE 2: Demographic change and indicators

	Population					Mortality and fertility			
	rural		urban		density	life ex-pectancy at birth	death rate	infant mortality	fertility rate
	share	growth (% p.a.)	share	growth (% p.a.)	people per sq. km of land area	total	per 1000	per 1000 live births	
	%	%	%	%	people	years	people	people	births per woman
	2010	2000-2010	2010	2000-2010	2010	2010	2010	2010	2010
NORTH AFRICA	46.5	1.1	53.5	2.0		72.9	5.2		2.5
Algeria	33.5	−0.3	66.5	2.6	14.9	72.9	4.9	30.5	2.3
Egypt	57.2	1.8	42.8	1.9	81.5	73.0	5.1	18.6	2.7
Libyan Arab Jamahiriya	22.1	1.3	77.9	2.2	3.6	74.8	4.0	13.4	2.6
Morocco	43.3	0.3	56.7	1.7	71.6	71.9	5.8	30.4	2.3
Tunisia	32.7	−0.1	67.3	1.6	67.9	74.6	5.6	13.8	2.0
WEST AFRICA	55.5	1.6	44.5	4.0		53.7	13.0		5.4
Benin	58.0	2.5	42.0	4.1	80.0	55.6	11.8	73.2	5.3
Burkina Faso	79.6	2.5	20.4	5.1	60.2	54.9	11.9	92.6	5.8
Cape Verde	38.9	−0.5	61.1	2.6	123.1	73.8	5.3	29.2	2.4
Cote d'Ivoire	49.9	0.5	50.1	3.2	62.1	54.7	12.1	85.9	4.4
Gambia	41.9	0.9	58.1	4.7	172.8	58.2	9.2	56.9	4.9
Ghana	48.5	1.0	51.5	4.1	107.2	63.8	7.8	50.0	4.2
Guinea	64.6	1.1	35.4	3.2	40.6	53.6	13.1	81.2	5.2
Guinea-Bissau	70.0	2.0	30.0	2.1	53.9	47.7	16.7	92.0	5.1
Liberia	38.5	1.7	61.5	4.7	41.5	56.1	11.0	73.6	5.2
Mali	66.7	2.3	33.3	5.0	12.6	51.0	14.6	99.2	6.3
Mauritania	58.6	2.5	41.4	3.1	3.4	58.2	9.7	75.3	4.5
Niger	83.3	3.5	16.7	3.9	12.2	54.3	12.9	72.5	7.1
Nigeria	50.2	1.1	49.8	4.1	173.9	51.4	14.3	88.4	5.5
Senegal	57.1	2.3	42.9	3.3	64.6	59.0	9.0	49.8	4.8
Sierra Leone	61.6	3.1	38.4	4.4	81.9	47.4	15.7	113.7	5.0
Togo	56.6	1.1	43.4	4.1	110.8	56.6	10.8	66.0	4.1
CENTRAL AFRICA	59.4	1.8	40.6	4.2		49.3	15.7		5.4
Cameroon	41.6	0.4	58.4	3.9	41.5	51.1	14.3	84.4	4.5
Central African Republic	61.1	1.5	38.9	2.1	7.1	47.6	16.4	106.0	4.6
Chad	72.4	2.6	27.6	4.9	8.9	49.2	16.4	98.9	6.0
Congo	37.9	1.6	62.1	3.2	11.8	57.0	11.2	60.8	4.5
Democratic Republic of the Congo	64.8	2.1	35.2	4.6	29.1	48.1	16.5	111.7	5.8
Equatorial Guinea	60.3	2.9	39.7	3.3	25.0	50.8	14.6	80.5	5.2
Gabon	14.0	−1.5	86.0	2.7	5.8	62.3	8.9	54.4	3.2
Sao Tome and Principe	37.8	−0.5	62.2	3.2	172.3	64.3	7.8	53.1	3.7
EAST AFRICA	75.7	2.1	24.3	4.3		57.3	10.5		4.9
Burundi	89.0	2.5	11.0	5.7	326.4	49.9	14.2	87.8	4.3
Djibouti	11.9	−1.4	88.1	2.5	38.3	57.5	10.2	73.0	3.8
Eritrea	78.4	3.2	21.6	5.7	52.0	61.0	7.7	42.3	4.5
Ethiopia	82.4	2.0	17.6	4.1	82.9	58.7	9.6	67.8	4.2
Kenya	77.8	2.3	22.2	3.9	71.2	56.5	10.5	55.1	4.7
Rwanda	81.1	2.1	18.9	6.0	430.6	55.1	11.8	59.1	5.4
Somalia	62.6	1.7	37.4	3.6	14.9	50.9	15.0	108.3	6.3
Sudan (former)	54.8	0.4	45.2	4.3	18.3	61.1	9.0	66.4	4.4
Uganda	86.7	3.1	13.3	4.3	167.3	53.6	12.3	63.0	6.1
United Republic of Tanzania	73.6	2.2	26.4	4.5	50.6	57.4	10.5	60.2	5.5
SOUTHERN AFRICA	55.1	1.2	44.9	3.1		53.3	13.3		4.2
Angola	41.5	1.1	58.5	5.0	15.3	50.7	14.4	97.9	5.4
Botswana	38.9	−0.5	61.1	2.7	3.5	53.1	13.1	36.1	2.8
Comoros	71.8	2.7	28.2	2.7	395.0	60.6	8.8	62.8	4.9
Lesotho	73.1	0.1	26.9	4.0	71.5	47.4	15.8	64.6	3.2
Madagascar	69.8	2.6	30.2	4.2	35.6	66.5	6.5	43.1	4.7
Malawi	80.2	2.3	19.8	5.6	158.0	53.5	12.7	58.1	6.0
Mauritius	57.4	0.8	42.6	0.7	631.0	73.0	7.1	13.0	1.5
Mozambique	61.6	1.3	38.4	4.9	29.7	49.7	14.6	92.2	4.9

TABLE 2: Demographic change and indicators (continued)

	Population					Mortality and fertility			
	rural		urban		density	life expectancy at birth	death rate	infant mortality	fertility rate
	share	growth (% p.a.)	share	growth (% p.a.)	people per sq. km of land area	total	per 1000	per 1000 live births	
	%	%	%	%	people	years	people	people	births per woman
	2010	2000-2010	2010	2000-2010	2010	2010	2010	2010	2010
Namibia	62.0	1.0	38.0	3.5	2.8	62.1	8.2	29.3	3.2
Seychelles	44.7	−0.3	55.3	1.5	188.1	73.0	8.0	11.7	2.5
South Africa	38.3	0.1	61.7	2.1	41.2	52.1	14.9	40.7	2.5
Swaziland	74.5	0.1	25.5	1.3	61.4	48.3	14.4	55.1	3.4
Zambia	64.3	2.3	35.7	2.7	17.4	48.5	15.6	68.9	6.3
Zimbabwe	61.7	−0.7	38.3	1.3	32.5	49.9	13.3	50.9	3.3
AFRICA	59.9	1.7	40.1	3.4		57.3	11.4		4.6
ECOWAS	55.4	1.5	44.6	4.1		53.6	13.0		5.4
SADC	60.4	1.6	39.6	3.6		52.7	13.6		4.8
COMESA	69.5	2.0	30.5	3.4		59.0	10.3		4.5
UMA	37.1	0.2	62.9	2.1		72.3	5.4		2.4
ECCAS	58.7	1.8	41.3	4.4		49.5	15.4		5.4
IGAD	75.4	2.1	24.6	4.1		57.7	10.3		4.7
CEMAC	51.0	1.4	49.0	3.7		51.2	14.6		4.9
UEMOA	65.5	2.2	34.5	3.9		54.7	12.1		5.5
CEN-SAD	56.5	1.6	43.5	3.4		58.9	10.7		4.6
ASIA Developing	58.3	0.2	41.7	2.7		69.5	7.2		2.2
LAC	20.7	−0.5	79.3	1.8		74.1	5.9		2.2
DEVELOPED REGIONS	24.9	−0.4	75.1	0.6		78.0	9.9		1.7
WORLD	49.3	0.4	50.7	2.1	53.2	69.6	8.2	41.2	2.5

TABLE 3: Land availability

	Land area	Share of land area				Arable land	
	total	agricultural	permanent crops	arable	pasture	hectares per person	growth (p.a.)
	million ha	%	%	%	%	ha/person	%
	2009	2009	2009	2009	2009	2009	1970-2009
NORTH AFRICA	573.8	17.5	0.9	4.0	12.6	0.1	−1.8
Algeria	238.2	17.4	0.4	3.1	13.8	0.2	−1.9
Egypt	99.5	3.7	0.8	2.9		0.0	−1.9
Libyan Arab Jamahiriya	176.0	8.8	0.2	1.0	7.7	0.3	−2.9
Morocco	44.6	67.3	2.2	18.0	47.1	0.3	−1.5
Tunisia	15.5	63.0	14.3	17.4	31.2	0.3	−2.2
WEST AFRICA	606.1	47.1	2.0	13.6	31.5	0.3	−1.6
Benin	11.1	29.8	2.7	22.1	5.0	0.3	−1.0
Burkina Faso	27.4	43.7	0.2	21.6	21.9	0.4	−0.1
Cape Verde	0.4	21.8	0.7	14.9	6.2	0.1	−0.3
Cote d'Ivoire	31.8	63.8	13.5	8.8	41.5	0.1	−2.0
Gambia	1.0	66.5	0.5	40.0	26.0	0.2	−0.4
Ghana	22.8	68.1	12.3	19.3	36.5	0.2	−0.1
Guinea	24.6	58.0	2.8	11.6	43.5	0.3	−2.6
Guinea-Bissau	2.8	58.0	8.9	10.7	38.4	0.2	−1.8
Liberia	9.6	27.1	2.2	4.2	20.8	0.1	−2.3
Mali	122.0	33.7	0.1	5.2	28.4	0.4	1.0
Mauritania	103.1	38.5	0.0	0.4	38.1	0.1	−1.9
Niger	126.7	34.6	0.0	11.8	22.7	1.0	−2.4
Nigeria	91.1	81.8	3.3	37.3	41.2	0.2	−2.0
Senegal	19.3	49.4	0.3	20.0	29.1	0.3	−2.2
Sierra Leone	7.2	47.7	1.8	15.1	30.7	0.2	0.5
Togo	5.4	62.1	3.3	40.4	18.4	0.4	−2.1
CENTRAL AFRICA	525.0	19.5	0.5	3.8	15.2	0.2	−2.4
Cameroon	47.3	19.8	3.0	12.6	4.2	0.3	−2.4
Central African Republic	62.3	8.4	0.1	3.1	5.1	0.5	−1.9
Chad	125.9	39.2	0.0	3.4	35.7	0.4	−1.8
Congo	34.1	30.9	0.2	1.5	29.3	0.1	−2.8
Democratic Republic of the Congo	226.7	9.9	0.3	3.0	6.6	0.1	−2.8
Equatorial Guinea	2.8	10.9	2.5	4.7	3.7	0.2	−2.0
Gabon	25.8	19.9	0.6	1.3	18.1	0.2	−1.1
Sao Tome and Principe	0.1	58.3	46.9	10.4	1.0	0.1	4.0
EAST AFRICA	583.3	52.5	1.1	10.3	41.1	0.2	−1.8
Burundi	2.6	83.7	13.6	35.0	35.0	0.1	−2.2
Djibouti	2.3	73.4		0.1	73.3	0.0	−2.5
Eritrea	10.1	75.2	0.0	6.8	68.3	0.1	
Ethiopia	100.0	35.0	1.0	13.9	20.0	0.2	
Kenya	56.9	48.1	1.1	9.5	37.4	0.1	−2.1
Rwanda	2.5	81.1	11.3	52.7	17.0	0.1	−0.3
Somalia	62.7	70.2	0.0	1.6	68.5	0.1	−2.2
Sudan (former)	237.6	57.5	0.1	8.5	49.0	0.6	−1.4
Uganda	20.0	69.9	11.3	33.0	25.6	0.2	−1.7
United Republic of Tanzania	88.6	40.1	1.7	11.3	27.1	0.2	−2.0
SOUTHERN AFRICA	649.6	55.7	0.4	6.0	49.2	0.2	−1.6
Angola	124.7	46.8	0.2	3.2	43.3	0.2	−2.1
Botswana	56.7	45.6	0.0	0.4	45.2	0.1	−3.8
Comoros	0.2	83.3	32.2	43.0	8.1	0.1	−2.6
Lesotho	3.0	77.0	0.1	11.0	65.9	0.2	−2.1
Madagascar	58.2	70.2	1.0	5.1	64.1	0.1	−1.9
Malawi	9.4	59.1	1.3	38.2	19.6	0.2	−1.2
Mauritius	0.2	48.3	2.0	42.9	3.4	0.1	−1.5
Mozambique	78.6	62.7	0.3	6.4	56.0	0.2	−0.7
Namibia	82.3	47.1	0.0	1.0	46.2	0.4	−2.2
Seychelles	0.0	6.5	4.3	2.2		0.0	−1.2
South Africa	121.4	81.7	0.8	11.8	69.1	0.3	−1.7

TABLE 3: Land availability (continued)

	Land area	Share of land area				Arable land	
	total	agricultural	permanent crops	arable	pasture	hectares per person	growth (p.a.)
	million ha	%	%	%	%	ha/person	%
	2009	2009	2009	2009	2009	2009	1970-2009
Swaziland	1.7	71.0	0.9	10.2	60.0	0.2	−1.8
Zambia	74.3	31.5	0.0	4.5	26.9	0.3	−2.4
Zimbabwe	38.7	42.4	0.3	10.8	31.3	0.3	−0.7
AFRICA	2 964.7	39.2	1.0	7.6	30.6	0.2	−1.8
ECOWAS	503.0	48.9	2.4	16.3	30.2	0.3	−1.6
SADC	964.7	43.5	0.5	5.8	37.2	0.2	−1.9
COMESA	1 116.9	31.9	0.7	6.7	24.5	0.2	−1.8
UMA	577.4	23.6	0.8	3.5	19.3	0.2	−1.9
ECCAS	652.2	25.0	0.5	3.8	20.7	0.2	−2.4
IGAD	489.6	54.4	0.9	9.8	43.8	0.2	−1.8
CEMAC	298.2	26.8	0.6	4.4	21.8	0.3	−2.1
UEMOA	346.4	39.0	1.5	11.2	26.2	0.4	−1.5
CEN-SAD	1 499.5	41.1	1.2	8.8	31.2	0.2	−1.6
ASIA Developing	3 057.1	53.5	2.5	15.3	35.6	0.1	−1.4
LAC	2 024.1	35.7	1.0	7.4	27.3	0.3	−1.0
DEVELOPED REGIONS	4 903.5	27.9	0.5	11.0	16.4	0.4	−1.0
WORLD	13 003.5	37.6	1.2	10.6	25.8	0.2	−1.5

TABLE 4: Water resources and irrigation

	Water resources		Irrigation			
	renewable		irrigation potential	total area equipped for irrigation	% of equip. area irrigated by groundwater	% of equip. area actually irrigated
	m^3/person/yr	m^3/person/yr	thousand ha	thousand ha	%	%
	1992	2009	2008	2008	2008	2008
NORTH AFRICA				6 340		
Algeria	439	334	510	569	64	80
Egypt	971	719	4 420	3 422	10	100
Libyan Arab Jamahiriya	133	96	40	470	99	67
Morocco	1 129	917	1 664	1 485	46	98
Tunisia	539	443	560	394	59	100
WEST AFRICA				997		
Benin	5 166	3 068	322	12	18	10
Burkina Faso	1 270	782	165	25	12	100
Cape Verde	822	610	3	3	14	66
Cote d'Ivoire						
Gambia	7 737	4 756	80	2	1	65
Ghana	3 398	2 233	1 900	31	20	90
Guinea	34 952	23 153	520	95	0	100
Guinea-Bissau	29 273	20 889	281	23	22	100
Liberia	112 950	60 480	600	2	1	
Mali	11 018	6 707	566	236	0	75
Mauritania	5 408	3 375	250	45	11	51
Niger	4 054	2 248	270	74	2	89
Nigeria	2 794	1 853	2 331	293	23	75
Senegal	5 047	3 205	409	120	9	97
Sierra Leone	40 201	27 879	807	29	1	
Togo	3 845	2 491	180	7	1	86
CENTRAL AFRICA				83		
Cameroon	22 161	14 889	290	26	4	
Central African Republic	46 807	33 441	1 900	0	0	51
Chad	6 731	3 932	335	30	20	87
Congo	330 159	211 114	340	2	0	11
Democratic Republic of the Congo	32 527	19 983	7 000	11	0	76
Equatorial Guinea	65 000	38 179	30			
Gabon	165 489	110 961	440	4	0	
Sao Tome and Principe	18 017	13 374	11	10	0	
EAST AFRICA				2 702		
Burundi	2 149	1 535	215	21	0	
Djibouti	505	344	2	1	100	38
Eritrea		1 236	188	22	24	62
Ethiopia		1 503	2 700	290	1	
Kenya	1 226	778	539	103	1	94
Rwanda	1 472	921	165	9	1	
Somalia	2 247	1 612	240	200	5	
Sudan (former)	2 315	1 518	2 784	1 863	4	43
Uganda	3 485	2 039	90	9	1	64
United Republic of Tanzania	3 535	2 212	2 132	184	9	
SOUTHERN AFRICA				3 251		
Angola	13 451	7 976	3 700	80	20	29
Botswana	8 355	6 176	13	1	46	100
Comoros	2 609	1 676	0	0	4	65
Lesotho	1 779	1 406	13	3	2	3
Madagascar	28 142	16 746	1 517	1 086	0	100
Malawi	1 785	1 197	162	56	0	96
Mauritius	2 526	2 129	33	21	25	98
Mozambique	15 163	9 497	3 072	118	1	34

TABLE 4: Water resources and irrigation (continued)

	Water resources		Irrigation			
	renewable		irrigation potential	total area equipped for irrigation	% of equip. area irrigated by groundwater	% of equip. area actually irrigated
	m^3/person/yr	m^3/person/yr	thousand ha	thousand ha	%	%
	1992	2009	2008	2008	2008	2008
Namibia	11 712	7 904	47	8	22	100
Seychelles			1	0	0	77
South Africa	1 294	1 005	1 500	1 498	9	100
Swaziland	4 967	3 861	93	50	2	90
Zambia	12 718	8 268	523	156	4	100
Zimbabwe	1 817	1 603	366	174	12	71
AFRICA				13 374		
ECOWAS				952		
SADC				3 446		
COMESA				7 764		
UMA				2 963		
ECCAS				184		
IGAD				2 488		
CEMAC				62		
UEMOA				497		
CEN-SAD				8 994		
ASIA Developing				218 918		
LAC				18 502		
DEVELOPED REGIONS						
WORLD	7 878	6 242		304 398	38	

TABLE 5: Labour force structure

	Labour force	Share of employment in			Agricultural employment by gender			
	total	agriculture	services	industry	female (share of female empl)	male (share of male empl)	female (share of female empl)	male (share of male empl)
	million people	%	%	%	%	%	%	%
	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*
NORTH AFRICA								
Algeria	11.2							
Egypt	27.1	31.6	45.3	23.0	45.6	28.2	45.6	28.2
Libyan Arab Jamahiriya	2.4							
Morocco	11.4	40.9	37.2	21.7	59.2	34.2	59.2	34.2
Tunisia	3.8							
WEST AFRICA								
Benin	3.6							
Burkina Faso	7.5	84.8	12.2	3.1	87.2	82.3	87.2	82.3
Cape Verde	0.2							
Cote d'Ivoire	7.8							
Gambia	0.8							
Ghana	10.4	57.2	29.1	13.6	53.2	61.4	53.2	61.4
Guinea	4.1							
Guinea-Bissau	0.6							
Liberia	1.4	48.9	41.9	9.2	48.3	49.5	48.3	49.5
Mali	4.3	66.0	28.3	5.6	63.9	67.8	63.9	67.8
Mauritania	1.1							
Niger	5.1	56.9	31.1	11.1	37.8	64.1	37.8	64.1
Nigeria	50.3							
Senegal	5.4	33.7	36.1	14.8	33.0	34.1	33.0	34.1
Sierra Leone	2.3							
Togo	2.9	54.1	37.5	6.8	48.2	60.5	48.2	60.5
CENTRAL AFRICA								
Cameroon	8.2							
Central African Republic	2.1							
Chad	4.4							
Congo	1.7	35.4	42.2	20.6	39.3	31.3	39.3	31.3
Democratic Republic of the Congo	25.3							
Equatorial Guinea	0.4							
Gabon	0.6	24.2	64.0	11.8	33.7	17.3	33.7	17.3
Sao Tome and Principe	0.1							
EAST AFRICA								
Burundi	4.3							
Djibouti	0.3							
Eritrea	2.6							
Ethiopia	40.8	79.3	13.0	6.6	10.3	8.7	10.3	8.7
Kenya	15.5	61.1	32.2	6.7	68.0	54.5	68.0	54.5
Rwanda	5.2	78.8	16.6	3.8				
Somalia	2.9							
Sudan (former)	10.8							
Uganda	13.4	65.6	28.4	6.0	81.7	68.6	81.7	68.6
United Republic of Tanzania	22.1	76.5	19.2	4.3	80.0	72.7	80.0	72.7
SOUTHERN AFRICA								
Angola	7.1							
Botswana	1.0	29.9	54.9	15.2	24.3	35.1	24.3	35.1
Comoros	0.2							
Lesotho	0.9							
Madagascar	10.1	80.4	15.8	3.7	81.1	79.8	81.1	79.8
Malawi	6.7							
Mauritius	0.6	8.7	63.1	28.2	7.8	9.5	7.8	9.5
Mozambique	11.1							
Namibia	0.9	16.3	65.9	17.7	8.2	22.7	8.2	22.7

TABLE 5: Labour force structure (continued)

	Labour force	Share of employment in			Agricultural employment by gender			
	total	agriculture	services	industry	female (share of female empl)	male (share of male empl)	female (share of female empl)	male (share of male empl)
	million people	%	%	%	%	%	%	%
	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*
Seychelles								
South Africa	18.2	5.1	69.8	25.0	3.7	6.3	3.7	6.3
Swaziland	0.4							
Zambia	5.5	72.2	20.6	7.1	78.9	65.9	78.9	65.9
Zimbabwe	6.6							
AFRICA								
ECOWAS								
SADC								
COMESA								
UMA								
ECCAS								
IGAD		73.0	20.1	6.2	74.5	72.7	74.5	72.7
CEMAC								
UEMOA								
CEN-SAD								
ASIA Developing		46.3	32.4	21.2				
LAC		14.3	62.6	22.7	7.8	18.7	7.8	18.7
DEVELOPED REGIONS		3.8	73.1	22.4	3.1	4.4	3.1	4.4
WORLD	3 219.9	35.0	42.9	21.9				

TABLE 6: Employment

	Employment to population ratio			Labour participation rate		Unemployment	
	age 15+ female	age 15+ male	age 15+ total	age 15+ female	age 15+ male	female	total
	% 2005-2010*	% 2005-2010*	% 2005-2010*	% 2005-2010*	% 2005-2010*	% 2005-2010*	% 2005-2010*
NORTH AFRICA	18.9	67.8	43.1	22.5	73.6	19.1	9.7
Algeria	13.0	64.1	38.6	14.7	71.7	20.0	11.4
Egypt	18.7	70.0	44.2	23.5	74.2	22.9	9.4
Libyan Arab Jamahiriya	26.3	71.8	49.2	30.4	76.9		
Morocco	23.5	68.0	45.0	25.9	74.7	10.5	10.0
Tunisia	21.3	60.3	40.7	25.3	69.7	17.3	14.2
WEST AFRICA	50.1	66.3	58.2	53.2	71.0		
Benin	66.9	77.6	72.1	67.1	78.3		
Burkina Faso	75.7	86.7	81.1	77.5	90.5	1.7	3.3
Cape Verde	46.3	76.5	61.2	50.2	83.1		
Cote d'Ivoire	49.9	77.6	64.2	51.5	81.3		
Gambia	66.7	76.7	71.5	72.4	83.2		
Ghana	64.3	69.1	66.8	66.8	71.6	3.6	3.6
Guinea	63.6	75.4	69.5	65.2	78.3		
Guinea-Bissau	62.8	72.3	67.5	67.8	78.2		
Liberia	55.4	61.9	58.6	57.8	64.0	4.1	3.7
Mali	34.2	63.0	48.3	36.8	69.7		
Mauritania	19.2	52.9	36.0	28.4	79.1		
Niger	38.3	84.9	61.3	39.8	90.1		
Nigeria	44.4	58.4	51.4	47.8	63.0		
Senegal	57.5	81.5	69.2	66.0	88.3	13.6	10.0
Sierra Leone	64.9	65.7	65.3	66.4	68.9		
Togo	74.2	75.0	74.6	80.3	81.2		
CENTRAL AFRICA	63.7	69.4	66.5	68.3	74.7		
Cameroon	61.4	73.6	67.5	63.9	77.3	3.3	2.9
Central African Republic	67.1	78.6	72.7	72.5	85.2		
Chad	59.4	74.1	66.7	64.5	80.2		
Congo	63.5	67.5	65.5	68.2	72.7		
Democratic Republic of the Congo	65.1	67.1	66.1	70.2	72.4		
Equatorial Guinea	74.6	85.1	80.1	80.6	92.3		
Gabon	47.8	52.8	50.3	56.0	64.9		
Sao Tome and Principe				43.2	76.4	24.5	16.7
EAST AFRICA	62.7	78.2	70.4	68.8	83.1		
Burundi	77.3	75.6	76.5	83.7	81.9		
Djibouti				35.5	67.0		
Eritrea	73.4	82.8	77.9	79.6	90.0		
Ethiopia	71.7	87.4	79.5	78.3	89.9	29.9	20.5
Kenya	55.4	64.9	60.1	61.2	71.5		
Rwanda	86.1	84.5	85.3	86.3	85.2		
Somalia	34.8	71.2	52.6	37.6	77.0		
Sudan (former)	26.1	71.2	48.6	30.8	76.5		
Uganda	72.3	77.0	74.6	76.2	79.6	5.1	4.2
United Republic of Tanzania	77.3	80.6	78.9	88.3	90.3	5.8	4.3
SOUTHERN AFRICA	58.8	67.3	63.0	66.9	76.2		
Angola	58.0	71.1	64.4	62.7	77.0		
Botswana	57.3	69.3	63.4	71.6	81.5	19.9	17.6
Comoros	32.2	74.6	53.4	34.7	80.4		
Lesotho	40.6	54.1	47.2	58.7	73.3	28.0	25.3
Madagascar	80.6	87.2	83.9	83.5	88.7	3.5	2.6
Malawi	77.2	76.4	76.8	85.0	81.2		
Mauritius	38.3	72.2	54.9	43.9	75.7	12.8	7.7
Mozambique	79.8	76.6	78.3	86.3	83.0		
Namibia	33.5	46.7	40.0	58.4	69.8	43.0	37.6
Seychelles						4.9	5.5

TABLE 6: Employment (continued)

	Employment to population ratio			Labour participation rate		Unemployment	
	age 15+ female	age 15+ male	age 15+ total	age 15+ female	age 15+ male	female	total
	%	%	%	%	%	%	%
	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*
South Africa	31.7	46.8	39.1	43.8	60.4	25.9	23.8
Swaziland	32.2	56.0	43.7	43.5	70.7		
Zambia	63.4	70.4	66.9	73.3	85.7		15.9
Zimbabwe	80.5	84.9	82.6	82.9	89.5		
AFRICA	51.3	70.3	60.7	56.3	75.9		
ECOWAS	50.5	66.5	58.5	53.5	70.9		
SADC	63.4	69.4	66.4	71.3	77.6		
COMESA	55.2	75.1	65.1	60.4	79.6		
UMA	19.0	65.2	41.8	21.7	73.2	14.5	10.1
ECCAS	63.7	70.0	66.9	68.5	75.4		
IGAD	57.9	77.4	67.6	63.3	81.5		
CEMAC	61.4	73.1	67.2	65.4	78.3		
UEMOA	54.2	78.3	66.2	57.1	83.0		
CEN-SAD	41.8	67.7	54.7	45.6	72.8		
ASIA Developing	45.8	76.5	61.5	48.1	80.2		5.4
LAC	48.4	75.3	61.5	53.2	79.9	9.8	8.0
DEVELOPED REGIONS	48.9	62.0	55.0	53.3	68.1	8.4	8.8
WORLD	47.9	72.7	60.3	51.2	77.2		6.1

TABLE 7: Capital and investment in agriculture: total

	Agricultural capital stock					
	constant 2005 prices				growth (% p.a.)	
	million US$ 1980	million US$ 1990	million US$ 2000	million US$ 2007	% 1990-2000	% 2000-2007
NORTH AFRICA	67564.0	77996.6	89391.6	95179.8	1.4	0.9
Algeria	9406.8	12186.0	13422.5	14545.2	1.0	1.2
Egypt	22972.3	26280.8	33097.1	36793.4	2.3	1.5
Libyan Arab Jamahiriya	4751.9	7216.9	7169.8	7531.4	−0.1	0.7
Morocco	23390.2	24123.8	25957.1	26006.1	0.7	0.0
Tunisia	7042.8	8189.2	9744.9	10303.7	1.8	0.8
WEST AFRICA	78497.0	92374.4	118377.6	142135.1	2.5	2.6
Benin	1642.2	1832.5	2578.0	2956.7	3.5	2.0
Burkina Faso	3395.1	5276.6	7672.6	10177.3	3.8	4.1
Cape Verde	76.8	123.7	153.9	207.5	2.2	4.4
Cote d'Ivoire	4600.3	6634.4	7373.7	7852.5	1.1	0.9
Gambia	219.8	248.1	282.8	376.0	1.3	4.2
Ghana	3983.1	4540.4	5895.6	7208.7	2.6	2.9
Guinea	2220.2	2292.2	3890.1	5398.9	5.4	4.8
Guinea-Bissau	873.7	1167.9	1717.8	1820.7	3.9	0.8
Liberia	562.2	504.8	598.0	637.3	1.7	0.9
Mali	7134.7	6734.7	10026.4	12642.0	4.1	3.4
Mauritania	2575.4	2934.6	3992.7	4330.7	3.1	1.2
Niger	8524.9	7542.9	10610.0	13095.5	3.5	3.1
Nigeria	33843.6	41305.8	50742.0	60871.4	2.1	2.6
Senegal	6976.4	8442.8	9813.8	10560.6	1.5	1.1
Sierra Leone	943.8	1320.3	1456.6	2224.4	1.0	6.2
Togo	924.7	1472.9	1573.7	1774.9	0.7	1.7
CENTRAL AFRICA	17295.4	20065.4	22017.0	23722.3	0.9	1.1
Cameroon	5436.6	6640.8	7294.2	7423.3	0.9	0.3
Central African Republic	1290.0	1719.3	2201.1	2492.1	2.5	1.8
Chad	4313.0	4380.3	5731.0	7110.6	2.7	3.1
Congo	451.0	511.4	572.5	635.7	1.1	1.5
Democratic Republic of the Congo	4794.8	5754.6	5098.5	5022.5	−1.2	−0.2
Equatorial Guinea	423.9	426.7	429.6	369.1	0.1	−2.1
Gabon	389.2	425.1	467.3	443.5	1.0	−0.7
Sao Tome and Principe	197.0	207.2	222.9	225.3	0.7	0.2
EAST AFRICA	103010.7	118911.6	140346.7	166898.5	1.7	2.5
Burundi	1373.1	1367.4	1237.4	1685.2	−1.0	4.5
Djibouti	242.6	318.0	385.1	386.5	1.9	0.1
Eritrea			3518.9	3396.1		−0.5
Ethiopia			33094.4	48890.8		5.7
Kenya	12787.2	17497.4	16175.1	18542.0	−0.8	2.0
Rwanda	1268.8	1343.8	1420.1	2007.4	0.6	5.1
Somalia	11712.1	13552.3	13203.3	13261.2	−0.3	0.1
Sudan (former)	25365.2	28075.5	43763.9	48105.8	4.5	1.4
Uganda	4875.6	6139.7	7367.5	8729.8	1.8	2.5
United Republic of Tanzania	15337.3	16982.9	20180.8	21893.8	1.7	1.2
SOUTHERN AFRICA	87972.6	94741.0	97653.0	98055.5	0.3	0.1
Angola	5841.6	5963.2	6380.0	6663.0	0.7	0.6
Botswana	1865.0	2137.5	2083.2	1869.9	−0.3	−1.5
Comoros	97.3	110.4	133.8	140.1	1.9	0.7
Lesotho	995.9	1046.3	1144.0	1082.2	0.9	−0.8
Madagascar	14780.8	17477.6	17980.5	17688.7	0.3	−0.2
Malawi	1631.4	1914.0	2515.4	3125.0	2.8	3.1
Mauritius	230.5	252.9	266.6	273.6	0.5	0.4
Mozambique	2916.4	3667.7	4504.5	4952.8	2.1	1.4
Namibia	2736.0	2386.2	2580.6	2652.9	0.8	0.4
Seychelles	12.9	15.1	15.9	11.1	0.5	−5.1
South Africa	44404.6	44169.1	44542.2	43831.8	0.1	−0.2

TABLE 7: Capital and investment in agriculture: total (continued)

	Agricultural capital stock					
	constant 2005 prices				growth (% p.a.)	
	million US$ 1980	million US$ 1990	million US$ 2000	million US$ 2007	% 1990-2000	% 2000-2007
Swaziland	811.2	887.4	863.6	820.3	−0.3	−0.7
Zambia	3 751.1	4 926.3	5 410.6	5 986.6	0.9	1.5
Zimbabwe	7 897.9	9 787.2	9 232.2	8 957.5	−0.6	−0.4
AFRICA	354 574.0	404 436.7	468 183.7	526 416.7	1.5	1.7
ECOWAS	75 921.6	89 439.8	114 384.9	137 804.4	2.5	2.7
SADC	108 007.4	117 368.1	122 798.6	124 831.7	0.5	0.2
COMESA	137 693.4	162 999.6	188 746.5	218 093.7	1.5	2.1
UMA	47 167.1	54 650.5	60 287.2	62 717.1	1.0	0.6
ECCAS	24 510.1	27 396.0	29 634.4	32 070.6	0.8	1.1
IGAD	85 031.5	99 217.4	117 508.3	141 312.1	1.7	2.7
CEMAC	12 303.7	14 103.6	16 695.7	18 474.5	1.7	1.5
UEMOA	34 072.0	39 104.6	51 365.9	60 880.2	2.8	2.5
CEN-SAD	192 581.7	223 921.8	279 527.9	316 221.9	2.2	1.8
ASIA Developing	780 317.9	967 005.4	1 246 622.5	1 373 406.2	2.6	1.4
LAC	594 289.1	650 882.0	684 301.9	727 155.6	0.5	0.9
DEVELOPED REGIONS	2 490 463.5	2 594 679.8	2 221 481.1	2 164 432.8	−1.5	−0.4
WORLD	4 581 002.2	5 053 080.9	5 138 395.0	5 356 830.5	0.2	0.6

TABLE 8: Capital and investment in agriculture: components

	Share of components in capital stock					
	land	plantation	livestock			machinery & equipment
	development	crops	fixed assets	inventory	structures	
	%	%	%	%	%	%
	2007	2007	2007	2007	2007	2007
NORTH AFRICA	61.7	6.5	19.8	3.5	1.6	7.0
Algeria	42.0	6.9	28.8	5.1	1.4	15.8
Egypt	73.6	2.3	15.1	2.7	2.3	4.0
Libyan Arab Jamahiriya	64.6	5.6	15.4	2.7	0.5	11.1
Morocco	63.2	4.9	22.9	4.0	1.2	3.7
Tunisia	40.5	25.5	19.2	3.4	0.9	10.5
WEST AFRICA	28.9	11.8	44.7	7.9	4.5	2.3
Benin	29.8	11.8	42.8	7.5	6.1	2.0
Burkina Faso	11.0	0.5	65.5	11.6	8.8	2.6
Cape Verde	19.1	1.9	64.5	11.4	2.5	0.7
Cote d'Ivoire	16.9	65.3	11.4	2.0	1.6	2.7
Gambia	21.8	1.1	51.2	9.0	11.2	5.5
Ghana	16.7	37.0	34.4	6.1	2.3	3.6
Guinea	12.4	8.0	59.3	10.5	7.2	2.6
Guinea-Bissau	24.9	29.3	35.6	6.3	3.0	0.9
Liberia	23.8	45.4	20.7	3.6	0.9	5.7
Mali	30.2	1.1	51.5	9.1	6.8	1.4
Mauritania	8.9	0.3	70.9	12.5	6.6	0.7
Niger	27.7	0.3	54.1	9.5	7.3	1.1
Nigeria	40.1	11.0	36.6	6.5	3.2	2.7
Senegal	11.9	0.4	70.3	12.4	3.5	1.4
Sierra Leone	44.2	9.7	34.5	6.1	3.3	2.1
Togo	34.7	9.0	43.2	7.6	2.6	2.9
CENTRAL AFRICA	25.5	11.9	43.5	7.7	7.7	3.8
Cameroon	24.0	17.5	41.4	7.3	7.8	1.9
Central African Republic	15.8	2.6	56.0	9.9	13.8	1.8
Chad	19.5	0.5	57.5	10.1	10.9	1.5
Congo	32.5	12.6	40.1	7.1	2.0	5.7
Democratic Republic of the Congo	38.4	16.6	27.5	4.9	2.1	10.6
Equatorial Guinea	27.1	66.8	3.4	0.6	0.1	1.9
Gabon	26.4	38.3	22.7	4.0	0.9	7.7
Sao Tome and Principe	54.1	42.7	1.9	0.3	0.2	0.8
EAST AFRICA	18.6	3.7	56.8	10.0	8.4	2.4
Burundi	16.0	17.8	46.7	8.2	3.4	7.7
Djibouti	2.4	0.0	73.2	12.9	9.1	2.4
Eritrea	17.8	0.1	63.4	11.2	5.8	1.8
Ethiopia	5.9	1.2	69.1	12.2	9.3	2.3
Kenya	15.4	4.1	59.0	10.4	7.2	3.8
Rwanda	11.4	9.0	57.5	10.1	5.2	6.8
Somalia	21.7	0.4	59.3	10.5	7.3	0.8
Sudan (former)	29.4	0.4	50.9	9.0	9.0	1.3
Uganda	12.8	19.8	45.9	8.1	8.3	5.2
United Republic of Tanzania	27.9	11.1	42.6	7.5	7.9	2.9
SOUTHERN AFRICA	32.4	5.6	38.9	6.9	11.2	5.0
Angola	32.7	7.4	42.5	7.5	5.9	4.0
Botswana	4.6	0.1	65.8	11.6	12.7	5.2
Comoros	17.3	47.5	21.3	3.8	3.8	6.3
Lesotho	12.2	0.5	64.7	11.4	7.1	4.0
Madagascar	46.5	4.2	36.3	6.4	4.9	1.6
Malawi	35.5	4.0	42.8	7.6	3.3	6.7
Mauritius	60.9	1.8	24.8	4.4	1.0	7.2
Mozambique	37.0	5.3	38.9	6.9	3.4	8.7
Namibia	14.8	0.5	61.4	10.8	9.4	3.1

TABLE 8: Capital and investment in agriculture: components (continued)

	Share of components in capital stock					
	land	plantation	livestock			machinery & equipment
	development	crops	fixed assets	inventory	structures	
	%	%	%	%	%	%
	2007	2007	2007	2007	2007	2007
Seychelles	3.6	43.0	33.9	6.0	1.0	12.5
South Africa	33.8	8.3	28.4	5.0	18.3	6.3
Swaziland	37.5	2.4	44.3	7.8	6.7	1.3
Zambia	30.9	0.8	50.7	8.9	4.6	4.1
Zimbabwe	7.7	0.6	68.5	12.1	5.8	5.3
AFRICA	32.1	7.1	42.9	7.6	6.6	3.8
ECOWAS	29.5	12.1	43.9	7.7	4.4	2.3
SADC	31.9	6.9	39.1	6.9	10.3	4.9
COMESA	31.4	3.2	47.3	8.3	6.5	3.4
UMA	51.0	8.5	26.1	4.6	1.5	8.3
ECCAS	26.5	11.3	43.4	7.7	7.1	4.0
IGAD	17.3	2.4	59.1	10.4	8.6	2.2
CEMAC	21.6	10.3	48.3	8.5	9.3	2.0
UEMOA	21.5	10.6	51.3	9.1	5.7	1.8
CEN-SAD	36.7	7.3	40.9	7.2	5.0	2.9
ASIA Developing	43.9	12.7	23.0	4.1	3.5	12.9
LAC	24.3	6.9	47.1	8.3	5.2	8.1
DEVELOPED REGIONS	24.8	4.5	18.5	3.3	6.4	42.5
WORLD	31.2	7.7	27.4	4.8	5.1	23.8

TABLE 9: Additional investment indicators

	Gross capital formation		Foreign direct investment		Research and development		Net ODA received	
	share of GDP		net inflows		expenditure	number of persons	share of GNI	current per capita
	%	%	current million US$	current million US$	share of GDP %	people	%	US$
	2000	2010	2000	2010	2005-2010*	2005-2010*	2007-2010*	2007-2010*
NORTH AFRICA	21.9	29.6	2629.0	13075.1	0.3	616.8		
Algeria	25.0	41.4	280.1	2264.0	0.1	170.1	0.1	5.6
Egypt	19.6	18.9	1235.0	6385.6	0.2	420.4	0.3	7.3
Libyan Arab Jamahiriya	13.4		141.0	1784.0			0.1	1.3
Morocco	25.5	35.1	220.7	1240.6	0.6	661.0	1.1	31.1
Tunisia	26.1	26.4	752.2	1400.9	1.1	1862.5	1.3	52.2
WEST AFRICA			1963.4	11326.5	0.2			
Benin	18.9	26.1	59.7	110.9			10.5	77.9
Burkina Faso	16.8		23.2	37.1	0.2	45.1	12.0	64.5
Cape Verde	30.7	46.8	33.4	111.7			20.7	661.1
Cote d'Ivoire	10.8	13.8	234.7	417.9		70.4	3.9	42.8
Gambia	4.6	19.4		37.4	0.0		11.9	69.5
Ghana	24.0	26.8	165.9	2527.3	0.2	17.3	5.3	69.4
Guinea	19.7	20.0	9.9	101.3			5.1	21.8
Guinea-Bissau	11.3		0.7	8.8			16.7	92.0
Liberia	7.5	34.5	20.8	452.3			175.5	355.3
Mali	24.6		82.4	147.6	0.2	37.7	12.1	70.8
Mauritania	20.6	27.3	40.1	13.6			10.6	108.2
Niger	11.4		8.4	946.9		7.8	13.8	48.0
Nigeria			1140.1	6048.6	0.2	38.6	1.2	13.0
Senegal	20.5	29.0	62.9	237.2	0.4	384.1	7.3	74.6
Sierra Leone	6.9	15.8	39.0	86.6			24.4	79.6
Togo	15.2	18.9	41.9	41.1		38.2	13.3	69.5
CENTRAL AFRICA	24.0		628.4	7498.2				
Cameroon	16.7		158.8	−0.6			2.4	27.6
Central African Republic	9.5		0.8	72.0			13.2	59.3
Chad	23.3	32.7	115.2	781.4			6.2	43.3
Congo	22.6	20.5	165.9	2816.0			14.5	324.6
Democratic Republic of the Congo	3.5		72.0	2939.3	0.5		29.0	53.7
Equatorial Guinea	61.3	28.2	154.5	695.0			0.9	120.9
Gabon	21.9	26.6	−42.6	170.4	0.6		0.9	69.1
Sao Tome and Principe			3.8	24.6			24.2	298.1
EAST AFRICA	18.3	22.8	1313.3	3762.3				
Burundi	2.9	18.0	11.7	0.8			31.0	75.1
Djibouti	8.8		3.3	36.5			14.9	148.8
Eritrea	23.8		27.9	55.6			7.7	30.6
Ethiopia	20.3	21.5	134.6	288.3	0.2	20.8	11.9	42.5
Kenya	17.4	19.3	110.9	185.8	0.4	56.2	5.1	40.2
Rwanda	18.3	21.0	8.3	42.3		11.9	18.5	97.2
Somalia			0.3	112.0				53.3
Sudan (former)	18.3	23.3	392.2	2063.7	0.3		3.4	47.7
Uganda	19.5	23.5	160.7	543.9	0.4		10.2	51.6
United Republic of Tanzania	16.8	28.9	463.4	433.4	0.4		13.0	66.0
SOUTHERN AFRICA	16.9	18.7	2829.6	3542.4	0.8			
Angola	15.1	12.6	878.6	−3227.2			0.3	12.5
Botswana	31.8	29.5	57.2	265.0	0.5		1.1	77.8
Comoros	10.1		0.1	9.4			12.5	91.5
Lesotho	44.2	28.0	32.4	117.0	0.0	21.3	9.5	118.0
Madagascar	15.0		83.0	860.4	0.1	46.2	5.4	22.7
Malawi	13.6	24.8	26.0	140.0		29.9	20.8	68.6
Mauritius	26.1	23.9	265.6	431.0	0.4		1.3	97.8
Mozambique	31.0	24.7	139.2	789.0	0.2	15.8	21.4	83.4
Namibia	17.1	25.7	118.9	795.9			2.4	112.3
Seychelles	25.2		24.3	167.3	0.3	155.7	6.3	647.7

TABLE 9: Additional investment indicators (continued)

	Gross capital formation		Foreign direct investment		Research and development		Net ODA received	
	share of GDP		net inflows		expenditure	number of persons	share of GNI	current per capita
	%	%	current million US$	current million US$	share of GDP %	people	%	US$
	2000	2010	2000	2010	2005-2010*	2005-2010*	2007-2010*	2007-2010*
South Africa	15.9	19.3	968.8	1 224.3	0.9	395.6	0.3	20.6
Swaziland	18.1	11.1	90.7	135.7			2.6	86.6
Zambia	17.4	22.4	121.7	1 729.3	0.3	43.3	6.4	70.7
Zimbabwe	13.6	3.0	23.2	105.4			10.1	58.3
AFRICA	19.6	24.1	9 363.7	39 204.5				
ECOWAS			1 923.3	11 312.9	0.2			
SADC	16.6	19.1	3 364.9	6 905.8	0.8			
COMESA	17.8	20.1	2 932.2	17 904.3	0.2			
UMA	23.2	36.8	1 434.1	6 703.1				
ECCAS	19.3	17.5	1 518.7	4 271.7				
IGAD	18.7	22.0	829.9	3 285.8	0.2			
CEMAC	27.5		552.6	4 534.2				
UEMOA	16.2		514.1	1 947.6				
CEN-SAD	19.8		4 933.3	25 367.0				
ASIA Developing	29.2	37.0	139 505.2	442 279.6	1.5	539.1		
LAC	20.0	21.9	87 385.2	133 016.8	0.7	479.4		
DEVELOPED REGIONS	21.5	18.1	1 166 585.7	838 746.4	2.4	3 301.6		
WORLD	22.3	19.9	1 408 074.0	1 457 514.9	2.1	1 269.5	0.2	18.9

TABLE 10: Inputs and infrastructure

	Fertilizer consumption		Pesticide consumption		Quality of infrastructure	Lead time to trade	
	per ha of arable land		per ha of arable land		score	export	import
	kg/ha	kg/ha	thousand kg	thousand kg	1 = lowest, 5 = highest score	days	days
	2000-2004*	2005-2009*	2000-2004*	2005-2009*	2010	2008-2010*	2008-2010*
NORTH AFRICA					2.3	13.8	17.2
Algeria	25.1	7.8		2109	2.1	17.0	23.0
Egypt	557.6	502.8			2.2	12.0	12.0
Libyan Arab Jamahiriya	51.7	40.3			2.2		
Morocco	49.0	20.8	28042	25437		13.0	17.0
Tunisia	32.5	42.3		2136	2.6	13.0	17.0
WEST AFRICA					2.1	27.4	31.4
Benin	0.1	0.0			2.5	30.0	32.0
Burkina Faso	11.9	9.1	26	1044	1.9	41.0	49.0
Cape Verde			10			19.0	18.0
Cote d'Ivoire	27.2	15.9			2.4	25.0	36.0
Gambia	7.5	6.8	559	597	2.2	23.0	23.0
Ghana	13.2	11.9	8729	14702	2.5	19.0	29.0
Guinea	1.0	0.6		899	2.1	35.0	32.0
Guinea-Bissau			164		1.6	23.0	22.0
Liberia					2.0	17.0	15.0
Mali	34.0	3.2			2.0	26.0	31.0
Mauritania						37.0	40.0
Niger	0.2	0.1	62	15	2.3	59.0	64.0
Nigeria	4.8	2.1			2.4	24.0	39.0
Senegal	12.5	4.9	563		2.6	11.0	14.0
Sierra Leone					1.6	26.0	31.0
Togo	3.4	3.3			1.8	24.0	28.0
CENTRAL AFRICA						40.2	51.6
Cameroon	11.1	7.4	6728	6248	2.1	23.0	26.0
Central African Republic						54.0	62.0
Chad					2.0	75.0	101.0
Congo	2.7	1.1			1.6	50.0	62.0
Democratic Republic of the Congo	0.2	0.5			2.3	44.0	63.0
Equatorial Guinea						29.0	48.0
Gabon	5.1	6.1			2.1	20.0	22.0
Sao Tome and Principe						27.0	29.0
EAST AFRICA					1.9	34.1	38.9
Burundi	1.1	0.9	1017	610		41.0	60.0
Djibouti					2.3	19.0	18.0
Eritrea	0.0	3.5	55		1.4	50.0	59.0
Ethiopia	5.6	7.9	1260		1.8	43.0	44.0
Kenya	27.7	32.4	3156		2.1	26.0	24.0
Rwanda	1.8	1.1	72		1.6	35.0	34.0
Somalia					1.5		
Sudan (former)	4.6	7.9	532		1.8	32.0	46.0
Uganda	1.5	2.1			2.4	37.0	34.0
United Republic of Tanzania	5.3	8.7			2.0	24.0	31.0
SOUTHERN AFRICA						30.7	35.4
Angola	4.5	1.1			1.7	52.0	49.0
Botswana					2.1	28.0	41.0
Comoros					1.8	30.0	21.0
Lesotho						31.0	35.0
Madagascar	2.2	2.6	43	36	2.6	21.0	24.0
Malawi	34.4	26.6	1264			41.0	51.0
Mauritius	287.8	209.4	2072	2435	2.3	13.0	13.0
Mozambique	2.3	2.9			2.0	23.0	28.0
Namibia	3.2	1.6			1.7	29.0	24.0

TABLE 10: Inputs and infrastructure (continued)

	Fertilizer consumption		Pesticide consumption		Quality of infrastructure	Lead time to trade	
	per ha of arable land		per ha of arable land		score	export	import
	kg/ha	kg/ha	thousand kg	thousand kg	1 = lowest, 5 = highest score	days	days
	2000-2004*	2005-2009*	2000-2004*	2005-2009*	2010	2008-2010*	2008-2010*
Seychelles	11.0	36.0				17.0	18.0
South Africa	54.5	49.2	53 714		3.4	30.0	35.0
Swaziland						18.0	27.0
Zambia	29.9	27.3			1.8	44.0	56.0
Zimbabwe	22.8	28.0				53.0	73.0
AFRICA					2.1	30.5	35.9
ECOWAS					2.1	26.8	30.9
SADC						31.2	37.9
COMESA					2.0	32.0	37.6
UMA						20.0	24.2
ECCAS						41.5	52.2
IGAD					1.9	34.5	37.5
CEMAC						41.8	53.5
UEMOA					2.1	29.9	34.5
CEN-SAD					2.1	29.7	34.3
ASIA Developing					2.6	28.5	30.3
LAC					2.5	18.0	19.9
DEVELOPED REGIONS					3.1	15.2	15.8
WORLD	111.1	122.1			2.6	22.9	25.5

TABLE 11: Macroeconomic environment

	Gross domestic product				Agriculture value added		
	total	per capita	real growth		share of GDP	constant US$ per worker	
	current billion US$	current US$	%	%	%	US$	US$
	2010	2010	2009	2010	2005-2010*	2009	2010
NORTH AFRICA	515.9	3233.2	3.9	4.2			
Algeria	162.0	4566.9	2.4	3.3	6.9	2194.6	2254.2
Egypt	218.9	2698.4	4.7	5.1	14.0	3149.6	3265.0
Libyan Arab Jamahiriya			−2.3	4.2	1.9		
Morocco	90.8	2795.5	4.9	3.1	15.4	3340.5	3315.0
Tunisia	44.2	4193.6	3.1	3.7	8.0	3328.4	3050.2
WEST AFRICA	313.0	1028.6	5.0	6.6			
Benin	6.6	741.1	2.7	2.5	32.2		
Burkina Faso	8.8	535.9	3.2	5.8	33.3		
Cape Verde	1.7	3344.9	3.6	5.4	9.9	2806.2	3334.5
Cote d'Ivoire	22.9	1161.2	3.8	2.6	22.8	1007.8	1056.2
Gambia	1.1	607.6	6.7	5.7	28.5	404.6	440.4
Ghana	32.2	1319.1	4.7	5.7	29.9		
Guinea	4.7	474.5	−0.3	1.9	13.0	232.5	242.2
Guinea-Bissau	0.8	551.3	3.0	3.5			
Liberia	1.0	247.3	4.6	5.1		628.3	672.1
Mali	9.4	613.0	4.5	4.5	36.5		
Mauritania	3.6	1044.5	−1.2	4.7	17.1	779.0	812.5
Niger	5.4	348.8	−0.9	7.5			
Nigeria	196.8	1242.5	7.0	8.4	32.7		
Senegal	12.9	1033.9	2.2	4.2	17.4	265.2	270.6
Sierra Leone	1.9	325.5	3.2	5.0	49.0		
Togo	3.2	526.9	3.2	3.4	42.8	517.3	530.6
CENTRAL AFRICA	86.0	799.3	2.5	6.1			
Cameroon	22.5	1147.0	1.9	3.0	19.5		
Central African Republic	2.0	451.0	1.7	3.3	56.5		
Chad	8.5	760.7	0.3	5.1	13.6		
Congo	12.0	2970.1	7.5	9.1	3.8		
Democratic Republic of the Congo	13.1	198.7	2.8	7.2	42.9	172.7	
Equatorial Guinea	14.5	20703.1	5.7	−0.8	3.2	993.1	
Gabon	13.2	8767.8	−1.4	5.7	4.1	1946.1	1824.5
Sao Tome and Principe	0.2	1215.5	4.0	4.5	16.8		
EAST AFRICA	178.8	665.8	6.8	6.2			
Burundi	2.0	241.8	3.5	3.8	35.1	82.8	84.1
Djibouti			5.0	4.5	3.9		
Eritrea	2.1	403.0	3.9	2.2	14.5	65.8	
Ethiopia	29.7	357.9	10.0	8.0	47.7	219.0	226.3
Kenya	32.2	794.8	2.6	5.0	25.2	336.8	351.2
Rwanda	5.6	529.4	4.1	6.5	32.2		
Somalia							
Sudan (former)	67.0	1538.3	6.0	5.1	23.6	917.7	928.8
Uganda	17.2	514.5	7.2	5.2	24.2	205.0	200.2
United Republic of Tanzania	22.9	526.6	6.7	6.5	28.1	284.5	288.5
SOUTHERN AFRICA	535.8	3285.2	1.9	4.0			
Angola	82.5	4321.9	2.4	1.6	9.8	323.6	333.3
Botswana	14.9	7426.6	−3.7	8.6	2.5	522.2	534.1
Comoros	0.5	736.4	1.8	2.1	46.3	551.4	
Lesotho	2.2	1003.7	3.0	2.4	8.6	194.6	214.6
Madagascar	8.7	421.0	−3.7	−2.0	29.1	187.4	
Malawi	5.1	339.2	7.6	6.6	30.5	171.0	168.6
Mauritius	9.7	7583.9	3.0	4.0	3.6	5538.8	5691.8
Mozambique	9.2	393.7	6.3	7.0	31.9	220.0	233.9
Namibia	11.1	4876.0	−0.8	4.4	7.5	1582.4	880.6
Seychelles	1.0	11129.8	0.7	6.2	1.8	700.7	

TABLE 11: Macroeconomic environment (continued)

	Gross domestic product				Agriculture value added		
	total	per capita	real growth		share of GDP	constant US$ per worker	
	current billion US$	current US$	%	%	%	US$	US$
	2010	2010	2009	2010	2005-2010*	2009	2010
South Africa	363.5	7271.7	−1.7	2.8	2.5	3661.7	3950.9
Swaziland	3.7	3503.2	1.2	2.0	8.0	1136.4	1213.2
Zambia	16.2	1252.7	6.4	7.6	9.2	219.2	214.1
Zimbabwe	7.5	594.7	6.0	9.0	16.0	142.3	160.7
AFRICA	1629.5	1623.6	4.5	5.6			
ECOWAS	309.4	1028.5	5.1	6.6			
SADC	571.3	2096.3	2.9	5.2			
COMESA	440.2	1010.6	5.2	5.8			
UMA	300.6	3673.4	2.9	3.4			
ECCAS	170.5	1262.4	2.5	5.3			
IGAD	148.2	720.5	7.1	6.2			
CEMAC	72.7	1752.9	2.0	4.2			
UEMOA	70.0	729.9	2.7	4.5			
CEN-SAD	777.8	1455.6	4.6	5.7			
ASIA Developing	13408.4	3480.7	6.3	8.8			
LAC	5097.6	8837.1	−1.4	5.8			
DEVELOPED REGIONS	41949.1	33666.6	−4.5	2.7			
WORLD	63134.7	9157.4	3.4	6.9	2.8	1064.4	1061.5

TABLE 12: Prices, trade and debt

	Inflation	USD Exchange rate	Real interest rate	Govern-ment debt	Merchan-dise trade	Trade performance		
	consumer prices	rate	rate	% of GDP	% of GDP	exports	imports	terms of trade
	annual			total				
	%	per LCU	%	%	%	2000 = 100	2000 = 100	2000 = 100
	2010	2011-2010	2010	2008-2010*	2010	2009-2010	2009-2010	2009-2010
NORTH AFRICA		20.5			52.6			
Algeria	3.9	74.4	−7.1		60.0	259.0	448.0	177.5
Egypt	11.3	5.6	0.8		36.3	565.5	379.0	152.4
Libyan Arab Jamahiriya	2.5	1.3				364.2	613.4	162.5
Morocco	1.0	8.4		50.3	58.2	244.4	308.0	134.2
Tunisia	4.4	1.4		40.5	87.4	280.8	259.3	95.2
WEST AFRICA		315.6			62.9			
Benin	2.3	495.3			51.8	353.8	352.5	103.5
Burkina Faso	−0.8	495.3			37.8	626.5	335.2	120.9
Cape Verde	2.1	83.3	7.5		47.4	419.2	322.9	104.0
Cote d'Ivoire	1.7	495.3			79.2	265.5	277.9	161.6
Gambia	5.0	28.0	20.0		27.7	100.0	147.5	93.3
Ghana	10.7	1.4			57.8	476.4	367.0	175.4
Guinea	15.5	0.0			49.6	220.9	229.6	110.2
Guinea-Bissau	2.5	495.3			41.3	193.4	383.7	83.5
Liberia		71.5	7.4		94.2	60.8	97.3	146.7
Mali	1.1	495.3			55.2	359.2	344.9	158.7
Mauritania	6.3	275.9	−2.0		106.7	576.3	401.3	132.7
Niger	0.8	495.3			56.9	367.3	607.0	150.1
Nigeria	13.7	150.3	7.6	3.0	64.1	336.5	467.4	186.9
Senegal	1.3	495.3			54.0	234.9	308.0	98.9
Sierra Leone	16.6	3978.1	6.0		58.0	2611.6	517.6	70.2
Togo	1.8	495.3			74.0	245.2	266.0	30.7
CENTRAL AFRICA		774.6			73.6			
Cameroon	1.3	495.3			39.4	211.6	346.0	143.8
Central African Republic	1.5	495.3			24.2	86.3	291.5	85.9
Chad	−2.1	495.3			70.8	1865.2	790.9	180.0
Congo	5.0	495.3			92.4	329.1	624.3	182.3
Democratic Republic of the Congo		905.9	28.2		74.8	655.7	645.5	137.9
Equatorial Guinea	7.8	495.3			111.7	908.3	1127.7	205.7
Gabon	1.5	495.3			93.6	321.8	261.8	195.8
Sao Tome and Principe	12.9	18498.6	15.3		61.3	237.0	376.8	135.9
EAST AFRICA		562.0			39.5			
Burundi	6.4	1230.7	4.4		30.1	200.8	344.3	153.1
Djibouti	4.0	177.7				222.5	201.4	80.2
Eritrea		15.4			33.2	63.7	146.4	77.2
Ethiopia	8.1	14.4			36.3	531.3	768.1	127.5
Kenya	4.0	79.2	11.9		53.5	297.1	389.3	91.7
Rwanda	2.3	583.1	13.8		30.7	560.9	671.2	234.4
Somalia		0.0				233.2	278.4	106.2
Sudan (former)	13.0	2.3			32.1	581.2	641.5	196.8
Uganda	4.0	2177.6	9.7	33.1	35.8	481.0	303.2	111.1
United Republic of Tanzania	6.2	1409.3	7.1		50.3	552.1	505.5	139.2
SOUTHERN AFRICA		682.0			60.3			
Angola	14.5	91.9	0.1		90.9	624.6	819.9	210.9
Botswana	6.9	6.8	−2.8		69.4	169.9	271.6	84.7
Comoros	3.4	371.5	6.4		38.4	94.8	428.2	71.4
Lesotho	3.6	7.3	6.8		138.6	363.0	272.3	66.2
Madagascar	9.2	2089.9	37.9		42.9	125.5	255.3	76.3
Malawi	7.4	150.5	16.5		58.7	281.1	408.2	87.7
Mauritius	2.9	30.8	6.9	37.8	68.4	123.7	199.4	73.2
Mozambique	12.7	34.0	5.7		83.6	616.3	306.7	108.9

TABLE 12: Prices, trade and debt (continued)

	Inflation	USD Exchange rate	Real interest rate	Govern-ment debt	Merchan-dise trade	Trade performance		
	consumer prices	rate	rate	% of GDP	% of GDP	exports	imports	terms of trade
	annual			total				
	%	per LCU	%	%	%	2000 = 100	2000 = 100	2000 = 100
	2010	2011-2010	2010	2008-2010*	2010	2009-2010	2009-2010	2009-2010
Namibia	4.5	7.3	8.6		84.5	311.4	364.4	120.3
Seychelles	−2.4	12.1	18.5	78.2	109.1	206.6	288.8	75.7
South Africa	4.3	7.3	1.8		48.4	268.2	318.6	139.4
Swaziland	4.5	7.3	3.4		87.9	169.8	161.9	110.1
Zambia	8.5	4 797.1	8.2		77.3	806.9	599.2	189.0
Zimbabwe		0.0			84.3	130.0	198.8	106.7
AFRICA		442.5			56.6			
ECOWAS		316.1			62.4			
SADC		855.9			60.2			
COMESA		592.7			41.7			
UMA		44.3			64.2			
ECCAS		706.5			81.8			
IGAD		359.1			38.2			
CEMAC		495.3			73.4			
UEMOA		495.3			61.2			
CEN-SAD		202.5			53.6			
ASIA Developing		1 225.3			68.8			
LAC		232.6			35.7			
DEVELOPED REGIONS		38.9			43.3			
WORLD		809.5			48.0			

PART

2

Hunger dimensions

Food Security

Food security refers to a household's physical and economic access to sufficient, safe and nutritious food that fulfills the dietary needs and food preferences of that household for living an active and healthy life. The World Health Organization defines food security as having three facets: food availability, food access, and food use. Food availability means having sufficient quantities of food available on a consistent basis. Food access refers to having sufficient resources, both economic and physical, to obtain appropriate foods for a nutritious diet. Food use refers to appropriate use, based on knowledge of basic nutrition and care, as well as adequate water and sanitation. The FAO adds a fourth facet: the stability of the first three dimensions of food security over time.

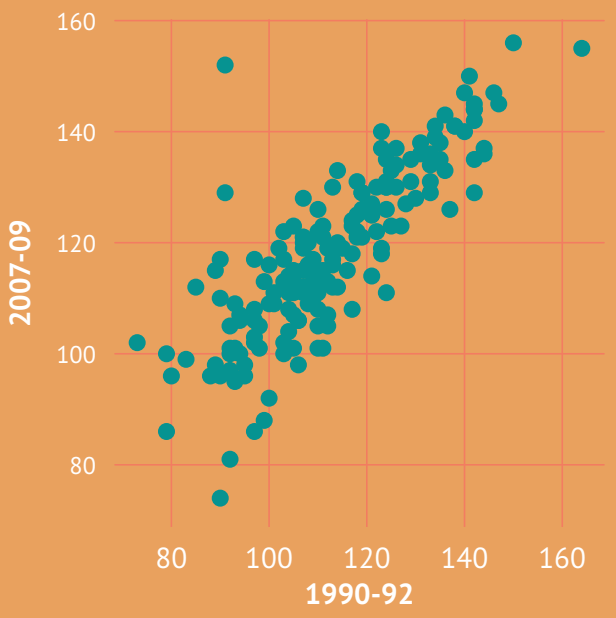
Availability

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 aggregate level, through food balance sheets that provide data on the amount of energy and protein available per person per day at country level. However, this information reports only on the energy or nutrients available for consumption at national level, not on 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. Adequacy in food supply, as measured by the ratio of dietary energy supply and average energy requirements, has increased over time in Africa overall between 1990-1992 and 2007-2009 and in most countries food supply is now sufficient to cover the average requirements. However, these indicators are national averages and food supply adequacy does not mean that all individuals within a country have the same access to the food available; thus, a ratio of 110 percent observed in sub-Saharan Africa does not prevent a high level (25%) of food deprivation in the region.

Growth in food supply is in line with the positive trend observed in the value of food supply per capita, although Africa experienced lower growth rates than other regions in the last 20 years, with an average annual growth of less than 1 percent, compared with about 2 percent in the developing countries as a whole. The main reason for this slow progress lies in the 2.4 percent growth in the population of sub-Saharan Africa, which outpaced the annual increase of 3 percent in value of food production. In almost 20 countries, the population grew at an even higher rate than the value of the food production, leading to overall negative growth.

In terms of diversity of food, cereals, roots and tubers still represent more than 60 percent of the total energy supply, the highest share compared with other regions. The increasing trend towards a more diversified diet is not encouraging as the share of basic staples in total energy supply decreased from 56 percent to 51 percent in the world as a whole, compared with 65 percent to 62 percent in the region of Africa. The same pattern is observed in terms of the "quality" of the diet, measured by the daily amount of protein available per person, as this amount is the lowest for Africa compared with other regions and there are wide disparities between countries; amounts range from an average of 93 grams of protein per person per day in countries of the north of Africa to less than 50 grams per person per day in some sub-Saharan countries. Again, even if the availability of protein has slightly increased over time in Africa, still more progress needs to be made in order to match global trends.

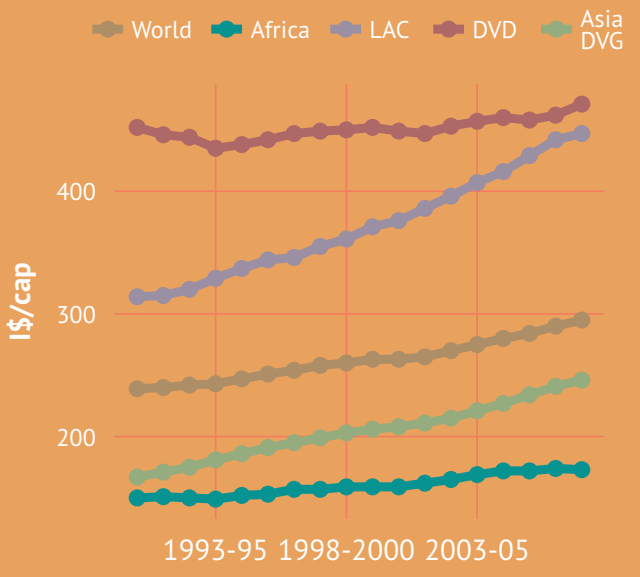
CHART 24: Overall improvement in the average dietary supply inadequacy, African countries (1992 and 2009)



Source: Statistics Division

Metalink: DA.DET.AV.IN.NO, p. 236

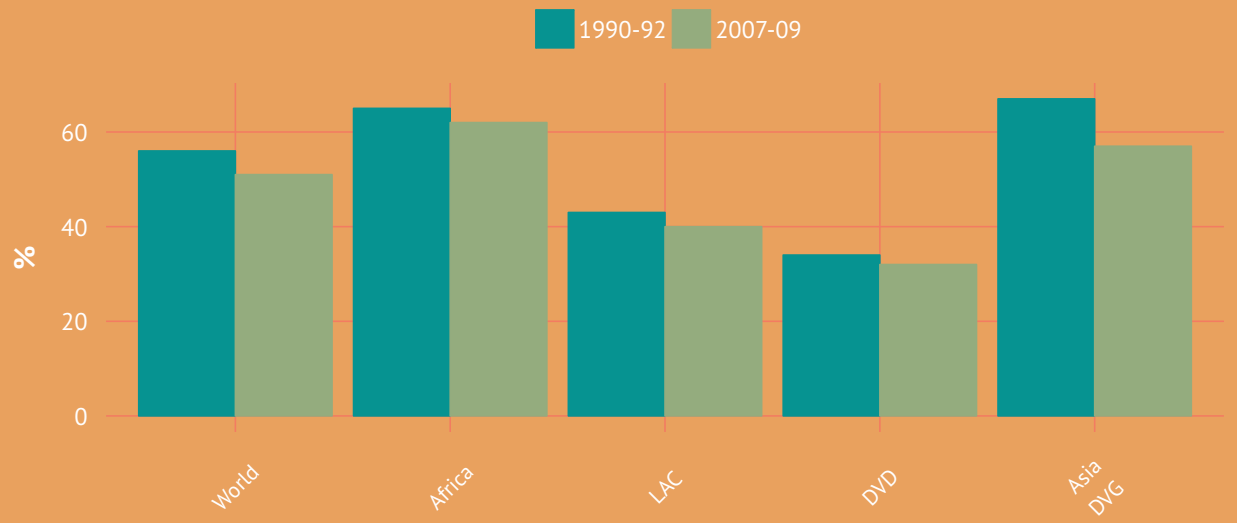
CHART 25: Growing trend of the value of food production (1992-2009)



Source: Statistics Division

Metalink: DA.DET.FPI.I.NO, p. 250

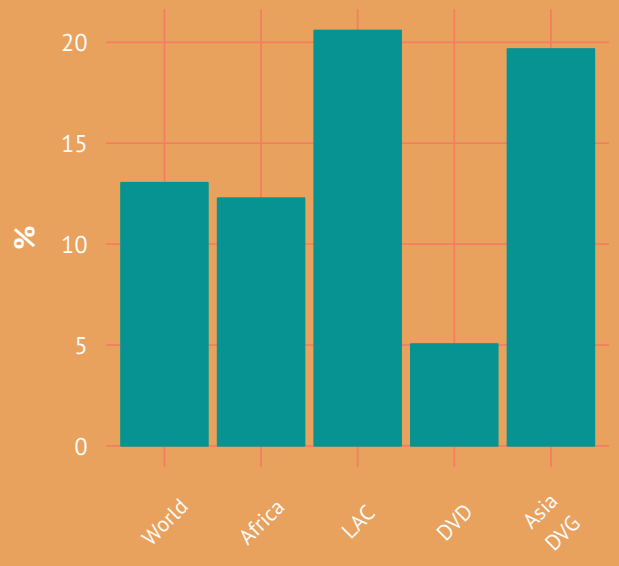
CHART 26: Share of energy supply derived from cereals, roots and tubers (1992 and 2009)



Source: Statistics Division

Metalink: DA.DET.ES.KCD.SH, p. 249

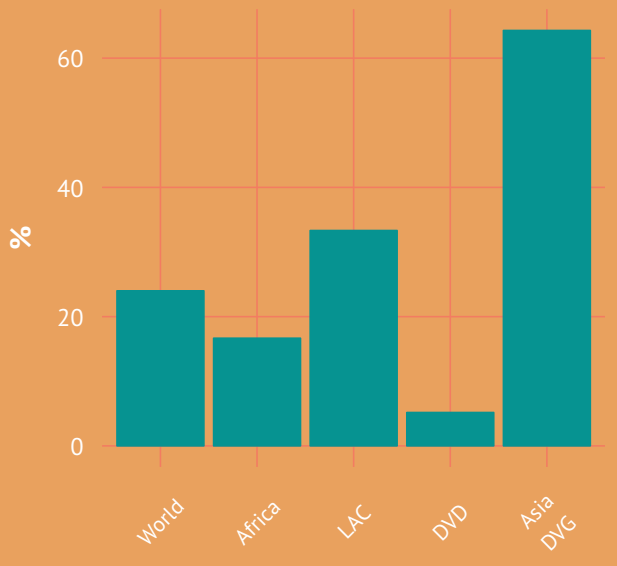
CHART 27: Relative change in average protein supply (1992-2009)



Source: Statistics Division

Metalink: DA.DET.PS.GR.NO, p. 236

CHART 28: Relative change in the average protein supply from animal origin (1992-2009)



Source: Statistics Division

Metalink: DA.DET.APS.GR.NO, p. 236

2

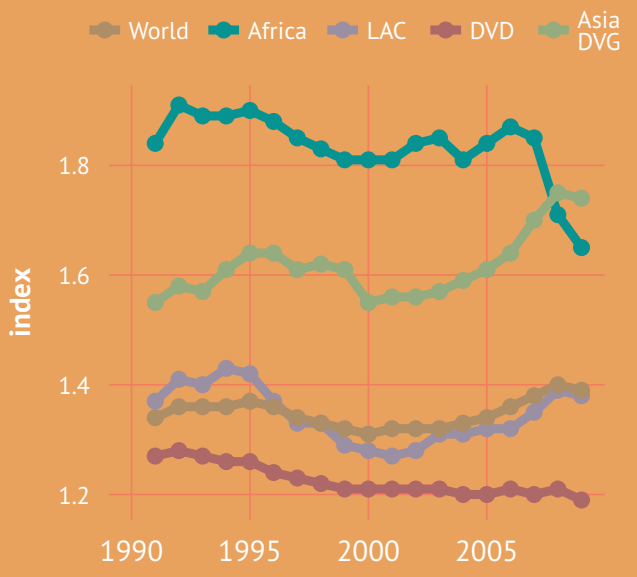
Access

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. Road density, as measured by the ratio of total road network over total land area, can be used as a proxy indicator of physical access. The scarcity of data does not allow for computation of regional aggregates nor analyses of trends over time in improvement of infrastructures. However, based on information available, 56 percent[3] of African countries have road coverage lower than 12.5 km per 100 square km of land area, the average for the world being between 12.5 and 25 km per 100 square km of land area. Railroad coverage and the percentage of paved road over total road network are further indicators of physical access to food; the former reflects mainly the speed with which food can reach the populations, while the latter informs mainly on the quality of the access and on potential deterioration over time of the infrastructure, due to natural or man-made disasters. Based on information available, the percentage of road paved in Africa ranges between 15 percent and 30 percent, well behind the average of 45 percent to 60 percent observed for the whole world.

Finally, even if food is physically accessible, the concern remains that it still needs to be affordable to people. Good information systems on food prices do not exist worldwide. The ratio of food price indices over general prices, adjusted for purchase power parity to allow for comparisons across countries, can be used as an indication of the cost of food relative to the price of a generic consumption basket. Food price level indices in 2009 in Africa were very close to those observed in developing countries but well above the world average. While a huge peak in the food price level index was expected in the aftermath of the food price crisis of 2008, data show that, worldwide, the relative price of food increased only slightly and more striking was the decrease in the food price level index observed in Africa between 2007 and 2009. However, there is great disparity in the cost of food within Africa, and the decreasing trend observed for the region as a whole does not reveal the wide disparities between countries. Given that the food price level index ranged from a low 0.8 to a high 2.7 in 2009, economic access to food was clearly a burden for some populations of Africa that were diversely affected by the food price crisis, as some countries experienced a negative change in the food price level index of -46 percent and others experienced an increase of more than 9 percent between 2007 and 2008.

[3] Excluding six countries for which no data at all were available for the period 1990 to 2010.

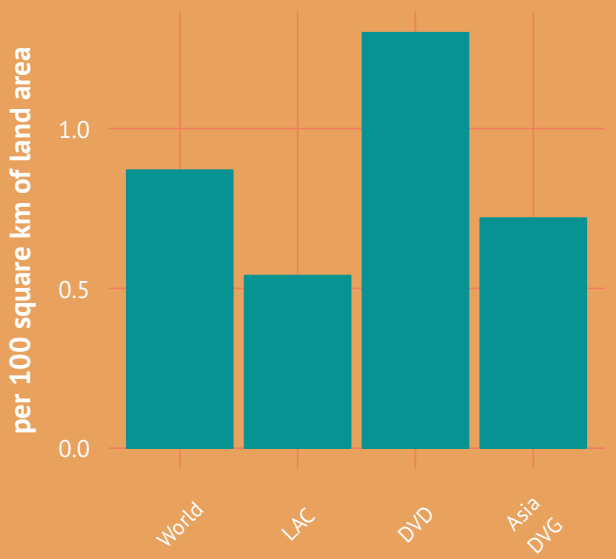
CHART 29: Food price level index (1991-2009)



Source: Statistics Division

Metalink: DE.DET.EA.IN.NO, p. 239

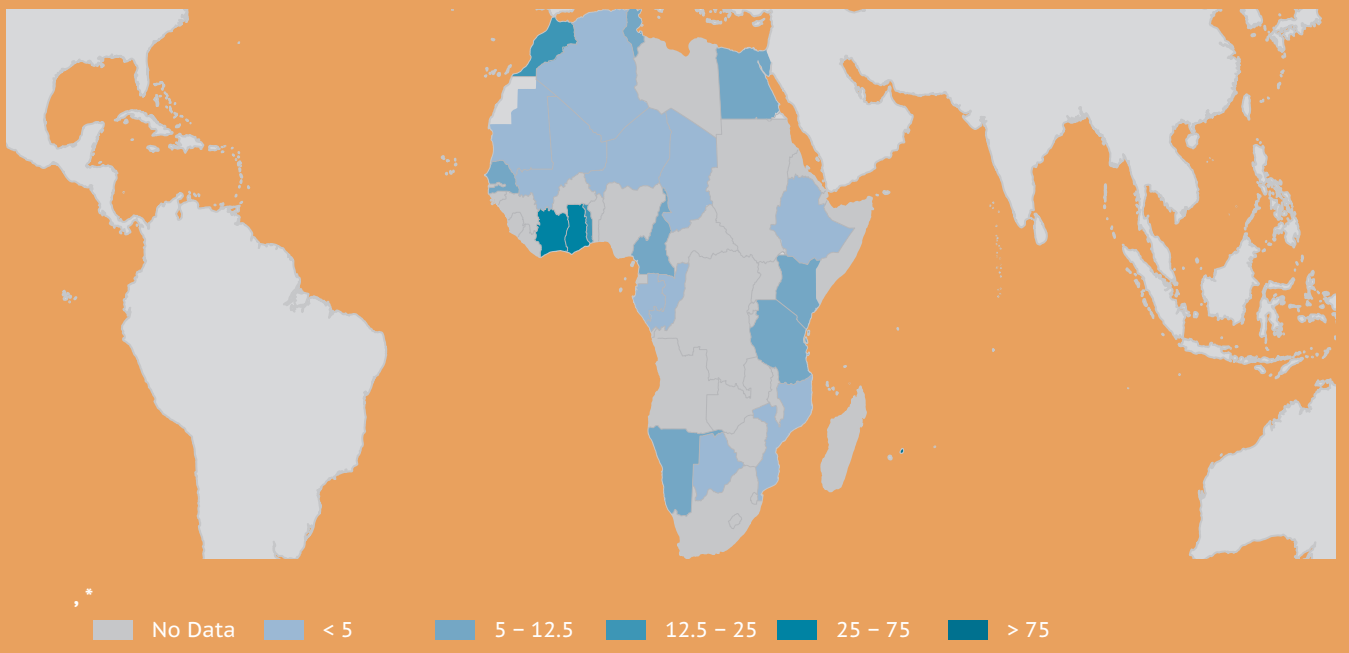
CHART 30: Rail-lines density (2009)



Source: Statistics Division

Metalink: DP.DET.PARLD.KM.SH, p. 247

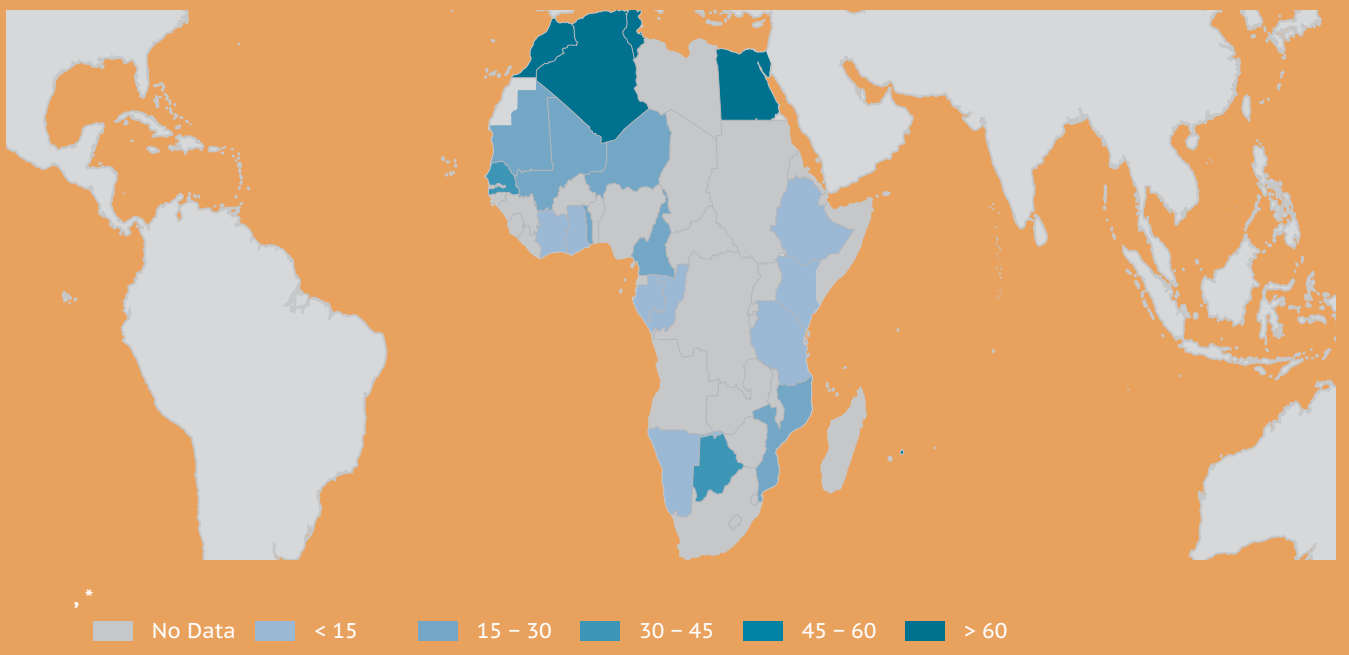
MAP 15: Road density (per 100 square km of land area, 2005-2009*)



Source: Statistics Division

Metalink: DP.DET.PARD.KM.SH, p. 248

MAP 16: Percent of paved roads over total roads (%, 2005-2009*)



Source: Statistics Division

Metalink: DP.DET.PAPR.KM.SH, p. 244

Inadequate access to food

For the purpose of monitoring the progress towards the World Food Summit (WFS) and MDG1 targets, FAO provides regular updates on the number and proportion of population below the minimum level of dietary energy requirements. Estimates are computed at global, regional and country levels.

The trends in undernourishment presented in the 2012 State of Food Insecurity Report (SOFI) show that undernourishment in sub-Saharan Africa has improved, but less rapidly than in other regions.

According to the new estimates, the prevalence of undernourishment declined in sub-Saharan Africa, from 32.8 to 26.5 percent between 1990-1992 and 2007-2009. Despite this remarkable decrease, the region is still far from the MDG1 target and has seen an increase in the number of undernourished people (from 170 to 214 million between 1990-1992 and 2007-2009).

Considerable differences exist among sub-Saharan countries: twenty-two countries, mainly located in the Eastern and Southern regions, had an undernourishment prevalence of higher than 25 percent in 2007-2009. Eight countries moved in the opposite direction from the MDG goal, reporting an increase in undernourishment prevalence.

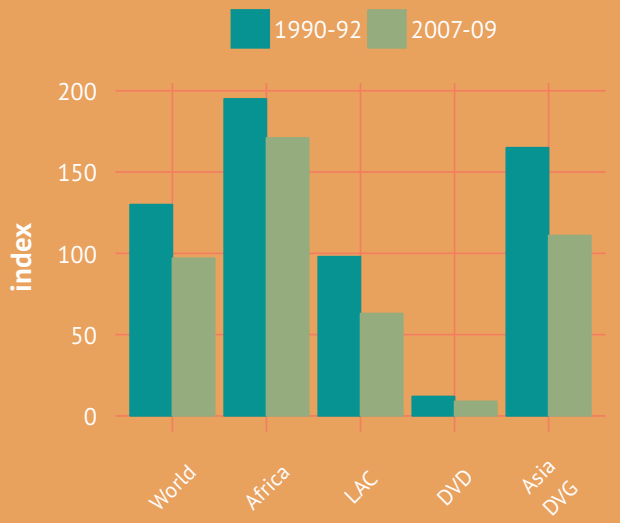
Undernourishment is much less severe in Northern Africa, where the proportion of undernourished people declined from 3.8 to 2.7 percent between 1990-1992 and 2007-2009, while the number of undernourished people decreased from five to four million. The targets set by the WFS and the Millennium Declaration have not been achieved yet, but they are within reach. With respect to undernourishment, North African countries are more homogeneous than sub-Saharan countries. Almost all North African countries have a rate lower than 5 percent and none of them reported an increasing trend.

Although undernourishment is the main indicator used by FAO for the global monitoring of hunger, other indicators, such as food deficit and the prevalence of food inadequacy are extremely important to report on food accessibility.

The measurement of food inadequacy, introduced this year for the first time, is conceptually analogous to the indicator for the prevalence of undernourishment, but it is calculated after setting the caloric threshold to a higher level.

The food deficit indicator describes the amount of calories needed to lift the undernourished out of that status. The regional trends described in the bar chart on the right (see chart 8) are consistent with trends in undernourishment. Africa started in 1990-1992 with a food deficit much larger than the other regions. Some progress has been made, but not enough to close the gap with the other regions. Therefore, in 2007-2009, Africa – and specifically the sub-Saharan region – still had the highest food deficit.

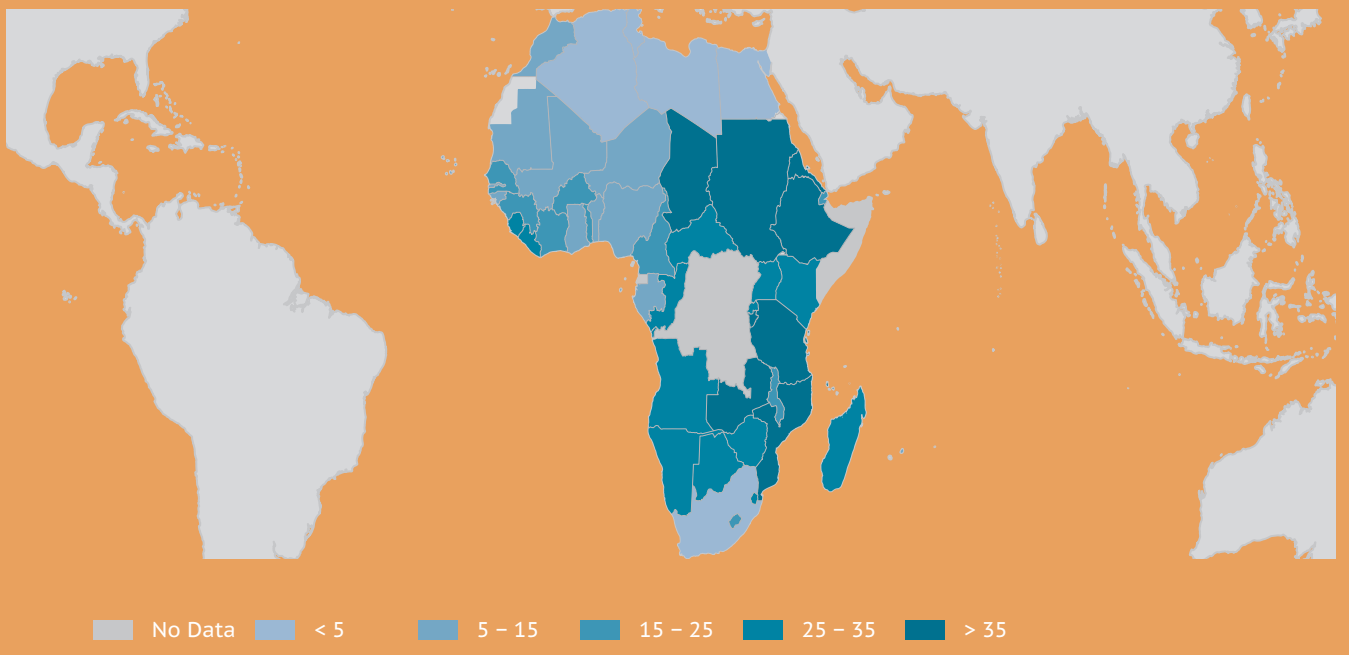
CHART 31: Depth of food deficit (1992 and 2009)



Source: Statistics Division

Metalink: DO.OUT.ACDFD.DP.NO, p. 237

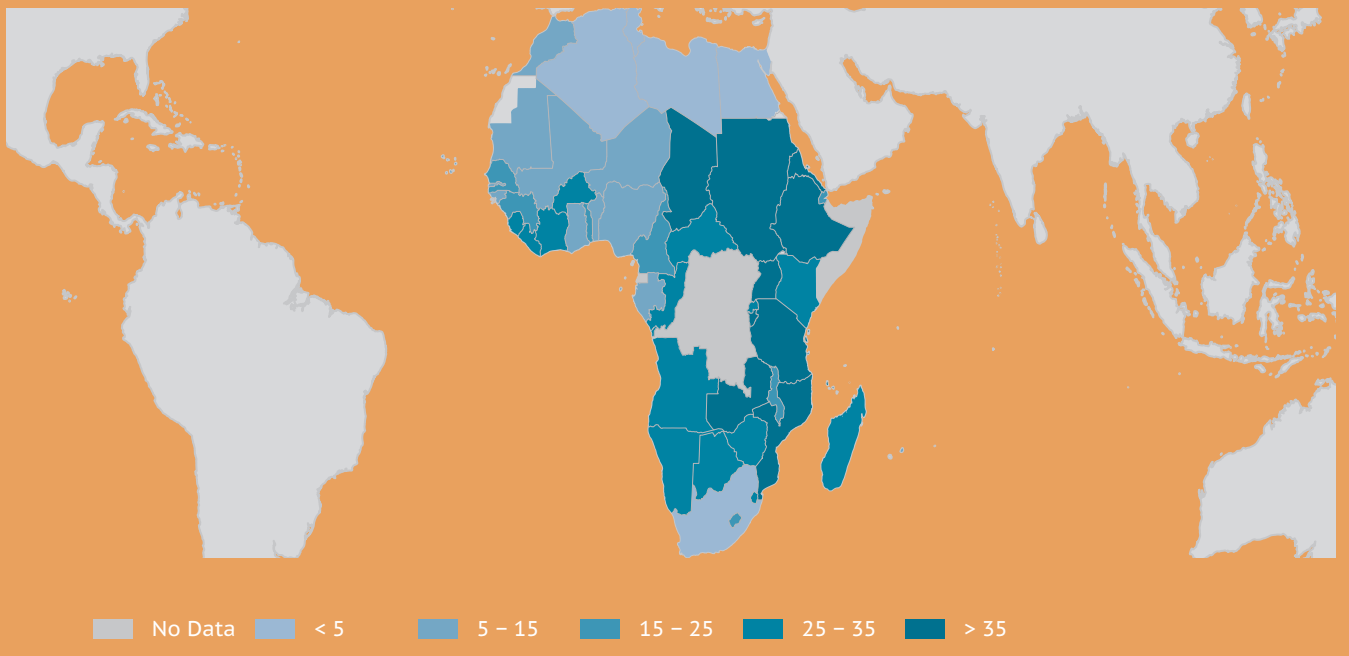
MAP 17: Map of hunger (%, 2007-2009)



Source: Statistics Division

Metalink: DO.OUT.ACPU.POP.NO, p. 246

MAP 18: Food inadequacy (%, 2007-2009)



Source: Still unknown

Metalink: DO.OUT.ACPFI.POP.NO, p. 246

Utilization

One of the targets set by the Millennium Declaration is to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation (MDG 7, target 7.C).

Although, at the global level, the MDG drinking water target had been reached by 2010,[4] significant challenges were still present in Africa, where only 66 percent of the population reported access to a safe drinking water source in 2009.

Remarkable differences exist among the African countries, in particular between the North and the sub-Saharan regions. While the coverage of improved water sources is above 90 percent in North Africa, it is only 61 percent in the sub-Saharan area, and 5 out of 53 countries in this area do not even have 50 percent coverage.[5]

Improved sanitation coverage in Africa shows a pattern similar to water coverage. As a whole, the region is behind other regions (40 percent in 2009 in contrast to 56 percent of Asia DVG and 80 percent of the LAC region) and it is off track to meet the MDG sanitation target.

As with water, most of the countries with low sanitation coverage are in sub-Saharan Africa, where the percentage of population with access to improved sanitation facilities is lower than 50 percent in 34 countries (out of 53). In North Africa, the improved sanitation coverage is much higher than in the sub-Saharan region (90 percent in 2009) and the progress made since 1990 has been remarkable (18 percent increase).

Adequate nutritional status is crucial for physical and cognitive development of the individual as well as for the economic growth of the entire society.

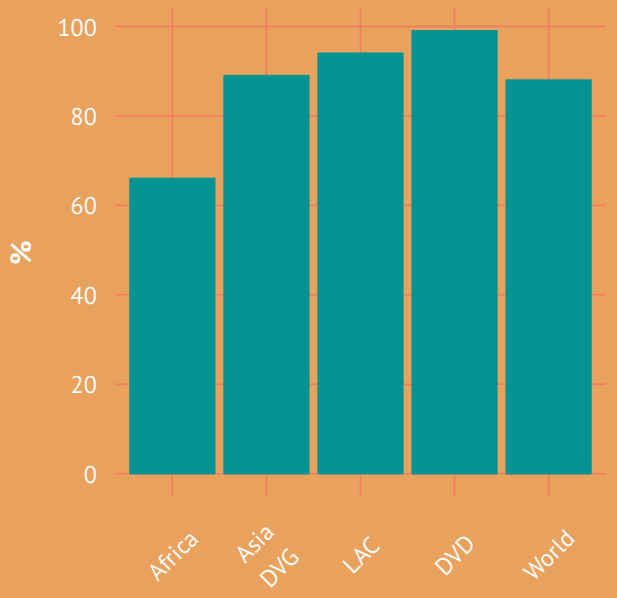
Stunting prevalence reflects the incidence of growth failure that occurs through a slow, cumulative process, as a result of inadequate nutrition and/or repeated infections. Between 2005 and 2009, one out of four African countries reported a stunting rate of 40 percent or more – a "very high" prevalence according to the World Health Organization (WHO) classification. Map 19 shows that high levels of stunting were concentrated mainly in Central and Southeast Africa, and in the Horn of Africa, although pockets could be found in some parts of Western Africa, as well.

While stunting is a symptom of chronic malnutrition, underweight reflects a combination of chronic and acute malnutrition. Between 2005 and 2009, 16 African countries (out of 59) showed an underweight prevalence equal to or higher than 20 percent, with the highest rates concentrated mainly in the Horn of Africa (see Map 20).

[4] [fix spacing]WHO and UNICEF, Progress on Drinking Water and Sanitation: 2012 Update, and UN, The Millennium Development Goals Report 2012

[5] SOFI 2012

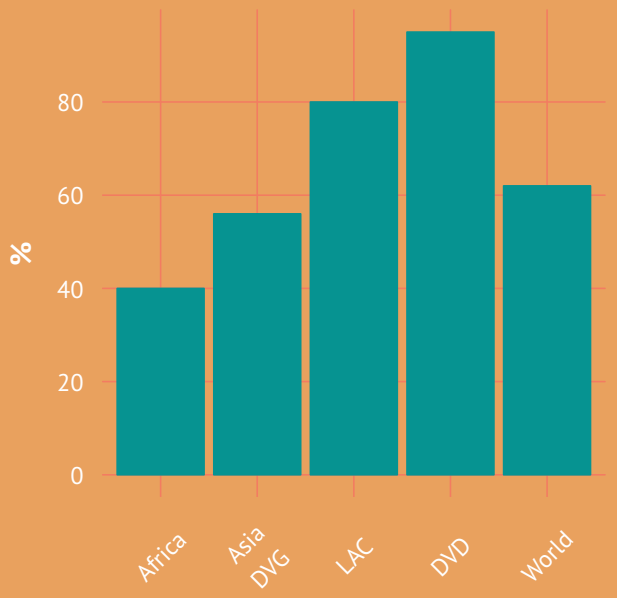
CHART 32: % of population with access to improved water sources water (2009)



Source: Statistics Division

Metalink: DU.DET.UTWR.POP.SH, p. 245

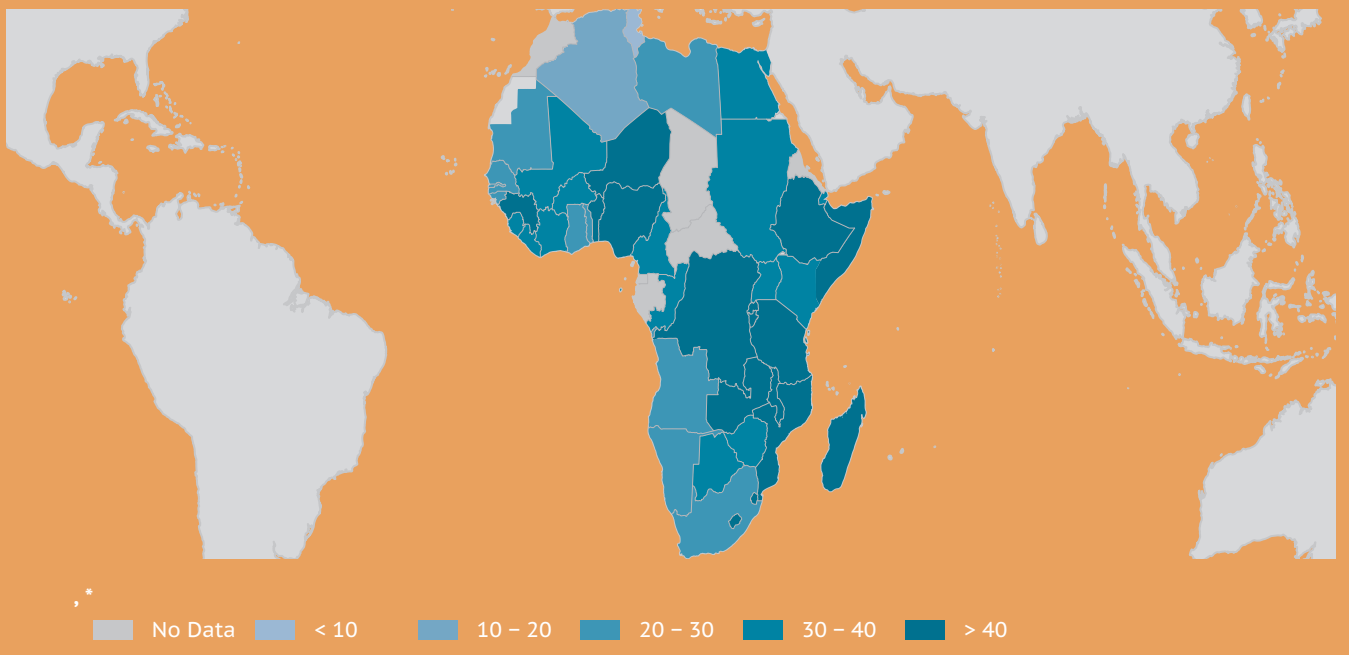
CHART 33: % of population with access to improved sanitation facilities (2009)



Source: Statistics Division

Metalink: DU.DET.UTSF.POP.SH, p. 245

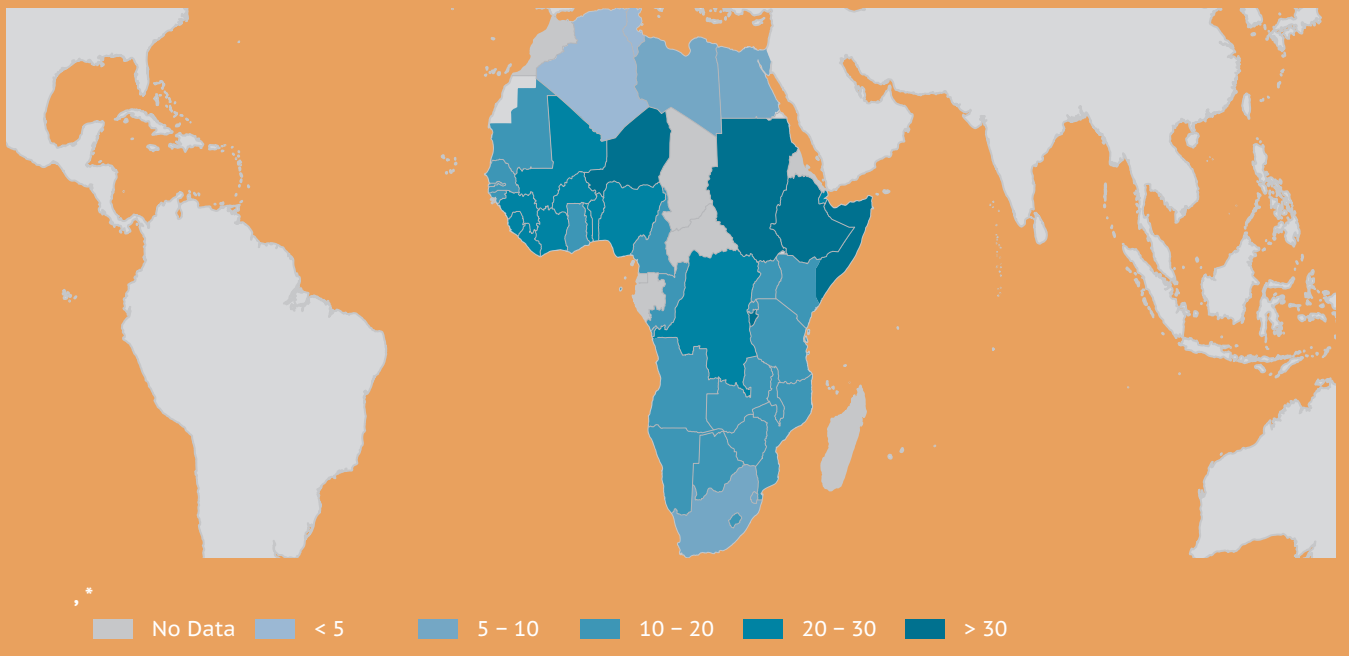
MAP 19: Percentage of children under 5 years of age who are stunted (%, 2005-2009*)



Source: Statistics Division

Metalink: DT.OUT.UTST.POP.SH, p. 244

MAP 20: Percentage of children under 5 years of age who are underweight (%, 2005-2009*)



Source: Statistics Division

Metalink: DT.OUT.UTUN.POP.SH, p. 245

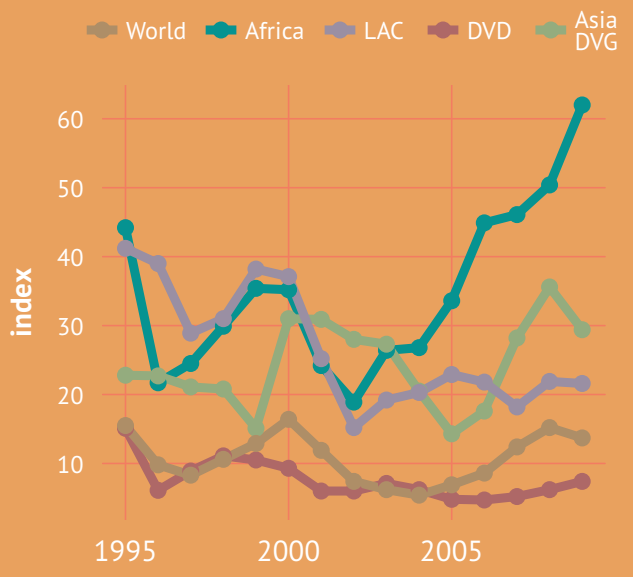
Vulnerability/Stability

Vulnerability in food security terms can be defined as "the probability of a person or household falling or staying below a minimum food security threshold within a certain timeframe". Vulnerability is not the same as food insecurity: food insecurity describes the current state of a person's welfare, while vulnerability refers to the likelihood of remaining or becoming food insecure at some future point in time. While there is a strong justification for measuring and monitoring the levels of vulnerability, it is both theoretically and practically challenging to identify suitable vulnerability indicators. Vulnerability and uncertainty are closely related. While food security measures an outcome in a known past, vulnerability seeks to measure the probability in an unknown future. Given the challenges of measuring vulnerability, triangulation among multiple measures is essential; the indicators selected to reflect vulnerability to food security refer to price, trade, political conditions and food production stability.

Domestic food price volatility, together with the two other indicators of variability, domestic food production and food supply, as measured by the standard deviation of the deviations from the trend over the previous five years, provides an indication of the past ability of a country to maintain food prices or production stability. Indeed, in Africa as a whole, food price variability was relatively in line with other developing regions, such as Asia and Latin America in the 1990s. But after 2000, food prices appeared more volatile in Africa compared with the other regions. Furthermore, the increasing trend in variability observed after 2005 reverted worldwide after 2008, while in Africa food prices remained highly volatile.

While Africa experienced high instability in food price levels, per capita food production was more stable over time and variability was relatively low compared to other regions, such as Asia or Latin America. It was mainly among North African countries that larger fluctuations in food production were observed. As food supply is the direct result of supply utilization account, fluctuations in production translate into fluctuations in food supply, which therefore appeared slightly more stable in Africa than in Latin America or Asia.

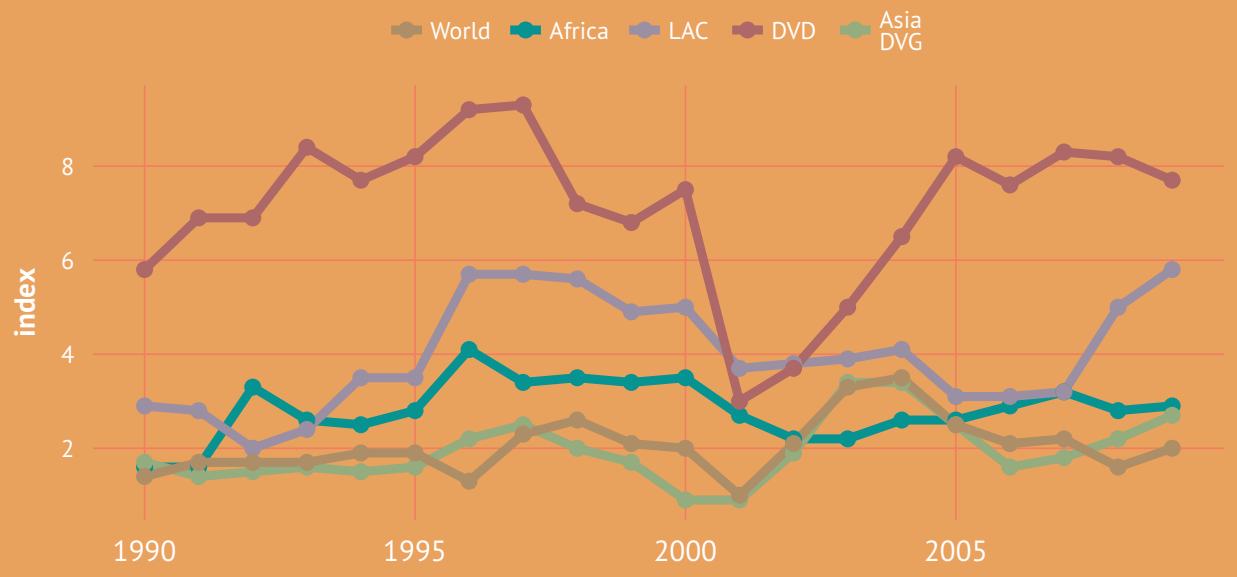
CHART 34: Domestic food price volatility (1995-2009)



Source: Statistics Division

Metalink: DV.VS.DFPI.IN.NO, p. 237

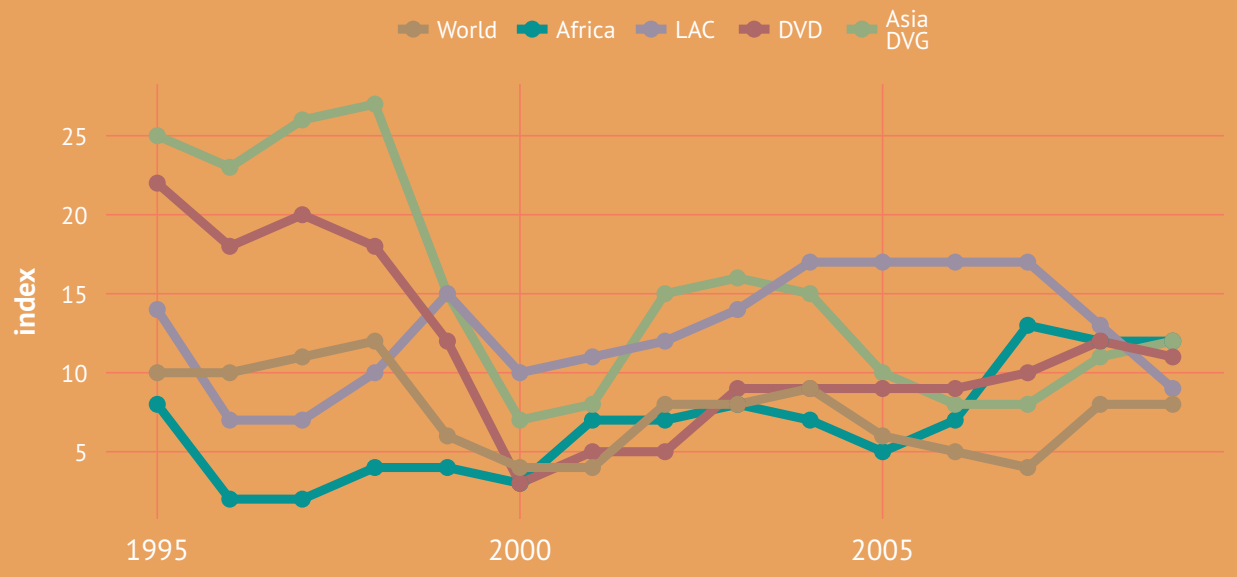
CHART 35: Per capita food production variability (1990-2009)



Source: Statistics Division

Metalink: DV.VS.FPV.IN.SH, p. 244

CHART 36: Per capita food supply variability (1995-2009)



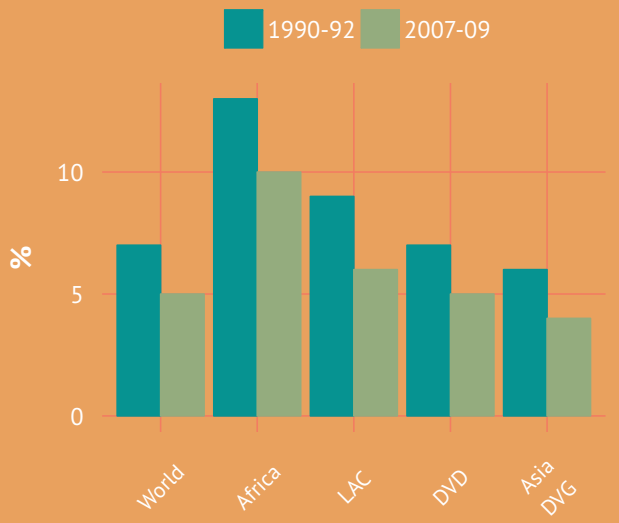
Source: Statistics Division

Metalink: DV.VS.FSV.IN.SH, p. 244

The share of imports in total merchandise exports and the cereal import dependency ratio are also two indicators of a country's vulnerability to food insecurity through its exposure to changes in terms of trade. Africa is the region of the world where the share of cereal imports over total domestic supply has been constantly higher than that observed in the developing world. Imports of cereals represented almost 30 percent of total cereal supply in Africa in 2007-2009, which was about 12 percent higher than in 1990-1992. But this aggregate level does not reflect all the disparities observed within African countries; imports of cereal represent more than 50 percent of total cereal supply in Northern Africa compared with about 21 percent in sub-Saharan Africa in 2007-2009. In terms of value, this high dependency rate on cereal imports translated to a share of 10 percent of total merchandise exports in Africa in 2009, compared with 5 percent in the overall developing world. However, there was an important decline in the share, in line with overall world trends, from 13 percent in 1990-1992 to 10 percent in 2007-2009, with more substantial declines observed in North African countries.

Finally, without an enabling environment, stability cannot be achieved. The index of political stability and absence of violence measures perceptions of the likelihood that a given government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. A negative value of -2.5 of the index indicates very weak stability, while strong stability is assigned a positive value of 2.5. Unfortunately such an index cannot be aggregated; however, based on an assumption that a value of the index lower than -1.3 is indicative of a high likelihood that the government will be destabilized, political stability has slightly improved in Africa between 1996 and 2010, compared to the situation in the developing world, especially in Asia. Indeed, between 1996 and 2010 the percentage of countries presenting an index lower than -1.3 decreased from 25 percent to 18 percent; however, despite these encouraging findings, and as shown on the map, no country in Africa shows an index higher than 1.

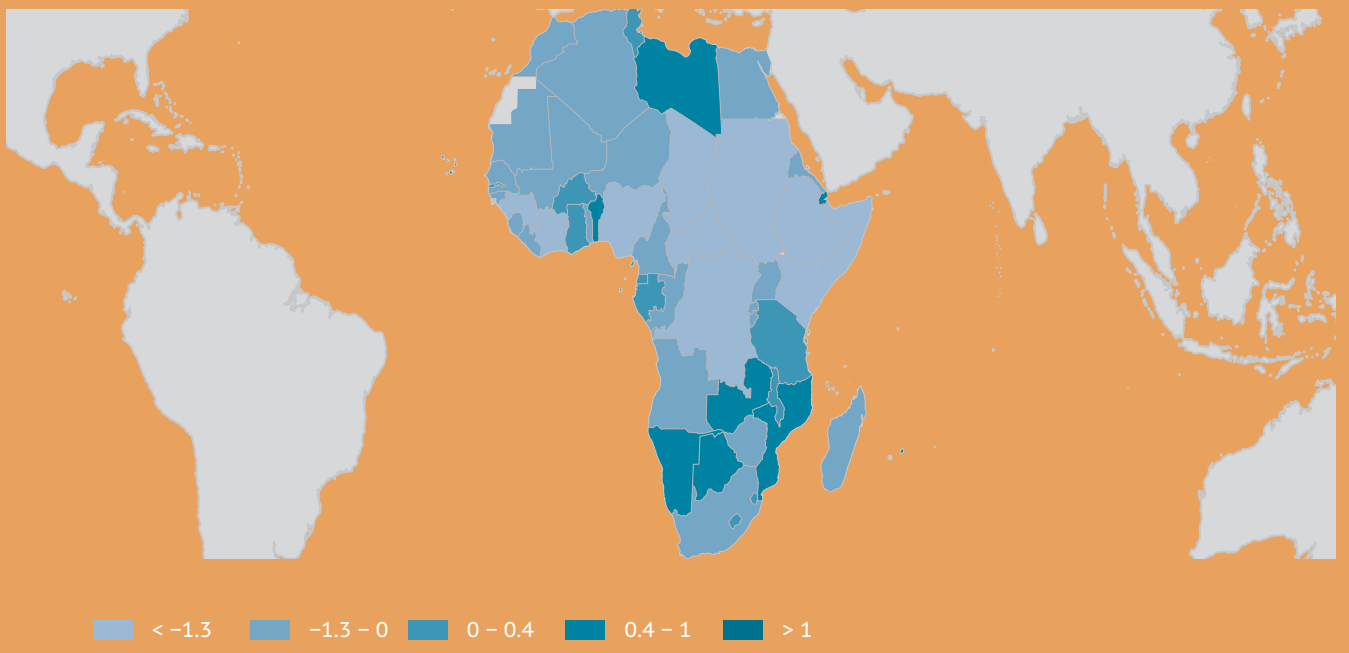
CHART 37: Value of cereal imports over total merchendise exports (1992 and 2009)



Source: Statistics Division

Metalink: DV.VS.FIME.FE.SH, p. 250

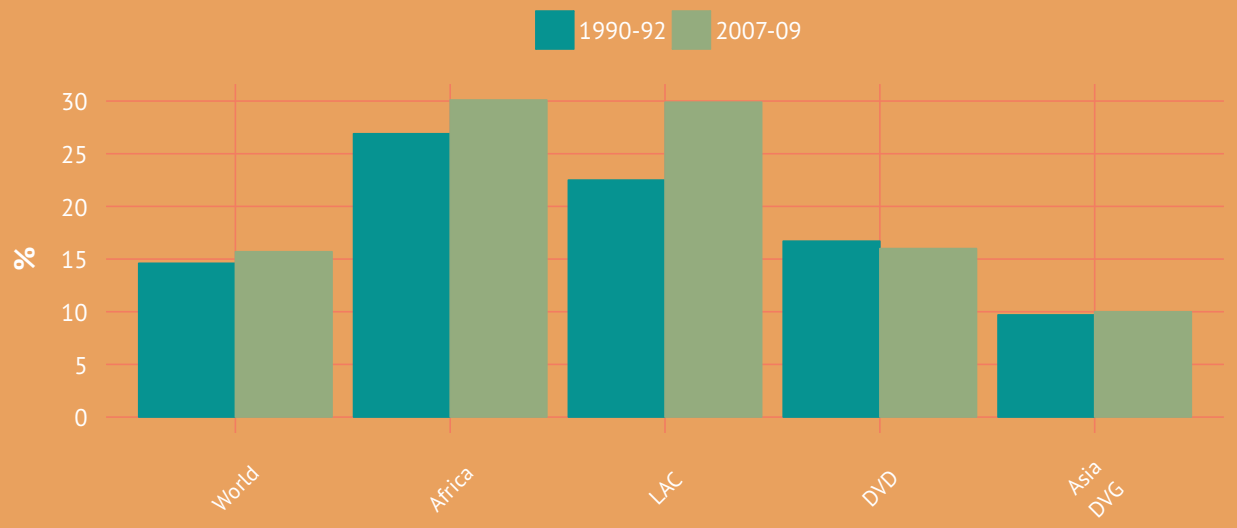
MAP 21: Political stability and absence of violence/terrorism (index, 2009)



Source: Statistics Division

Metalink: DV.VS.PS.IN.NO, p. 245

CHART 38: Cereal import dependency ratio (1992 and 2009)



Source: Statistics Division

Metalink: DV.VS.CIDR.IN.NO, p. 236

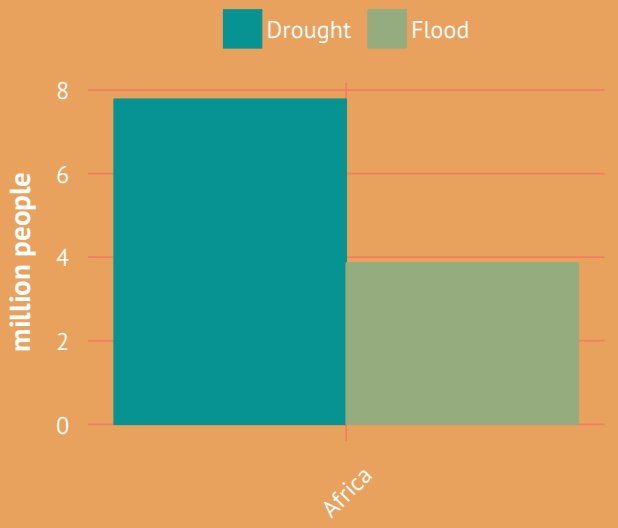
Risks, hazards and shocks

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 transitory shock or short-lived crisis can turn into a self-perpetuating vicious cycle, from which countries cannot easily return to a path of longer-term development. Severe events can have an irreversible impact on human capital and societal systems. Armed conflict and natural disasters, therefore, represent ongoing and fundamental threats to both lives and livelihoods, from which recovery is progressively more difficult over time.

Among countries affected by disasters, 68 percent of these disasters were related to floods, 19 percent to storms, 10 percent to drought, 2 percent to extreme temperatures, and 1 percent to earthquake. Almost all the floods occurred in Asia, which made Asia the area most 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 Africa in 2011. (Table 19)

Map 22 shows that almost all African countries were affected by natural disasters in 2011. But the consequences of these disasters were not on the same scale and varied widely within countries. Benin, Burkina Faso, Mali, Mauritania, Niger, Nigeria, and Senegal, in West Africa, Angola, Madagascar, Mozambique, Namibia and Zimbabwe in southern Africa, Ethiopia, Kenya and Somalia in East Africa, Morocco in North Africa, were significantly affected by natural disasters and more than 110 000 people were stricken in each country. However, in countries of North Africa and some countries in sub-Saharan Africa, fewer than 15 000 people were negatively affected (Map 22)

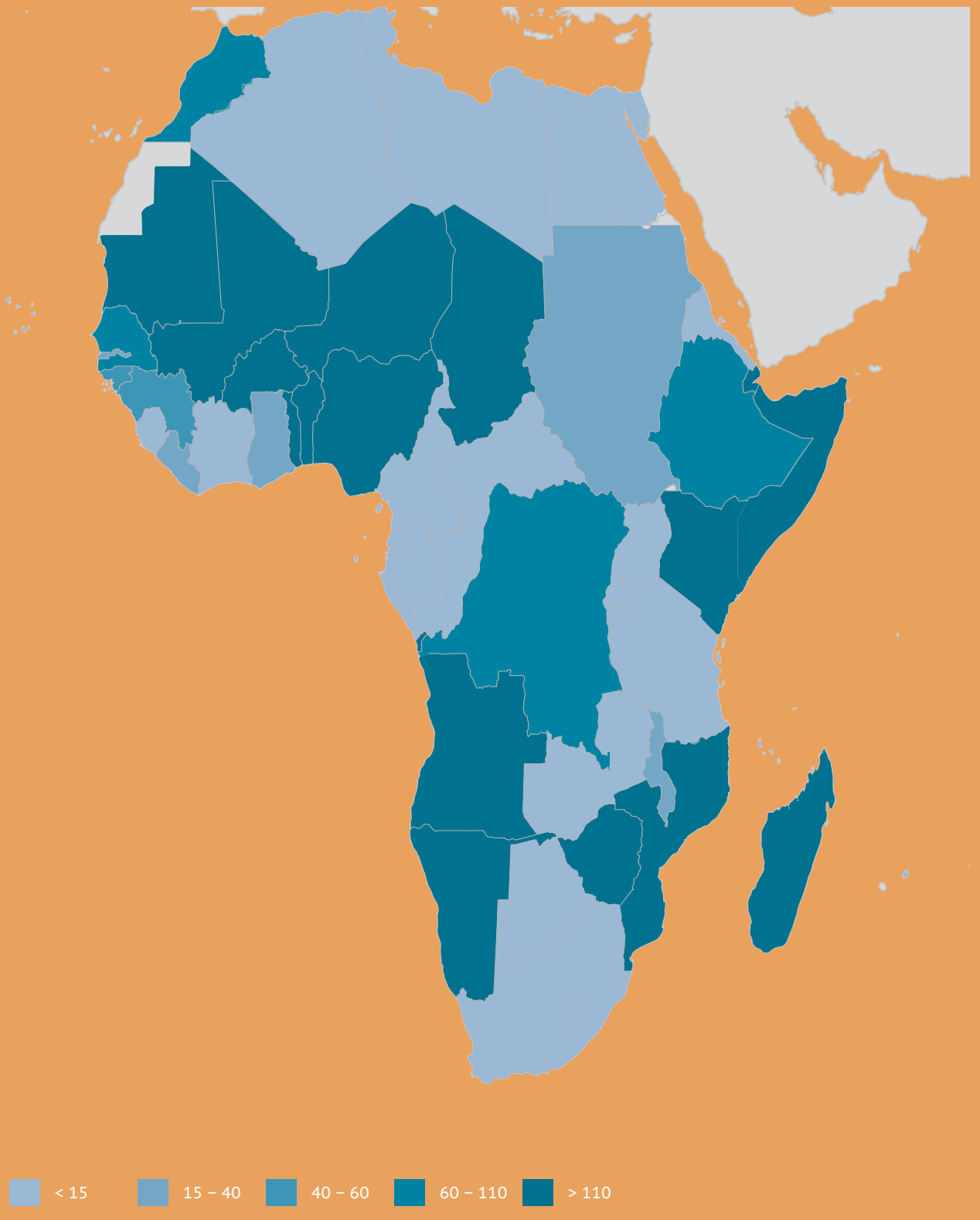
CHART 39: Number affected by drought and flood in Africa (2010)



Source: EM-DAT: The OFDA/CRED International Disaster Database

Metalink: P2.HUN.ODFA.EMDAT.RHS.PPDR, p. 245

MAP 22: Number affected by natural disasters (thousand people, 2010)



Source: EM-DAT: The OFDA/CRED International Disaster Database

Metalink: P2.HUN.ODFA.EMDAT.RHS.PPND, p. 245

From 1960 to 2011, the number of people affected by disasters evolved at an uneven rate, with very important peaks for some years. For example, in 1983 and 1999 the number of people affected was very high, well above 30 millions for each year. Another peak, lower than in those two exceptional years, corresponded to the natural disaster in 1991, when nearly 25 million people were stricken. (Chart 40)

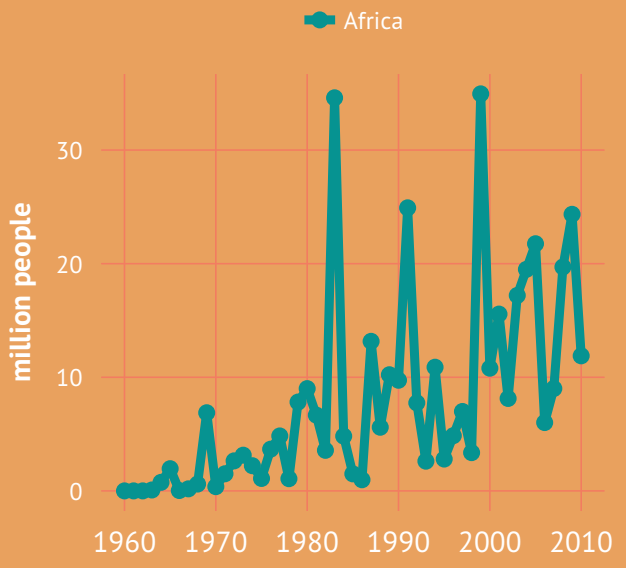
As of 2010, FAO identified 22 countries as being in a state of protracted crisis, defined as "those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time". The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or to provide adequate levels of protection. Food insecurity is the most common manifestation of protracted crises. Among the 22 countries in protracted crisis in the world, 17 are in Africa. (Chart 41)

Natural disasters and armed conflict result in large numbers of displaced people. In some countries, such as Cote d'Ivoire, Democratic Republic of the Congo, Somalia and Sudan, the population affected was higher than 500 000 in each country. However, the corresponding population has been under 2 000 in the cases of Burkina Faso, Gabon, Niger, and in all the countries of southern Africa, including Madagascar. (Map 23) By September 2011, the food crisis in the Horn of Africa, a result of the driest spell since 1950-1951, had affected 12 million people in Djibouti, Ethiopia, Kenya and Uganda, with parts of southern Somalia enduring famine. The situation was exacerbated by high local cereal prices, excessive livestock mortality, conflict and restricted humanitarian access. In August 2011, the UN Refugee Agency (UNHCR) reported a malnutrition-related child mortality rate of ten per day at a camp in eastern Ethiopia for refugees from Somalia who had fled drought, famine and fighting within their own borders.

Furthermore, among the people concerned, the number of Internally Displaced Persons (IDPs) in Africa is the most significant, followed by refugees and other stateless persons. Indeed, in 2009, IDPs numbered more than 6 million; their number was reduced slightly in 2010 but still remained over 6 million. In contrast, refugees numbered more than 2 million in 2009 and their number increased slightly in 2010. The other populations concerned also increased in the same period. (Chart 42)

In West Africa, the conflict in Côte d'Ivoire has greatly increased the number of people at risk, including the number of displaced persons. In East Africa, numerous conflicts in Burundi, Kenya, Somalia, Sudan and Uganda have contributed to increase the population at risk. In central Africa, the increasing number of IDPs is a result of conflict in the Democratic Republic of the Congo. Southern Africa is the part of Africa where there are fewer people at risk. Indeed, except in Angola, where conflicts persist, and in Zimbabwe, other countries are relatively free of conflict. (Table 18)

CHART 40: Number affected by natural disasters (1960-2010)



Source: EM-DAT: The OFDA/CRED International Disaster Database

Metalink: P2.HUN.ODFA.EMDAT.RHS.PPND, p. 245

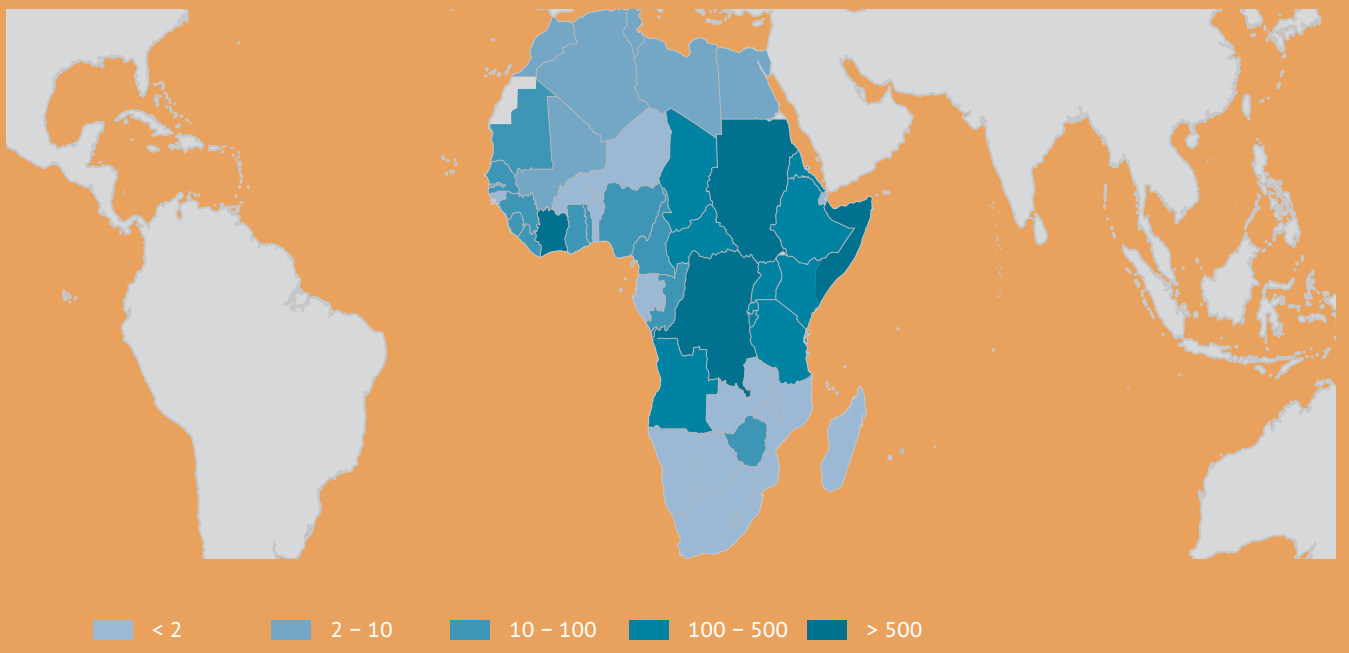
CHART 41: Countries in protracted crisis

Afghanistan	Guinea
Angola	Haiti
Burundi	Iraq
Central African Republic	Kenya
Chad	Liberia
Congo	Sierra Leone
Côte d'Ivoire	Somalia
Democratic People's Republic of Korea	Sudan
Democratic Republic of the Congo	Tajikistan
Eritrea	Uganda
Ethiopia	Zimbabwe

Source: FAO, Trade and Markets Division

Metalink: P2.HUN.FAO.ESA.RHS.NPC, p. 237

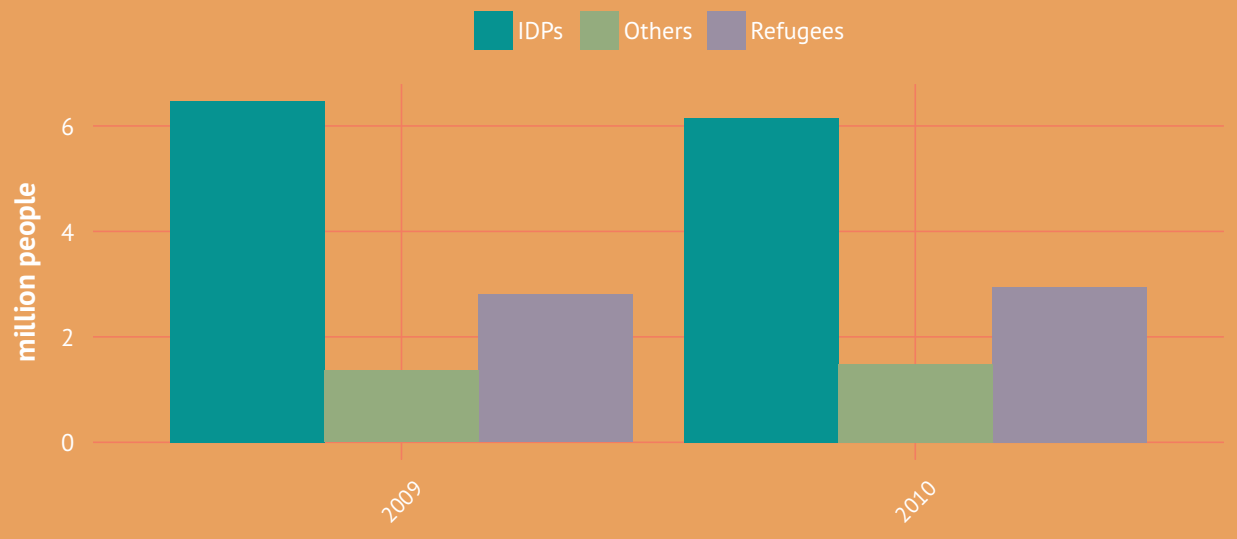
MAP 23: Total population of concern to UNHCR (thousand people, 2010)



Source: Statistical Online Population Database

Metalink: P2.HUN.UNHCR.GT.RHS.TPCP, p. 250

CHART 42: Total African population of concern to UNHCR by type (2009-2010)



Source: Statistical Online Population Database

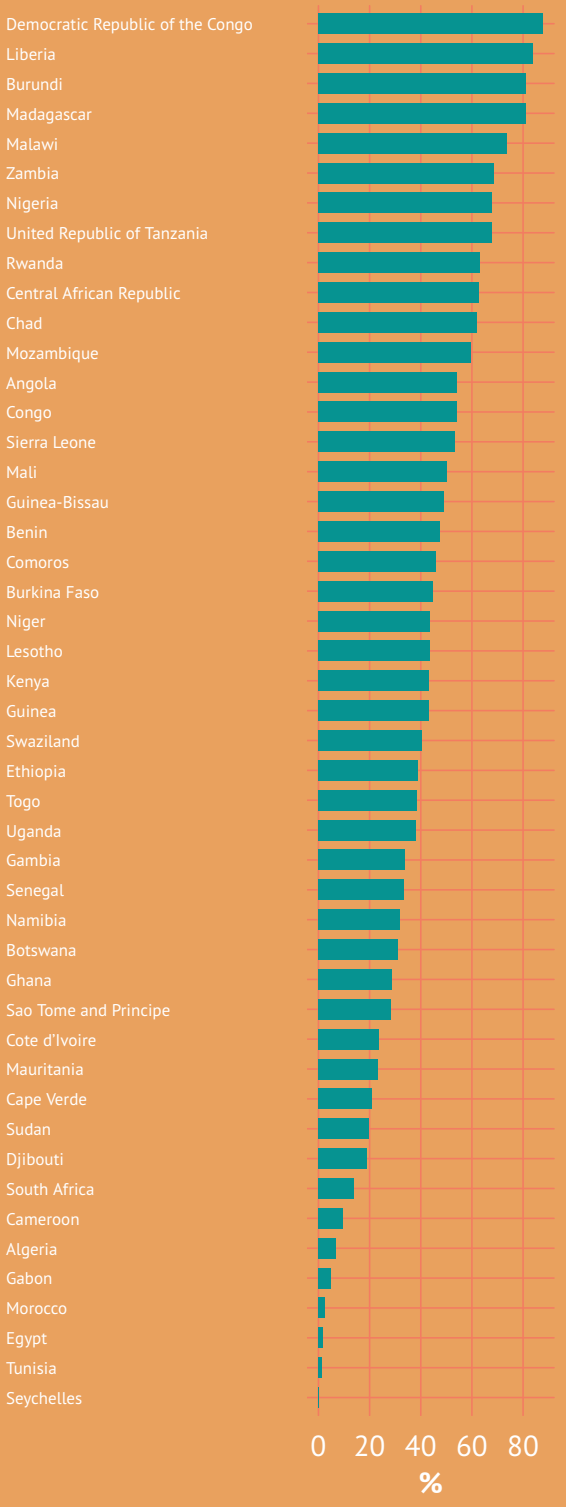
Metalink: P2.HUN.UNHCR.GT.RHS.TPCR, p. 250

Poverty and inequality

Among the many determinants of hunger, poverty is one of the most important. But, like hunger, poverty is also multi-faceted. Not simply defined by a lack of income or consumption, poverty includes deprivation in the areas of health, education, nutrition, security, empowerment and dignity. Vulnerability constitutes a further 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 are usually confined to measuring the proportion of a population whose income is below a particular threshold.

The lowest rates of poverty are recorded mainly in Algeria, Cameroon, Djibouti, Egypt, Gabon, Morocco, the Seychelles, South Africa, Sudan and Tunisia. In contrast, poverty rates are very high in the following countries, in order of importance: Democratic Republic of the Congo, Liberia, Burundi, Madagascar, Malawi, Zambia, Nigeria, Tanzania, Rwanda and the Central African Republic. It appears that the low poverty rates are recorded in most of the countries of North Africa; however, these low rates often hide important disparities within countries. The high poverty rates are usually inherent to countries in conflict or those that have experienced conflict. (Chart 43)

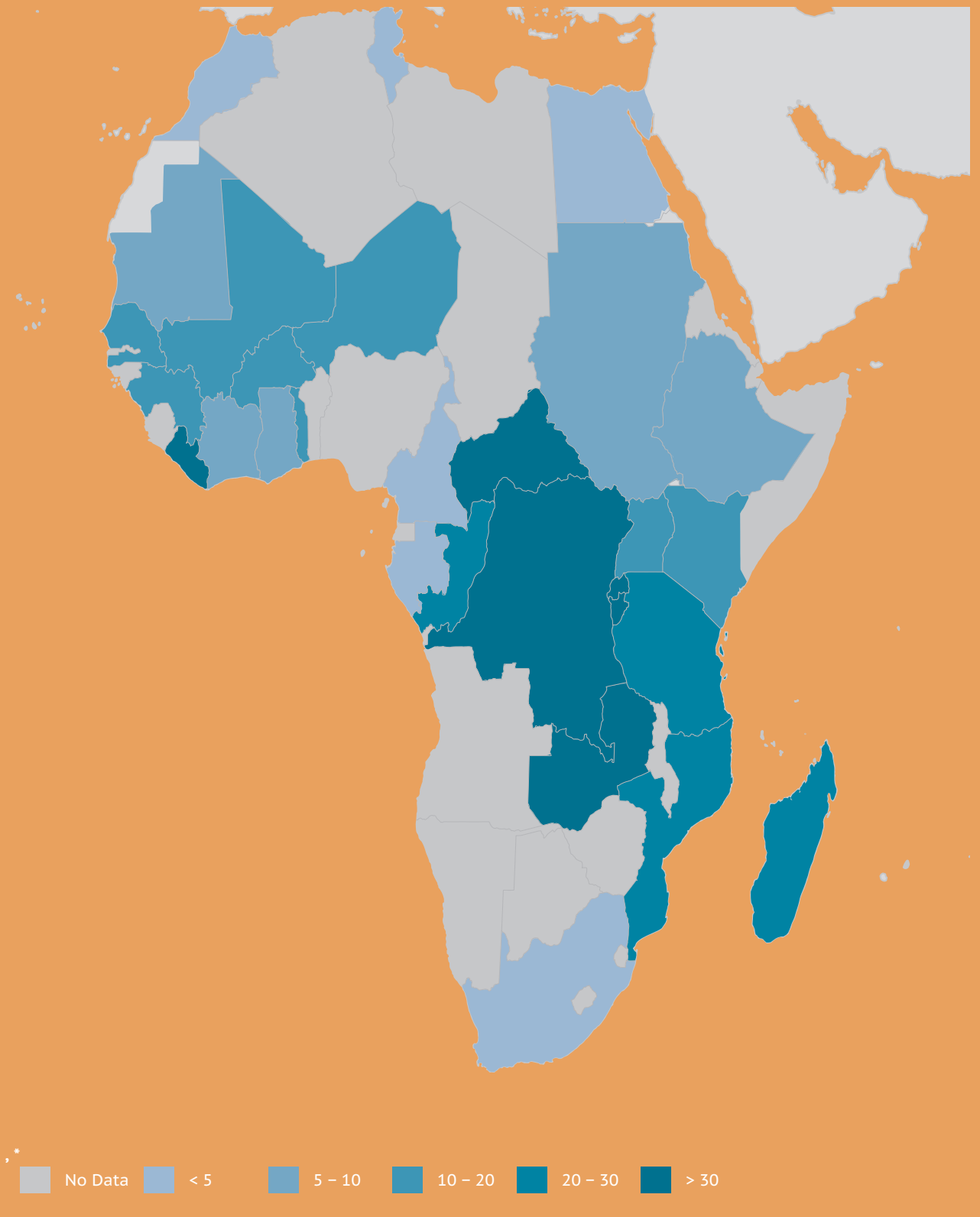
CHART 43: Poverty headcount ratio at $1.25 a day PPP, share of population (1990-2010*)



Source: World Bank (WDI)

Metalink: P2.HUN.WBK.WDI.POV.H125, p. 246

MAP 24: Poverty gap at $1.25 a day PPP (%, 2005-2009*)



Source: World Bank (WDI)

Metalink: P2.HUN.WBK.WDI.POV.P125, p. 246

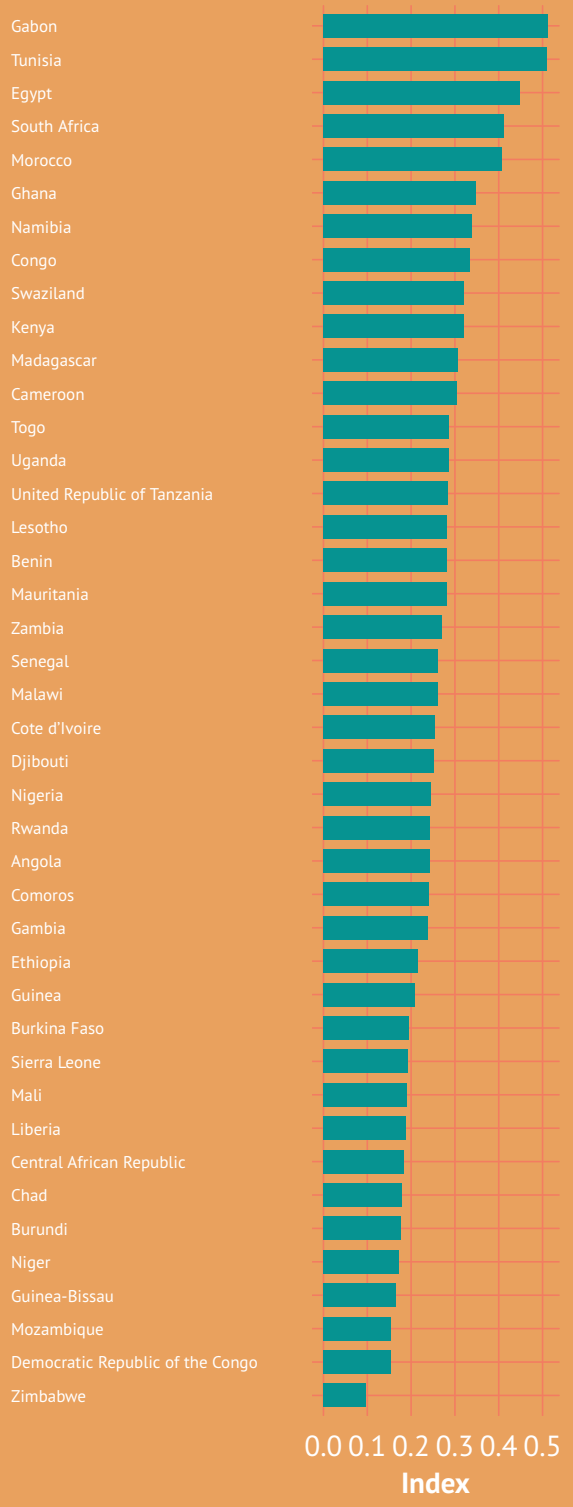
The Inequality-adjusted Human Development Index (IHDI) adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. In 2010, the ten countries in Africa with the highest IHDI were: Gabon, Tunisia, Egypt, South Africa, Morocco, Ghana, Namibia, Congo, Swaziland, and Kenya. The ten countries with the lowest IHDI were Zimbabwe, Democratic Republic of the Congo, Mozambique, Guinea-Bissau, Niger, Burundi, Chad, Central African Republic, Liberia, and Mali. (Chart 44)

According to Human Development Report[6] 2010, sub-Saharan Africa had the highest incidence of multidimensional poverty, with considerable variation across the 37 African countries in the sample—from a low level of 3 percent in South Africa to a massive level of 93 percent in Niger—while the average share of deprivation ranges from about 45 percent (in Gabon, Lesotho and Swaziland) to 69 percent (in Niger). In Guinea, Mali and Niger, more than half of the population is poor and has experienced a child death. In those countries, as well as in Burkina Faso, Burundi, Ethiopia and Mozambique, more than half of the population is poor and lives in a household where nobody has completed primary school.

Higher inequality of income distribution (Gini score of income distribution Index, 2005-2009, of more than 45) was observed in the Central African Republic, Congo, Kenya, Madagascar, Mozambique, Rwanda, South Africa, and Zambia. (Map 25)

Poverty at the global level hides disparities, including at the gender level. In fact, too higher inequality has been recorded in the Central African Republic, Democratic Republic of the Congo, Mali, Niger, and Sierra Leone where the gender inequality score was more than 0.75. Similarly, in some countries, such as Benin, Cameroon, Côte d'Ivoire, Congo, Kenya, Malawi, Sudan, Uganda and Zambia, the inequalities are also high, with gender inequality scores of more than 0.73 and less than 0.75. (Map 26)

CHART 44: Inequality-adjusted HDI score (2010)

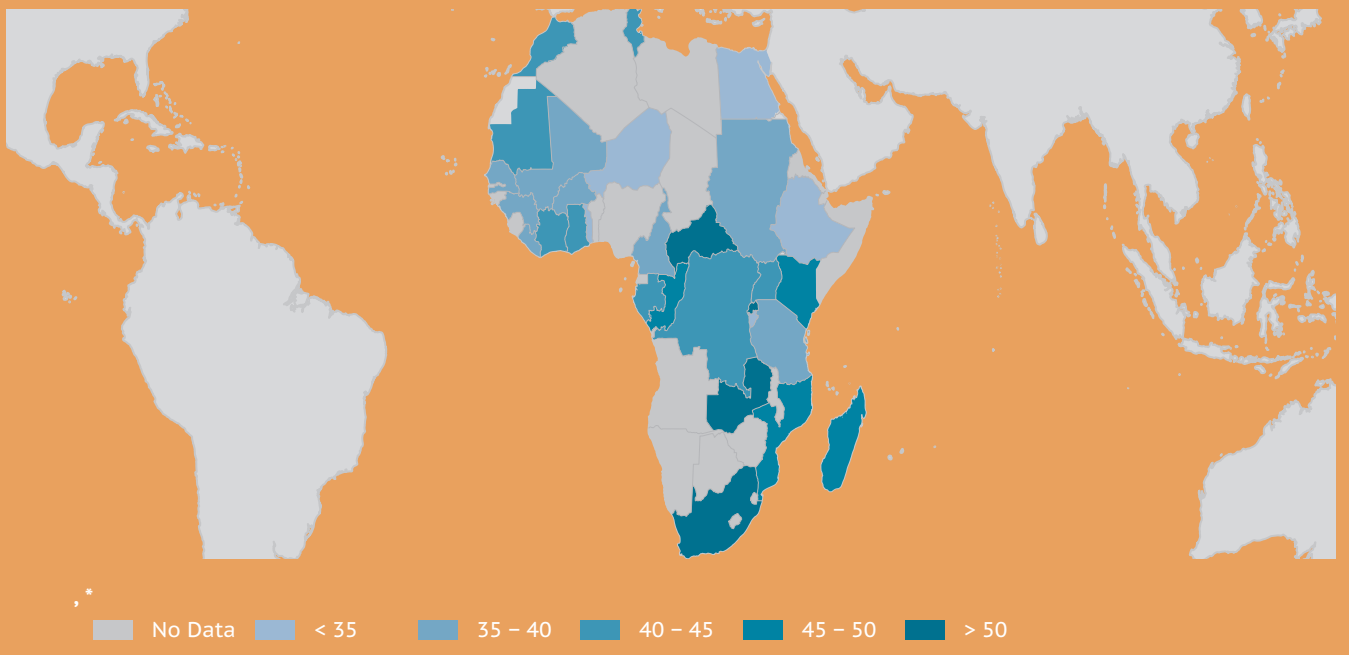


Source: Human Development Report 2010

Metalink: P2.HUN.UNDP.HDR.POV.HDIi, p. 241

[6] UNDP. Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development (http://hdr.undp.org/en/reports/global/hdr2010/)

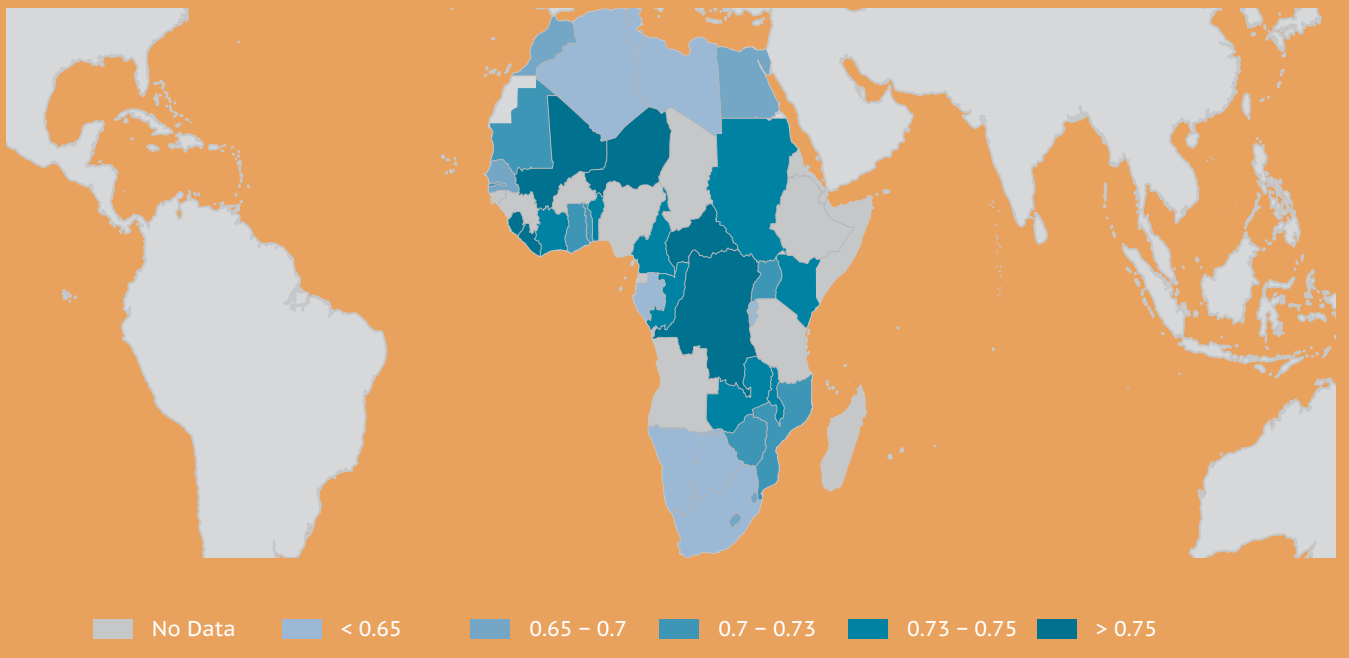
MAP 25: Gini-score of income distribution, higher scores reflect higher inequality (index, 2005-2009*)



Source: World Bank (WDI)

Metalink: P2.HUN.WBK.WDI.POV.GINI, p. 239

MAP 26: Gender inequality score, higher scores reflect higher inequality (index, 2008)



Source: Human Development Report 2010

Metalink: P2.HUN.UNDP.HDR.POV.GEI, p. 239

Food aid

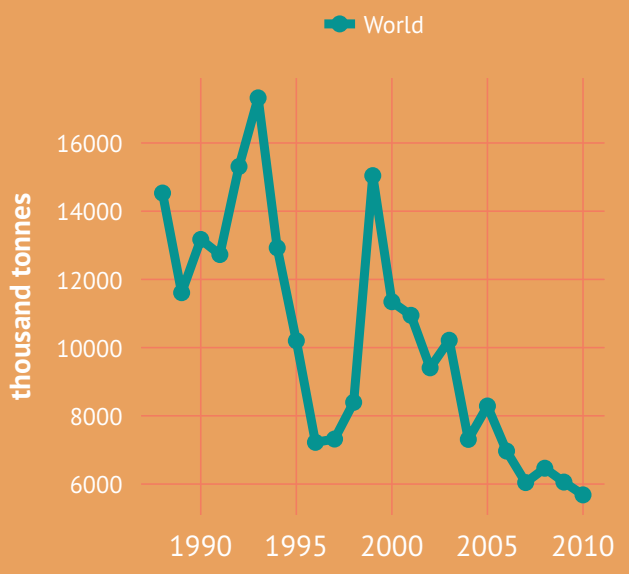
Emergency situations have become increasingly frequent over the past 25 years, and are often coupled with acute and chronic food insecurity in the affected countries. International responses to these crises have generally focused on addressing immediate humanitarian needs, as evidenced by the growing share of food aid that is channeled to emergencies.

From 1988 to 2010, food aid received in Africa underwent significant change. Indeed, food aid was estimated to be just over 14 million tonnes in 1988, and dropped to just under 6 million tonnes in 2010, a reduction of more than half. Chart 45 shows that aid has experienced two major peaks: in 1993, when it surpassed the record volume of 16 million tonnes, and in 1999, when it was 15 million tonnes. Outside these times of abundance, the general trend of food aid has been declining. (Chart 45)

Some African countries have naturally received more aid than others, which may be because of their vulnerability and/or poverty. The countries that received the most help – i.e. their endowments exceeded 45 000 tonnes – were Burkina Faso, Chad, Democratic Republic of the Congo, Ethiopia, Kenya, Mozambique, Niger, Somalia, Sudan, Uganda and Zimbabwe. Overall, almost all African countries received some assistance. Countries which received smaller amounts received less than 1 000 tonnes. These include the Central African Republic, Eritrea, Gabon, Ghana, Guinea, Libya, Morocco, Namibia, Nigeria, Rwanda, South Africa and Togo. (Map 27)

The strong focus on short-term relief measures, combined with limited support to local agriculture, is not only less effective for overcoming the structural reasons for food insecurity, it might even lower incentives to invest in agriculture and domestic food production. A more sustainable solution is required to tackle the underlying reasons for food insecurity, such as low agricultural productivity. Accordingly, those most in need would also benefit from the provision of basic inputs, such as seeds, fertilizers, and farming tools. Donors are addressing shortcomings of traditional food assistance.

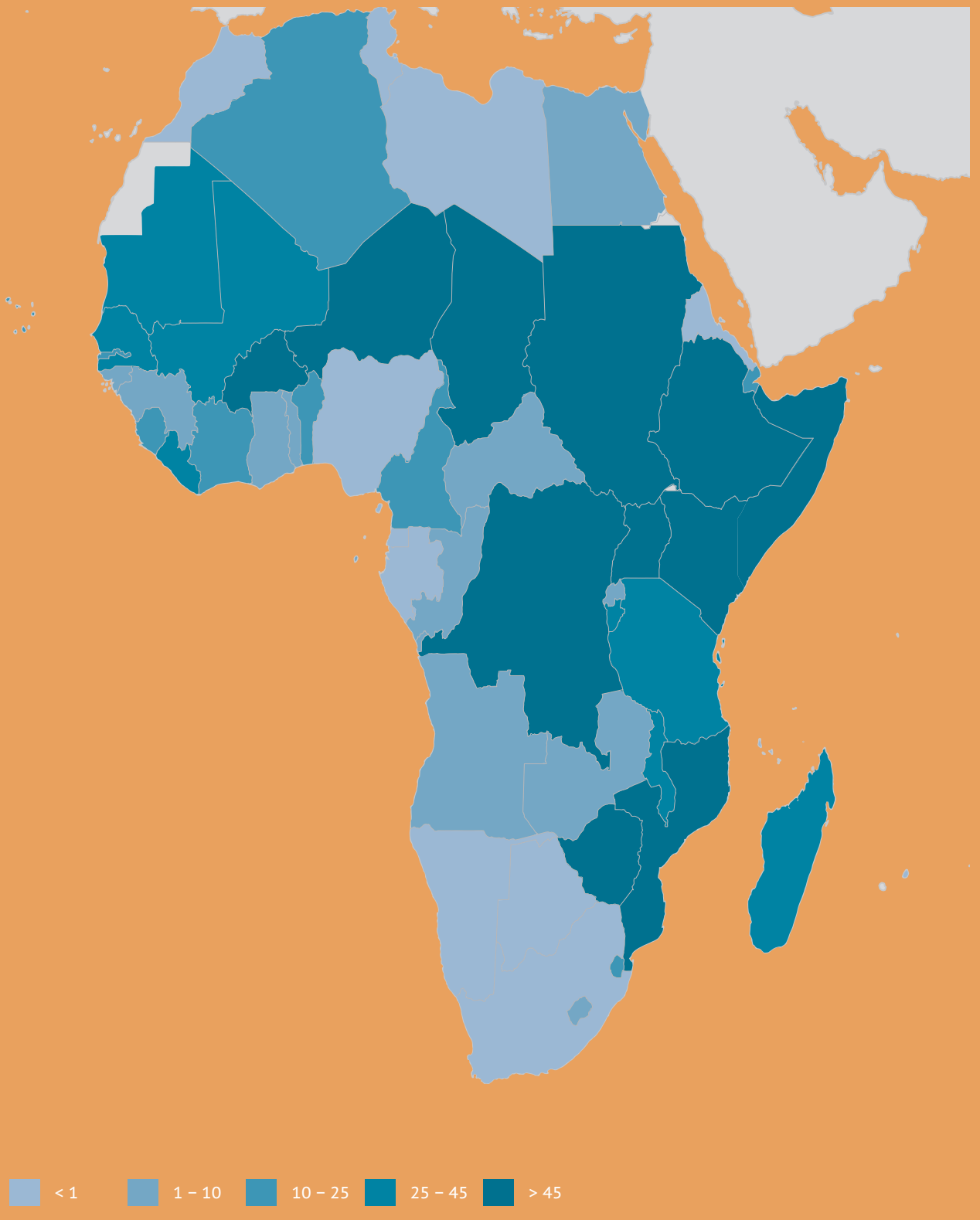
CHART 45: Food aid received (1988-2010)



Source: Food Aid Information System

Metalink: P2.HUN.WFP.FAIS.FDAID, p. 239

MAP 27: Food aid received, grain equivalent (thousand tonnes, 2010)



Source: Food Aid Information System

Metalink: P2.HUN.WFP.FAIS.FDAID, p. 239

TABLE 13: Availability

	dietary supply adequacy		value of food production		energy supply from cereals, roots and tubers		protein supply	
	average index 1990-1992	average index 2007-2009	per capita I$/cap 1990-1992	per capita I$/cap 2007-2009	share % 1990-1992	share % 2007-2009	average g/cap/day 1990-1992	average g/cap/day 2007-2009
NORTH AFRICA	138	141	175	239	64	62	82	93
Algeria	133	136	117	151	59	59	77	87
Egypt	142	145	177	273	68	66	84	98
Libyan Arab Jamahiriya	144	136	172	174	49	51	81	80
Morocco	135	138	188	229	64	61	84	89
Tunisia	140	140	302	342	56	52	85	95
WEST AFRICA								
Benin	107	120	148	196	74	72	54	63
Burkina Faso	108	120	109	119	76	73	71	80
Cape Verde	112	113	70	89	55	47	62	73
Cote d'Ivoire	119	126	248	258	66	68	53	54
Gambia	109	113	73	69	58	61	52	60
Ghana	91	129	172	254	68	64	43	59
Guinea	118	121	166	180	63	63	57	56
Guinea-Bissau	107	112	141	180	69	64	46	45
Liberia	106	106	91	84	67	68	39	38
Mali	105	123	145	198	69	71	62	70
Mauritania	119	129	163	136	55	49	79	86
Niger	97	117	133	183	76	62	56	78
Nigeria	107	128	170	201	68	64	50	65
Senegal	104	111	109	110	65	62	66	62
Sierra Leone	93	101	94	103	61	61	42	50
Togo	97	108	102	124	75	73	48	55
CENTRAL AFRICA								
Cameroon	93	109	152	211	59	57	49	62
Central African Republic	88	96	168	205	57	54	41	50
Chad	80	96	129	124	65	67	51	63
Congo	92	97	82	94	60	61	46	45
Democratic Republic of the Congo			115	59				
Equatorial Guinea								
Gabon	115	119	209	151	46	51	72	81
Sao Tome and Principe	103	122	116	180	52	47	52	63
EAST AFRICA								
Burundi	90	74	176	132	46	48	59	43
Djibouti	73	102	74	86	56	55	41	59
Eritrea		73		48		81		49
Ethiopia		94		95		78		59
Kenya	95	96	148	148	55	53	55	58
Rwanda	89	98	168	169	49	51	44	53
Somalia			189	172				
Sudan (former)	92	105	156	272	58	49	62	73
Uganda	108	109	178	155	45	45	51	50
United Republic of Tanzania	103	102	139	143	70	59	53	55
SOUTHERN AFRICA								
Angola	79	100	78	128	59	62	35	46
Botswana	100	92	159	122	48	49	68	60
Comoros	92	81	116	91	58	56	54	49
Lesotho	110	108	61	54	78	81	65	67
Madagascar	105	101	196	160	75	79	52	49
Malawi	90	110	75	159	73	71	51	61
Mauritius	117	123	218	193	49	47	70	84
Mozambique	83	99	70	76	76	76	31	39
Namibia	93	95	260	192	61	57	58	63
Seychelles	105	113	78	51	47	48	71	79
South Africa	121	125	211	236	55	54	74	83

TABLE 13: Availability (continued)

	dietary supply adequacy		value of food production		energy supply from cereals, roots and tubers		protein supply	
	average index 1990-1992	average index 2007-2009	per capita I$/cap 1990-1992	per capita I$/cap 2007-2009	share % 1990-1992	share % 2007-2009	average g/cap/day 1990-1992	average g/cap/day 2007-2009
Swaziland	110	101	288	239	56	58	58	59
Zambia	97	86	85	85	77	75	51	46
Zimbabwe	90	96	95	96	64	59	50	54
AFRICA	108	115	150	173	65	62	57	64
ECOWAS								
SADC								
COMESA								
UMA								
ECCAS								
IGAD								
CEMAC								
UEMOA								
CEN-SAD								
ASIA Developing	107	115	167	246	67	57	61	73
LAC	117	124	314	447	43	40	68	82
DEVELOPED REGIONS	131	136	452	471	34	32	99	104
WORLD	114	120	239	295	56	51	69	78

TABLE 14: Access

	Physical access						Economic access			
	percent of paved roads over total roads		rail-lines density		road density		food price level index			
	%	%	per 100 square km of land area	per 100 square km of land area	per 100 square km of land area	per 100 square km of land area	index	index	index	index
	1990	2009	1990	2009	1990	2009	1991	2000	2005	2009
NORTH AFRICA	62.4	73.9			5.8		1.8	1.8	1.8	1.6
Algeria	67.0	74.0	0.2	0.2	3.7	4.7				
Egypt	72.0	89.4	0.5	0.5		10.0	2.0	2.0	1.8	1.6
Libyan Arab Jamahiriya	51.7				4.2					
Morocco	49.1	70.3	0.4	0.5	13.3	13.0	1.6	1.6	1.6	
Tunisia	76.1	75.2	1.4	1.2	12.2	11.8	1.6	1.7	1.7	1.6
WEST AFRICA										
Benin	20.0							2.4	2.1	1.9
Burkina Faso	16.6			0.2			2.0	1.9	1.9	2.0
Cape Verde	78.0				27.3		1.4	1.5	1.5	1.4
Cote d'Ivoire	8.7		0.2	0.2			2.1	1.9	1.9	
Gambia					21.1		2.4	2.5	2.7	2.7
Ghana	19.6	12.6	0.4		16.0	45.9	3.0	2.4	2.4	2.0
Guinea	15.2				12.1		1.8	1.9	2.4	2.7
Guinea-Bissau	8.3				11.3				2.0	
Liberia	5.5				8.4					
Mali	10.9	24.6	0.0		1.1	1.8	2.2	1.9	2.0	1.9
Mauritania				0.1	0.7		1.9	2.0	2.1	2.2
Niger	29.0				0.9		1.7	1.9	2.0	2.2
Nigeria					13.2		2.8	2.4	2.5	2.4
Senegal	27.2	32.0	0.5		7.0	7.5	1.9	2.0	2.1	2.0
Sierra Leone	10.6				15.8		4.0	2.2	2.4	2.2
Togo	21.2				13.0		3.8	2.2	2.2	2.3
CENTRAL AFRICA										
Cameroon	10.5		0.2	0.2	7.2			1.9	1.9	
Central African Republic					3.8		2.1	2.2	2.2	
Chad	0.8				2.3		2.3	2.3	2.5	2.6
Congo	9.7				3.7		2.4	2.5	2.1	2.3
Democratic Republic of the Congo			0.2	0.2						
Equatorial Guinea					9.1			2.0	2.1	
Gabon	8.2		0.3	0.3	2.8		2.2	2.1	2.1	2.3
Sao Tome and Principe	61.6							2.1	2.0	2.2
EAST AFRICA										
Burundi							2.1	2.3	2.2	
Djibouti					12.4					
Eritrea	19.4				3.0					
Ethiopia	15.0		0.1		2.3		1.6	1.7	1.8	1.9
Kenya	12.8	14.3	0.4		10.6	10.7	1.7	1.7	1.9	2.2
Rwanda	9.0				50.0		1.6	1.5	1.7	1.7
Somalia	11.1				3.3					
Sudan (former)	33.8		0.2	0.2	0.4					
Uganda			0.5				1.5	1.7	1.7	1.9
United Republic of Tanzania		6.7	0.5			10.9	1.9	1.9	2.0	2.0
SOUTHERN AFRICA										
Angola							2.9	2.0	2.1	
Botswana	32.0			0.1	1.4		1.9	1.9	1.8	2.1
Comoros	69.3									
Lesotho	18.0				16.8		2.5	2.3	1.9	1.5
Madagascar	15.4						2.0	2.1	2.2	2.0
Malawi			0.7		8.6		2.1	2.3	2.1	2.0
Mauritius	93.0	98.0			88.3	101.3	1.6	1.6	1.6	1.8
Mozambique	16.8	20.8		0.4	3.4	3.8		1.9	1.9	2.0
Namibia	10.8	14.7	0.3		7.9	5.1	1.6	1.5	1.6	1.8
Seychelles	56.9	96.5				110.4				
South Africa			1.8	1.8			1.1	1.3	1.4	0.8
Swaziland				1.7	16.1		1.2	1.5	1.8	

TABLE 14: Access (continued)

	Physical access						Economic access			
	percent of paved roads over total roads		rail-lines density		road density		food price level index			
	%	%	per 100 square km of land area	per 100 square km of land area	per 100 square km of land area	per 100 square km of land area	index	index	index	index
	1990	2009	1990	2009	1990	2009	1991	2000	2005	2009
Zambia	16.6		0.2		4.7		1.6	1.7	1.7	1.5
Zimbabwe	14.0		0.7		23.1		1.2	1.9	1.9	2.0
AFRICA							1.8	1.8	1.8	1.6
ECOWAS										
SADC										
COMESA										
UMA										
ECCAS										
IGAD										
CEMAC										
UEMOA										
CEN-SAD										
ASIA Developing				0.7			1.6	1.6	1.6	1.7
LAC	16.0		0.4	0.5	14.2		1.4	1.3	1.3	1.4
DEVELOPED REGIONS			1.2	1.3	30.9	34.2	1.3	1.2	1.2	1.2
WORLD				0.9			1.3	1.3	1.3	1.4

TABLE 15: Inadequate access to food

	Prevalence of undernourishment		Depth of the food deficit		Prevalence of food inadequacy	
	%	%	index	index	%	%
	1990-1992	2007-2009	1990-1992	2007-2009	1990-1992	2007-2009
NORTH AFRICA	< 5	< 5	21	17	5.3	< 5
Algeria	5.2	< 5	30	25	5.2	< 5
Egypt	< 5	< 5	13	10	5.5	< 5
Libyan Arab Jamahiriya	< 5	< 5	5	10	< 5	< 5
Morocco	7.1	5.2	40	32	7.1	5.2
Tunisia	< 5	< 5	5	5	< 5	< 5
WEST AFRICA						
Benin	22.4	10.8	138	64	22.4	10.8
Burkina Faso	22.9	24.4	143	172	31.1	30.3
Cape Verde	12.2	10.5	72	71	12.2	10.5
Cote d'Ivoire	13.7	19.3	78	122	21.1	25.7
Gambia	19.5	13.0	121	81	19.5	13.0
Ghana	40.5	5.8	294	35	40.5	5.8
Guinea	18.4	15.5	112	93	18.4	15.5
Guinea-Bissau	22.0	14.4	139	91	22.0	14.4
Liberia	32.9	29.6	228	208	32.9	29.6
Mali	25.3	9.5	156	52	25.3	9.5
Mauritania	12.4	7.9	73	46	12.4	7.9
Niger	36.9	13.6	248	77	36.9	13.6
Nigeria	19.3	7.3	120	42	19.3	7.3
Senegal	21.7	16.5	137	104	21.7	16.5
Sierra Leone	41.9	33.1	328	243	41.9	33.1
Togo	32.8	19.8	222	129	32.8	19.8
CENTRAL AFRICA						
Cameroon	38.7	15.6	266	101	38.7	15.6
Central African Republic	49.5	32.6	372	233	49.5	32.6
Chad	61.1	36.4	502	284	61.1	36.4
Congo	42.8	34.6	312	245	42.8	34.6
Democratic Republic of the Congo						
Equatorial Guinea						
Gabon	10.1	6.0	59	37	10.1	6.0
Sao Tome and Principe	22.6	7.5	142	46	22.6	7.5
EAST AFRICA						
Burundi	49.0	72.4	349	640	49.0	72.4
Djibouti	68.0	24.0	601	174	68.0	24.0
Eritrea	72.4	69.1		584	79.3	69.1
Ethiopia	68.0	43.8		377	80.7	50.8
Kenya	35.6	32.4	227	216	35.6	32.4
Rwanda	52.6	34.2	395	249	52.6	34.2
Somalia						
Sudan (former)	42.1	36.6	296	293	51.8	43.2
Uganda	26.6	31.0	163	198	35.8	38.3
United Republic of Tanzania	29.4	36.1	184	249	38.1	43.1
SOUTHERN AFRICA						
Angola	63.9	30.7	505	202	63.9	30.7
Botswana	27.4	31.9	178	240	27.4	31.9
Comoros	43.5	62.6	361	607	43.5	62.6
Lesotho	16.9	17.0	101	110	16.9	17.0
Madagascar	24.8	29.1	154	188	24.8	29.1
Malawi	44.8	23.0	329	142	44.8	23.0
Mauritius	8.6	5.6	58	38	8.6	5.6
Mozambique	57.1	39.9	446	298	65.2	47.3
Namibia	37.5	32.7	259	234	37.5	32.7
Seychelles	14.6	8.7	85	51	14.6	8.7
South Africa	< 5	< 5	29	21	< 5	< 5
Swaziland	16.1	27.3	94	185	16.1	27.3
Zambia	34.3	47.5	229	352	34.3	47.5

TABLE 15: Inadequate access to food (continued)

	Prevalence of undernourishment		Depth of the food deficit		Prevalence of food inadequacy	
	%	%	index	index	%	%
	1990-1992	2007-2009	1990-1992	2007-2009	1990-1992	2007-2009
Zimbabwe	44.1	33.9	334	258	44.1	33.9
AFRICA	27.3	22.6	195	171	29.9	24.9
ECOWAS						
SADC						
COMESA						
UMA						
ECCAS						
IGAD						
CEMAC						
UEMOA						
CEN-SAD						
ASIA Developing	23.7	14.8	165	111	27.3	19.1
LAC	14.6	8.7	98	63	16.4	10.9
DEVELOPED REGIONS	< 5	< 5	12	9	< 5	< 5
WORLD	18.6	12.9	130	97	21.2	16.0

TABLE 16: Utilization

	Determinants		Outcomes					
	access to water	access to sanitation	underweight		stunting		wasting	
	%	%	%	%	%	%	%	%
	2009	2009	1990	2009	1990	2009	1990	2009
NORTH AFRICA	92	90						
Algeria	83	95						
Egypt	99	95						
Libyan Arab Jamahiriya		97						
Morocco	82	70						
Tunisia	94	85						
WEST AFRICA								
Benin	74	13						
Burkina Faso	77	17		26.0		35.1		11.3
Cape Verde	87	60						
Cote d'Ivoire	79	23						
Gambia	89	68						
Ghana	84	14						
Guinea	74	18						
Guinea-Bissau	63	19						
Liberia	72	17						
Mali	63	21						
Mauritania	50	26	43.3		54.8		17.4	
Niger	49	9						
Nigeria	58	31	35.1		50.5		11.8	
Senegal	71	51						
Sierra Leone	54	12	25.4		40.9		10.2	
Togo	61	13						
CENTRAL AFRICA								
Cameroon	77	49						
Central African Republic	67	34						
Chad	51	13						
Congo	71	18						
Democratic Republic of the Congo	45	24						
Equatorial Guinea								
Gabon	87	33						
Sao Tome and Principe	89	26		14.4		31.6		11.2
EAST AFRICA								
Burundi	72	46						
Djibouti	88	50						
Eritrea								
Ethiopia	44	20						
Kenya	58	31		16.4		35.2		7.0
Rwanda	66	55						
Somalia	29	23						
Sudan (former)	58	26						
Uganda	71	34						
United Republic of Tanzania	53	10						
SOUTHERN AFRICA								
Angola	51	57						
Botswana	96	62						
Comoros	95	36						
Lesotho	78	26						
Madagascar	46	15				49.2		
Malawi	80	51						
Mauritius	99	89						
Mozambique	47	17						
Namibia	93	32						
Seychelles								
South Africa	91	79						

TABLE 16: Utilization (continued)

	Determinants		Outcomes					
	access to water	access to sanitation	underweight		stunting		wasting	
	%	%	%	%	%	%	%	%
	2009	2009	1990	2009	1990	2009	1990	2009
Swaziland	68	57						
Zambia	61	48						
Zimbabwe	80	39						
AFRICA	66	40						
ECOWAS								
SADC								
COMESA								
UMA								
ECCAS								
IGAD								
CEMAC								
UEMOA								
CEN-SAD								
ASIA Developing	89	56						
LAC	94	80						
DEVELOPED REGIONS	99	95						
WORLD	88	62						

TABLE 17: Vulnerability/Stability

	Value of food imports over total merchandise exports			Cereal import dependency ratio			Arable land equipped for irrigation share	
	%	%	%	%	%	%	%	%
	1990-1992	1999-2001	2007-2009	1990-1992	1999-2001	2007-2009	1990-1992	2007-2009
NORTH AFRICA	18	16	12	43.2	52.8	49.9	23.1	28.7
Algeria	16	13	10	62.4	79.7	70.7	6.8	7.6
Egypt	69	46	30	37.9	35.6	35.5	100.0	100.0
Libyan Arab Jamahiriya	9	9	4	89.9	91.3	91.8	26.0	26.9
Morocco	15	17	21	27.2	59.5	53.6	14.3	18.1
Tunisia	11	9	10	35.0	66.9	60.2	13.0	16.0
WEST AFRICA								
Benin	38	45	49	35.3	11.6	18.6	0.6	0.5
Burkina Faso	53	55	33	7.8	11.7	8.4	0.6	0.5
Cape Verde	822	578	601	90.2	72.8	94.3	7.3	5.0
Cote d'Ivoire	13	9	10	39.9	46.6	58.8	2.7	2.6
Gambia	142	313	222	52.1	39.7	45.9	0.9	0.5
Ghana	21	17	20	26.4	23.9	30.6	0.2	0.8
Guinea	16	18	24	26.7	20.7	14.5	3.2	3.4
Guinea-Bissau	165	49	56	33.1	37.7	27.3	6.8	8.3
Liberia	21	28	95	59.8	64.5	63.6	0.9	0.8
Mali	25	18	17	4.7	7.1	6.1	3.7	3.9
Mauritania	27	43	26	74.1	68.3	75.0	9.8	11.3
Niger	29	39	26	5.8	8.6	7.0	0.5	0.5
Nigeria	5	6	6	4.4	13.7	14.5	0.8	0.8
Senegal	47	54	66	42.4	48.4	55.0	2.3	3.4
Sierra Leone	59	590	73	30.1	49.5	27.9	5.8	2.8
Togo	27	12	23	23.9	17.1	16.2	0.3	0.3
CENTRAL AFRICA								
Cameroon	9	13	16	33.8	30.3	32.6	0.4	0.5
Central African Republic	26	11	30	31.2	20.6	19.4	0.0	0.1
Chad	12	16	3	6.7	4.9	8.4	0.5	0.7
Congo	9	6	4	95.5	95.2	90.2	0.4	0.4
Democratic Republic of the Congo	26	26	20	21.4	20.8	38.6	0.1	0.2
Equatorial Guinea	15	1	0					
Gabon	5	5	5	78.6	85.5	83.3	1.4	1.2
Sao Tome and Principe	113	48	284	77.2	85.5	84.9	100.0	100.0
EAST AFRICA								
Burundi	27	41	104	10.6	13.8	24.9	1.7	2.6
Djibouti	247	298	551	102.0	100.0	100.0	100.0	69.8
Eritrea	83	197	810		51.5	58.6		3.1
Ethiopia	59	52	60		11.0	10.1		2.1
Kenya	18	23	26	14.3	26.4	36.1	1.2	1.9
Rwanda	46	72	53	11.0	19.6	21.9	0.5	0.7
Somalia	80	81	131	43.6	37.6	74.9	19.6	20.0
Sudan (former)	42	21	13	17.8	21.5	24.6	14.6	9.6
Uganda	14	26	28	1.8	6.8	17.7	0.2	0.1
United Republic of Tanzania	22	44	21	4.0	11.9	13.8	1.6	1.9
SOUTHERN AFRICA								
Angola	11	5	3	50.0	52.4	54.6	2.7	2.2
Botswana	11	12	10	82.2	98.1	90.1	0.4	0.6
Comoros	89	118	304	71.1	69.8	73.9	0.2	0.2
Lesotho	148	49	17	71.5	54.8	84.8	0.6	0.9
Madagascar	18	20	23	6.5	12.3	9.2	39.5	36.8
Malawi	24	8	17	18.4	4.0	6.4	1.0	1.8
Mauritius	14	14	23	102.4	112.9	110.1	17.0	24.1
Mozambique	156	43	23	59.6	23.1	30.5	3.0	2.4
Namibia	9	15	7	62.9	71.7	64.8	0.8	1.0
Seychelles	54	21	19	100.0	100.0	100.1	0.0	30.0
South Africa	3	3	4	23.8	13.2	19.3	8.8	10.4
Swaziland	13	15	9	56.5	57.9	79.3	25.6	28.2

TABLE 17: Vulnerability/Stability (continued)

	Value of food imports over total merchandise exports			Cereal import dependency ratio			Arable land equipped for irrigation share	
	% 1990-1992	% 1999-2001	% 2007-2009	% 1990-1992	% 1999-2001	% 2007-2009	% 1990-1992	% 2007-2009
Zambia	6	9	4	23.8	8.9	4.9	1.3	5.0
Zimbabwe	9	5	25	30.7	8.8	52.2	3.7	4.2
AFRICA	13	12	10	26.9	29.8	30.1	6.5	6.1
ECOWAS								
SADC								
COMESA								
UMA								
ECCAS								
IGAD								
CEMAC								
UEMOA								
CEN-SAD								
ASIA Developing	6	4	4	9.7	10.0	10.0	34.5	47.2
LAC	9	8	6	22.5	30.3	29.9	12.8	13.6
DEVELOPED REGIONS	7	5	5	16.7	15.2	16.0	6.7	5.4
WORLD	7	5	5	14.6	15.2	15.7	18.4	22.5

TABLE 18: Population at risk: UNHCR population of concern

	UNHCR population of concern							
	total	total refugees	internally displaced persons	others and stateless persons	total	total refugees	internally displaced persons	others and stateless persons
	thousand people 2009	thousand people 2009	thousand people 2009	thousand people 2009	thousand people 2010	thousand people 2010	thousand people 2010	thousand people 2010
NORTH AFRICA	27	22	0	5	26	20	0	5
Algeria	10	8	0	2	8	7	0	2
Egypt	9	7	0	2	9	7	0	2
Libyan Arab Jamahiriya	3	2	0	1	3	2	0	1
Morocco	3	2	0	1	3	2	0	1
Tunisia	3	2	0	1	3	2	0	1
WEST AFRICA	968	234	519	215	827	253	515	60
Benin	1	0	0	0	1	0	0	0
Burkina Faso	1	1	0	0	2	1	0	1
Cape Verde	0	0	0	0	0	0	0	0
Cote d'Ivoire	714	23	519	172	585	42	515	29
Gambia	5	2	0	3	3	2	0	1
Ghana	16	15	0	1	22	20	0	2
Guinea	14	11	0	3	15	12	0	3
Guinea-Bissau	1	1	0	0	1	1	0	0
Liberia	78	72	0	6	73	70	0	3
Mali	4	3	0	1	4	4	0	0
Mauritania	52	39	0	13	40	38	0	2
Niger	1	1	0	0	1	1	0	0
Nigeria	25	16	0	10	28	16	0	12
Senegal	17	16	0	1	18	16	0	2
Sierra Leone	19	15	0	3	15	11	0	3
Togo	20	18	0	1	19	18	0	1
CENTRAL AFRICA	3 312	706	2 420	186	3 356	731	2 045	580
Cameroon	17	15	0	2	17	15	0	2
Central African Republic	357	160	197	1	359	165	193	2
Chad	250	55	171	25	237	54	131	53
Congo	24	21	0	3	24	21	0	3
Democratic Republic of the Congo	2 663	456	2 053	154	2 719	477	1 721	520
Equatorial Guinea	0	0	0	0	0	0	0	0
Gabon	0	0	0	0	0	0	0	0
Sao Tome and Principe	0	0	0	0	0	0	0	0
EAST AFRICA	6 027	1 561	3 529	936	6 096	1 664	3 595	837
Burundi	231	94	100	37	254	84	157	12
Djibouti	1	1	0	0	1	1	0	0
Eritrea	224	209	0	14	236	222	0	14
Ethiopia	112	63	0	49	118	69	0	49
Kenya	417	10	399	8	311	9	300	2
Rwanda	155	129	0	25	136	115	0	21
Somalia	2 249	678	1 550	21	2 257	770	1 464	23
Sudan (former)	1 619	368	1 034	217	2 185	387	1 548	250
Uganda	863	8	446	409	436	6	126	304
United Republic of Tanzania	156	1	0	155	164	1	0	162
SOUTHERN AFRICA	186	166	0	20	165	162	0	3
Angola	159	141	0	18	136	135	0	1
Botswana	0	0	0	0	0	0	0	0
Comoros	0	0	0	0	0	0	0	0
Lesotho	0	0	0	0	0	0	0	0
Madagascar	0	0	0	0	0	0	0	0
Malawi	0	0	0	0	0	0	0	0
Mauritius	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0
Namibia	1	1	0	0	1	1	0	0
Seychelles	0	0	0	0	0	0	0	0
South Africa	1	0	0	0	1	0	0	0
Swaziland	0	0	0	0	0	0	0	0
Zambia	0	0	0	0	0	0	0	0

TABLE 18: Population at risk: UNHCR population of concern (continued)

	UNHCR population of concern							
	total	total refugees	internally displaced persons	others and stateless persons	total	total refugees	internally displaced persons	others and stateless persons
	thousand people 2009	thousand people 2009	thousand people 2009	thousand people 2009	thousand people 2010	thousand people 2010	thousand people 2010	thousand people 2010
Zimbabwe	24	22	0	1	25	24	0	1
AFRICA	10 636	2 805	6 469	1 362	10 587	2 947	6 154	1 486
ECOWAS	916	195	519	202	787	215	515	57
SADC	3 005	623	2 053	329	3 047	639	1 721	686
COMESA	6 320	1 370	4 032	918	6 433	1 404	3 852	1 176
UMA	70	54	0	16	57	51	0	6
ECCAS	3 702	942	2 520	241	3 746	950	2 202	594
IGAD	5 484	1 336	3 429	719	5 543	1 464	3 437	641
CEMAC	649	250	368	31	638	255	324	60
UEMOA	759	64	519	176	631	84	515	33
CEN-SAD	6 104	1 728	3 870	506	6 430	1 875	4 150	406
ASIA Developing	13 602	6 372	5 435	1 796	14 103	6 425	4 232	3 446
LAC	3 898	463	3 304	132	4 238	471	3 672	95
DEVELOPED REGIONS	1 097	535	421	141	1 055	505	397	153
WORLD	29 233	10 174	15 628	3 431	29 986	10 350	14 456	5 180

TABLE 19: Population at risk: persons affected by natural disasters

	Persons affected by natural disasters						
	total	drought	earthquake	extreme temperature	flood	storm	volcanoes, wildfires and epidemics
	thousand people 2011-2010	thousand people 2011-2010	thousand people 2011-2010	thousand people 2011-2010	thousand people 2011-2010	thousand people 2011-2010	thousand people 2011-2010
NORTH AFRICA	80		0		80		
Algeria	0	0	0	0	0	0	
Egypt	4		0	0	4	0	
Libyan Arab Jamahiriya	0		0		0		
Morocco	77	0	0	0	77	0	
Tunisia	0	0	0		0		
WEST AFRICA	4 433	1 438			2 978		
Benin	681	0			680	0	
Burkina Faso	139	0			133		
Cape Verde	0	0			0	0	
Cote d'Ivoire	6	0			6		
Gambia	39	0			39	0	
Ghana	17	0			17		
Guinea	48	0	0		48	0	
Guinea-Bissau	57	0			57	0	
Liberia	15	0		0	15	0	
Mali	632	600			32		
Mauritania	847	838			9	0	
Niger	228	0			227	0	
Nigeria	1 508	0		0	1 500	0	
Senegal	102	0			102	0	
Sierra Leone	0				0	0	
Togo	112	0			112	0	
CENTRAL AFRICA	230						
Cameroon	3	0			0		
Central African Republic	2	0			2	0	
Chad	150	0			145	0	
Congo	1	0	0		0		
Democratic Republic of the Congo	73	0	0		69	0	4
Equatorial Guinea	0						
Gabon	2				0	2	
Sao Tome and Principe	0	0					
EAST AFRICA	4 543	4 200			326		
Burundi	2	0	0		2	0	
Djibouti	200	200			0	0	
Eritrea	0	0			0	0	
Ethiopia	82	0	0		81		1
Kenya	214	0	0		211	0	
Rwanda	0	0	0		0		
Somalia	4 016	4 000	0		16	0	
Sudan (former)	16	0	0		16	0	
Uganda	13	0	0		0	0	
United Republic of Tanzania	0	0	0		0	0	
SOUTHERN AFRICA	2 603	2 140			261		
Angola	111	0			111		
Botswana	0	0			0	0	
Comoros	0	0			0	0	
Lesotho	0	0			0	0	
Madagascar	192	0			0	192	
Malawi	21	0	0		21	0	
Mauritius	0	0				0	
Mozambique	480	460	0		17	0	
Namibia	110	0			110		
Seychelles	0		0		0	0	
South Africa	6	0	0	0	0	6	
Swaziland	0	0			0	0	

TABLE 19: Population at risk: persons affected by natural disasters (continued)

	Persons affected by natural disasters						
	total	drought	earthquake	extreme temperature	flood	storm	volcanoes, wildfires and epidemics
	thousand people	thousand people	thousand people	thousand people	thousand people	thousand people	thousand people
	2011-2010	2011-2010	2011-2010	2011-2010	2011-2010	2011-2010	2011-2010
Zambia	1	0			1		
Zimbabwe	1 681	1 680			1	0	
AFRICA	11 889	7 778			3 861		
ECOWAS	3 586	600			2 969		
SADC	2 676	2 140			330		
COMESA	2 499	1 880			406		
UMA	924				86		
ECCAS	343						
IGAD	4 541	4 200			324	0	
CEMAC	157				146		
UEMOA	1 958	600			1 349		
CEN-SAD	9 111	5 638			3 448		
ASIA Developing	229 078				178 823		
LAC	11 591	124			4 636	1 082	
DEVELOPED REGIONS	1 345			15	468	511	
WORLD	253 965	49 385	5 701	73	187 803	7 963	641

TABLE 20: Dimensions of poverty

	Poverty gap at				Poverty headcount ratio			
	$1.25 a day (ppp)	$2 a day (ppp)	national poverty line	rural poverty line	$1.25 a day (ppp)	$2 a day (ppp)	national poverty line	rural poverty line
	%	%	%	%	%	%	%	%
	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*
NORTH AFRICA								
Algeria								
Egypt	0.4	2.8	3.6		1.7	15.4	22.0	30.0
Libyan Arab Jamahiriya								
Morocco	0.5	3.2			2.5	14.0	9.0	14.5
Tunisia	0.3	1.8			1.4	8.1	3.8	
WEST AFRICA								
Benin								
Burkina Faso	14.7	31.7	15.1	17.4	44.6	72.6	46.7	52.6
Cape Verde			8.1	14.3			26.6	44.3
Cote d'Ivoire	7.5	17.8	15.3	20.3	23.8	46.3	42.7	54.2
Gambia							48.4	73.9
Ghana	9.9	21.3	9.6	13.5	28.6	51.8	28.5	39.2
Guinea	15.0	31.0	17.6	22.0	43.3	69.6	53.0	63.0
Guinea-Bissau								
Liberia	40.9	59.6	24.4	26.3	83.8	94.9	63.8	67.7
Mali	16.4	35.2	13.2		50.4	78.7	47.4	50.6
Mauritania	6.8	17.7	14.5	22.3	23.4	47.7	42.0	59.4
Niger	12.4	30.8	19.6	21.2	43.6	75.2	59.5	63.9
Nigeria	33.7	50.2			68.0	84.5		
Senegal	10.8	24.7	16.4	21.5	33.5	60.4	50.8	61.9
Sierra Leone								
Togo	11.4	27.9	22.9	29.3	38.7	69.3	61.7	74.3
CENTRAL AFRICA								
Cameroon	1.2	8.2	12.3	17.5	9.6	30.4	39.9	55.0
Central African Republic	31.3	46.8	33.1	35.0	62.8	80.1	62.0	69.4
Chad								
Congo	22.8	38.8	18.9	20.6	54.1	74.4	50.1	57.7
Democratic Republic of the Congo	52.8	67.6	32.2	34.9	87.7	95.2	71.3	75.7
Equatorial Guinea			45.3	49.8			76.8	79.9
Gabon	0.9	5.0	10.0	16.0	4.8	19.6	32.7	44.6
Sao Tome and Principe			24.8				66.2	
EAST AFRICA								
Burundi	36.4	56.1	23.4	24.2	81.3	93.5	66.9	68.9
Djibouti								
Eritrea								
Ethiopia	9.6	28.9	8.3	8.5	39.0	77.6	38.9	39.3
Kenya	16.9	31.8	16.3	17.5	43.4	67.2	45.9	49.1
Rwanda	34.8	52.2	24.0	26.0	72.1	87.4	58.5	64.2
Somalia								
Sudan (former)	5.5	15.4	16.2	21.3	19.8	44.1	46.5	57.6
Uganda	12.2	27.4	6.8	7.6	38.0	64.7	24.5	27.2
United Republic of Tanzania	28.1	47.5	9.9	11.0	67.9	87.9	33.4	37.4
SOUTHERN AFRICA								
Angola								
Botswana								
Comoros								
Lesotho								
Madagascar	43.3	60.1	26.8	28.9	81.3	92.6	68.7	73.5
Malawi								
Mauritius								
Mozambique	25.1	42.9	21.2	22.2	59.6	81.8	54.7	56.9
Namibia								
Seychelles	0.1	0.3			0.2	1.8		

TABLE 20: Dimensions of poverty (continued)

	Poverty gap at				Poverty headcount ratio			
	$1.25 a day (ppp)	$2 a day (ppp)	national poverty line	rural poverty line	$1.25 a day (ppp)	$2 a day (ppp)	national poverty line	rural poverty line
	%	%	%	%	%	%	%	%
	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*	2005-2010*
South Africa	2.3	10.2	7.0		13.8	31.3	23.0	
Swaziland	16.0	29.3			40.6	60.4		
Zambia	37.0	51.8	28.5	38.8	68.5	82.5	59.3	76.8
Zimbabwe								
AFRICA								
ECOWAS								
SADC								
COMESA								
UMA								
ECCAS								
IGAD								
CEMAC								
UEMOA								
CEN-SAD								
ASIA Developing								
LAC								
DEVELOPED REGIONS								
WORLD								

TABLE 21: Dimensions of inequality

	Human Development Index		Gender inequality	Gini-index	Income share held by	
	HDI	inequality adjusted	index	income distribution	highest 20%	lowest 20%
	Index	Index	Index	Index	%	%
	2010	2010	2008	2005-2010*	2005-2010*	2005-2010*
NORTH AFRICA						
Algeria	0.7		0.6			
Egypt	0.6	0.4	0.7	30.8	40.3	9.2
Libyan Arab Jamahiriya	0.8		0.5			
Morocco	0.6	0.4	0.7	40.9	47.9	6.5
Tunisia	0.7	0.5	0.5	41.4	47.9	5.9
WEST AFRICA						
Benin	0.4	0.3	0.7			
Burkina Faso	0.3	0.2		39.8	47.0	6.7
Cape Verde	0.5					
Cote d'Ivoire	0.4	0.3	0.7	41.5	47.6	5.6
Gambia	0.4	0.2	0.7			
Ghana	0.5	0.3	0.7	42.8	48.5	5.2
Guinea	0.3	0.2		39.4	46.2	6.3
Guinea-Bissau	0.3	0.2				
Liberia	0.3	0.2	0.8	38.2	45.0	6.4
Mali	0.3	0.2	0.8	33.0	41.3	8.0
Mauritania	0.4	0.3	0.7	40.5	47.0	6.0
Niger	0.3	0.2	0.8	34.5	43.1	8.1
Nigeria	0.4	0.2		48.8	54.0	4.4
Senegal	0.4	0.3	0.7	39.2	45.9	6.2
Sierra Leone	0.3	0.2	0.8			
Togo	0.4	0.3	0.7	34.4	42.4	7.6
CENTRAL AFRICA						
Cameroon	0.5	0.3	0.7	38.9	46.2	6.7
Central African Republic	0.3	0.2	0.8	56.3	60.6	3.4
Chad	0.3	0.2				
Congo	0.5	0.3	0.7	47.3	53.1	5.0
Democratic Republic of the Congo	0.2	0.2	0.8	44.4	50.6	5.5
Equatorial Guinea	0.5					
Gabon	0.6	0.5	0.6	41.5	48.2	6.2
Sao Tome and Principe	0.5					
EAST AFRICA						
Burundi	0.3	0.2	0.6	33.3	42.8	9.0
Djibouti	0.4	0.3				
Eritrea						
Ethiopia	0.3	0.2		29.8	39.4	9.3
Kenya	0.5	0.3	0.7	47.7	53.2	4.8
Rwanda	0.4	0.2	0.6	53.1	58.6	4.6
Somalia						
Sudan (former)	0.4		0.7	35.3	42.4	6.8
Uganda	0.4	0.3	0.7	44.3	50.7	5.8
United Republic of Tanzania	0.4	0.3		37.6	44.8	6.8
SOUTHERN AFRICA						
Angola	0.4	0.2				
Botswana	0.6		0.6			
Comoros	0.4	0.2				
Lesotho	0.4	0.3	0.7			
Madagascar	0.4	0.3		44.1	50.1	5.4
Malawi	0.4	0.3	0.7			
Mauritius	0.7					
Mozambique	0.3	0.2	0.7	45.7	51.5	5.2
Namibia	0.6	0.3	0.6			
Seychelles				65.8	69.6	3.7
South Africa	0.6	0.4	0.6	63.1	68.2	2.7
Swaziland	0.5	0.3	0.7	51.5	56.6	4.0
Zambia	0.4	0.3	0.7	54.6	59.4	3.6

TABLE 21: Dimensions of inequality (continued)

	Human Development Index		Gender inequality	Gini-index	Income share held by	
	HDI	inequality adjusted	index	income distribution	highest 20%	lowest 20%
	Index	Index	Index	Index	%	%
	2010	2010	2008	2005-2010*	2005-2010*	2005-2010*
Zimbabwe	0.1	0.1	0.7			
AFRICA						
ECOWAS						
SADC						
COMESA						
UMA						
ECCAS						
IGAD						
CEMAC						
UEMOA						
CEN-SAD						
ASIA Developing						
LAC						
DEVELOPED REGIONS						
WORLD						

TABLE 22: Food aid received

	Food aid received				
	total				
	thousand tonnes 1990	thousand tonnes 1995	thousand tonnes 2000	thousand tonnes 2005	thousand tonnes 2010
NORTH AFRICA	0	0	0	0	0
Algeria	10	27	33	42	24
Egypt	1606	207	41	14	3
Libyan Arab Jamahiriya	0	0	0	0	0
Morocco	271	2	241	0	0
Tunisia	383	27	4	0	0
WEST AFRICA	0	0	0	0	0
Benin	15	21	12	15	19
Burkina Faso	34	41	33	39	45
Cape Verde	59	73	53	29	16
Cote d'Ivoire	66	24	17	34	21
Gambia	4	4	8	11	23
Ghana	66	97	101	66	7
Guinea	11	8	5	41	4
Guinea-Bissau	5	3	27	11	7
Liberia	35	161	116	102	30
Mali	39	20	12	41	25
Mauritania	45	45	17	92	39
Niger	40	25	20	139	159
Nigeria	0	0	1	20	0
Senegal	63	21	54	30	41
Sierra Leone	11	34	28	39	24
Togo	12	6	4	1	2
CENTRAL AFRICA	0	0	0	0	0
Cameroon	3	7	4	14	14
Central African Republic	3	1	3	5	10
Chad	26	21	23	74	111
Congo	8	13	18	9	7
Democratic Republic of the Congo	98	109	74	103	193
Equatorial Guinea	5	4	2	0	0
Gabon	0	0	1	0	0
Sao Tome and Principe	9	8	5	5	3
EAST AFRICA	0	0	0	0	0
Burundi	3	103	11	73	34
Djibouti	9	20	12	21	10
Eritrea	0	104	257	232	0
Ethiopia	864	636	1527	1122	1415
Kenya	90	80	291	155	258
Rwanda	9	274	232	42	7
Somalia	98	53	61	40	72
Sudan (former)	230	82	182	931	476
Uganda	47	77	87	293	80
United Republic of Tanzania	35	145	63	116	38
SOUTHERN AFRICA	0	0	0	0	0
Angola	124	220	296	57	4
Botswana	15	10	0	0	0
Comoros	4	6	0	0	0
Lesotho	42	34	6	44	7
Madagascar	54	38	44	47	26
Malawi	219	236	36	153	38
Mauritius	11	1	0	0	0
Mozambique	423	386	185	117	80
Namibia	12	3	2	2	1
Seychelles	1	0	0	0	0
South Africa	7	0	3	0	0
Swaziland	10	7	0	12	17
Zambia	11	26	49	146	7
Zimbabwe	14	13	16	80	92

TABLE 22: Food aid received (continued)

	Food aid received				
	total				
	thousand tonnes 1990	thousand tonnes 1995	thousand tonnes 2000	thousand tonnes 2005	thousand tonnes 2010
AFRICA	5 255	3 562	4 320	4 656	3 491
ECOWAS	0	0	0	0	0
SADC	0	0	0	0	0
COMESA	0	0	0	0	0
UMA	0	0	0	0	0
ECCAS	0	0	0	0	0
IGAD	0	0	0	0	0
CEMAC	0	0	0	0	0
UEMOA	0	0	0	0	0
CEN-SAD	0	0	0	0	0
ASIA Developing	3 357	4 641	4 314	2 958	1 775
LAC	2 306	939	828	632	416
DEVELOPED REGIONS	2 250	1 058	1 883	43	0
WORLD	13 172	10 201	11 345	8 288	5 682

PART

3

Feeding the world

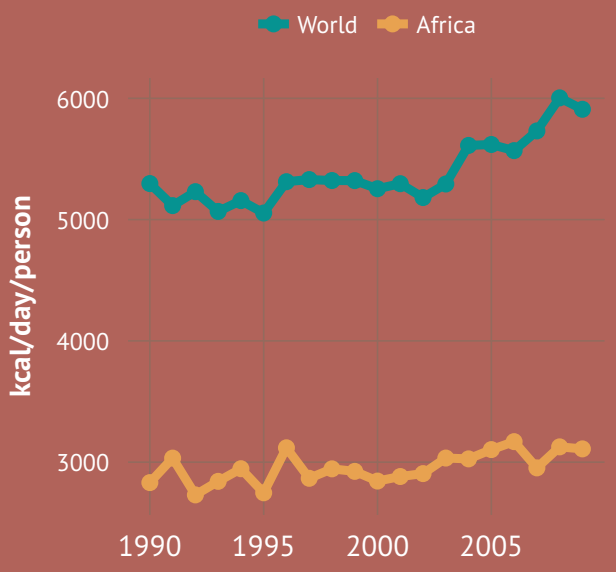
Aggregate agriculture

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 to raise global dietary energy supply beyond 3 000 kcal per person per day. This translates into the additional production of almost one billion tonnes of cereals and just less than 200 million tonnes of meat every year by 2050.

In Africa, per capita food production has remained almost constant from 1990 to 2009 and at a very low level compared with the global figure. Indeed, while the per capita food production in Africa has remained around 3 000 kcal/day/person during this period, that of the world has increased from 5 000 to 6 000 kcal/day/person. (Chart 46)

In addition to this relative constancy of per capita food production in Africa, there are huge differences between countries. Thus, in 2009, in some countries, such as Benin, Côte d'Ivoire, Ghana, Guinea, Mali and Nigeria, in West Africa and Southern Africa, food production per capita was higher than 4 000 kcal/day/person, while it was less than 1 500 kcal/day/person in Botswana, Democratic Republic of the Congo, Djibouti, Eritrea, Lesotho, Libya, Mauritania, Namibia and Somalia. (Map 28)

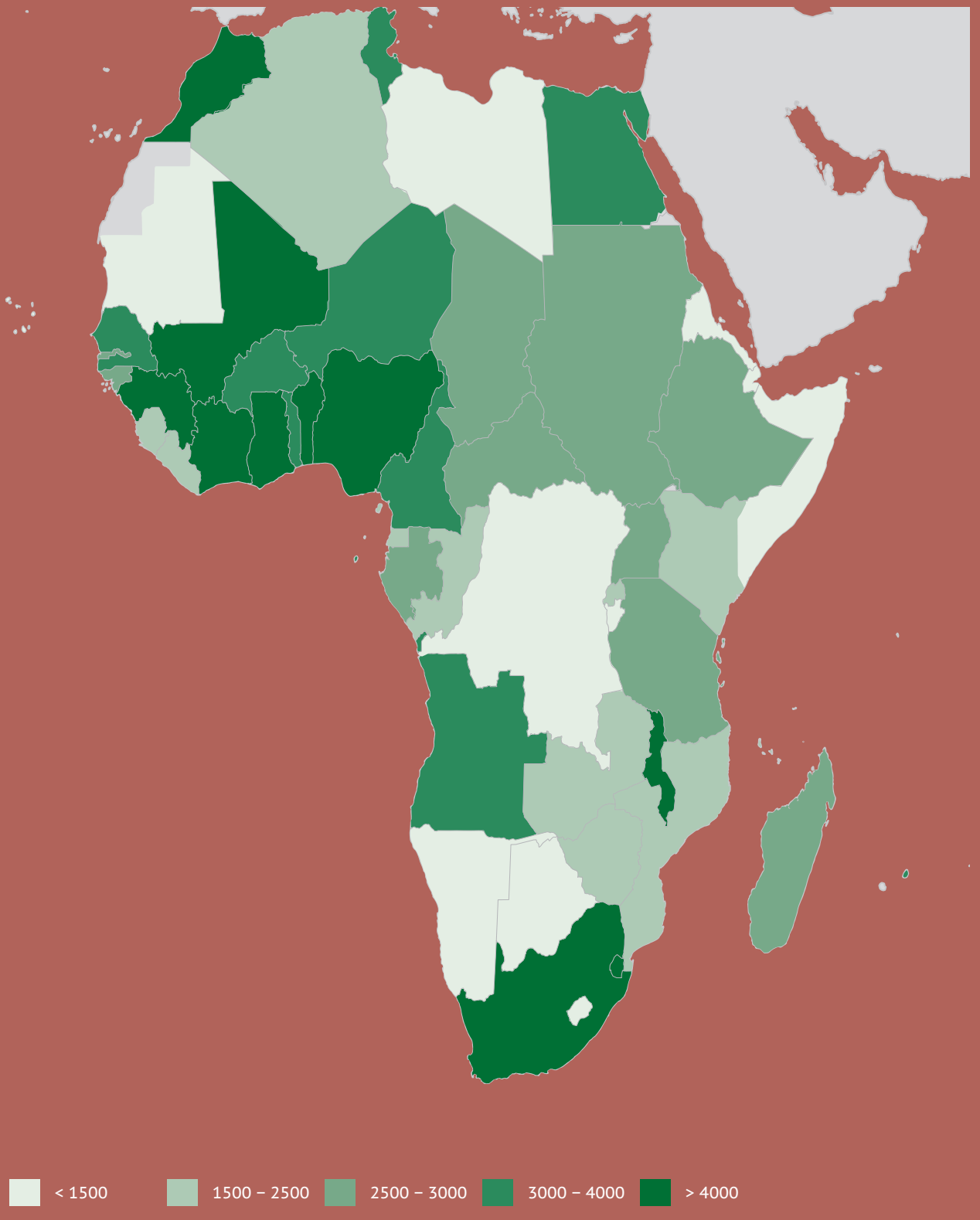
CHART 46: Per capita food production (1990-2009)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.FD.QP.SHP, p. 239

MAP 28: Per capita food production (kcal/day/person, 2009)



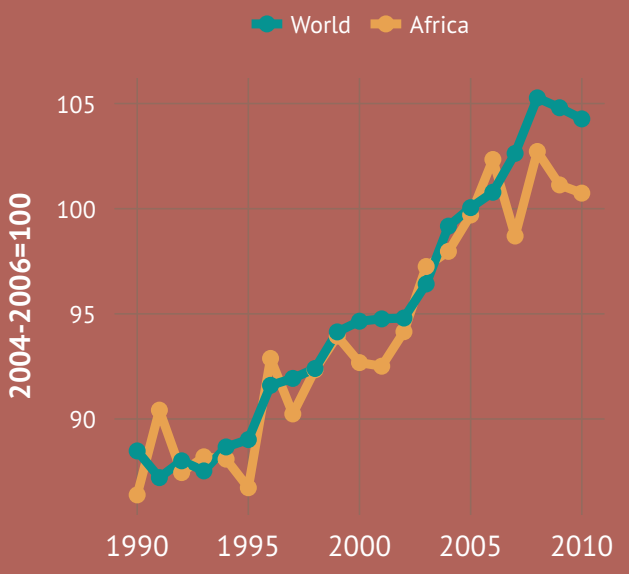
Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.FD.QP.SHP, p. 239

During the period 1990-2010, the gross per capita production index increased both for Africa and the world. For Africa, this index started at about 85 in 1990 and it rose to 100 in 2010, whereas for the world, this index started at almost 90 and reached more than 100 in 2010. The trends of the two curves are similar but disparities exist between countries. (Chart 47)

Indeed, countries like Algeria, Angola, Mali, Morocco, Niger and Sierra Leone had a gross per capita production index number growth per annum of greater than 3 percent, whereas it was negative for some others. (Map 29)

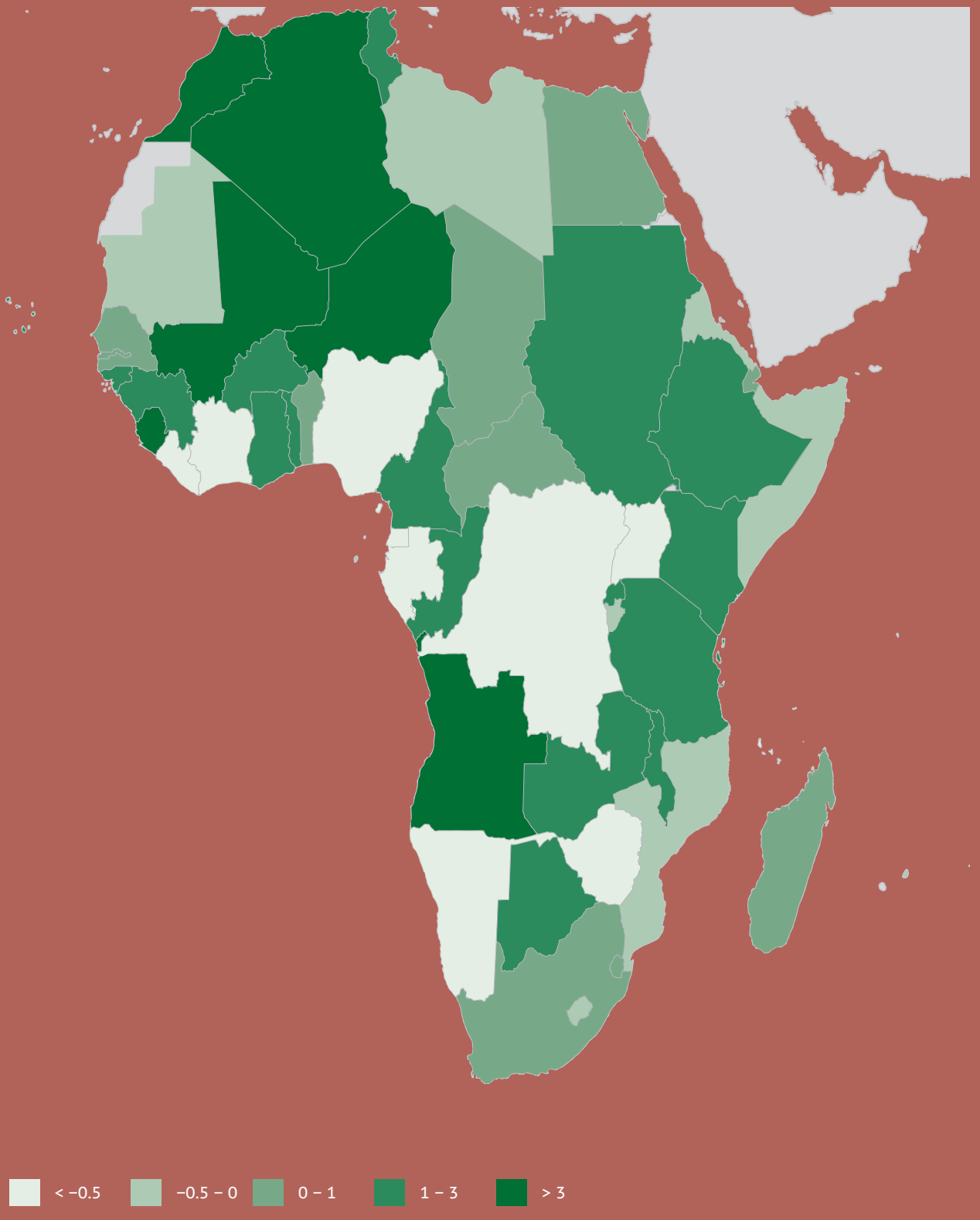
CHART 47: Gross per capita Production Index Number (1990-2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.GPCPIN.FD, p. 241

MAP 29: Gross per capita Production Index Number p.a. growth, 2004-2006=100 (%, 1990-2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.GPCPIN.FD.GR10, p. 241

Sources of growth in crop production

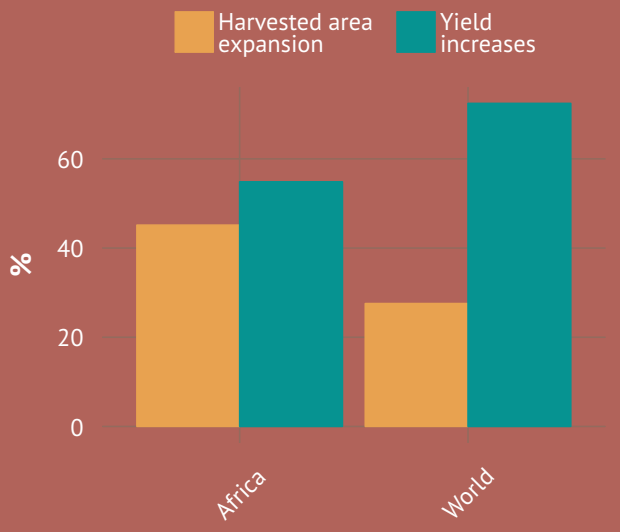
In the past 50 years or so, global crop production has expanded three-fold. Crop production growth goes hand in hand with crop yield increase and/or expansion in the physical area (arable land) allocated to crops, which – together with increases in cropping intensities, such as higher multiple cropping 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 area in the latter group peaked in the mid-1980s and has been falling ever since at an accelerating rate. Hence, growth in yields and more intensive use of land accounts for all of the growth in crop production in developed countries.

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

In African regions, harvested area expansion has represented about 45 percent as sources of growth in crop production, whereas it is almost 30 percent for the world. Africa utilized this source of growth in crop production more than the rest of the world during the period 1961-2009. In contrast, Africa has used yield increases to account for about 55 percent, while at world level this source has been utilized at about 70 percent. (Chart 48)

Angola, Benin, Ghana, Malawi, Mali, Mozambique, Namibia, Niger and Zambia are countries where agricultural production recorded strong growth rates – more than 4.5 percent over the period 1992-2010. However, in some countries, such as Botswana, Democratic Republic of the Congo, Gabon, and Swaziland, the rate of growth of agricultural production was very low (below 1.5 percent). (Map 30)

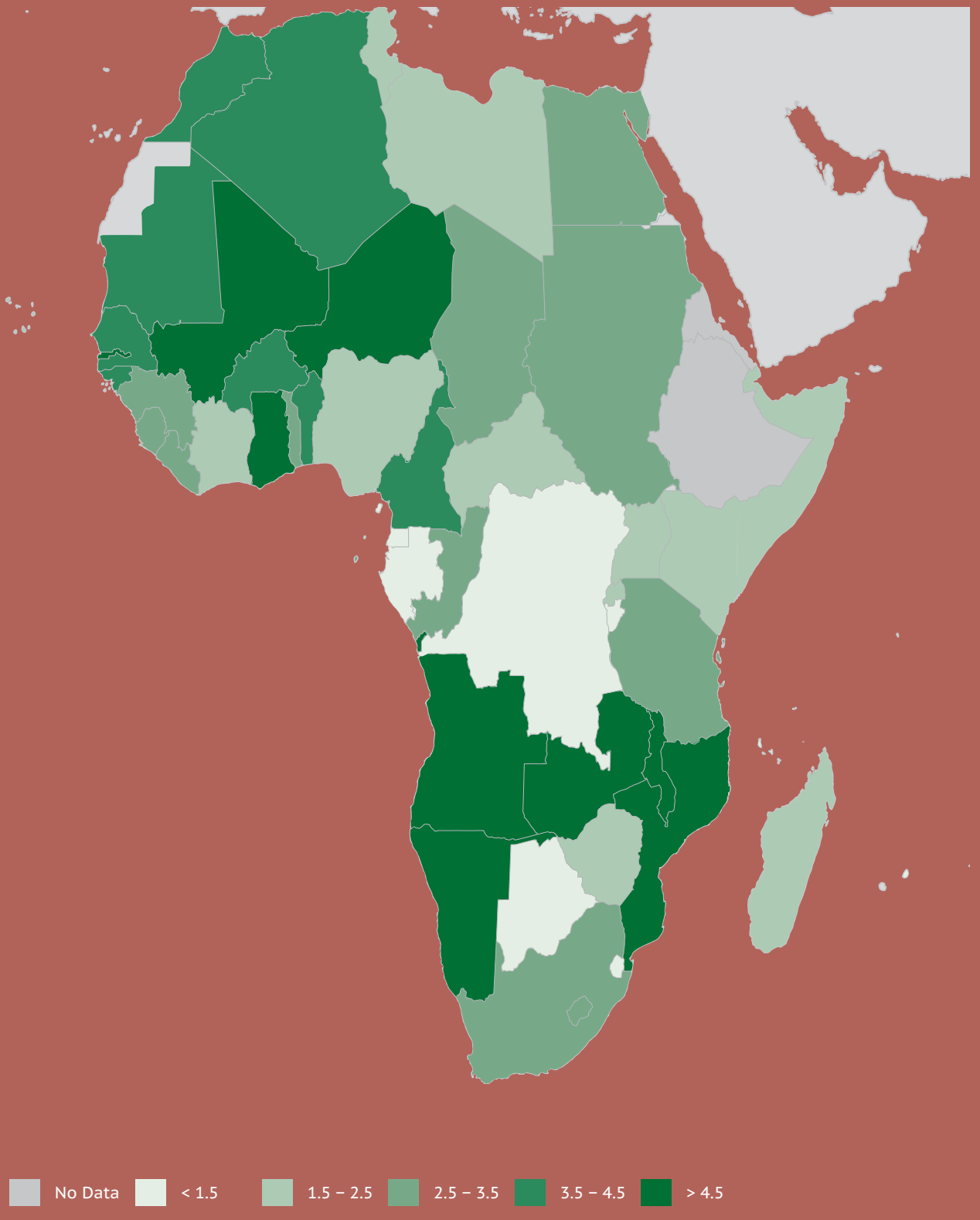
CHART 48: Sources of growth in crop production (1961-2010)



Source: Statistics Division

Metalink: P3.FEED.FAO.ESS.CRPS.GSRCE.AR, p. 249

MAP 30: Crop production, p.a. growth (%, 1992-2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.GPIN.CRPS.GR18, p. 237

Trends in the crop sector

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 an 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 in industrial applications.

World wheat production fell from 686.636 million tonnes in 2009 to 653.655 million tonnes in 2010, although over the period 2000-2010, it grew by 1.1 percent. In terms of volume, the DVD produced the largest quantities of wheat, with 310.098 million tonnes in 2010, followed by Asia DVG, with 291.951 million tonnes, LAC regions, with 29.500 million tonnes, and Africa, with 22105 million tonnes.

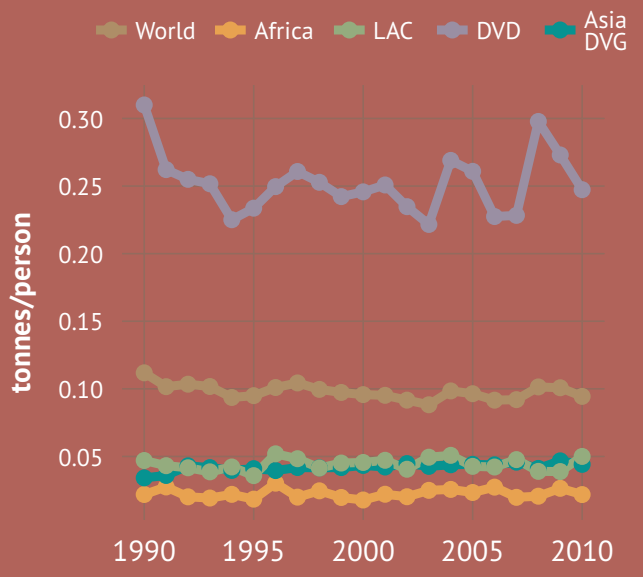
In spite of the decrease from 25.659 million tonnes in 2009 to 22.105 million tonnes in 2012, wheat production in Africa increased by 4.5 percent during the period 2000-2010. This increase can be explained by the trends at the regional level including the fact that in the North African region, wheat production increased by 5.2 percent, primarily due to the growth experienced in Algeria (15.1 percent) and Morocco (13.4 percent). The performance of Algeria is the result of an increase in wheat production area of nearly 8.7 percent, while that of Morocco is due to improving yields of 13.6 percent.

In the West African region, however, production fell by 0.5 percent, while in Central Africa it increased by 4.4 percent, as a result of wheat production growth in Chad (13.5 percent). Production also increased by 9.4 percent in East Africa, mainly because of the increase of production in Rwanda (28.2 percent). However, it decreased in Southern Africa (by 4.8 percent), due to the production circumstances in Botswana and Zimbabwe. (Table 24)

Wheat production per capita is very important in the DVD. It ranged from 0.23 to 0.3 tonnes per person between 1990 and 2010. This region was followed by the LAC regions, with a per capita output that fluctuated around 0.10 tonnes per person. Africa was in the last position, with a very low output per capita of less than 0.05 tonnes per person. (Chart 49)

Major wheat producing countries in Africa are countries whose production exceeded 500 000 tonnes in 2010, i.e. Algeria, Egypt, Ethiopia, Kenya, Morocco, South Africa and Tunisia. Some countries, such as Libya, Nigeria, Sudan, Tanzania, Zambia and Zimbabwe, produced between 40 000 and 500 000 tonnes in 2010. Other countries are considered small producers because their production was lower than 40 000 tonnes in 2010. (Map 31)

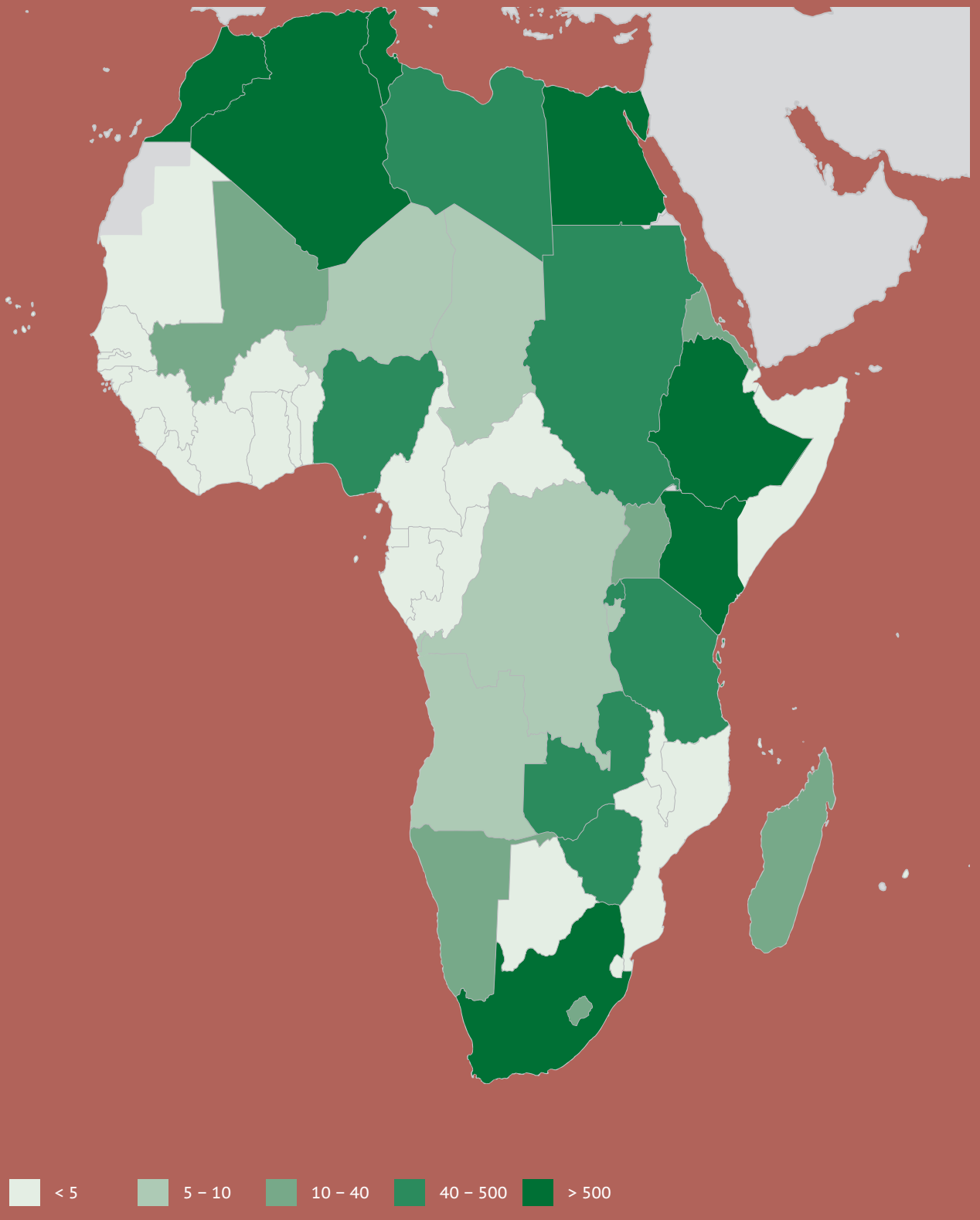
CHART 49: Per capita wheat production (1990-2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.WT.QP.SHP, p. 251

MAP 31: Wheat producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.WT.QP, p. 251

Rice

The bulk of world rice production is destined for food use, although some quantities are used in domestic animal feeding. Rice is the primary staple for more than half 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. At the global level, the growth of demand has been diminishing, as evidenced in several large producing and consuming countries of South and East Asia. Given the importance of these regions in world rice consumption, these declines are reflected in the aggregate trends of the world.

World rice production grew from 684.595 million tonnes in 2009 to 696.324 million tonnes in 2010, likewise over the period from 2000 to 2010, it grew by 1.2 percent. (Table 25) In terms of volume, Asia DVG was the biggest producer of rice, with 621.242 million tonnes in 2010, distantly followed by the DVD (26.145 million tonnes), LAC region (25.948 million tonnes) and Africa (22.977 million tonnes).

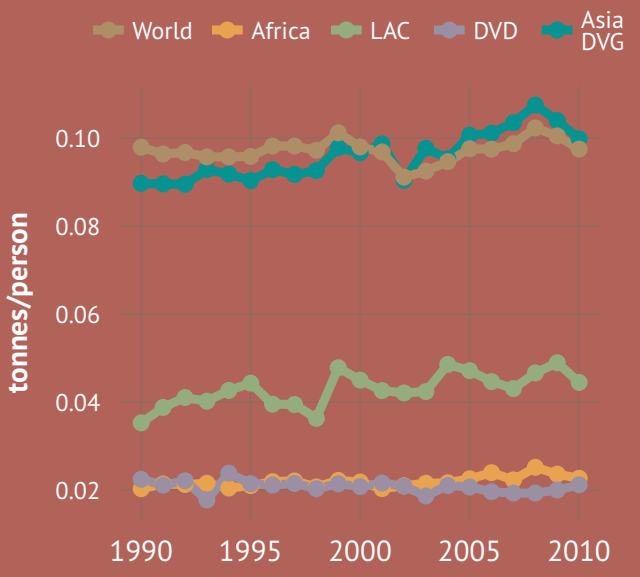
Although its level of rice production is low, Africa has recorded stronger growth in this production (3.2 percent) than other regions of the world; the average growth for the world was 1.5 percent. This is explained by growth across regions of sub-Saharan Africa. Indeed, in West Africa, rice production grew by 4.6 percent, in Central Africa by 3.1 percent, in East Africa by 4.6 percent and in Southern Africa by 6.3 percent. In contrast, the North Africa region experienced a decline in rice production (-3.1 percent).

The strong growth in Southern Africa can be explained by the 11.8 percent increase in rice production in Angola, the result of a spectacular increase (19.3 percent) in rice production areas, despite a decline of 6.3 percent in yields. It can also be attributed to the growth of rice production by 14 percent in Zambia because of increases in both rice production areas (7.8 percent) and yields (5.8 percent).

Likewise, rice production per capita was largely dominated by Asia DVG over the period 1990-2010, hovering around 0.1 tonne per person. This region was followed by the LAC region, with 0.04 to 0.05 tonnes per person, while Africa and the DVD were in last place. (Chart 50)

Among the African countries the largest producers of rice (over 600 000 tonnes) in 2010 were: Côte d'Ivoire, Egypt, Guinea, Madagascar, Mali, Nigeria, Senegal, Sierra Leone and Tanzania. (Map 32)

CHART 50: Per capita rice production (1990-2010)



Source: Statistics Division (FAOSTAT)

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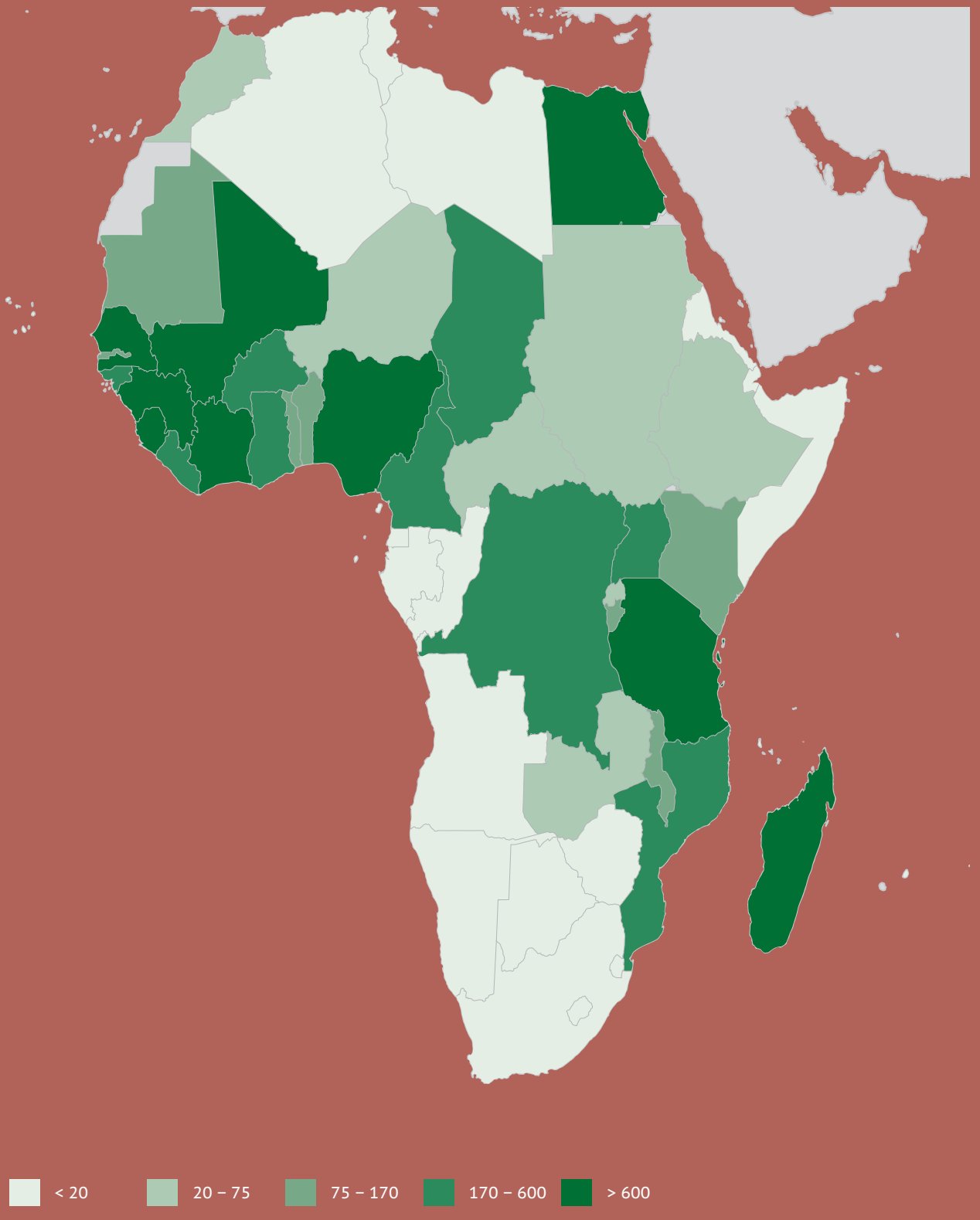
MAP 32: Rice producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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Coarse grain

Currently, about 55 percent of world consumption of coarse grains is as animal feed, but in many countries (mainly in sub-Saharan Africa and Latin America) this also includes human consumption. At the global level, about 17 percent of aggregate consumption of coarse grains is devoted to food, but the share rises to as much as 80 percent in sub-Saharan Africa. In this region, maize, millet, sorghum and other coarse grains (e.g. tef in Ethiopia) account for 3 out of every 4 kg of cereals consumed as food.

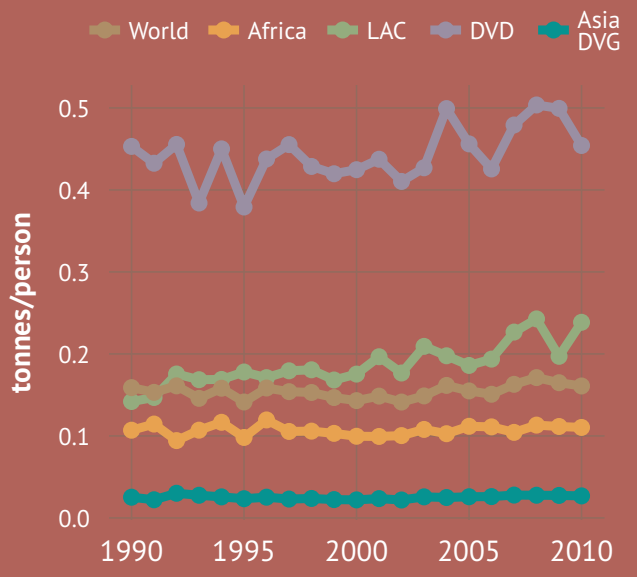
Rising industrial utilization of coarse grains has provided strong support to the sector, led by the growth of maize-based ethanol in the United States of America. At present, almost 40 percent of the crop – 111 million tonnes – is used for biofuel production, which represents an eight-fold increase in the span of just ten years.

World coarse grain production fell from 1 122.942 million tonnes in 2009 to 1 107.683 million tonnes in 2010, whereas over the period 2000-2010, it grew by 2.4 percent. (Table 26) In volume, the DVD were the biggest producers of coarse grain, with 564.074 million tonnes in 2010, followed distantly by Asia DVG (294 519 million tonnes), LAC regions (137 801 million tonnes) and Africa (111 271 million tonnes).

Coarse grain production is clearly dominated by the DVD whose production per capita has oscillated between 0.4 and 0.5 tonne per person. They are followed distantly by LAC whose per capita production fluctuated between 0.2 and 0.3 tonne per person from 1990 to 2010. Then comes Africa (0.1 tonne per person), and Asia DVG is in last place. (Chart 51)

In Africa, the major producers were Burkina Faso, Egypt, Ethiopia, Kenya, Malawi, Mali, Niger, Nigeria, South Africa, Sudan and Tanzania, each with over 3 million tonnes in 2010. (Map 33)

CHART 51: Per capita coarse grain production (1990-2010)



Source: Statistics Division (FAOSTAT)

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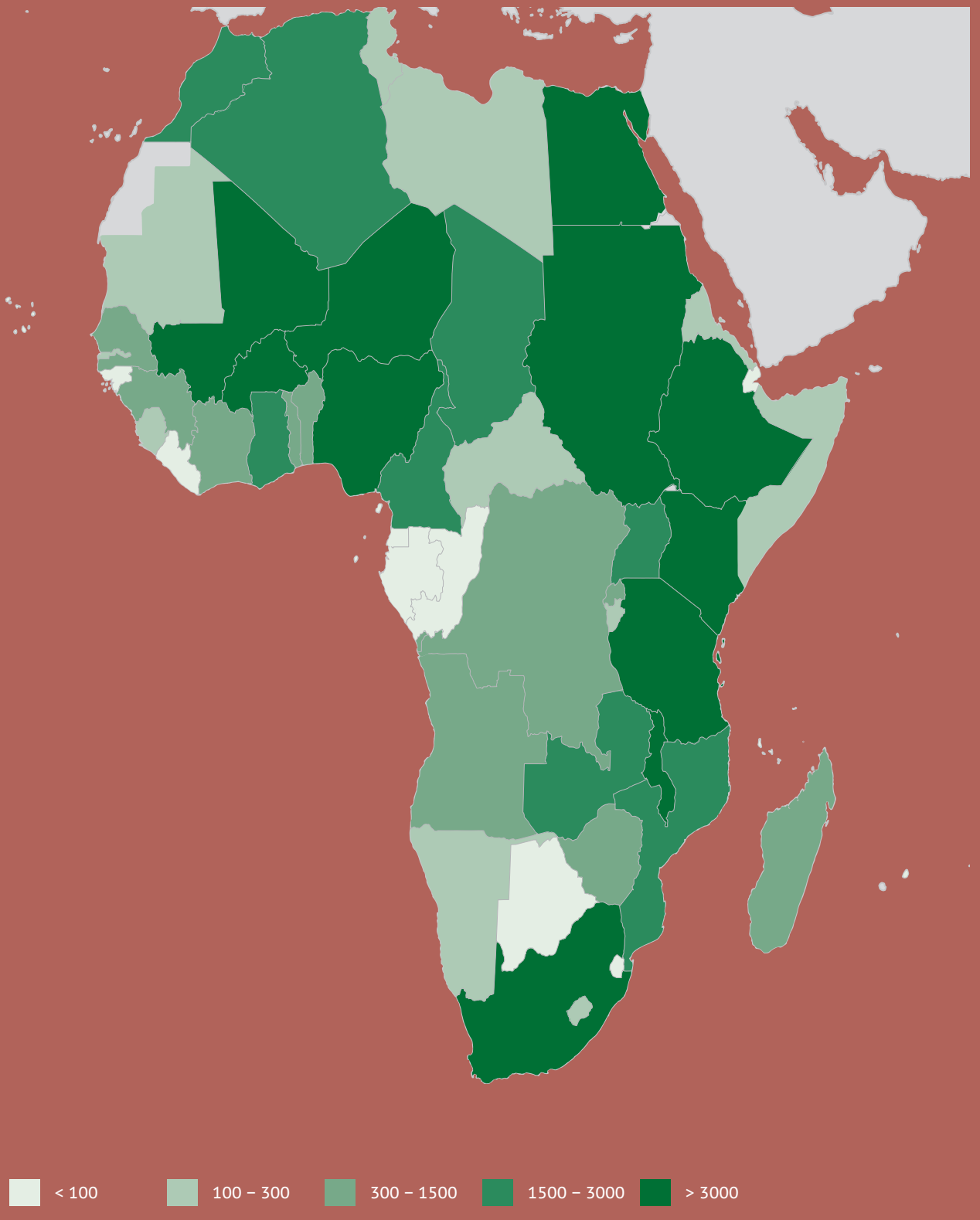
MAP 33: Coarse grain producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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Oil crops

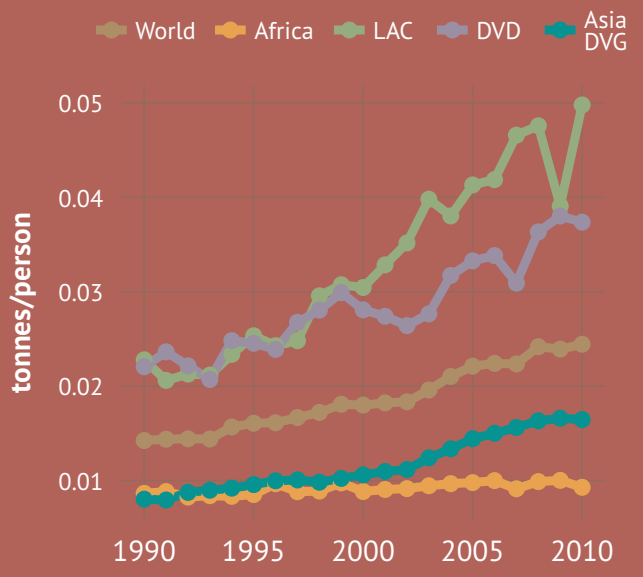
World oil crops production rose from 163 037 million tonnes in 2009 to 168 445 million tonnes in 2010. In recent decades, the oil crops sector has been one of the most vibrant in world agriculture. Over the past 20 years it grew at 4.3 percent per annum, compared with an average of 2.3 percent per annum for all agriculture.

The major driving force has been the growth of food consumption in developing countries, mostly in the form of oil but also as direct consumption of soybeans, groundnuts, etc., as well as in the form of derived products other than oil. Food demand in developing countries has accounted for around 40 percent of the increases in world output during the last two decades (with output measured in oil content equivalent).

In volume, Asia DVG were the biggest producers of oil crops, with 81 314 million tonnes in 2010, followed by DVD (46 499 million tonnes), LAC regions (29 508 million tonnes) and finally Africa, with only 9 735 million tonnes. Oil crops production was increasing in 2010, with 6.3 percent growth rate in North Africa, and 4.9 percent in East Africa. (Table 27) Since 2000, the per capita production of oil crops has been dominated by the LAC region, where it increased from 0.03 tonne per person to 0.05 tonne per person. Prior to 2000, from 1999 to 2000, the per capita production of LAC regions was at the same level as the DVD. In the period from 2000 to 2009, the DVD was in second place, with a per capita output which rose from 0.03 tonne per person in 1999 to just under 0.04 tonne per person in 2010. (Chart 52)

Asia DVG was in third place and Africa in last place, producing less than 0.01 tonne per person. (Map 34) Despite this low level of oil crops production per capita, in 2010 many African countries recorded oil crops production of more than 300 000 tonnes. These included Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Morocco, Nigeria, Senegal, South Africa, Sudan and Tanzania.

CHART 52: Per capita oilcrop production (1990-2010)



Source: Statistics Division (FAOSTAT)

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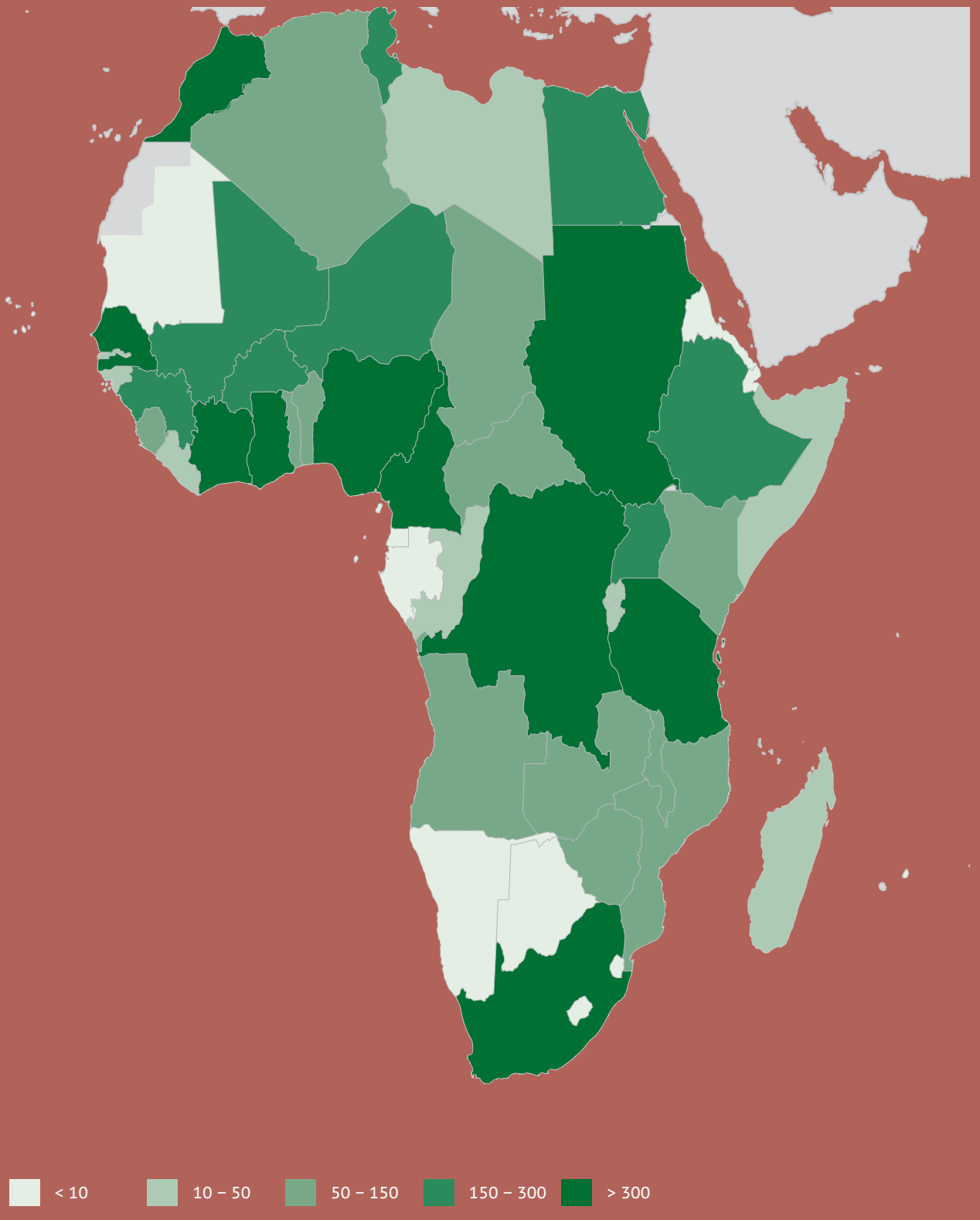
MAP 34: Oil-bearing crop producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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Pulses

Pulses are an important constituent in local food crops in developing countries. They are a key source of protein in the diets of the world's poorest countries. The nutritional and environmental benefits of pulses are being realized in sub-Saharan Africa, where per capita production has increased by almost 4 kg per annum in the last decade. However, at the global level, changes in consumer preferences and the relegation of pulses to secondary crop status in the agricultural policies of other developing regions, notably Asia and Latin America, has left the global level of production growth markedly stagnant and lagging well behind population growth.

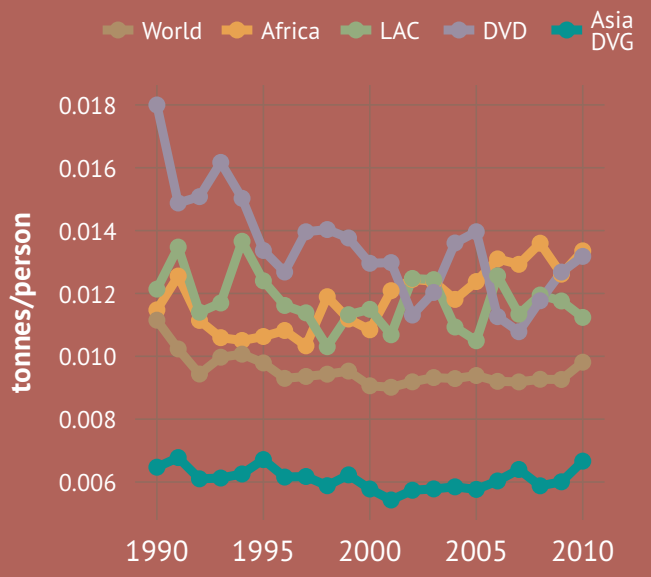
World production of pulses increased from 63.447 million tonnes in 2009 to 67.166 million tonnes in 2010. It showed an increase of 1.9 percent in the period 2000-2010. In terms of volume, the largest producer of pulses is Asia, with 30.511 million tonnes in 2010, followed by the DVD (16.377 million tonnes), then Africa (13.641 million tonnes) and finally the LAC regions (6.628 million tonnes).

Production in Africa increased by 4.4 percent over the period 2000-2010, more than in the other regions of the world. This is mainly due to growth of the production of pulses, especially in West Africa, of 5.7 percent over the same period. Countries that have contributed the most are Burkina Faso and Niger: Burkina Faso, with a production growth of 15 percent, due to the 15.8 percent increase of areas, and especially Niger, whose growth in production of pulses reached 20.1 percent, both because of increased areas and yield increases of nearly 11 percent. It is also explained by production growth in Southern Africa (4.6 percent) despite the plummeting production of Botswana (-18.5 percent) and Lesotho (-4.1 percent) as a result of reduction of both areas and yields. Over the same period, other regions experienced growth of production, particularly in Central Africa (3.5 percent), and East Africa (3.6 percent). (Table 28)

From 1990 until 2002, the DVD was the leader in the production of pulses per capita. But during the last 10 years, they were closely followed by Africa, which has experienced a steady growth in pulses production per capita since 2000. LAC regions production is declining while Asia DVG is in last place, far behind. (Chart 53)

This growth in Africa has been attributed to the increase of pulses production in 2010 by countries such as Burkina Faso, Cameroon, Egypt, Ethiopia, Kenya, Malawi, Niger, Nigeria, Rwanda, Tanzania and Uganda, whose productions were above 300 000 tonnes. (Map 35)

CHART 53: Per capita pulses production (1990-2010)



Source: Statistics Division (FAOSTAT)

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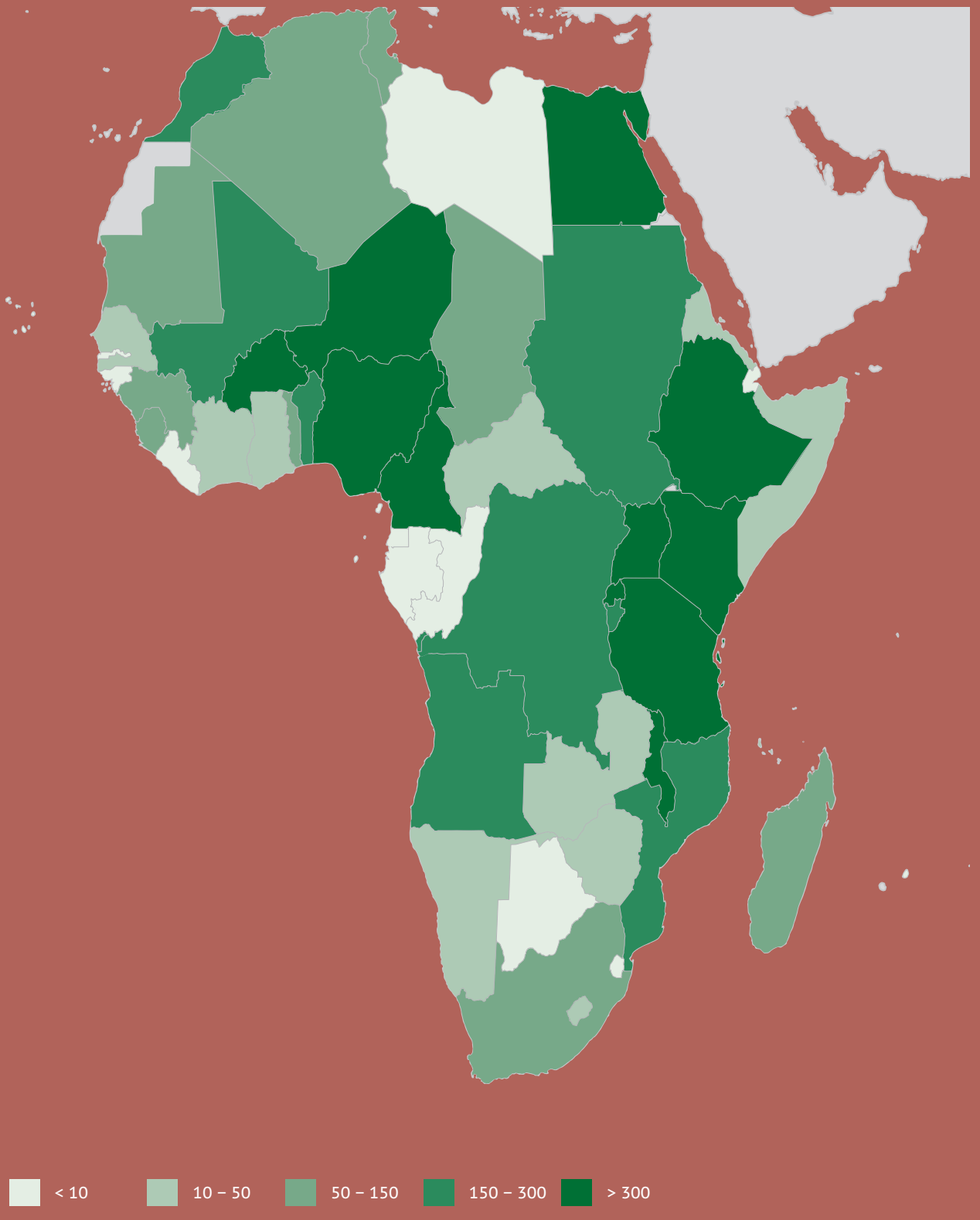
MAP 35: Pulse producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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Roots and tubers

World production of roots and tubers decreased from 738.217 million tonnes in 2009 to 729.984 million tonnes in 2010, but over the period 2000-2010, it increased slightly, by 0.4 percent. In terms of volume, the largest producer of roots and tubers is Asia DVG (316.367 million tonnes), followed by Africa, with 218.809 million tonnes in 2010, then by the DVD (137.622 million tonnes) and the LAC region (55.059 million tonnes).

The production of roots and tubers in Africa increased by 2.6 percent over the period 2000-2010. This was mainly due to growth of the production in North Africa of 7.2 percent over the same period. Countries that have contributed especially are Algeria and Egypt: Algeria with a production growth of 10.5 percent due to a 6 percent increase of areas and a 4.3 percent increase of yield, and Egypt, where growth of production of roots and tubers was 7.2 percent as a result of increase of areas.

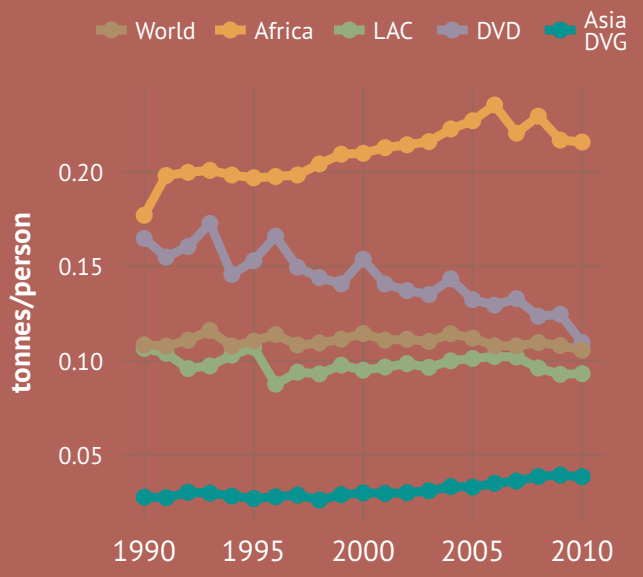
In Southern Africa, roots and tubers production growth has also been high (5.8 percent) because of production in Angola, which reached 12.8 percent as a result of increases of both areas and yields.

Other regions experienced small growth of production, particularly in Central Africa (0.9 percent), East Africa (2.1 percent) and West Africa (1.9 percent), in spite of roots and tubers production growth of 8.4 percent in Burkina Faso and 11.9 percent in Mali. (Table 29)

Root crops have traditionally been the mainstay of food consumption in several countries with low overall consumption levels, mainly in sub-Saharan Africa and Latin America. Regarding the production of roots and tubers, per capita output in Africa was clearly in the lead, increasing approximately 0.17 tonne per person in 1990 to more than 0.2 tonne per person in 2010. Meanwhile, the DVD, in second place, experienced a gradual decline, from 0.16 tonne per person in 1990 to about 0.1 tonne per person in 2010. LAC regions were in third place but their production per capita has remained constant since 1990. Finally, Asia DVG was in last place with a low, but steady growth. (Chart 54)

The first place of Africa is explained mainly by the high production of over 7000 thousand tonnes of roots and tubers in certain countries, such as Angola, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Malawi, Nigeria and Uganda. (Map 36)

CHART 54: Per capita roots and tubers production (1990-2010)



Source: Statistics Division (FAOSTAT)

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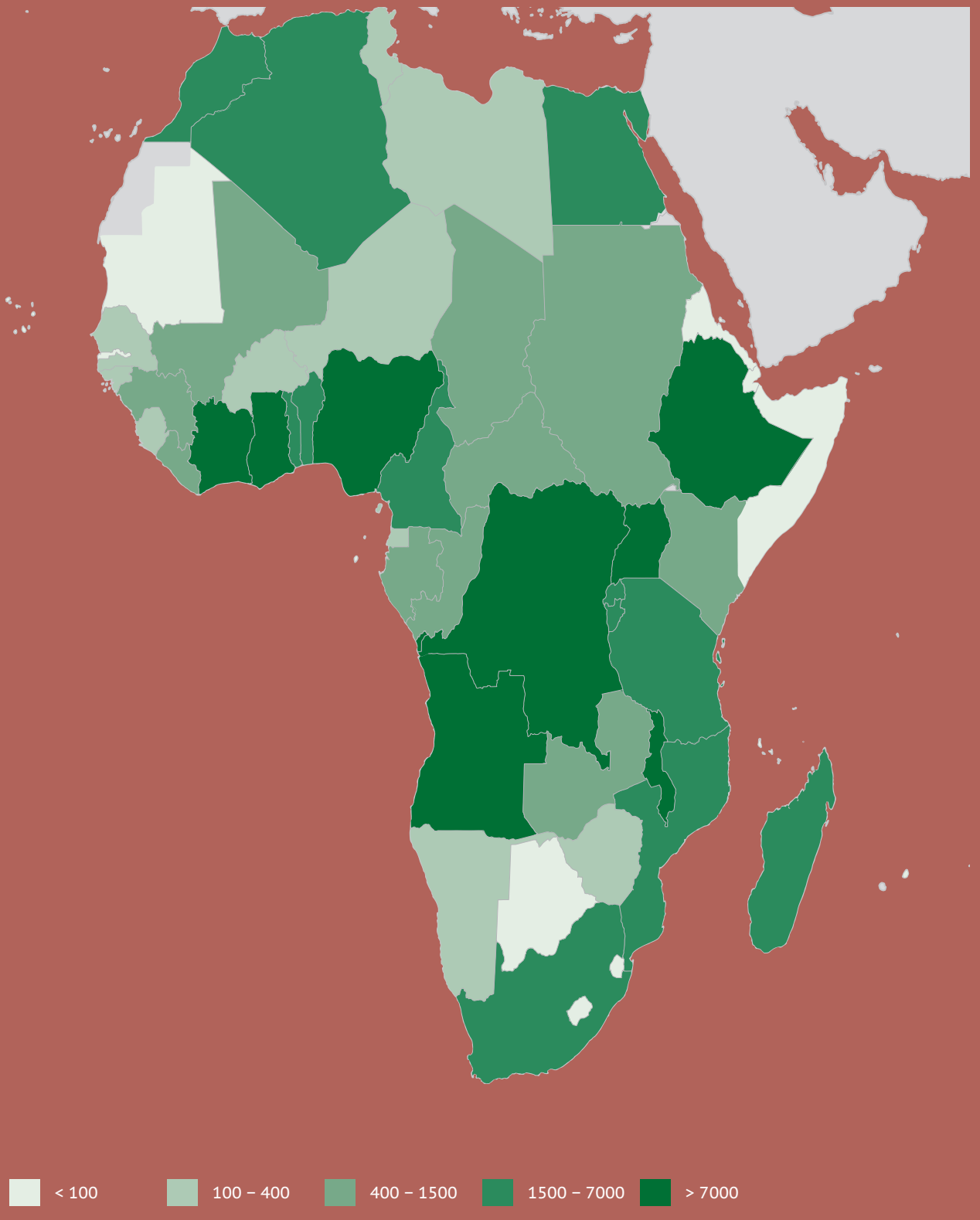
MAP 36: Roots and tubers producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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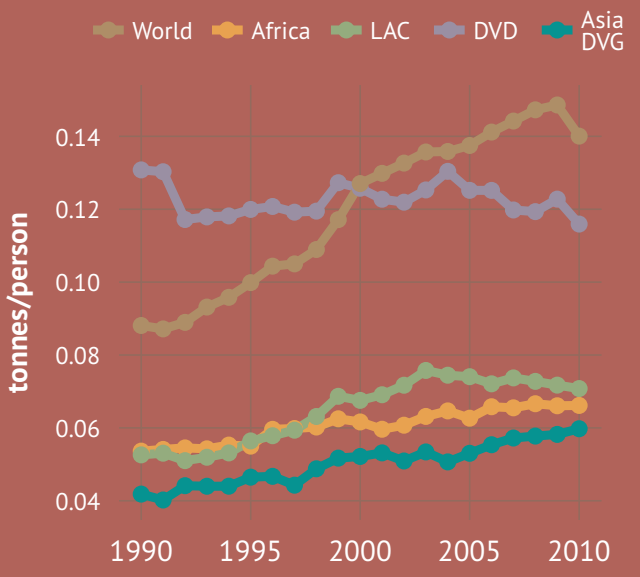
Fruits and vegetables

Global fruits and vegetables production has experienced remarkable growth, fuelled by area expansion in Asia, especially in China. World production growth over the past two decades has been at almost 4 percent per annum, exceeding growth rates of other food crops.

However, the DVD are the main producers of vegetables, with a per capita output that ranged from 0.11 tonne to a little less than 0.14 tonne per person. Since 1997, LAC countries have been in second place, while Asia DVG is in last place. (Chart 55) Africa is in third place, due to large-scale production in Algeria, Cameroon, Egypt, Kenya, Morocco, Nigeria, South Africa, Sudan, Tanzania and Tunisia, whose productions have exceeded 1.7 million tonnes per country in 2010. (Map 37)

CHART 55: Per capita vegetable production (1990-2010)



Source: Statistics Division (FAOSTAT)

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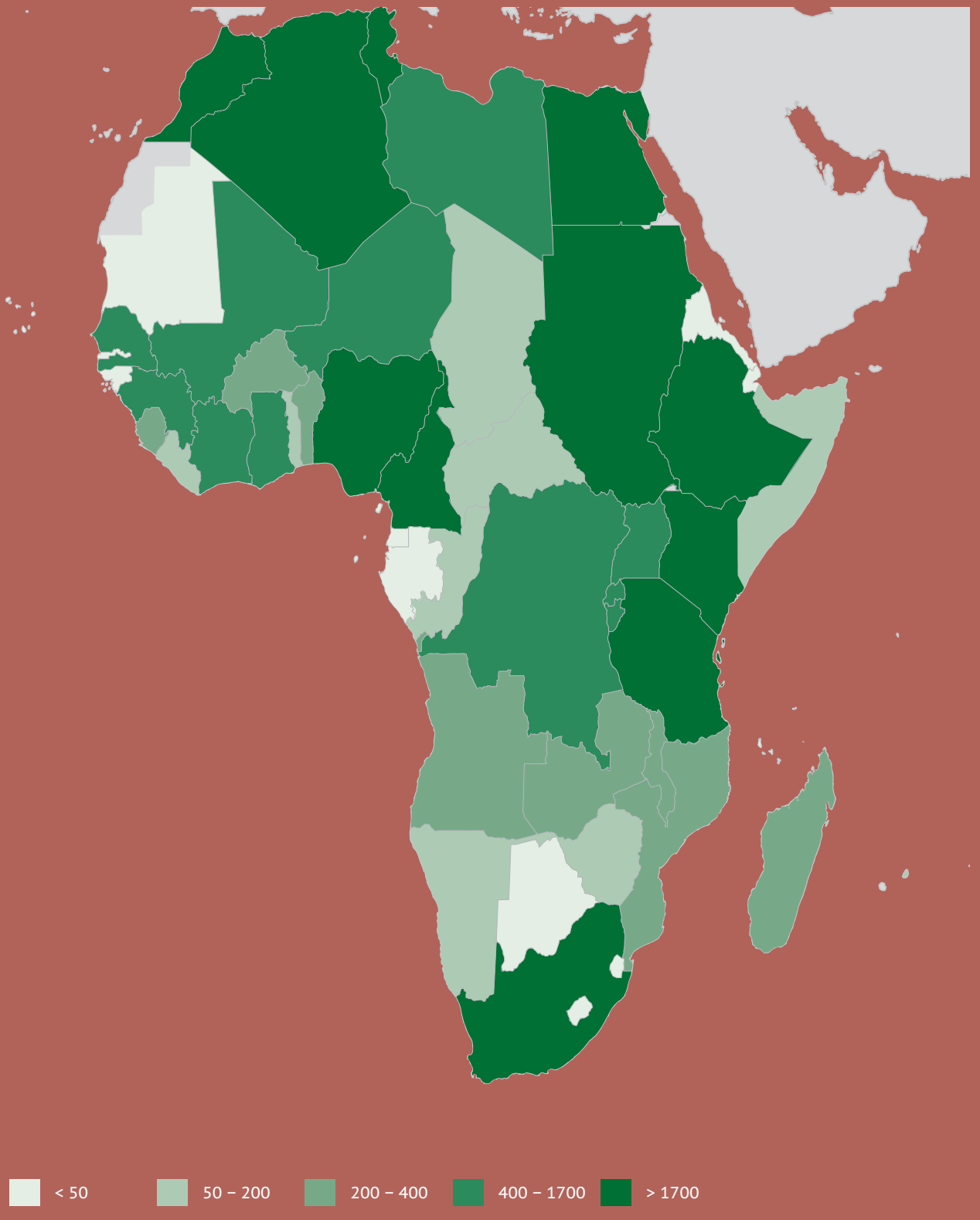
MAP 37: Vegetable producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.VG.QP, p. 250

Sugar crops

Sugar crops in many parts of the world have expanded in response to rising demand for sugar for both food consumption and feedstock for ethanol production. The bulk of the expansion has come from the developing countries, with the main burden of growth falling on Brazil.

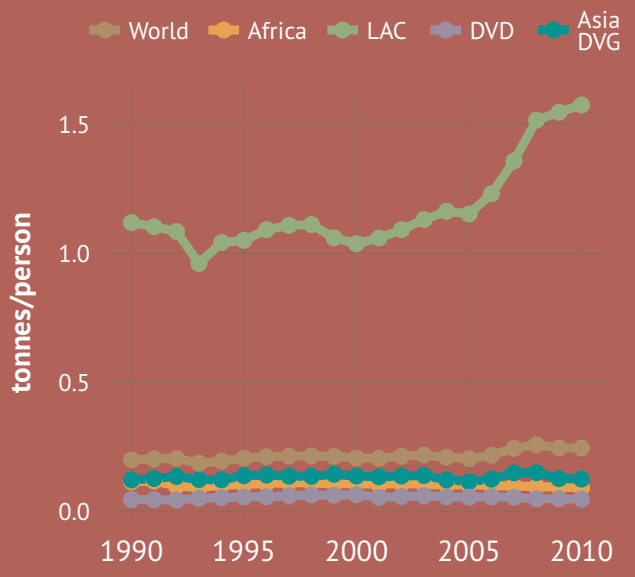
Total world production of sugar cane in volume was 1 711.087 million tonnes in 2010 and the LAC regions accounted for more than half of this production. They were followed by Asia DVG, then Africa and then the DVD.

The production of sugar cane is low in Africa, estimated at 89.594 million tonnes in 2010, with a very low growth of 0.4 percent over the period 2000-2010, while the average growth in the world was 3.1 percent – and 5.7 percent in LAC regions. With the exception of East Africa, where the production growth has reached 3.4 percent, other regions have low growth and even declines, as in the case of North Africa (-0.5 percent) and Southern Africa (-0.7 percent). (Table 30)

With regard to the production of sugar, LAC regions largely dominate, with a per capita output that increased from 1.1 tonnes per person in 1990 to more than 1.5 tonnes per person in 2010. Following, in order, are Asia DVG, Africa and the DVD, all at a very low level of production, near 0.005 tonne per person, far behind the LAC regions. (Chart 56)

In Africa, Egypt, Kenya, Madagascar, South Africa, Sudan, Zambia and Zimbabwe have all contributed to increase sugar production. Indeed, each country produced more than 3 million tonnes of sugar in 2010. (Map 38)

CHART 56: Per capita sugar production (1990-2010)



Source: Statistics Division (FAOSTAT)

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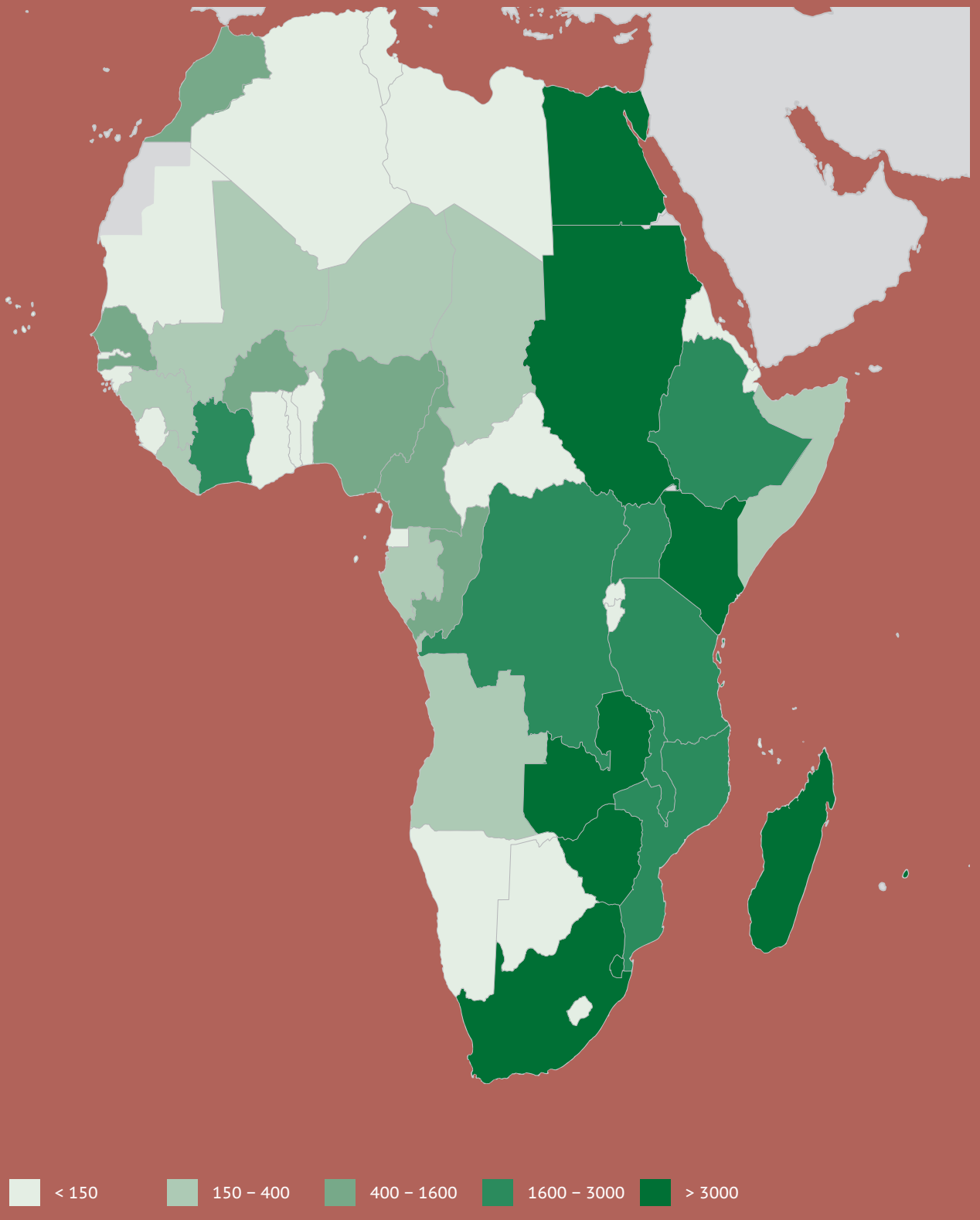
MAP 38: Sugar producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.SC.QP, p. 249

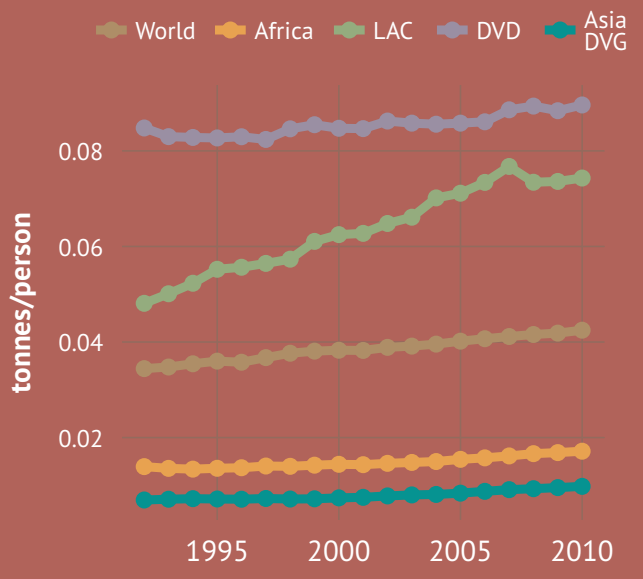
Trends in the livestock sector

The world food economy is increasingly driven by the shift in diet and food consumption patterns towards livestock products. In the last few decades, in the 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 that of milk and dairy products at 3.5 to 4.0 percent per annum.

Meat production is dominated by the DVD and their output per capita, which was about 0.085 tonne per person, has increased to 0.09 tonne per capita. However, the LAC, in second place, is coming increasingly close to the DVD. Indeed, from almost 0.05 tonne per person in 1990, they approached the level of the DVD, reaching 0.08 tonne of meat per person in 2010. Africa is in third place, far behind the LAC regions, with production of less than 0.02 tonne per person. The last place in meat production is occupied by Asia DVG. (Chart 57)

The level of meat production in Africa is due to the contribution of the countries that are the largest producers of meat, such as Algeria, Egypt, Ethiopia, Kenya, Morocco, Nigeria, South Africa, Sudan, Tanzania and Uganda, of which each country's production exceeded 350 000 tonnes in 2010. (Map 39)

CHART 57: Per capita meat production (1992-2010)



Source: Statistics Division (FAOSTAT)

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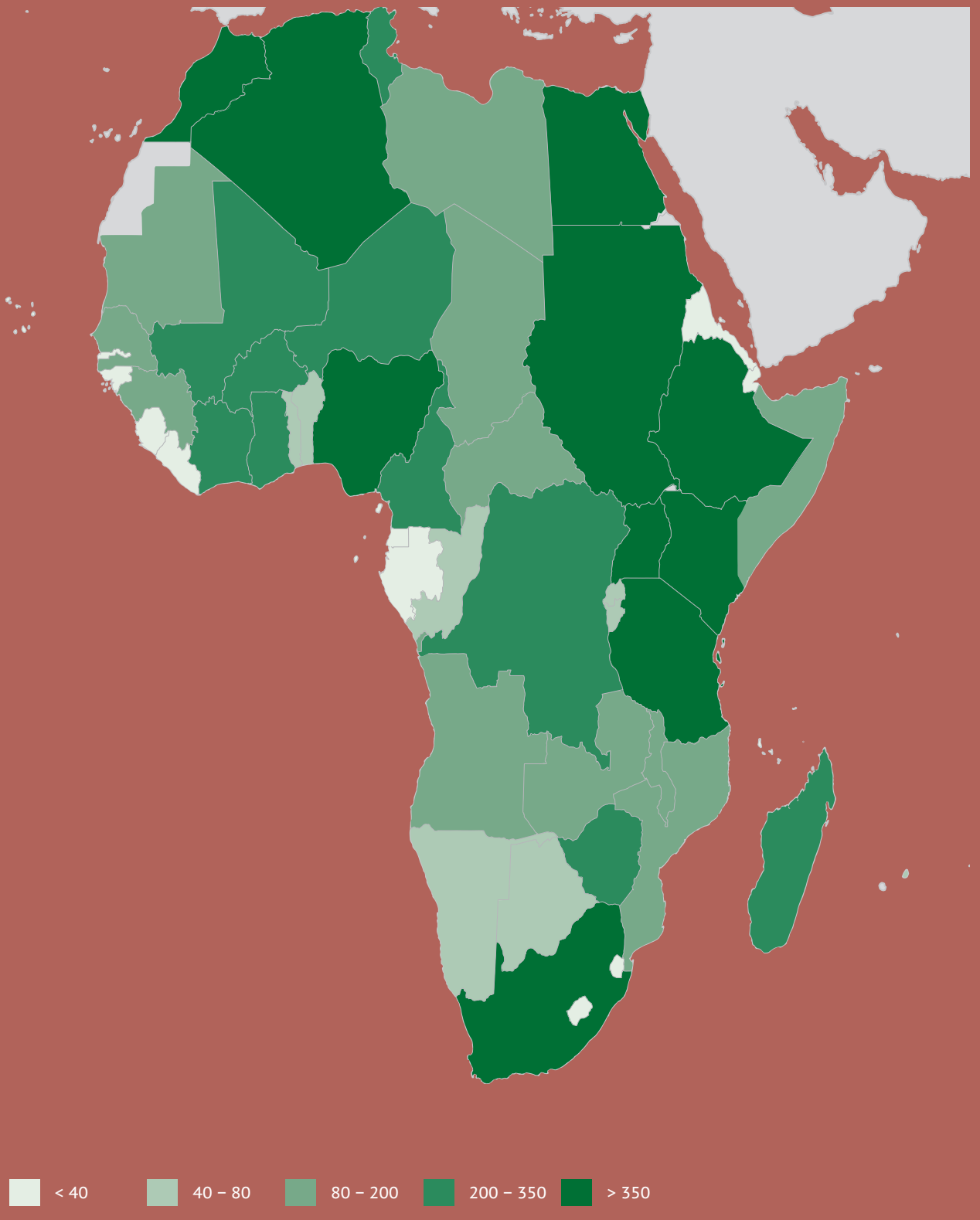
MAP 39: Meat producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

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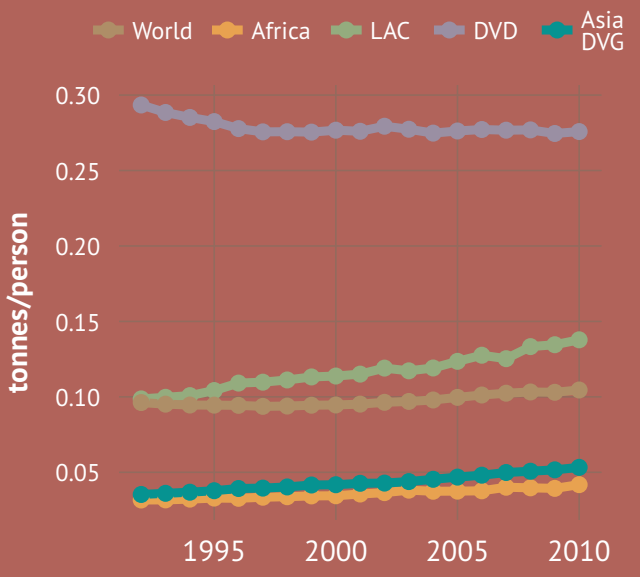
Concerning milk, the DVD are incomparably the largest producer, with an output of over 0.25 tonne per person. They are followed by LAC regions, whose production fluctuates between 0.10 and 0.15 tonne per person. Then comes Asia, and Africa is in the last position, with less than 0.05 tonne per person. (Chart 58)

Developing countries continue to have per capita consumption well below that of the industrial countries (partly reflecting consumption habits, as well as low incomes and poverty), but the gap is gradually closing.

Nevertheless, some countries in Africa have been major dairy producers, including Algeria, Egypt, Ethiopia, Kenya, Mali, Morocco, Niger, Somalia, South Africa, Sudan, Tanzania, Tunisia and Uganda. Each country recorded milk production exceeding one million tonnes in 2010. (Map 40)

CHART 58: Per capita milk production (1992-2010)



Source: Statistics Division (FAOSTAT)

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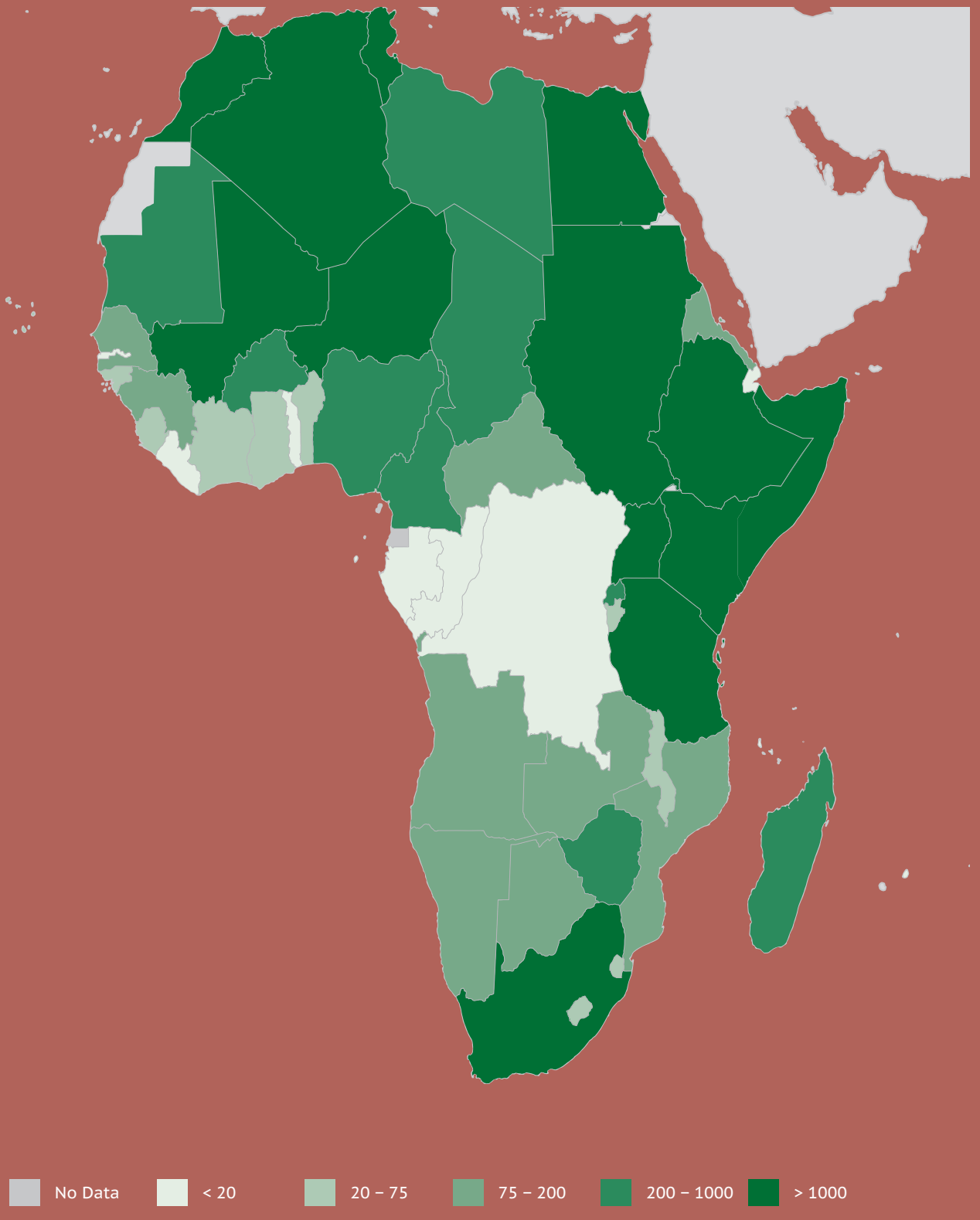
MAP 40: Milk producing countries (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.MK.QP, p. 243

Trends in the fisheries sector

Capture fisheries and aquaculture supplied the world with about 148 million tonnes of fish in 2010 (for a total value of USD 217.5 billion), of which about 128 million tonnes was utilized as food for people. Preliminary data for 2011 indicated increased production of 154 million tonnes, of which 131 million tonnes was destined to serve as food. With sustained growth in fish production and improved distribution channels, world fish food supply has grown dramatically in the last five decades, with an average growth rate of 3.2 percent per year in the period 1961–2009, outpacing the increase in the world's population of 1.7 percent per year. World per capita fish food supply increased from an average of 9.9 kg (live weight equivalent) in the 1960s to 18.4 kg in 2009, and preliminary estimates for 2010 pointed to a further increase in fish consumption, up to 18.6 kg, with 126 million tonnes available for human consumption in 2009. Fish consumption was lowest in Africa (9.1 million tonnes, with 9.1 kg per capita), while Asia accounted for two-thirds of total consumption, with 85.4 million tonnes (20.7 kg per capita), of which 42.8 million tonnes was consumed outside of China (15.4 kg per capita).[7]

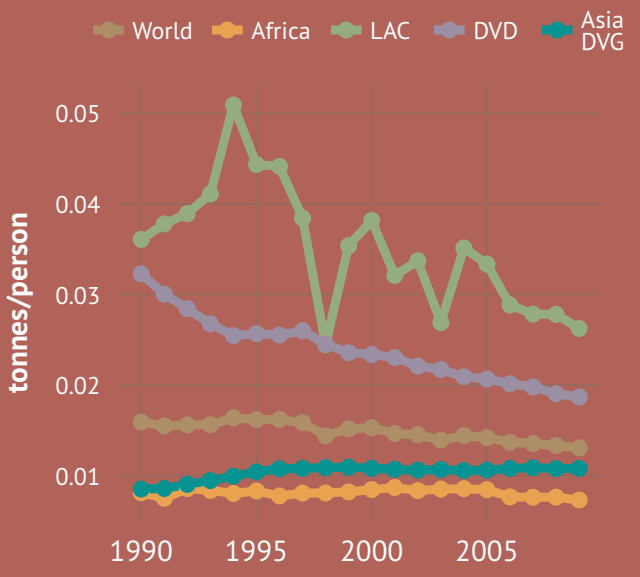
Africa has increased its contribution to global fish production from 1.2 percent to 2.2 percent in the past ten years, albeit from a very low base. The share of freshwater aquaculture in the region fell from 55.2 percent to 21.8 percent in the 1990s, largely reflecting the strong growth in brackish-water culture in Egypt, but it recovered in the 2000s, reaching 39.5 percent in 2010 as a result of rapid development in freshwater fish farming in sub-Saharan Africa, most notably in Ghana, Kenya, Nigeria, Uganda and Zambia. African aquaculture production is overwhelmingly dominated by fin fishes (99.3 percent by volume), with only a small fraction from marine shrimp (0.5 percent) and marine molluscs (0.2 percent). In spite of some limited successes, the potential for bivalve production in marine waters remains almost completely unexplored.[8]

Chart 59 shows that the LAC regions are the highest fish producers per capita. However, their production has been subjected to severe changes since 1990 and has been declining gradually. Indeed, after a peak level of more than 0.05 tonne per capita in 1990, it fell below 0.03 tonne per capita in 2010. DVD appeared in second place but the trend there is also downward. In third place was the Asia DVG, with a slight increase in output per person. Since 1990, Africa has been moving to below 0.01 tonne per capita. (Chart 59) However, countries like Angola, Democratic Republic of the Congo, Egypt, Ghana, Morocco, Namibia, Nigeria, Senegal, South Africa, Tanzania and Uganda each produced more than 230 000 tonnes of fish in 2009. (Map 41)

[7] FAO. The State of World Fisheries and Aquaculture 2012, p. 3.

[8] FAO. The State of World Fisheries and Aquaculture 2012, pp. 26-27.

CHART 59: Capture fish production, per capita (1990-2009)



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

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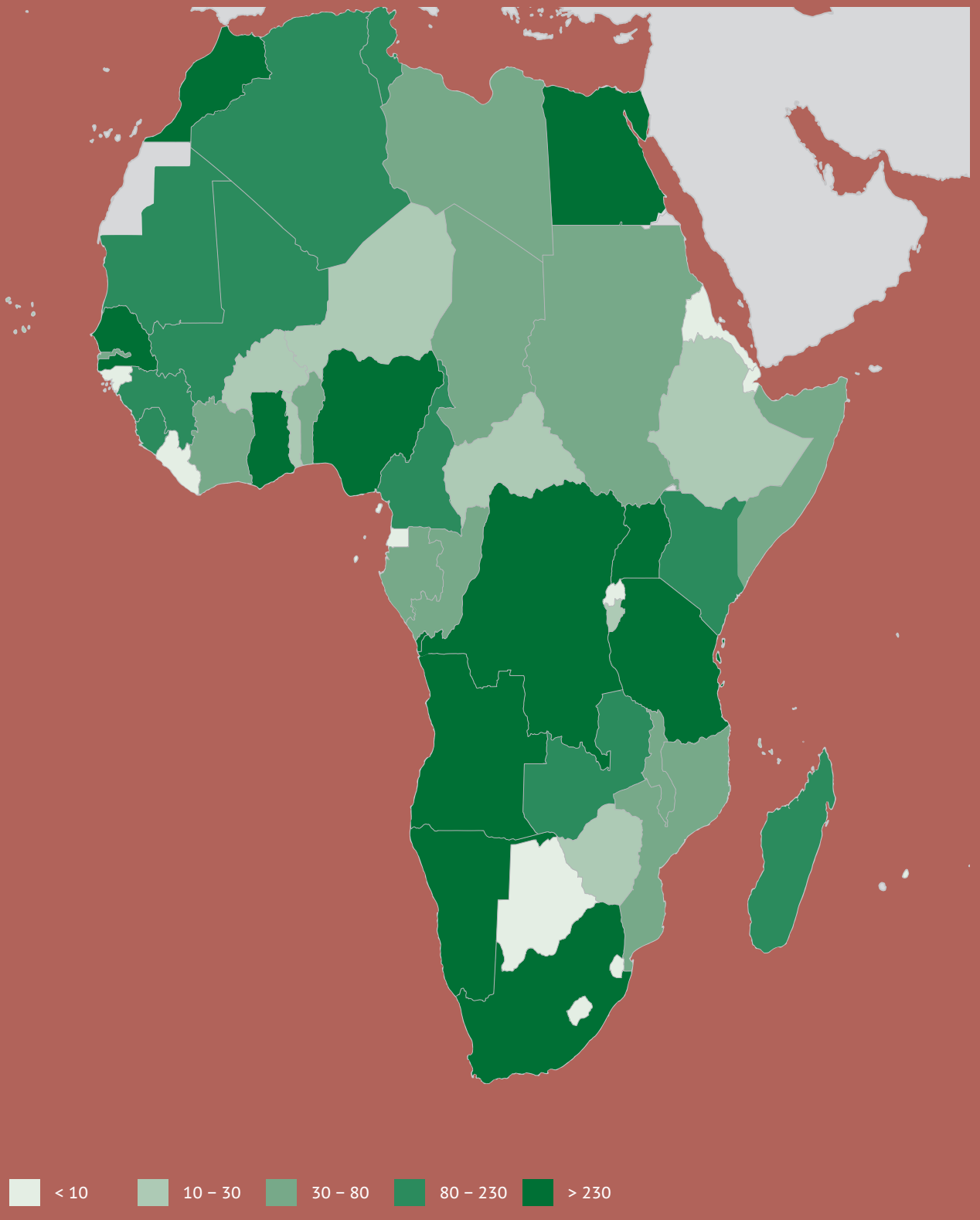
MAP 41: Capture fish producing countries (thousand tonnes, 2009)



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

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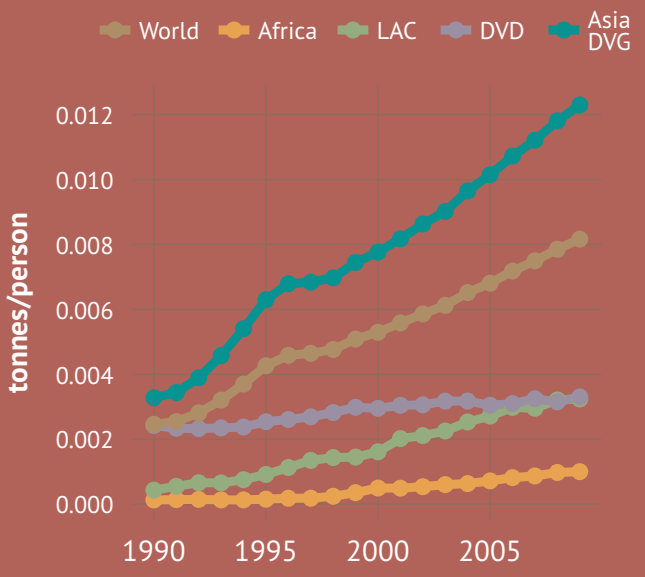
Global aquaculture production has continued to grow in the new millennium, albeit more slowly than in the 1980s and 1990s. In the course of half a century or so, aquaculture has expanded from being almost negligible to being fully comparable with capture production in terms of feeding people in the world. Aquaculture has also evolved in terms of technological innovation and adaptation to meet changing requirements. World aquaculture production attained an all-time high in 2010, at 60 million tonnes (excluding aquatic plants and non-food products), with an estimated human consumption amounting to USD 119 billion.[9] The global distribution of aquaculture growth has been very uneven, with production heavily concentrated in Asia, especially in China.

Aquaculture, dominated by Asia DVG and the DVD, is on the rise. Indeed, after producing less than 0.003 tonne per person in 1990, Asia DVG rose above 0.012 tonne per person in 2009, while the DVD, in second place, evolved from 0.0025 to 0.003 tonne per person over the same period. Moreover, the LAC regions have nearly caught up, as they are clearly making progress. (Chart 60)

Africa, although in the last position, has had slight but steady growth. Countries that were originally part of this growth are Egypt, Ghana, Kenya, Madagascar, Nigeria, Tunisia, Uganda and Zambia. (Map 42)

CHART 60: Aquaculture per capita production (1990-2009)

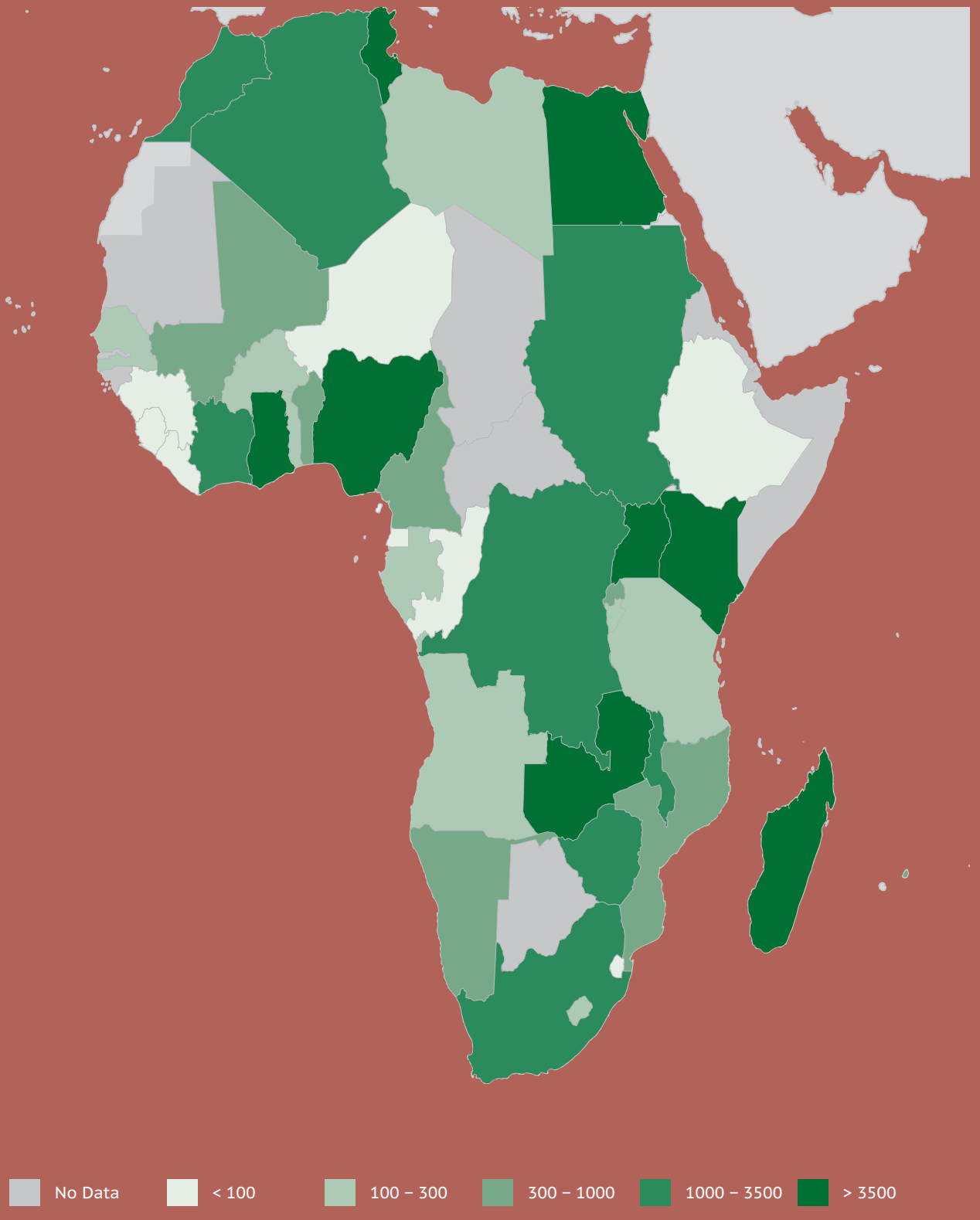


Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Metalink: P3.FTW.FAO.FI.ACQ.QP.SHP, p. 235

[9] FAO. The State of World Fisheries and Aquaculture 2012, p. 24.

MAP 42: Aquaculture producing countries (tonnes, 2009)



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

Metalink: P3.FTW.FAO.FI.ACQ.QP, p. 235

Trends in the agricultural trade

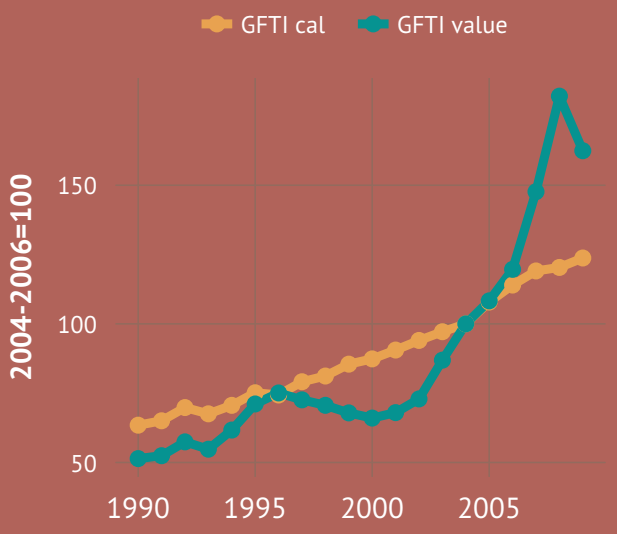
Global trade has been instrumental for achieving food security, at least in those countries where it is affordable. The scale of food and agricultural trade today is unprecedented; in real terms, international flows have increased around five-fold over the past fifty years, but the expansion has been unevenly distributed across regions. For much of this period, it would not be unreasonable to say that the rich world outpaced the poor world in the very area where developing countries are supposed to have a comparative advantage. The evolution of the overall net agricultural trade balance of developing countries as a whole does not itself denote overall improvement or deterioration from a developmental standpoint. The aggregate of the developing countries is a composite of widely differing country and commodity situations.

Sub-Saharan Africa has seen its share of world exports drop from 11 percent to fewer than 3 percent in the space of just 20 years. The region's half-billion dollar trade surplus in the late 1980s has mushroomed into a 10 billion dollar deficit at present. Growing net imports of cereal and livestock products have been dominant in shaping the growing deficit of agriculture in developing countries, while imports of products in the oilseed complex by several major developing countries other than China have also assumed importance, notwithstanding rapidly rising net exports of these products from other developing countries (e.g. Argentina, Indonesia and Malaysia).

Chart 61 shows that from 1990 to 2005, the index of the caloric value of world food exports (GFTI Cal) was greater than the index of the value of world food exports (GFTI value). Since 2005, the trend has been reversed, so that "GFTI value" became greater than "GFTI Cal" up to 2009. This can be explained by the increase of food price in the world since 2005. (Chart 61)

The import dependency ratio (IDR) is higher (more than 50 percent) for some African countries, such as Algeria, Botswana, Lesotho, Libya, Mauritania, Swaziland, Tunisia and Zimbabwe. In contrast, this ratio is less than 10 percent for Chad, Madagascar, Mali, Niger and Zambia. (Map 43)

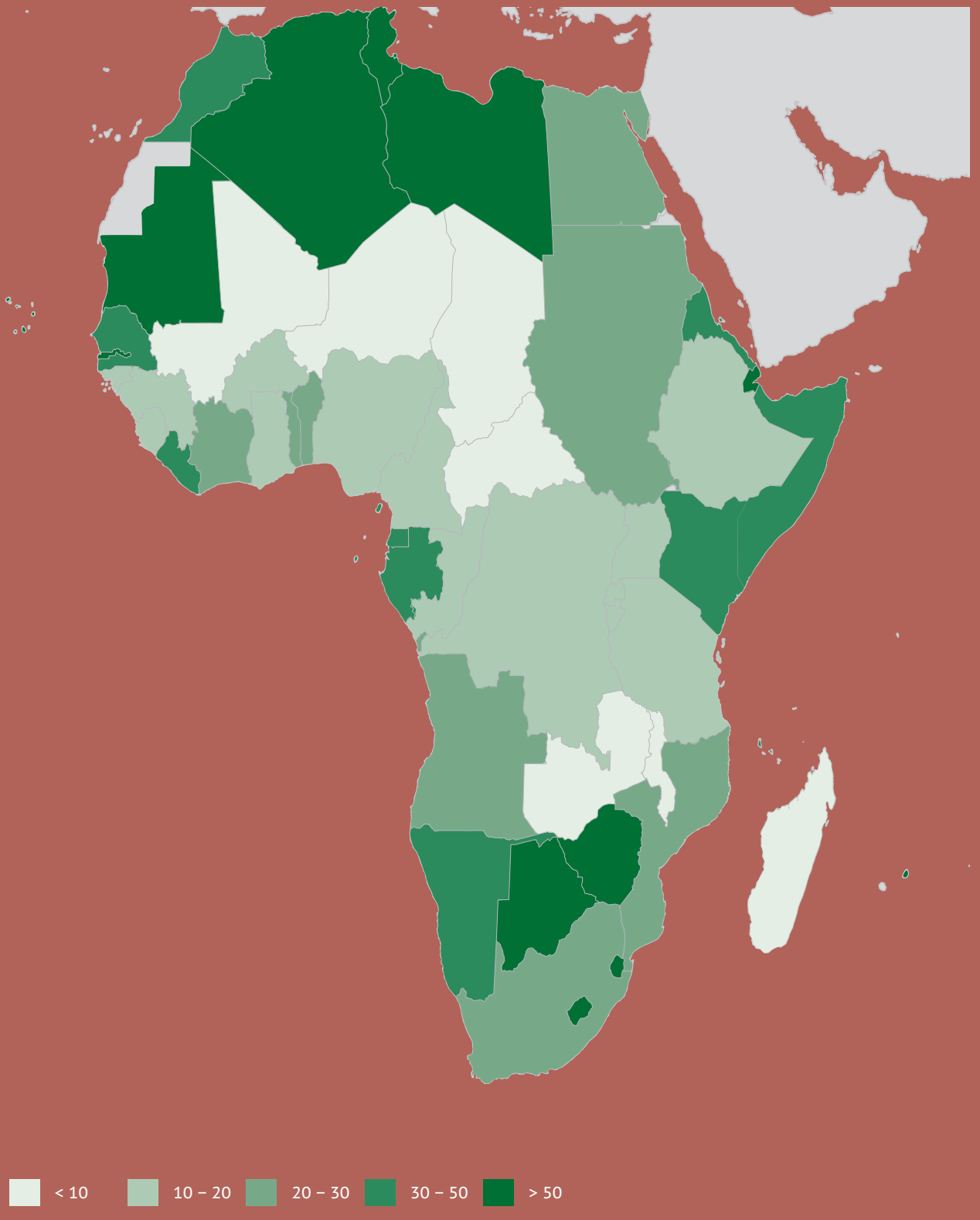
CHART 61: Global food trade index - calories and value (1990-2009)



Source: Statistics Division

Metalink: P3.FEED.FAO.ESS.FD.IXc, p. 240

MAP 43: Import dependence (calories, 2009)



Source: Statistics Division

Metalink: P3.FTW.FAO.ESS.IMPDc, p. 241

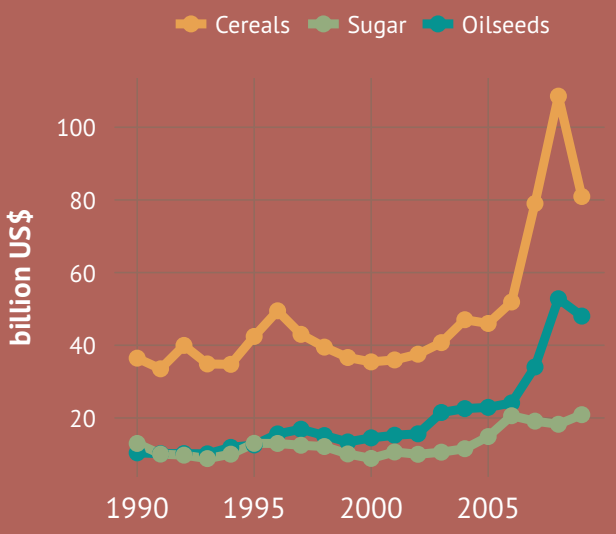
In order to satisfy the increasingly high domestic demand, many African countries are forced to import basic foods, such as cereals, meat, milk, and sugar, which are not fully covered by domestic production. In Tunisia, for example, grain products represent a significant share of food imports in the country. Similarly, as Algeria provided its food needs by imports it became the first African importer of food. In sub-Saharan Africa, import of food turns out to be expensive relative to GDP; however, faced with the explosion in global prices of some cereals, such as rice and wheat, Africa is struggling to keep pace.

In global trade, cereals were more important than sugar from 1990 to 2009. Trade in cereals was USD 40 billion in 1990 and it increased to USD 80 billion in 2009, while sugar trade was less than USD 20 billion in 1990 and almost USD 45 billion in 2009. In next place, after sugar, were oilseeds, for which trade has increased slowly. (Chart 62)

Global trade in fruits and vegetables increased from USD 50 billion in 1990 to more than USD 150 billion in 2009. Likewise, global trade in vegetable oils and animal fat has increased, but at a low level, from about USD 10 billion in 1990 to USD 50 billion in 2009. (Chart 63)

Global trade for fish is the most important, followed by meat, with milk equivalents in last position. Global trade for coffee, tea, cocoa and spices has been growing strongly since 2000. (Chart 65, Chart 66)

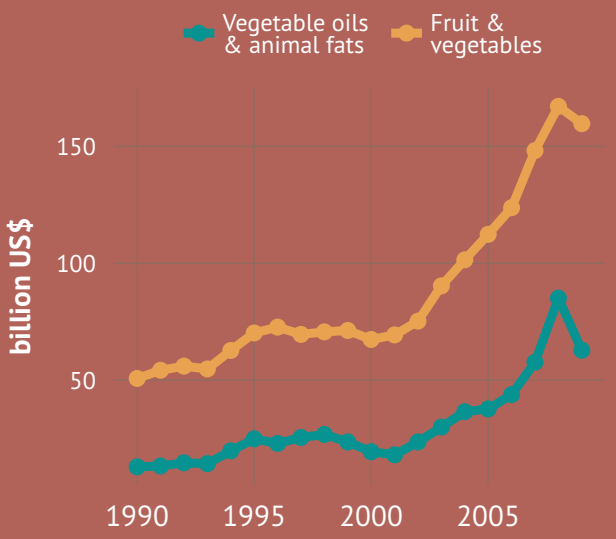
CHART 62: Global trade - cereals, sugar and oilseeds (1990-2009)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.CE.EXv, p. 238

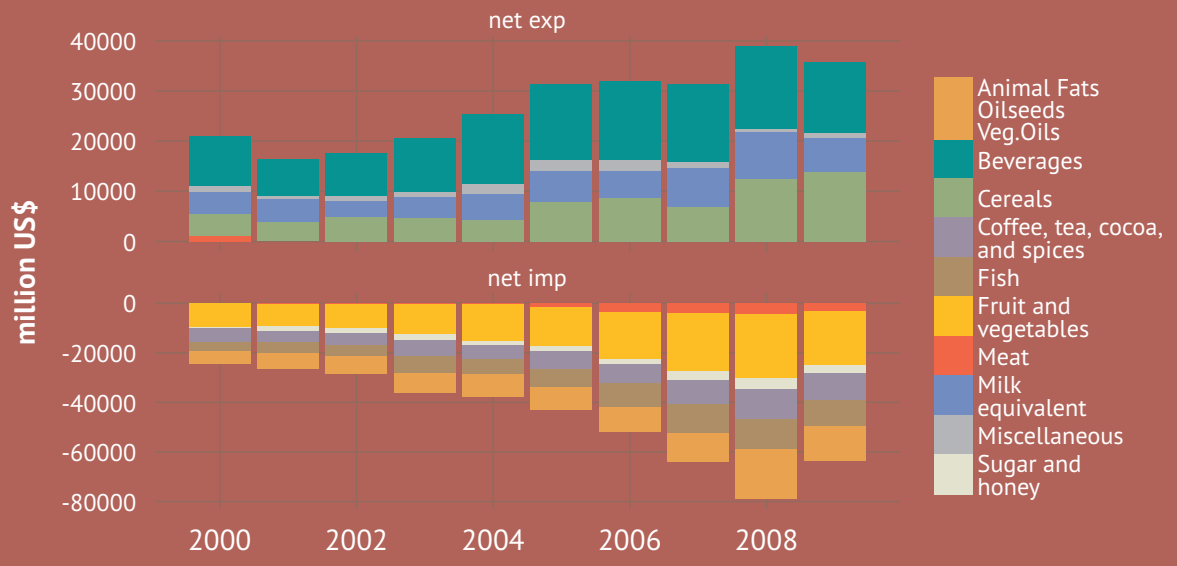
CHART 63: Global trade - vegetable oils and fruit + vegetables (1990-2009)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.VL.EXv, p. 238

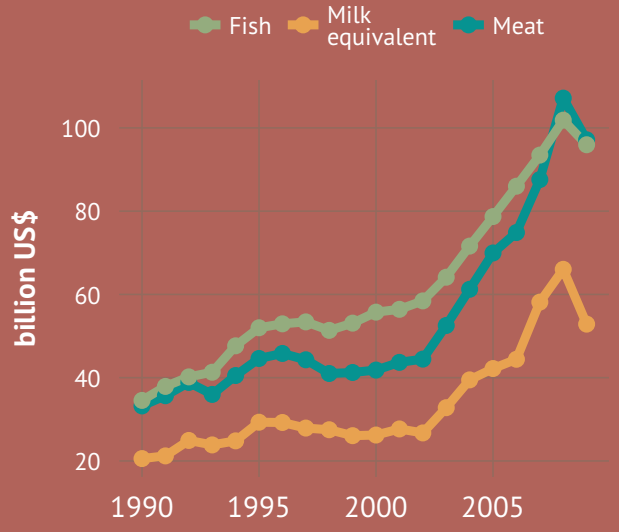
CHART 64: Composition of African trade (food, fish, beverages) (2000-2009)



Source: Still unknown

Metalink: **??**, p. **??**

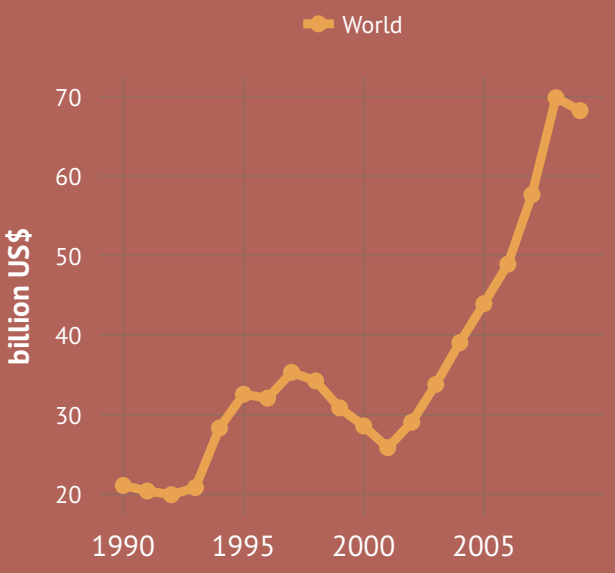
CHART 65: Global trade - livestock and fish (1990-2009)



Source: Statistics Division

Metalink: P3.FTW.FAO.FI.TOT.EXv, p. 238

CHART 66: Global trade - coffee, tea, cocoa and spices (1990-2009)



Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.CTCS.EXv, p. 238

2

Urban and peri-urban agriculture

Intra-urban agriculture takes place within the inner city. Most cities and towns have vacant and underutilized land areas that are or can be used for urban agriculture, including areas not suitable for building (along streams, close to airports, etc.), public or private lands not being used (e.g. lands waiting for construction) that can have an interim use, community lands and household areas. Peri-urban agriculture takes place in the urban periphery.[10]

The ongoing exodus of rural people to urban areas in developing countries has led to the rapid and massive increase in urban populations. Often, rural emigration results in the transfer of poverty, hunger and malnutrition from the countryside to towns and cities, a process known as the "urbanization of poverty". To meet food needs and supplement incomes, many urban inhabitants — especially new arrivals from the countryside — practice urban and peri-urban agriculture (UPA) in vacant lots, in backyards, along rivers, roads and railways, and under power lines. It has been estimated that some 200 million people are engaged in urban agriculture and related enterprises, contributing to the food supply of 800 million urban dwellers. In Africa, 40 percent of urban dwellers are said to be involved in some form of agricultural activity, and this figure rises to 50 percent in Latin America.

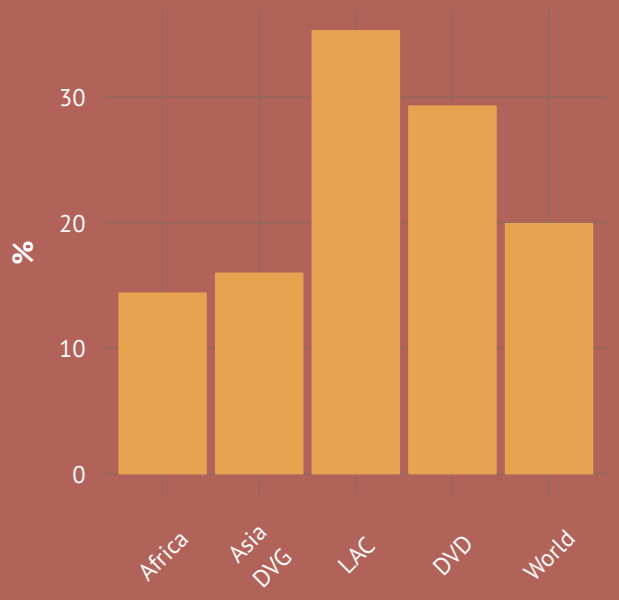
The share of the population in urban agglomerations of more than one million people in the total population is higher in the LAC region than in the rest of the world. Indeed, for the DVD, which is in second place, this share is approximately 30 percent, followed by Asia and Africa, which each have less than 20 percent. (Chart 67)

The annual growth rate of urbanization is quite high (over 5 percent) in some African countries, including Angola, Burkina Faso, Burundi, Eritrea, Malawi and Rwanda. In Chad, Democratic Republic of the Congo, Liberia, Mali, Mozambique, Sudan and Tanzania, the rate is between 4.5 percent and 5 percent, which is not negligible. (Map 44)

UPA is already an important reality in developing countries. As urbanization accelerates in the decades ahead, its contribution will be even more significant. Consequently, governments and city administrations must recognize the opportunities offered by UPA to improve urban food security and livelihoods. By adopting policy responses that better integrate horticulture into urban development, developing countries can reap considerable benefits, especially enhancements in social, economic and environmental sustainability.

[10] FAO (2007). Profitability and Sustainability of Urban and Peri-urban Agriculture.

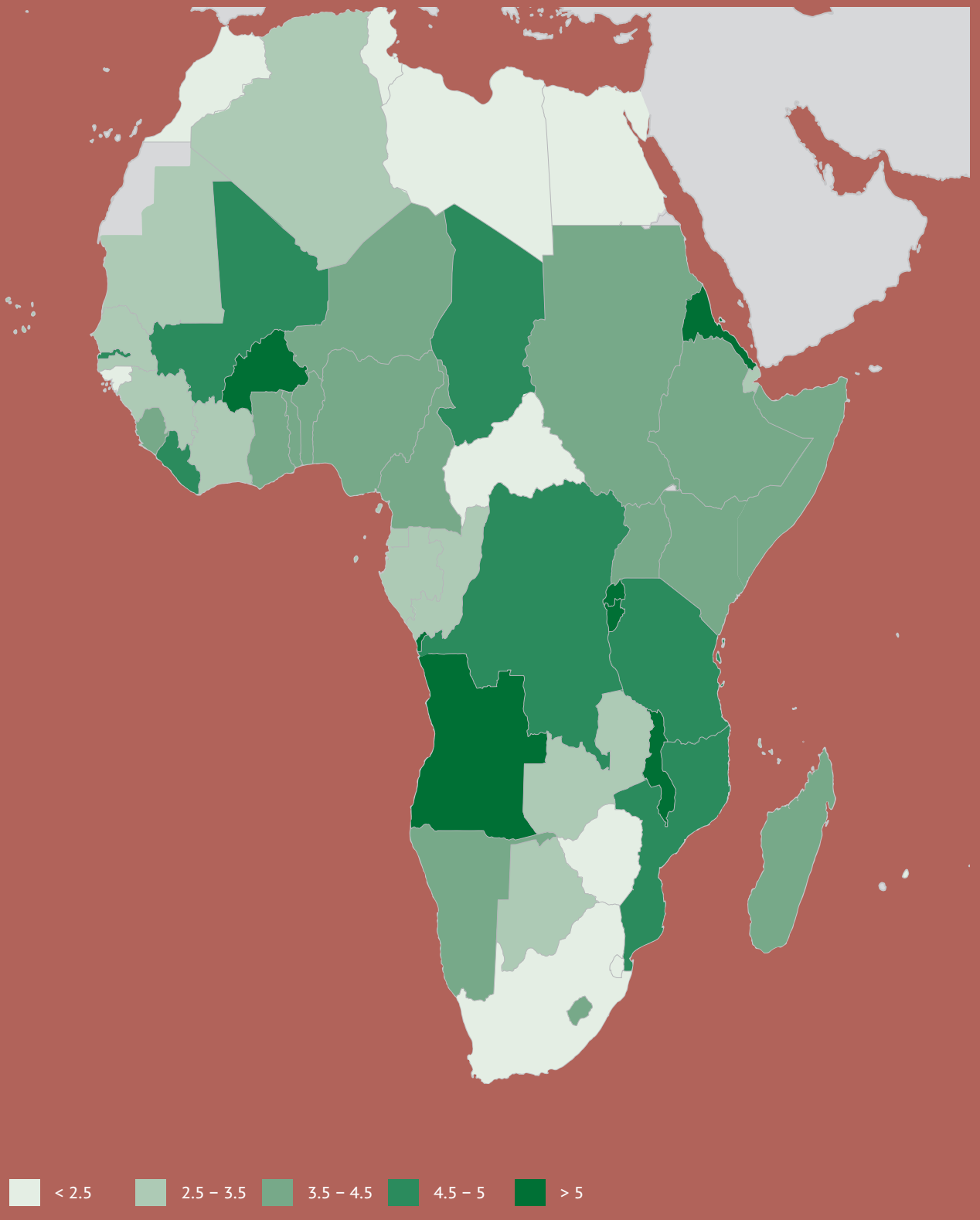
CHART 67: Population in urban agglomerations of more than 1 million, share of total population (2010)



Source: World Bank (WDI)

Metalink: P1.DEM.UN.WUP.POP.SH, p. 245

MAP 44: Urbanization rates, p.a. growth (%, 2000-2010)



Source: World Bank (WDI)

Metalink: P1.DEM.UN.WUP.POP.URB.GR10, p. 250

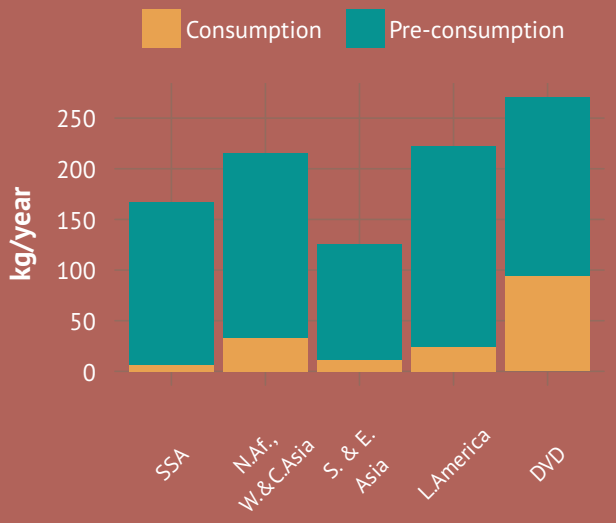
Food losses

Food losses represent a significant cost to the world economy and have a major impact on the ability to feed the world. Wastage at the consumer level is typical of food systems in developed countries, while losses from production to the retail level characterize those of developing countries. Roughly one-third of the edible food produced for human consumption is lost or wasted, which is about 1.3 billion tonnes per year. Per capita waste by consumers comes to between 95-115 kg a year in Europe and North America, while consumers in sub-Saharan Africa and in South and Southeast Asia waste only 6-11 kg a year.

Chart 68 shows that, in 2010, average per capita food loss and wastage was more important in the DVD, where it was more than 250 kg/year, while it is little higher than 150 kg/year in sub-Saharan Africa. Apart from Asia, in the other regions, losses and wastage are higher than in sub-Saharan Africa, in both consumption and pre-consumption stages. (Chart 68)

In North Africa, the average food loss and waste per capita is more important than it is in sub-Saharan Africa. Indeed in 2010, it came to more than 192 kg/year in North Africa, whereas in sub-Saharan Africa it was between 144 and 192 kg/year. (Map 45)

CHART 68: Average per capita food losses and wastage (2010)



Source: Global Food Losses and Waste

Metalink: P3.FTW.FAO.AGS.LOSS.PRE, p. 244

MAP 45: Per capita food losses and waste (kg/year, 2010)

Source: Global Food Losses and Waste

Metalink: P3.FTW.FAO.AGS.LOSS, p. 244

TABLE 23: Agriculture-in-aggregate production indicators

	Gross per capita production index number (2004-2006 = 100)							
	crops		livestock		food		non food	
	change by latest	p.a. growth	change by latest	p.a. growth	change by latest	p.a. growth	change by latest	p.a. growth
	%	%	%	%	%	%	%	%
	2009-2010	2000-2010	2009-2010	2000-2010	2009-2010	2000-2010	2009-2010	2000-2010
NORTH AFRICA	−5.5	2.0	−0.0	1.8	−4.2	2.0	9.7	−3.2
Algeria	4.7	6.8	0.8	0.6	3.3	4.3	−0.4	1.7
Egypt	−10.6	0.1	−3.6	2.3	−9.3	0.8	15.2	−6.0
Libyan Arab Jamahiriya	1.2	−0.7	−3.2	0.0	−0.4	−0.4	−0.7	−2.0
Morocco	1.8	5.4	7.9	3.1	3.7	4.7	−0.2	1.4
Tunisia	−4.5	1.5	2.1	−0.1	−2.8	1.1	−0.7	−1.2
WEST AFRICA	0.4	−0.5	3.4	1.2	0.9	−0.1	−3.2	−4.6
Benin	−7.3	−0.6	13.3	0.2	−5.0	0.3	−11.9	−9.5
Burkina Faso	13.0	3.7	4.9	−0.0	12.4	2.4	0.6	2.7
Cape Verde	0.9	−0.4	2.9	3.3	1.9	1.5	−3.3	0.6
Cote d'Ivoire	1.0	−1.7	0.4	0.8	1.0	−0.8	1.3	−6.4
Gambia	12.9	0.3	−0.4	−0.3	10.6	0.2	−17.8	6.2
Ghana	1.1	2.3	3.1	1.1	1.4	2.2	−20.3	−1.3
Guinea	1.4	0.7	2.9	3.3	2.1	1.3	−12.9	−3.4
Guinea-Bissau	5.4	1.4	−0.2	0.7	4.3	1.3	2.3	−0.7
Liberia	−0.4	−3.7	3.1	−0.6	0.3	−1.5	−0.8	−8.5
Mali	−0.1	3.6	−0.3	3.5	−0.4	4.1	1.8	−5.3
Mauritania	32.8	0.4	2.8	−0.5	7.4	−0.3		
Niger	43.2	6.7	15.2	1.3	30.5	4.3	−45.6	−9.3
Nigeria	−2.2	−1.6	0.1	0.3	−1.9	−1.5	−5.9	−1.2
Senegal	8.7	0.7	−3.2	1.1	5.7	0.8	−11.6	−3.7
Sierra Leone	6.0	5.1	0.1	1.9	7.3	5.1	−38.2	−4.2
Togo	−0.6	0.5	8.0	2.7	0.4	1.9	2.6	−10.3
CENTRAL AFRICA	−1.5	−0.4	5.7	0.1	−0.4	−0.1	6.7	−5.3
Cameroon	0.1	2.4	8.0	1.3	0.5	2.7	13.8	−4.1
Central African Republic	−2.8	−0.5	2.4	1.0	−0.2	0.5	−7.1	−9.3
Chad	−0.5	0.2	0.1	−0.8	−0.6	0.4	3.8	−10.7
Congo	−2.6	0.2	18.1	6.1	3.2	1.6	−44.3	2.0
Democratic Republic of the Congo	−2.0	−2.7	9.9	−1.5	−0.6	−2.5	−6.1	−4.1
Equatorial Guinea	−5.5	−1.2	−1.1	−1.7	−6.2	−0.7	0.5	−4.8
Gabon	−10.1	−1.0	8.3	−0.8	−5.6	−1.0	0.6	0.2
Sao Tome and Principe	−3.1	−0.1	0.8	1.2	−2.8	−0.0	21.9	3.6
EAST AFRICA	−2.1	1.0	0.0	2.4	−1.3	1.6	0.5	−0.1
Burundi	−2.9	−0.8	−1.7	3.3	−1.3	−0.4	−42.5	−6.4
Djibouti	−6.5	−0.9	−18.0	1.0	−16.4	0.7		
Eritrea	−2.3	−1.9	1.7	0.6	0.0	−0.3	−1.6	−2.4
Ethiopia	0.9	2.9	−1.8	1.9	−0.0	2.7	1.7	0.3
Kenya	4.8	0.6	−3.3	2.7	−0.1	1.8	12.9	−0.6
Rwanda	−1.4	2.5	7.5	3.6	0.7	2.8	−31.7	−3.2
Somalia	−2.6	−1.1	12.0	−0.3	10.1	−0.4	19.0	0.9
Sudan (former)	−10.2	0.5	0.0	4.0	−4.0	2.7	−1.5	−0.6
Uganda	−2.9	−1.9	−1.6	1.2	−2.4	−1.3	−7.7	−1.7
United Republic of Tanzania	−2.1	2.3	−1.4	0.9	−2.0	1.9	−1.1	2.5
SOUTHERN AFRICA	−0.3	0.5	2.9	0.9	0.9	0.8	−0.6	−0.9
Angola	4.4	7.0	−0.2	−2.3	3.3	4.6	1.0	−3.9
Botswana	10.6	−1.0	2.5	1.6	4.2	1.2	−30.3	−14.3
Comoros	−3.7	−2.7	−1.1	−1.3	−3.4	−2.5	−19.1	−2.5
Lesotho	40.5	0.0	−0.6	−0.3	15.7	−0.3	−6.3	2.6
Madagascar	−0.7	0.9	−2.8	−1.8	−1.8	0.2	18.3	−1.5
Malawi	−3.5	1.9	7.7	3.7	−2.0	1.8	−6.1	3.6
Mauritius	−5.2	−2.1	5.3	4.5	−2.6	−0.5	3.0	−1.8
Mozambique	1.4	1.5	0.5	−3.2	−0.2	−0.3	13.5	13.9
Namibia	2.4	1.5	−3.7	−2.1	−2.2	−1.1	−7.4	−4.6
Seychelles	−11.4	−5.4	0.0	−7.5	−4.3	−6.6	−6.8	−15.7
South Africa	−2.7	−1.1	6.7	2.8	1.6	0.8	−0.9	−6.5
Swaziland	0.5	0.3	3.7	1.3	1.1	0.7	3.6	−15.9
Zambia	12.5	5.4	2.4	−0.7	10.6	2.6	−2.2	11.5

TABLE 23: Agriculture-in-aggregate production indicators (continued)

	Gross per capita production index number (2004-2006 = 100)							
	crops		livestock		food		non food	
	change by latest	p.a. growth	change by latest	p.a. growth	change by latest	p.a. growth	change by latest	p.a. growth
	%	%	%	%	%	%	%	%
	2009-2010	2000-2010	2009-2010	2000-2010	2009-2010	2000-2010	2009-2010	2000-2010
Zimbabwe	−1.2	−5.5	−3.2	0.6	0.6	−2.0	−15.4	−7.8
AFRICA	−1.5	0.4	1.3	1.5	−0.8	0.8	0.3	−2.4
ECOWAS	0.4	−0.5	3.4	1.2	0.9	−0.1	−3.2	−4.6
SADC	−1.0	0.3	2.3	0.6	0.1	0.4	−1.1	−0.6
COMESA	−4.7	0.1	−1.6	2.2	−3.9	0.8	1.0	−1.8
UMA	1.4	4.4	3.4	1.4	2.1	3.3	−0.5	0.7
ECCAS	−0.8	0.5	4.4	−0.3	0.1	0.6	2.6	−5.3
IGAD	−2.1	0.6	0.1	2.6	−1.3	1.6	3.2	−0.5
CEMAC	−0.9	1.4	4.9	0.7	−0.0	1.6	9.0	−5.3
UEMOA	5.8	0.6	6.1	1.8	6.5	1.4	−1.2	−5.7
CEN-SAD	−2.1	0.1	1.1	1.9	−1.4	0.7	1.5	−3.7
ASIA Developing	1.7	1.6	1.9	1.9	1.7	1.7	2.7	1.6
LAC	9.1	2.4	−1.0	1.9	5.0	2.3	0.2	0.4
DEVELOPED REGIONS	−5.2	−0.0	0.5	0.1	−2.7	0.1	9.4	−1.8
WORLD	0.5	1.2	0.7	1.0	0.5	1.1	3.5	0.7

TABLE 24: Wheat producers and their productivity

	Wheat							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	6 609	1.6	24	3.6	19 606	16 073	−0.2	5.2
Algeria	1 900	8.7	16	5.9	2 953	3 100	0.1	15.1
Egypt	1 288	2.2	56	−1.3	8 523	7 169	4.4	0.9
Libyan Arab Jamahiriya	135	−1.5	8	−0.1	105	106	−0.3	−1.6
Morocco	2 852	−0.2	17	13.6	6 371	4 876	−9.2	13.4
Tunisia	434	−4.9	19	4.9	1 654	822	−2.8	−0.2
WEST AFRICA	54	−1.3	16	0.7	77	86	3.3	−0.5
Benin					0	0		
Burkina Faso					0	0		
Cape Verde					0	0		
Cote d'Ivoire					0	0		
Gambia					0	0		
Ghana					0	0		
Guinea					0	0		
Guinea-Bissau					0	0		
Liberia					0	0		
Mali	10	13.7	25	0.6	15	24	11.6	14.4
Mauritania	1	13.6	21	3.7	3	2	−1.8	17.8
Niger	6	−0.2	15	−2.0	9	9	−1.7	−2.3
Nigeria	37	−3.3	14	−0.2	50	51	3.9	−3.5
Senegal					0	0		
Sierra Leone					0	0		
Togo					0	0		
CENTRAL AFRICA	12	2.7	16	1.6	20	19	3.1	4.4
Cameroon	1	11.1	14	−2.4	1	1	0.5	8.4
Central African Republic					0	0		
Chad	5	9.9	20	3.3	11	10	2.5	13.5
Congo					0	0		
Democratic Republic of the Congo	7	−0.6	13	0.0	9	9	3.4	−0.6
Equatorial Guinea					0	0		
Gabon					0	0		
Sao Tome and Principe					0	0		
EAST AFRICA	2 228	4.7	19	4.5	3 719	4 227	0.8	9.4
Burundi	12	2.6	8	1.4	9	9	−3.4	4.0
Djibouti					0	0		
Eritrea	28	2.0	10	5.0	26	27		7.1
Ethiopia	1 684	4.7	18	4.6	2 638	3 076		9.6
Kenya	160	2.0	32	7.5	219	512	−2.0	9.6
Rwanda	49	17.3	16	9.3	72	77	−5.2	28.2
Somalia	3	1.4	3	−1.1	1	1	0.4	0.3
Sudan (former)	225	9.3	18	−2.6	642	403	−6.3	6.5
Uganda	12	6.0	17	0.0	20	22	11.6	6.0
United Republic of Tanzania	55	−2.7	18	14.9	92	100	−11.1	11.8
SOUTHERN AFRICA	628	−4.8	27	0.0	2 236	1 700	2.6	−4.8
Angola	2	0.6	20	1.6	5	5	4.8	2.3
Botswana	0	−100.0			0	0	−4.4	−100.0
Comoros					0	0		
Lesotho	14	−5.4	15	8.4	7	20	−7.3	2.6
Madagascar	5	2.1	25	1.2	12	12	6.1	3.3
Malawi	2	−3.8	15	6.6	3	2	1.0	2.6
Mauritius					0	0		
Mozambique	3	8.4	10	1.5	3	3	−17.5	10.0
Namibia	2	5.9	66	7.4	12	12	−2.5	13.8
Seychelles					0	0		

TABLE 24: Wheat producers and their productivity (continued)

	Wheat							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	558	−5.0	26	−0.1	1 958	1 430	3.6	−5.2
Swaziland	0	4.1	15	0.0	0	0	−14.5	4.1
Zambia	27	8.5	63	0.2	195	172	3.1	8.7
Zimbabwe	15	−9.9	28	−6.4	40	42	−3.4	−15.7
AFRICA	9 531	1.6	23	2.8	25 659	22 105	0.4	4.5
ECOWAS	52	−1.4	16	0.7	74	83	3.3	−0.8
SADC	690	−4.6	26	0.3	2 337	1 808	2.2	−4.3
COMESA	3 649	3.5	32	−0.5	12 513	11 639	3.3	2.9
UMA	5 323	1.5	17	9.5	11 087	8 907	−5.7	11.1
ECCAS	26	2.4	13	1.5	34	33	1.1	4.0
IGAD	2 112	4.8	19	4.1	3 546	4 040	1.4	9.2
CEMAC	5	10.0	19	2.6	11	10	2.2	12.9
UEMOA	15	6.0	21	0.6	24	32	1.3	6.6
CEN-SAD	5 184	0.1	27	3.9	17 629	14 012	−0.4	4.0
ASIA Developing	101 229	0.3	29	1.1	299 986	291 951	2.3	1.4
LAC	8 819	−0.5	33	2.7	22 553	29 500	1.3	2.2
DEVELOPED REGIONS	97 640	−0.2	32	0.8	338 439	310 098	−1.9	0.5
WORLD	217 219	0.1	30	1.0	686 636	653 655	−0.1	1.1

TABLE 25: Rice producers and their productivity

	Rice							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	467	−3.5	94	0.3	5 571	4 380	6.6	−3.1
Algeria	0	−3.4	16	−0.3	0	0	−14.6	−3.6
Egypt	460	−3.5	94	0.3	5 520	4 330	6.6	−3.2
Libyan Arab Jamahiriya					0	0		
Morocco	7	2.8	68	4.3	50	51	22.4	7.2
Tunisia					0	0		
WEST AFRICA	5 101	1.7	22	2.8	10 392	11 156	2.6	4.6
Benin	40	5.5	42	7.1	151	167	16.2	13.0
Burkina Faso	134	12.8	20	−2.4	214	271	8.0	10.1
Cape Verde					0	0		
Cote d'Ivoire	395	1.5	18	0.0	688	723	−1.0	1.5
Gambia	86	18.8	12	−6.3	79	100	4.8	11.3
Ghana	181	4.6	27	2.3	391	492	11.9	7.1
Guinea	864	2.6	17	0.1	1 456	1 499	4.4	2.8
Guinea-Bissau	101	3.0	18	2.2	182	177	−1.5	5.3
Liberia	251	5.8	12	−0.8	293	296	0.2	4.9
Mali	472	3.0	49	8.8	1 951	2 308	10.2	12.0
Mauritania	26	3.6	52	2.1	54	134	3.9	5.8
Niger	20	−0.9	15	−5.9	20	30	−1.8	−6.8
Nigeria	1 788	−2.0	18	1.8	3 403	3 219	2.8	−0.2
Senegal	147	5.5	41	5.8	502	604	1.1	11.6
Sierra Leone	549	11.6	19	5.6	888	1 027	−8.9	17.8
Togo	47	3.9	23	1.9	121	110	9.5	5.9
CENTRAL AFRICA	710	2.1	10	1.0	649	704	−0.1	3.1
Cameroon	140	21.3	12	−8.4	115	175	1.0	11.1
Central African Republic	17	0.7	23	4.6	39	39	11.4	5.4
Chad	130	3.8	13	2.4	175	170	3.4	6.3
Congo	2	2.2	7	0.2	2	2	−0.6	2.4
Democratic Republic of the Congo	420	−0.6	8	−0.0	317	317	−1.5	−0.6
Equatorial Guinea					0	0		
Gabon	0	0.0	26	2.7	1	1	2.3	2.7
Sao Tome and Principe					0	0		
EAST AFRICA	938	5.7	17	−1.1	1 805	1 616	1.4	4.6
Burundi	22	2.6	38	2.2	78	83	2.6	4.9
Djibouti					0	0		
Eritrea					0	0		
Ethiopia	13	5.0	19	0.4	25	25		5.3
Kenya	20	3.8	40	0.5	42	80	2.5	4.3
Rwanda	13	11.8	52	6.6	81	67	2.3	19.2
Somalia	4	13.7	41	7.3	16	15	−18.2	22.0
Sudan (former)	6	1.6	36	9.6	22	23	23.1	11.3
Uganda	140	6.9	16	0.3	206	218	7.3	7.2
United Republic of Tanzania	720	5.6	15	−2.0	1 334	1 105	0.5	3.5
SOUTHERN AFRICA	2 125	3.7	24	2.5	4 935	5 120	0.7	6.3
Angola	25	19.3	7	−6.3	14	18	6.8	11.8
Botswana					0	0		
Comoros	20	2.1	10	−1.1	20	19	1.6	1.0
Lesotho					0	0		
Madagascar	1 808	4.1	26	2.5	4 540	4 738	0.2	6.7
Malawi	59	3.1	19	1.3	136	110	5.2	4.4
Mauritius	0				0	0	−100.0	
Mozambique	185	0.0	10	−0.1	179	180	6.5	−0.0
Namibia					0	0		
Seychelles					0	0		

TABLE 25: Rice producers and their productivity (continued)

	Rice							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	1	0.8	26	−1.1	3	3	2.9	−0.3
Swaziland	0	−3.5	30	−1.2	0	0	−25.7	−4.7
Zambia	26	7.8	20	5.8	42	52	4.2	14.0
Zimbabwe	0	1.5	13	−3.9	0	0	0.7	−2.5
AFRICA	9 341	2.1	25	0.6	23 353	22 977	3.2	2.8
ECOWAS	5 076	1.7	22	2.8	10 339	11 022	2.6	4.6
SADC	3 245	3.4	20	1.9	6 566	6 523	0.4	5.3
COMESA	3 008	1.8	33	−0.9	11 032	10 063	4.0	0.9
UMA	33	3.4	56	2.7	104	185	6.0	6.2
ECCAS	757	2.4	11	1.0	742	805	0.1	3.4
IGAD	183	6.2	20	0.6	312	361	5.3	6.8
CEMAC	290	8.5	13	−0.5	332	387	3.2	8.0
UEMOA	1 355	3.4	32	4.9	3 828	4 390	3.1	8.5
CEN-SAD	5 765	1.2	28	0.6	16 278	15 882	4.2	1.8
ASIA Developing	140 437	0.3	44	1.2	608 329	621 242	1.4	1.5
LAC	5 807	−0.9	45	2.0	28 041	25 948	4.1	1.0
DEVELOPED REGIONS	3 827	0.2	68	0.3	24 855	26 145	−0.4	0.5
WORLD	159 417	0.3	44	1.2	684 595	696 324	1.5	1.5

TABLE 26: Coarse grain producers and their productivity

	Coarse grains							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	4 920	1.0	26	3.0	16 078	12 936	−1.2	4.1
Algeria	1 089	16.8	15	6.8	2 300	1 586	−14.9	24.7
Egypt	1 220	1.3	66	−0.7	8 713	8 043	3.0	0.6
Libyan Arab Jamahiriya	194	0.4	6	1.1	111	112	−3.9	1.5
Morocco	2 200	−1.4	13	19.0	4 022	2 908	−14.0	17.3
Tunisia	217	−6.3	13	7.5	931	287	−6.7	0.8
WEST AFRICA	36 934	1.1	10	1.5	37 035	38 176	2.1	2.6
Benin	1 008	1.4	13	1.7	1 358	1 288	5.8	3.2
Burkina Faso	4 158	4.7	10	2.2	3 413	4 290	4.0	7.0
Cape Verde	34	1.1	2	−12.0	7	8	7.9	−11.0
Cote d'Ivoire	469	1.0	16	0.2	741	756	1.8	1.3
Gambia	236	7.0	11	−0.6	232	264	7.5	6.4
Ghana	1 421	1.8	17	3.3	2 216	2 415	6.7	5.1
Guinea	1 164	8.0	11	−1.3	1 175	1 244	7.5	6.5
Guinea-Bissau	69	−2.4	9	0.6	46	60	5.0	−1.8
Liberia					0	0		
Mali	3 254	5.3	13	4.5	4 369	4 086	0.5	10.1
Mauritania	265	3.4	5	−0.4	115	139	7.3	3.0
Niger	10 604	3.8	5	5.7	3 423	5 165	0.0	9.6
Nigeria	11 983	−2.8	14	1.9	17 543	16 259	1.8	−1.0
Senegal	1 330	2.1	9	1.4	1 367	1 164	0.3	3.5
Sierra Leone	104	16.2	10	−0.1	91	104	−8.9	16.1
Togo	833	2.2	11	1.0	940	936	4.0	3.3
CENTRAL AFRICA	5 667	3.3	11	2.4	5 792	6 068	3.3	5.8
Cameroon	1 499	7.9	18	0.2	2 415	2 630	4.8	8.0
Central African Republic	146	−0.6	14	4.1	212	200	5.8	3.4
Chad	2 415	3.8	8	5.0	1 892	1 970	4.6	9.0
Congo	29	10.2	8	0.2	22	23	6.5	10.4
Democratic Republic of the Congo	1 553	0.1	8	−0.3	1 201	1 202	1.2	−0.2
Equatorial Guinea					0	0		
Gabon	22	3.4	18	0.9	46	40	1.3	4.3
Sao Tome and Principe	1	1.8	30	3.0	3	4	−1.9	4.9
EAST AFRICA	25 165	3.0	11	1.9	27 523	28 788	1.9	4.9
Burundi	199	1.5	11	0.1	213	221	−2.6	1.7
Djibouti	0	4.1	11	−4.9	0	0	1.0	−0.9
Eritrea	427	3.4	5	3.3	201	214		6.8
Ethiopia	7 644	2.3	16	3.9	12 038	12 383		6.2
Kenya	2 362	3.1	15	1.0	2 637	3 508	−0.7	4.2
Rwanda	324	1.9	19	8.4	469	601	−1.0	10.5
Somalia	590	1.0	4	−6.5	198	220	−3.7	−5.5
Sudan (former)	7 655	1.9	4	−1.5	4 888	3 136	8.9	0.3
Uganda	1 690	2.7	16	0.5	2 610	2 723	2.7	3.2
United Republic of Tanzania	4 274	7.7	14	−0.2	4 269	5 781	−1.0	7.5
SOUTHERN AFRICA	12 937	0.9	20	1.2	23 215	25 287	2.5	2.1
Angola	1 737	7.0	7	1.4	1 011	1 134	7.5	8.5
Botswana	111	−5.2	5	15.6	56	60	−7.6	9.6
Comoros	2	3.6	28	1.7	5	6	0.6	5.4
Lesotho	177	−0.4	9	1.7	68	153	−4.3	1.3
Madagascar	374	6.8	11	2.3	426	413	0.9	9.2
Malawi	1 833	1.9	19	1.3	3 669	3 498	6.5	3.2
Mauritius	0	−3.7	68	−2.6	0	0	−12.1	−6.2
Mozambique	2 303	3.4	10	1.7	2 365	2 323	8.3	5.2
Namibia	308	−0.5	3	−0.9	99	103	2.3	−1.3
Seychelles					0	0		

TABLE 26: Coarse grain producers and their productivity (continued)

	Coarse grains							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	2 987	−3.7	44	4.8	12 616	13 266	2.1	0.9
Swaziland	56	−2.2	12	−2.8	61	68	0.7	−4.9
Zambia	1 163	5.3	25	4.4	1 959	2 874	−0.2	9.9
Zimbabwe	1 886	0.7	7	−5.6	879	1 387	0.2	−4.9
AFRICA	85 628	1.7	13	1.6	109 656	111 271	1.8	3.4
ECOWAS	36 669	1.1	10	1.5	36 921	38 038	2.1	2.6
SADC	18 762	2.0	17	0.7	28 680	32 263	1.9	2.8
COMESA	28 583	2.1	14	1.0	40 081	40 390	2.6	3.1
UMA	3 965	1.1	13	13.9	7 479	5 032	−11.7	15.1
ECCAS	7 603	4.0	10	2.0	7 015	7 423	3.3	6.0
IGAD	20 368	2.2	11	2.0	22 572	22 185	2.7	4.2
CEMAC	4 112	4.9	12	3.1	4 587	4 862	4.7	8.1
UEMOA	21 725	3.8	8	3.2	15 656	17 744	2.0	7.0
CEN-SAD	54 330	1.2	11	1.5	60 842	58 777	1.7	2.8
ASIA Developing	89 583	0.6	33	3.5	280 333	294 519	0.2	4.1
LAC	35 026	0.7	39	3.5	114 377	137 801	3.8	4.2
DEVELOPED REGIONS	101 270	−1.2	56	2.3	618 558	564 074	−0.2	1.0
WORLD	311 512	0.3	36	2.1	1 122 942	1 107 683	0.4	2.4

TABLE 27: Oilcrop producers and their productivity

	Oilcrops							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	3 466	2.4	3	3.8	797	1 024	−0.4	6.3
Algeria	337	6.0	4	2.7	119	140	−1.0	8.8
Egypt	427	1.0	6	1.3	238	274	4.0	2.3
Libyan Arab Jamahiriya	215	4.2	2	−3.2	45	46	8.2	0.9
Morocco	824	3.2	4	9.5	224	367	−4.0	12.9
Tunisia	1 663	1.7	1	2.7	170	197	−3.7	4.4
WEST AFRICA	14 524	1.7	4	1.1	5 402	5 383	3.9	2.8
Benin	341	−4.2	4	4.7	127	127	6.3	0.2
Burkina Faso	1 054	7.6	2	1.2	186	201	0.2	8.9
Cape Verde	2	0.3	4	−1.4	1	1	−2.4	−1.1
Cote d'Ivoire	569	−0.5	8	2.1	455	445	0.5	1.6
Gambia	148	1.1	3	−1.2	41	47	6.0	−0.1
Ghana	827	5.1	4	−1.3	347	355	3.5	3.7
Guinea	577	0.9	3	0.9	166	170	5.0	1.9
Guinea-Bissau	61	4.9	6	0.8	25	37	1.6	5.7
Liberia	35	−0.2	14	0.2	50	50	5.9	−0.0
Mali	699	3.1	3	1.4	176	181	1.1	4.5
Mauritania	6	−4.0	2	−1.4	1	1	0.8	−5.3
Niger	986	7.8	2	6.9	120	169	21.3	15.2
Nigeria	7 647	0.8	4	1.6	3 246	3 048	4.9	2.4
Senegal	1 262	1.1	3	1.1	328	408	4.0	2.2
Sierra Leone	152	12.4	6	−5.6	86	94	−3.1	6.1
Togo	159	−3.2	3	5.8	47	50	0.6	2.5
CENTRAL AFRICA	2 642	−0.1	4	1.4	1 105	973	0.7	1.3
Cameroon	662	1.1	5	1.3	452	333	1.0	2.4
Central African Republic	264	1.8	3	0.3	87	79	1.6	2.1
Chad	742	−1.8	2	1.7	151	145	9.5	−0.1
Congo	65	1.8	6	1.7	38	38	−0.3	3.5
Democratic Republic of the Congo	860	−0.1	4	0.9	353	355	−1.8	0.8
Equatorial Guinea	7	0.4	10	0.4	7	7	−1.7	0.8
Gabon	27	1.0	3	−4.6	10	9	3.0	−3.6
Sao Tome and Principe	15	1.4	5	1.0	7	7	2.4	2.4
EAST AFRICA	6 828	0.3	2	4.6	1 585	1 464	4.6	4.9
Burundi	30	5.4	6	7.9	19	19	−3.1	13.7
Djibouti					0	0		
Eritrea	56	2.7	1	−3.4	5	5		−0.7
Ethiopia	877	6.5	3	7.6	245	261		14.6
Kenya	235	0.9	3	4.7	45	70	3.3	5.7
Rwanda	93	8.0	2	3.9	14	15	−2.2	12.2
Somalia	96	1.7	4	8.4	31	34	−5.3	10.3
Sudan (former)	2 825	−2.7	2	2.9	562	455	12.6	0.0
Uganda	1 040	1.8	3	4.0	279	273	3.6	5.9
United Republic of Tanzania	1 577	3.0	2	4.0	384	333	2.4	7.0
SOUTHERN AFRICA	3 837	3.0	2	−1.3	1 004	890	0.7	1.7
Angola	364	13.1	3	−7.3	106	110	1.6	4.8
Botswana	17	9.5	4	0.9	3	7	15.4	10.5
Comoros	34	0.9	3	0.9	11	12	1.5	1.8
Lesotho					0	0		
Madagascar	121	−0.7	3	1.2	25	31	0.2	0.5
Malawi	432	7.1	3	2.6	110	108	10.4	9.9
Mauritius	1	5.1	4	−3.1	0	0	−9.1	1.9
Mozambique	1 093	4.7	1	−3.9	129	132	1.6	0.7
Namibia	3	−3.2	2	1.8	1	1	1.3	−1.4
Seychelles	0	−7.8	7	1.8	0	0	−7.1	−6.1

TABLE 27: Oilcrop producers and their productivity (continued)

	Oilcrops							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	821	2.5	4	−1.3	475	351	−1.0	1.2
Swaziland	10	−11.1	1	5.7	1	1	−8.2	−6.0
Zambia	436	6.2	2	1.4	69	73	4.0	7.7
Zimbabwe	504	−3.9	1	−2.9	74	63	1.9	−6.7
AFRICA	31 300	1.4	3	1.7	9 892	9 735	2.8	3.1
ECOWAS	14 518	1.7	4	1.1	5 400	5 382	3.9	2.8
SADC	6 240	2.5	3	−0.1	1 730	1 566	0.2	2.4
COMESA	8 196	0.0	3	2.8	2 096	2 062	2.9	2.8
UMA	3 045	2.6	2	5.5	560	751	−2.5	8.2
ECCAS	3 036	0.8	4	0.9	1 230	1 103	0.8	1.8
IGAD	5 128	−0.5	2	4.7	1 167	1 098	5.3	4.1
CEMAC	1 766	−0.1	3	1.8	745	611	2.7	1.6
UEMOA	5 132	2.5	3	1.0	1 464	1 617	2.4	3.6
CEN-SAD	21 919	0.9	3	2.0	6 977	7 074	4.0	2.9
ASIA Developing	102 185	0.9	8	3.4	80 859	81 314	4.5	4.4
LAC	52 612	5.0	6	1.3	22 931	29 508	4.6	6.4
DEVELOPED REGIONS	79 897	1.4	6	1.9	47 118	46 499	2.9	3.3
WORLD	266 698	1.8	6	2.4	161 748	168 047	3.9	4.3

TABLE 28: Pulses producers and their productivity

	Pulses							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	711	0.6	11	2.2	846	812	−4.5	2.8
Algeria	71	1.1	10	10.7	64	68	−4.6	12.0
Egypt	110	−2.7	29	−0.3	392	316	−2.2	−3.0
Libyan Arab Jamahiriya	5	−4.3	16	0.7	8	9	0.5	−3.6
Morocco	398	0.9	7	9.9	276	282	−11.6	10.9
Tunisia	127	3.0	11	6.1	106	137	−0.5	9.2
WEST AFRICA	11189	3.6	5	2.0	4533	5597	4.3	5.7
Benin	224	4.8	9	2.0	166	203	6.2	6.9
Burkina Faso	1396	15.8	5	−0.7	514	707	−1.4	15.0
Cape Verde	16	−6.3	2	3.8	3	3	−6.7	−2.7
Cote d'Ivoire	58	4.6	8	1.2	46	47	13.6	5.9
Gambia	11	1.0	3	0.4	3	3	−3.9	1.5
Ghana	240	4.1	1	0.2	22	23	0.5	4.4
Guinea	60	−0.7	9	0.9	50	56	−0.1	0.2
Guinea-Bissau	8	7.0	4	−5.0	4	3	0.3	1.7
Liberia	5	−0.6	7	0.6	3	4	1.6	0.0
Mali	277	−0.2	6	3.1	159	155	14.5	2.9
Mauritania	104	0.7	5	2.5	51	52	6.1	3.2
Niger	5707	8.3	3	10.9	847	1832	2.7	20.1
Nigeria	2640	−3.4	9	3.8	2420	2293	4.7	0.2
Senegal	129	−1.3	4	1.7	87	49	14.3	0.3
Sierra Leone	97	4.6	9	2.4	79	85	1.1	7.0
Togo	218	3.7	4	2.0	80	83	8.1	5.7
CENTRAL AFRICA	995	1.6	8	1.9	801	815	5.5	3.5
Cameroon	376	2.5	12	3.2	434	449	13.6	5.8
Central African Republic	32	1.6	10	0.2	31	31	5.4	1.9
Chad	168	0.6	7	2.0	125	122	9.9	2.6
Congo	12	1.6	8	−0.0	9	10	2.4	1.6
Democratic Republic of the Congo	407	1.4	5	−0.8	201	204	−0.8	0.6
Equatorial Guinea					0	0		
Gabon	0	−4.0	9	2.2	0	0	3.6	−1.8
Sao Tome and Principe					0	0		
EAST AFRICA	6502	2.2	8	1.4	5039	5233	1.4	3.6
Burundi	222	−1.6	11	2.3	243	235	−5.1	0.7
Djibouti	5	−6.0	3	1.9	2	2	1.4	−4.2
Eritrea	50	−6.8	7	7.9	36	36		0.5
Ethiopia	1483	2.8	12	3.1	1811	1781		6.0
Kenya	1077	−0.7	5	2.6	584	578	−4.7	1.9
Rwanda	367	0.1	10	4.6	360	365	1.1	4.7
Somalia	55	−0.4	3	2.5	20	18	0.7	2.1
Sudan (former)	328	7.5	9	−5.7	250	290	9.7	1.4
Uganda	1143	2.7	6	−1.5	648	654	1.6	1.1
United Republic of Tanzania	1773	4.4	7	−0.3	1084	1272	4.9	4.1
SOUTHERN AFRICA	2071	5.4	6	−0.8	1202	1183	0.7	4.6
Angola	724	14.0	3	−1.1	247	250	8.6	12.8
Botswana	15	−2.1	1	−16.8	2	2	−0.3	−18.5
Comoros	15	1.7	8	0.6	10	12	2.8	2.3
Lesotho	29	3.9	4	−7.6	5	10	3.3	−4.1
Madagascar	119	1.7	10	0.8	120	120	5.5	2.5
Malawi	646	3.4	7	2.2	443	434	−0.1	5.7
Mauritius					0	0		
Mozambique	315	4.6	7	2.7	195	205	0.8	7.4
Namibia	17	3.5	12	0.5	19	19	5.0	3.9
Seychelles					0	0		

TABLE 28: Pulses producers and their productivity (continued)

	Pulses							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	64	−3.8	12	−0.0	94	74	−3.5	−3.8
Swaziland	7	−1.1	5	0.9	3	3	−2.5	−0.2
Zambia	58	5.2	5	0.2	26	27	1.1	5.4
Zimbabwe	64	−0.8	4	−6.1	37	26	0.4	−6.8
AFRICA	21 471	3.1	6	1.3	12 422	13 641	1.9	4.4
ECOWAS	11 085	3.7	5	2.0	4 481	5 544	4.3	5.7
SADC	4 236	4.5	6	−0.5	2 478	2 647	2.3	4.0
COMESA	6 104	1.5	8	1.3	5 175	5 093	0.1	2.8
UMA	706	1.2	8	7.8	506	548	−7.0	9.1
ECCAS	1 941	4.1	7	0.0	1 291	1 300	1.6	4.1
IGAD	4 141	1.8	8	1.8	3 351	3 360	1.2	3.6
CEMAC	589	1.8	10	2.9	600	611	11.4	4.8
UEMOA	8 015	8.2	4	5.6	1 902	3 079	3.9	14.3
CEN-SAD	13 543	3.0	5	1.6	6 369	7 427	1.7	4.6
ASIA Developing	38 401	1.8	8	0.1	28 532	30 511	−0.2	1.9
LAC	7 339	−0.7	9	1.7	6 843	6 628	1.1	1.0
DEVELOPED REGIONS	9 372	0.4	17	0.1	15 641	16 377	−2.8	0.5
WORLD	76 597	1.7	9	0.2	63 447	67 166	−0.6	1.9

TABLE 29: Roots and tubers producers and their productivity

	Roots and tubers							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	386	4.4	252	2.7	8653	9713	2.2	7.2
Algeria	130	6.0	253	4.3	2636	3290	4.1	10.5
Egypt	158	6.2	262	1.0	4135	4138	1.2	7.2
Libyan Arab Jamahiriya	15	4.7	193	−0.3	311	290	2.7	4.3
Morocco	57	−0.7	282	4.6	1246	1615	2.0	3.9
Tunisia	26	2.2	147	0.5	324	380	2.9	2.7
WEST AFRICA	11490	0.8	98	1.1	111542	112819	6.9	1.9
Benin	474	2.0	128	1.8	6434	6065	7.5	3.8
Burkina Faso	28	9.4	70	−0.9	168	196	3.6	8.4
Cape Verde	1	−0.1	109	2.9	13	14	−6.2	2.8
Cote d'Ivoire	1240	4.0	63	−2.3	7702	7829	3.6	1.6
Gambia	2	−0.8	33	1.0	7	8	1.7	0.1
Ghana	1539	2.2	136	2.5	19635	20940	11.6	4.7
Guinea	186	0.2	70	1.1	1308	1292	3.5	1.3
Guinea-Bissau	14	1.2	112	3.9	111	162	3.5	5.1
Liberia	69	−0.8	81	1.6	560	558	1.5	0.7
Mali	21	9.1	196	2.5	472	416	10.2	11.9
Mauritania	3	1.2	20	−1.2	7	7	0.9	0.0
Niger	12	1.6	153	−3.3	190	184	2.0	−1.7
Nigeria	7556	−0.0	96	1.1	72542	72850	6.8	1.1
Senegal	28	−1.2	95	5.3	341	266	7.8	4.0
Sierra Leone	79	3.2	49	0.5	428	390	6.8	3.7
Togo	237	1.7	69	0.7	1624	1645	2.5	2.4
CENTRAL AFRICA	3288	0.6	78	0.3	25491	25705	−0.6	0.9
Cameroon	503	2.5	106	1.6	5225	5336	2.9	4.2
Central African Republic	334	1.8	37	−0.2	1174	1233	2.4	1.7
Chad	112	2.5	72	1.2	733	810	−2.0	3.8
Congo	137	3.2	90	0.2	1227	1233	1.6	3.4
Democratic Republic of the Congo	2064	−0.3	79	−0.0	16298	16368	−1.4	−0.3
Equatorial Guinea	44	2.1	42	3.5	204	188	1.3	5.7
Gabon	88	1.6	56	−0.3	591	496	1.6	1.2
Sao Tome and Principe	4	1.1	96	0.8	40	40	15.9	1.9
EAST AFRICA	4388	1.1	72	1.0	32689	31486	1.5	2.1
Burundi	237	1.0	70	0.3	1611	1663	0.3	1.3
Djibouti					0	0		
Eritrea	16	−9.1	40	2.5	72	65		−6.8
Ethiopia	703	1.6	102	2.6	7122	7158		4.3
Kenya	260	1.1	46	−4.3	2178	1186	0.1	−3.2
Rwanda	489	1.4	107	4.6	4265	5213	7.2	6.0
Somalia	9	2.1	91	−0.9	90	84	4.1	1.1
Sudan (former)	111	2.9	67	0.6	682	747	9.4	3.5
Uganda	1137	1.1	78	0.1	8634	8815	3.9	1.2
United Republic of Tanzania	1426	1.0	46	−0.3	8036	6554	−3.3	0.6
SOUTHERN AFRICA	3836	3.0	102	2.7	37219	39078	5.7	5.8
Angola	1321	8.1	119	4.4	14633	15687	10.0	12.8
Botswana	13	1.5	78	0.1	88	99	2.6	1.6
Comoros	14	−0.1	55	0.9	85	78	2.6	0.8
Lesotho	7	3.3	135	−2.0	84	98	6.8	1.2
Madagascar	568	0.8	78	1.7	4395	4423	0.9	2.5
Malawi	425	1.7	181	3.0	7251	7675	25.6	4.7
Mauritius	1	5.7	192	−1.0	22	23	−2.4	4.7
Mozambique	1089	0.9	62	0.4	6691	6739	2.2	1.4
Namibia	40	2.9	86	0.1	327	342	1.9	3.0
Seychelles	0	−0.6	63	1.1	0	0	1.4	0.5

TABLE 29: Roots and tubers producers and their productivity (continued)

	Roots and tubers							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	82	0.5	265	1.4	1 930	2 156	3.0	2.0
Swaziland	13	1.9	50	0.1	64	65	2.0	2.0
Zambia	214	2.4	67	2.6	1 383	1 428	2.2	5.0
Zimbabwe	49	1.3	54	1.0	266	264	5.0	2.3
AFRICA	23 388	1.2	94	1.4	215 601	218 809	4.3	2.6
ECOWAS	11 487	0.8	98	1.1	111 536	112 812	6.9	1.9
SADC	7 312	1.6	85	1.6	61 468	61 921	1.0	3.2
COMESA	6 474	0.8	92	1.4	58 775	59 600	2.0	2.2
UMA	231	3.3	241	3.7	4 524	5 582	3.0	7.2
ECCAS	4 846	2.1	89	1.6	41 736	43 054	0.5	3.8
IGAD	2 237	1.2	81	0.7	18 778	18 056	3.6	1.9
CEMAC	1 219	2.3	76	1.2	9 153	9 296	2.0	3.5
UEMOA	2 054	3.2	82	−0.5	17 042	16 762	4.7	2.7
CEN-SAD	12 606	0.9	98	1.2	122 598	123 472	6.4	2.0
ASIA Developing	17 591	−0.4	180	1.0	311 692	316 367	2.8	0.7
LAC	4 355	0.8	126	0.3	54 255	55 059	0.5	1.1
DEVELOPED REGIONS	6 911	−3.7	199	0.9	154 497	137 622	−0.3	−2.9
WORLD	52 527	−0.1	139	0.6	738 217	729 984	2.0	0.4

TABLE 30: Sugarcane producers and their productivity

	Sugarcane							
	area		yield		production			
		p.a. growth		p.a. growth			p.a. growth	p.a. growth
	thousand ha	%	thousand hg/ha	%	thousand tonnes	thousand tonnes	%	%
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
NORTH AFRICA	145	−0.4	1 128	−0.0	16 295	16 341	3.5	−0.5
Algeria					0	0		
Egypt	135	0.0	1 168	−0.0	15 482	15 709	3.5	0.0
Libyan Arab Jamahiriya					0	0		
Morocco	10	−5.1	614	−2.9	813	632	3.5	−7.9
Tunisia					0	0		
WEST AFRICA	158	3.8	368	−2.1	5 706	5 802	1.1	1.6
Benin	2	1.1	308	−1.9	48	48	6.7	−0.8
Burkina Faso	5	1.3	1 000	0.0	455	455	0.5	1.3
Cape Verde	2	5.2	190	2.0	28	28	−2.9	7.4
Cote d'Ivoire	22	−1.8	750	1.7	1 579	1 650	2.1	−0.1
Gambia					0	0		
Ghana	6	0.4	254	−0.0	145	145	2.4	0.4
Guinea	5	0.2	534	0.3	283	283	1.8	0.5
Guinea-Bissau	0	1.4	274	−0.0	6	6	0.0	1.4
Liberia	26	0.6	102	−0.0	265	265	1.8	0.6
Mali	5	2.0	748	−0.6	377	359	0.1	1.4
Mauritania					0	0		
Niger	4	3.1	494	−2.0	212	222	7.5	1.1
Nigeria	73	11.8	193	−4.0	1 402	1 414	−2.8	7.4
Senegal	7	−0.7	1 149	0.7	836	850	1.9	0.0
Sierra Leone	1	−0.4	691	−0.2	70	76	1.5	−0.6
Togo					0	0		
CENTRAL AFRICA	228	1.2	209	0.3	4 657	4 765	0.3	1.5
Cameroon	145	0.7	100	0.0	1 450	1 450	−0.7	0.7
Central African Republic	13	0.5	72	−0.0	95	95	4.1	0.5
Chad	4	1.1	974	0.3	445	380	0.9	1.4
Congo	16	3.2	394	0.5	600	650	5.4	3.7
Democratic Republic of the Congo	45	2.3	433	−0.7	1 827	1 950	−0.1	1.6
Equatorial Guinea					0	0		
Gabon	4	0.0	600	0.1	240	240	0.8	0.1
Sao Tome and Principe					0	0		
EAST AFRICA	230	2.0	874	1.4	21 721	20 115	1.1	3.4
Burundi	2	−2.0	540	−2.1	133	132	8.7	−4.1
Djibouti					0	0	3.2	0.0
Eritrea					0	0		
Ethiopia	19	−1.7	1 269	2.7	2 450	2 400		1.0
Kenya	69	1.8	831	1.9	5 611	5 710	−1.8	3.8
Rwanda	4	6.1	320	4.8	101	115	1.1	11.2
Somalia	6	0.0	371	0.4	230	230	−0.9	0.4
Sudan (former)	67	0.6	1 001	2.5	7 527	6 728	1.7	3.1
Uganda	40	7.2	600	−2.1	3 300	2 400	9.2	5.0
United Republic of Tanzania	23	4.4	1 043	1.5	2 370	2 400	0.3	5.9
SOUTHERN AFRICA	792	2.5	513	−3.1	42 689	40 641	1.9	−0.7
Angola	10	0.1	379	0.2	360	360	2.6	0.3
Botswana					0	0		
Comoros					0	0		
Lesotho					0	0		
Madagascar	95	3.5	316	−0.3	3 000	3 000	0.9	3.2
Malawi	23	1.4	1 087	0.3	2 500	2 500	1.6	1.8
Mauritius	59	−2.2	744	0.6	4 667	4 366	−0.8	−1.6
Mozambique	215	23.1	130	−1.2	2 207	2 800	1.8	21.6
Namibia					0	0		
Seychelles					0	0		

TABLE 30: Sugarcane producers and their productivity (continued)

	Sugarcane							
	area		yield		production			
	thousand ha	p.a. growth %	thousand hg/ha	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	p.a. growth %
	2010	2000-2010	2010	2000-2010	2009	2010	1990-2000	2000-2010
South Africa	267	−2.1	600	−1.9	18 655	16 016	2.8	−3.9
Swaziland	52	3.6	962	−1.0	5 000	5 000	0.1	2.6
Zambia	33	8.2	1 061	−0.1	3 200	3 500	3.6	8.1
Zimbabwe	39	−1.0	795	−2.1	3 100	3 100	3.2	−3.1
AFRICA	1 577	2.0	568	−1.5	92 976	89 594	1.9	0.4
ECOWAS	158	3.8	368	−2.1	5 706	5 802	1.1	1.6
SADC	860	2.5	523	−2.8	46 886	44 991	1.8	−0.4
COMESA	681	1.4	831	−0.0	57 897	56 609	1.7	1.4
UMA	10	−5.1	614	−2.9	813	632	3.5	−7.9
ECCAS	240	1.1	219	0.1	5 150	5 257	0.7	1.2
IGAD	201	1.7	869	1.4	19 117	17 468	1.1	3.2
CEMAC	183	0.9	154	0.5	2 830	2 815	0.7	1.4
UEMOA	45	−0.5	797	0.7	3 513	3 591	1.9	0.3
CEN-SAD	460	1.4	766	−0.3	35 880	35 257	1.9	1.1
ASIA Developing	9 223	0.4	675	0.7	615 473	622 632	2.5	1.2
LAC	12 241	3.9	767	1.7	916 608	939 021	0.9	5.7
DEVELOPED REGIONS	783	−0.9	737	−1.8	59 412	57 751	3.8	−2.7
WORLD	23 877	2.1	717	1.0	1 686 891	1 711 087	1.8	3.1

TABLE 31: Livestock production - milk, eggs and poultry

	Production								
	milk			eggs			poultry		
	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010
NORTH AFRICA	11 055	11 430	4.1	869	970	4.0	1 865	1 975	4.0
Algeria	2 243	2 338	4.4	185	189	6.5	270	277	1.3
Egypt	5 624	5 774	4.3	333	398	8.5	782	798	3.0
Libyan Arab Jamahiriya	228	223	0.9	62	62	0.4	125	129	2.7
Morocco	1 879	2 002	4.8	200	230	−0.2	545	618	8.1
Tunisia	1 081	1 093	1.7	88	91	1.0	144	153	2.8
WEST AFRICA	3 983	4 116	5.7	849	866	4.1	538	568	5.1
Benin	38	40	3.0	13	14	7.4	20	20	4.9
Burkina Faso	253	265	4.4	51	52	2.8	35	35	3.0
Cape Verde	22	23	9.2	2	2	1.5	1	1	4.3
Cote d'Ivoire	31	31	2.0	30	32	−0.3	23	24	0.8
Gambia	9	9	2.0	1	1	2.0	1	1	2.3
Ghana	38	39	1.4	37	37	5.4	48	52	10.2
Guinea	128	131	5.1	23	23	6.8	7	8	6.8
Guinea-Bissau	23	23	2.8	1	1	3.1	2	2	3.8
Liberia	1	1	−0.4	5	5	2.3	11	11	5.4
Mali	1 405	1 460	11.6	14	14	1.6	41	41	3.4
Mauritania	405	392	1.9	6	5	1.4	4	4	0.9
Niger	958	1 002	4.5	8	8	−0.3	11	12	0.5
Nigeria	472	496	2.5	613	623	4.5	256	268	5.3
Senegal	166	169	3.5	27	30	5.3	39	49	7.8
Sierra Leone	21	21	7.6	9	9	1.4	12	12	1.3
Togo	13	13	1.2	9	9	3.9	26	28	9.0
CENTRAL AFRICA	585	600	2.2	34	34	1.7	96	101	7.0
Cameroon	236	242	2.5	15	15	1.4	64	68	12.4
Central African Republic	72	75	1.7	2	2	1.4	6	6	5.9
Chad	266	272	2.2	4	4	0.8	5	5	1.2
Congo	1	1	2.4	2	2	3.5	6	6	0.8
Democratic Republic of the Congo	7	8	4.8	9	9	2.4	11	11	−0.6
Equatorial Guinea				0	0	3.1	0	0	0.7
Gabon	2	2	−0.3	2	2	0.8	4	4	0.0
Sao Tome and Principe	0	0	1.9	1	1	4.2	1	1	2.6
EAST AFRICA	18 757	20 001	4.4	247	245	2.1	215	222	2.3
Burundi	44	44	4.8	3	3	0.0	7	7	1.9
Djibouti	15	16	1.3						
Eritrea	141	143	5.1	2	2	2.7	2	2	−1.1
Ethiopia	1 691	1 748	4.6	39	35	2.1	51	53	3.5
Kenya	4 081	4 144	5.6	81	81	2.9	25	27	7.4
Rwanda	177	216	5.9	3	3	2.8	2	2	5.4
Somalia	2 319	2 939	3.4	2	2	−0.4	3	3	−0.4
Sudan (former)	7 424	7 803	3.0	55	56	2.2	29	29	1.0
Uganda	1 155	1 190	8.8	23	23	1.3	46	49	1.0
United Republic of Tanzania	1 710	1 758	8.1	39	39	1.1	50	50	1.5
SOUTHERN AFRICA	4 720	4 896	1.5	607	636	3.3	1 694	1 786	5.5
Angola	158	184	−0.6	4	4	0.5	8	8	0.5
Botswana	116	118	−0.4	4	4	3.5	6	7	−2.6
Comoros	5	5	1.3	1	1	0.4	1	1	0.5
Lesotho	34	34	0.8	2	2	1.3	2	2	0.6
Madagascar	555	555	0.4	21	21	0.6	71	71	1.0
Malawi	40	47	2.9	20	20	0.4	21	22	3.5
Mauritius	4	4	−2.6	10	10	−2.2	44	47	8.3
Mozambique	75	76	0.8	14	14	1.6	24	25	−2.6
Namibia	110	115	2.6	4	4	6.8	15	16	4.6
Seychelles	0	0	−7.0	1	1	−5.3	1	1	−3.9
South Africa	3 104	3 233	2.4	450	473	4.1	1 394	1 478	6.1
Swaziland	42	42	1.2	1	1	1.0	5	5	4.6
Zambia	87	88	1.7	45	50	2.4	40	42	2.0

TABLE 31: Livestock production - milk, eggs and poultry (continued)

	Production								
	milk			eggs			poultry		
	thousand tonnes	thousand tonnes	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %	thousand tonnes	thousand tonnes	p.a. growth %
	2009	2010	2000-2010	2009	2010	2000-2010	2009	2010	2000-2010
Zimbabwe	389	396	−1.9	30	30	3.0	62	62	9.3
AFRICA	39 132	41 081	4.0	2 611	2 758	3.7	4 428	4 672	4.6
ECOWAS	3 577	3 724	6.2	844	861	4.2	533	563	5.2
SADC	6 432	6 657	2.9	654	683	3.2	1 754	1 846	5.3
COMESA	21 709	22 446	4.0	739	806	4.4	1 324	1 356	3.1
UMA	5 837	6 047	3.7	541	578	1.8	1 088	1 181	4.7
ECCAS	787	828	1.6	41	42	1.4	111	116	6.0
IGAD	16 826	17 983	4.1	202	199	2.3	156	162	2.5
CEMAC	578	592	2.2	24	25	1.4	85	89	8.7
UEMOA	2 887	3 004	7.1	154	160	2.6	197	210	4.4
CEN-SAD	27 096	28 582	4.1	1 677	1 794	3.7	2 203	2 337	4.6
ASIA Developing	250 239	259 234	4.9	39 477	39 987	2.8	31 461	33 077	4.3
LAC	77 564	80 170	3.1	7 065	7 109	3.4	20 205	21 242	5.4
DEVELOPED REGIONS	341 289	342 589	0.3	18 896	19 229	0.9	38 133	39 499	2.4
WORLD	708 292	723 143	2.2	68 067	69 103	2.3	94 251	98 517	3.7

TABLE 32: Livestock production - pig meat, beef and buffalo meat, and sheep and goat meat

	Production								
	pig meat			beef and buffalo meat			sheep and goat meat		
	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010
NORTH AFRICA	1	2	−9.3	1 236	1 194	3.1	593	581	1.7
Algeria	0	0	0.0	127	132	−0.0	192	194	1.0
Egypt	1	0	−16.7	859	805	4.0	144	122	5.0
Libyan Arab Jamahiriya				9	9	1.1	42	43	3.7
Morocco	1	1	2.1	190	192	3.2	156	162	1.0
Tunisia	0	0	−1.6	52	56	−0.7	59	59	−0.6
WEST AFRICA	343	351	3.7	961	1 027	3.4	850	882	3.6
Benin	4	5	2.1	24	29	4.8	8	8	2.3
Burkina Faso	31	28	3.3	110	134	4.7	50	52	3.0
Cape Verde	8	8	2.5	1	1	6.6	1	1	7.8
Cote d'Ivoire	7	7	1.4	34	35	0.5	12	12	1.5
Gambia	1	1	7.5	4	4	1.6	2	2	9.5
Ghana	18	18	4.9	26	26	0.8	31	31	4.7
Guinea	2	2	−0.3	52	55	5.6	15	15	6.9
Guinea-Bissau	13	13	1.9	6	6	3.5	2	2	3.9
Liberia	8	9	7.4	1	1	1.0	2	2	3.5
Mali	3	3	3.2	136	144	9.8	110	116	5.8
Mauritania				26	26	2.3	38	44	2.5
Niger	1	1	0.3	142	164	3.3	103	109	5.5
Nigeria	226	234	4.0	298	302	0.8	433	442	2.8
Senegal	11	11	2.1	82	84	6.2	31	32	3.1
Sierra Leone	2	2	−0.9	9	9	4.2	3	3	10.8
Togo	9	10	4.9	9	9	3.4	11	11	4.3
CENTRAL AFRICA	75	86	3.7	302	324	2.6	112	121	2.2
Cameroon	31	38	8.9	110	124	2.9	30	37	1.4
Central African Republic	14	16	2.9	82	85	2.4	19	20	6.0
Chad	1	1	2.8	91	95	2.5	40	41	3.1
Congo	2	2	2.9	6	6	14.3	1	1	3.0
Democratic Republic of the Congo	24	26	−0.0	12	12	−0.8	21	21	−0.6
Equatorial Guinea	0	0	0.8	0	0	0.8	0	0	0.6
Gabon	3	3	0.3	1	1	0.1	1	1	0.4
Sao Tome and Principe	0	0	3.5	0	0	2.2	0	0	1.2
EAST AFRICA	164	164	4.0	2 682	2 651	7.5	960	950	3.7
Burundi	12	12	11.2	15	16	6.2	7	7	6.5
Djibouti				6	6	0.0	5	5	0.0
Eritrea				23	23	3.6	12	12	0.1
Ethiopia	2	2	1.1	390	373	2.4	150	153	9.5
Kenya	18	15	2.9	483	462	6.1	87	88	4.3
Rwanda	7	8	8.7	35	36	7.8	9	9	10.3
Somalia	0	0	0.4	58	58	−0.5	81	81	1.8
Sudan (former)				1 252	1 255	15.5	524	509	2.9
Uganda	111	113	3.9	129	130	3.0	41	41	3.2
United Republic of Tanzania	14	14	1.1	290	292	2.4	44	45	1.2
SOUTHERN AFRICA	591	600	5.8	1 340	1 420	1.9	308	306	1.7
Angola	28	32	1.1	104	106	1.2	13	13	1.5
Botswana	0	0	−6.5	36	37	2.5	7	7	0.3
Comoros				1	1	2.1	0	0	0.8
Lesotho	4	4	−3.0	10	10	0.3	7	7	0.8
Madagascar	55	55	10.1	150	150	0.2	12	12	5.2
Malawi	45	45	7.7	30	34	7.0	22	25	12.6
Mauritius	1	1	−1.1	2	2	−2.9	0	0	−6.0
Mozambique	94	97	−2.3	19	19	4.6	23	24	−0.4
Namibia	4	4	9.6	36	36	−5.4	16	16	−1.0
Seychelles	0	0	−12.0	0	0	−11.8	0	0	0.4
South Africa	313	312	11.6	771	848	3.1	183	176	1.4
Swaziland	1	1	0.8	15	16	−1.0	2	2	−3.4
Zambia	15	16	5.0	60	61	1.4	9	9	6.1

TABLE 32: Livestock production - pig meat, beef and buffalo meat, and sheep and goat meat (continued)

	Production								
	pig meat			beef and buffalo meat			sheep and goat meat		
	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010	thousand tonnes 2009	thousand tonnes 2010	p.a. growth % 2000-2010
Zimbabwe	31	31	3.6	104	100	−0.2	13	13	−0.4
AFRICA	1 189	1 214	4.7	6 523	6 619	4.3	2 823	2 841	2.9
ECOWAS	343	351	3.7	935	1 001	3.5	813	838	3.7
SADC	629	640	5.4	1 641	1 723	2.0	372	371	1.5
COMESA	322	326	4.8	3 577	3 492	6.3	1 101	1 073	4.1
UMA	1	1	1.2	403	416	1.4	486	503	1.1
ECCAS	115	130	3.5	422	445	2.4	131	141	2.3
IGAD	131	130	3.7	2 341	2 307	8.4	900	889	3.7
CEMAC	51	60	6.0	290	311	2.8	91	101	2.9
UEMOA	79	78	2.7	544	604	5.1	327	342	4.7
CEN-SAD	370	376	3.6	4 066	4 074	6.1	2 018	2 024	3.0
ASIA Developing	58 711	60 639	2.6	15 538	16 017	2.5	7 903	8 005	2.7
LAC	6 482	6 445	2.3	18 220	17 334	2.3	435	436	0.4
DEVELOPED REGIONS	40 089	40 778	0.9	27 323	27 613	−0.3	2 576	2 432	−1.7
WORLD	106 565	109 167	2.0	67 626	67 603	1.4	13 738	13 714	1.7

TABLE 33: Fish production

	Fish production								
	capture					aquaculture			
	total	inland	marine	total	total, p.a. growth	inland	marine	total	total, p.a. growth
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	%	thousand tonnes	thousand tonnes	thousand tonnes	%
	2008	2009	2009	2009	2000-2009	2009	2009	2009	2000-2009
NORTH AFRICA	1 652	245	1 569	1 814	1.8	710	4	714	8.4
Algeria	139		128	128	1.4	2	0	2	22.4
Egypt	374	238	136	374	−0.3	706		706	8.4
Libyan Arab Jamahiriya	48		52	52	0.5	0	0	0	10.2
Morocco	993	6	1 156	1 162	2.8	1	0	1	−2.7
Tunisia	98	1	97	98	0.3	1	3	4	11.7
WEST AFRICA	2 237	652	1 525	2 177	1.3	163	0	163	19.8
Benin	37	30	9	39	2.1	0		0	
Burkina Faso	11	12		12	3.7	0		0	51.1
Cape Verde	24		17	17	5.3				
Cote d'Ivoire	58	3	45	48	−5.6	1		1	0.8
Gambia	43	4	41	46	5.2				
Ghana	360	89	233	322	−3.7	7		7	4.1
Guinea	87	4	82	86	−0.7	0		0	
Guinea-Bissau	7	0	7	7	0.8				
Liberia	8	1	7	8	−4.0	0		0	
Mali	100	100		100	−1.0	1		1	43.9
Mauritania	195	15	164	179	5.1				
Niger	30	30		30	7.0	0		0	18.7
Nigeria	601	286	312	598	3.4	153		153	21.9
Senegal	449	59	400	459	0.6	0	0	0	7.5
Sierra Leone	204	14	186	200	11.6	0		0	3.2
Togo	24	5	22	27	2.2	0		0	20.5
CENTRAL AFRICA	523	398	134	532	−0.5	4		4	2.4
Cameroon	138	74	64	138	2.3	0		0	26.0
Central African Republic	15	15		15	0.0				
Chad	40	40		40	−7.8				
Congo	54	28	33	61	3.2	0		0	−1.2
Democratic Republic of the Congo	236	230	6	236	−0.5	3		3	4.1
Equatorial Guinea	5	1	7	8	8.7	0		0	
Gabon	30	10	20	30	−5.0	0		0	−15.4
Sao Tome and Principe	4		4	4	0.6				
EAST AFRICA	1 080	913	117	1 029	1.5	85		85	45.3
Burundi	18	18		18	0.2	0		0	8.0
Djibouti	1		1	1	3.2				
Eritrea	2		3	3	−14.7				
Ethiopia	17	17		17	0.9	0		0	5.8
Kenya	135	133	6	139	−4.7	5		5	28.5
Rwanda	9	9		9	3.4	0		0	4.1
Somalia	30	0	30	30	2.4				
Sudan (former)	69	66	6	72	3.4	2		2	9.2
Uganda	450	400		400	6.9	77		77	65.6
United Republic of Tanzania	350	269	71	340	0.0	0		0	−0.4
SOUTHERN AFRICA	1 829	217	1 409	1 626	−1.2	22	2	24	3.7
Angola	306	6	266	272	1.4	0		0	
Botswana	0	0		0	−7.0				
Comoros	30		20	20	5.0				
Lesotho	0	0		0	3.9	0		0	33.5
Madagascar	120	33	98	131	1.0	6	0	6	−2.0
Malawi	70	69		69	3.7	2		2	13.2
Mauritius	7		8	8	−2.5	0	0	0	19.7
Mozambique	120	10	58	68	5.6	0	0	0	
Namibia	373	3	367	369	−5.1	0	1	1	30.1
Seychelles	69		81	81	10.6	0		0	−3.8

TABLE 33: Fish production (continued)

	Fish production								
	capture					aquaculture			
	total	inland	marine	total	total, p.a. growth	inland	marine	total	total, p.a. growth
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	%	thousand tonnes	thousand tonnes	thousand tonnes	%
	2008	2009	2009	2009	2000-2009	2009	2009	2009	2000-2009
South Africa	645	1	510	511	−2.5	3	1	3	2.3
Swaziland	0	0		0	0.0	0		0	0.6
Zambia	79	85		85	2.7	9		9	8.0
Zimbabwe	10	10		10	−2.4	3		3	2.4
AFRICA	7 337	2 424	4 774	7 197	0.7	984	6	990	10.6
ECOWAS	2 041	637	1 362	1 998	1.0	163	0	163	19.8
SADC	2 385	716	1 466	2 182	−1.0	25	2	28	3.7
COMESA	1 744	1 308	418	1 726	1.4	812	1	813	9.5
UMA	1 473	22	1 596	1 618	2.7	5	4	8	8.5
ECCAS	846	421	401	822	0.1	4		4	3.2
IGAD	704	617	46	662	2.3	84		84	48.8
CEMAC	283	168	124	292	−0.6	1		1	−3.3
UEMOA	716	239	482	722	0.2	3	0	3	9.4
CEN-SAD	4 052	1 151	3 020	4 171	1.1	878	4	882	9.9
ASIA Developing	42 109	6 922	35 738	42 660	1.2	35 480	13 224	48 704	6.5
LAC	15 994	486	14 784	15 270	−2.9	763	1 125	1 887	9.4
DEVELOPED REGIONS	23 480	477	22 647	23 124	−2.1	839	3 258	4 097	1.7
WORLD	89 579	10 324	78 586	88 910	−0.6	38 065	17 611	55 676	6.2

TABLE 34: Volume of total cereal trade

	Cereals							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	25 028	32 538	32 963	31 995	507	1 470	476	913
Algeria	7 846	7 278	9 112	7 910	0	7	12	6
Egypt	9 070	13 629	12 357	14 585	328	1 250	323	774
Libyan Arab Jamahiriya	1 718	2 356	2 307	3 104	0	1	0	4
Morocco	4 379	6 150	6 127	4 415	65	146	95	100
Tunisia	2 015	3 125	3 059	1 981	115	65	45	30
WEST AFRICA	6 487	11 054	11 057	12 366	88	240	207	471
Benin	127	705	753	714	0	33	33	143
Burkina Faso	300	249	205	375	4	17	11	18
Cape Verde	80	86	103	135	0	0	1	0
Cote d'Ivoire	727	1 200	1 090	1 665	15	25	38	127
Gambia	104	163	169	207	1	0	0	1
Ghana	288	836	825	805	24	12	0	0
Guinea	331	466	455	403	0	2	15	15
Guinea-Bissau	67	47	32	91	0	0	0	0
Liberia	162	257	262	357	0	0	0	0
Mali	157	267	252	242	12	6	4	0
Mauritania	370	368	438	588				
Niger	160	294	320	172	1	17	30	30
Nigeria	2 418	4 224	4 066	4 981	6	16	5	0
Senegal	884	1 594	1 533	1 332	0	95	37	104
Sierra Leone	187	147	246	135	0	0	0	0
Togo	125	151	308	163	24	17	31	32
CENTRAL AFRICA	1 142	1 915	1 891	2 069	2	6	8	5
Cameroon	402	717	858	907	1	0	1	0
Central African Republic	36	30	32	42	0	0	0	0
Chad	50	144	144	193	0	0	0	0
Congo	207	185	97	234	0	1	1	4
Democratic Republic of the Congo	286	681	546	490	0	5	5	0
Equatorial Guinea	12	21	30	25				
Gabon	139	123	169	160	0	0	0	0
Sao Tome and Principe	9	14	14	18	0	0	0	0
EAST AFRICA	3 092	5 616	6 449	10 411	451	608	414	198
Burundi	15	89	29	67	0	0	0	0
Djibouti	173	112	370	561	0	0	0	0
Eritrea	80	214	208	252	0	0	0	0
Ethiopia	704	694	1 424	2 229	3	3	2	0
Kenya	753	1 136	1 100	2 711	61	55	30	19
Rwanda	31	117	56	131	0	3	8	0
Somalia	245	401	642	611	0	0	0	0
Sudan (former)	726	1 476	1 632	2 385	322	119	164	2
Uganda	145	500	439	514	25	104	73	105
United Republic of Tanzania	221	876	548	951	40	324	136	71
SOUTHERN AFRICA	3 991	7 153	6 371	6 931	904	852	1 606	1 977
Angola	397	756	940	818	0	1	1	1
Botswana	161	145	177	209	1	5	2	7
Comoros	47	50	47	46	0	0	0	0
Lesotho	205	257	270	268	2	0	0	0
Madagascar	167	368	276	221	1	4	3	1
Malawi	120	123	259	215	6	410	31	15
Mauritius	288	295	282	328	26	26	18	42
Mozambique	382	873	714	1 019	0	21	30	16
Namibia	255	97	201	131	2	0	3	0
Seychelles	13	20	19	18	0	0	0	0
South Africa	1 546	3 386	2 302	2 153	633	145	1 279	1 822
Swaziland	94	186	182	159	3	2	1	1
Zambia	73	39	48	70	12	238	238	71
Zimbabwe	244	558	652	1 277	218	1	1	0

TABLE 34: Volume of total cereal trade (continued)

	Cereals							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	39 741	58 276	58 730	63 771	1 952	3 176	2 710	3 564
ECOWAS	6 118	10 686	10 619	11 778	88	240	207	471
SADC	4 452	8 659	7 417	8 325	943	1 181	1 747	2 049
COMESA	14 746	22 644	22 235	29 362	1 006	2 222	898	1 036
UMA	16 329	19 277	21 043	17 998	180	220	153	139
ECCAS	1 554	2 761	2 860	2 954	2	7	8	6
IGAD	2 826	4 534	5 815	9 262	412	281	270	126
CEMAC	846	1 221	1 331	1 560	1	1	2	4
UEMOA	2 547	4 508	4 493	4 755	57	210	185	454
CEN-SAD	25 711	39 805	38 993	43 133	980	1 877	863	1 398
ASIA Developing	92 527	97 382	101 861	110 588	30 865	53 014	40 469	38 876
LAC	40 945	48 774	48 448	46 473	20 768	44 688	40 949	33 720
DEVELOPED REGIONS	90 496	109 069	109 671	106 341	211 868	218 754	234 177	254 017
WORLD	264 495	314 247	319 484	327 876	265 454	319 661	318 332	330 201

TABLE 35: Volume of wheat trade

	Wheat and flour (wheat equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	13 876	20 132	22 129	20 556	200	233	156	218
Algeria	4 383	4 856	6 487	5 731	0	7	12	6
Egypt	4 342	8 242	8 328	9 124	21	17	8	84
Libyan Arab Jamahiriya	1 234	1 646	1 450	2 071	0	1	0	4
Morocco	2 816	3 690	4 086	2 394	65	146	92	95
Tunisia	1 101	1 698	1 779	1 237	115	62	44	30
WEST AFRICA	3 178	5 180	5 019	6 306	52	75	83	132
Benin	54	41	55	39	0	9	4	3
Burkina Faso	80	86	65	105	0	0	0	0
Cape Verde	17	24	30	30	0	0	0	0
Cote d'Ivoire	297	388	320	511	3	23	14	72
Gambia	37	47	49	70	1	0	0	0
Ghana	219	385	362	382	18	0	0	0
Guinea	121	132	108	163	0	2	15	15
Guinea-Bissau	5	11	11	4	0	0	0	0
Liberia	72	58	42	59	0	0	0	0
Mali	72	112	72	132	0	3	3	0
Mauritania	246	311	311	417				
Niger	43	52	33	48	0	0	0	0
Nigeria	1 583	3 006	3 080	3 804	5	4	4	0
Senegal	238	424	378	443	0	19	15	9
Sierra Leone	32	30	48	24	0	0	0	0
Togo	62	72	57	76	24	15	27	32
CENTRAL AFRICA	787	1 116	1 152	1 206	1	6	5	5
Cameroon	246	241	425	411	1	0	0	0
Central African Republic	34	25	28	30	0	0	0	0
Chad	50	96	97	112	0	0	0	0
Congo	150	90	55	148	0	1	0	4
Democratic Republic of the Congo	221	556	439	385	0	5	5	0
Equatorial Guinea	12	16	20	20				
Gabon	66	81	81	92	0	0	0	0
Sao Tome and Principe	7	11	7	8				
EAST AFRICA	2 477	4 091	4 375	6 841	36	241	122	53
Burundi	11	9	3	31	0	0	0	0
Djibouti	142	48	343	538	0	0	0	0
Eritrea	74	160	158	166	0	0	0	0
Ethiopia	606	602	1 113	1 874	0	0	0	0
Kenya	603	720	570	811	30	3	5	7
Rwanda	15	51	35	36	0	2	5	0
Somalia	143	154	124	192	0	0	0	0
Sudan (former)	706	1 193	1 292	1 882	0	0	1	1
Uganda	78	338	278	418	0	22	6	5
United Republic of Tanzania	100	816	459	893	6	214	105	41
SOUTHERN AFRICA	1 677	2 760	3 022	3 366	326	141	249	229
Angola	281	467	505	548	0	0	0	0
Botswana	61	58	85	95	0	3	0	1
Comoros	5	12	10	13	0	0	0	0
Lesotho	82	97	102	98	2	0	0	0
Madagascar	72	164	102	97	0	0	0	0
Malawi	90	97	225	153	0	14	8	4
Mauritius	140	158	122	166	26	25	17	41
Mozambique	197	354	244	440	0	1	1	1
Namibia	94	51	53	34	1	0	3	0
Seychelles	7	6	7	6	0	0	0	0
South Africa	509	1 115	1 440	1 326	203	62	174	132
Swaziland	51	60	60	37	2	0	0	0
Zambia	49	20	30	18	4	36	45	50
Zimbabwe	38	102	36	334	89	0	0	0

TABLE 35: Volume of wheat trade (continued)

	Wheat and flour (wheat equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	21 995	33 279	35 698	38 274	615	697	614	636
ECOWAS	2 932	4 869	4 709	5 889	52	75	83	132
SADC	1 993	4 121	3 911	4 631	332	361	359	270
COMESA	8 483	14 184	14 603	18 160	171	125	101	196
UMA	9 781	12 201	14 112	11 850	179	216	148	134
ECCAS	1 079	1 593	1 661	1 784	1	6	5	5
IGAD	2 351	3 214	3 878	5 881	30	25	12	12
CEMAC	559	549	705	812	1	1	0	4
UEMOA	850	1 186	991	1 358	28	68	64	116
CEN-SAD	14 417	22 849	23 261	24 853	281	304	233	351
ASIA Developing	43 220	44 159	47 638	57 691	6 846	17 058	11 593	11 173
LAC	18 290	20 530	19 837	18 503	9 866	12 222	13 555	10 211
DEVELOPED REGIONS	40 023	40 975	41 965	46 731	109 336	109 702	120 518	140 774
WORLD	123 849	139 342	145 495	161 533	126 664	139 707	146 306	162 818

TABLE 36: Volume of rice trade

	Rice							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	193	394	303	149	307	1223	309	653
Algeria	54	73	98	76	0	0	0	0
Egypt	7	118	44	16	307	1223	307	649
Libyan Arab Jamahiriya	110	174	135	36	0	0	0	0
Morocco	1	11	7	12	0	0	2	4
Tunisia	21	18	20	10	0	0	0	0
WEST AFRICA	3114	5586	5678	5721	5	106	106	320
Benin	73	664	697	675	0	12	29	140
Burkina Faso	205	150	137	264	0	0	0	1
Cape Verde	26	36	47	93	0	0	1	0
Cote d'Ivoire	423	809	762	1121	3	1	22	53
Gambia	67	116	119	137	0	0	0	1
Ghana	69	442	395	384	1	0	0	0
Guinea	210	333	340	238	0	0	0	0
Guinea-Bissau	62	33	20	85	0	0	0	0
Liberia	41	149	170	249	0	0	0	0
Mali	82	147	172	110	0	0	0	0
Mauritania	122	56	122	133				
Niger	84	173	269	106	0	17	30	30
Nigeria	812	1217	972	1164	0	0	0	0
Senegal	625	1073	1012	771	0	74	20	94
Sierra Leone	150	112	196	106				
Togo	63	79	247	85	0	2	4	0
CENTRAL AFRICA	332	729	677	718	0	0	2	0
Cameroon	152	471	427	469	0	0	1	0
Central African Republic	2	3	4	6	0	0	0	0
Chad	0	1	1	1	0	0	0	0
Congo	53	94	42	86	0	0	1	0
Democratic Republic of the Congo	51	110	99	73	0	0	0	0
Equatorial Guinea	0	5	10	5				
Gabon	72	42	88	67	0	0	0	0
Sao Tome and Principe	2	3	7	10				
EAST AFRICA	307	691	529	676	16	45	32	42
Burundi	0	7	4	10	0	0	0	0
Djibouti	24	62	23	20	0	0	0	0
Eritrea	0	0	1	1				
Ethiopia	9	44	22	30	0	0	0	0
Kenya	53	259	265	296	0	1	1	2
Rwanda	14	19	13	32	0	0	0	0
Somalia	69	121	38	128	0	0	0	0
Sudan (former)	13	56	37	38	0	0	0	0
Uganda	40	75	63	80	0	25	25	38
United Republic of Tanzania	86	48	64	40	16	20	6	1
SOUTHERN AFRICA	875	2132	1816	1810	16	22	27	35
Angola	31	282	401	230	0	0	0	0
Botswana	13	28	26	20	0	1	0	1
Comoros	42	39	38	34				
Lesotho	10	5	11	12				
Madagascar	94	191	169	109	1	2	0	0
Malawi	1	4	5	7	5	5	2	8
Mauritius	83	63	69	80	0	1	0	2
Mozambique	35	487	368	495	0	0	0	0
Namibia	5	7	6	7	1	0	0	0
Seychelles	4	5	7	5	0	0	0	0
South Africa	515	959	650	745	7	8	24	24
Swaziland	12	21	20	20	1	1	1	1
Zambia	7	12	16	10	0	4	0	1
Zimbabwe	22	30	30	36	0	0	0	0

TABLE 36: Volume of rice trade (continued)

	Rice							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	4 821	9 533	9 003	9 073	344	1 397	477	1 050
ECOWAS	2 992	5 530	5 556	5 588	5	106	106	320
SADC	969	2 252	1 941	1 889	32	42	32	36
COMESA	587	1 288	1 058	934	315	1 261	336	700
UMA	309	332	381	266	0	0	2	4
ECCAS	363	1 018	1 081	958	0	0	2	0
IGAD	207	617	449	594	0	25	27	40
CEMAC	278	616	572	634	0	0	2	0
UEMOA	1 618	3 127	3 317	3 217	4	105	105	319
CEN-SAD	3 433	6 414	6 249	6 236	312	1 330	415	975
ASIA Developing	14 708	14 036	13 048	11 538	18 162	25 528	22 094	21 402
LAC	2 921	3 188	2 952	3 110	1 799	1 892	2 035	2 667
DEVELOPED REGIONS	4 426	5 412	5 572	5 525	4 975	4 893	5 128	4 614
WORLD	27 314	32 459	30 908	29 547	25 280	33 710	29 734	29 734

TABLE 37: Volume of sugar trade

	Sugar (raw equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	3 094	3 520	3 687	3 498	0	281	232	234
Algeria	903	1 219	1 125	1 251	0	5	0	15
Egypt	1 206	925	1 262	747	0	272	228	215
Libyan Arab Jamahiriya	221	256	208	202	0	0	1	0
Morocco	467	748	752	976	0	0	0	0
Tunisia	296	372	341	322	0	4	3	4
WEST AFRICA	1 757	2 542	2 769	2 505	29	370	344	252
Benin	61	27	48	44	0	20	13	18
Burkina Faso	27	46	27	27	0	1	0	0
Cape Verde	16	20	13	19	0	0	0	0
Cote d'Ivoire	49	1	1	1	25	0	6	6
Gambia	93	139	98	97	0	55	39	39
Ghana	109	345	263	359	2	265	254	110
Guinea	79	113	141	112	0	0	0	0
Guinea-Bissau	5	37	14	18	0	15	0	0
Liberia	8	15	21	18	0	0	0	0
Mali	137	144	140	77	0	0	0	0
Mauritania	156	223	207	174	0	0	0	1
Niger	57	66	74	74	0	10	22	22
Nigeria	890	1 213	1 570	1 220	0	0	3	0
Senegal	41	75	56	88	0	1	0	0
Sierra Leone	9	23	24	21	0	0	0	0
Togo	19	54	72	157	0	4	6	55
CENTRAL AFRICA	141	305	267	298	26	25	47	47
Cameroon	43	73	56	36	1	0	6	3
Central African Republic	5	8	12	12	0	0	0	0
Chad	16	61	53	47	0	0	0	0
Congo	1	33	62	20	25	22	34	43
Democratic Republic of the Congo	64	117	80	172	0	0	7	0
Equatorial Guinea	3	4	4	5				
Gabon	7	3	0	0	0	3	1	1
Sao Tome and Principe	2	6	1	6				
EAST AFRICA	592	1 587	1 426	1 387	140	222	195	209
Burundi	2	9	14	10	2	2	3	3
Djibouti	9	161	171	75	0	2	22	45
Eritrea	12	103	32	76	0	0	0	0
Ethiopia	2	92	161	85	1	25	19	27
Kenya	62	248	234	197	5	23	48	2
Rwanda	17	23	26	31	0	0	0	0
Somalia	251	324	235	220	0	0	0	0
Sudan (former)	4	283	336	447	103	29	3	35
Uganda	51	150	146	137	5	75	91	91
United Republic of Tanzania	182	193	72	109	25	65	10	6
SOUTHERN AFRICA	454	669	844	800	2 403	2 841	1 858	2 112
Angola	136	289	337	241	0	0	0	0
Botswana	51	54	66	82	1	0	0	1
Comoros	4	9	8	5				
Lesotho	26	30	30	30				
Madagascar	27	107	123	134	7	6	11	35
Malawi	0	0	0	0	48	115	78	119
Mauritius	38	42	44	36	534	442	427	348
Mozambique	102	13	55	55	20	115	138	109
Namibia	37	15	4	42	5	2	0	0
Seychelles	4	4	4	4	0	0	0	0
South Africa	1	104	163	127	1 138	1 059	704	929
Swaziland	0	1	4	2	395	904	298	272
Zambia	28	0	3	0	90	135	98	161
Zimbabwe	1	0	4	41	165	62	103	139

TABLE 37: Volume of sugar trade (continued)

	Sugar (raw equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	6 038	8 622	8 994	8 487	2 598	3 739	2 676	2 855
ECOWAS	1 601	2 318	2 563	2 331	29	370	344	251
SADC	698	971	989	1 075	2 428	2 906	1 875	2 119
COMESA	1 752	2 532	2 858	2 399	1 353	2 093	1 436	1 491
UMA	2 044	2 818	2 632	2 925	0	9	4	20
ECCAS	279	603	618	549	27	27	50	50
IGAD	391	1 362	1 315	1 237	113	154	183	200
CEMAC	75	182	186	120	26	25	40	47
UEMOA	396	450	433	484	26	50	47	102
CEN-SAD	4 295	6 025	6 401	5 817	136	700	648	554
ASIA Developing	15 383	23 048	18 737	22 534	6 574	12 639	11 068	7 780
LAC	1 601	2 697	2 170	2 530	19 724	25 199	25 623	31 677
DEVELOPED REGIONS	16 766	17 066	17 928	16 419	13 279	10 724	10 473	11 100
WORLD	39 839	51 498	47 962	50 050	42 467	52 518	50 100	53 597

TABLE 38: Volume of oilseed trade

	Oilseeds							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	555	1 764	1 705	1 286	20	18	38	69
Algeria	2	55	59	55	0	0	0	0
Egypt	157	1 150	1 225	586	10	17	38	68
Libyan Arab Jamahiriya	58	2	1	1	9	0	0	0
Morocco	310	538	383	400	0	0	0	0
Tunisia	27	19	38	244	0	0	0	0
WEST AFRICA	37	82	101	78	346	374	310	351
Benin	1	1	1	1	127	45	12	6
Burkina Faso	0	9	9	1	28	32	32	118
Cape Verde	1	0	0	0	0	0	0	0
Cote d'Ivoire	0	16	17	20	3	42	52	14
Gambia	15	10	9	9	18	18	18	18
Ghana	0	5	15	2	50	67	52	50
Guinea	0	0	1	1	15	0	0	0
Guinea-Bissau	0	1	1	1	6	0	0	0
Liberia	0	0	0	0	0	0	0	0
Mali	1	8	9	4	16	43	7	5
Mauritania	2	0	0	0	0	0	0	0
Niger	0	5	2	2	3	2	1	1
Nigeria	14	18	31	30	50	118	127	135
Senegal	0	9	5	7	8	5	6	3
Sierra Leone	0	0	0	0	0	0	0	0
Togo	2	0	0	1	23	1	1	0
CENTRAL AFRICA	2	3	2	10	0	1	1	1
Cameroon	0	0	0	5	0	1	0	0
Central African Republic	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	0
Congo	0	0	0	0	0	0	0	0
Democratic Republic of the Congo	0	0	0	4	0	0	0	0
Equatorial Guinea								
Gabon	1	2	1	1	0	0	0	0
Sao Tome and Principe	0	0	0	0	0	0	0	0
EAST AFRICA	3	63	101	136	245	362	390	592
Burundi	0	0	1	1	0	0	0	0
Djibouti	0	3	2	2	0	1	1	2
Eritrea					0	3	1	0
Ethiopia	0	0	15	16	38	171	170	324
Kenya	0	27	36	63	2	14	8	8
Rwanda	0	2	8	14	0	0	0	0
Somalia	0	0	0	0	0	0	0	0
Sudan (former)	0	2	8	4	187	107	119	143
Uganda	0	14	15	21	5	16	23	19
United Republic of Tanzania	2	14	15	16	13	51	67	96
SOUTHERN AFRICA	92	267	149	222	173	245	207	359
Angola	0	3	1	1	0	0	0	0
Botswana	2	6	5	9	4	5	1	3
Comoros	0	0	0	0	0	0	0	0
Lesotho	2	2	2	2				
Madagascar	0	0	3	2	0	1	1	1
Malawi	5	2	15	13	7	78	21	43
Mauritius	2	2	2	2	0	0	0	0
Mozambique	0	3	2	2	17	62	50	62
Namibia	1	3	3	3	0	0	0	0
Seychelles	1	2	2	2	0	0	0	0
South Africa	64	232	62	166	89	16	110	185
Swaziland	4	5	4	4	18	1	1	1
Zambia	2	3	36	8	20	71	9	20
Zimbabwe	10	3	12	11	17	11	14	44

TABLE 38: Volume of oilseed trade (continued)

	Oilseeds							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	690	2 178	2 058	1 732	784	1 000	946	1 371
ECOWAS	35	81	101	78	346	374	310	351
SADC	95	281	165	241	186	296	275	455
COMESA	240	1 219	1 386	751	314	490	407	672
UMA	401	614	480	700	9	0	0	1
ECCAS	3	6	4	11	0	1	1	1
IGAD	1	46	76	105	232	311	322	496
CEMAC	2	3	2	6	0	1	1	1
UEMOA	5	48	45	37	213	171	111	148
CEN-SAD	590	1 823	1 794	1 378	555	516	478	574
ASIA Developing	17 670	48 307	53 560	61 142	1 619	2 435	2 275	2 349
LAC	7 108	10 026	10 256	7 915	15 784	40 704	41 656	37 252
DEVELOPED REGIONS	35 740	36 903	39 271	39 033	42 231	53 550	60 842	70 121
WORLD	61 213	97 418	105 154	109 832	60 543	97 759	105 809	111 171

TABLE 39: Volume of vegetable oil trade

	Vegetable oils and animal fats							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	1 743	2 071	2 920	2 019	264	327	334	398
Algeria	419	637	606	678	6	10	13	39
Egypt	687	558	1 405	477	32	14	33	113
Libyan Arab Jamahiriya	96	93	83	75	3	0	0	0
Morocco	327	473	453	508	17	24	25	16
Tunisia	215	310	373	281	206	278	264	230
WEST AFRICA	579	1 913	1 872	1 828	283	582	557	612
Benin	17	228	186	175	19	220	232	238
Burkina Faso	31	22	25	30	0	5	1	1
Cape Verde	6	8	9	8	0	0	0	0
Cote d'Ivoire	30	14	15	13	147	141	174	247
Gambia	31	74	59	81	3	2	2	7
Ghana	22	223	220	151	12	102	89	56
Guinea	18	38	34	32	0	0	0	0
Guinea-Bissau	4	13	10	8	0	0	0	0
Liberia	8	19	16	18	6	1	1	1
Mali	16	65	70	62	9	8	4	2
Mauritania	41	66	78	97	0	0	0	0
Niger	33	44	58	46	0	3	2	2
Nigeria	157	892	846	886	14	23	33	18
Senegal	151	172	158	133	73	71	13	32
Sierra Leone	4	12	13	15	0	0	0	0
Togo	10	23	76	75	1	5	6	8
CENTRAL AFRICA	67	121	198	245	22	15	11	11
Cameroon	13	34	42	37	13	12	10	6
Central African Republic	1	5	8	8	0	0	0	0
Chad	1	5	4	4	0	0	0	0
Congo	22	25	15	23	0	0	0	1
Democratic Republic of the Congo	21	41	113	142	2	1	1	1
Equatorial Guinea	2	3	3	3	0	0	0	0
Gabon	7	6	12	26	6	1	1	2
Sao Tome and Principe	1	2	2	2	0	0	0	0
EAST AFRICA	640	1 494	1 507	1 598	37	119	123	135
Burundi	1	7	5	11	0	0	0	0
Djibouti	28	91	128	171	0	1	1	0
Eritrea	4	2	6	4				
Ethiopia	49	114	200	234	0	1	0	0
Kenya	263	456	442	525	31	51	51	75
Rwanda	9	29	27	40	0	0	0	0
Somalia	25	49	77	59	0	0	0	0
Sudan (former)	92	161	149	133	0	0	0	0
Uganda	84	192	229	203	3	47	37	44
United Republic of Tanzania	86	393	244	217	3	19	33	15
SOUTHERN AFRICA	641	1 672	1 536	1 464	67	52	105	114
Angola	40	175	181	163	0	12	20	13
Botswana	17	21	21	16	1	1	1	1
Comoros	1	2	3	2	0	0	0	0
Lesotho	4	1	0	1				
Madagascar	22	72	80	102	0	0	0	0
Malawi	11	35	30	34	0	1	0	4
Mauritius	40	39	39	51	1	1	1	2
Mozambique	62	105	165	118	4	7	7	6
Namibia	8	125	24	24	1	2	2	2
Seychelles	6	7	5	6	0	0	0	0
South Africa	326	927	834	758	47	24	69	80
Swaziland	16	7	6	6	7	0	1	1
Zambia	19	67	59	68	1	1	1	1
Zimbabwe	69	90	89	115	4	2	2	3

TABLE 39: Volume of vegetable oil trade (continued)

	Vegetable oils and animal fats							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	3 670	7 271	8 033	7 155	673	1 095	1 130	1 270
ECOWAS	538	1 847	1 794	1 732	283	582	557	612
SADC	748	2 104	1 889	1 822	71	72	139	130
COMESA	1 516	2 062	3 097	2 400	84	121	128	246
UMA	1 097	1 579	1 593	1 638	232	313	302	286
ECCAS	107	303	385	420	22	27	31	24
IGAD	544	1 064	1 231	1 330	34	100	89	120
CEMAC	45	78	83	101	20	14	11	9
UEMOA	293	580	598	542	249	453	432	530
CEN-SAD	2 311	4 111	4 997	4 070	573	951	931	1 047
ASIA Developing	16 958	29 801	31 694	34 588	18 134	32 793	40 403	41 787
LAC	3 276	4 512	4 684	4 451	7 554	11 834	10 882	9 418
DEVELOPED REGIONS	16 325	27 731	30 113	29 338	15 609	21 704	22 847	23 763
WORLD	40 264	69 369	74 566	75 563	42 346	67 923	75 813	76 838

TABLE 40: Volume of dairy trade

	Dairy (milk equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	2 757	3 505	3 847	3 906	50	208	206	608
Algeria	1 497	2 139	2 169	2 400	0	2	3	2
Egypt	828	573	868	669	41	106	142	541
Libyan Arab Jamahiriya	171	355	321	397	0	0	0	0
Morocco	198	373	392	358	8	23	19	18
Tunisia	63	65	97	83	1	76	42	46
WEST AFRICA	905	3 264	1 771	1 915	70	52	99	85
Benin	30	42	50	83	0	1	0	1
Burkina Faso	51	26	36	43	1	0	0	1
Cape Verde	27	43	37	39	0	0	0	0
Cote d'Ivoire	150	95	134	113	55	18	27	17
Gambia	28	35	44	51	0	0	0	9
Ghana	67	169	213	112	0	10	11	8
Guinea	25	32	12	22	0	0	1	1
Guinea-Bissau	2	4	3	4	0	0	0	0
Liberia	6	13	8	9	0	0	0	0
Mali	85	59	68	72	0	0	39	0
Mauritania	49	114	149	99	0	0	0	0
Niger	33	45	73	59	4	0	1	1
Nigeria	211	2 350	698	830	1	0	3	2
Senegal	129	200	214	347	5	17	9	28
Sierra Leone	1	12	8	8				
Togo	8	27	23	24	4	6	8	18
CENTRAL AFRICA	158	260	294	322	4	1	3	4
Cameroon	51	59	58	71	4	1	2	4
Central African Republic	3	2	4	4	0	0	0	0
Chad	4	8	9	10	0	0	0	0
Congo	32	38	37	51	0	0	0	0
Democratic Republic of the Congo	27	102	143	136	0	0	0	0
Equatorial Guinea	2	1	1	1				
Gabon	37	45	38	46	0	0	0	0
Sao Tome and Principe	1	6	3	4	0	0	0	0
EAST AFRICA	170	329	314	391	4	48	55	47
Burundi	3	1	7	4	0	0	0	0
Djibouti	36	46	26	23	0	1	0	0
Eritrea	9	0	0	0	1	1	1	1
Ethiopia	13	12	11	17	0	2	0	0
Kenya	26	16	15	27	2	40	35	28
Rwanda	12	4	5	9	0	0	0	0
Somalia	5	8	8	3	0	0	0	0
Sudan (former)	44	208	207	276	0	0	1	0
Uganda	3	10	10	6	1	2	7	17
United Republic of Tanzania	19	23	25	25	0	3	10	0
SOUTHERN AFRICA	526	636	563	615	290	76	171	154
Angola	18	27	31	38	0	0	0	0
Botswana	139	108	81	94	0	0	1	1
Comoros	2	5	4	3	0	0	0	0
Lesotho	6	7	6	6				
Madagascar	14	18	26	23	0	1	0	0
Malawi	12	22	26	31	0	0	0	0
Mauritius	123	129	128	138	0	2	2	2
Mozambique	26	17	25	19	0	0	0	0
Namibia	33	24	15	18	2	0	0	0
Seychelles	7	16	14	14	0	0	0	0
South Africa	70	218	155	146	232	65	153	139
Swaziland	47	25	21	21	5	0	0	0
Zambia	11	19	23	26	1	1	3	4
Zimbabwe	17	3	7	41	49	6	11	7

TABLE 40: Volume of dairy trade (continued)

	Dairy (milk equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	4 517	7 993	6 788	7 149	418	385	532	898
ECOWAS	856	3 150	1 622	1 815	70	52	99	85
SADC	571	755	727	774	290	79	181	154
COMESA	1 405	1 563	1 863	1 860	100	162	203	602
UMA	1 978	3 045	3 128	3 337	9	102	64	66
ECCAS	179	288	331	364	4	1	3	4
IGAD	137	300	278	353	4	45	44	46
CEMAC	130	152	147	182	4	1	3	4
UEMOA	489	497	600	745	69	41	84	66
CEN-SAD	2 270	4 886	3 688	3 731	123	299	339	721
ASIA Developing	14 596	21 076	20 856	23 865	1 549	6 065	6 959	5 318
LAC	7 053	6 473	6 776	7 530	2 501	3 632	4 032	3 965
DEVELOPED REGIONS	40 590	54 007	54 482	54 089	63 225	83 712	83 578	88 165
WORLD	66 937	89 730	89 069	92 808	67 694	93 797	95 105	98 349

TABLE 41: Volume of total meat trade

	Meat							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
NORTH AFRICA	218	483	262	320	2	2	5	6
Algeria	26	83	74	82	0	0	0	0
Egypt	184	350	125	187	1	1	2	3
Libyan Arab Jamahiriya	1	29	44	30	0	0	0	0
Morocco	3	12	12	13	1	1	3	1
Tunisia	3	8	7	8	1	0	1	2
WEST AFRICA	110	264	293	336	0	6	1	39
Benin	42	58	95	116	0	4	0	37
Burkina Faso	0	0	0	0	0	0	0	0
Cape Verde	1	9	10	11	0	0	0	0
Cote d'Ivoire	13	22	19	16	0	0	0	0
Gambia	2	7	4	5	0	0	0	0
Ghana	31	114	106	101	0	0	0	0
Guinea	1	6	6	6	0	0	0	0
Guinea-Bissau	1	1	1	1	0	0	0	0
Liberia	8	9	12	10	0	0	0	0
Mali	0	0	0	0	0	2	0	0
Mauritania	1	7	5	9	0	0	0	0
Niger	0	0	0	0	0	0	0	0
Nigeria	4	4	1	34	0	0	0	0
Senegal	1	15	12	10	0	0	0	0
Sierra Leone	0	7	7	5	0	0	0	0
Togo	2	6	15	11	0	0	0	1
CENTRAL AFRICA	68	217	206	254	1	0	0	0
Cameroon	11	5	3	2	0	0	0	0
Central African Republic	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	0
Congo	14	38	38	66	0	0	0	0
Democratic Republic of the Congo	13	92	93	98	0	0	0	0
Equatorial Guinea	4	15	15	17				
Gabon	27	66	56	69	0	0	0	0
Sao Tome and Principe	0	1	1	1				
EAST AFRICA	2	19	16	14	13	11	12	13
Burundi	0	0	0	0	0	0	0	0
Djibouti	0	16	11	9	0	0	0	0
Eritrea	0	0	0	0				
Ethiopia	0	0	0	0	2	5	8	7
Kenya	0	1	1	0	1	3	4	3
Rwanda	0	0	0	0	0	0	0	0
Somalia	0	0	0	0	0	0	0	0
Sudan (former)	0	1	1	2	10	2	0	2
Uganda	0	0	1	0	0	0	0	0
United Republic of Tanzania	1	0	2	2	0	1	0	0
SOUTHERN AFRICA	324	654	633	606	99	92	75	89
Angola	94	243	280	249	0	0	0	0
Botswana	4	6	7	7	21	41	25	33
Comoros	2	9	8	9	0	0	0	0
Lesotho	6	8	8	8	0	0	0	0
Madagascar	0	0	1	0	0	0	0	0
Malawi	1	0	0	1	0	0	0	0
Mauritius	15	15	15	16	1	0	0	0
Mozambique	3	13	13	16	0	0	0	0
Namibia	32	20	35	10	34	29	24	21
Seychelles	1	4	3	3	0	0	0	0
South Africa	158	330	257	264	19	19	22	33
Swaziland	7	6	5	5	2	0	0	0
Zambia	0	0	0	0	0	0	0	0
Zimbabwe	1	1	1	18	21	3	3	1

TABLE 41: Volume of total meat trade (continued)

	Meat							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
AFRICA	723	1 637	1 411	1 530	114	111	93	147
ECOWAS	109	258	288	327	0	6	1	39
SADC	335	738	720	697	99	93	75	89
COMESA	227	526	310	379	37	14	17	17
UMA	35	139	142	142	1	1	4	3
ECCAS	162	460	487	503	1	0	0	0
IGAD	2	18	14	12	13	10	12	12
CEMAC	55	124	112	155	1	0	0	0
UEMOA	61	101	143	155	0	6	1	39
CEN-SAD	304	682	494	585	13	13	10	50
ASIA Developing	4 709	6 668	7 892	8 085	2 270	2 805	2 919	3 082
LAC	1 652	2 803	3 116	3 166	2 088	8 098	8 118	8 208
DEVELOPED REGIONS	15 006	22 284	23 253	22 786	18 968	23 698	26 334	26 272
WORLD	22 201	33 518	35 794	35 688	23 444	34 715	37 467	37 711

TABLE 42: Value of total fish trade

	Fish							
	imports				exports			
	million US$ 1999	million US$ 2007	million US$ 2008	million US$ 2009	million US$ 1999	million US$ 2007	million US$ 2008	million US$ 2009
NORTH AFRICA	202.8	399.1	601.4	763.8	842.4	1583.4	1942.4	1725.4
Algeria	13.3	25.5	29.6	53.9	2.7	12.2	13.3	8.5
Egypt	153.1	223.9	377.8	475.5	1.4	4.5	10.7	14.1
Libyan Arab Jamahiriya	12.7	35.3	47.7	51.9	5.3	11.7	23.2	4.8
Morocco	10.5	61.7	75.3	115.8	750.8	1371.1	1696.5	1547.8
Tunisia	13.3	52.7	71.0	66.6	82.1	184.1	198.6	150.2
WEST AFRICA	503.7	1410.9	1226.2	1402.3	659.6	797.1	716.6	743.4
Benin	7.6	24.3	32.1	28.5	0.9	0.4	0.0	0.2
Burkina Faso	2.0	5.8	6.5	9.1	0.0	0.8	1.2	1.0
Cape Verde	0.9	2.0	3.3	3.0	2.6	11.3	2.7	14.9
Cote d'Ivoire	172.8	279.7	398.4	363.5	153.1	171.8	198.5	170.3
Gambia	0.4	0.9	0.8	0.8	3.2	3.5	2.8	5.2
Ghana	103.2	170.8	128.7	121.4	72.2	61.0	44.1	53.9
Guinea	13.5	9.1	3.6	8.8	1.7	7.7	5.5	9.3
Guinea-Bissau	0.5	1.5	2.0	1.5	2.0	2.9	1.5	3.1
Liberia	1.4	2.9	6.2	2.6	0.1	0.6	0.6	1.0
Mali	2.9	6.8	7.8	9.4	0.5	0.9	0.1	0.1
Mauritania	0.6	0.2	0.2	0.4	95.6	159.5	148.7	126.4
Niger	0.4	0.8	1.3	1.4	1.6	0.3	0.4	0.3
Nigeria	178.1	892.8	618.1	836.6	10.7	50.1	75.1	100.7
Senegal	3.8	2.1	2.8	1.1	301.5	313.5	223.0	242.2
Sierra Leone	3.3	3.6	3.5	4.1	12.3	10.6	10.1	9.8
Togo	12.2	7.8	11.0	10.1	1.5	2.1	2.1	5.0
CENTRAL AFRICA	101.5	243.3	333.1	348.5	14.9	19.4	10.4	5.8
Cameroon	29.6	126.7	178.1	243.3	1.5	1.4	1.4	2.2
Central African Republic	0.5	1.8	2.0	3.0		0.0	0.0	
Chad	0.0	0.5	0.3	0.5		0.3	0.0	0.0
Congo	18.7	11.9	30.0	5.5	1.7	2.4	1.1	0.7
Democratic Republic of the Congo	40.7	71.0	88.8	51.0	0.4	0.4	0.4	0.6
Equatorial Guinea	2.5	17.4	16.1	25.5	2.3	0.1	0.1	0.1
Gabon	9.5	13.8	17.6	19.6	8.9	14.8	7.4	2.1
Sao Tome and Principe	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0
EAST AFRICA	9.1	28.8	30.3	45.0	122.3	351.1	386.5	317.9
Burundi	0.1	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Djibouti	2.0	7.6	9.7	16.7	0.1	0.4	0.5	0.5
Eritrea	0.1	0.2	0.3	0.1	1.0	1.5	0.9	1.6
Ethiopia	0.2	0.8	1.7	1.1	0.0	0.6	0.4	0.3
Kenya	5.3	8.5	6.2	6.6	32.4	61.5	75.7	57.1
Rwanda	0.1	3.0	1.8	5.5		0.0	0.1	0.3
Somalia	0.2	2.7	3.7	5.5	4.1	3.1	4.5	3.1
Sudan (former)	0.9	2.9	1.9	4.6	0.2		0.3	0.2
Uganda	0.1	0.7	0.9	0.8	24.2	118.1	119.4	109.2
United Republic of Tanzania	0.2	2.3	3.9	4.0	60.2	165.6	184.7	145.5
SOUTHERN AFRICA	155.4	725.1	861.6	811.7	826.9	1750.7	1723.0	1706.1
Angola	14.5	70.3	114.5	97.3	10.0	15.8	9.4	9.1
Botswana	5.1	10.2	12.7	9.3	0.1	0.1	0.0	0.3
Comoros	0.5	0.5	1.4	2.5	0.0		0.0	0.0
Lesotho		2.0	2.8	2.1			0.1	
Madagascar	11.6	57.6	26.6	18.0	39.3	186.8	160.2	115.2
Malawi	0.7	1.2	1.8	2.7	0.2	0.3	0.3	0.2
Mauritius	32.6	227.5	303.7	235.5	38.6	263.0	280.5	284.5
Mozambique	4.8	26.7	38.9	39.8	74.8	70.1	76.8	66.4
Namibia	5.9	35.3	39.4	39.1	291.0	502.6	576.8	574.9
Seychelles	3.1	81.9	63.5	87.4	108.4	197.8	97.2	210.2
South Africa	55.7	192.7	238.7	260.6	260.1	510.8	518.9	441.8
Swaziland	9.7	5.3	4.0	2.9	2.2	0.1	0.2	0.2
Zambia	1.2	10.4	8.9	8.4	0.8	0.4	1.3	1.2
Zimbabwe	9.9	3.5	4.8	6.0	1.5	3.0	1.5	2.2

TABLE 42: Value of total fish trade (continued)

	Fish							
	imports				exports			
	million US$ 1999	million US$ 2007	million US$ 2008	million US$ 2009	million US$ 1999	million US$ 2007	million US$ 2008	million US$ 2009
AFRICA	972.7	2 807.2	3 052.7	3 371.3	2 468.2	4 509.5	4 792.2	4 508.1
ECOWAS	503.1	1 410.7	1 226.0	1 401.9	564.0	637.5	567.9	616.9
SADC	195.9	797.9	952.9	864.1	887.5	1 916.8	1 908.1	1 852.2
COMESA	284.7	741.9	951.6	977.3	256.2	850.3	772.9	802.4
UMA	50.4	175.4	223.8	288.7	936.5	1 738.5	2 080.3	1 837.8
ECCAS	116.1	313.6	447.6	446.0	25.1	35.4	20.0	15.1
IGAD	8.8	23.4	24.6	35.3	62.0	185.2	201.6	171.9
CEMAC	60.8	172.1	244.1	297.4	14.4	18.9	10.0	5.2
UEMOA	202.2	328.7	461.9	424.6	461.2	492.7	426.9	422.1
CEN-SAD	701.9	1 807.3	1 820.5	2 148.7	1 534.4	2 423.9	2 724.7	2 507.8
ASIA Developing	6 800.7	15 637.3	17 623.5	17 043.8	16 377.3	29 606.6	33 157.2	32 471.7
LAC	1 016.5	2 460.9	3 171.8	2 902.7	6 535.4	11 099.4	12 549.3	11 337.9
DEVELOPED REGIONS	48 802.3	77 894.7	84 078.7	76 308.5	27 504.0	47 895.1	50 953.8	47 182.7
WORLD	57 611.1	98 823.3	107 933.4	99 651.3	53 098.7	93 468.3	101 854.2	95 947.6

TABLE 43: Value of trade in selected cash crops

	Coffee, tea, cocoa and spices				Fruit and vegetables			
	imports		exports		imports		exports	
	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009
NORTH AFRICA	522.3	1 191.2	40.1	257.5	612.7	1 760.1	961.9	3 685.9
Algeria	171.3	320.2	0.0	5.6	193.5	554.3	16.9	35.7
Egypt	136.4	422.7	6.8	126.3	247.0	633.5	135.4	2 037.7
Libyan Arab Jamahiriya	40.0	102.6	0.1	0.0	68.6	251.5	5.8	0.5
Morocco	129.3	254.8	25.6	65.5	64.0	236.1	709.3	1 324.2
Tunisia	45.3	90.9	7.6	60.0	39.6	84.7	94.5	287.8
WEST AFRICA	97.6	224.6	2 620.1	6 004.6	175.0	615.9	412.0	608.3
Benin	1.5	1.7	0.1	0.0	16.1	25.5	15.4	33.8
Burkina Faso	7.6	6.5	0.0	0.0	23.6	17.4	4.1	11.6
Cape Verde	2.8	4.3	0.0	0.0	12.5	30.4	0.0	0.0
Cote d'Ivoire	13.9	11.1	1 778.1	3 823.7	21.8	79.3	227.3	335.1
Gambia	2.0	2.2	0.1	3.4	5.1	8.8	1.0	3.7
Ghana	2.7	9.8	468.7	1 160.7	16.1	68.1	28.7	50.6
Guinea	1.7	3.0	10.7	6.9	10.2	10.5	1.6	2.2
Guinea-Bissau	0.1	0.7	0.0	0.0	0.5	1.9	49.5	90.1
Liberia	0.5	2.5	3.2	10.9	4.7	10.2	0.0	0.0
Mali	17.9	37.7	0.0	0.1	5.0	19.1	0.5	7.1
Mauritania	8.2	41.1	0.0	0.5	7.4	44.4	0.0	0.0
Niger	6.3	18.6	0.5	1.3	7.1	12.7	31.2	17.8
Nigeria	11.8	48.6	318.8	671.3	10.9	189.5	36.5	26.0
Senegal	18.5	31.4	0.5	3.0	28.2	82.3	15.0	28.8
Sierra Leone	0.3	3.2	5.3	31.8	4.2	8.8	0.5	0.0
Togo	1.8	2.1	34.1	291.0	1.9	6.8	0.5	1.4
CENTRAL AFRICA	8.9	28.2	328.2	711.9	39.9	200.1	48.6	87.0
Cameroon	1.6	4.4	268.8	665.2	6.6	25.0	47.7	83.3
Central African Republic	0.3	0.6	13.0	1.8	0.5	2.1	0.0	0.1
Chad	1.0	1.6	0.1	0.0	0.3	2.8	0.0	0.0
Congo	0.7	4.2	0.3	11.1	9.2	15.1	0.1	0.8
Democratic Republic of the Congo	2.9	9.0	34.4	25.9	10.2	125.8	0.7	2.7
Equatorial Guinea	0.0	0.0	6.3	2.1	0.0	0.3	0.0	0.0
Gabon	2.2	8.3	0.5	0.3	12.7	26.6	0.1	0.0
Sao Tome and Principe	0.0	0.2	5.0	5.5	0.5	2.2	0.0	0.1
EAST AFRICA	70.8	179.3	1 465.5	2 207.9	69.3	422.2	385.7	869.0
Burundi	0.0	0.1	43.5	47.2	1.1	4.7	0.0	3.9
Djibouti	1.5	6.2	0.0	0.0	3.6	23.5	0.0	1.3
Eritrea	0.3	0.6	0.0	0.0	2.7	5.3	0.0	0.0
Ethiopia	1.4	4.1	271.3	379.0	5.3	78.2	18.6	294.8
Kenya	3.8	18.3	629.3	1 110.3	11.8	67.5	155.4	359.3
Rwanda	0.2	0.9	44.9	69.5	3.4	9.4	0.1	3.2
Somalia	2.8	5.2	0.0	0.0	2.9	26.5	7.2	0.3
Sudan (former)	58.3	134.8	0.1	0.3	19.1	171.0	25.8	21.6
Uganda	1.4	6.3	312.1	374.7	6.7	17.5	5.2	25.0
United Republic of Tanzania	1.1	2.7	164.3	227.0	12.8	18.6	173.4	159.4
SOUTHERN AFRICA	158.8	410.2	218.7	329.7	330.5	876.4	1 104.4	2 310.8
Angola	0.6	36.8	2.7	1.1	21.1	145.1	0.0	0.0
Botswana	15.6	29.1	0.2	0.4	58.5	102.9	0.6	3.2
Comoros	0.2	0.3	4.1	10.4	0.9	1.5	0.0	0.0
Lesotho	2.4	1.9			29.4	31.4	0.5	0.2
Madagascar	0.6	2.5	48.4	116.0	0.8	10.9	16.2	32.6
Malawi	0.9	4.7	49.6	84.3	2.2	12.4	8.7	40.5
Mauritius	7.3	23.3	0.6	1.6	37.9	74.8	2.0	3.3
Mozambique	5.0	17.9	0.1	2.0	6.5	24.1	16.4	36.4
Namibia	12.8	26.7	1.1	0.1	33.9	32.3	5.0	51.4
Seychelles	1.3	2.5	0.4	0.1	8.3	12.4	0.1	1.0
South Africa	99.0	244.1	52.5	92.9	88.0	301.6	974.9	2 078.7
Swaziland	7.2	5.7	0.1	0.4	25.1	26.6	27.6	39.2
Zambia	2.1	8.6	8.2	9.6	8.2	23.4	6.4	16.5
Zimbabwe	3.7	6.1	50.5	10.9	9.8	77.0	45.9	7.7

TABLE 43: Value of trade in selected cash crops (continued)

	Coffee, tea, cocoa and spices				Fruit and vegetables			
	imports		exports		imports		exports	
	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009	million US$ 1999	million US$ 2009
AFRICA	858.3	2 033.4	4 672.5	9 511.7	1 227.5	3 874.7	2 912.6	7 561.0
ECOWAS	89.3	183.5	2 620.1	6 004.1	167.6	571.5	412.0	608.3
SADC	162.6	421.6	413.3	572.2	352.6	1 019.3	1 278.5	2 472.9
COMESA	269.5	759.4	1 504.6	2 366.5	472.5	1 626.7	454.0	2 891.0
UMA	394.2	809.6	33.3	131.6	373.1	1 171.0	826.5	1 648.1
ECCAS	9.5	65.1	374.4	760.2	62.1	350.0	48.6	90.9
IGAD	69.5	175.5	1 212.8	1 864.3	52.0	389.5	212.2	702.4
CEMAC	5.9	19.0	288.9	680.5	29.2	72.1	47.9	84.2
UEMOA	67.7	109.8	1 813.2	4 119.2	104.0	245.1	343.6	525.8
CEN-SAD	514.1	1 259.0	3 311.6	7 384.7	624.0	2 093.8	1 545.4	4 641.2
ASIA Developing	3 309.4	9 077.1	6 022.8	13 552.7	8 464.6	25 577.5	13 003.0	35 554.2
LAC	886.7	2 008.6	7 494.8	11 730.8	3 198.0	5 869.5	11 780.3	24 428.7
DEVELOPED REGIONS	27 004.0	55 121.0	12 448.9	33 186.3	65 855.6	133 107.6	43 572.6	93 239.5
WORLD	32 079.5	68 298.4	30 851.1	68 294.4	78 822.9	168 582.8	71 287.5	160 823.8

PART

4

Sustainability dimensions

Land

The loss of prime-quality land has put additional strain on agriculture to perform. Changes in landcover have caused the most pressing environmental issue in recent decades. Deforestation and land use intensification, and their impact on soil degradation, are at the heart of the issue. However, in much of the world, the current picture of landcover change shows a continuing slowdown in the conversion of forests to areas for crop or livestock production and the continued growth of protected areas.

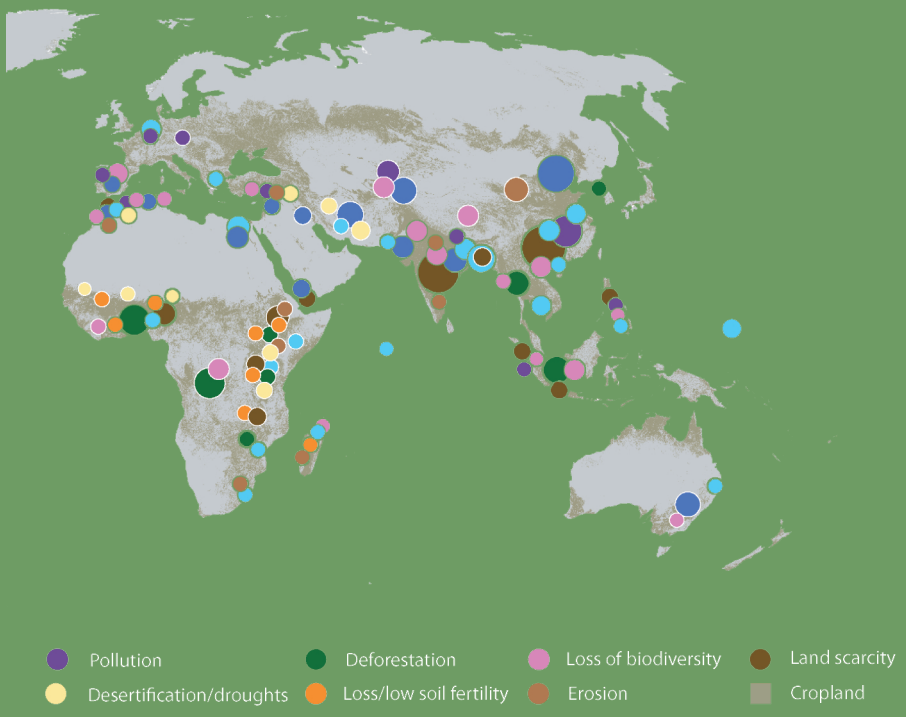
While cropland, permanent meadows and pastures are still showing positive per annum growth, forest land is decreasing at the global level. The increase in cropland was more rapid in Africa than in other regions over the period from 1990-2009 (1.1 percent for Africa, 0.4 percent for Asia, 0.6 percent for the LAC regions and -0.8 percent for the DVD), while the increase of pastureland was more rapid in Asia (0.1 percent for Africa, 2.8 percent for Asia, 0.2 percent for LAC and -1.6 percent for DVD). (Table 44)

Regarding land use for crop production, the land with rainfed crop potential (land suitable to some extent for rainfed agriculture) is estimated to be 4.2 billion ha (30 percent of the total of world land surface). This rainfed cropland potential is 45 percent in sub-Saharan Africa (one billion ha of land with rainfed crop potential and more than one billion ha of land which is not suitable), 9 percent for the Near East and North Africa, 52 percent for Latin America, 52 percent for South Asia, 26 percent for East Asia, 27 percent for industrial countries and 22 percent for transition countries. (Chart 69)

With regard to the distribution of risks associated with main agricultural production systems, the situation in Africa in 2010 has been presented by country as follows: (Map 46)

- Floods/sea level rise: Egypt, Kenya, Madagascar, Morocco, Mozambique, Nigeria, Somalia, South Africa (east coast).
- Water scarcity: Algeria, Egypt, Morocco, Tunisia.
- Pollution: Algeria (sea borders).
- Desertification/droughts: Algeria, Burkina Faso, Ethiopia, Mauritania, Niger, Nigeria, Tanzania.
- Deforestation: Benin, Democratic Republic of the Congo, Nigeria, Tanzania, Togo, Zambia,.
- Loss/low soil fertility: Burkina Faso, Cote d'Ivoire, Ghana, Madagascar, Nigeria, Sudan, Togo, Zambia.
- Loss of Biodiversity: Algeria, Democratic Republic of the Congo, Liberia, Madagascar, Morocco, Tunisia.
- Erosion: Ethiopia, Morocco.
- Land scarcity: Burundi, Ethiopia, Malawi, Nigeria, Rwanda.

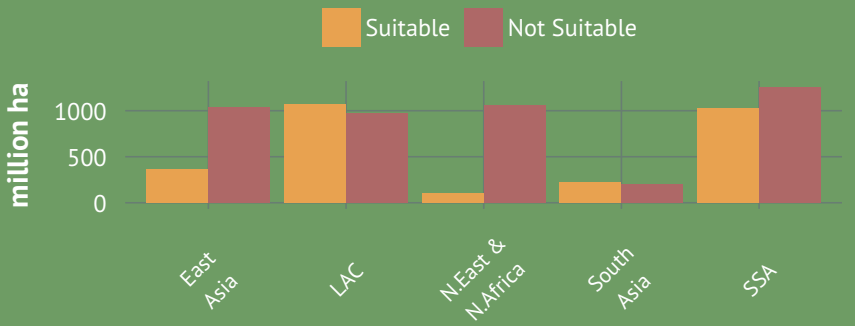
MAP 46: Global distribution of risks associated with main agricultural production systems (2010)



Source: FAO, Land and Water Division

Metalink: P4.ENV.FAO.FOR.LCF.SOLAW, p. 240

CHART 69: Land with rainfed crop potential (2007)



Source: Agricultural Development Economics Division

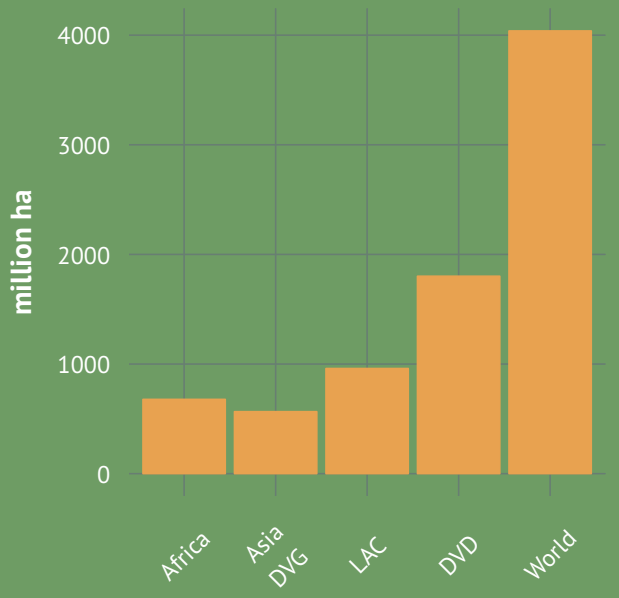
Metalink: P4.ENV.LND.SUIT, p. 242

The latest estimate of the world's total forest area is over four billion ha, corresponding to 31 percent of total land area, or an average of 0.6 ha per capita. The five most forest-rich countries (Brazil, Canada, China, the Russian Federation and the United States of America) account for more than half of the total forest area. Ten countries or areas have no forest area at all, and an additional 54 have forest on less than 10 percent of their total land area. The estimated forest area in Africa is close to 675 million ha, accounting for about 17 percent of global forest area and 23 percent of the total land area in the region. At the sub-regional level, Central Africa accounted for 37 percent of the total forest area, Southern Africa for 29 percent, North Africa for 12 percent, and East and West Africa for 11 percent each. In Africa, the five countries with the largest forest area (Angola, Democratic Republic of the Congo, Mozambique, Sudan and Zambia) together contained more than half the forest area of the continent (55 percent). Countries reporting the highest percentage of their land area covered by forest were Seychelles (88 percent), Gabon (85 percent), Guinea-Bissau (72 percent), Democratic Republic of the Congo (68 percent) and Zambia (67 percent).

While the rate of deforestation and loss of forest from natural causes is still high, it is slowing down. At the global level, it decreased from an estimated 16 million ha per year in the 1990s to around 13 million ha per year in the last decade. At the same time, afforestation and natural expansion of forests in some countries and areas have significantly reduced the net loss of forest area at the global level. The net change in forest area over the period 1990-2000 was estimated at -0.2 percent per year, down by 0.1 percent over 2000-2010. The net change in forest area in the period 2000–2010 was estimated at -5.2 million hectares per year, down by 40 percent per year in the prior decade. However, most of the loss of forest continued to take place in countries and areas in the tropical regions, while the most gain took place in the temperate and boreal zones and in some emerging economies. Africa has the highest level of forest loss in the world but there was also a reduction in the rate of net forest loss in the region between the last two decades, from 4.0 million ha per year in the decade 1990–2000 (0.6 percent per year) to 3.4 million ha per year during the period 2000–2010 (0.5 percent per year).

With regard to carbon, carbon content in topsoil is high (more than 1.25 percent) for some African countries, including Congo, Guinea, Lesotho, Malawi, Swaziland, Tanzania and Zambia. However it has been very low (less than 0.5 percent) in Egypt, Libya, Namibia and Somalia. (Map 47)

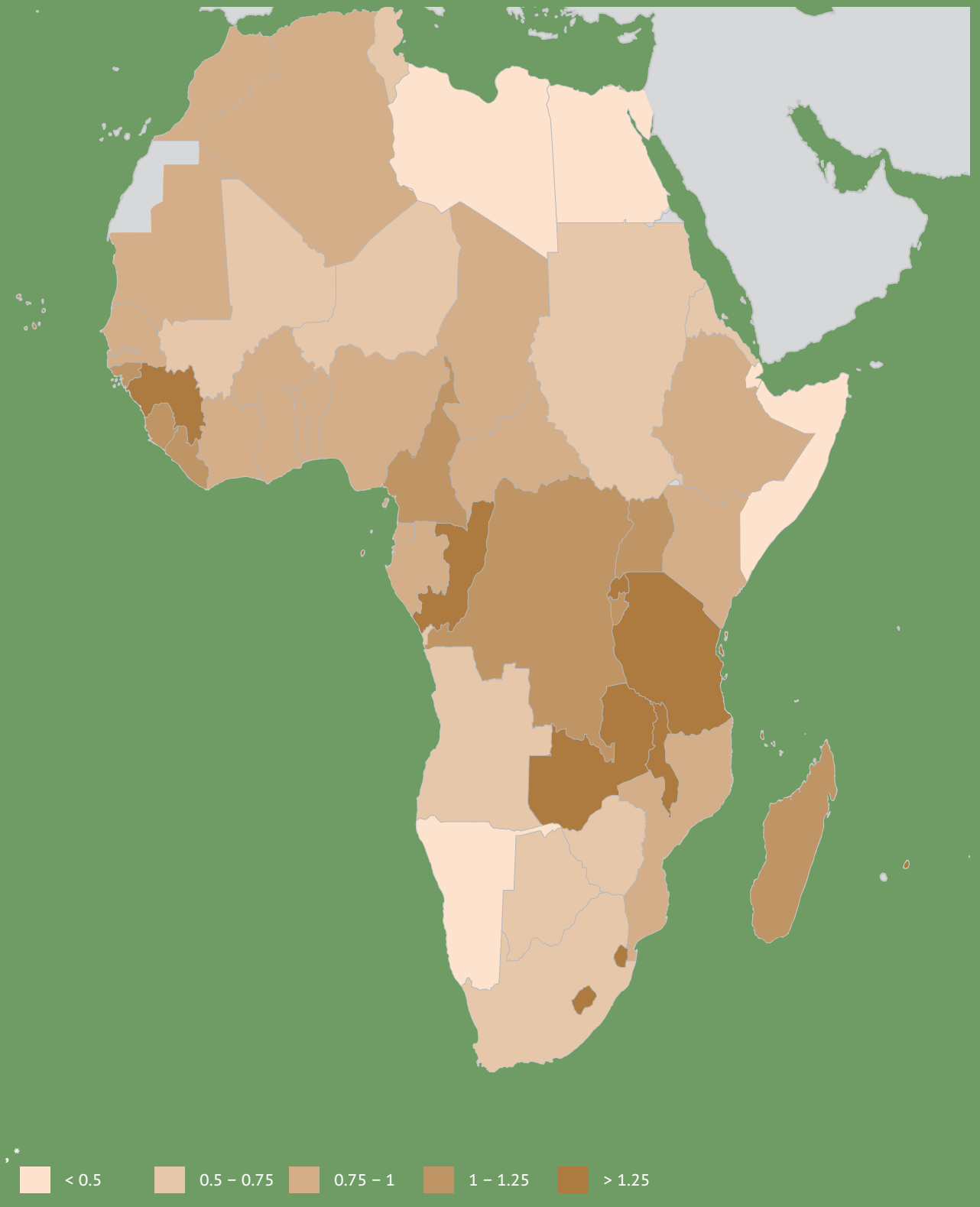
CHART 70: Forest area (2009)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.ESS.LAND.FOST, p. 239

MAP 47: Carbon content in topsoil (%, 2000-2008*)



Source: Statistics Division

Metalink: P4.ENV.FAO.FOR.LCF.SQ, p. 236

The total forest is constituted by primary forest, other naturally regenerated forest and planted forest.

Primary forests are very important in the LAC region; they represented more than 60 percent of total forest in 2009. In South Asia, they were more than 20 percent and almost 20 percent for East Asia. However primary forests were very small (less than 10 percent) in Sub-Saharan Africa in 2010. (Chart 72)

In contrast, the other naturally regenerated forests have been very important in Sub-Saharan Africa (more than 80 percent of total forest while they have represented more than 60 percent in South Asia, 60 percent in East Asia and about 30 percent in LAC regions. Planted forests are more important in East Asia (about 20 percent of total forest than in South Asia, and they are insignificant in LAC regions and in Africa. (Chart 72)

FAO takes in account these five primary designated functions of forest: 1) production 2) protection and conservation, 3) social services, 4) multiple uses, 5) other or unknown.

In Africa, 30 percent of forest land is devoted to production, 17 percent to protection and conservation, 0.6 percent to social services, 17 percent to multiple use and 35 percent to other or unknown uses. Compared with world levels, in which 30 percent is given to production, 20 percent to protection and conservation, 4 percent to social services, 24 percent for multiple use and 23 percent to other or unknown uses, insufficiency in levels of protection and conservation, in social services, and in multiple use, can be noted. However, the primary designated functions of forest as production was regular and it appears that too much functions of forest were identified as other use or unknown in Africa. (Chart 73, Table 45)

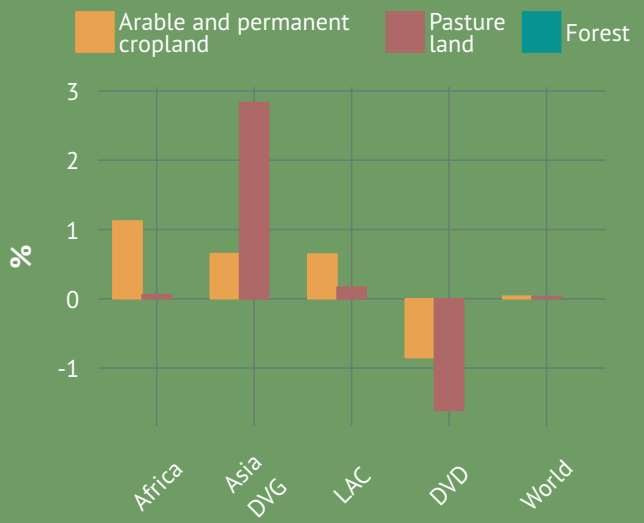
In Asia DVG, 35.8 percent of forest land is dedicated to production, 35.8 percent to protection and conservation, 0.9 percent to social services, 26.4 percent to multiple uses and 1.3 percent to other or unknown uses. Here the shortfall is at the social services level. (Table 45)

In the LAC regions, 14.5 percent is dedicated to production, 23.5 percent to protection and conservation, 8.7 percent to social services, 23 percent for multiple use and 32.3 percent to other or unknown uses. The percentage is insufficient at the production level and too high at the protection and conservation and social services levels.

For the DVD, 34.9 percent is committed to production, 27.9 percent to protection and conservation, 3.7 percent to social services, 29.4 percent for multiple use and 5.7 percent to other or unknown uses. The percentage is overly high at the levels of production, protection and conservation and multiple uses. Moreover, the social services level is a little insufficient. (Chart 73, Table 45)

With regard to the carbon stock at the world level, carbon stock in living forest biomass is decreasing slightly. For the world it was about 270 256 gigatonnes in 2010: 55 736 gigatonnes for Africa; about 34 883 in Asia DVG; 97 511 for the LAC regions; and 79 558 for the DVD. From 1990 to 2010, LAC regions have had the most important carbon stock in living forest biomass, followed by the DVD, then Africa and Asia DVG. (Chart 74, Table 44)

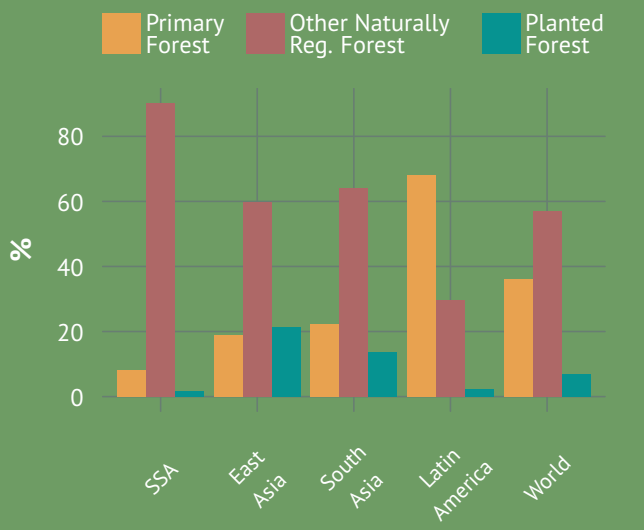
CHART 71: Land use p.a. growth (2009)



Source: Statistics Division (FAOSTAT)

Metalink: P1.RES.FAO.ESS.LDAQ.ARPCL.GR19, p. 235

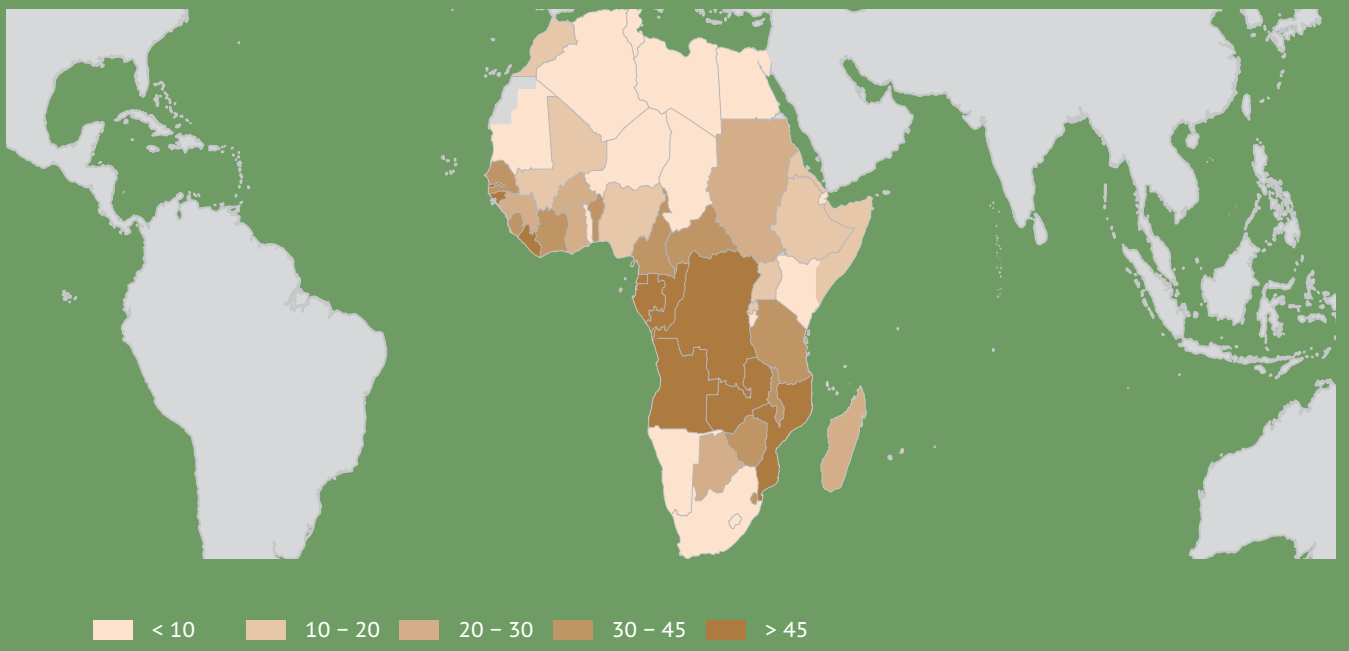
CHART 72: Forest characteristics (2010)



Source: Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.FOC.PR, p. 246

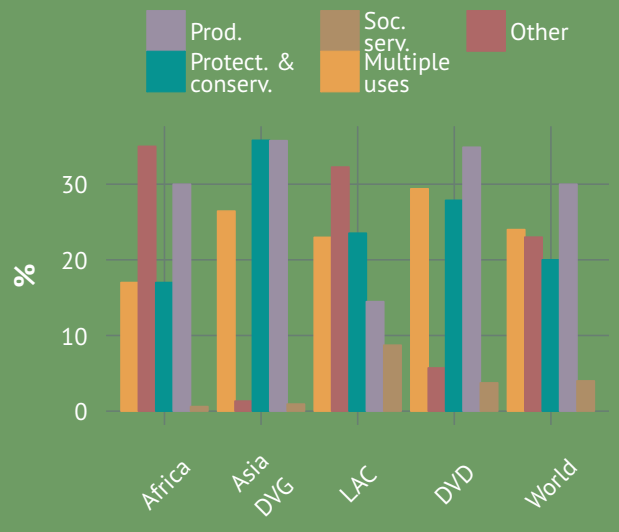
MAP 48: Forest area as share of total land area (%, 2009)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.ESS.LAND.FOST.SHL, p. 239

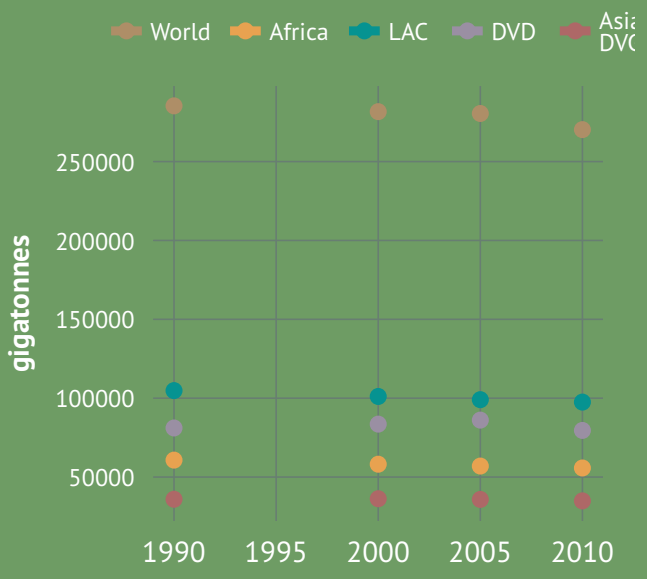
CHART 73: Primary designated functions of forest (2010)



Source: Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.PFF.PR, p. 246

CHART 74: Carbon stock in living forest biomass (1990-2010)



Source: Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.CSFO, p. 236

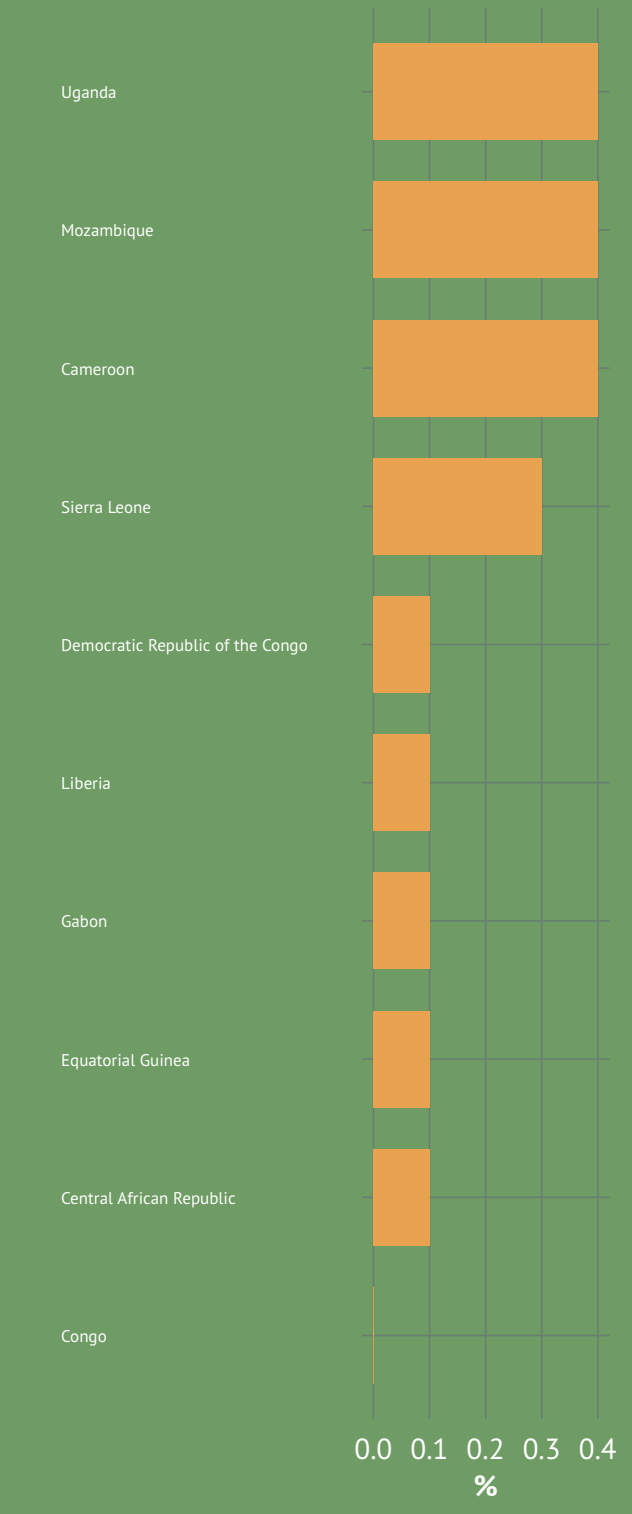
Water

A very small proportion of the planet's water is available for human use. Only around 2.5 percent of the world's water is freshwater. Of this 2.5 percent, more than two-thirds is locked away in glaciers, ice caps and permafrost. About 30 percent is groundwater, with the remaining 1.3 percent of the world's total freshwater being surface water in rivers and other forms, such as ice and snow, lakes and swamps.

Global demand for water has risen sharply within the last century. At the beginning of the twentieth century, each person withdrew 360 m^3 of water on average per year. By the year 2005 this had risen to 607 m^3, while total annual water withdrawal by agriculture, industry and municipalities together rose from 580 000 m^3 to 3 941 000 m^3 over the same period.

In Africa, the per capita water withdrawal is low in most countries compared with the global figure (<100 m^3/person/year). Some countries are distinguished by a higher rate; Egypt, Libya, Madagascar, Sudan and Swaziland have high rates (>750 m^3/person/year). Others are characterized by a low level, with less than 40 m^3/person/year in 2005 (Benin, Burundi, Central African Republic, Congo, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Lesotho, Rwanda and Uganda). (Map 49)

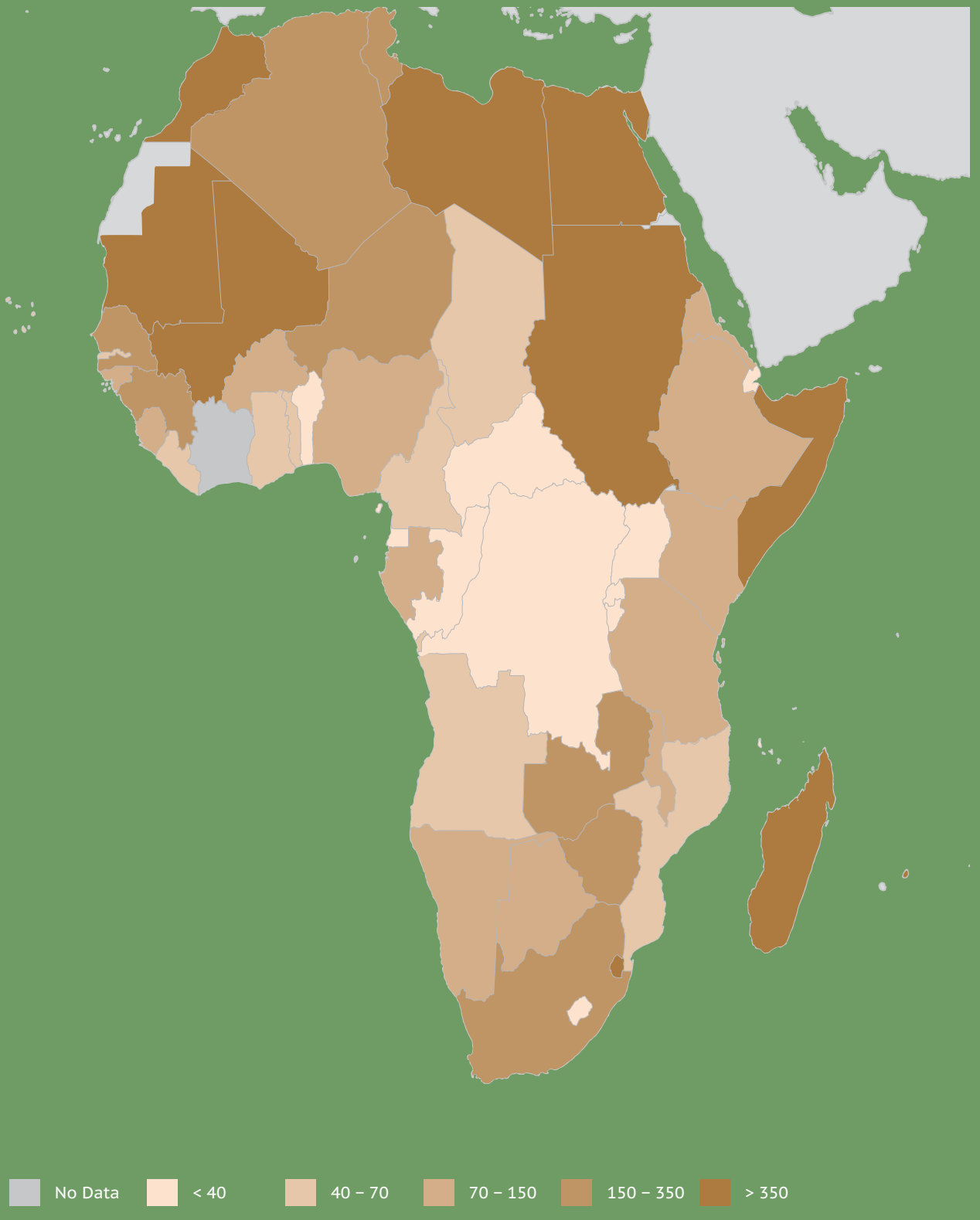
CHART 75: Share of freshwater resources withdrawn, lowest 10 (2005)



Source: Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.NRL.WAT.WWfr, p. 249

MAP 49: Total water withdrawal per capita (m^3/inhab/yr, 2005)



Source: Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.NRL.WAT.TWWpc, p. 250

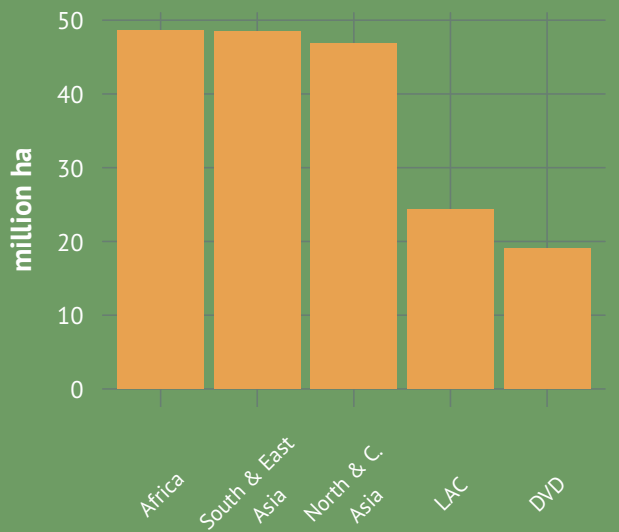
Today, agriculture accounts for about 70 percent of the freshwater withdrawals in the world, mostly through irrigation. This has been crucial for gains in food production. Irrigation reduces drought risk and encourages crop diversification, thus enhancing rural incomes. The pressure of irrigation on water resources can be defined as its share of water withdrawal in total renewable water resources.

While the pressure on water resources from irrigation was estimated at 6.5 percent for the world as a whole in 2005, there was wide variation across countries and regions. In the Near East/North Africa region and Central Asia, for instance, pressure on water resources from irrigation is estimated at 58 percent, while it holds at 52 percent in South Asia. On the other hand, in sub-Saharan Africa it is less than 3 percent. Variations are even wider at the country level. This indicates that some countries are already beyond the critical level, and their condition may even worsen with time.

Regarding the use of freshwater for agriculture, in Africa, countries can be classified as follows: countries whose share of freshwater resources withdrawn by agriculture is the most noticeable, i.e. more than 15 percent in 2005 (all countries of North Africa, Somalia, South Africa, Sudan and Zimbabwe); countries whose share of freshwater resources withdrawn by agriculture is between 5 percent and 15 percent (Burkina Faso, Djibouti, Eritrea, Kenya, Mali, Mauritania, Niger and Senegal); and those for which the rate is less than 0.5 percent (Angola, Benin, Gambia, Lesotho, Liberia, Mozambique, Sierra Leone and almost all the countries of Central Africa). (Map 50)

With respect to the issue of saline soils, Africa and South and East Asia have the most of saline soils (almost 50 million ha for each). In contrast, in the LAC region, saline soils represent 25 million ha, while in the DVD, they account for less than 20 million ha. (Chart 76)

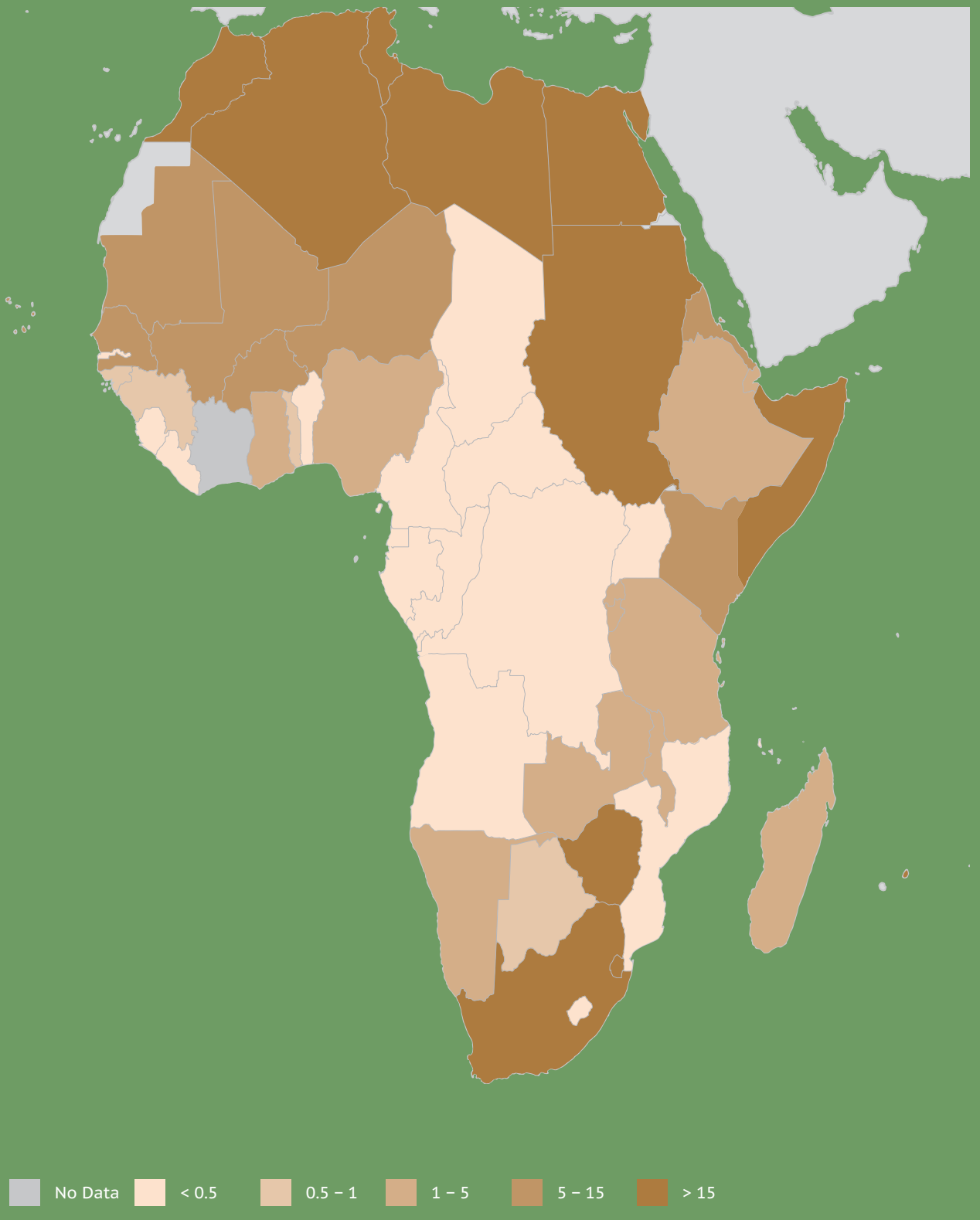
CHART 76: Saline soils (2005)



Source: Natural Resources and Environment Department

Metalink: P4.ENV.FAO.POL.SAL, p. 249

MAP 50: Share of freshwater resources withdrawn by agriculture (%, 2005*)



Source: Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.NRL.WAT.WWfrag, p. 249

Pollution from agriculture

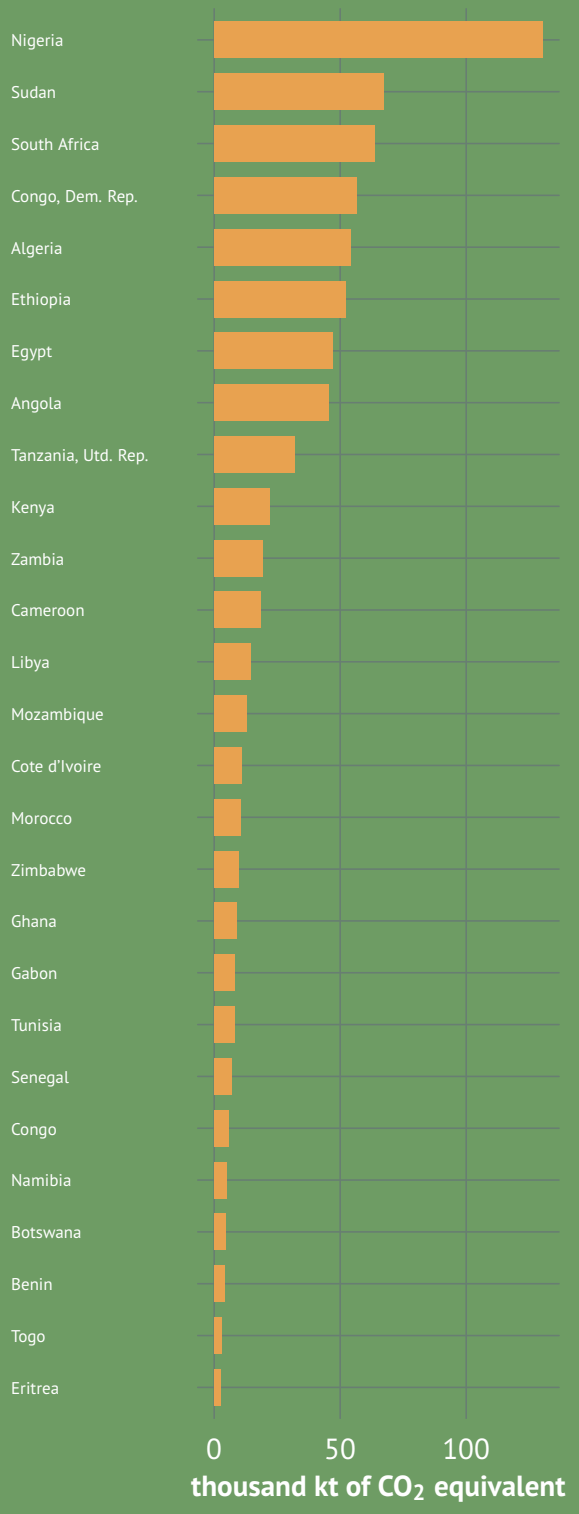
While public attention tends to focus on the more perceptible signs of agriculture's impact on the environment, the non-visible or less obvious effects of pollution have the greatest economic costs. Agriculture affects air quality and the atmosphere in four main ways: 1) particulate matter and greenhouse gases (GHGs) from land clearance by fire (mainly rangeland and forest) and the burning of rice residues; 2) methane from rice and livestock production; 3) nitrous oxide from fertilizers and manure; and 4) ammonia from manure and urine. Pollution from agriculture is not confined to atmospheric contaminants; the same pollutant sources – especially runoff from fertilizers, pesticides and animal wastes – can also affect both groundwater and surface water.

Methane is a principal GHG driving climate change. Its warming potential is about 20 times more powerful than carbon dioxide. At present, global methane emissions amount to about 540 million tonnes per annum, increasing at an annual rate of 20-30 million tonnes. Rice production currently contributes about 11 percent of global methane emissions (up to 90 percent of the methane from rice fields is emitted through the rice plant). Depending on the extent and level of intensification, around 15 percent of methane comes from livestock (from enteric fermentation by cattle, sheep and goats and from animal excreta).

With regard to Africa, for each of the countries below, the total methane emissions came to more than 50 000 Kt in 2005: Algeria, Democratic Republic of the Congo, Ethiopia, Nigeria, South Africa and Sudan. In contrast, for countries like Benin, Botswana, Congo, Eritrea and Togo, the total methane emissions were the smallest in Africa in 2005. (Chart 77)

The largest emitters of agricultural methane in Africa, each with over 15 000 Kt in 2005 are: Ethiopia, Nigeria, South Africa, Sudan and Tanzania. However, those that emitted less than 2 000 Kt in 2005 are: Benin, Botswana, Congo, Côte d'Ivoire, Eritrea, Gabon and Libya. (Map 51)

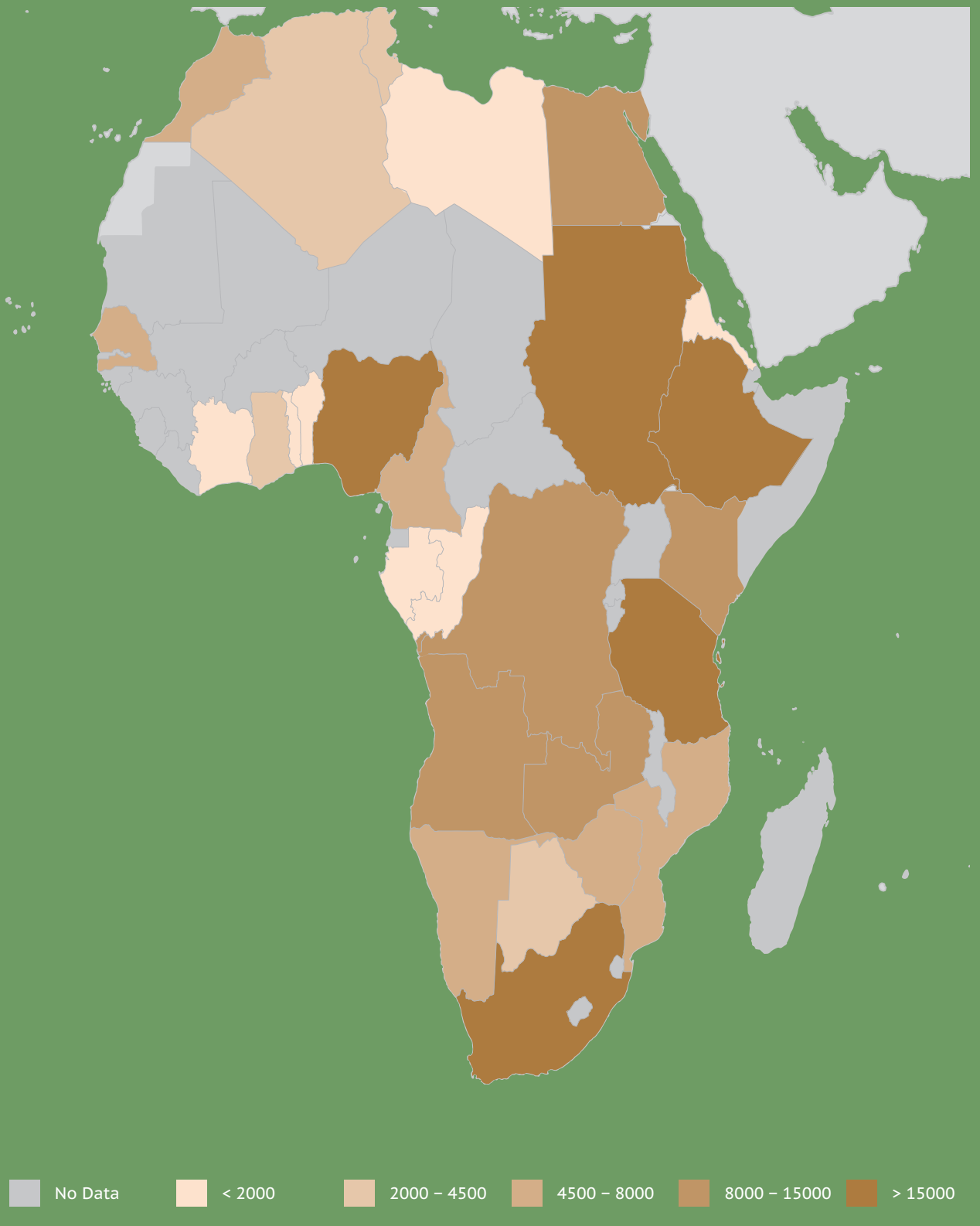
CHART 77: Total methane emissions (2005)



Source: World Bank (WDI)

Metalink: P4.ENV.WBK.WDI.POL.MTHE, p. 243

MAP 51: Agricultural methane emissions (kt of CO_2 equivalent, 2005)



Source: World Bank

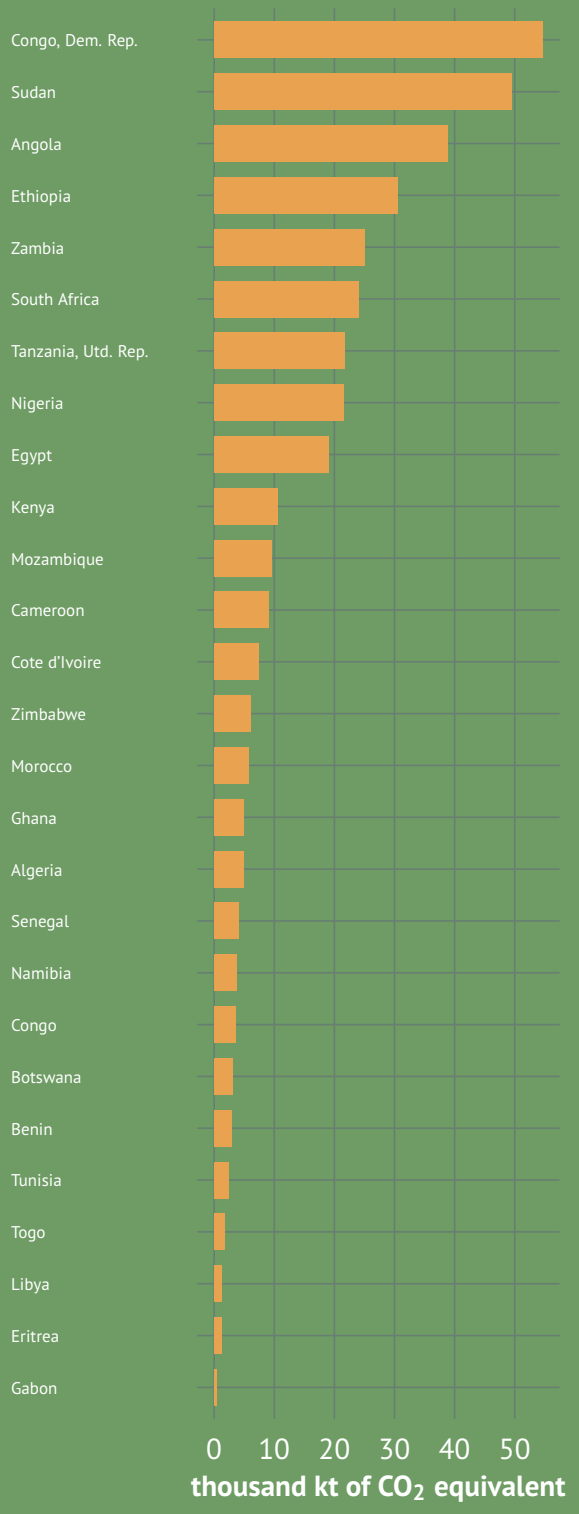
Metalink: P4.ENV.WBK.WDI.POL.AMTHEAB, p. 235

Nitrous oxide (N_2O) is the other powerful GHG for which agriculture is the dominant human-induced, or anthropogenic, source. Mineral fertilizer use and cattle production are the main contributors. N_2O is generated by natural biogenic processes but output is enhanced by agriculture, through nitrogen fertilizers, the creation of crop residues, animal urine and faeces, and nitrogen leaching and runoff. N_2O formation is sensitive to climate, soil type, tillage practices and type and placement of fertilizer. It is also linked to the release of nitric oxide and ammonia, which contribute to acid rain and the acidification of soils and drainage systems. Nitrogen fertilizer, a major source of nitrous oxide emissions, is used very inefficiently in many developing countries.

In Africa for instance, the highest emissions of nitrous oxide (over 30 000 Kt in 2005) have been recorded in Angola, Democratic Republic of the Congo, Ethiopia and Sudan. They are followed by Egypt, Nigeria, South Africa, Tanzania and Zambia, with more than 20 000 Kt each, and the other countries, which have less than 10 000 Kt. Some countries, like Eritrea, Gabon and Libya, have a smaller, almost insignificant, quantity of nitrous oxide emissions. (Chart 78)

Agriculture is the predominant source of ammonia emissions, which are nearly fourfold greater than natural emissions. Livestock production, particularly of cattle, accounts for about 44 percent of ammonia emissions, while mineral fertilizers account for 17 percent and biomass burning and crop residues account for about 11 percent of the global total. Volatilization rates from mineral fertilizers in developing countries are about four times greater than in developed countries because of higher temperatures and lower quality fertilizers. Ammonia emissions are potentially even more acidifying than emissions of sulphur dioxide and nitrogen oxides. Extensive leaching of nitrates from soils into surface water and groundwater, which was originally an issue in almost all industrial countries, is now becoming a problem in many developing countries. It poses a risk to human health and contributes to eutrophication of rivers, lakes and coastal waters.

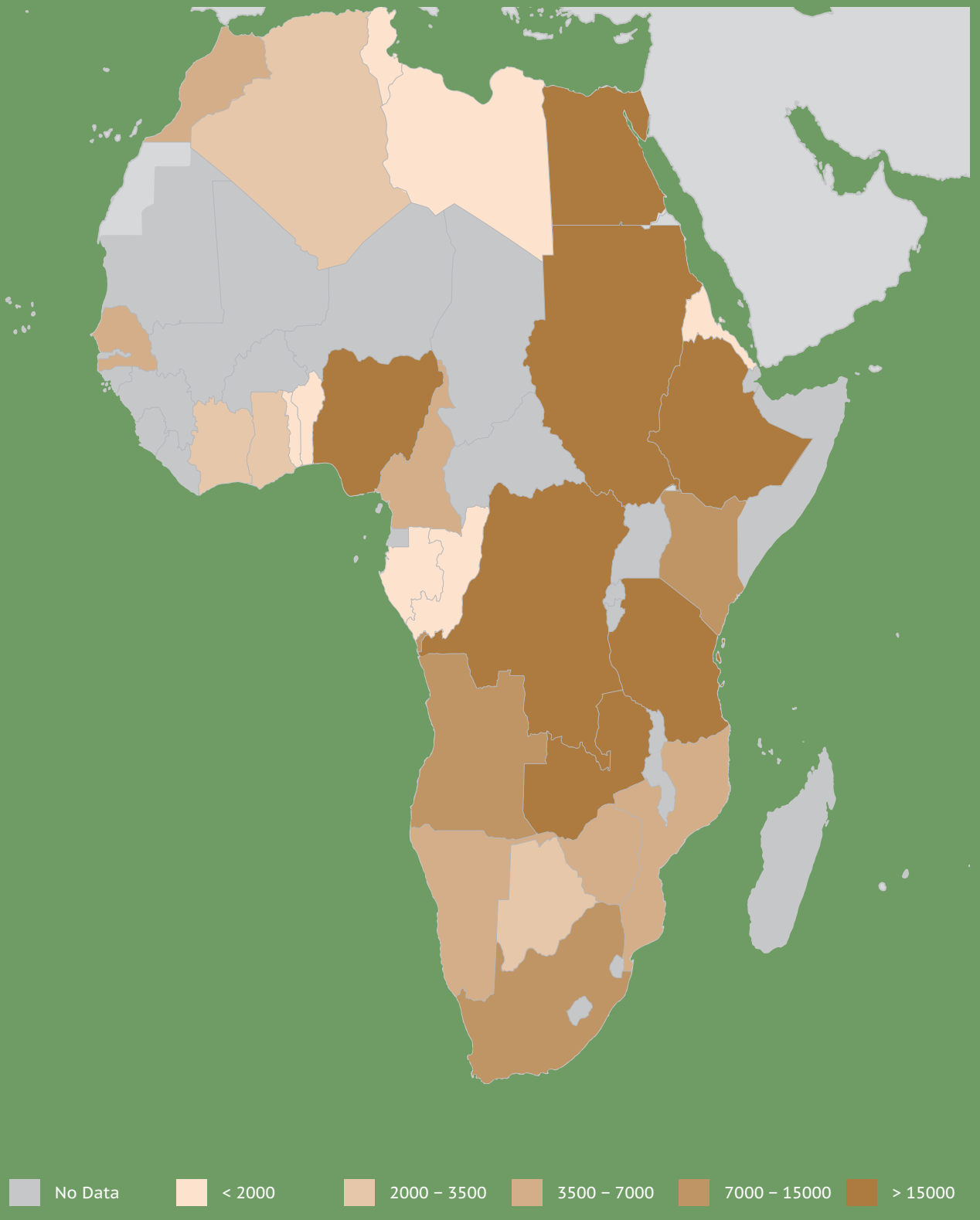
CHART 78: Total nitrous oxide emissions (2005)



Source: World Bank (WDI)

Metalink: P4.ENV.WBK.WDI.POL.NOE, p. 243

MAP 52: Agricultural nitrous oxide emissions (kt of CO_2 equivalent, 2005)



Source: World Bank

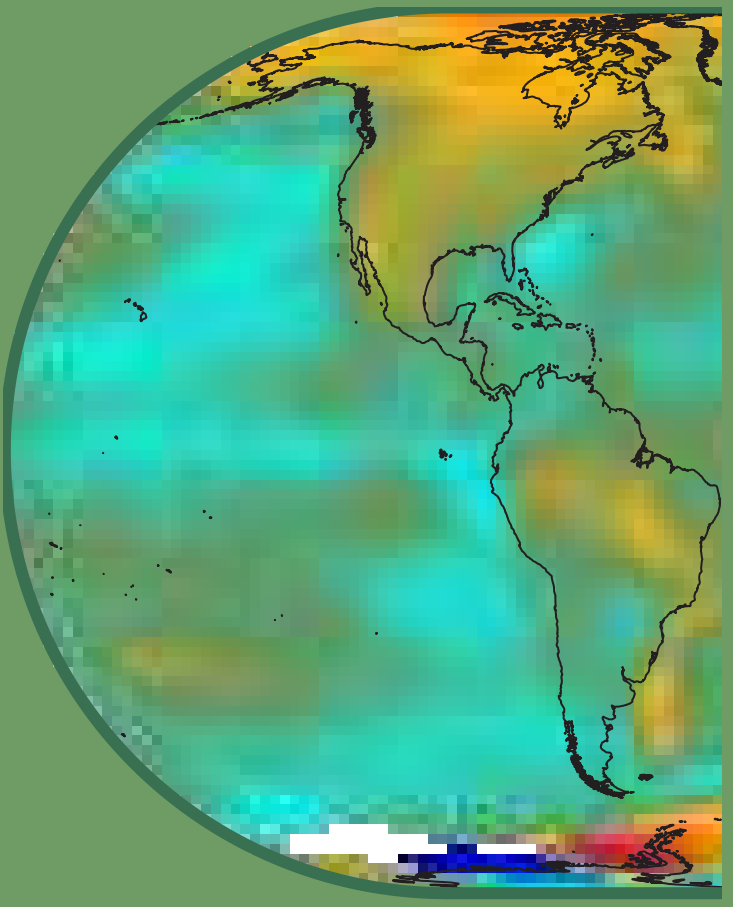
Metalink: P4.ENV.WBK.WDI.POL.ANOEAB, p. 235

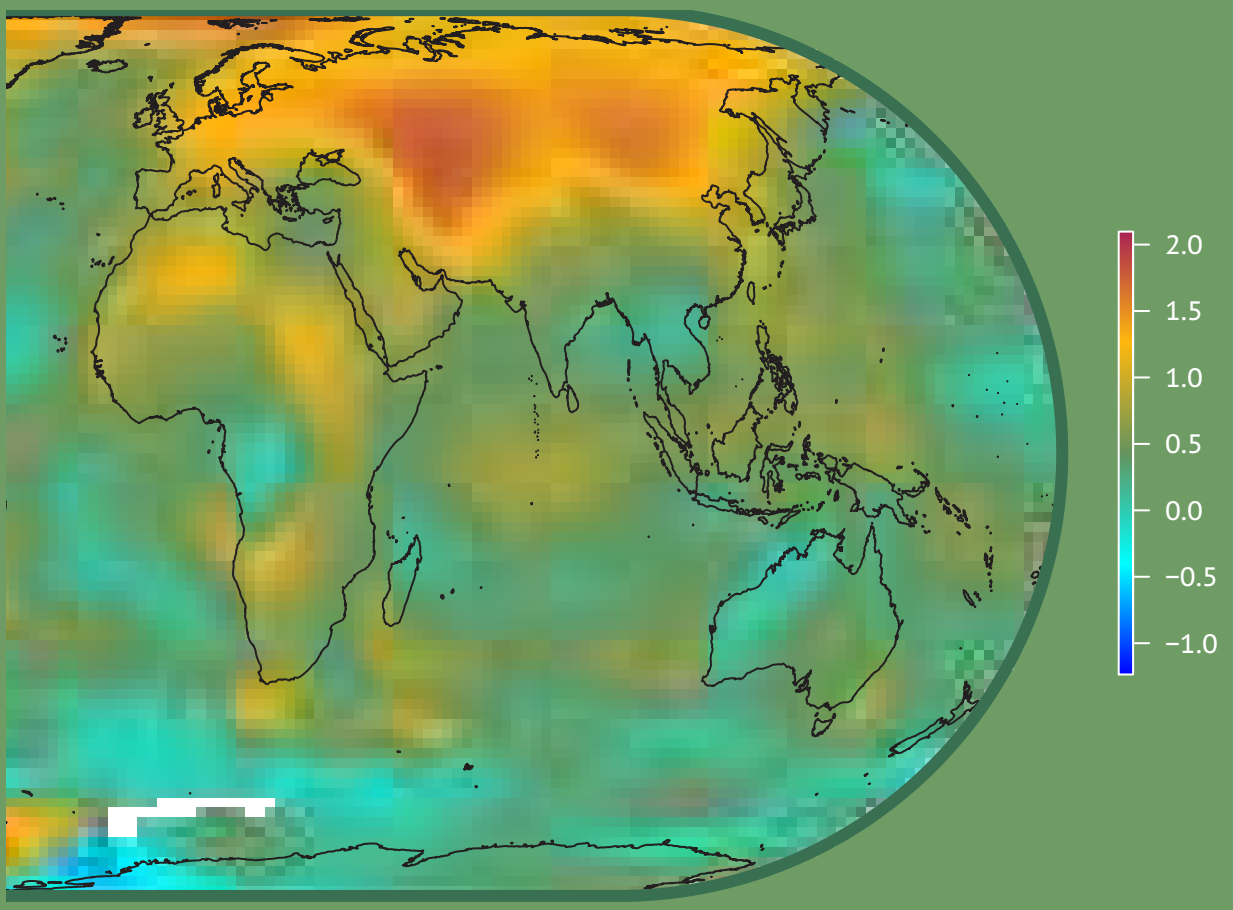
Climate change

In Africa, low levels of food security and economic development combine with high levels of climate risk, while large populations, heavily exploited natural resources and climate risk threaten South Asia's poor. Climate change will have a significant impact on agriculture by increasing water demand, limiting crop productivity and reducing water availability in areas where irrigation is most needed or has a comparative advantage.

Global atmospheric temperature is predicted to rise by approximately 4°C by 2080, consistent with a doubling of atmospheric CO_2 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.

MAP 53: Temperature map



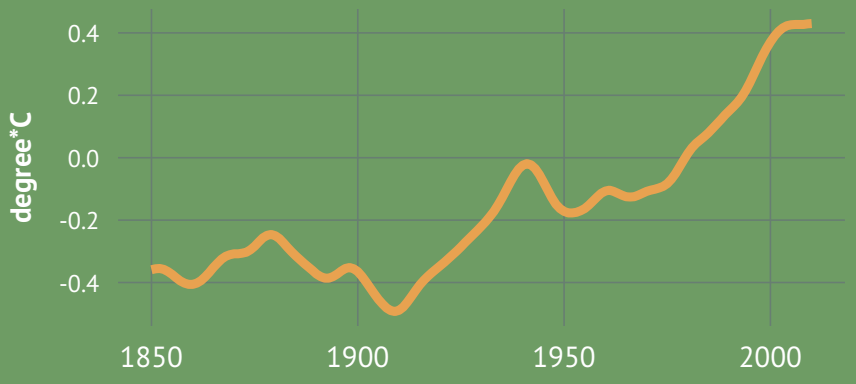


Global surface temperature (°C, Temperature difference of 2000–08 versus 1940–80)

Source: IPCC Data Distribution Centre

Metalink: P4.ENV.IPCC.CC.GSTG, p. 240

CHART 79: Global surface temperature (1850-2010)

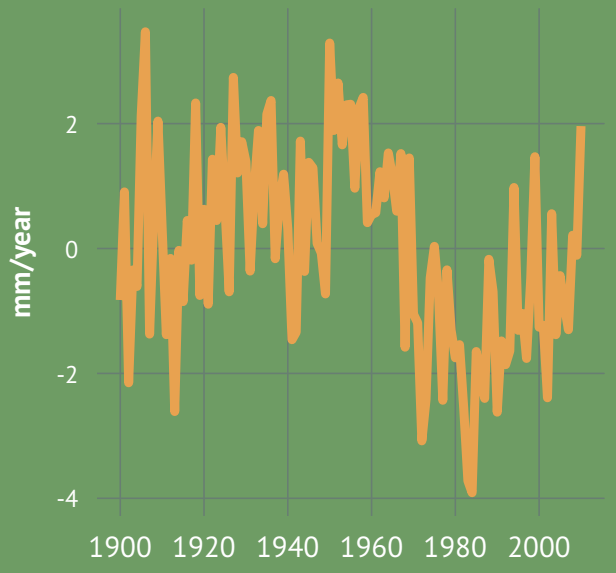


Source: IPCC Data Distribution Centre

Metalink: P4.ENV.IPCC.CC.GST, p. 240

For countries like Congo, Cameroon, Democratic Republic of the Congo, Gabon, Guinea, Guinea Bissau, Liberia, Madagascar and Sierra Leone, the average precipitation levels (in 2000-2010) were higher than 1 500 mm per year (the highest level of precipitation in Africa). Countries like Mali, Mauritania, Namibia, Niger, Somalia, and most of the countries of North Africa except Morocco, have recorded low levels of precipitation (less than 300 mm per year on average). (Map 54)

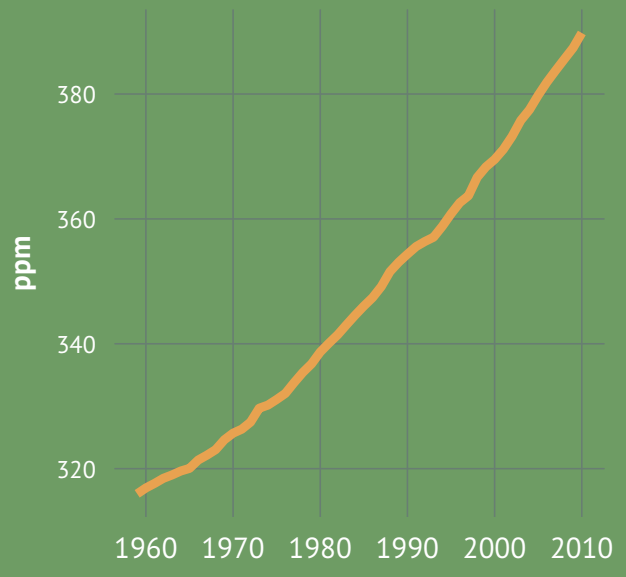
CHART 80: Sahel rainfall anomalies (1900-2010)



Source: JISAO data (http://jisao.washington.edu/data/sahel/)

Metalink: P4.ENVJISAO.CLIM.SAHEL, p. 249

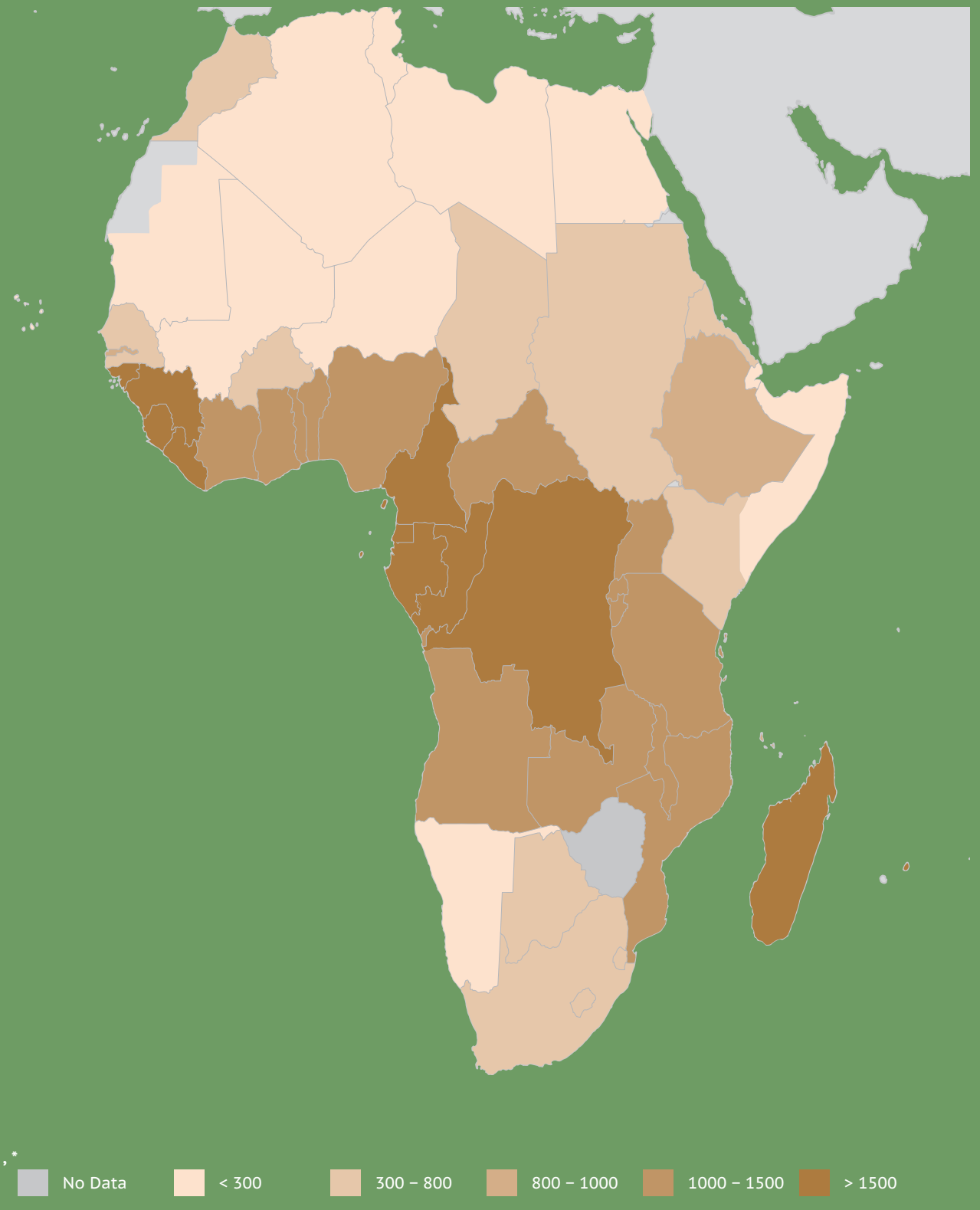
CHART 81: CO_2 concentration (1959-2010)



Source: Global Climate Change: key indicators

Metalink: P4.ENV.IPCC.CC.C02, p. 237

MAP 54: Average precipitation in depth (mm/year, 2000-2010*)



Source: Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.ACQ.CLIM.APD, p. 236

Biodiversity and conservation

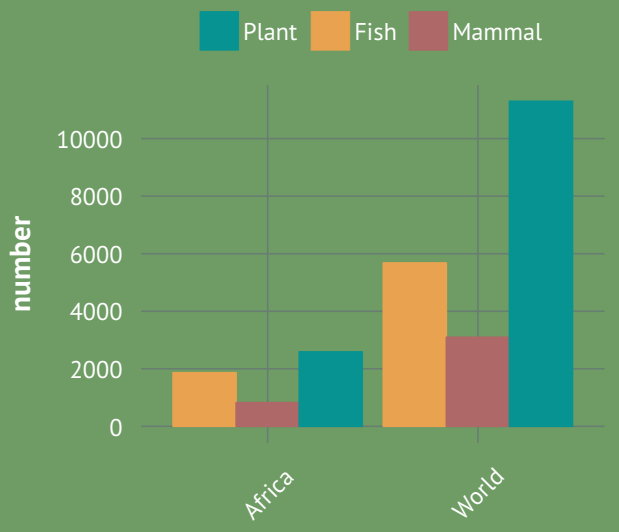
Biodiversity underpins the functioning of the ecosystems on which humankind depends for food and fresh water, health and protection from natural disasters. Such diversity is the result of thousands of years of farmers' and breeders' activities, land and forest utilization, and fishery activities, combined with millions of years of natural selection. Most of the human population lives in areas where food production and nature coexist.

Agriculture's main impacts on biodiversity are diverse. For instance, the expansion of agriculture can lead to losses of natural wildlife habitat and reduction in the area of natural forests, wetlands and so on, with an attendant loss of species. It also causes a general decline in species richness in forests, pastures and field margins, and the reduction of wild genetic resources related to domesticated crops and livestock. Moreover, the observed reduction of micro-organisms that help sustain food and agricultural production is another way that agriculture's life support system has been damaged.

Globally, in 2010, more than 10 000 species of plants, about 6 000 species of fish and over 3 000 species of mammals were threatened. In Africa, in the same year, over 2 000 species of plants, about 1 000 species of mammals and nearly 2 000 species of fish were threatened. (Chart 82)

Some countries have more natural areas protected relative to total surface area (as of 2000-2009). Those which had more than 15 percent protected natural areas include Benin, Botswana, Central African Republic, Congo, Ethiopia, Gabon, Guinea Bissau, Malawi, Mozambique, Senegal, Tanzania, Zambia and Zimbabwe. However, other countries had only a very few protected natural areas (less than 3 percent of the total area). These include Gambia, Lesotho, Libya, Mali, Mauritania, Morocco, Sierra Leone, Somalia and Tunisia. (Map 55)

CHART 82: Species threatened (2010)



Source: World Bank (WDI)

Metalink: P4.ENV.WBK.WDI.BIOD.PST, p. 245

MAP 55: Nationally protected areas, share of total area (%, 2000-2010*)

Source: World Bank (WDI)

Metalink: P4.ENV.WBK.WDI.CON.PROT, p. 250

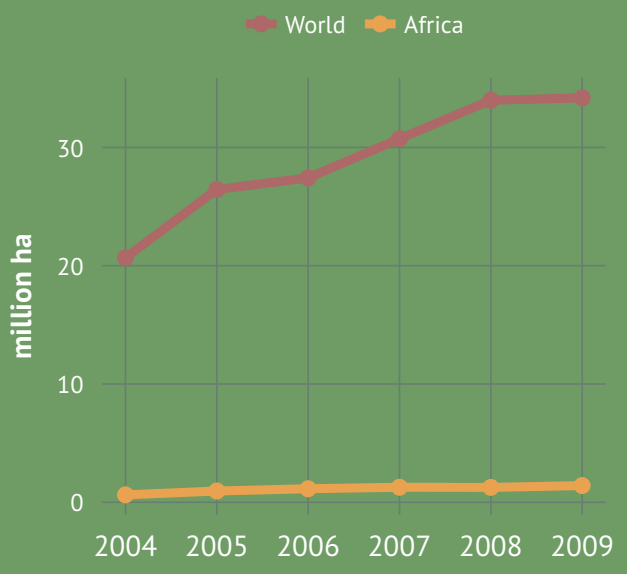
Organic farming

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, using methods that minimize pollution of air, soil and water. Organic agriculture comprises a range of land, crop and animal management procedures, circumscribed by a set of rules and limits usually enforced by inspection and certification mechanisms. Synthetic pesticides, mineral fertilizers, synthetic preservatives, pharmaceuticals, genetically modified organisms (GMOs), sewage sludge and irradiation are prohibited in all organic standards.

At the global level, world organic agricultural areas grew from 20 million ha in 2004 to about 34 million ha in 2009. In Africa, these areas were very small, less than 2 million ha in 2009, and they have grown only very slightly. (Chart 83)

Growth rates of land under organic management in Western Europe, Latin America and the United States of America have been impressive, despite low-base beginnings and the reclassification of land. Between 1995 and 2010, the combined area of organic land tripled to 38 million ha.

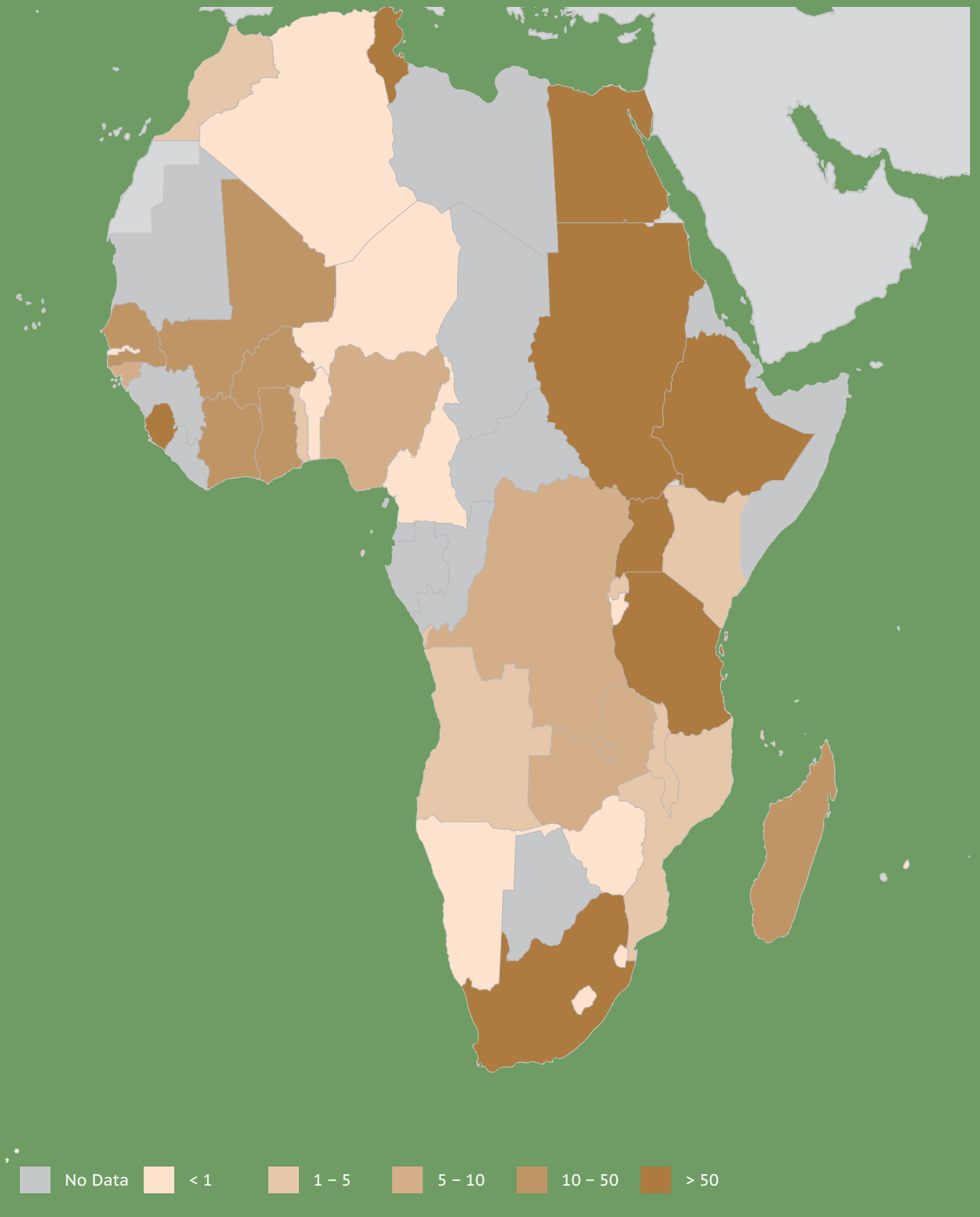
CHART 83: World organic agriculture area (2004-2009)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.BIO.ORGAN.HA, p. 244

MAP 56: Organic agriculture area (thousand ha, 2005-2009*)



Source: Statistics Division (FAOSTAT)

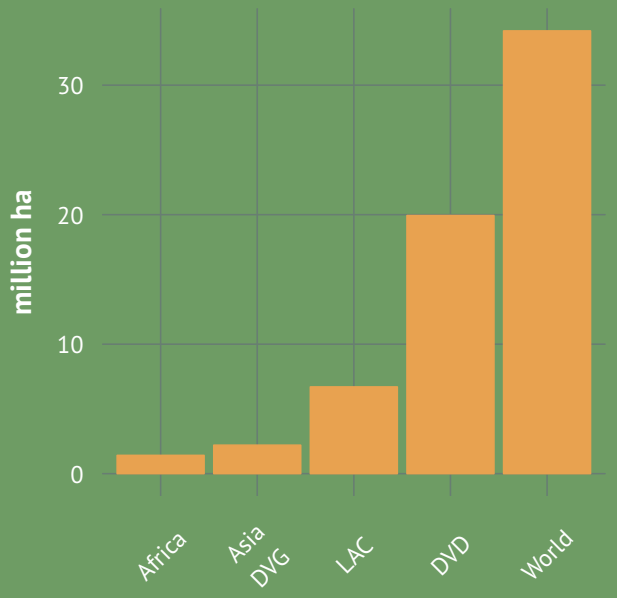
Metalink: P4.ENV.FAO.BIO.ORGAN.HA, p. 244

The distribution of organic agriculture areas worldwide (as of 2009) was led by the DVD, which operated 20 million ha in 2009, followed by LAC regions with about 7.5 million ha, Asia DVG (roughly 3 million) and finally Africa (roughly 2 million ha). (Chart 84)

In Africa, countries like Egypt, Sierra Leone, South Africa, Sudan, Tanzania and Tunisia had the largest organic agriculture areas (more than 50 000 ha in 2005-2009), compared with other African countries. These same areas in Burkina Faso, Côte d'Ivoire and Mali were between 10 000 ha and 50 000 ha. In Democratic Republic of the Congo, Madagascar, Morocco, Nigeria and Zambia, organic agriculture areas were between 5 000 and 10 000 ha. In contrast, these areas were much smaller, i.e. less than one ha in Algeria, Burundi, Cameroon, Lesotho and Niger.

The share of organic agriculture area in the total area was more than 0.3 percent for Egypt, Guinea Bissau, Sierra Leone, Sudan, Uganda and Tunisia. It represented between 0.08 percent and 0.3 percent in Benin, Burkina Faso, Côte d'Ivoire, Rwanda and Tanzania, and it was even smaller (less than 0.02 ha) in Burundi, Kenya, Lesotho and Malawi. (Map 57)

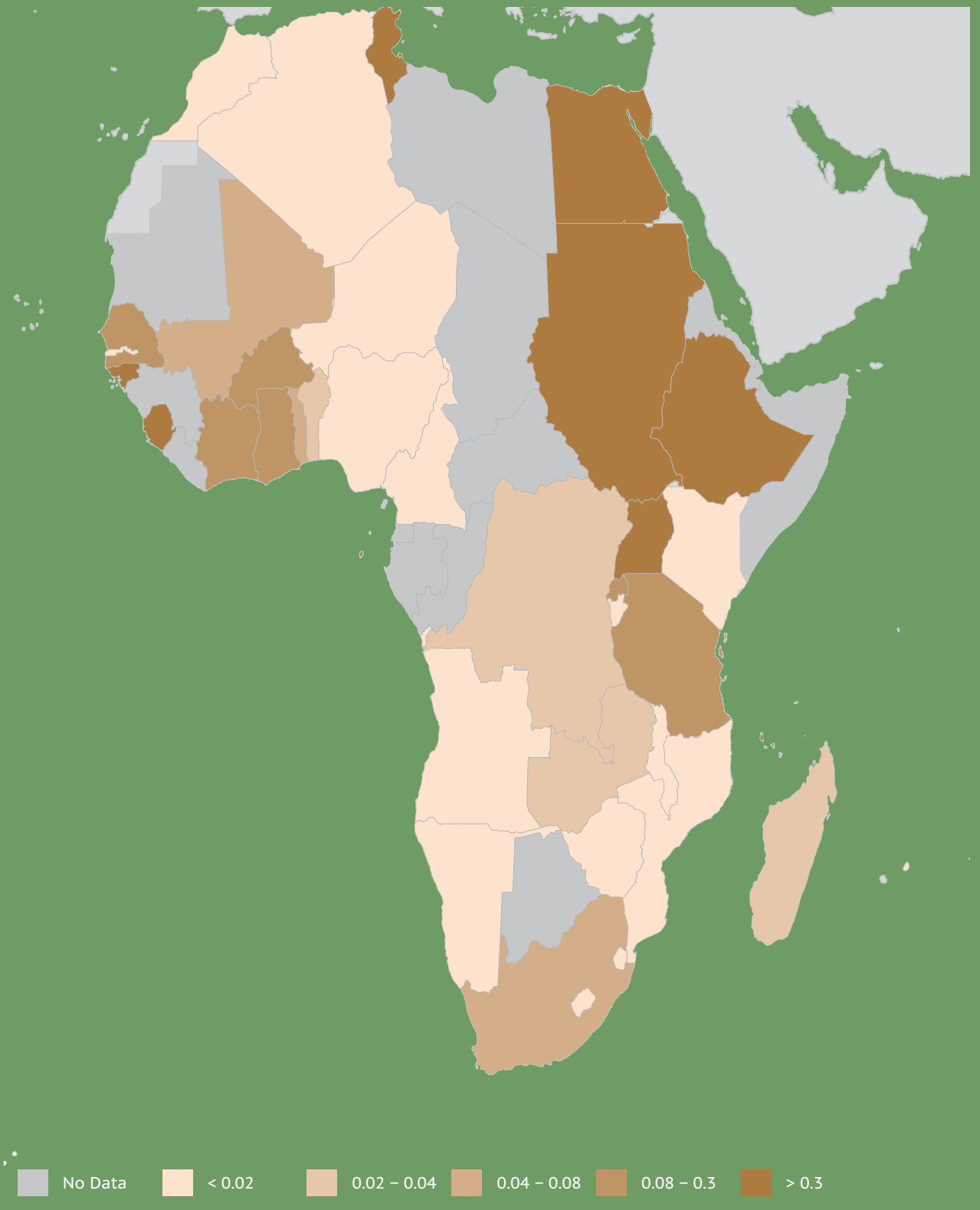
CHART 84: Regional organic agriculture area (2009)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.BIO.ORGAN.HA, p. 244

MAP 57: Organic agriculture, share of total area (%, 2005-2009*)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.BIO.ORGAN.HA.SHL, p. 244

Genetically modified crops

The benefits of agricultural biotechnology arise from its potentially large contribution to productivity gains and quality improvements. Productivity gains can encompass essentially all factors of agricultural production: higher returns on land and livestock, labour and capital, or simply lower input requirements per unit of outputs. This may mean higher crop and livestock yields, lower pesticide and fertilizer applications, less demanding production techniques, higher product quality, better storage and easier processing, or enhanced methods to monitor the health of plants and animals.

Higher productivity also holds the key in the fight against rural poverty. Biotechnology promises to boost productivity and thus raise rural incomes, much in the same way that the green revolution did in large parts of Asia during the 1960s to 1980s. But there are also numerous risks and uncertainties associated with these new technologies that have given rise to a host of concerns and questions, especially regarding GMOs.

In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of the Cartagena Protocol on Biosafety is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health as well, and specifically focusing on transboundary movements.[11]

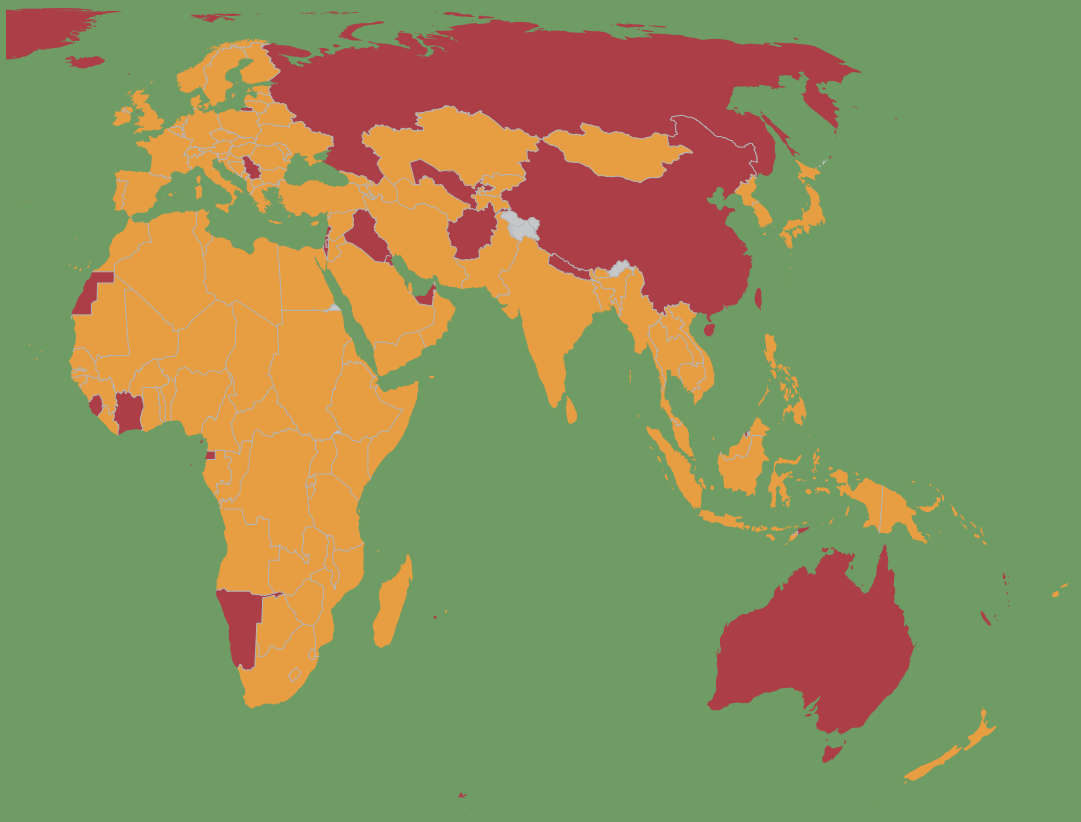
The Biosafety Protocol makes clear that products from new technologies must be based on the precautionary principle and allows developing countries to balance public health against economic benefits. It will, for example, let countries prohibit imports of a living modified organism if they feel there is not enough scientific evidence that the product is safe, and it requires exporters to label shipments containing genetically altered commodities such as corn or cotton. The required number of 50 instruments of ratification/accession/approval/acceptance by countries was reached in May 2003. In accordance with the provisions of its Article 37, the Protocol entered into force on 11 September 2003.

In Africa, almost all countries have ratified the Cartagena Protocol on Biosafety except for Côte d'Ivoire, Equatorial Guinea, Sierra Leone and Western Sahara. Worldwide, major countries, such as Australia, Canada, China, the Russian Federation and the United States of America, have not yet ratified it. (Map 58)

Nevertheless, areas in the world under GMO crops in 2010 came to about 150 million ha but they were a small, almost negligible, number in Africa. (Chart 58)

MAP 58: Countries that have ratified the Cartagena Protocol on Biosafety (number, 2010)

[11] United Nations, Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Text and Annexes, Article 1. 2000. Montreal. http://www.biodiv.org/biosafety/protocol.asp?lg=2.



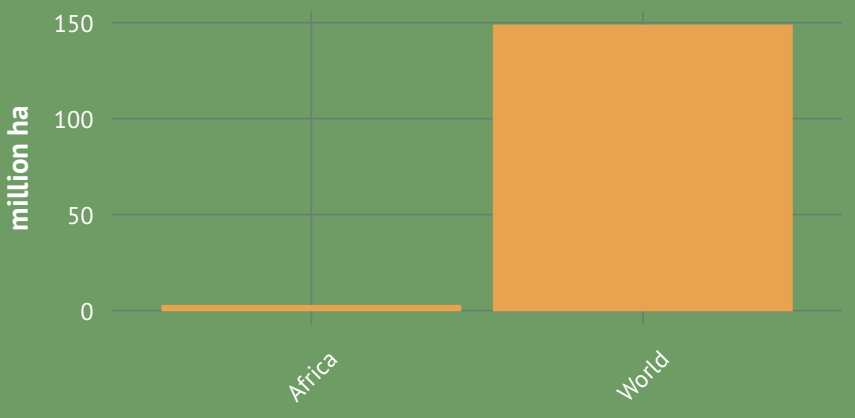
Countries that have ratified the Cartagena Protocol on Biosafety (number, 2011)

No Data | No | Yes

Source: www.cbd.int

Metalink: P4.ENV.CBD.GMO.CBP, p. 244

CHART 85: Area under GM crops (2010)



Source: Clive James, Global Status of Commercialized Biotech and GM Crops: 2010

Metalink: P4.ENV.ISAAA.BIO.GM.HA, p. 236

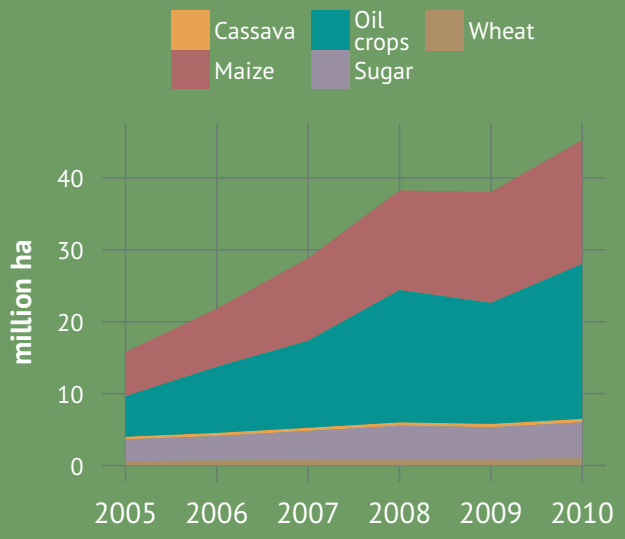
Agriculture and the bio-based economy

Agriculture is playing an increasingly important role in the bio-based economy, providing feedstock for the production of liquid fuels, chemicals and advanced materials such as natural fibre composites for industry. The emergence of green industries provides expanded opportunities for the rural sector beyond traditional forestry and the supply of wood. Biological science has the ability both to make incremental efficiency improvements and to bring about radical change in a wide range of sectors. This includes use of enzymes, fermentation and organisms for processes and products in the energy, chemical, pharmaceutical, food, textile, and pulp and paper industries. Above all, biological and material science working with agriculture has the greatest potential in the energy, natural fibre composite and starch sectors. Much of this potential is already being realized, especially considering the rapid growth of the biofuel sector. Currently, ethanol is being produced from easily fermentable agricultural feedstock such as sugar cane, sugar beet, cereal grains and cassava. Biodiesel is produced from vegetable oil (typically rapeseed, soybean and palm oil) using a process of chemical modification. The expansion of liquid biofuel has been rapid – doubling from 68.3 million tonnes in 2006 to 130 million tonnes in 2011 – and is currently drawing upon feedstock from over 45 million ha of land. The emerging bio-based economy is based on energy efficiency, renewable feed stocks in polymer products, industrial processes that reduce carbon emissions and recyclable materials. Natural fibres exemplify these attributes.

Oil crops have occupied a large portion of areas under bioenergy crops (in 2005-2010). They were followed by corn and sugar cane, while wheat and cassava were grown as bioenergy crops on only a very small area. (Chart 86)

In Africa, Democratic Republic of the Congo, Ethiopia, Kenya, Nigeria, South Africa and Tanzania were the largest producers of biofuel, with over 13 500 Kt in 2005-2009. Angola, Cote d'Ivoire, Mozambique and Sudan produced between 6 500 and 13 500 Kt. Production was between 1 500 and 6 500 Kt in Benin, Central African Republic, Egypt, Ghana, Togo, Tunisia, Zambia and Zimbabwe. Some countries, such as Algeria, Botswana, Libya, Morocco and Namibia, had a very low biofuel production, below 500 Kt. (Map 59)

CHART 86: Area under bioenergy crops (2005-2010)



Source: Based on IEA biofuel production data

Metalink: P4.ENV.FAO.BIO.BF.HA, p. 236

MAP 59: Biofuel production (kt, 2005-2009*)

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

Metalink: P4.ENV.IEA.BIO.BF.QP, p. 236

Worldwide biofuel production has been growing significantly; it rose from 850 000 Kt in 1990 to about 1 150 000 Kt in 2009. (Chart 87)

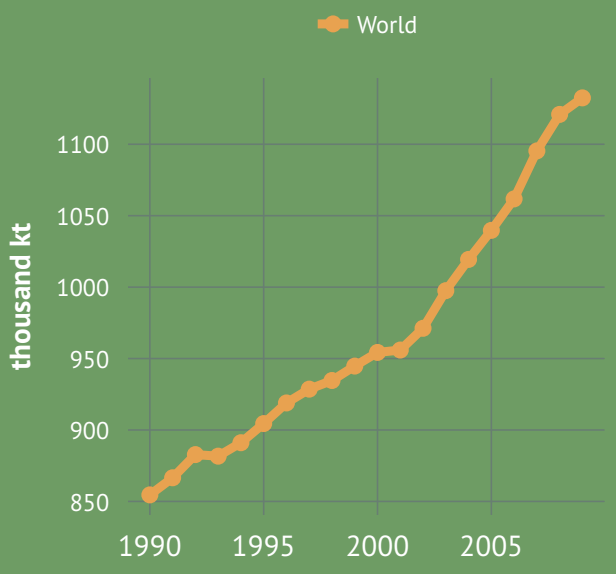
At the global level, natural fibre production was at less than 25 million tonnes in 1990; it reached 30 million tonnes in 2003, remained constant between 2003 and 2007, then dropped to about 25 million tonnes in 2010. In contrast, in Africa, natural fibre production has been very low as it was only 2 million tonnes in 1990 and remained almost constant until 2010. (Chart 88)

Regarding the share of food "crop" usage in the world bio-based economy, products can be classified as follows: palm oil fruit, sugar cane, maize, coconut, soybean and cassava. For food and feed, wheat was the most widely used, followed by soybean, cassava, maize, sugar cane, palm oil fruit and coconut. With respect to material production, coconut was the most used, followed by wood, palm oil fruit, maize, cassava, sugar cane, soybean, and wheat. (Chart 89)

In 2010, Democratic Republic of the Congo, Mozambique and Zimbabwe have produced more global jute and hard fibre (each producing more than 3 500 000 tonnes) than the other African countries, Egypt and Sudan each produced between 1 100 000 and 3 500 000 tonnes. Production from Mali was between 750 000 and 1 100 000 tonnes, more than Angola, Ethiopia and Nigeria, which produced between 500 000 and 750 000 tonnes each. However, Cameroon, Central African Republic, Madagascar, and South Africa recorded the smallest production of jute and hard fibre (less than 500 000 tonnes in 2010). (Map 60)

Ensuring the sustainable development of bio sectors becomes challenging when one tries to capture potential benefits for rural development, climate and non-food security. For instance, the rapid growth and sheer scale of the biofuel sector has potentially negative implications for all four dimensions of food security (availability, access, stability and utilization) as it may result in increased competition for land and water resources, leading to higher and less stable food prices. At the same time, however, it may create new employment and income-generating opportunities, especially in countries with abundant marginal land and climates conducive to feedstock production, where such land would be too costly to bring into food cultivation. Such opportunities exist, for example, in countries of Latin America, Southeast Asia and sub-Saharan Africa.

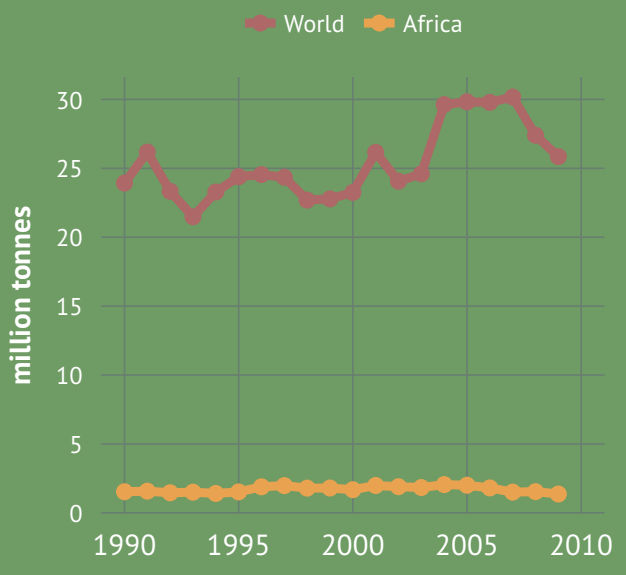
CHART 87: Biofuel production (1990-2009)



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

Metalink: P4.ENV.IEA.BIO.BF.QP, p. 236

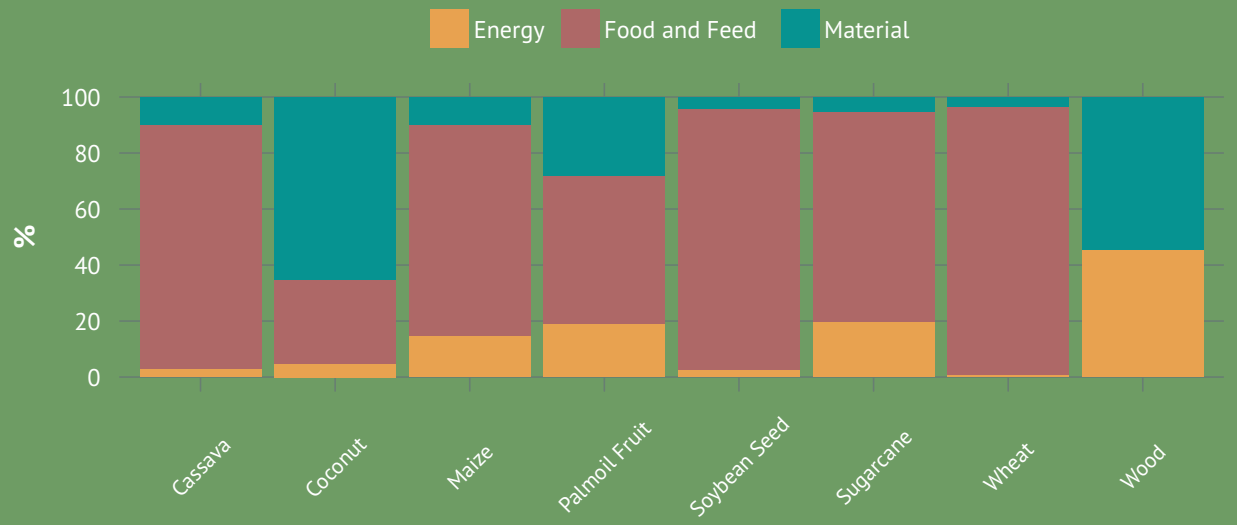
CHART 88: Natural fibre production (1990-2010)



Source: Statistics Division

Metalink: P4.ENV.FAO.BIO.NF.QP, p. 243

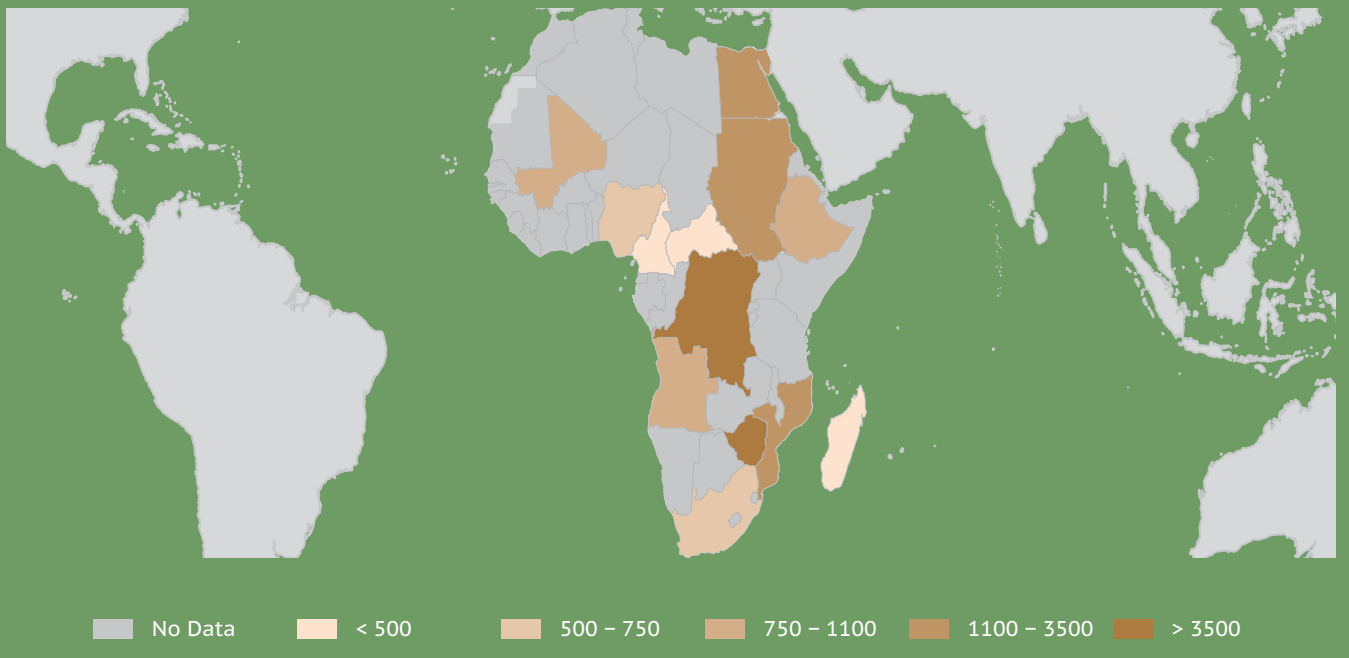
CHART 89: Share of food crop usage in world bio-based economy (2009)



Source: Statistics Division

Metalink: P4.ENV.FAO.BIO.FD.FDSTK, p. 249

MAP 60: Jute and jute-like fibre production (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.BIO.CT.QP, p. 242

TABLE 44: Land indicators

	Forest area		Carbon content in topsoil	Carbon stock	Land use change		
	p.a. growth	total	weight	in living forest biomass	p.a. growth		
					cropland	pasture	forest
	%	thousand ha	%	giga-tonnes	%	%	%
	1990-2009	2009	2005-2010	2010	1990-2009	1990-2009	1990-2009
NORTH AFRICA	0.2	7 849	0.6	315	0.3	0.2	0.2
Algeria	−0.6	1 501	0.8	70	0.5	0.3	−0.6
Egypt	2.4	69	0.4	7	1.8		2.4
Libyan Arab Jamahiriya	0.0	217	0.5	6	−0.3	0.1	0.0
Morocco	0.1	5 121	0.8	223	−0.2	0.0	0.1
Tunisia	2.0	940	0.7	9	0.1	1.3	2.0
WEST AFRICA	−1.1	74 361	0.8	6 082	1.5	0.2	−1.1
Benin	−1.2	4 611	0.8	263	2.5	0.0	−1.2
Burkina Faso	−1.0	5 709	0.8	292	2.7	0.0	−1.0
Cape Verde	2.0	85	1.2	5	2.0	0.0	2.0
Cote d'Ivoire	0.1	10 403	0.9	1 842	1.0	0.1	0.1
Gambia	0.4	478	0.9	32	4.2	−2.8	0.4
Ghana	−2.0	5 055	0.9	381	2.9	−0.1	−2.0
Guinea	−0.5	6 580	1.3	619	0.3	−0.0	−0.5
Guinea-Bissau	−0.5	2 032	1.1	96	2.2	0.0	−0.5
Liberia	−0.6	4 359	1.1	585	1.1	0.0	−0.6
Mali	−0.6	12 569	0.7	282	6.0	0.8	−0.6
Mauritania	−2.7	247	0.9	7	−0.1	0.0	−2.7
Niger	−2.4	1 216	0.6	37	1.6	1.4	−2.4
Nigeria	−3.1	9 451	0.8	1 085	0.8	−0.3	−3.1
Senegal	−0.5	8 513	0.8	340	1.2	−0.1	−0.5
Sierra Leone	−0.7	2 746	1.2	216	3.6	−0.0	−0.7
Togo	−4.1	307	0.9		0.4	0.0	−4.1
CENTRAL AFRICA	−0.3	254 909	1.1	32 186	0.2	0.0	−0.3
Cameroon	−1.0	20 136	1.1	2 696	0.1	0.0	−1.0
Central African Republic	−0.1	22 635	0.9	2 861	0.1	0.3	−0.1
Chad	−0.6	11 604	0.9	635	1.4	0.0	−0.6
Congo	−0.1	22 423	1.5	3 438	0.4	0.0	−0.1
Democratic Republic of the Congo	−0.2	154 446	1.1	19 639	−0.3	0.0	−0.2
Equatorial Guinea	−0.7	1 638	1.0	203	−0.7	0.0	−0.7
Gabon	0.0	22 000	1.0	2 710	0.2	−0.0	0.0
Sao Tome and Principe	0.0	27	2.8	4	1.6	0.0	0.0
EAST AFRICA	−0.7	131 790	1.3	4 666	1.5	−0.2	−0.7
Burundi	−2.6	174	1.0	17	−0.2	0.4	−2.6
Djibouti	0.0	6	0.5		3.7	1.4	0.0
Eritrea		1 536	0.6				
Ethiopia		12 437	0.9	219			
Kenya	−0.3	3 478	0.9	476	0.5	0.0	−0.3
Rwanda	1.5	425	8.3	39	1.5	−2.6	1.5
Somalia	−1.0	6 824	0.5	394	−0.1	0.0	−1.0
Sudan (former)	−0.5	70 003	0.7	1 393	2.4	0.3	−0.5
Uganda	−2.3	3 076	1.1	109	1.4	0.0	−2.3
United Republic of Tanzania	−1.1	33 831	1.6	2 019	0.7	0.0	−1.1
SOUTHERN AFRICA	−0.5	208 178	0.9	12 448	0.9	0.2	−0.5
Angola	−0.2	58 605	0.6	4 385	1.2	−0.0	−0.2
Botswana	−0.9	11 588	0.6	646	−2.7	0.0	−0.9
Comoros	−6.4	3	1.6		1.1	0.0	−6.4
Lesotho	0.5	44	1.3	2	0.3	0.0	0.5
Madagascar	−0.4	12 610	1.1	1 626	0.3	0.6	−0.4
Malawi	−0.9	3 270	1.3	144	2.4	0.0	−0.9
Mauritius	−0.5	35	1.9	2	−0.8	0.0	−0.5
Mozambique	−0.5	39 233	0.8	1 692	1.9	0.0	−0.5
Namibia	−0.9	7 364	0.3	210	1.1	0.0	−0.9
Seychelles	0.0	41		4	−1.5		0.0

TABLE 44: Land indicators (continued)

	Forest area		Carbon content in topsoil	Carbon stock	Land use change		
	p.a. growth	total	weight	in living forest biomass	p.a. growth		
					cropland	pasture	forest
	%	thousand ha	%	giga-tonnes	%	%	%
	1990-2009	2009	2005-2010	2010	1990-2009	1990-2009	1990-2009
South Africa	0.0	9 241	0.6	807	0.4	0.1	0.0
Swaziland	0.9	559	1.7	22	−0.1	−0.1	0.9
Zambia	−0.3	49 635	1.6	2 416	0.8	0.6	−0.3
Zimbabwe	−1.7	15 951	0.5	492	1.9	1.0	−1.7
AFRICA	−0.5	677 898	0.9	55 736	1.1	0.1	−0.5
ECOWAS	−1.1	74 114	0.8	6 075	1.5	0.3	−1.1
SADC	−0.4	396 453	1.0	34 106	0.7	0.1	−0.4
COMESA	−0.4	327 971	1.0	26 611	1.4	−0.1	−0.4
UMA	0.0	8 026	0.8	315	0.1	0.2	0.0
ECCAS	−0.2	313 688	1.0	36 588	0.3	0.0	−0.2
IGAD	−0.6	97 360	0.9	2 591	1.7	−0.3	−0.6
CEMAC	−0.3	100 436	1.0	12 543	0.5	0.0	−0.3
UEMOA	−0.6	45 361	0.8	3 152	2.0	0.7	−0.6
CEN-SAD	−0.6	196 741	0.8	12 085	1.4	0.3	−0.6
ASIA Developing	0.3	565 849	1.3	34 883	0.4	1.6	0.3
LAC	−0.5	959 538	1.9	97 511	0.6	0.2	−0.5
DEVELOPED REGIONS	0.0	1 801 480	2.5	79 558	−0.8	−1.6	0.0
WORLD	−0.2	4 038 719	1.5	270 265	0.0	0.0	−0.2

TABLE 45: Forestry indicators

	Forest characteristics			Primary designated functions of forest				
	primary forest	other naturally regener-ated forest	planted forest	production	protection and conservation	social services	multiple use	other or unknown
	thousand ha	thousand ha	thousand ha	%	%	%	%	%
	2010	2010	2010	2010	2010	2010	2010	2010
NORTH AFRICA	0	5 914	2 002	14.1	48.5	0.0	37.5	0.0
Algeria	0	1 088	404	35.0	65.0		0.0	0.0
Egypt	0	0	70	2.0	52.0	0.0	46.0	0.0
Libyan Arab Jamahiriya	0	0	217	0.0	100.0	0.0	0.0	0.0
Morocco	0	4 510	621	21.0	12.0	0.0	67.0	0.0
Tunisia	0	316	690	24.0	45.0	0.0	32.0	0.0
WEST AFRICA	3 145	67 817	2 515	31.5	24.3	0.1	12.6	32.0
Benin	0	4 542	19	31.0	28.0		40.0	0.0
Burkina Faso	0	5 540	109	11.0	6.0		84.0	0.0
Cape Verde	0	0	85	80.0	20.0	0.0	0.0	0.0
Cote d'Ivoire	625	9 441	337	89.0	11.0		0.0	0.0
Gambia	1	478	1		21.0	0.0	5.0	73.0
Ghana	395	4 285	260	23.0	8.0	1.0	0.0	68.0
Guinea	63	6 388	93	2.0	55.0	0.0	7.0	36.0
Guinea-Bissau	0	2 021	1	29.0	67.0	3.0	0.0	0.0
Liberia	175	4 146	8	25.0	4.0	0.0	0.0	71.0
Mali	0	11 960	530	47.0	38.0	0.0	15.0	0.0
Mauritania	0	221	21	0.0	27.0	0.0	73.0	0.0
Niger	220	836	148	1.0		0.0	81.0	0.0
Nigeria	0	8 659	382	29.0	28.0	0.0	0.0	43.0
Senegal	1 553	6 456	464	60.0			22.0	0.0
Sierra Leone	113	2 599	15	9.0	7.0	0.0	0.0	84.0
Togo	0	245	42	68.0	32.0	0.0	0.0	0.0
CENTRAL AFRICA				30.6	15.9	0.2	5.4	47.9
Cameroon				73.0	20.0	1.0	6.0	
Central African Republic	2 370	20 233	2	21.0	1.0	0.0	78.0	0.0
Chad	184	11 324	17	90.0		0.0	0.0	0.0
Congo	7 436	14 900	75	88.0	4.0	0.0	7.0	0.0
Democratic Republic of the Congo			59	5.0	17.0	0.0	0.0	78.0
Equatorial Guinea	0	1 626		5.0	36.0	3.0	53.0	3.0
Gabon	14 334	7 636	30	45.0	18.0		36.0	0.0
Sao Tome and Principe	11	16	0					
EAST AFRICA	14 691	108 783	7 546	26.7	22.6	1.8	36.5	13.5
Burundi	40	63	69	9.0	0.0	0.0	0.0	91.0
Djibouti	0	6	0	0.0	0.0	0.0	100.0	0.0
Eritrea	0	1 498	34	2.0	6.0	0.0	1.0	91.0
Ethiopia	0	11 785	511	4.0	0.0	0.0	96.0	0.0
Kenya	654	2 616	197	6.0	94.0	0.0	0.0	0.0
Rwanda	7	55	373	74.0	12.0	0.0	14.0	0.0
Somalia	0	6 744	3		0.0	0.0	100.0	0.0
Sudan (former)	13 990	49 891	6 068	50.0	20.0	0.0	0.0	30.0
Uganda	0	2 937	51	12.0	36.0	15.0	0.0	37.0
United Republic of Tanzania	0	33 188	240	71.0	6.0	0.0	24.0	0.0
SOUTHERN AFRICA	5 720	198 158	3 074	26.1	18.5	0.1	36.3	19.0
Angola	0	58 352	128	4.0	3.0	0.0	0.0	93.0
Botswana	0	11 351	0	0.0	0.0	0.0	100.0	0.0
Comoros	0	2	1	33.0	67.0	0.0	0.0	0.0
Lesotho	0	34	10	24.0	0.0	0.0	76.0	0.0
Madagascar	3 036	9 102	415	26.0	39.0	0.0	34.0	0.0
Malawi	934	1 938	365	37.0	23.0	0.0	0.0	40.0
Mauritius	0	20	15	30.0	61.0	7.0	2.0	0.0
Mozambique	0	38 960	62	67.0	33.0	0.0	0.0	0.0
Namibia	0	7 290		0.0	9.0	0.0	22.0	69.0
Seychelles	2	34	5	1.0	21.0	0.0	14.0	64.0
South Africa	947	6 531	1 763	19.0	10.0	0.0	71.0	0.0

TABLE 45: Forestry indicators (continued)

	Forest characteristics			Primary designated functions of forest				
	primary forest	other naturally regener-ated forest	planted forest	production	protection and conservation	social services	multiple use	other or unknown
	thousand ha	thousand ha	thousand ha	%	%	%	%	%
	2010	2010	2010	2010	2010	2010	2010	2010
Swaziland	0	423	140	25.0	0.0	0.0	0.0	75.0
Zambia	0	49 406	62	24.0	22.0	0.0	17.0	37.0
Zimbabwe	801	14 715	108	10.0	8.0	0.0	82.0	0.0
AFRICA	47 947	437 154	15 326	30.0	17.0	0.6	17.0	35.0
ECOWAS	3 145	67 596	2 494	31.8	24.2	0.1	11.9	32.4
SADC	5 720	231 344	3 372	28.4	15.9	0.0	25.6	30.1
COMESA	19 464	144 491	8 760	13.8	30.9	1.2	31.3	22.8
UMA	0	6 135	1 953	24.7	44.3	0.0	31.1	0.0
ECCAS				25.5	13.1	0.2	4.3	57.0
IGAD	14 644	75 477	6 864	15.3	27.4	2.3	41.6	14.0
CEMAC	24 324	55 719		71.4	14.4	0.5	14.0	0.1
UEMOA	2 398	41 041	1 650	43.3	21.4	0.1	36.5	0.0
CEN-SAD	20 354	164 973	10 350	26.2	33.9	0.1	20.8	21.0
ASIA Developing	104 944	348 573	112 332	35.8	35.8	0.9	26.4	1.3
LAC	663 075	226 028	18 154	14.5	23.5	8.7	23.0	32.3
DEVELOPED REGIONS	514 589	1 165 193	117 804	34.9	27.9	3.7	29.4	5.7
WORLD	1 358 851	2 181 405	263 970	30.0	20.0	4.0	24.0	23.0

TABLE 46: Water withdrawal

	Water withdrawal by sector			Water withdrawal		% of freshwater res withdr	% of freshwater resources withdrawn
	share of total			total	per capita	total	by agriculture
	agricultural %	industrial %	municipal %	million m^3/yr	m^3/inhab/yr	%	%
	2005	2005	2005	2005	2005	2005	2005
NORTH AFRICA							
Algeria	61	15	24	6472	197	55.5	33.8
Egypt	86	6	8	68300	920	119.2	103.0
Libyan Arab Jamahiriya	83	3	14	4326	750	721.0	597.3
Morocco	84	4	12	13115	432	45.2	38.0
Tunisia	82	4	14	2640	266	57.5	47.1
WEST AFRICA							
Benin	45	23	32	130	17	0.5	0.2
Burkina Faso	63	2	35	1087	77	8.7	5.5
Cape Verde	91	2	7	22	47	7.3	6.7
Cote d'Ivoire							
Gambia	24	26	50	82	55	1.0	0.3
Ghana	66	10	24	982	45	1.8	1.2
Guinea	83	3	14	1641	182	0.7	0.6
Guinea-Bissau	76	6	18	190	139	0.6	0.5
Liberia	31	28	41	194	61	0.1	0.0
Mali	90	1	9	6546	497	6.5	5.9
Mauritania	92	2	6	1627	534	14.3	13.2
Niger	86	1	12	2407	185	7.2	6.2
Nigeria	48	17	35	11574	83	4.0	1.9
Senegal	93	3	4	2221	204	5.7	5.3
Sierra Leone	68	11	21	517	100	0.3	0.2
Togo	34	3	63	223	41	1.5	0.5
CENTRAL AFRICA							
Cameroon	68	10	23	1081	62	0.4	0.3
Central African Republic	1	16	82	73	18	0.1	0.0
Chad	48	26	26	397	41	0.9	0.4
Congo	4	26	69	92	26	0.0	0.0
Democratic Republic of the Congo	15	20	64	722	13	0.1	0.0
Equatorial Guinea	5	15	80	20	33	0.1	0.0
Gabon	34	9	57	149	109	0.1	0.0
Sao Tome and Principe							
EAST AFRICA							
Burundi	79	5	15	280	39	2.2	1.8
Djibouti	16	0	84	19	24	6.3	1.0
Eritrea	95	0	5	582	130	9.2	8.7
Ethiopia	86	1	13	6065	82	5.0	4.3
Kenya	79	4	17	2735	77	8.9	7.1
Rwanda	55	11	33	184	20	1.9	1.1
Somalia	99	0	0	3298	394	22.4	22.3
Sudan (former)	96	1	3	37513	977	58.2	55.9
Uganda	43	16	41	279	10	0.4	0.2
United Republic of Tanzania	89	0	10	5184	134	5.4	4.8
SOUTHERN AFRICA							
Angola	27	31	42	769	47	0.5	0.1
Botswana	39	19	42	207	110	1.7	0.7
Comoros	47	5	48	10	16	0.8	0.4
Lesotho	20	40	40	50	24	1.7	0.3
Madagascar	97	1	2	14768	826	4.4	4.2
Malawi	81	5	14	1001	78	5.8	4.7
Mauritius	68	3	30	725	577	26.4	17.8
Mozambique	65	4	30	840	40	0.4	0.3

TABLE 46: Water withdrawal (continued)

	Water withdrawal by sector			Water withdrawal		% of freshwater res withdr	% of freshwater resources withdrawn
	share of total			total	per capita	total	by agriculture
	agricultural %	industrial %	municipal %	million m^3/yr	m^3/inhab/yr	%	%
	2005	2005	2005	2005	2005	2005	2005
Namibia	71	5	24	300	144	1.7	1.2
Seychelles	7	28	66	14	163		
South Africa	57	7	36	13 677	286	27.4	15.7
Swaziland	94	2	4	1 068	967	23.7	22.3
Zambia	76	7	17	1 740	152	1.7	1.3
Zimbabwe	79	7	14	4 205	335	21.0	16.6
AFRICA							
ECOWAS							
SADC							
COMESA							
UMA							
ECCAS							
IGAD							
CEMAC							
UEMOA							
CEN-SAD							
ASIA Developing							
LAC							
DEVELOPED REGIONS							
WORLD	70	19	12	3 941 055	607	9.3	6.5

TABLE 47: Agricultural emissions and pollution

	Greenhouse gas emissions		Methane emissions		Nitrous oxide emissions	
	by agriculture	share of agriculture in total	total	by agriculture	total	by agriculture
	gigagrams	%	thousand kt	%	thousand kt	%
	2000-2010	2000-2008	2000-2005	2000-2005	2000-2005	2000-2005
NORTH AFRICA			135	20.6	33	75.3
Algeria	6 534.6	5.9	54	8.2	5	58.6
Egypt	31 799.0	16.5	47	31.7	19	80.0
Libyan Arab Jamahiriya			15	5.7	1	51.9
Morocco	20 927.5	35.0	11	51.7	6	82.6
Tunisia			8	25.5	2	66.4
WEST AFRICA				23.9		67.8
Benin			4	47.8	3	61.5
Burkina Faso						
Cape Verde						
Cote d'Ivoire	194 611.9	71.8	11	17.4	7	29.3
Gambia						
Ghana			9	39.5	5	70.5
Guinea						
Guinea-Bissau						
Liberia						
Mali						
Mauritania	5 667.5	81.6				
Niger	10 635.0	78.0				
Nigeria			130	19.8	22	77.3
Senegal	6 260.5	37.1	7	68.3	4	88.5
Sierra Leone						
Togo			3	39.8	2	67.5
CENTRAL AFRICA				25.7		38.3
Cameroon			19	42.4	9	75.9
Central African Republic						
Chad						
Congo	324.7	15.7	6	31.9	4	51.8
Democratic Republic of the Congo	34 582.7	75.2	56	23.1	55	31.3
Equatorial Guinea						
Gabon			8	1.1	0	23.3
Sao Tome and Principe						
EAST AFRICA				74.8		88.6
Burundi	25 917.3	97.9				
Djibouti						
Eritrea			2	73.2	1	90.9
Ethiopia			52	72.5	31	88.8
Kenya			22	65.5	11	88.8
Rwanda	958.4	40.2				
Somalia						
Sudan (former)			67	85.2	49	92.6
Uganda						
United Republic of Tanzania			32	63.2	22	78.8
SOUTHERN AFRICA				40.8		59.4
Angola			45	27.9	39	38.4
Botswana			5	84.1	3	92.0
Comoros						
Lesotho						
Madagascar	26 550.1	90.5				
Malawi						
Mauritius						
Mozambique			13	44.2	10	71.4
Namibia			5	94.9	4	94.3
Seychelles						
South Africa			64	31.4	24	59.8
Swaziland						
Zambia			19	59.3	25	71.7

TABLE 47: Agricultural emissions and pollution (continued)

	Greenhouse gas emissions		Methane emissions		Nitrous oxide emissions	
	by agriculture	share of agriculture in total	total	by agriculture	total	by agriculture
	gigagrams	%	thousand kt	%	thousand kt	%
	2000-2010	2000-2008	2000-2005	2000-2005	2000-2005	2000-2005
Zimbabwe			10	73.3	6	85.2
AFRICA				39.6		66.9
ECOWAS				23.9		67.8
SADC				39.6		53.4
COMESA				54.6		70.5
UMA				14.7		69.0
ECCAS				26.4		38.3
IGAD				77.4		90.9
CEMAC				30.1		67.4
UEMOA				39.4		54.3
CEN-SAD				40.5		81.2
ASIA Developing			3 322	45.4	1 113	71.8
LAC				58.1		72.4
DEVELOPED REGIONS		12.8	2 062	31.6	925	56.5
WORLD			7 136	42.6	2 853	66.2

TABLE 48: Agricultural pollution

	Energy use in oil equivalent		Air pollution	Water pollution			
	by agriculture	share of agriculture in total	urban	food industry	paper and pulp industry	textile industry	wood industry
			annual PM10[mg/m3]	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions
	kt	%	PM10	%	%	%	%
	2005-2009	2005-2009	2004	2000-2007	2000-2007	2000-2007	2000-2007
NORTH AFRICA		7.2	93.4				
Algeria			65.0				
Egypt	2 618.6	5.3	136.0				
Libyan Arab Jamahiriya	224.9	2.1	121.0				
Morocco	1 721.6	14.8	27.0	16.3	2.9	43.5	2.0
Tunisia	423.7	6.5	46.0				
WEST AFRICA			84.9				
Benin			51.0				
Burkina Faso			97.0				
Cape Verde			33.0				
Cote d'Ivoire	64.9	1.1					
Gambia			138.0				
Ghana	91.5	1.2	42.0	18.6	3.8	10.2	33.3
Guinea			63.0				
Guinea-Bissau			84.0				
Liberia			39.0				
Mali			102.0				
Mauritania			42.0				
Niger			86.0				
Nigeria			95.0				
Senegal	6.1	0.3	93.0	44.6	6.3	10.5	0.8
Sierra Leone			69.0				
Togo			45.0				
CENTRAL AFRICA			62.4				
Cameroon	4.4	0.1	86.0				
Central African Republic			24.0				
Chad			73.0				
Congo			74.0				
Democratic Republic of the Congo	0.1	0.0	57.0				
Equatorial Guinea			12.0				
Gabon	8.3	0.5	13.0				
Sao Tome and Principe			76.0				
EAST AFRICA			85.9				
Burundi			99.0				
Djibouti			68.0				
Eritrea			109.0	27.3	4.4	29.0	
Ethiopia			88.0	34.7	6.0	27.9	1.5
Kenya	110.4	0.9	38.0				
Rwanda			100.0				
Somalia			35.0				
Sudan (former)	54.1	0.5	219.0	57.5	1.9	8.0	1.7
Uganda			33.0	34.8	7.8	17.2	
United Republic of Tanzania	717.7	4.2	38.0	61.2	4.8	12.7	2.9
SOUTHERN AFRICA			54.0				
Angola	4.1	0.0	113.0				
Botswana	20.3	1.1	25.0	43.8	2.4	3.9	
Comoros			125.0				
Lesotho			94.0	2.6	0.5	93.5	
Madagascar			51.0	7.6	1.6	58.9	6.3
Malawi			88.0	82.1	1.4	7.5	1.1
Mauritius			47.0	14.7	3.6	63.9	0.7
Mozambique	7.2	0.1	44.0				
Namibia	223.4	13.9	50.0				
Seychelles							
South Africa	1 535.0	2.2	24.0	15.7	6.6	10.4	4.2

TABLE 48: Agricultural pollution (continued)

	Energy use in oil equivalent		Air pollution	Water pollution			
	by agriculture	share of agriculture in total	urban	food industry	paper and pulp industry	textile industry	wood industry
			annual PM10[mg/m3]	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions
	kt	%	PM10	%	%	%	%
	2005-2009	2005-2009	2004	2000-2007	2000-2007	2000-2007	2000-2007
Swaziland			71.0				
Zambia	39.7	0.7	71.0				
Zimbabwe	641.4	7.7	43.0				
AFRICA			79.1				
ECOWAS			85.5				
SADC			51.9				
COMESA			93.9				
UMA			52.0				
ECCAS			71.8				
IGAD			94.7				
CEMAC			70.8				
UEMOA			85.4				
CEN-SAD			95.0				
ASIA Developing			87.3				
LAC			46.1				
DEVELOPED REGIONS	59 540.2	2.3	30.0				
WORLD		2.0	72.2				

TABLE 49: Conservation and renewable feedstocks

	Nationally protected area	Organic agriculture	Production					
	share of total area	% of total area	biofuel			natural fibre		recovered paper
					p.a. growth		p.a. growth	
	%	%	kt	kt	%	thousand tonnes	%	thousand tonnes
	2000-2009	2009	2000	2009	2000-2009	2009	1961-2009	2010
NORTH AFRICA	3.0	0.2	2910.8	3566.6	2.3	112	−2.4	487000
Algeria	6.3	0.0	76.5	57.2	−3.2	0	−7.6	32000
Egypt	5.9	1.5	1325.1	1567.3	1.9	110	−2.4	380000
Libyan Arab Jamahiriya	0.1		139.6	168.0	2.1			
Morocco	1.5	0.0	436.0	480.1	1.1	2	−0.4	35000
Tunisia	1.3	1.7	933.6	1294.0	3.7	1	2.5	40000
WEST AFRICA	10.4	0.1	88058.2	111530.8	2.7	625	4.8	14000
Benin	23.8	0.0	1445.0	1995.6	3.7	92	11.1	
Burkina Faso	14.2	0.1				183	12.0	
Cape Verde	2.5							
Cote d'Ivoire	22.6	0.1	4223.6	7780.4	7.0	53	7.5	6000
Gambia	1.5					0	*Inf*	
Ghana	14.7	0.2	5315.2	6456.0	2.2	8	*Inf*	
Guinea	6.8					11	10.3	
Guinea-Bissau	16.1					2	*Inf*	
Liberia	1.8							
Mali	2.4	0.1				73	7.5	
Mauritania	0.5							
Niger	7.1	0.0				2	2.0	
Nigeria	12.8	0.0	74154.7	91907.2	2.4	178	2.6	8000
Senegal	24.1	0.3	1163.6	1208.5	0.4	6	8.2	0
Sierra Leone	4.9	2.1				5	−0.5	
Togo	11.3	0.1	1756.1	2183.1	2.4	13	3.2	
CENTRAL AFRICA	12.9	0.0	22255.3	27735.2	2.5	96	0.7	
Cameroon	9.2	0.0	4984.7	4436.5	−1.3	60	4.1	
Central African Republic	17.7					3	−2.3	
Chad	9.4					20	0.4	
Congo	9.4		587.6	716.9	2.2			
Democratic Republic of the Congo	10.0	0.0	15758.4	21473.1	3.5	13	−2.0	
Equatorial Guinea	19.2					0	−0.7	
Gabon	15.1		924.6	1108.7	2.0			
Sao Tome and Principe		6.4						
EAST AFRICA	9.3	0.3	52690.4	72806.0	3.7	273	−1.3	46500
Burundi	4.8	0.0				1	−2.2	
Djibouti	0.0							
Eritrea	5.0		507.7	561.3	1.1			
Ethiopia	18.4	0.4	17423.9	30052.0	6.2	41		2500
Kenya	11.8	0.0	11245.0	14233.7	2.7	29	−1.7	38000
Rwanda	10.0	0.2				0	−100.0	
Somalia	0.6					2	1.8	
Sudan (former)	4.2	0.3	11055.9	10754.4	−0.3	62	−1.3	6000
Uganda	10.3	1.6				23	−2.2	
United Republic of Tanzania	27.5	0.2	12457.8	17204.6	3.7	115	−1.6	
SOUTHERN AFRICA	15.2	0.0	36278.8	42849.5	1.9	255	0.8	1176398
Angola	12.4	0.0	5538.2	7150.4	2.9	2	−7.0	
Botswana	30.9		542.6	483.2	−1.3	1	−0.9	
Comoros	0.0	0.8				0	−100.0	
Lesotho	0.5	0.0						
Madagascar	3.1	0.0				23	−0.2	2200
Malawi	15.0	0.0				27	4.3	
Mauritius	4.5	0.0				0	−5.6	3000
Mozambique	15.8	0.0	6417.6	7987.8	2.5	60	−0.2	5000
Namibia	14.9	0.0	172.9	205.7	1.9	2	*Inf*	
Seychelles	42.0							0
South Africa	6.9	0.1	12872.4	14428.8	1.3	13	0.6	1090198

TABLE 49: Conservation and renewable feedstocks (continued)

	Nationally protected area	Organic agriculture	Production					
	share of total area	% of total area	biofuel			natural fibre		recovered paper
					p.a. growth		p.a. growth	
	%	%	kt	kt	%	thousand tonnes	%	thousand tonnes
	2000-2009	2009	2000	2009	2000-2009	2009	1961-2009	2010
Swaziland	3.0	0.0				0	−3.9	6 000
Zambia	36.0	0.0	5 144.1	6 357.0	2.4	44	*Inf*	
Zimbabwe	28.0	0.0	5 591.0	6 236.6	1.2	83	8.8	70 000
AFRICA	11.1	0.1	202 193.4	258 488.2	2.8	1 363	0.3	1 723 898
ECOWAS	11.1	0.1	88 058.2	111 530.8	2.7	625	4.8	14 000
SADC	16.7	0.0	64 494.9	81 527.2	2.6	383	−0.4	1 176 398
COMESA	11.2	0.3	68 190.8	91 403.4	3.3	456	−0.8	507 700
UMA	2.0	0.1	1 585.6	1 999.3	2.6	2	−0.5	107 000
ECCAS	11.9	0.0	27 793.4	34 885.6	2.6	99	−0.7	
IGAD	7.2	0.3	40 232.6	55 601.4	3.7	157	−1.0	46 500
CEMAC	13.3	0.0	6 496.9	6 262.1	−0.4	84	1.8	
UEMOA	15.2	0.1	8 588.3	13 167.6	4.9	424	8.3	6 000
CEN-SAD	8.2	0.1	113 701.2	140 589.7	2.4	854	0.6	513 000
ASIA Developing	9.6	0.2	514 021.4	551 414.6	0.8	19 253	2.4	64 663 116
LAC	15.7	1.2	90 732.1	123 613.2	3.5	1 782	−0.0	9 787 000
DEVELOPED REGIONS	14.1	1.5	147 342.5	198 962.5	3.4	3 452	−0.1	131 830 091
WORLD	12.3	0.7	954 280.6	1 132 462.3	1.9	25 849	1.1	208 004 105

TABLE 50: Forestry production

	Production of selected forest products					
	industrial roundwood		woodfuel		total roundwood	
	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %
	2010	1961-2010	2010	1961-2010	2010	1961-2010
NORTH AFRICA	1077	1.5	29235	0.8	30312	0.8
Algeria	103	−0.4	8176	2.2	8279	2.1
Egypt	268	3.2	17511	1.1	17779	1.2
Libyan Arab Jamahiriya	116	3.5	952	2.5	1068	2.5
Morocco	372	0.7	411	−5.1	783	−3.9
Tunisia	218	3.0	2185	1.1	2403	1.2
WEST AFRICA	17311	1.8	176919	1.4	194230	1.5
Benin	427	2.5	6275	0.5	6702	0.6
Burkina Faso	1171	3.7	12785	1.5	13956	1.7
Cape Verde			193	1.8	193	1.8
Cote d'Ivoire	1469	−0.1	8947	0.7	10416	0.6
Gambia	113	6.2	694	2.5	807	2.7
Ghana	1250	−0.9	37791	3.7	39041	3.2
Guinea	651	1.9	11959	0.6	12610	0.7
Guinea-Bissau	132	0.7	2600	3.9	2732	3.6
Liberia	480	2.4	7008	3.1	7488	3.1
Mali	413	1.7	5326	1.5	5739	1.5
Mauritania	3	0.0	1836	2.1	1839	2.1
Niger	701	3.6	2857	0.6	3558	0.9
Nigeria	9418	2.9	63215	1.1	72633	1.3
Senegal	794	2.2	5427	1.3	6221	1.4
Sierra Leone	124	0.5	5582	−0.0	5705	0.0
Togo	166	1.5	4424	0.5	4590	0.5
CENTRAL AFRICA	14536	2.0	98538	2.4	113074	2.4
Cameroon	2175	2.2	9906	0.8	12081	1.0
Central African Republic	648	2.2	2000	0.5	2648	0.8
Chad	761	1.8	7070	2.0	7831	2.0
Congo	2426	3.2	1336	1.0	3762	2.1
Democratic Republic of the Congo	4592	2.1	76602	3.0	81194	2.9
Equatorial Guinea	525	1.1	447	0.8	972	1.0
Gabon	3400	1.4	1070	2.3	4470	1.6
Sao Tome and Principe	9		107	1.7	116	1.9
EAST AFRICA	14967	2.7	237920	2.0	252887	2.0
Burundi	883	7.5	9846	2.1	10729	2.3
Djibouti	0		356		356	10.2
Eritrea	1		1264		1265	
Ethiopia	2935		101274		104209	
Kenya	1246	2.1	26400	2.4	27646	2.4
Rwanda	1212	6.6	5000	1.2	6212	1.6
Somalia	110	2.0	12532	3.2	12642	3.2
Sudan (former)	2173	1.8	18776	1.4	20949	1.4
Uganda	4093	3.4	39636	2.1	43729	2.2
United Republic of Tanzania	2314	2.2	22836	1.3	25150	1.4
SOUTHERN AFRICA	25398	2.6	74005	2.4	99403	2.4
Angola	1096	1.1	4009	2.6	5105	2.2
Botswana	105	2.5	683	0.4	788	0.5
Comoros	25		266	3.8	291	4.0
Lesotho			2092	0.7	2092	0.7
Madagascar	281	−0.8	13100	3.7	13381	3.4
Malawi	1400	4.7	5405	1.1	6805	1.5
Mauritius	5	−2.9	9	−3.1	14	−3.1
Mozambique	1416	1.1	16724	1.9	18140	1.8
Namibia			822	1.8	822	1.8
Seychelles	10		3		13	
South Africa	18888	2.9	12000	5.8	30888	3.6
Swaziland	330	1.8	1063		1393	4.8
Zambia	1325	3.1	9119	2.1	10444	2.2

TABLE 50: Forestry production (continued)

	Production of selected forest products					
	industrial roundwood		woodfuel		total roundwood	
	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %
	2010	1961-2010	2010	1961-2010	2010	1961-2010
Zimbabwe	518	2.1	8 709	1.6	9 227	1.7
AFRICA	73 294	2.2	616 675	1.8	689 969	1.9
ECOWAS	17 308	1.8	175 083	1.4	192 391	1.5
SADC	32 279	2.5	173 177	2.4	205 456	2.4
COMESA	21 413	2.6	335 292	2.2	356 704	2.2
UMA	812	1.2	13 560	0.5	14 372	0.6
ECCAS	16 515	2.1	112 393	2.4	128 908	2.3
IGAD	10 558	2.5	200 238	2.1	210 797	2.1
CEMAC	9 935	2.0	21 829	1.2	31 764	1.4
UEMOA	5 273	1.4	48 641	1.1	53 914	1.1
CEN-SAD	23 258	1.8	266 556	1.5	289 814	1.5
ASIA Developing	250 841	2.3	764 934	−0.1	1 015 776	0.2
LAC	207 517	3.8	282 923	1.1	490 440	1.8
DEVELOPED REGIONS	995 731	0.3	197 054	−0.5	1 192 785	0.1
WORLD	1 533 819	0.8	1 867 470	0.5	3 401 289	0.6

TABLE 51: Forestry production: finished products

	Production of selected forest products							
	sawnwood		wood-based panels		paper and paperboard		wood pulp	
	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %
	2010	1961-2010	2010	1961-2010	2010	1961-2010	2010	1961-2010
NORTH AFRICA	159	1.2	246	6.6	996	4.2	262	5.4
Algeria	13	−3.0	48		46	0.3		
Egypt	12		59	5.1	660	5.4	41	
Libyan Arab Jamahiriya	31	3.8			6	2.0		
Morocco	83	2.8	35	3.7	127	2.4	221	5.0
Tunisia	20	4.4	104		157	7.3		
WEST AFRICA	3505	2.5	1049	7.3	20		23	
Benin	84	4.9						
Burkina Faso	5							
Cape Verde								
Cote d'Ivoire	700	3.8	477	10.2				
Gambia	1							
Ghana	513	0.4	430	8.3				
Guinea	30	1.2	42					
Guinea-Bissau	16	1.4						
Liberia	80	1.2	0					
Mali	13	0.7						
Mauritania	14		2		1			
Niger	4							
Nigeria	2002	3.5	97	3.3	19		23	
Senegal	23	0.3			0			
Sierra Leone	5	−1.3						
Togo	15	6.5	1					
CENTRAL AFRICA	1416	2.5	445	2.4	6	4.8	0	
Cameroon	838	4.7	80	3.9	0		0	
Central African Republic	45	0.3	5					
Chad	2							
Congo	179	3.6	60	3.9	3			
Democratic Republic of the Congo	92	−1.8	4	−4.5	3	3.3		
Equatorial Guinea	4	−2.6	28					
Gabon	250	4.8	268	2.7				
Sao Tome and Principe	5							
EAST AFRICA	584	1.7	216	8.0	109	8.9	56	
Burundi	83							
Djibouti								
Eritrea								
Ethiopia	18		103		78			
Kenya	142	2.2	83		0	−100.0	0	
Rwanda	135		0					
Somalia	14	2.1	0					
Sudan (former)	51	1.9	2		3			
Uganda	117	2.2	24	4.0	3			
United Republic of Tanzania	24	−2.9	5	5.1	25		56	
SOUTHERN AFRICA	2667	1.8	815	4.5	2690	5.3	2376	4.4
Angola	5	−5.2	11		0	−100.0	15	
Botswana								
Comoros								
Lesotho								
Madagascar	104	1.7	1		10		1	
Malawi	45	2.9	18					
Mauritius	2	−0.3	0		0		0	
Mozambique	198	1.0	1	−0.8	2			
Namibia								
Seychelles	1		0		0		0	
South Africa	1876	1.8	690	4.1	2516	5.3	2298	4.5
Swaziland	102	2.5	8		49		15	0.9
Zambia	157	3.4	18		4			

TABLE 51: Forestry production: finished products (continued)

	Production of selected forest products							
	sawnwood		wood-based panels		paper and paperboard		wood pulp	
	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %	thousand m^3	p.a. growth %
	2010	1961-2010	2010	1961-2010	2010	1961-2010	2010	1961-2010
Zimbabwe	177	2.4	68		109	5.2	47	5.2
AFRICA	8 332	2.2	2 771	4.8	3 821	5.0	2 717	4.6
ECOWAS	3 491	2.5	1 047	7.3	19		23	
SADC	2 783	1.3	824	3.7	2 718	5.4	2 432	4.5
COMESA	1 269	1.7	388	4.2	925	5.6	104	4.2
UMA	161	1.3	189	7.4	337	2.8	221	5.0
ECCAS	1 504	2.3	456	2.5	6	2.4	15	
IGAD	342	1.6	211	8.2	84	8.3	0	
CEMAC	1 318	4.0	441	3.2	3		0	
UEMOA	860	3.5	478	10.3	0			
CEN-SAD	3 911	2.5	1 336	7.2	973	4.8	285	5.6
ASIA Developing	84 886	2.8	137 460	11.2	148 318	8.0	18 109	6.5
LAC	42 969	2.6	16 654	7.1	19 694	5.0	20 960	7.3
DEVELOPED REGIONS	253 735	−0.2	121 986	3.3	229 835	2.5	128 815	1.6
WORLD	390 141	0.4	278 983	4.9	401 668	3.5	170 601	2.1

PART

5

Metadata

TIME PERIODS

2011	calendar year
1991-2011	annual period from 1991 to 2011
1991-2011*	closest to year 2011 within the annual period

SYMBOLS AND UNITS

ha	hectare
kg	kilogram
US$	United States dollar
tonne	metric tonne (1000 kg)
kt	kilotonne (1000 tonnes)
billion	thousand million
kcal	kilocalories
mm	millimetre
mg	milligram
km^3	cubic kilometre

m^3	cubic metre
km^2	square kilometre
mt	metric tonne
p.a. growth	per annum growth

TABLE 52: List of countries

Developed regions			
North America	Asia and Oceania	Europe	European Union[12]
Bermuda	Australia	Albania	Austria
Canada	Israel	Andorra	Belgium
United States of America	Japan	Austria	Bulgaria
Greenland	New Zealand	Belarus	Cyprus[13]
Saint Pierre and Miquelon		Belgium	Czech Republic
		Bosnia and Herzegovina	Denmark
		Bulgaria	Estonia
		Croatia	Finland
		Czech Republic	France
		Denmark	Germany
		Estonia	Greece
		Faroe Islands	Hungary
		Finland	Ireland
		France	Italy
		Germany	Latvia
		Gibraltar	Lithuania
		Greece	Luxembourg
		Holy See	Malta
		Hungary	Netherlands
		Iceland	Poland
		Ireland	Portugal
		Italy	Romania
		Latvia	Slovakia
		Liechtenstein	Slovenia
		Lithuania	Spain
		Luxembourg	Sweden
		Malta	United Kingdom
		Monaco	
		Montenegro	
		Netherlands	
		Norway	
		Poland	
		Portugal	
		Republic of Moldova	
		Romania	
		Russian Federation	
		San Marino	
		Serbia[14]	
		Slovakia	
		Slovenia	
		Spain	
		Sweden	
		Switzerland	
		The former Yugoslav Republic of Macedonia	
		Ukraine	
		United Kingdom	

[12] The European Union is treated as a group (EU27) and forms the geograpghical aggregate for Europe excluding Cyprus.
[13] Situated in West Asia, excluded from the Europe aggregate
[14] Kosovo is not considered to be a part of Serbia in World Bank sourced data.

Developing regions							
Africa		Asia					
North Africa	Sub-Saharan Africa	Central Asia	East Asia	South Asia	West Asia	Latin America and Caribbean	Oceania
Algeria	Angola	Kazakhstan	Brunei Darussalam	Afghanistan	Armenia	Antigua and Barbuda	Fiji
Egypt	Benin	Kyrgyzstan	Cambodia	Bangladesh	Azerbaijan	Argentina	French Polynesia
Libyan Arab Jamahiriya	Botswana	Tajikistan	China[15]	Bhutan	Bahrain	Bahamas	Kiribati
Morocco	Burkina Faso	Turkmenistan	Indonesia	India	Cyprus	Barbados	New Caledonia
Tunisia	Burundi	Uzbekistan	Democratic People's Republic of Korea	Iran (Islamic Republic of)	Gaza Strip (Palestine)	Belize	Papua New Guinea
Western Sahara	Cameroon		Republic of Korea	Maldives	Georgia	Bolivia (Plurinational State of)	Samoa
	Cape Verde		Lao People's Democratic Republic	Nepal	Iraq	Brazil	Solomon Islands
	Central African Republic		Malaysia	Pakistan	Jordan	Chile	Tonga
	Chad		Mongolia	Sri Lanka	Kuwait	Colombia	Vanuatu
	Comoros		Myanmar		Lebanon	Costa Rica	American Samoa
	Congo		Philippines		Occupied Palestinian Territory[16]	Cuba	Cook Islands
	Côte d'Ivoire		Singapore		Saudi Arabia	Dominica	Guam
	Democratic Republic of the Congo		Thailand		Syrian Arab Republic	Dominican Republic	Marshall Islands
	Djibouti		Timor-Leste		Turkey	Ecuador	Micronesia (Federated States of)
	Equatorial Guinea		Viet Nam		United Arab Emirates	El Salvador	Nauru
	Eritrea				West Bank	French Guiana	Niue
	Ethiopia				Yemen	Grenada	Northern Mariana Islands
	Gabon				Oman	Guatemala	Palau
	Gambia				Qatar	Guyana	Tokelau
	Ghana					Haiti	Tuvalu
	Guinea					Honduras	Wallis and Futuna Islands
	Guinea-Bissau					Jamaica	
	Kenya					Mexico	
	Lesotho					Netherlands Antilles	
	Liberia					Nicaragua	
	Madagascar					Panama	
	Malawi					Paraguay	
	Mali					Peru	
	Mauritania					Saint Kitts and Nevis	
	Mauritius					Saint Lucia	
	Mayotte					Saint Vincent and the Grenadines	
	Mozambique					Suriname	
	Namibia					Trinidad and Tobago	
	Niger					Uruguay	
	Nigeria					Venezuela (Bolivarian Republic of)	
	Réunion					Anguilla	
	Rwanda					Aruba	
	Saint Helena					British Virgin Islands	
	Sao Tome and Principe					Cayman Islands	
	Senegal					Falkland Islands (Malvinas)	
	Seychelles					Guadeloupe	
	Sierra Leone					Martinique	
	Somalia					Montserrat	
	Sudan[17]					Puerto Rico	
	South Africa					Turks and Caicos Islands	
	Swaziland					United States Virgin Islands	
	United Republic of Tanzania						
	Togo						
	Uganda						
	Zambia						
	Zimbabwe						

[15] includes China, mainland; China, Hong Kong SAR; China, Macao SAR; and China, Taiwan Province of. The composition of China in World Bank sourced data is: China, mainland; and China, Taiwan Province of.

[16] Excludes West Bank and Gaza Strip.

[17] Includes South Sudan owning to a lack of data availability.

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
Tunisia	Gambia	Democratic Republic of the Congo	Kenya	Madagascar
	Ghana	Equatorial Guinea	Rwanda	Malawi
	Guinea	Gabon	Somalia	Mauritius
	Guinea-Bissau	Sao Tome and Principe	Sudan	Mozambique
	Liberia		Uganda	Namibia
	Mali		United Republic of Tanzania	Seychelles
	Mauritania			South Africa
	Niger			Swaziland
	Nigeria			Zambia
	Senegal			Zimbabwe
	Sierra Leone			
	Togo			

RAF regional economic communities								
ECOWAS	SADC	COMESA	UMA	ECCAS	IGAD	CEMAC	UEMOA	CEN-SAD
Benin	Angola	Burundi	Algeria	Angola	Djibouti	Cameroon	Benin	Benin
Burkina Faso	Botswana	Comoros	Libyan Arab Jamahiriya	Burundi	Eritrea	Central African Republic	Burkina Faso	Burkina Faso
Cape Verde	Democratic Republic of the Congo	Democratic Republic of the Congo	Mauritania	Cameroon	Ethiopia	Chad	Côte d'Ivoire	Central African Republic
Côte d'Ivoire	Lesotho	Djibouti	Morocco	Central African Republic	Kenya	Equatorial Guinea	Guinea-Bissau	Chad
Gambia	Madagascar	Egypt	Tunisia	Chad	Somalia	Congo	Mali	Comoros
Ghana	Malawi	Eritrea		Congo	Sudan	Gabon	Niger	Côte d'Ivoire
Guinea	Mauritius	Ethiopia		Democratic Republic of the Congo	Uganda		Senegal	Djibouti
Guinea-Bissau	Mozambique	Kenya		Equatorial Guinea			Togo	Egypt
Liberia	Namibia	Libyan Arab Jamahiriya		Gabon				Eritrea
Mali	Seychelles	Madagascar		Sao Tome and Principe				Gambia
Niger	South Africa	Malawi						Ghana
Nigeria	Swaziland	Mauritius						Guinea-Bissau
Senegal	Tanzania	Rwanda						Liberia
Sierra Leone	Zambia	Seychelles						Libyan Arab Jamahiriya
Togo	Zimbabwe	Sudan						Mali
		Swaziland						Morocco
		Uganda						Niger
		Zambia						Nigeria
		Zimbabwe						Senegal
								Somalia
								Sierra Leone
								Sudan
								Togo
								Tunisia

Indicators list

% of equip. area actually irrigated
P1.RES.FAO.NRL.EAAI
Source: Land and Water Division (AQUASTAT)
Owner: FAO

% of equip. area irrigated by groundwater
P1.RES.FAO.NRL.EAIG
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Agricultural area (ha)
P1.RES.FAO.ESS.LDAQ.LDAG
Source: Statistics Division (FAOSTAT)
Owner: FAO

Agricultural area by total land area (%)
P1.RES.FAO.ESS.LDAQ.LDAG.SHL
Source: Statistics Division (FAOSTAT)

Agricultural machinery, tractors per 100 sq. km of arable land
P1.RES.WBK.WDI.TRA.SKM
Source: World Bank (WDI)
Owner: FAO

Agricultural methane emissions (% of total)
P4.ENV.WBK.WDI.POL.AMTHE
Page: table 47 (p. 218).
Source: World Bank (WDI)
Owner: IEA

Agricultural methane emissions (kt of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.AMTHEAB
Page: map 51 (p. 193).
Source: World Bank
Owner: IEA

Agricultural methane emissions (% of the world's total) (kt of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.AMTHEAB.SC
Source: World Bank (WDI)

Agricultural nitrous oxide emissions (% of total)
P4.ENV.WBK.WDI.POL.ANOE
Page: table 47 (p. 218).
Source: World Bank (WDI)
Owner: IEA

Agricultural nitrous oxide emissions (metric tons of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.ANOEAB
Page: map 52 (p. 195).
Source: World Bank
Owner: IEA

Agricultural nitrous oxide emissions (% of the world's total) (kt of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.ANOEAB.SC
Source: World Bank (WDI)

Agricultural population, total
P1.DEM.FAO.POP.AGR
Source: Statistics Division (FAOSTAT)
Owner: FAO

Agricultural population (% of total population)
P1.DEM.FAO.POP.AGR.SHP
Source: Statistics Division (FAOSTAT)

Agricultural population growth (% p.a.)
P1.DEM.FAO.POP.AGR.GR20
Source: Statistics Division (FAOSTAT)

Agricultural water withdrawal (m^3/yr)
P4.ENV.FAO.NRL.WAT.WWA
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Agriculture value added per worker (constant 2000 US$)
P1.MAC.WBK.WDI.AGV.PWK
Source: World Bank (WDI)
Owner: World Bank and FAO

Agriculture, value added (% of GDP)
P1.MAC.WBK.WDI.AGV.GDP
Source: World Bank (WDI)
Owner: World Bank and OECD

Aquaculture production (tonnes)
P3.FTW.FAO.FI.ACQ.QP
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Aquaculture per capita production (tonnes/person)
P3.FTW.FAO.FI.ACQ.QP.SHP
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Aquaculture production (% p.a.)
P3.FTW.FAO.FI.ACQ.QP.GR9
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Arable and permanent cropland growth (% p.a.)
P1.RES.FAO.ESS.LDAQ.ARPCL
Source: Statistics Division (FAOSTAT)
Owner: FAO

Arable and permanent cropland (ha)
P1.RES.FAO.ESS.LDAQ.ARPCL.GR19
Page: table 44 (p. 212), chart 71 (p. 186).
Source: Statistics Division (FAOSTAT)

Arable land (ha)
P1.RES.FAO.ESS.LDAQ.ARL
Source: Statistics Division (FAOSTAT)
Owner: FAO

Arable land per person (ha/person)
P1.RES.FAO.ESS.LDAQ.ARL.SHP
Source: Statistics Division (FAOSTAT)

Arable land (% of total land area)
P1.RES.FAO.ESS.LDAQ.ARL.SHL
Source: Statistics Division (FAOSTAT)

Arable land per person growth (% p.a.)
P1.RES.FAO.ESS.LDAQ.ARL.SHP.GR39
Source: Statistics Division (FAOSTAT)

Arable land potential (ha)
P1.RES.FAO.LAN.ALP
Source: Agricultural Development Economics Division
Owner: FAO

Area under bioenergy crops
P4.ENV.FAO.BIO.BF.HA
Page: chart 86 (p. 208).
Source: Based on IEA biofuel production data
Owner: FAO

Area under GM crops (time series of economic regions)
P4.ENV.ISAAA.BIO.GM.HA
Page: chart 85 (p. 207).
Source: Clive James, Global Status of Commercialized Biotech and GM Crops: 2010
Owner: International Service for the Acquisition of Agri-biotech Applications (ISAAA)

Average dietary supply adequacy (index)
DA.DET.AV.IN.NO
Source: FAOSTAT and ESS calculations
Owner: FAO

Average governance Index
P2.HUN.WBK.POV.GOV.AVE
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Average precipitation in depth (mm per year)
P4.ENV.FAO.ACQ.CLIM.APD
Page: map 54 (p. 199).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Average protein supply (g/cap/day)
DA.DET.PS.GR.NO
Source: FAOSTAT
Owner: FAO

Average soil quality (%)
P4.ENV.FAO.FOR.LCF.SQ
Page: table 44 (p. 212), map 47 (p. 185).
Source: Statistics Division
Owner: FAO, IIASA, ISRIC, ISSCAS, and JRC: Harmonized World Soil Database

Average supply of protein of animal origin (g/cap/day)
DA.DET.APS.GR.NO
Source: FAOSTAT
Owner: FAO

Biofuel production (kt of oil equivalent)
P4.ENV.IEA.BIO.BF.QP
Page: table 49 (p. 222), chart 87 (p. 210), map 59 (p. 209).
Source: Energy Balances of OECD Countries and Energy Balances of Non-OECD Countries, 2011 editions
Owner: IEA

Biofuel production growth (% p.a.)
P4.ENV.IEA.BIO.BF.QP.GR9
Page: table 49 (p. 222).
Source: Energy Balances of OECD Countries and Energy Balances of Non-OECD Countries, 2011 editions

Bovine meat production (tonnes)
P3.FEED.FAO.ESS.BF.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Bovine meat production growth (% p.a.)
P3.FEED.FAO.ESS.BF.QP.GR10
Source: Statistics Division (FAOSTAT)

Capture production (tonnes)
P3.FTW.FAO.FI.CAP.QP
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Capture per capita production (tonnes/capita)
P3.FTW.FAO.FI.CAP.QP.SHP
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Capture production growth (% p.a.)
P3.FTW.FAO.FI.CAP.QP.GR9
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)

Carbon stock in living forest biomass
P4.ENV.FAO.FOR.LCF.CSFO
Page: table 44 (p. 212), chart 74 (p. 187).
Source: Global Forest Resources Assessment 2010
Owner: FAO

Central government debt, total (% of GDP)
P1.MAC.IMF.WEO.GOV.DBT
Source: World Bank (WDI)
Owner: IMF, World Bank and OECD

Cereal exports (volume)
P3.FEED.FAO.ESS.CE.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Cereal import dependency ratio (%)
DV.VS.CIDR.IN.NO
Source: ESS calculations
Owner: FAO

Cereal imports (volume)
P3.FEED.FAO.ESS.CE.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Children out of school, primary, total
P2.HUN.WBK.WDI.EDU.COSR
Source: World Bank (WDI)
Owner: UNESCO

CO_2 concentration
P4.ENV.IPCC.CC.CO2
Page: chart 81 (p. 198).
Source: Global Climate Change: key indicators
Owner: NASA

Coarse grain harvested area (ha)
P3.FEED.FAO.ESS.CG.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Coarse grain harvested area growth (% p.a.)
P3.FEED.FAO.ESS.CG.AH.GR10
Source: Statistics Division (FAOSTAT)

Coarse grain harvested area growth (% p.a.)
P3.FEED.FAO.ESS.CG.AH.GR49
Source: Statistics Division (FAOSTAT)

Coarse grain production (tonnes)
P3.FEED.FAO.ESS.CG.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Coarse grain per capita production (tonnes/person)
P3.FEED.FAO.ESS.CG.QP.SHP
Source: Statistics Division (FAOSTAT)

Coarse grain production growth (% p.a.)
P3.FEED.FAO.ESS.CG.QP.GR10
Source: Statistics Division (FAOSTAT)

Coarse grain yield (hg/ha)
P3.FEED.FAO.ESS.CG.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Coarse grain yield growth (% p.a.)
P3.FEED.FAO.ESS.CG.YLD.GR10
Source: Statistics Division (FAOSTAT)

Contraceptive prevalence (% of women ages 15-49)
P1.DEM.UN.WPP.FER.CON
Source: World Bank (WDI)
Owner: UNICEF

Contribution of the agricultural sector to total greenhouse gases (%)
P4.ENV.FAO.BIO.GHG.AG.SH
Page: table 47 (p. 218).
Source: Statistics Division
Owner: UNFCCC

Control of Corruption Index
P2.HUN.WBK.POV.GOV.COR
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Countries in protracted crises
P2.HUN.FAO.ESA.RHS.NPC
Source: Trade and Markets Division
Owner: FAO

Crop production (tonnes)
P3.FEED.FAO.ESS.GPIN.CRPS
Source: Statistics Division (FAOSTAT)
Owner: FAO

Growth in crop production (% p.a.)
P3.FEED.FAO.ESS.GPIN.CRPS.GR18
Source: Statistics Division (FAOSTAT)

Dairy exports (volume)
P3.FEED.FAO.ESS.MK.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Dairy imports (volume)
P3.FEED.FAO.ESS.MK.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Death rate, crude (per 1000 people)
P1.DEM.UN.WPP.MOR.CDR
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Depth of the food deficit (depth)
DO.OUT.ACDFD.DP.NO
Source: ESS calculations
Owner: FAO

Domestic food price volatility (index)
DV.VS.DFPI.IN.NO
Source: FAO elaboration
Owner: Data to compute the Domestic Food Price Index were provided by ILO and World Bank ICP (International Comparison Project).

Economically active children, total (% of children ages 7-14)
P1.RES.WBK.WDI.LAB.CHLD
Source: World Bank (WDI)
Owner: ILO, UNICEF and World Bank

Electricity access, rural %
P1.RES.IEA.WEO.ELEC.AC.REA
Source: World Energy Outlook 2012
Owner: IEA

Electricity access, urban %
P1.RES.IEA.WEO.ELEC.AC.UEA
Source: World Energy Outlook 2011
Owner: IEA

Electrification rate (%)
P1.RES.IEA.WEO.ELEC.AC.ER
Source: World Energy Outlook 2010
Owner: IEA

Employees, agriculture, female (% of female employment)
P1.RES.WBK.WDI.LAB.AGRF
Source: World Bank (WDI)
Owner: ILO

Employees, agriculture, male (% of female employment)
P1.RES.WBK.WDI.LAB.AGRM
Source: World Bank (WDI)
Owner: ILO

Employment in agriculture (% of total employment)
P1.RES.WBK.WDI.LAB.EAT
Source: World Bank (WDI)
Owner: ILO

Employment in industry (% of total employment)
P1.RES.WBK.WDI.LAB.EIT
Source: World Bank (WDI)
Owner: ILO

Employment in services (% of total employment)
P1.RES.WBK.WDI.LAB.EST
Source: World Bank (WDI)
Owner: ILO

Employment to population ratio, 15+, female (%)
P1.RES.WBK.WDI.LAB.EPRF
Source: World Bank (WDI)
Owner: ILO

Employment to population ratio, 15+, male (%)
P1.RES.WBK.WDI.LAB.EPRM
Source: World Bank (WDI)
Owner: ILO

Employment to population ratio, 15+, total (%)
P1.RES.WBK.WDI.LAB.EPRT
Source: World Bank (WDI)
Owner: ILO

Energy use by agriculture (kt)
P4.ENV.FAO.BIO.ENGY.AG
Page: table 48 (p. 220).
Source: Statistics Division
Owner: IEA

Energy use share (kt)
P4.ENV.FAO.BIO.ENGY.AG.SH
Page: table 48 (p. 220).
Source: Statistics Division
Owner: IEA

Expenditure per student, primary (% of GDP per capita)
P2.HUN.WBK.WDI.EDU.EXPS
Source: World Bank (WDI)
Owner: UNESCO

Export value index (2000 = 100)
P1.MAC.WBK.WDI.XVAL.IX
Source: World Bank (WDI)
Owner: UNCTAD and IMF

Exports of cereals (value)
P3.FEED.FAO.ESS.CE.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of coffee, tea, cocoa and spices (value)
P3.FEED.FAO.ESS.CTCS.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of coffee, tea, cocoa, and spices (value)
P3.FEED.FAO.ESS.BVS.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of fish (value)
P3.FTW.FAO.FI.TOT.EXv
Source: Statistics Division
Owner: FAO

Exports of fruit and vegetables (value)
P3.FEED.FAO.ESS.FV.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of milk equivalent (value)
P3.FEED.FAO.ESS.MK.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of oilcrops (volume)
P3.FEED.FAO.ESS.OS.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of oilseeds (value)
P3.FEED.FAO.ESS.OS.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of sugar (value)
P3.FEED.FAO.ESS.SU.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of total meat (value)
P3.FEED.FAO.ESS.MT.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of total meat (volume)
P3.FEED.FAO.ESS.MT.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of vegetable oils and animal fats (value)
P3.FEED.FAO.ESS.VL.EXv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Exports of vegetable oils and animal fats (volume)
P3.FEED.FAO.ESS.VL.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

FAO Global Consumption price volatility (2002-2004=100)
P2.HUN.FAO.FPV.GCI
Source: Statistics Division
Owner: FAO

Female (% of agricultural holders in developing regions)
P1.RES.ILO.GEND.HLD.FM
Source: Gender and Land Rights Database
Owner: FAO

Female (% of the agricultural labour force)
P1.RES.ILO.LAB.GEND
Source: World Bank
Owner: ILO

Fertility rate, total (births per woman)
P1.DEM.UN.WPP.FER.TOT
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Fertilizer consumption (kilograms per hectare of arable land)
P1.RES.WBK.WDI.FER.HA
Source: World Bank (WDI)
Owner: FAO

Fish species, threatened
P4.ENV.WBK.WDI.BIOD.FST
Page: chart 82 (p. 200).
Source: World Bank (WDI)
Owner: FishBase database, www.fishbase.org

Food aid received (tonnes)
P2.HUN.WFP.FAIS.FDAID
Source: Food Aid Information System
Owner: WFP

Food price inflation (%)
P2.HUN.FAO.FPV.FCPI
Source: LABORSTA
Owner: ILO

Food Price Level Index (index)
DE.DET.EA.IN.NO
Source: FAO elaboration
Owner: Data provided by ILO and the World Bank ICP (International Comparison Project).

Food price volatility (annualized historical volatility) (%)
P2.HUN.FAO.FPV.FPVn
Source: Statistics Division
Owner: FAO

Food production (calories)
P3.FEED.FAO.ESS.FD.QP
Source: Statistics Division
Owner: FAO

Food production (kcal/day/person)
P3.FEED.FAO.ESS.FD.QP.SHP
Source: Statistics Division (FAOSTAT)

Foreign direct investment, net inflows (BoP, current US$)
P1.RES.WBK.WDI.FDI.INF
Source: World Bank (WDI)
Owner: IMF and UNCTAD

Forest area (ha)
P4.ENV.FAO.ESS.LAND.FOST
Page: table 44 (p. 212), chart 70 (p. 184).
Source: Statistics Division (FAOSTAT)
Owner: FAO

Forest area (% of total land area)
P4.ENV.FAO.ESS.LAND.FOST.SHL
Page: map 48 (p. 187).
Source: Statistics Division (FAOSTAT)

Forest area growth (% p.a.)
P4.ENV.FAO.ESS.LAND.FOST.GR4
Source: Statistics Division (FAOSTAT)

Forest area growth (% p.a.)
P4.ENV.FAO.ESS.LAND.FOST.GR19
Page: table 44 (p. 212), chart 71 (p. 186).
Source: Statistics Division (FAOSTAT)

Fungicides and bactericides consumption (tonnes)
P1.RES.FAO.ESS.PES.FUNG
Source: Statistics Division (FAOSTAT)
Owner: FAO

GDP (current US$)
P1.MAC.IMF.WEO.GDP.NOM
Source: World Bank (WDI)
Owner: IMF, World Bank and OECD

GDP per capita (current US$)
P1.MAC.IMF.WEO.GDP.NPC
Source: World Bank (WDI)
Owner: IMF, World Bank and OECD

Gender Inequality Index
P2.HUN.UNDP.HDR.POV.GEI
Source: Human Development Report 2010
Owner: UNDP

Genetically modified plants
P4.ENV.ISAAA.BIO.GM.CROPS
Source: Clive James, Global Status of Commercialized Biotech and GM Crops: 2010
Owner: International Service for the Acquisition of Agri-biotech Applications (ISAAA)

Gini-index of income distribution
P2.HUN.WBK.WDI.POV.GINI
Source: World Bank (WDI)
Owner: World Bank

Global affordability of food (2002-2004=100)
P2.HUN.FAO.FPV.AFD
Source: Statistics Division
Owner: FAO

Global distribution of risks associated with main agricultural production systems
P4.ENV.FAO.FOR.LCF.SOLAW
Source: Natural Resources and Environment Department
Owner: FAO

Global food trade index, cal (2004-2006=100)
P3.FEED.FAO.ESS.FD.IXc
Source: Statistics Division
Owner: FAO

Global food trade index, value (2004-2006=100)
P3.FEED.FAO.ESS.FD.IXv
Source: Statistics Division
Owner: FAO

Global surface temperature (current)
P4.ENV.IPCC.CC.GSTG
Page: map 53 (p. 196).
Source: IPCC Data Distribution Centre
Owner: IPCC

Global surface temperature (time series)
P4.ENV.IPCC.CC.GST
Page: chart 79 (p. 197).
Source: IPCC Data Distribution Centre
Owner: IPCC

Government Effectiveness Index
P2.HUN.WBK.POV.GOV.GOV
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Greenhouse gas emissions by agriculture (gigagrams CO_2 equivalent)
P4.ENV.FAO.BIO.GHG.AG
Page: table 47 (p. 218).
Source: Statistics Division
Owner: UNFCCC

Gross capital formation (% of GDP)
P1.RES.WBK.WDI.GCF.GDP
Source: World Bank (WDI)
Owner: World Bank and OECD

Gross capital stock (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock growth (% p.a.)
P1.RES.FAO.ESS.CAP.STK.GR7
Source: Statistics Division (FAOSTAT)

Gross capital stock growth (% p.a.)
P1.RES.FAO.ESS.CAP.STK.GR10
Source: Statistics Division (FAOSTAT)

Gross capital stock (% of GDP)
P1.RES.FAO.ESS.CAP.STK.SHGDP
Source: Statistics Division (FAOSTAT)

Gross capital stock change (% of GDP)
P1.RES.FAO.ESS.CAP.STK.SHGDP.CH
Source: Statistics Division (FAOSTAT)

Gross capital stock, land development (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, land development (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LD.SH
Source: Statistics Division (FAOSTAT)

Gross capital stock, livestock fixed assets (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LFA
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, livestock fixed assets (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LFA.SH
Source: Statistics Division (FAOSTAT)

Gross capital stock, livestock inventory (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LI
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, livestock inventory (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LI.SH
Source: Statistics Division (FAOSTAT)

Gross capital stock, machinery & equipment (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LME
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, machinery & equipment (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LME.SH
Source: Statistics Division (FAOSTAT)

Gross capital stock, plantation crops (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LPC
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, plantation crops (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LPC.SH
Source: Statistics Division (FAOSTAT)

Gross capital stock, structures for livestock (constant 2005 prices)
P1.RES.FAO.ESS.CAP.STK.LSL
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross capital stock, structures for livestock (% gross capital stock)
P1.RES.FAO.ESS.CAP.STK.LSL.SH
Source: Statistics Division (FAOSTAT)

Gross per capita crop production index number (2004-2006 = 100)
P3.FEED.FAO.ESS.GPCPIN.CRPS
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross per capita crop production index number (% change by latest)
P3.FEED.FAO.ESS.GPCPIN.CRPS.CH
Source: Statistics Division (FAOSTAT)

Gross per capita crop production index number growth (% p.a.)
P3.FEED.FAO.ESS.GPCPIN.CRPS.GR10
Source: Statistics Division (FAOSTAT)

Gross per capita livestock production index number (2004-2006 = 100)
P3.FEED.FAO.ESS.GPCPIN.LSTK
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross per capita livestock production index number (% change by latest)
P3.FEED.FAO.ESS.GPCPIN.LSTK.CH
Source: Statistics Division (FAOSTAT)

Gross per capita livestock production index number growth (% p.a.)
P3.FEED.FAO.ESS.GPCPIN.LSTK.GR10
Source: Statistics Division (FAOSTAT)

Gross per capita non-food production index number (2004-2006 = 100)
P3.FEED.FAO.ESS.GPCPIN.NFOOD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross per capita non-food production index number (% change by latest)
P3.FEED.FAO.ESS.GPCPIN.NFOOD.CH
Source: Statistics Division (FAOSTAT)

Gross per capita non-food production index number growth (% p.a.)
P3.FEED.FAO.ESS.GPCPIN.NFOOD.GR10
Source: Statistics Division (FAOSTAT)

Gross per capita Production Index Number (2004-2006=100)
P3.FEED.FAO.ESS.GPCPIN.FD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross per capita Production Index Number growth (2004-2006=100, % p.a.)
P3.FEED.FAO.ESS.GPCPIN.FD.GR10
Source: Statistics Division (FAOSTAT)

Gross per capita production index number food (2004-2006 = 100)
P3.FEED.FAO.ESS.GPCPIN.FOOD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Gross per capita production index number food (% change by latest)
P3.FEED.FAO.ESS.GPCPIN.FOOD.CH
Source: Statistics Division (FAOSTAT)

Gross per capita production index number food growth (% p.a.)
P3.FEED.FAO.ESS.GPCPIN.FOOD.GR10
Source: Statistics Division (FAOSTAT)

Health expenditure per capita (current US$)
P2.HUN.WBK.WDI.HAE.HE.PCP
Source: World Bank (WDI)
Owner: WHO

Health expenditure, total (% of GDP)
P2.HUN.WBK.WDI.HAE.HE.TOT
Source: World Bank (WDI)
Owner: WHO

Herbicides consumption (tonnes)
P1.RES.FAO.ESS.PES.HERB
Source: Statistics Division (FAOSTAT)
Owner: FAO

Human Development Index
P2.HUN.UNDP.HDR.POV.HDI
Source: Human Development Report 2010
Owner: UNDP

Human Development Index (inequality adjusted)
P2.HUN.UNDP.HDR.POV.HDIi
Source: Human Development Report 2010
Owner: UNDP

Import dependency (calories)
P3.FTW.FAO.ESS.IMPDc
Source: Statistics Division
Owner: FAO

Import value index (2000 = 100)
P1.MAC.WBK.WDI.MVAL.IX
Source: World Bank (WDI)
Owner: UNCTAD and IMF

Imports of coffee, tea, cocoa and spices (value)
P3.FEED.FAO.ESS.BVS.IMv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Imports of fish (value)
P3.FTW.FAO.FI.TOT.IMv
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Imports of fruit and vegetables (value)
P3.FEED.FAO.ESS.FV.IMv
Source: Statistics Division (FAOSTAT)
Owner: FAO

Imports of oilcrops (volume)
P3.FEED.FAO.ESS.OS.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Imports of total meat (volume)
P3.FEED.FAO.ESS.MT.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Imports of vegetable oils and animal fats (volume)
P3.FEED.FAO.ESS.VL.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Improved sanitation facilities (% of population with access)
P2.HUN.WBK.WDI.HAE.SAN.IMPS
Source: World Bank (WDI)
Owner: WHO and UNCF

Improved water source, rural (% of rural population with access)
P2.HUN.WBK.WDI.HAE.WAT.IMPRU
Source: World Bank (WDI)
Owner: WHO and UNCF

Improved water source, urban (% of urban population with access)
P2.HUN.WBK.WDI.HAE.WAT.IMPWU
Source: World Bank (WDI)
Owner: WHO and UNCF

Income share held by highest 20% (%)
P2.HUN.WBK.WDI.POV.H20
Source: World Bank (WDI)
Owner: World Bank

Income share held by lowest 20% (%)
P2.HUN.WBK.WDI.POV.L20
Source: World Bank (WDI)
Owner: World Bank

Industrial water withdrawal (m^3/yr)
P4.ENV.FAO.NRL.WAT.WWI
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Inflation, consumer prices (annual %)
P1.MAC.IMF.WEO.INF.PER
Source: World Bank (WDI)
Owner: IMF

Inland aquaculture production (tonnes)
P3.FTW.FAO.FI.ACQ.QPi
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Inland capture production (tonnes)
P3.FTW.FAO.FI.CAP.QPi
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Insecticides consumption (tonnes)
P1.RES.FAO.ESS.PES.INS
Source: Statistics Division (FAOSTAT)
Owner: FAO

Internally displaced persons, total
P2.HUN.UNHCR.GT.RHS.TPCI
Source: Statistical Online Population Database
Owner: UNHCR

International food price volatility by food group (%)
P2.HUN.FAO.FPV.FPV
Source: Statistics Division
Owner: FAO

International food price volatility by food group (2002-2004=100)
P2.HUN.FAO.FPV.FPI
Source: Statistics Division
Owner: FAO

Irrigation potential (ha)
P1.RES.FAO.NRL.IP
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Jute and jute-like fibre production (tonnes)
P4.ENV.FAO.BIO.CT.QP
Page: map 60 (p. 211).
Source: Statistics Division (FAOSTAT)
Owner: FAO

Labor participation rate, female (% of female population ages 15+)
P1.RES.WBK.WDI.LAB.PTRF
Source: World Bank (WDI)
Owner: ILO

Labor participation rate, male (% of male population ages 15+)
P1.RES.WBK.WDI.LAB.PTRM
Source: World Bank (WDI)
Owner: ILO

Labour force, total
P1.RES.WBK.WDI.LAB.TOT
Source: World Bank (WDI)
Owner: ILO

Land with rainfed crop potential
P4.ENV.LND.SUIT
Page: chart 69 (p. 183).
Source: Agricultural Development Economics Division
Owner: FAO

Lead time to export, median case (days)
P1.RES.WBK.WDI.EXP.DAY
Source: World Bank (WDI)
Owner: World Bank

Lead time to import, median case (days)
P1.RES.WBK.WDI.IMP.DAY
Source: World Bank (WDI)
Owner: World Bank

Life expectancy at birth, total (years)
P1.DEM.UN.WPP.MOR.EXP
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Literacy rate, adult female (% of females ages 15 and above)
P2.HUN.WBK.WDI.EDU.FILT
Source: World Bank (WDI)
Owner: UNESCO

Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)
P1.RES.WBK.WDI.INF.IX
Source: World Bank (WDI)
Owner: World Bank

Male (% of agricultural holders in developing regions)
P1.RES.ILO.GEND.HLD.ML
Source: Gender and Land Rights Database
Owner: FAO

Mammal species, threatened
P4.ENV.WBK.WDI.BIOD.MST
Page: chart 82 (p. 200).
Source: World Bank (WDI)
Owner: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Marine aquaculture production (tonnes)
P3.FTW.FAO.FI.ACQ.QPm
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Marine capture production (tonnes)
P3.FTW.FAO.FI.CAP.QPm
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Owner: FAO

Meat production, total (tonnes)
P3.FEED.FAO.ESS.MT.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Meat per capita production (tonnes/person)
P3.FEED.FAO.ESS.MT.QP.SHP
Source: Statistics Division (FAOSTAT)

Merchandise trade (% of GDP)
P1.MAC.WBK.WDI.MCH.GDP
Source: World Bank (WDI)
Owner: WTO and World Bank

Methane emissions (kt of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.MTHE
Page: table 47 (p. 218), chart 77 (p. 192).
Source: World Bank (WDI)
Owner: IEA

Milk production (tonnes)
P3.FEED.FAO.ESS.MK.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Milk per capita production (tonnes/person)
P3.FEED.FAO.ESS.MK.QP.SHP
Source: Statistics Division (FAOSTAT)

Milk production growth (% p.a.)
P3.FEED.FAO.ESS.MK.QP.GR10
Source: Statistics Division (FAOSTAT)

Mortality rate, infant (per 1000 live births)
P1.DEM.UN.WPP.MOR.IMR
Source: World Bank (WDI)
Owner: UNICEF, WHO, World Bank and UNPD

Multidimensional Poverty Index
P2.HUN.UNDP.HDR.MPI
Source: Alkire, S. Roche, JM. Santos, ME. and Seth, S (November 2011) ophi.qeh.ox.ac.uk
Owner: OPHI

Multiple uses function (%)
P4.ENV.FAO.FOR.LCF.PFF.MU
Page: table 45 (p. 214), chart 73 (p. 187).
Source: Global Forest Resources Assessment 2013
Owner: FAO

Municipal water withdrawal (m^3/yr)
P4.ENV.FAO.NRL.WAT.WWM
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Natural fibre production (tonnes)
P4.ENV.FAO.BIO.NF.QP
Page: table 49 (p. 222), chart 88 (p. 210).
Source: Statistics Division
Owner: FAO

Natural fibre production growth (% p.a.)
P4.ENV.FAO.BIO.NF.QP.GR48
Page: table 49 (p. 222).
Source: Statistics Division

Net barter terms of trade index (2000 = 100)
P1.MAC.WBK.WDI.TOT.IX
Source: World Bank (WDI)
Owner: UNCTAD and IMF

Net ODA received (% of GNI)
P1.RES.WBK.WDI.ODA.GNI
Source: World Bank (WDI)
Owner: OECD

Net ODA received per capita (current US$)
P1.RES.WBK.WDI.ODA.PCP
Source: World Bank (WDI)
Owner: OECD

Nitrous oxide emissions (metric tons of CO_2 equivalent)
P4.ENV.WBK.WDI.POL.NOE
Page: table 47 (p. 218), chart 78 (p. 194).
Source: World Bank (WDI)
Owner: IEA

Oil-bearing crops harvested area (ha)
P3.FEED.FAO.ESS.OS.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Oil-bearing crops harvested area growth (% p.a.)
P3.FEED.FAO.ESS.OS.AH.GR10
Source: Statistics Division (FAOSTAT)

Oil-bearing crops harvested area growth (% p.a.)
P3.FEED.FAO.ESS.OS.AH.GR49
Source: Statistics Division (FAOSTAT)

Oil-bearing crops yield growth (hg/ha)
P3.FEED.FAO.ESS.OS.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Oil-bearing crops yield growth (% p.a.)
P3.FEED.FAO.ESS.OS.YLD.GR10
Source: Statistics Division (FAOSTAT)

Oilcrop production (tonnes)
P3.FEED.FAO.ESS.OS.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Oilcrop per capita production (tonnes/person)
P3.FEED.FAO.ESS.OS.QP.SHP
Source: Statistics Division (FAOSTAT)

Oilcrop production growth (% p.a.)
P3.FEED.FAO.ESS.OS.QP.GR10
Source: Statistics Division (FAOSTAT)

Organic agriculture area (ha)
P4.ENV.FAO.BIO.ORGAN.HA
Page: chart 83, 84 (p. 202, 204), map 56 (p. 203).
Source: Statistics Division (FAOSTAT)
Owner: FAO-FiBL-IFOAM

Organic agriculture area (% of the agricultural area)
P4.ENV.FAO.BIO.ORGAN.HA.SHL
Page: table 49 (p. 222), map 57 (p. 205).
Source: Statistics Division (FAOSTAT)

Othe and unknown function (%)
P4.ENV.FAO.FOR.LCF.PFF.OU
Page: table 45 (p. 214), chart 73 (p. 187).
Source: Global Forest Resources Assessment 2014
Owner: FAO

Other naturally reg. forest (%)
P4.ENV.FAO.FOR.LCF.FOC.NR
Page: table 45 (p. 214), chart 72 (p. 186).
Source: Global Forest Resources Assessment 2011
Owner: FAO

Other pesticide consumption (tonnes)
P1.RES.FAO.ESS.PES.OTH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Parties to the Cartagena Protocol on Biosafety
P4.ENV.CBD.GMO.CBP
Page: map 58 (p. 206).
Source: www.cbd.int
Owner: Convention on Biological Diversity

Pasture land (ha)
P1.RES.FAO.ESS.LDAQ.PSTL
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pasture land by total land area (%)
P1.RES.FAO.ESS.LDAQ.PSTL.SHL
Source: Statistics Division (FAOSTAT)

Pasture land growth (% p.a.)
P1.RES.FAO.ESS.LDAQ.PSTL.GR19
Page: table 44 (p. 212), chart 71 (p. 186).
Source: Statistics Division (FAOSTAT)

Per capita food losses and waste at consumption stage
P3.FTW.FAO.AGS.LOSS.CON
Source: Global Food Losses and Waste
Owner: FAO

Per capita food losses and waste at pre-consumptions stages
P3.FTW.FAO.AGS.LOSS.PRE
Source: Global Food Losses and Waste
Owner: FAO

Per Capita food production variability (index)
DV.VS.FPV.IN.SH
Source: FAOSTAT
Owner: FAO

Per Capita food supply variability (index)
DV.VS.FSV.IN.SH
Source: FAOSTAT
Owner: FAO

Per capita total food losses and waste (kg/year)
P3.FTW.FAO.AGS.LOSS
Source: Global Food Losses and Waste
Owner: FAO

Percent of adults who are underweight (%)
DT.OUT.UTAUN.POP.SH
Source: WHO
Owner: World Health Organization, Global Database on Body Mass Index.

Percent of arable land equipped for irrigation (%)
DV.VS.AEI.IN.SH
Source: ESS calculations
Owner: FAO

Percent of paved roads over total roads (%)
DP.DET.PAPR.KM.SH
Source: World Bank
Owner: World Bank, Transportation, Water, and Information and Communications Technologies Department, Transport Division.

Percentage of children under 5 years of age who are stunted (%)
DT.OUT.UTST.POP.SH
Source: WDI
Owner: World Health Organization.

Percentage of children under 5 years of age who are underweight (%)
DT.OUT.UTUN.POP.SH
Source: WDI
Owner: World Health Organization.

Percentage of children under 5 years of age who are wasted (%)
DT.OUT.UTWA.POP.SH
Source: WDI
Owner: World Health Organization.

Percentage of population with access to improved sanitation facilities (%)
DU.DET.UTSF.POP.SH
Source: WDI
Owner: World Health Organization and United Nations Children's Fund, Joint Measurement Programme (JMP).

Percentage of population with access to improved water sources (%)
DU.DET.UTWR.POP.SH
Source: WDI
Owner: World Health Organization and United Nations Children's Fund, Joint Measurement Programme (JMP).

Permanent cropland (ha)
P1.RES.FAO.ESS.LDAQ.PCL
Source: Statistics Division (FAOSTAT)
Owner: FAO

Permanent cropland by total land area (%)
P1.RES.FAO.ESS.LDAQ.PCL.SHL
Source: Statistics Division (FAOSTAT)

Persons affected by drought, total
P2.HUN.ODFA.EMDAT.RHS.PPDR
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by earthquake (seismic activity), total
P2.HUN.ODFA.EMDAT.RHS.PPEA
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by extreme temperature, total
P2.HUN.ODFA.EMDAT.RHS.PPTE
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by flood, total
P2.HUN.ODFA.EMDAT.RHS.PPFL
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by natural disasters, total
P2.HUN.ODFA.EMDAT.RHS.PPND
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by storm, total
P2.HUN.ODFA.EMDAT.RHS.PPST
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Persons affected by volcano disasters, total
P2.HUN.ODFA.EMDAT.RHS.PPVOWIEP
Source: EM-DAT: The OFDA/CRED International Disaster Database
Owner: OFDA and CRED

Pesticide consumption
P1.RES.FAO.ESS.PES.TON
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pigmeat production (tonnes)
P3.FEED.FAO.ESS.PK.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pigmeat production growth (% p.a.)
P3.FEED.FAO.ESS.PK.QP.GR10
Source: Statistics Division (FAOSTAT)

Plant species (higher), threatened
P4.ENV.WBK.WDI.BIOD.PST
Page: chart 82 (p. 200).
Source: World Bank (WDI)
Owner: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Political stability and absence of violence/terrorism (index)
DV.VS.PS.IN.NO
Source: WorldWide Governance Indicators
Owner: Produced by: Brookings Institution (Daniel Kaufmann); World Bank Development Research Group (Aart Kraay); and World Bank Institute (Massimo Mastruzzi).

Political Stability and Absence of Violence/Terrorism Index
P2.HUN.WBK.POV.GOV.POL
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Population ages 0-14 (% of total)
P1.DEM.UN.WPP.POP.AGE.YNG
Source: World Bank (WDI)
Owner: World Bank

Population ages 15-64 (% of total)
P1.DEM.UN.WPP.POP.AGE.MDN
Source: World Bank (WDI)
Owner: World Bank

Population ages 65 and above (% of total)
P1.DEM.UN.WPP.POP.AGE.OLD
Source: World Bank (WDI)
Owner: World Bank

Population density (people per sq. km of land area)
P1.DEM.UN.WPP.POP.DEN
Source: World Bank (WDI)
Owner: FAO and World Bank

Population in urban agglomerations of more than 1 million (% of total population)
P1.DEM.UN.WUP.POP.SH
Source: World Bank (WDI)
Owner: missing

Population, total
P1.DEM.UN.WPP.POP.TOT
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Population growth (% p.a.)
P1.DEM.UN.WPP.POP.TOT.GR20
Source: World Bank (WDI)

Population growth (% p.a.)
P1.DEM.UN.WPP.POP.TOT.GR10
Source: World Bank (WDI)

Poultry meat production (tonnes)
P3.FEED.FAO.ESS.PT.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Poultry meat production growth (% p.a.)
P3.FEED.FAO.ESS.PT.QP.GR10
Source: Statistics Division (FAOSTAT)

Poverty gap at $1.25 a day (PPP) (%)
P2.HUN.WBK.WDI.POV.P125
Source: World Bank (WDI)
Owner: World Bank

Poverty gap at $2 a day (PPP) (%)
P2.HUN.WBK.WDI.POV.P200
Source: World Bank (WDI)
Owner: World Bank

Poverty gap at national poverty line (%)
P2.HUN.WBK.WDI.POV.PNPL
Source: World Bank (WDI)
Owner: World Bank

Poverty gap at rural poverty line (%)
P2.HUN.WBK.WDI.POV.PRPL
Source: World Bank (WDI)
Owner: World Bank

Poverty headcount ratio at $1.25 a day (PPP) (% of population)
P2.HUN.WBK.WDI.POV.H125
Source: World Bank (WDI)
Owner: World Bank

Poverty headcount ratio at $2 a day (PPP) (% of population)
P2.HUN.WBK.WDI.POV.H200
Source: World Bank (WDI)
Owner: World Bank

Poverty headcount ratio at national poverty line (% of population)
P2.HUN.WBK.WDI.POV.HNPL
Source: World Bank (WDI)
Owner: World Bank

Poverty headcount ratio at rural poverty line (% of rural population)
P2.HUN.WBK.WDI.POV.HRPL
Source: World Bank (WDI)
Owner: World Bank

Prevalence of food inadequacy (%)
DO.OUT.ACPFI.POP.NO
Source: ESS calculations
Owner: FAO

Prevalence of HIV, total (% of population ages 15-49)
P2.HUN.WBK.WDI.HAE.HIV.PREV
Source: World Bank (WDI)
Owner: UNAIDS and WHO

Prevalence of undernourishment (%)
DO.OUT.ACPU.POP.NO
Source: ESS calculations
Owner: FAO

Price-adjusted major currencies US Dollar Index (2000 = 100)
P1.MAC.USA.FR.EXR.MAJ
Source: United States Federal Reserve
Owner: Board of Governors of the Federal Reserve System

Primary forest (%)
P4.ENV.FAO.FOR.LCF.FOC.PR
Page: table 45 (p. 214), chart 72 (p. 186).
Source: Global Forest Resources Assessment 2010
Owner: FAO

Primary forest (%)
P4.ENV.FAO.FOR.LCF.FOC.PL
Page: table 45 (p. 214), chart 72 (p. 186).
Source: Global Forest Resources Assessment 2012
Owner: FAO

Production function (%)
P4.ENV.FAO.FOR.LCF.PFF.PR
Page: table 45 (p. 214), chart 73 (p. 187).
Source: Global Forest Resources Assessment 2010
Owner: FAO

Production of eggs in shell (tonnes)
P3.FEED.FAO.ESS.EG.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Production of eggs in shell growth (% p.a.)
P3.FEED.FAO.ESS.EG.QP.GR10
Source: Statistics Division (FAOSTAT)

Production of industrial roundwood (m^3)
P4.ENV.FAO.BIO.IR.QP
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of industrial roundwood growth (% p.a.)
P4.ENV.FAO.BIO.IR.QP.GR49
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)

Production of paper and paperboard (m^3)
P4.ENV.FAO.BIO.PP.QP
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of paper and paperboard growth (% p.a.)
P4.ENV.FAO.BIO.PP.QP.GR49
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)

Production of recovered paper (tonnes)
P4.ENV.FAO.BIO.RP.QP
Page: table 49 (p. 222).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of roundwood (m^3)
P4.ENV.FAO.BIO.RW.QP
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of roundwood growth (% p.a.)
P4.ENV.FAO.BIO.RW.QP.GR49
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)

Production of sawnwood (m^3)
P4.ENV.FAO.BIO.SW.QP
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of sawnwood growth (% p.a.)
P4.ENV.FAO.BIO.SW.QP.GR49
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)

Production of wood-based panels (m^3)
P4.ENV.FAO.BIO.WBP.QP
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of wood-based panels growth (% p.a.)
P4.ENV.FAO.BIO.WBP.QP.GR49
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)

Production of wood pulp (m^3)
P4.ENV.FAO.BIO.WP.QP
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of wood pulp growth (% p.a.)
P4.ENV.FAO.BIO.WP.QP.GR49
Page: table 51 (p. 226).
Source: Statistics Division (FAOSTAT)

Production of woodfuel (m^3)
P4.ENV.FAO.BIO.WF.QP
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)
Owner: FAO, Forestry Department (foresSTAT)

Production of woodfuel (% p.a.)
P4.ENV.FAO.BIO.WF.QP.GR49
Page: table 50 (p. 224).
Source: Statistics Division (FAOSTAT)

Protection and conservation function (%)
P4.ENV.FAO.FOR.LCF.PFF.PC
Page: table 45 (p. 214), chart 73 (p. 187).
Source: Global Forest Resources Assessment 2011
Owner: FAO

Public spending on education, total (% of GDP)
P2.HUN.WBK.WDI.EDU.EXPP
Source: World Bank (WDI)
Owner: UNESCO

Pulses harvested area (ha)
P3.FEED.FAO.ESS.PS.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pulses harvested area growth (% p.a.)
P3.FEED.FAO.ESS.PS.AH.GR10
Source: Statistics Division (FAOSTAT)

Pulses harvested area growth (% p.a.)
P3.FEED.FAO.ESS.PS.AH.GR49
Source: Statistics Division (FAOSTAT)

Pulses production (tonnes)
P3.FEED.FAO.ESS.PS.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pulses per capita production (tonnes/person)
P3.FEED.FAO.ESS.PS.QP.SHP
Source: Statistics Division (FAOSTAT)

Pulses production growth (% p.a.)
P3.FEED.FAO.ESS.PS.QP.GR10
Source: Statistics Division (FAOSTAT)

Pulses yield (hg/ha)
P3.FEED.FAO.ESS.PS.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Pulses yield (% p.a.)
P3.FEED.FAO.ESS.PS.YLD.GR10
Source: Statistics Division (FAOSTAT)

Rail-lines density (%)
DP.DET.PARLD.KM.SH
Source: World Bank
Owner: World Bank, Transportation, Water, and Information and Communications Technologies Department, Transport Division.

Ratio of girls to boys in primary and secondary education (%)
P2.HUN.WBK.WDI.EDU.GEN
Source: World Bank (WDI)
Owner: UNESCO

Real effective exchange rate index
P1.MAC.IMF.IFS.EXR.REEXR
Source: International Financial Statistics
Owner: IMF

Real growth rate in GDP
P1.MAC.IMF.WEO.GDP.RGR
Source: World Economic Outlook
Owner: IMF

Real interest rate (%)
P1.MAC.WBK.WDI.INT.RL
Source: World Bank (WDI)
Owner: IMF and World Bank

Regulatory Quality Index
P2.HUN.WBK.POV.GOV.REG
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Renewable water resources (m^3/person/yr)
P1.RES.FAO.NRL.WTRpc
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Research and development expenditure (% of GDP)
P1.RES.WBK.WDI.RD.GDP
Source: World Bank (WDI)
Owner: UNESCO

Researchers in R&D (per million people)
P1.RES.WBK.WDI.RD.NUM
Source: World Bank (WDI)
Owner: UNESCO

Rice exports (volume)
P3.FEED.FAO.ESS.RI.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Rice harvested area (ha)
P3.FEED.FAO.ESS.RI.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Rice harvested area growth (% p.a.)
P3.FEED.FAO.ESS.RI.AH.GR10
Source: Statistics Division (FAOSTAT)

Rice harvested area growth (% p.a.)
P3.FEED.FAO.ESS.RI.AH.GR49
Source: Statistics Division (FAOSTAT)

Rice imports (volume)
P3.FEED.FAO.ESS.RI.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Rice production (tonnes)
P3.FEED.FAO.ESS.RI.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Rice per capita production (tonnes/person)
P3.FEED.FAO.ESS.RI.QP.SHP
Source: Statistics Division (FAOSTAT)

Rice production growth (% p.a.)
P3.FEED.FAO.ESS.RI.QP.GR10
Source: Statistics Division (FAOSTAT)

Rice yield (hg/ha)
P3.FEED.FAO.ESS.RI.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Rice yield growth(hg/ha)
P3.FEED.FAO.ESS.RI.YLD.GR10
Source: Statistics Division (FAOSTAT)

Road density (%)
DP.DET.PARD.KM.SH
Source: World Bank
Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

Roads, paved (% of total roads)
P1.RES.WBK.WDI.RD.PV
Source: World Bank (WDI)
Owner: International Road Federation

Root and tuber crops harvested area (ha)
P3.FEED.FAO.ESS.RT.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Root and tuber crops harvested area growth (% p.a.)
P3.FEED.FAO.ESS.RT.AH.GR10
Source: Statistics Division (FAOSTAT)

Root and tuber crops harvested area growth (% p.a.)
P3.FEED.FAO.ESS.RT.AH.GR49
Source: Statistics Division (FAOSTAT)

Root and tuber crops production (tonnes)
P3.FEED.FAO.ESS.RT.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Root and tuber crops per capita production (tonnes/person)
P3.FEED.FAO.ESS.RT.QP.SHP
Source: Statistics Division (FAOSTAT)

Root and tuber crops production growth (% p.a.)
P3.FEED.FAO.ESS.RT.QP.GR10
Source: Statistics Division (FAOSTAT)

Root and tuber crops yield (hg/ha)
P3.FEED.FAO.ESS.RT.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Root and tuber crops yield growth (% p.a.)
P3.FEED.FAO.ESS.RT.YLD.GR10
Source: Statistics Division (FAOSTAT)

Rule of Law Index
P2.HUN.WBK.POV.GOV.LAW
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Rural population (% of total population)
P1.DEM.UN.WUP.POP.RUR.SH
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Rural population, total
P1.DEM.UN.WUP.POP.RUR
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Rural population growth (% p.a.)
P1.DEM.UN.WUP.POP.RUR.GR10
Source: World Bank (WDI)

Sahel rainfall anomalies
P4.ENV.JISAO.CLIM.SAHEL
Page: chart 80 (p. 198).
Source: JISAO data (http://jisao.washington.edu/data/sahel/)
Owner: Joint Institute for the Study of the Atmosphere and Ocean (JISAO)

Saline soils (ha)
P4.ENV.FAO.POL.SAL
Page: chart 76 (p. 190).
Source: Natural Resources and Environment Department
Owner: FAO

Share of energy supply derived from cereals, roots and tubers (%)
DA.DET.ES.KCD.SH
Source: FAOSTAT and ESS calculations
Owner: FAO

Share of feedstocks used in bioenergy production (%)
P4.ENV.FAO.BIO.FD.FDSTK
Page: chart 89 (p. 211).
Source: Statistics Division
Owner: FAO

Share of food expenditure of the poor (%)
DO.OUT.ACFEP.EXP.SH
Source: LABORSTA
Owner: ILO

Share of freshwater resources withdrawn (total)
P4.ENV.FAO.NRL.WAT.WWfr
Page: table 46 (p. 216), chart 75 (p. 188).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Share of freshwater resources withdrawn by agriculture
P4.ENV.FAO.NRL.WAT.WWfrag
Page: table 46 (p. 216), map 50 (p. 191).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Sheep and goat meat production (tonnes)
P3.FEED.FAO.ESS.SH.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sheep and goat meat production growth (% p.a.)
P3.FEED.FAO.ESS.SH.QP.GR10
Source: Statistics Division (FAOSTAT)

Social services function (%)
P4.ENV.FAO.FOR.LCF.PFF.SS
Page: table 45 (p. 214), chart 73 (p. 187).
Source: Global Forest Resources Assessment 2012
Owner: FAO

Source of growth in crop production, harvested area expansion (%)
P3.FEED.FAO.ESS.CRPS.GSRCE.AR
Source: Statistics Division
Owner: FAO

Source of growth in crop production, yield increases (%)
P3.FEED.FAO.ESS.CRPS.GSRCE.YI
Source: Statistics Division
Owner: FAO

Stateless and others, total
P2.HUN.UNHCR.GT.RHS.TPCO
Source: Statistical Online Population Database
Owner: UNHCR

Sugar exports (volume)
P3.FEED.FAO.ESS.SU.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sugar imports (volume)
P3.FEED.FAO.ESS.SU.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sugarcane harvested area (ha)
P3.FEED.FAO.ESS.SC.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sugarcane harvested area growth (% p.a.)
P3.FEED.FAO.ESS.SC.AH.GR10
Source: Statistics Division (FAOSTAT)

Sugarcane harvested area growth (% p.a.)
P3.FEED.FAO.ESS.SC.AH.GR49
Source: Statistics Division (FAOSTAT)

Sugarcane production (tonnes)
P3.FEED.FAO.ESS.SC.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sugarcane per capita production (tonnes/person)
P3.FEED.FAO.ESS.SC.QP.SHP
Source: Statistics Division (FAOSTAT)

Sugarcane production growth (% p.a.)
P3.FEED.FAO.ESS.SC.QP.GR10
Source: Statistics Division (FAOSTAT)

Sugarcane yield (hg/ha)
P3.FEED.FAO.ESS.SC.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Sugarcane yield growth (% p.a.)
P3.FEED.FAO.ESS.SC.YLD.GR10
Source: Statistics Division (FAOSTAT)

Terrestrial protected areas (% of total surface area)
P4.ENV.WBK.WDI.CON.PROT
Page: table 49 (p. 222), map 55 (p. 201).
Source: World Bank (WDI)
Owner: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Total area equipped for irrigation (ha)
P1.RES.FAO.NRL.TAEI
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Total land area (ha)
P1.RES.FAO.ESS.LDAQ.LAND
Source: Statistics Division (FAOSTAT)
Owner: FAO

Total population of concern to UNHCR, total
P2.HUN.UNHCR.GT.RHS.TPCP
Source: Statistical Online Population Database
Owner: UNHCR

Total refugees, total
P2.HUN.UNHCR.GT.RHS.TPCR
Source: Statistical Online Population Database
Owner: UNHCR

Total water withdrawal (m^3/inhab/yr)
P4.ENV.FAO.NRL.WAT.TWWpc
Page: table 46 (p. 216), map 49 (p. 189).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Total water withdrawal (m^3/yr)
P4.ENV.FAO.NRL.WAT.TWW
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Unemployment, female (% of female labour force)
P1.RES.WBK.WDI.LAB.UNF
Source: World Bank (WDI)
Owner: ILO

Unemployment, total (% of total labor force)
P1.RES.WBK.WDI.LAB.UNFT
Source: World Bank (WDI)
Owner: ILO

Urban air pollution
P4.ENV.WHO.GHO.POL.UAP
Page: table 48 (p. 220).
Source: Global Health Observatory
Owner: WHO

Urban population (% of total population)
P1.DEM.UN.WUP.POP.URB.SH
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Urban population, total
P1.DEM.UN.WUP.POP.URB
Source: World Bank (WDI)
Owner: UNPD World Population Prospects 2010

Urban population growth (% p.a.)
P1.DEM.UN.WUP.POP.URB.GR10
Source: World Bank (WDI)

US$ Exchange rate
P1.MAC.IMF.IFS.EXR.AVE
Source: International Financial Statistics
Owner: IMF

Value of food imports over total merchandise exports (%)
DV.VS.FIME.FE.SH
Source: ESS calculations
Owner: FAO

Value of food production per capita (I$/cap)
DA.DET.FPI.I.NO
Source: FAOSTAT and ESS calculations
Owner: FAO

Vegetable production (tonnes)
P3.FEED.FAO.ESS.VG.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Vegetable per capita production (tonnes/person)
P3.FEED.FAO.ESS.VG.QP.SHP
Source: Statistics Division (FAOSTAT)

Voice and Accountability Index
P2.HUN.WBK.POV.GOV.VCE
Source: World Bank
Owner: Worldwide Governance Indicators (WGI) project

Water pollution, chemical industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATC
Source: World Bank (WDI)
Owner: World Bank

Water pollution, clay and glass industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATCG
Source: World Bank (WDI)
Owner: World Bank

Water pollution, food industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATF
Page: table 48 (p. 220).
Source: World Bank (WDI)
Owner: World Bank

Water pollution, metal industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATM
Source: World Bank (WDI)
Owner: World Bank

Water pollution, other industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATO
Source: World Bank (WDI)
Owner: World Bank

Water pollution, paper and pulp industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATP
Page: table 48 (p. 220).
Source: World Bank (WDI)
Owner: World Bank

Water pollution, textile industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATT
Page: table 48 (p. 220).
Source: World Bank (WDI)
Owner: World Bank

Water pollution, wood industry (% of total BOD emissions)
P4.ENV.WBK.WDI.POL.WATW
Page: table 48 (p. 220).
Source: World Bank (WDI)
Owner: World Bank

Water withdrawal % by agriculture
P4.ENV.FAO.NRL.WAT.WWAperc
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Water withdrawal % by industry
P4.ENV.FAO.NRL.WAT.WWIperc
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Water withdrawal % by the municipal sector
P4.ENV.FAO.NRL.WAT.WWMperc
Page: table 46 (p. 216).
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Wheat exports (volume)
P3.FEED.FAO.ESS.WT.EX
Source: Statistics Division (FAOSTAT)
Owner: FAO

Wheat harvested area (ha)
P3.FEED.FAO.ESS.WT.AH
Source: Statistics Division (FAOSTAT)
Owner: FAO

Wheat harvested area growth (% p.a.)
P3.FEED.FAO.ESS.WT.AH.GR10
Source: Statistics Division (FAOSTAT)

Wheat harvested area growth (% p.a.)
P3.FEED.FAO.ESS.WT.AH.GR49
Source: Statistics Division (FAOSTAT)

Wheat imports (volume)
P3.FEED.FAO.ESS.WT.IM
Source: Statistics Division (FAOSTAT)
Owner: FAO

Wheat production (tonnes)
P3.FEED.FAO.ESS.WT.QP
Source: Statistics Division (FAOSTAT)
Owner: FAO

Wheat per capita production (tonnes/person)
P3.FEED.FAO.ESS.WT.QP.SHP
Source: Statistics Division (FAOSTAT)

Wheat production growth (% p.a.)
P3.FEED.FAO.ESS.WT.QP.GR10
Source: Statistics Division (FAOSTAT)

Wheat yield (hg/ha)
P3.FEED.FAO.ESS.WT.YLD
Source: Statistics Division (FAOSTAT)
Owner: FAO

Wheat yield growth (% p.a.)
P3.FEED.FAO.ESS.WT.YLD.GR10
Source: Statistics Division (FAOSTAT)

Definitions

% of equip. area actually irrigated

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.

% of equip. area irrigated by groundwater

Area equipped to provide water (via irrigation) to crops that is irrigated from wells (shallow wells and deep tube wells) or springs.

Agricultural area

Agricultural area, this category is the sum of areas under "Arable land and Permanent crops" and "Permanent pastures".

Agricultural area organic, total

Sum of areas under "Agricultural area certified organic" and "Agricultural area in conversion to organic".

Agricultural machinery, tractors per 100 sq. km of arable land

Agricultural machinery refers to the number of wheel and crawler tractors (excluding garden tractors) in use in agriculture at the end of the calendar year specified or during the first quarter of the following year. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Agricultural methane emissions (% of total)

Agricultural methane emissions are emissions from animals, animal waste, rice production, agricultural waste burning (nonenergy, on-site), and savannah burning.

Agricultural methane emissions (kt of CO_2 equivalent)

See 'Agricultural methane emissions (% of total)' and 'Methane emissions (kt of CO_2 equivalent)'.

Agricultural nitrous oxide emissions (% of total)

Agricultural nitrous oxide emissions are emissions produced through fertilizer use (synthetic and animal manure), animal waste management, agricultural waste burning (nonenergy, on-site), and savannah burning.

Agricultural nitrous oxide emissions (metric tons of CO_2 equivalent)

See 'Agricultural nitrous oxide emissions (% of total)' and 'Nitrous oxide emissions (metric tons of CO_2 equivalent)'.

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 non-food 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 water withdrawal (m^3/yr)

Annual quantity of water withdrawn for irrigation, livestock and aquaculture purposes. It includes renewable freshwater resources as well as over-abstraction of renewable groundwater or withdrawal of fossil groundwater, use of agricultural drainage water, (treated) wastewater and desalinated water. .

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 US dollars.

Agriculture, value added (% 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.

Animal Vegetable Oil -4

Vegetables oils and fats. Oil extraction by traditional methods often requires various preliminary operations, such as cracking, shelling, dehulling, etc., after which the crop is ground to a paste. The paste, or the whole fruit, is then boiled with water and stirred until the oil separates and can be collected. Such traditional methods have a low rate of efficiency, particularly when performed manually. Oil extracted by pressing without heating is the purest method and often produces an edible product without refining. Modern methods of oil recovery include crushing and pressing, as well as dissolving the crop in a solvent, most commonly hexane. Extracting oil with a solvent is a more efficient method than pressing. The residue left after the removal of oil (oilcake or meal) is used as feedstuff. Crude vegetable oils are obtained without further processing other than degumming or filtering. To make them suitable for human consumption, most edible vegetable oils are refined to remove impurities and toxic substances, a process which involves bleaching, deodorization and cooling (to make the oils stable in cold temperatures). The loss involved in these processes ranges from 4 to 8 percent. The FAO concept includes raw, refined and fractioned oils, but not chemically modified oils. With some exceptions, and in contrast to animal fats, vegetable oils contain predominantly unsaturated (light, liquid) fatty acids of two kinds: monounsaturated (oleic acid - mainly in extra virgin olive oil) and polyunsaturated (linoleic acid and linolenic acid - in oils extracted from oilseeds). Vegetable oils have a wide variety of food uses, including salad and cooking oils, as well as in the production of margarine, shortening and compound fat. They also enter into many processed products, such as mayonnaise, mustard, potato chips, French fries, salad dressing, sandwich spread and canned fish. Industrial and non-food uses of vegetable oils include the production of soaps, detergents, fatty acids, paint, varnish, resin, plastic and lubricants. Animal oils and fats. This chapter includes animal fats that are obtained in the course of dressing the carcasses of slaughtered animals (slaughter fats), or at a later stage in the butchering process when meat is being prepared for final consumption (butcher fats). Processed animal fats include lard obtained by melting raw pig fat and tallow obtained from raw fat of other animal species. Animal fats are largely used in the production of margarine, shortening and compound fat. They also enter into many processed food products. Industrial and non-food uses of animal fats include the production of soaps, fatty acids, lubricants and feedstuffs.

Aquaculture 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.

Arable land

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.

Arable land and Permanent crops

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

Arable land potential (ha)

Calculations based on Bruinsma 2011.

Area under bioenergy crops

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

Area under GM crops (time series of economic regions)

Data refer to the area from which genetically modified (GM) crops are gathered. See http://www.isaaa.org/ for further information. In the absence of verification, FAO does not necessarily endorse these data.

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.

Average governance Index

The Worldwide Governance Indicators project constructs aggregate indicators of six broad dimensions of governance: (i) Voice and Accountability; (ii) Political Stability and Absence of Violence/Terrorism; (iii) Government Effectiveness; (iv) Regulatory Quality; (v) Rule of Law; (vi) Control of Corruption. The six aggregate indicators are based on 30 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide. Details on the underlying data sources, the aggregation method, and the interpretation of the indicators, can be found in the WGI methodology paper: Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi (2010). "The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues". World Bank Policy Research Working Paper No. 5430 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130. .

Average precipitation in depth (mm per year)

Long-term average (over space and time) of annual endogenous precipitation (produced in the country) in depth.

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.

Average soil quality (%)

Carbon content in the topsoil, average - Percentage in weight (%). Soils with organic carbon content less than 1% in weight are generally affected by soil degradation processes and erosion. On the other hand, soils with 1-10% organic carbon content have high agricultural value. .

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 Acquatic Products, other. 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.

Beverages

This chapter includes five main groups of commodities that differ by source, use, nutritive value and in their commercial importance. The first group includes those products usually found in nature and used mainly for drinking purposes, such as water, ice and snow. Mineral water and aerated water, even when artificially produced, are also included here. The second group includes water to which sweeteners and flavourings have been added. This group of beverages has been gaining large markets in recent years and represents an important contribution to food consumption in some areas because of the sweetener content (up to 20 percent by weight) of these beverages. The third group includes the most traditional alcoholic beverages consumed by humans. Typically, the alcohol content of these beverages, which is obtained through fermentation of many vegetable crops, varies between 3 and 25 percent. The fourth group refers to undenatured ethyl alcohol with alcoholic strength by volume of less than 80 percent, and usually between 40 and 50 percent. This category includes all the distilled alcoholic beverages, whether or not sweeteners and/or flavourings have been added. The fifth and final group includes products that are not for human consumption, but are included here because they are closely related to alcoholic beverages. In this case, the strength of alcohol by volume is 80 percent and higher. This group includes both undenatured and denatured alcohol.

Biofuel production (kt of oil equivalent)

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

Capital Stock in agriculture and investment in agriculture

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.

Capture 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.

Carbon stock in living forest biomass

Carbon in all living biomass above the soil, including stem, stump, branches, bark, seeds, and foliage; and carbon biomass of live roots. Fine roots of less than 2 mm diameter are excluded, because these often cannot be distinguished empirically from soil organic matter or litter.

Central government debt, total (% of GDP)

Debt is the entire stock of direct government fixed-term contractual obligations to others outstanding on a particular date. It includes domestic and foreign liabilities such as currency and money deposits, securities other than shares, and loans. It is the gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government. Because debt is a stock rather than a flow, it is measured as of a given date, usually the last day of the fiscal year.

Cereal import dependency ratio (%)

Cereal imports/(cereal production+cereal import-cereal export)

Cereals

Cereals are generally of the gramineous family and, in the FAO concept, refer to crops harvested for dry grain only. Crops harvested green for forage, silage or grazingare classified as fodder crops. Also excluded are industrial crops, e.g. broom sorghum (Crude organic materials nes) and sweet sorghum when grown for syrup (Sugar crops nes). For international trade classifications, fresh cereals (other than sweet corn), whether or not suitable for use as fresh vegetables, are classified as cereals. Cereals are identified according to their genus. However, when two or more genera are sown and harvested as a mixture they should be classified and reported as "mixed grains". Production data are reported in terms of clean, dry weight of grains (12-14 percent moisture) in the form usually marketed. Rice, however, is reported in terms of paddy. Apart from moisture content and inedible substances such as cellulose, cereal grains contain, along with traces of minerals and vitamins, carbohydrates - mainly starches - (comprising 65-75 percent of their total weight), as well as proteins (6-12 percent) and fat (1-5 percent). The FAO definitions cover 17 primary cereals, of which one - white maize - is a component of maize. Each definition is listed along with its code, botanical name or names, and a short description. Cereal products derive either from the processing of grain through one or more mechanical or chemical operations, or from the processing of flour, meal or starch. Each cereal product is listed after the cereal from which it is derived.

CO_2 concentration

Data are reported as a dry air mole fraction defined as the number of molecules of carbon dioxide divided by the number of all molecules in air, including CO_2 itself, after water vapour has been removed. The mole fraction is expressed as parts per million (ppm).

Coffee+Tea+Cocoa+Sp-07

COFFEE is a tropical shrub that yields fruits or cherries which are processed so as to free the seeds or "beans" from the fruit pulp and then from the mucilage and silver skin covering the beans. Coffee with the mucilage and skin retained is called parchment coffee. By weight, the fresh cherries consist of 45-55 percent pulp, mucilage and skin, and 45-55 percent beans. The clean beand are called "green coffee" or "clean coffee" and this is considered to be a primary crop. Coffee contains caffeine, an alkaloid. Coffee is a stimulant, not a food crop. COCOA is a rain-forest tree that is cultivated for its beans. The beand are contained in ovoid pods that grow directly on the trunk and on major branches. The beand and the white mucilage or pulp that surrounds them represent about one-third of the total weight of the pods. The fermented and

dried beand are considered to be a primary crop from which various processed products are derived, including roasted beand (still in the shell) and nibs, or fragments of roasted, shelled and crushed beans. The nibs are ground to give cocoa mass, from which cocoa fat or butter is extracted by pressing. Pods, shells, pulp and cake have only limited use as an animal feed owing to their high alkaloid content. Cocoa beand contain carbohydrates, protein and particularly fat, making them a food crop as well as a stimulant. TEA is a shrub of the Camellia family that is cultivated for its tender leaves. The two main varieties are assamica and sinensis. The primary crop consists of the tender leaves, which may be withered, rolled, fermented and dried (black tea). Green tea is black tea that is not fermented. Tea is a stimulant, not a food crop.

Contribution of the agricultural sector to total greenhouse gases (%)

Contribution of the agricultural sector to total greenhouse gases: carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Emissions from agricultural transport and energy use are excluded, as these sectors are not defined as part of the agriculture sector by the current IPCC guidance.

Control of Corruption Index

See 'Average governance Index'.

Countries in protracted crises

Protracted crises are those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection.

Crop

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 "biological production", but to the actually harvested area during the year.

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.

Death rate, crude (per 1000 people)

Crude death rate indicates the number of deaths occurring during the year, per 1000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.

Depth of the food deficit (depth)

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.

Domestic food price volatility (index)

The Domestic Food Price Volatility is a measure of variation of the Domestic Food Price Level Index (indicator V09). It has been computed as the Standard Deviation (SD) of the deviations from the trend over the previous five years.

Eggs Primary

Eggs and Egg products. Egg production by type of poultry should refer to the total production of eggs in the shell by all types of hens in both the traditional sector (individually owned small flocks) and the modern sector (large-scale, intensive commercial poultry farms). Total productions include eggs for hatching but exclude waste of farms. Countries should report in terms of both numbers and weight. FAO lists seven egg and egg products items, including four primary and three processed products.

Electricity access, rural %

See definition of "Electrification rate".

Electricity access, urban %

See definition of "Electrification rate".

Electrification rate (%)

There is no single internationally-accepted definition for electricity access. The definition used covers electricity access at the household level, that is, the number of people who have electricity in their home. It comprises electricity sold commercially, both on-grid and off-grid. It also includes self-generated electricity for those countries where access to electricity has been assessed

through surveys by government or government agencies. The data does not capture unauthorised connections. The national, urban and rural electrification rates shown indicate the number of people with electricity access as a percentage of the total population.

Employees, agriculture, female (% of female employment)

See definition of "employment in agriculture".

Employees, agriculture, male (% of female employment)

See definition of "employment in agriculture".

Employment in agriculture (% 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. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.

Employment in industry (% 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. Industry corresponds to divisions 2-5 (ISIC revision 2) or tabulation categories C-F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water).

Employment in services (% 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. Services correspond to divisions 6-9 (ISIC revision 2) or tabulation categories G-P (ISIC revision 3) and include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.

Employment to population ratio, 15+, female (%)

See 'Employment to population ratio, 15+, total (%)'.

Employment to population ratio, 15+, male (%)

See 'Employment to population ratio, 15+, total (%)'.

Employment to population ratio, 15+, total (%)

Employment to population ratio is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population.

Energy use by agriculture (kt)

Energy use is indicated by the annual use of energy at farm level by fuel type (GJ/ha), and the energy used to produce mineral fertilisers for agricultural use (GJ/ha).

Energy use share (kt)

See 'Energy use by agriculture (kt)' and 'Concepts and Methods' section for aggregation and construction rules.

Export value index (2000 = 100)

Export values are the current value of exports (f.o.b.) converted to US dollars and expressed as a percentage of the average for the base period (2000). UNCTAD's export value indexes are reported for most economies. For selected economies for which UNCTAD does not publish data, the export value indexes are derived from export volume indexes (line 72) and corresponding unit value indexes of exports (line 74) in the IMF's International Financial Statistics.

Exports of fish (value)

Value of exports of fish US$.

FAO Global Consumption price volatility (2002-2004=100)

The FAO Global Food Consumption Price Index tracks changes in the cost of the global food basket as portrayed by the latest FAO world food balance sheet. Representative international prices for each of the commodities or commodity groups appearing in the balance sheet are weighted by their contribution to total calorific intake.

Female (% of agricultural holders in developing regions)

Number of women land holders in relation to the total number of holdings.

Female (% of the agricultural labour force)

The female share of the agricultural labour force is calculated as the total number of women economically active in agriculture divided by the total population economically active in agriculture. Regional averages are weighted by population.

Fertility rate, total (births per woman)

Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

Fertilizer consumption (kilograms per hectare of arable land)

Fertilizer consumption (100 grams per hectare of arable land) measures the quantity of plant nutrients used per unit of arable land. Fertilizer products cover nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). Traditional nutrients–animal and plant manures–are not included. For the purpose of data dissemination, FAO has adopted the concept of a calendar year (January to December). Some countries compile fertilizer data on a calendar year basis, while others are on a split-year basis. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

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.

Food aid received (tonnes)

Quantity of food aid that reaches the recipient country during a given period. Quantities exported in Grain Equivalent. The latter is a unit of measurement used as alternative to Actual Ton for cereal-derived products. To convert a product into grain equivalent a commodity specific conversion factor is used. For example if the factor to convert wheat flour into wheat is 1.37, a tonne of wheat flour corresponds to 0.730 tons of wheat (1/1.37).

Food price inflation (%)

Annual change in the ILO food price indices. The price data for the different items included in the computation of the index are

normally weighted in order to take into account the relative importance of each item with respect to total consumption expenditure. In most countries, the indices are computed in a derived form such as weighted arithmetic averages of price relatives for a selected number of representative items between the period under consideration and the base period, using one or other forms of Laspeyres' formula. The number of items and the weights used to compute the index are given according to expenditure group. The term "item" is used here to mean the smallest grouping of goods and services for which a specific weight is given. The source(s) and the reference period of the weights used for the index, e.g. a household expenditure survey, national accounts, etc. If the reference period for the weights differs from the base period of the index, the adjustments made to the weights to take account of the price changes between the two periods are described. See http://laborsta.ilo.org for more information.

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 proiding an index of the price of food in the country relative to the price of the generic cosnumption 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 chenges in Food CPI and General CPI as provided by ILO.

Food price volatility (annualized historical volatility) (%)

Annualized historical volatility of the ILO food price indices.

Food production (calories)

Food production converted in calorie equivalent. See http://www.fao.org/DOCREP/006/Y5022E/y5022e04.htm for conversion factors.

Foreign direct investment, net inflows (BoP, current US$)

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. Data are in current U.S. dollars.

Forest area

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: rubberwood 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.

Fruit + Vegetables -05

Vegetables contain principally water, accounting for between 70 percent and 95 percent of their weight. They are low in nutrients, but contain minerals and vitamins. FAO covers 27 primary vegetable products. Each is listed along with its code, botanical name, or names, and a short description. 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. Although melons and watermelons are generally considered to be fruits, FAO groups them with vegetables because they are temporary crops. Fruit crops are highly perishable. Their shelf life may be extended through the application of chemical substances that inhibit the growth of micro-organisms and through careful control of the surrounding temperature, pressure and humidity once the fruit has been picked. Fruits and berries have a very high water content accounting for some 70- 90 percent of their weight. They contain, in various degrees, minerals, vitamins and organic acids, some of which reside in the peel or skin. Some fruits have a high fibre content and other inedible components, so that wastage is high, e.g. 60 percent for passion fruit and 35-45 percent for pineapples. The waste in temperate zone fruit is lower, generally of the order of 10-15 percent, while berries contain very little waste. The carbohydrate content of fruits varies widely. Protein content is very low, averaging less than 1 percent, or below that in vegetables. Fat content in fruit is negligible, with the notable exception of avocados. Fruit crops are consumed directly as food and are processed into dried fruit, fruit juice, canned fruit, frozen fruit, jam, alcoholic beverages, etc. Fruit crops are not normally grown for animal feed, although significant quantities of diseased and substandard fruits, as well as certain by-products of the fruit processing industry, are fed to animals. Production data for fruit crops should relate to fruits actually harvested. Data on bananas and plantains should relate to the weight of single bananas or banana hands, excluding the weight of the central stalk. FAO lists 36 primary fruit crops.

Fungicides&Bactericides

See 'World pesticide usage'.

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 US 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.

GDP per capita (current US$)

GDP per capita is gross domestic product divided by midyear population. GDP 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 US dollars.

Gender Inequality Index

The Gender Inequality Index is a composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment and the labour market. It varies between zero (when women and men fare equally)

and one (when men or women fare poorly compared to the other in all dimensions). The health dimension is measured by two indicators: maternal mortality ratio and the adolescent fertility rate. The empowerment dimension is also measured by two indicators: the share of parliamentary seats held by each sex and by secondary and higher education attainment levels. The labour dimension is measured by women's participation in the work force. The Gender Inequality Index is designed to reveal the extent to which national human development achievements are eroded by gender inequality, and to provide empirical foundations for policy analysis and advocacy efforts.

Gini-index of income distribution

Gini index measures the extent to which the distribution of income 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.

Global distribution of risks associated with main agricultural production systems

See FAO (2011d) State of the World's Land and Water Resources for Food and Agriculture (SOLAW).

Global food trade index, cal (2004-2006=100)

Index of the caloric value of world food exports, 2004-2006 = 100.

Global food trade index, value (2004-2006=100)

Index of the value (current US$) of world food exports, 2004-2006 = 100.

World pesticide usage

Global utilization of pesticides by category.

Global surface temperature (current)

The global surface temperature is an estimate of the global mean surface air temperature. However, for changes over time, only anomalies, as departures from a climatology, are used, most commonly based on the area weighted global average of the sea surface temperature anomaly and land surface air temperature anomaly.

Global surface temperature (time series)

See 'Global surface temperature (current)'.

Government Effectiveness Index

See 'Average governance Index'.

Greenhouse gas emissions by agriculture (gigagrams CO_2 equivalent)

Greenhouse gas emissions by agriculture: carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Emissions from agricultural transport and energy use are excluded, as these sectors are not defined as part of the agriculture sector by the current IPCC guidance.

Gross capital formation (% of GDP)

Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.

Gross per capita Production Index Number (2004-2006=100)

See 'Agricultural production indices'.

Growth rates

Growth rates are calculated by the geometric formula: $100 \times (x(t)/x_0)^{(1/(t-0))-1}$.

Herbicides

See 'World pesticide usage'.

Human Development Index

The HDI represents a national average of human development achievements in the three basic dimensions making up the HDI: health, education and income. Like all averages, it conceals disparities in human development across the population within the same country. Two countries with different distributions of achievements can have the same average HDI value. The IHDI takes into account not only the average achievements of a country on health, education and income, but also how those achievements are distributed among its citizens by "discounting" each dimension's average value according to its level of inequality.

Human Development Index (inequality adjusted)

The Human Development Index (HDI) is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. The Inequality-adjusted Human Development Index (IHDI) adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. The IHDI accounts for inequalities in HDI dimensions by "discounting" each dimension's average value according to its level of inequality. The IHDI equals the HDI when there is no inequality across people but is less than the HDI as inequality rises. In this sense, the IHDI is the actual level of human development (accounting for this inequality), while the HDI can be viewed as an index of "potential" human development (or the maximum level of HDI) that could be achieved if there was no inequality. The "loss" in potential human development due to inequality is given by the difference between the HDI and the IHDI and can be expressed as a percentage.

Import dependency (calories)

Import dependency ratio (IDR) is defined as: IDR = imports*100/(production + imports - exports). The complement of this ratio to 100 would represent that part of the domestic food supply that has been produced in the country itself. However, there is a caveat to be kept in mind: these ratios hold only if imports are mainly used for domestic utilization and are not re-exported.

Import value index (2000 = 100)

Import value indexes are the current value of imports (c.i.f.) converted to US dollars and expressed as a percentage of the average for the base period (2000). UNCTAD's import value indexes are reported for most economies. For selected economies for which UNCTAD does not publish data, the import value indexes are derived from import volume indexes (line 73) and corresponding unit

value indexes of imports (line 75) in the IMF's International Financial Statistics.

Imports of fish (value)

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).

Income share held by highest 20% (%)

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.

Income share held by lowest 20% (%)

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.

Industrial Roundwood

The wood removed (volume of roundwood under bark) for production of goods and services other than energy production (woodfuel). 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 water withdrawal (m^3/yr)

Annual quantity of water withdrawn for industrial uses. It includes renewable water resources as well as potential over-abstraction of renewable groundwater or withdrawal of fossil groundwater and potential use of desalinated water or treated wastewater. This sector refers to self-supplied industries not connected to the public distribution network. The ratio between net consumption and withdrawal is estimated at less than 5%. It includes water for the cooling of thermoelectric plants, but it does not include hydropower. .

Inflation, consumer prices (annual %)

Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

Inland aquaculture production (tonnes)

Aquaculture production from inland areas.

Inland capture production (tonnes)

Capture fishery production from inland areas.

Insecticides

See 'World pesticide usage'.

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 subcategory 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.

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 .

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

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

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

See definition of 'Labor participation rate, male (% of male population ages 15+)'.

Labour force, total

Total labour force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population: all people who supply labour for the production of goods and services during a specified period. It includes both the employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labour force includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

Land area

Land area is the total area of the country excluding area under inland water bodies.

Land with rainfed crop potential

Calculations based on Bruinsma2011.

Lead time to export, median case (days)

Lead time to export is the median time (the value for 50 percent of shipments) from shipment point to port of loading. Data are from the Logistics Performance Index survey. Respondents provided separate values for the best case (10 percent of shipments) and the median case (50 percent of shipments). The data are exponentiated averages of the logarithm of single value responses and of midpoint values of range responses for the median case.

Lead time to import, median case (days)

Lead time to import is the median time (the value for 50 percent of shipments) from port of discharge to arrival at the consignee. Data

are from the Logistics Performance Index survey. Respondents provided separate values for the best case (10 percent of shipments) and the median case (50 percent of shipments). The data are exponentiated averages of the logarithm of single value responses and of midpoint values of range responses for the median case.

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.

Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)

Data are from Logistics Performance Index surveys conducted by the World Bank in partnership with academic and international institutions and private companies and individuals engaged in international logistics. 2009 round of surveys covered more than 5,000 country assessments by nearly 1,000 international freight forwarders. Respondents evaluate eight markets on six core dimensions on a scale from 1 (worst) to 5 (best). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighboring countries that connect them with international markets. Details of the survey methodology are in Arvis and others' Connecting to Compete 2010: Trade Logistics in the Global Economy (2010). Respondents evaluated the quality of trade and transport related infrastructure (e.g. ports, railroads, roads, information technology), on a rating ranging from 1 (very low) to 5 (very high). Scores are averaged across all respondents.

Male (% of agricultural holders in developing regions)

Number of men land holders in relation to the total number of holdings.

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.

Marine aquaculture production (tonnes)

Aquaculture production from marine areas.

Marine capture production (tonnes)

Capture fishery production from marine areas.

Meat, Total

FAO defines meat as the flesh of animals used for food. In production data, meat is normally reported inclusive of bone and exclusive of meat that is unfit for human consumption. As reported by individual countries, meat production data may refer either to commercial production (meat entering marketing channels), inspected production (from animals slaughtered under sanitary inspection), or total production (the total of the above- mentioned categories plus slaughter for personal consumption). All FAO annual production data refer to total production.

Merchandise trade (% of GDP)

Merchandise trade as a share of GDP is the sum of merchandise exports and imports divided by the value of GDP, all in current US dollars.

Methane emissions (kt of CO_2 equivalent)

Methane emissions are those stemming from human activities such as agriculture and from industrial methane production.

Milk,Total

Milk, eggs, honey and beeswax are included as products of live animals. Fibres of animal origin (mainly wool and silk) are included with fibres of vegetal and animal origin. Milk and dairy products. Estimates of milk production as reported by countries refer to one or more of the following three concepts. Gross production is milk production plus milk sucked by young animals. Production available for consumption is net production less milk fed to animals, milk retained by farmers for food and feed, direct sales to consumers and farm waste. The FAO concept relates to net milk production. Data should be reported by kind of milking animal (cow, sheep, goat, etc.) in terms of whole milk and by weight. In most developed countries only 5-10 percent of whole milk is used directly for human consumption. The bulk of milk production is processed before being marketed as liquid milk (e.g. standardized, pasteurized, skimmed, etc.) or is manufactured in to products such as cream, butter, cheese, evaporated and condensed milk, milk powder, casein, yogurt, ice cream, etc. About 70 percent of whole milk is processed into dairy products; the by-products of these processes (e.g. skim milk, buttermilk and whey) are used either for feed or are manufactured into other dairy products, e.g. dry skim milk and low-fat cheese. Processed milk and dairy products are often supplemented with vitamins, mineral and various additives. FAO list 50 milk and dairy product items in the list that follows, of which five are primary products. Some food products containing milk are not listed separately by FAO, e.g. eggnog, sherbet, malted milk, chocolate milk drink and mellorine.

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.

Multiple uses function (%)

See 'Production function (%)'.

Municipal water withdrawal (m^3/yr)

Annual quantity of water withdrawn primarily for the direct use by the population. It includes renewable freshwater resources as well as potential over-abstraction of renewable groundwater or withdrawal of fossil groundwater and the potential use of desalinated water or treated wastewater. It is usually computed as the total water withdrawn by the public distribution network. It can include that part of the industries, which is connected to the municipal network. The ratio between the net consumption and the water withdrawn can vary from 5 to 15% in urban areas and from 10 to 50% in rural areas.

Natural fibre production (tonnes)

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). 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. .

Net barter terms of trade index (2000 = 100)

Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year 2000. Unit value indexes are based on data reported by countries that demonstrate consistency under UNCTAD quality controls, supplemented by UNCTAD's estimates using the previous year's trade values at the Standard International Trade Classification three-digit level as weights. To improve data coverage, especially for the latest periods, UNCTAD

constructs a set of average prices indexes at the three-digit product classification of the Standard International Trade Classification revision 3 using UNCTAD's Commodity Price Statistics, international and national sources, and UNCTAD secretariat estimates and calculates unit value indexes at the country level using the current year's trade values as weights.

Net ODA received (% of GNI)

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 ODA received per capita (current US$)

Net official development assistance (ODA) per capita 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; and is calculated by dividing net ODA received by the midyear population estimate. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).

Nitrous oxide emissions (metric tons of CO_2 equivalent)

Nitrous oxide emissions are emissions from agricultural biomass burning, industrial activities, and livestock management.

Oilcrops Primary

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. Dessert and table nuts, although rich in oil, are listed under Nuts (see Chapter .). Annual oilseed plants tha are either harvested green or are used for grazing and for green manure are included with Fodder Crops (see Chapter 11). Some of the crops included in this chapter are also fibre crops in that both the seeds and the fibres are harvested from the same plant. Such crops include: coconuts, yielding coir from the mesocarp; kapok fruit; seed cotton; linseed; and hempseed. In the case of several other crops, both the pulp of the fruit and the kernels are used for oil. The main crops of this type are oil-palm fruit and tallow tree seeds. Production data are reported in terms of dry products as marketed. Exceptions to this general rule include: groundnuts, which are reported as groundnuts in the shell; coconuts, which are reported on the basis of the weight of the nut including the woody shell, but excluding the fibrous outer husk; and palm oil, which is reported in terms of oil, by weight. Because of the very different nature of the various oil crops, the primary products cannot be aggregated in their natural weight to obtain total oil crops. For this reason, FAO converts the crops to either an oil equivalent or an oilcake equivalent before aggregating them. Only 5-6 percent of the world production of oil crops is used for seed (oilseeds) and animal feed, while about 8 percent is used for food. The remaining 86 percent is processed into oil. The fat content of oil crops varies widely. Fat content ranges from as low as 10-15 percent of the weight of coconuts to over 50 percent of the weight of sesame seeds and palm kernels. Carbohydrates, mainly polysaccharides, range from 15 to 30 percent in the oilseeds, but are generally lower in other oil-bearing crops. The protein content is very high in soybeans, at up to 40 percent, but is much lower in many other oilseeds, at 15-25 percent, and is lower still in some other oil-bearing crops.

Othe and unknown function (%)

See 'Production function (%)'.

Other Insecticides

See 'World pesticide usage'.

Other naturally reg. forest (%)

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.

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.

Parties to the Cartagena Protocol on Biosafety

Countries which have deposited instruments of ratification, acceptance, approval or accession with the Depositary of the Cartagena Protocol on Biosafety, assumed by the Secretary General of the United Nations.

Per capita food losses and waste at consumption stage

See http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf for data sources and assumptions.

Per capita food losses and waste at pre-consumptions stages

See http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf for data sources and assumptions.

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.

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.

Per capita total food losses and waste (kg/year)

See http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf for data sources and assumptions.

Percent of arable land equipped for irrigation (%)

Percent of arable land equipped for irrigation.

Percent of paved roads over total roads (%)

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.

Percentage of children under 5 years of age who are stunted (%)

Percentage of stunting (height-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Percentage of children under 5 years of age who are underweight (%)

Percentage of underweight (weight-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Percentage of children under 5 years of age who are wasted (%)

Percentage of (weight-for-height less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Percentage of population with access to improved sanitation facilities (%)

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.

Percentage of population with access to improved water sources (%)

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.

Permanent crops

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.

Permanent meadows and pastures

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).

Persons affected by drought, total

See 'Persons affected by natural disasters, total' for a definition of persons affected. Drought: long lasting event, triggered by lack of precipitation. A drought is an extended period of time characterised 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.

Persons affected by earthquake (seismic activity), total

See 'Persons affected by natural disasters, total' for a definition of persons affected. Eartquake: shaking and displacement of ground due to seismic waves. This is the earthquake itself WITHOUT secondary effects. An earthquake is the result of a sudden release of stored energy in the Earth's crust that creates seismic waves. They can be of tectonic or volcanic origin. At the Earth's surface they are felt as a shaking or displacement of the ground. The energy released in the hypocenter can be measured in different frequency ranges. Therefore there are different scales for measuring the magnitude of a quake according to a certain frequency range. Those are: a) surface wave magnitude (Ms); b) body wave magnitude (Mb); c) local magnitude (ML); moment magnitude.

Persons affected by extreme temperature, total

See 'Persons affected by natural disasters, total' for a definition of persons affected. Extreme temperature includes heat weaves, cold weaves, and extreme winter conditions. A heat wave is a prolonged period of excessively hot and sometimes also humid weather relative to normal climat patterns of a certain region. Heat waves like in Central Europe 2003. 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, property. Damage caused by low temperatures. Extreme winter condition concerns the damage caused by snow and ice. Winter damage refers to damage to buildings, infrastructure, traffic (esp. navigation) inflicted by snow and ice in form of snow pressure, freezing rain, frozen waterways etc.

Persons affected by flood, total

See 'Persons affected by natural disasters, total' for a definition of persons affected. A flood is a significant rise of water level in a stream, lake, reservoir or coastal region.

Persons affected by natural disasters, total

People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance. Appearance of a significant number of cases of an infectious disease introduced in a region or a population that is usually free from that disease. See www.emdat.be - Universit" Catholique de Louvain - Brussels - Belgium.

Persons affected by storm, total

See 'Persons affected by natural disasters, total' for a definition of persons affected.

Persons affected by volcano disasters, total

See 'Persons affected by natural disasters, total' for a definition of persons affected. All volcanic activity like rock fall, ash fall, lava streams, gases etc. Volcanic activity desribes both the transport of magma and/or gases to the Earth's surface, which can be accompanied by tremors and eruptions, and the interaction of magma and water (e.g. groundwater, crater lakes) underneath the Earth's surface, which can result in phreatic eruptions. Depending on the composition of the magma eruptions can be explosive and effusive and result in variations of rock fall, ash fall, lava streams, pyroclastic flows, emission of gases etc. Wildfire describes an uncontrolled burning fire, usually in wild lands, which can cause damage to forestry, agriculture, infrastructure and buildings. Fire in forested/bush areas e.g. California, Australia. Epidemic: either an unusual increase in the number of cases of an infectious disease, which already exists in the region or population concerned; or the appearance of an infection previously absent from a region.

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.

Pig meat

Meat, with the bone in, of domestic or wild pigs (e.g. wild boars),whether fresh, chilled or frozen.

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.

Planted forest (%)

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. Planted forest is forest predominantly composed of trees established through planting and/or deliberate seeding.

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.

Political Stability and Absence of Violence/Terrorism Index

See 'Average governance Index'.

Population ages 0-14 (% of total)

Population between the ages 0 to 14 as a percentage of the total population. Population is based on the de facto definition of population.

Population ages 15-64 (% of total)

Population ages 15 to 64 is the percentage of the total population that is in the age group 15 to 64. Population is based on the de facto definition of population.

Population ages 65 and above (% of total)

Population ages 65 and above as a percentage of the total population. Population is based on the de facto definition of population.

Population density (people per sq. km of land area)

Population density is midyear population divided by land area in square kilometres. 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.

Population in urban agglomerations of more than 1 million (% of total population)

Population in urban agglomerations of more than one million is the percentage of a country's population living in metropolitan areas that in 2000 had a population of more than one million people.

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.

Poverty gap at $1.25 a day (PPP) (%)

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.

Poverty gap at $2 a day (PPP) (%)

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.

Poverty gap at national poverty line (%)

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.

Poverty gap at rural poverty line (%)

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.

Poverty headcount ratio at $1.25 a day (PPP) (% of population)

Population below US$1.25 a day is the percentage of the population living on less than US$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.

Poverty headcount ratio at $2 a day (PPP) (% of population)

Population below US$2 a day is the percentage of the population living on less than US$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.

Poverty headcount ratio at national poverty line (% of population)

National poverty rate is the percentage of the population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys.

Poverty headcount ratio at rural poverty line (% of rural population)

Rural poverty rate is the percentage of the rural population living below the national rural poverty line.

Prevalence of food inadequacy (%)

It is conceptually analogous to the prevalence of undernourishment (indicator V12), 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.

Prevalence of undernourishment (%)

Proportion of the population estimated to be at risk of caloric inadequacy. The indicator is calculated on 3 year averages.

Price-adjusted major currencies US Dollar Index (2000 = 100)

The major currencies index is a trade-weighted average of the foreign exchange values of the US dollar against currencies that circulate widely outside the country of issue. These are the euro, Canadian dollar, Japanese yen, British pound, Swiss franc, Australian dollar, and Swedish kroner. The base year for the index is 2003.

Primary forest (%)

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. 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.

Production function (%)

The primary function or management objective assigned to a management unit either by legal prescription, documented decision of the landowner/manager, or evidence provided by documented studies of forest management practices and customary use. Protected areas - areas especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means; Production - Forest area designated primarily for production of wood, fibre, bioenergy and/or non-wood forest products; Protection of soil and water - Forest area designated primarily for protection of soil and water; Conservation of biodiversity - Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas; Social services - Forest area designated primarily for social services; Multiple use - Forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function; and Other - Forest areas designated primarily for a function other than production, protection, conservation, social services or multiple use. .

Protection and conservation function (%)

See 'Production function (%)'.

Pulses,Total

Pulses are annual leguminous crops yielding from one to 12 grains or seeds of variable size, shape and color 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. In addition to their food value, pulses also play an important role in cropping systems because of their ability to produce nitrogen and thereby enrich the soil. Pulses contain carbohydrates, mainly starches (55-65 percent of the total weight); proteins, including essential amino acids (18-25 percent, and much higher than cereals); and fat (1 - 4 percent). The remainder consists of water and inedible substances. Production data should be reported in terms of dry clean weight, excluding the weightof the pods. Certain kinds of pulses can be skinned and partially crushed or split toremove the seed-coat, but the resulting products are still considered raw for classification purposes. FAO covers 11 primary pulses. Each is listed below, along with its code, its botanical name, or names, and a short description. Only two processed products are included in the FAO list, namely flour of pulses and bran of pulses.

Rail-lines density (%)

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.

Real effective exchange rate index

Real effective exchange rate is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs.

Real growth rate in GDP

Annual percentages of constant price GDP are year-on-year changes; the base year is country-specific. Expenditure-based GDP is total final expenditures at purchasers' prices (including the f.o.b. value of exports of goods and services), less the f.o.b. value of imports of goods and services.

Real interest rate (%)

Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.

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.

Regulatory Quality Index

See 'Average governance Index'.

Renewable water resources (m^3/person/yr)

Total annual internal renewable water resources per inhabitant.

Research and development expenditure (% of GDP)

Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

Researchers in R&D (per million people)

Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included.

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.

Road density (%)

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.

Roots and Tubers,Total

Roots and Tubers are plants yielding starchy roots, tubers, rhizomes, corms and stems. They are used mainly for human food (as such or in processed form), for animal feed and for manufacturing starch, alcohol and fermented beverages including beer. The denomination "roots and tubers" excludes crops which are cultivated mainly for feed (mangolds, swedes) or for processing into sugar (sugar beets), and those classified as "roots, bulb and tuberous vegetables" (onions, garlic and beets). It does include starch and the starchy pith and flour obtained from the trunk of the sago palm and the stem of the Abyssinian banana (Musa ensete). Certain root crops, notably bitter cassava, contain toxic substances, particularly in the skins. As a result, certain processes must be undertaken to make the product safe for human consumption. Apart from their high water content (70-80 percent), these crops contain mainly carbohydrates (largely starches that account for 16-24 percent of their total weight) with very little protein and fat (0-2 percent each). Methods of propagating root crops vary. A live potato tuber or seed must be planted but only part of the live yam tuber and a piece of the stalk (not the root) in the case of cassava. Production data of root crops should be reported in terms of clean weight, i.e. free of earth and mud. FAO distinguishes among seven primary root and tuber crops. The code and name of each one appears in the list that follows, along with its botanical name, or names, and a short description. The processed products of roots and tubers are listed together with their parent primary crops.

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.

Rule of Law Index

See 'Average governance Index'.

Rural population (% of total population)

See 'Rural population, total'.

Rural population, total

Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.

Sahel rainfall anomalies

The Sahel is the ecoclimatic and biogeographic zone of transition between the Sahara desert in the North and the Sudanian Savannas in the south, covering from (west to east) Senegal, southern Mauritania, Mali, Burkina Faso, southern Algeria, Niger, northern Nigeria, Chad, Sudan (including Darfur and the southern part of Sudan), northern Ethiopia and Eritrea. The Sahel rainy season is cantered on June through October, and the means are taken for those months. Documentation of the Sahel precipitation climatology, and additional analyses of the variability are provided on http://jisao.washington.edu/data/sahel/.

Saline soils (ha)

Saline soils are those which have an electrical conductivity of the saturation soil extract of more than 4 dS/m at 25^{o}C. This value is generally used the world over although the terminology committee of the Soil Science Society of America has lowered the boundary between saline and non-saline soils to 2 dS/m in the saturation extract. Soluble salts most commonly present are the chlorides and sulphates of sodium, calcium and magnesium. Nitrates may be present in appreciable quantities only rarely. Sodium and chloride are by far the most dominant ions, particularly in highly saline soils, although calcium and magnesium are usually present in sufficient quantities to meet the nutritional needs of crops. Many saline soils contain appreciable quantities of gypsum (CaSO4, 2H2O) in the profile. Soluble carbonates are always absent. The pH value of the saturated soil paste is always less than 8.2 and more often near neutrality.

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: unplaned, 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.

Share of energy supply derived from cereals, roots and tubers (%)

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 correponding 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.

Share of feedstocks used in bioenergy production (%)

Estimated shares of commodity globally used in non-food sectors, including industrial renewable materials and bioenergy.

Share of food expenditure of the poor (%)

Proportion of food consumption over total consumption (food and non-food) for the lowest income quintile of the population.

Share of freshwater resources withdrawn (total)

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.

Share of freshwater resources withdrawn by agriculture

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.

Social services function (%)

See 'Production function (%)'.

Stateless and others, total

In addition to protecting persons who are or have been displaced, UNHCR extends support to stateless persons by seeking to avoid and reduce statelessness. Stateless persons are individuals not considered as nationals by any State under relevant national laws. UNHCR statistics on statelessness also include people with undetermined nationality. UNHCR has been entrusted by the General Assembly with fulfilling the functions under Article 11 of the 1961 Convention on the Reduction of Statelessness. As the agency designated to act as an intermediary between States and stateless persons, UNHCR provides expertise in the area of nationality and has been requested by its Executive Committee to promote accession to the 1954 Convention relating to the Status of Stateless Persons and the 1961 Convention. Statelessness may be an important reason for fleeing one's place of origin. However, most stateless persons have not fled their country of habitual residence. Because stateless persons who are not refugees are difficult to enumerate, reliable global estimates on the scope of statelessness are currently not available. By the end of 2007, reliable estimates are only available for some 50 countries.

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.

Terrestrial protected areas (% of total surface area)

Nationally protected areas are totally or partially protected areas of at least 1000 hectares that are designated 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, and littoral (intertidal) areas are not included. The data also do not include sites protected under local or provincial law.

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.

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.

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.

Total water withdrawal (m^3/inhab/yr)

Total annual amount of water withdrawn per capita.

Total water withdrawal (m^3/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.

Unemployment, female (% of female labour force)

See definition of "Unemployment, total".

Unemployment, total (% of total labor force)

Unemployment refers to the share of the labour force that is without work but available for and seeking employment. Definitions of labour force and unemployment differ by country.

Urban air pollution

The mean annual concentration of fine suspended particles of less than 10 microns in diameters is a common measure of air pollution. The mean is a population-weighted average for urban population in cities above 100 000 inhabitants of a country.

Urban population (% of total population)

See 'Urban population, total'.

Urban population, total

Urban population refers to people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from the United Nations World Urbanization Prospects.

US$ Exchange rate

Official exchange rate refers to the exchange rate determined by national authorities or to the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on monthly averages (local currency units relative to the US dollar).

Value of food imports over total merchandise exports (%)

Value of food (excl. fish) imports over total merchandise exports.

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.

Vegetables&Melons, Total

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 0øC without the products being frozen. Vegetables contain principally water, accounting for between 70 percent and 95 percent of their weight. They are low in nutrients, but contain minerals and vitamins. FAO covers 27 primary vegetable products. Each is listed along with its code, botanical name, or names, and a short description. Pproducts derived from vegatables refer to processed products. Apart from a few main products, international trade classifications do not permit a sufficiently detailed classification of processed products according to the primary commodity used in the preparation. A similar situation prevails for frozen vegetables.

Voice and Accountability Index

See 'Average governance Index'.

Water pollution, chemical industry (% 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.

Water pollution, clay and glass industry (% 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: stone, ceramics, and glass (36). 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.

Water pollution, food industry (% 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: food and beverages (31). 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.

Water pollution, metal industry (% 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: primary metals (ISIC division 37). 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.

Water pollution, other industry (% 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: other (38 and 39). 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.

Water pollution, paper and pulp industry (% 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: paper and pulp (34). 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.

Water pollution, textile industry (% 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: textiles (32). 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.

Water pollution, wood industry (% 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: wood (33). 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.

Water withdrawal % by agriculture

Agricultural water withdrawal as percentage of total water withdrawal.

Water withdrawal % by industry

Industrial water withdrawal as percentage of total water withdrawal.

Water withdrawal % by the municipal sector

Municipal water withdrawal as percentage of total water withdrawal.

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+Flour,Wheat Equiv.

Defined broadly to include meal, groats and pellets. Strong flours from hard wheat are used for bread, while durum wheat flour is used primarily for pasta. Weaker flours from soft wheat are mainly used in cakes, pastries, biscuits and certain noodles.

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 Fuel

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.

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.

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PART 1

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UN Population Division http://www.un.org/esa/population/unpop.htm

UN Population Fund http://www.unfpa.org/public/

Land and water availability

The State of the World's Land and Water Resources for Food and Agriculture http://www.fao.org/publications/en/

Looking ahead in world food and agriculture: Perspectives to 2050 http://www.fao.org/economic/esa/esag/en/

FAO Natural Resources Department http://www.fao.org/nr/nr-home/en/

Labour

Global Employment Trends 2011 http://www.ilo.org/global/publications/books/WCMS_150440/lang-{}-en/index.htm

Key Indicators of the Labour Market (KILM) http://www.ilo.org/empelm/what/WCMS_114240/lang-{}-en/index.htm

FAO Gender, Equity and Rural Employment Division http://www.fao.org/economic/esw/esw-home/en/

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How to Feed the World in 2050: Investment Brief http://www.fao.org/wsfs/forum2050/wsfs-background-documents/hlef-issues-briefs/en/

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FAO Hunger Portal http://www.fao.org/hunger/en/

FAO State of Food Insecurity 2011 (http://www.fao.org/publications/sofi/en/

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World Population Prospects: the 2010 revision http://esa.un.org/unpd/wpp/index.htm

UN Population Division http://www.un.org/esa/population/unpop.htm

UN Population Fund http://www.unfpa.org/public/

FAO The Nutrition and Consumer Protection Division www.fao.org/food/en/

UNICEF Nutrition http://www.unicef.org/nutrition/index.html

WHO Nutrition and disorders http://www.who.int/topics/nutrition_disorders/en/

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UNESCO http://www.unesco.org/new/en/education/

UNICEF, Water, Sanitation and Hygiene http://www.unicef.org/wash/

WHO The world health report - Health systems financing: the path to universal coverage

UNDP, Human Development Report 2010 http://hdr.undp.org/en/reports/global/hdr2010/

Risks, hazards and shocks

The State of Food Insecurity in the World 2010: Addressing food insecurity in protracted crises http://www.fao.org/docrep/013/i2050e/i2050e.pdf

Centre for Research on the Epidemiology of Disasters http://www.cred.be/

United Nations High Commissioner for Refugees http://www.unhcr.org

Poverty and inequality

UNDP. Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development http://hdr.undp.org/en/reports/global/hdr2010/

IFAD Rural Poverty Report. New realities, new challenges, new opportunities for tomorrow's generation http://www.ifad.org/rpr2011/

World Bank Poverty Reduction and Equity Group http://wwwr.worldbank.org/poverty

Food aid

FAO Making the Food Aid Convention meet the realities of the 21st century http://www.fao.org/docrep/013/al935e/al935e00.pdf

World Food Programme http://www.wfp.org

PART 3

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Trends in the fisheries sector

FAO: The State of World Fisheries and Aquaculture http://www.fao.org/docrep/013/i1820e/i1820e00.htm

FAO Fisheries and Aquaculture Department (http://www.fao.org/fishery/en

FAO Food Outlook (http://www.fao.org/giews/english/fo/index.htm

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Urban and peri-urban agriculture

FAO Food for the cities (http://www.fao.org/fcit/en/

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Food losses

FAO: Global food losses and food waste: Extent, causes and prevention http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf

FAO Rural Infrastructure and Agro-Industries Division http://www.fao.org/ag/ags/ags-division/en/

PART 4

Land

FAO State of the Land and Water 2011 http://www.fao.org/nr/solaw/solaw-home/en/

FAO State of the World's Forests 2011 (http://www.fao.org/forestry/sofo/en/

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Water

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FAO Water http://www.fao.org/nr/water/

Pollution from agriculture

FAO Climate Change: the 2010 revision http://www.fao.org/climatechange/en/

Climate change, water and food security http://www.fao.org/docrep/014/i2096e/i2096e00.htm

Intergovernmental Panel on Climate Change (IPCC) http://www.ipcc.ch/

Climate change

FAO Climate Change (http://www.fao.org/climatechange/en/

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2010 International Year of Biodiversity http://www.fao.org/biodiversity/

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