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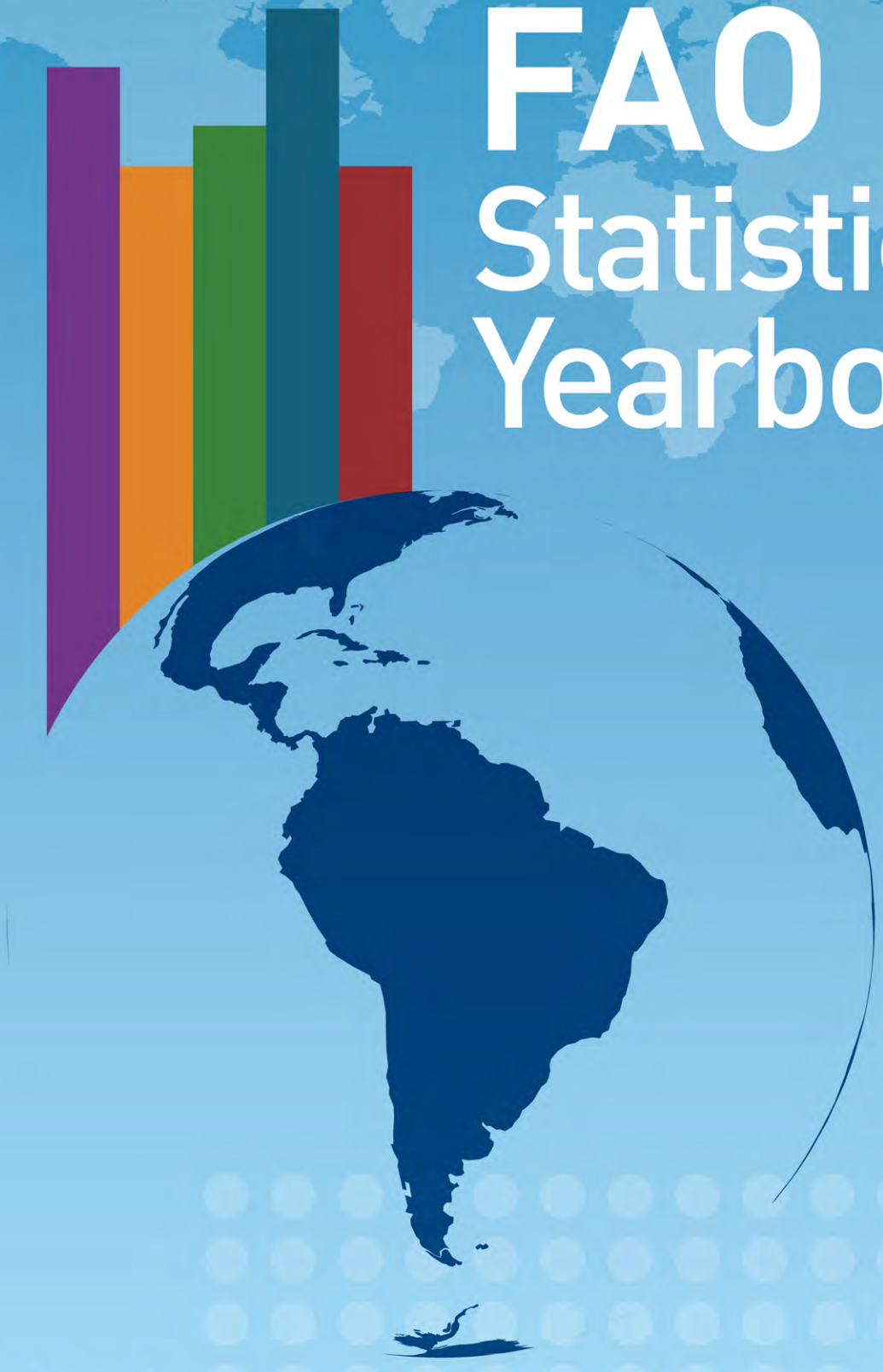
FAO Statistical Yearbook 2014



Latin America and the Caribbean food and agriculture

FAO STATISTICAL YEARBOOK
2014
Latin America and the Caribbean
Food and Agriculture

Food and Agriculture Organization of the United Nations
Regional Office for the Latin America and the Caribbean
Santiago, 2014

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Foreword

The Latin America and Caribbean region is made up of many diverse countries, from small islands states to large countries whose economies are becoming more and more important to the global economy. With high mountains, arid deserts and temperate and tropical areas, the rich variety of agricultural ecosystems found within the region is immense.

As a whole, the region is endowed with a wealth of natural resources and has by and large experienced a period of tremendous economic growth over the last decade. Nevertheless, 47 million people remain undernourished in the region. Most of these people live in rural areas and rely on agriculture for their livelihoods. Bringing an end to hunger in the region and ensuring that everyone has access to a secure supply of safe, nutritious food in the future will require policies that can balance economic growth with environmental sustainability and social equality. To strike this difficult balance, policymakers and the public that they work for will need to have on hand reliable data on a range of issues related to food and nutrition security, poverty, agricultural production and natural resource management. This information needs to be constantly updated in order to respond to changing conditions in the region and in the world.

As a contribution to this effort, FAO has prepared this Regional Yearbook for Latin America and the Caribbean. The Yearbook presents a visual synthesis of the major trends and factors shaping the regional food and agricultural landscape and their interplay with broader environmental, social and economic dimensions. It serves as a reference document on regional food and agriculture for policymakers, donor agencies, researchers and analysts, and the general public.

FAO's preparation of regional and global Yearbooks is part of a much broader effort by the organization and its national and international partners to improve the quality of statistical data related to food security, agriculture and the sustainable management of natural resources. A key element of these efforts is the Global Strategy to Improve Agricultural and Rural Statistics, which has been undertaken to address the lack of capacity in many countries to produce and report agricultural data. The Global Strategy, on which regional activity programmes are based, is built on three major pillars: producing a minimum set of core data and determining national priorities, integrating agricultural statistics into national statistical systems, and fostering the sustainability of agricultural statistics through governance and statistical capacity development.

The organization is committed to working with partners and member states in Latin America and the Caribbean to improve agricultural and rural statistics and see that this information is put to use to safeguard food security and ensure more sustainable food production.

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and Regional Representative
for Latin America and the Caribbean

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and Director,
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Acknowledgements

The FAO Regional Office for Latin America and the Caribbean (FAORLC) and the FAO Statistics Division (ESS) of the Food and Agriculture Organization of the United Nations would like to acknowledge the collective effort of statisticians and other staff in national statistical offices, ministries of agriculture and other ministries and government departments in this region that constantly provide data to FAO. In addition we would like to acknowledge the ongoing cooperation with regional and international institutions and non-government organizations, whose efforts have made this publication possible.

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

How to use this book

The structure

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

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

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

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

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

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

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

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

Country definitions and classification

The publication follows the FAO Regional Office for the Latin America and the Caribbean composition (see "Table: Country list" or http://www.rlc.fao.org/).

Aggregations

Two types of aggregations are used in the book: sum and weighted mean. Two restrictions are imposed when computing the aggregation: i) the sufficiency condition – the aggregation is computed only when sufficient countries have reported data, and the current threshold is set at 50 percent of the variable and the weighting variable,

if present; and ii) the comparability condition – as aggregations are usually computed over time, this condition is designed to ensure that the number of countries is comparable over several years; under the current restriction the number of countries may not vary by more than 15 over time.

Data presentation conventions

The cutoff date for the data is 30 September 2013.

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

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PART

1 The Setting

The countries of Latin America and the Caribbean, as with the rest of the world, are in a situation where they must find ways of feeding more and more people with a limited amount of land, water and other natural resources. Transforming the agricultural sector to meet the growing demand for safe and nutritious food, reducing rural poverty, while at the same time contributing to environmentally sustainable development, are among the most important challenges the world is facing.

To meet this challenge, attention will need to be paid to the communities whose livelihoods depend on agriculture, forestry and fisheries. In Latin America and the Caribbean, these rural communities are facing persistent outmigration and high levels of poverty. It is in these communities where the transformation to more sustainable agriculture will need to take place. Within the region, there are wide variations among countries in terms of their economic and agricultural development. But whatever the level of agricultural development, every country will need to invest in agriculture to ensure that production can be sustained for future generations and that agriculture

can continue to be a motor for sustainable economic growth, particularly in rural areas.

Recent years have seen upheavals that have affected the agricultural sector: food prices have soared and then declined on volatile international commodity markets, a global financial crisis has slowed down economic growth and there have been serious droughts in both South America and Europe. For many countries in the region, agriculture can offer an important haven against global economic and financial turmoil, often more effectively than other sectors.

The world is slowly emerging from the global economic downturn, and more financial resources are becoming available to address the issue of hunger and sustainable agricultural and rural development. The extreme volatility of food prices has made governments and donor agencies realize that agriculture and food security must be high on the development agenda and that policies promoting economic growth must take agriculture into account.

To pay dividends, national, regional and global investments in sustainable agriculture, forestry and fisheries, must be based on sound data on a wide range of subjects. There needs to be a complete picture of the overall context in which sustainable agriculture development is to take place. This involves gathering information on agriculture, forestry and fisheries, as well as on the natural resource base that supports these activities and the competing demands on these resources from other sectors. Information on livelihoods in agricultural communities is essential for determining the best possible options for achieving sustainable food production and reducing hunger and malnutrition. This includes a greater understanding of the demographic trends and the labour situation in rural communities.

Women contribute significantly to the rural economy, but they often do not have the same access to productive resources as men and rural families often depend on children's work to survive. For this reason, gender-sensitive data on the different roles men and women play in agricultural production and the alleviation of hunger and malnutrition is also required.

Key Resources

The State of Food and Agriculture

The State of Food and Agriculture, FAO's major annual flagship publication, aims at bringing to a wider audience balanced science-based assessments of important issues in the field of food and agriculture. Each edition of the report contains a comprehensive, yet easily accessible, overview of a selected topic of major relevance for rural and agricultural development and for global food security. This is supplemented by a synthetic overview of the current global agricultural situation.

2013: Food systems for better nutrition

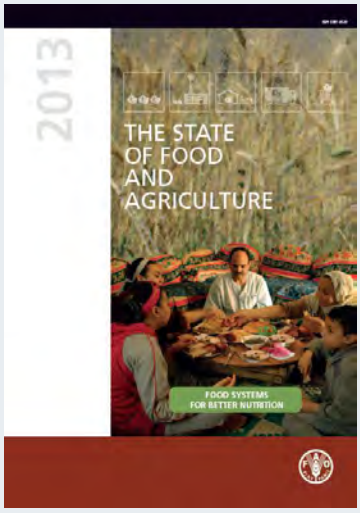
2012: Investing in agriculture for a better future

2010-11: Women in Agriculture, Closing the gender gap for development

2009: Livestock in the balance

Publication cycle: Annual

Webpage: www.fao.org/publications/sofa

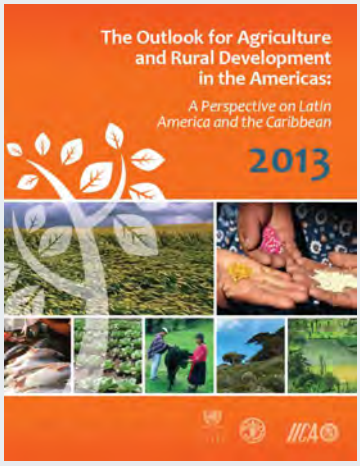


The Food Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean

This report provides information and analysis of the current situation and context of the agrifood sector, and the situation in 2013. This is a joint effort developed for a fourth consecutive year by the Economic Commission for Latin America and the Caribbean (ECLAC), the Regional Office for Latin America and the Caribbean of the Food and Agriculture Organization of the United Nations (FAO) and the Inter-American Institute for Cooperation on Agriculture (IICA).

Publication cycle: Annual

Webpage:
www.rlc.fao.org/en/publications/outlook-2013/



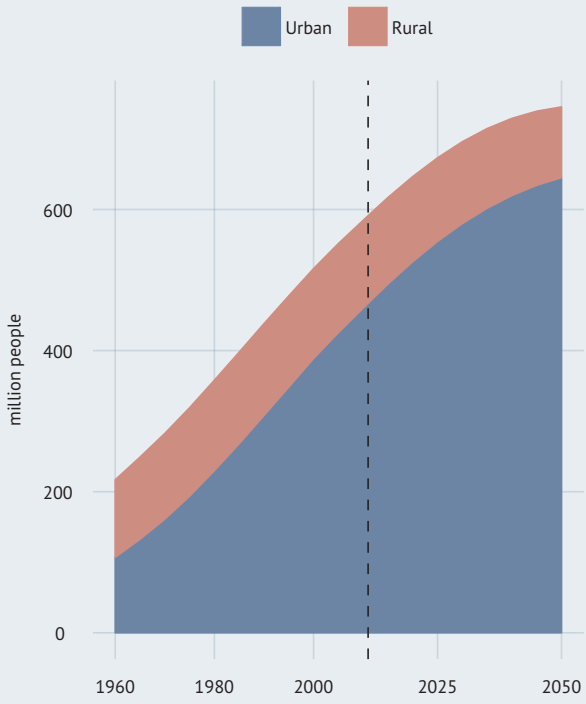
Overview

In 2012, the population of Latin America and the Caribbean was estimated at 597.7 million people, about nine percent of the total world population of nearly seven billion. Although the population continues to expand, the rate of population growth in the region has fallen from 1.7 percent between 1989-1999 to an estimated 1.3 percent between 1999 and 2015. The region's population growth rate is slightly higher than the global rate over the same period. From 2015 to 2030, population growth for the Latin American and Caribbean region is expected to equal the global rate of 0.9 percent.

In line with the global trend, the population of Latin America and the Caribbean is becoming more urban. Between 2000 and 2011, the percentage of the total population living in rural areas fell from 24.7 percent to 21.0 percent, around 30 percent lower than the global figure. Over the past fifty years, the rural population in the region has gradually declined. In 2010, it was estimated at about 120 million and is expected to decline to 115 million by 2015. The main factor for this sustained rural emigration is the persistent economic inequality between urban and rural areas. Rural emigration is selective, with more educated women and youth more likely to choose a life in the city.

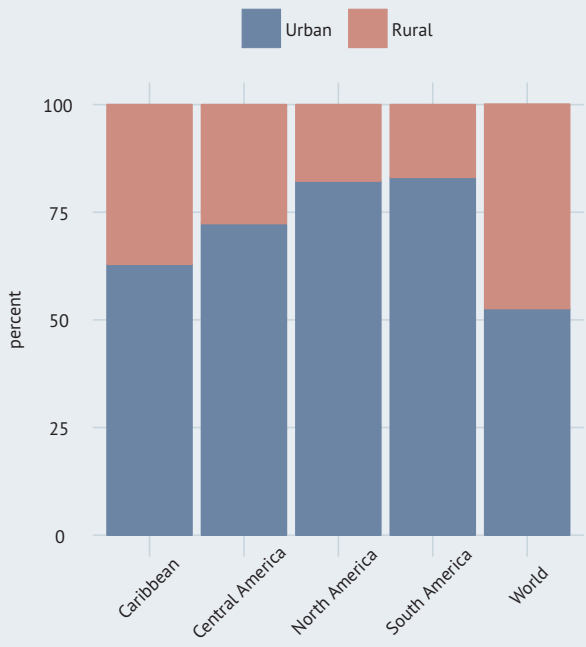
The island countries of the Caribbean are significantly more rural than the countries of Central and South America. Trinidad and Tobago has the highest percentage of rural people at 86 percent. The population in South America is almost as urban as North America and is significantly more urban than the world average. The Bolivarian Republic of Venezuela has one of the lowest percentages of rural population at 6.5 percent. In Argentina and Uruguay, the percentage is 7.5. These are among the lowest percentages of rural population in the world. In comparison, Japan's rural population is 8.9 percent.

CHART 1: **Latin America rural and urban population (1960-2050)**



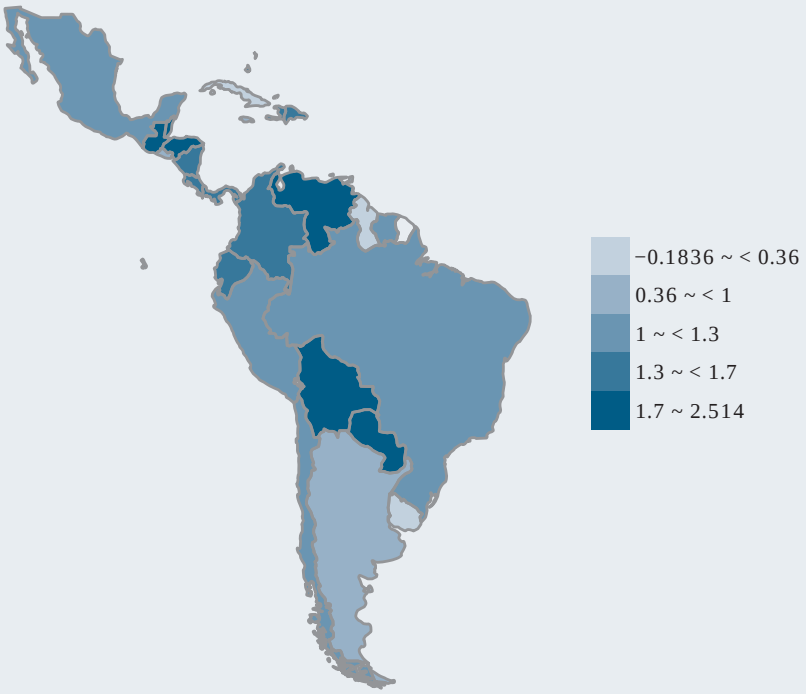
Source: United Nations Population Division.
Data after 2011 are projections.

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



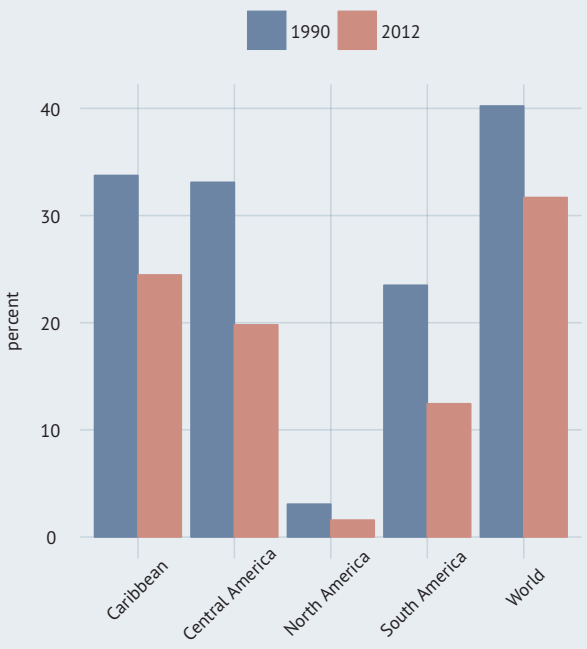
Source: United Nations Population Division.

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



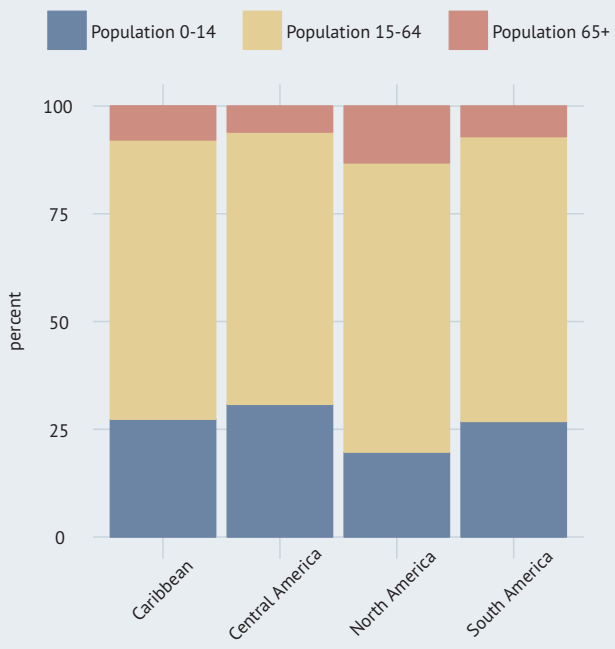
Source: United Nations Population Division.

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



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

CHART 4: **Population age structure (2010)**



Source: United Nations Population Division.

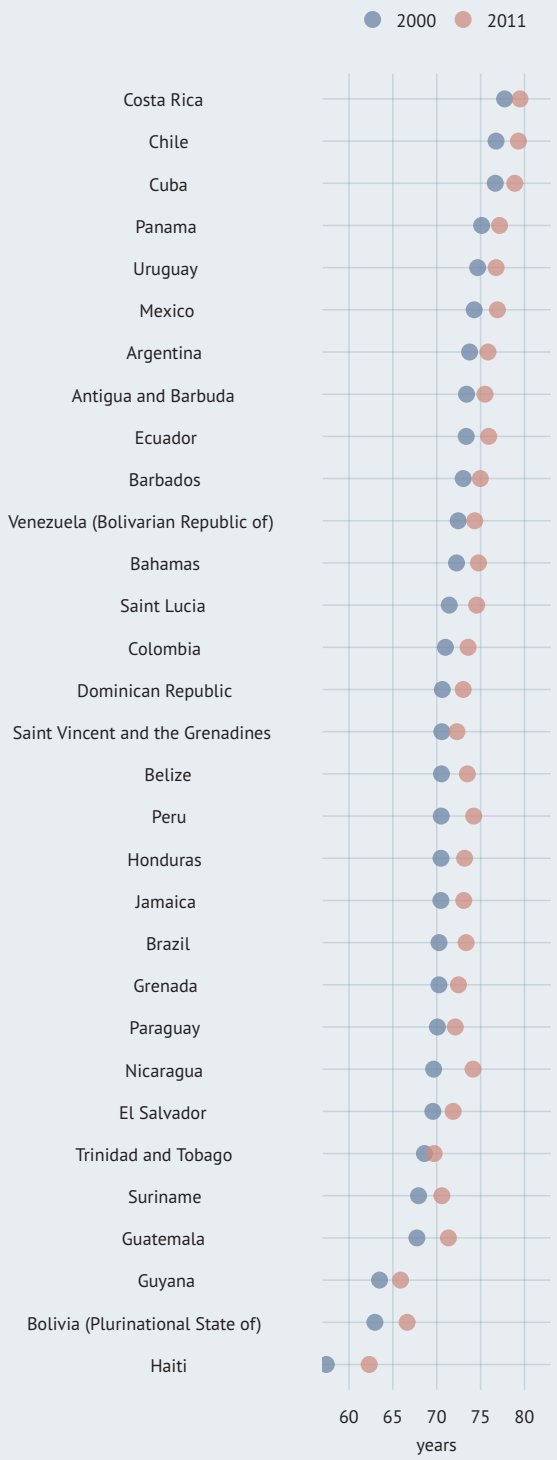
The per capita gross annual income (GNI) for the region more than doubled between 2000 and 2012. Nevertheless one of the main problems that countries in Latin America and the Caribbean continue to face is the concentration of wealth and persistent poverty. Although poverty and extreme poverty levels have gradually reduced over the last few years, progress in this area has declined since the 2008 global financial crisis. In 2010, it is estimated that a third of the population is poverty stricken, and around 13 percent are in extreme poverty. In rural areas, poverty levels are much higher, with an estimated half of the rural population living in poverty and roughly 30 percent in extreme poverty.

Progress is being made in key health-related areas. Between 2000 and 2012, life expectancy in the region increased from 72 to 74 years. The countries with the highest life expectancy in the region are Cuba, Costa Rica and Chile. Between 2000 and 2012, Guyana and Nicaragua have shown the greatest increases in life expectancy.

Increases in life expectancy partly reflect progress that has been made in lowering infant and under-5 mortality. Between 2000 and 2012, infant mortality decreased from 26.4 deaths per 1 000 live births to 19.4, well below the global number of 37.4. Over the same period, under-5 mortality also fell, declining from 32.7 deaths per 1 000 live births to 23.3, again well below the world average of 52.6.

Between 2000 and 2012, Brazil reduced its infant and under-5 mortality by half. In terms of percentage decease, this stands out in the region. Haiti has the highest incidence of infant mortality (52.9 deaths per 1 000 live births) and under-5 mortality (70 deaths per 1 000 live births) in the region. The Plurinational State of Bolivia has the second highest incidence of infant and under-5 mortality. These two countries, however, showed the greatest drop in mortality rates in absolute terms.

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

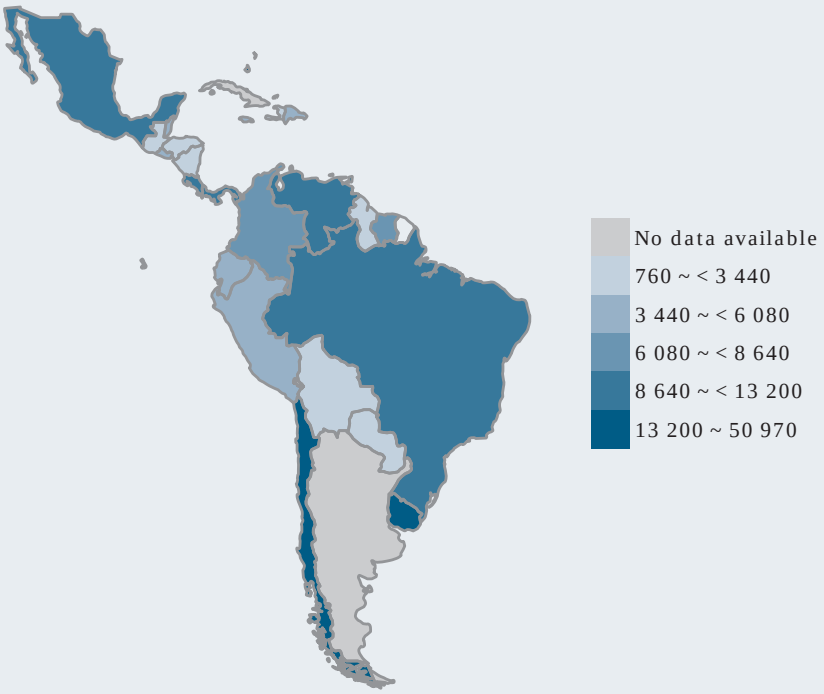


Source: World Bank (WDI).

Further reading

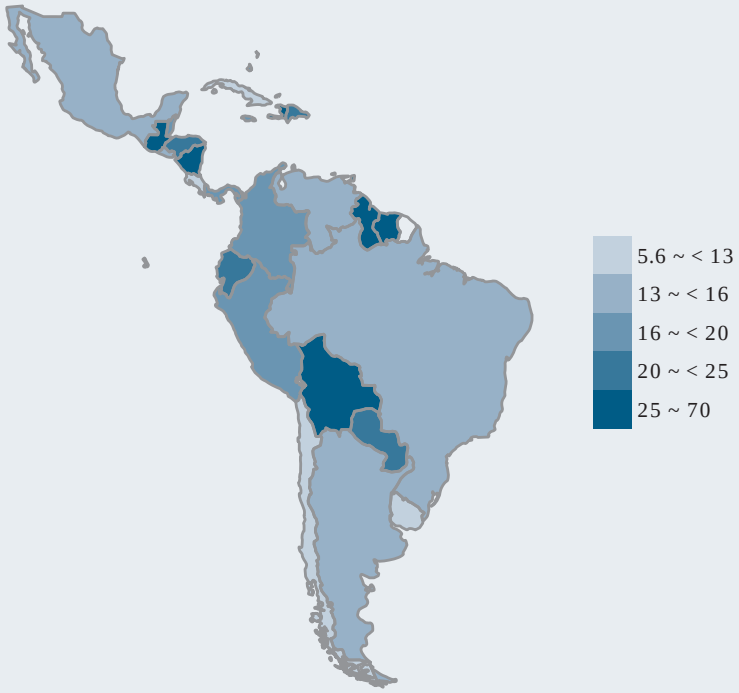
- World Population Prospects: the 2011 revision (www.un.org/esa/population/)
- UN Population Fund (www.unfpa.org/)
- FAO Food and Nutrition Security in Urban Environments (www.fao.org/ag/agn/nutrition/urban_security_en.stm)

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



Source: World Bank (WDI).

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



Source: World Bank (WDI).

Economy

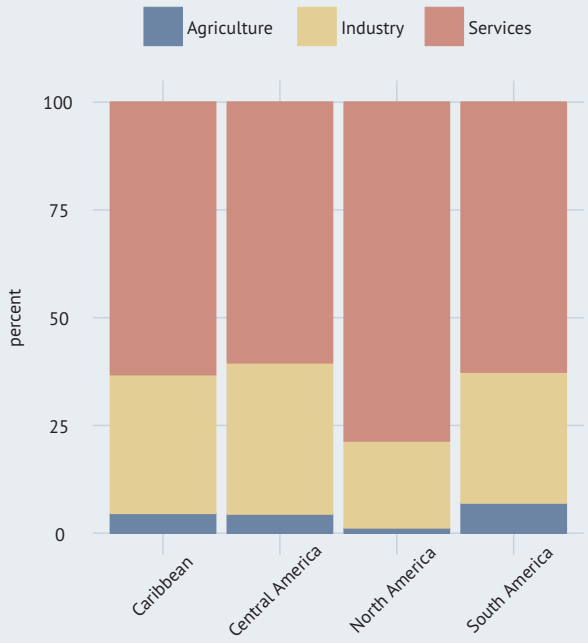
Latin America and the Caribbean made a strong recovery from the economic crisis, but has experienced a slowdown since 2010.

Value added to the GDP by agriculture accounts for more than six percent of the GDP, considerably higher than the global figure (2.9 percent). Although the Caribbean and Central America have higher percentages of agricultural population, the value added through agriculture accounts for a smaller percentage of the GDP in those areas compared to South America. In the Caribbean and Central America, the value added by agriculture accounts for roughly 4.5 percent of the GDP, whereas in South America it is seven percent. The countries where the value added by agriculture occupies the largest share of GDP are Guyana (21.3 percent) and Nicaragua (19.2 percent).

Recent years have seen wide fluctuations in the value added to the GDP by agriculture. In 2009, Latin America and the Caribbean saw a nearly four percent reduction in the value added by agriculture. This decline was due almost exclusively to the over seven percent drop in the value added by agriculture in the southern subregion caused by the drought that struck the Southern Cone during 2008 and 2009.

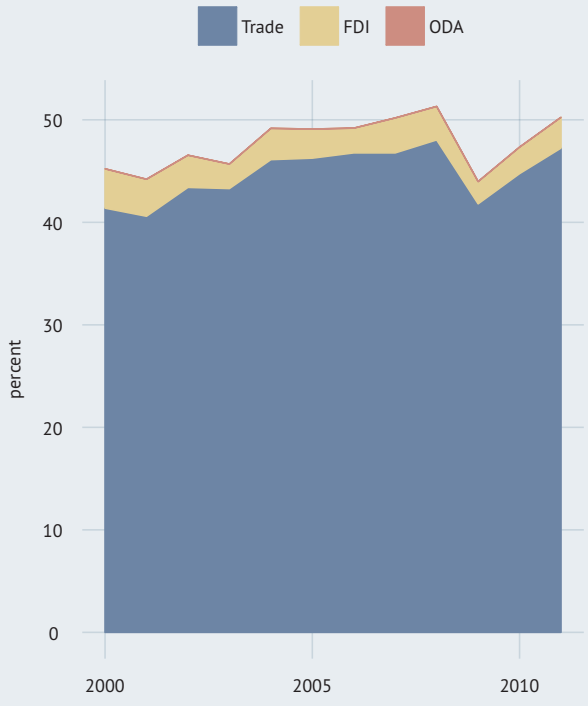
Trade makes up roughly 45 percent of the total GDP for the region, compared to global trade at 55.4 percent. However, there are wide variations within the region. In the Caribbean and Central America, the share of trade in GDP hovers around 70 percent. In South America, the share is only 36.8 percent. This significantly lower share is due to the fact that in Brazil the share of trade in GDP is very low (26.5 percent). In fact, Brazil has the lowest share of trade as total GDP. Japan has the second lowest share (29.2 percent). In all other South American countries, the share of trade in GDP is much higher.

CHART 6: **Value added in agriculture, industry, and services as shares of GDP (2011)**



Source: World Bank (WDI).

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

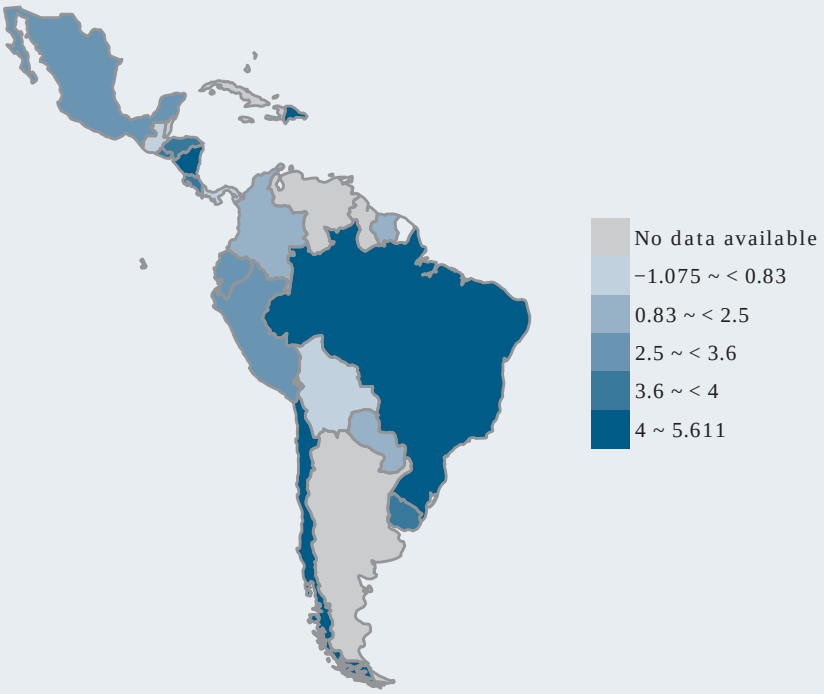


Source: World Bank (WDI).

Further reading

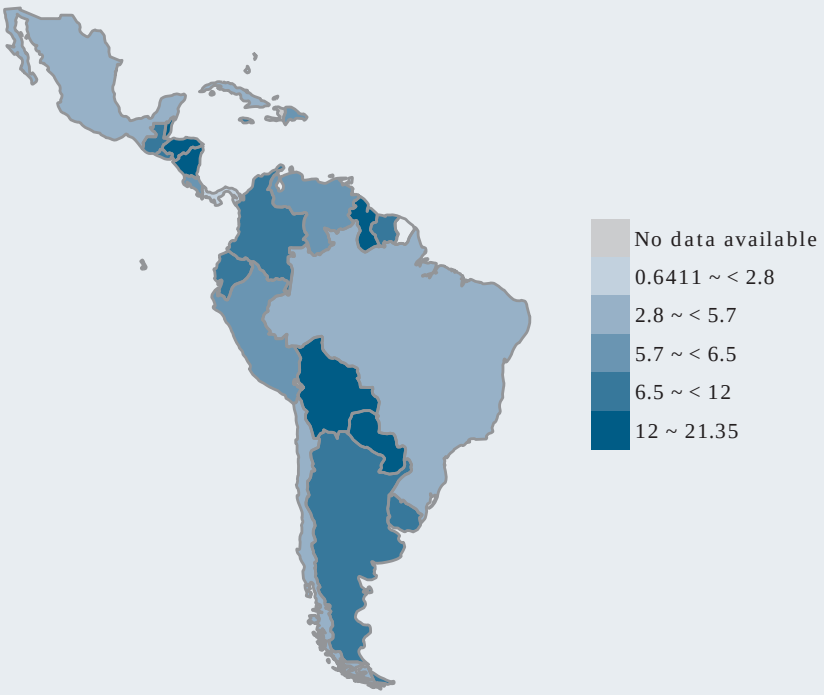
- World Bank: Global Economic Prospects (wwwr.worldbank.org/prospects/)
- International Monetary Fund: World Economic Outlook (www.imf.org/external/index.htm)

MAP 4: **Agriculture, value added per worker annual growth (percent, 2000-2012)**



Source: World Bank.

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



Source: World Bank (WDI).

Land and Water

Although agricultural production has increased in the region, the area used for agriculture has not fluctuated significantly during recent years. In Latin America and the Caribbean, 37 percent of the land is used for agriculture and another 47 percent is forested. In the Caribbean and Central America, there is more agricultural land than forest, whereas in South America the situation is reversed.

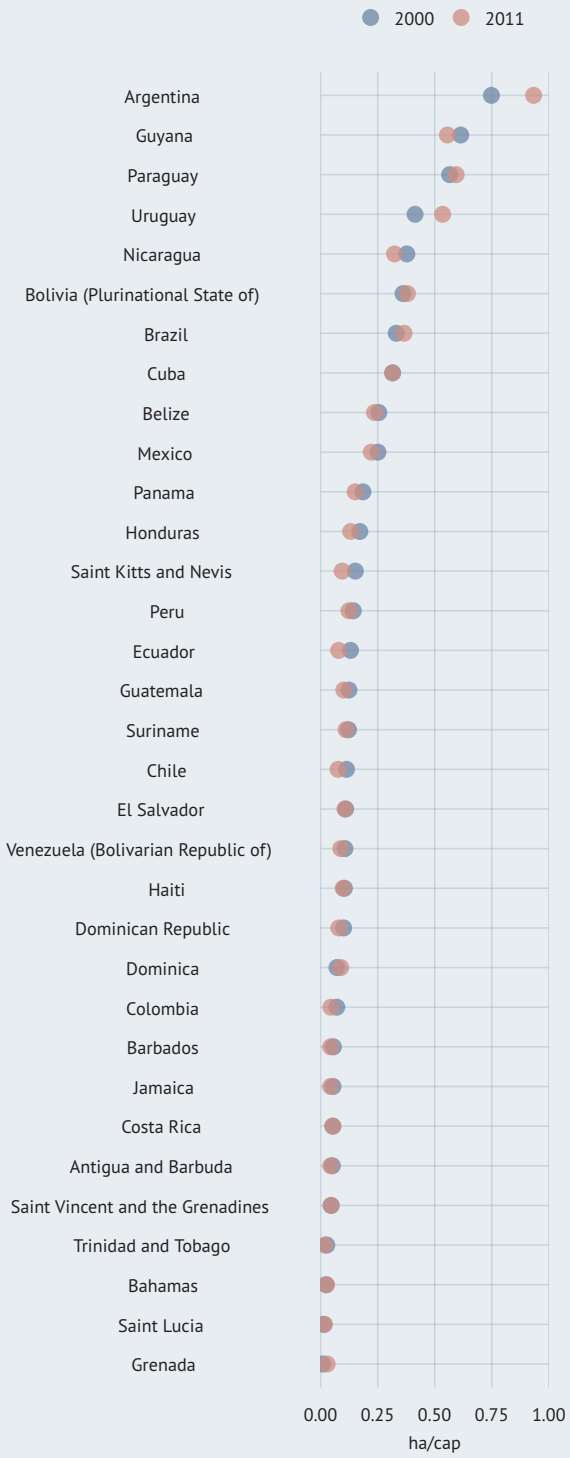
Of the total agricultural land in the region, 23 percent is arable, 2.7 percent is used for permanent crops and 75 percent is used for permanent meadows and pastureland. Although the percentage of permanent meadows and pastureland is somewhat higher than the global percentage, the ratio between these different uses of agricultural land is similar to Africa and to the global situation in general.

There are significant differences within the region regarding agricultural land use. In the Caribbean, the percentage of agricultural land used for permanent meadows and pastureland (40 percent) is considerably less than in Central and South America (70 and 77 percent respectively). Colombia has the highest percentage of permanent meadows and pastureland (91 percent).

In the Caribbean, 11 percent of agricultural land is used for permanent crops compared to 4.2 percent in Central America and 2.3 in South America. Dominica has the most agricultural land under permanent crops (69.2 percent), mainly for banana cultivation. In South America, Ecuador stands out as having the highest percentage (18.8 percent) of agricultural land under permanent crops, again mainly for banana. In the Caribbean, the percentage of agricultural land that is arable (48.6 percent) is markedly higher than in Central America (25.8 percent) and South America (21.6 percent).

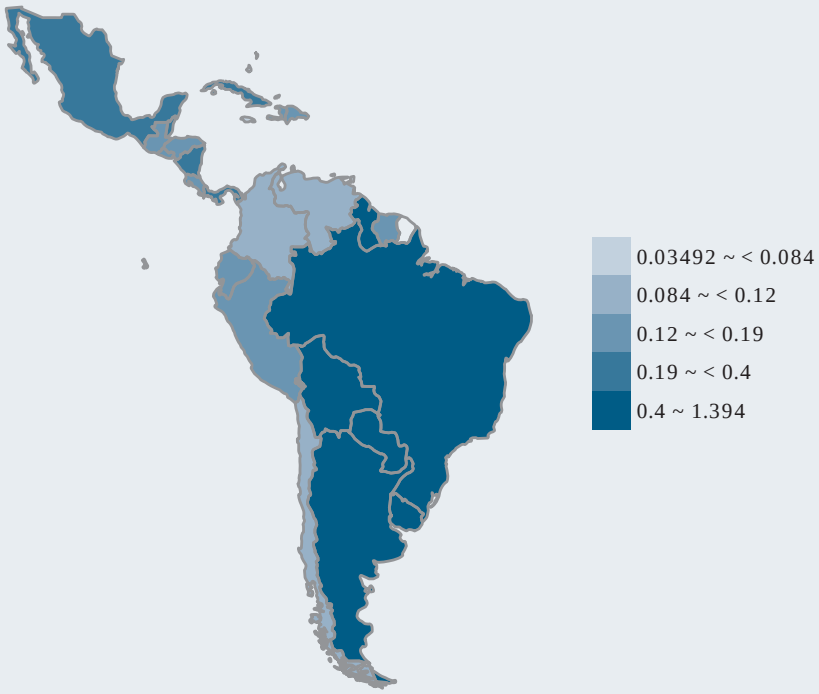
The area of cropland per capita varies within the region. On the small island countries of the Caribbean, population densities are higher (nearly three times higher than Central America and almost eight times higher than South America). As might be expected, per capita cropland in the Caribbean (0.2 ha) is smaller compared to Central America (0.23 ha) and South America (0.4 ha). Argentina has the highest amount of cropland per capita (0.96 ha). This is the same figure as for the Russian Federation. Only Canada and Australia have more cropland per capita.

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



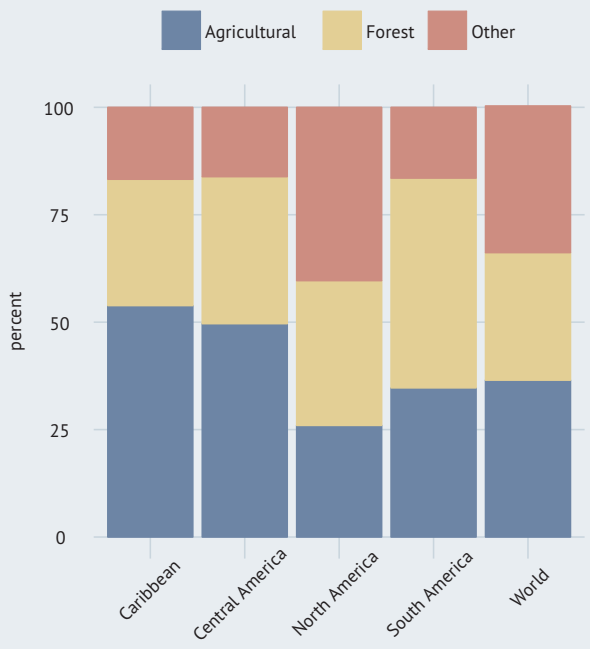
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



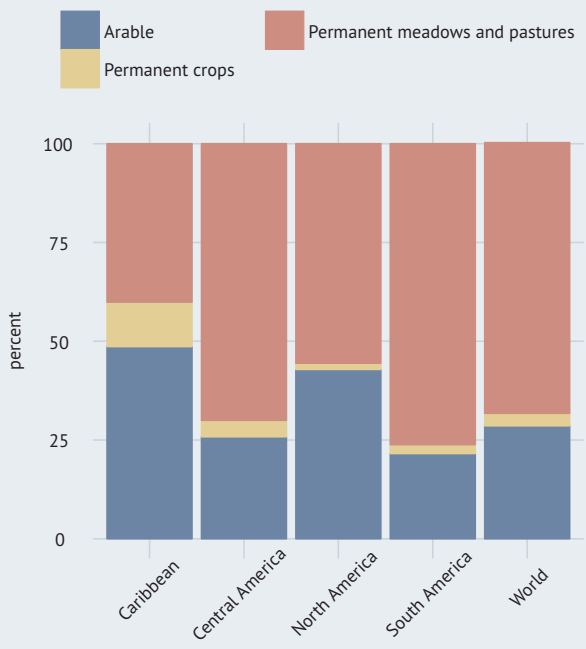
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 9: **Land area (2011)**



Source: FAO, Statistics Division (FAOSTAT).

CHART 10: **Agricultural area (2011)**



Source: FAO, Statistics Division (FAOSTAT).

Overall, Latin America and the Caribbean has a wealth of water resources. According to AQUASTAT, FAO's global water information system, the region, which represents 15 percent of the world's total land surface, receives 30 percent of precipitation and generates 33 percent of the world's water resources. AQUASTAT estimates the region's water resources to be around 28 000 cubic metres per capita per year, much higher than the world average.

Although data on the distribution of water resources in the Caribbean are not available for all countries, this subregion presents the highest water scarcity of the region. AQUASTAT uses 2 000 cubic metres per person per year as an indicator of water scarcity. Only four countries in the Caribbean have per capita water resources above that threshold: Cuba, the Dominican Republic, Jamaica and Trinidad and Tobago. The Bahamas has the least amount of water resources per capita (58 cubic metres per year). Guyana has the most per capita water resources (319 629 cubic metres per year) of any country in the world.

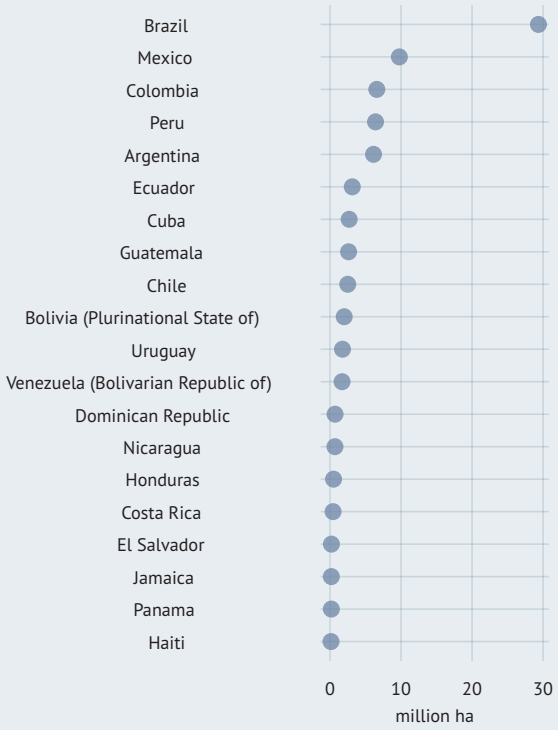
The total amount of land under irrigation is over 18.3 million hectares, which represents almost 14 percent of the cultivated area. Taking into account only the countries for which data were available, the irrigation potential for the region is estimated at 77.8 million hectares. Sixty-six percent of this regional irrigation potential is in four countries: Argentina, Brazil, Mexico and Peru.

AQUASTAT's suite of indicators distinguishes between land under irrigation and actually irrigated land. The first is the physical area equipped with irrigation infrastructure that is managed by the public or private sector, including the farmers themselves. The second is expressed in percentage and is defined as part of the area under irrigation that is actually irrigated in a given year. Although recent data are not available for every country in the region, AQUASTAT has made some recent estimates in this area. The 2011 estimate for Colombia indicates that only 36 percent of the area equipped for irrigation is actually irrigated. Estimates for other South American countries are much higher: Argentina (92 percent) and Paraguay (100 percent).

Further reading

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

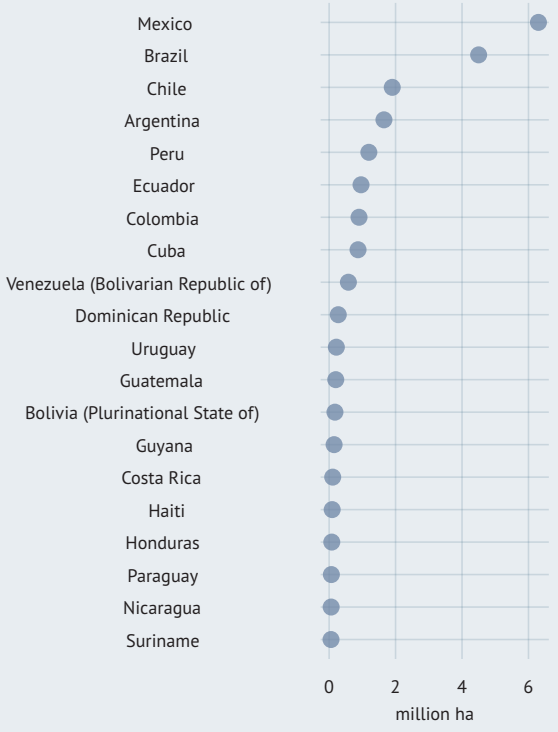
CHART 11: **Irrigation potential, selected countries (2012)**



Source: Land and Water Division (AQUASTAT).

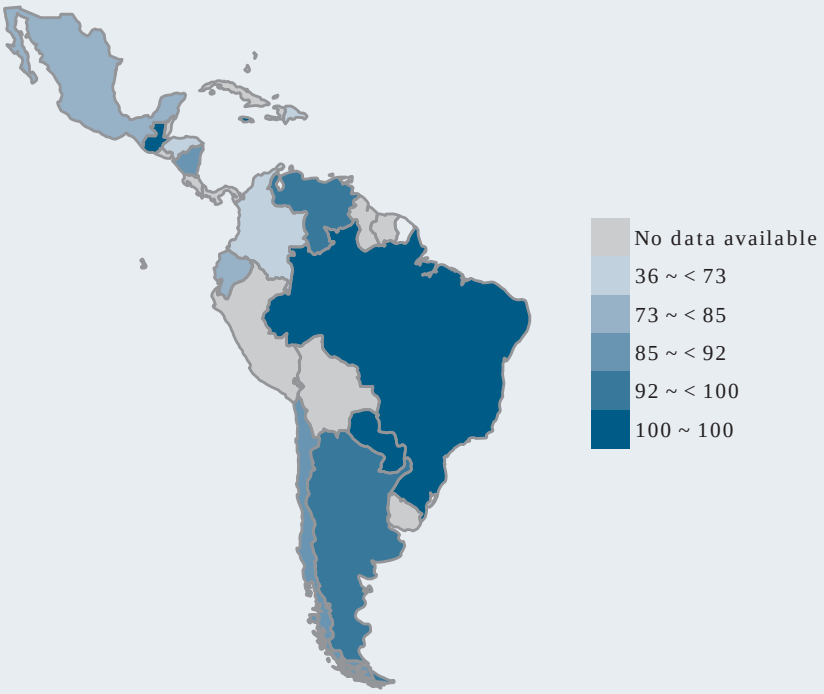
The irrigation potential area includes the area already equipped for irrigation.

CHART 12: **Total equipped area (2009)**



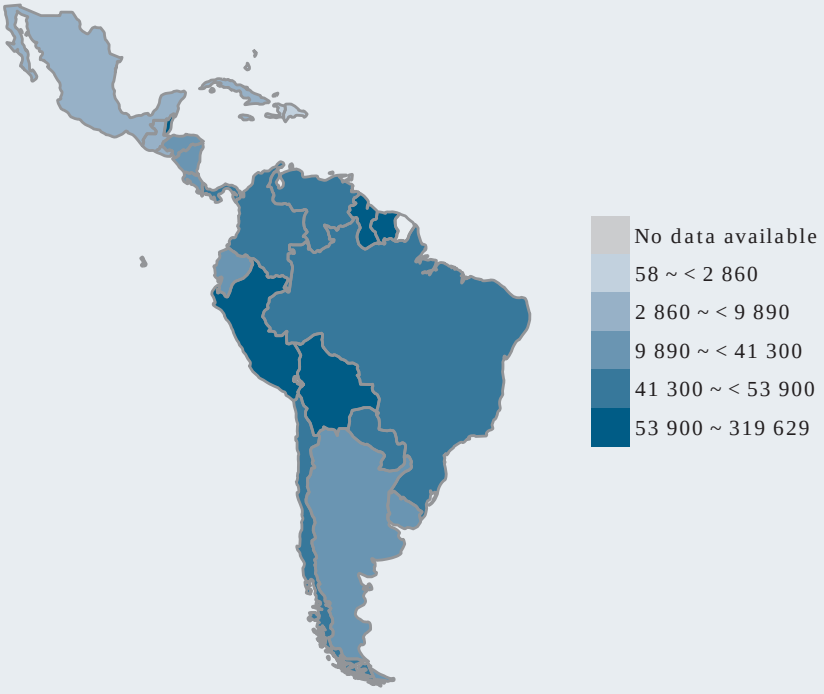
Source: Land and Water Division (AQUASTAT).

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



Source: Land and Water Division (AQUASTAT).

MAP 8: **Water resources per capita (m^3/yr/cap, 2010)**



Source: Land and Water Division (AQUASTAT).

Labour

In Latin America and the Caribbean the percentage of the labour force engaged in agriculture is just under 15 percent. Although there are no comparable regional figures from other parts of the developing world, in most countries in Asia and Africa agriculture employs a much larger share of the labour force.

Again, there is considerable variation within the region. The countries with the highest percentage of the labour force working in agriculture are in Central America: Guatemala (33.2 percent), Honduras (36 percent) and Nicaragua (32.2 percent). The Plurinational State of Bolivia is the only country in South America where the percentage is higher than 30 (32.1 percent). Argentina and Peru have the lowest percentages (1.3 and 1.4 percent respectively).

In Latin America and the Caribbean, the participation of women in the labour force (53.3 percent) is higher than the world average (49 percent) and approaches the North American average (57.9 percent). However, the percentage of women in the agricultural labour force (9.1 percent) is significantly smaller than it is for developing countries as a whole (43 percent). In Caribbean countries the percentage of women in the agricultural labour force is even less (5.9 percent). This somewhat exceptional situation in Latin America and the Caribbean reflects relatively high female education levels, economic growth and diversification, and cultural norms that support female migration to service jobs in urban areas. The Plurinational State of Bolivia has by far the highest percentage of women in the agricultural labour force (32.9 percent). In fact, the percentage is higher for women than it is for men (31.4), a situation that is unique in Latin America and the Caribbean but quite frequent in developing countries. Ecuador has the next highest percentage of women engaged in agricultural labour (21.3 percent).

Youth account for a disproportionate share (23.5 per cent) of the working poor (ILO, 2012). The majority of these poor youth live in rural areas (ILO, 2012). In the region, Peru has by far the highest percentage of children in employment (42.2 percent), as does the Plurinational State of Bolivia (20.2 percent). In the Caribbean, Haiti has the highest level of child employment (33.4 percent) and Guatemala in Central America (18.2 percent).

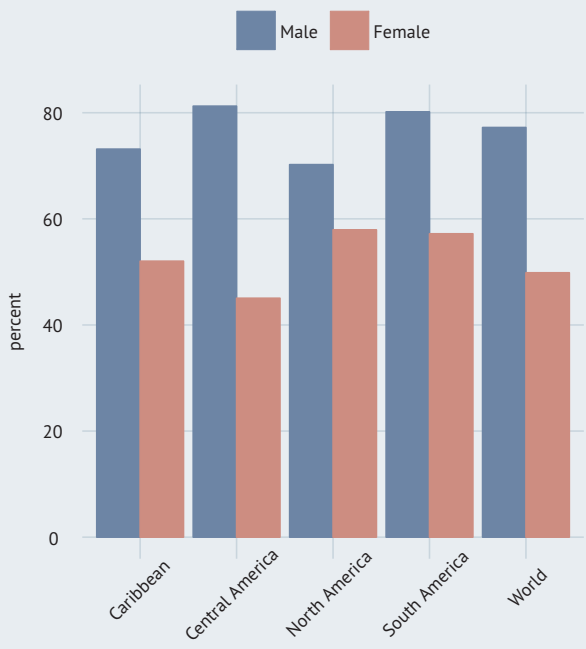
Further reading

- FAO (2012b)
- FAO Gender, Equity and Rural Employment Division (www.fao.org/economic/esw/)

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

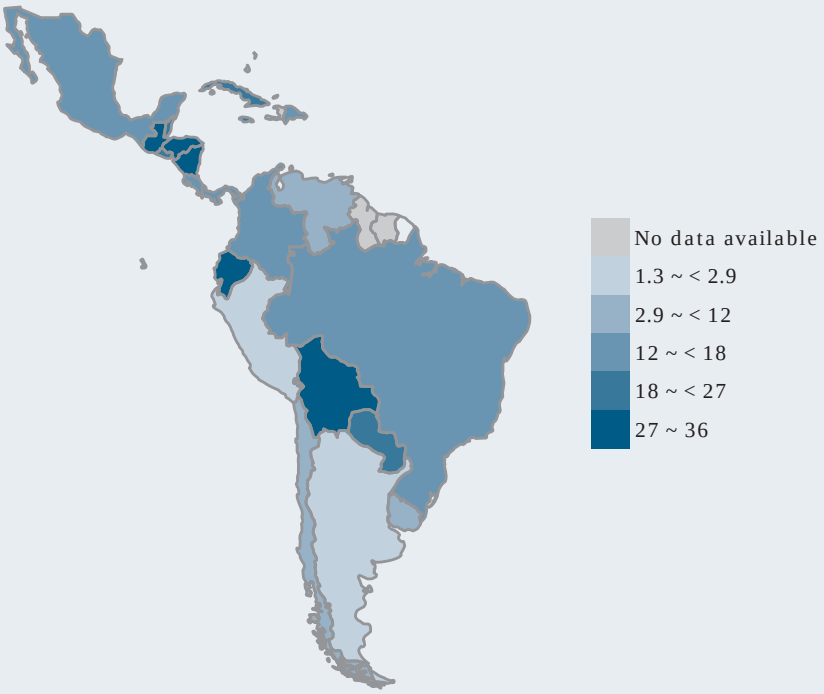
Source: World Bank (WDI).

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



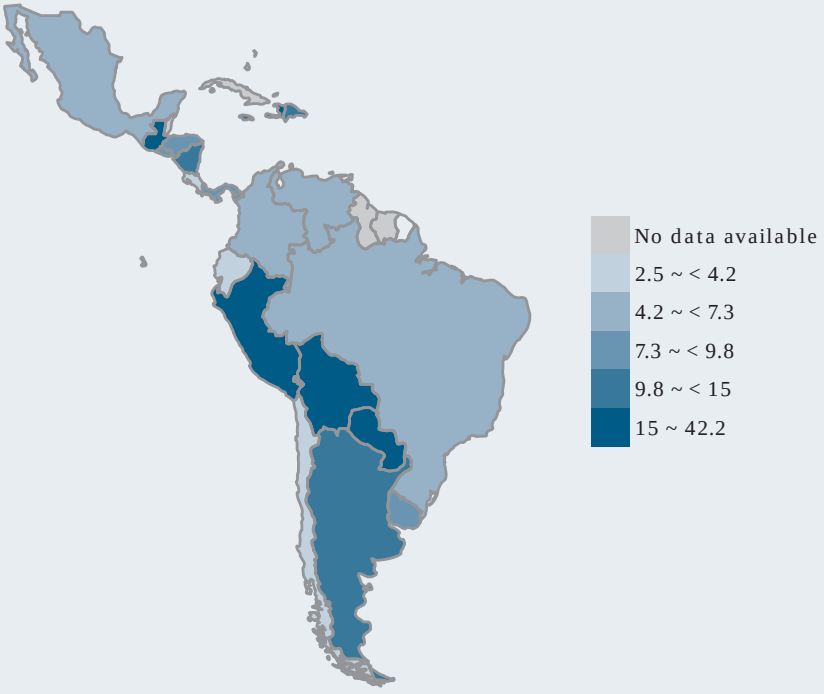
Source: World Bank (WDI).

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



Source: World Bank (WDI).

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



Source: World Bank (WDI).

Inputs

Globally, the use of fertilizers is becoming increasingly important due to the impact of more intensive cultivation practices and shorter fallow periods on soil fertility. In Latin America and the Caribbean fertilizer use grew steadily between 2002 and 2012.

In 2011, the countries of Latin America and the Caribbean applied 45.7 tonnes of nitrogen per ha of agricultural land. This is relatively close to the amount used in Europe and Central Asia (45 tonnes per ha) but less than the amount applied per hectare in North America (67.3 tonnes per ha) and Asia and the Pacific (61.2 tonnes per ha).

Fertilizers have varying use across the region. In Caribbean countries, less than half as much nitrogen fertilizer is applied per hectare of arable land than in Central and South America (21.5 tonnes as opposed to 52.8 and 45.0). Chile applies the most nitrogen per ha (243.8), which is comparable to China (296.8). In the Plurinational State of Bolivia, only 5.1 tonnes of nitrogen fertilizer is applied per ha.

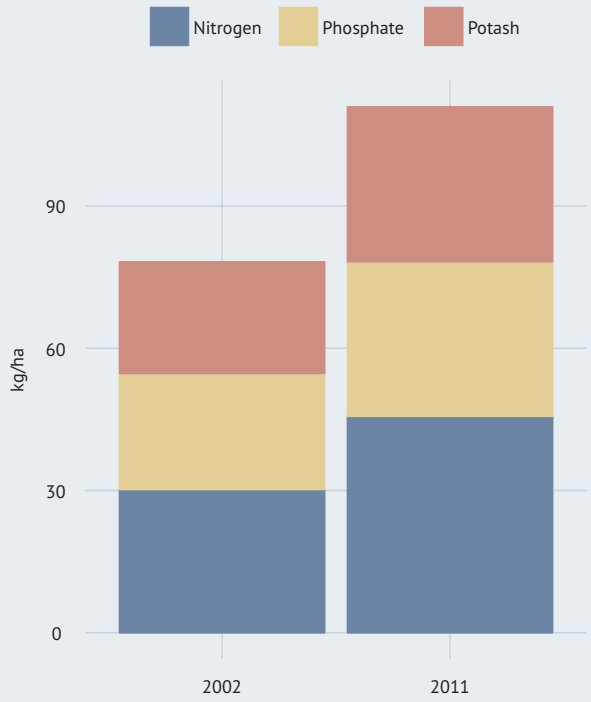
Latin America and the Caribbean is the region that applies the most phosphates and potash fertilizers per hectare of arable land (32.6 tonnes per ha for both type of fertilizer). Farmers in South America apply roughly three times the amount of phosphate and potash fertilizers per ha of agricultural land than their counterparts in the Caribbean and Central America.

Machinery is a major input into agriculture and can improve farm efficiency. Agricultural tractors are generally wheel-and-crawler or track-laying tractors, excluding garden tractors. It is not surprising the greatest number of tractors is found in the largest countries. Brazil has by far the most, followed by Argentina and Mexico.

Further reading

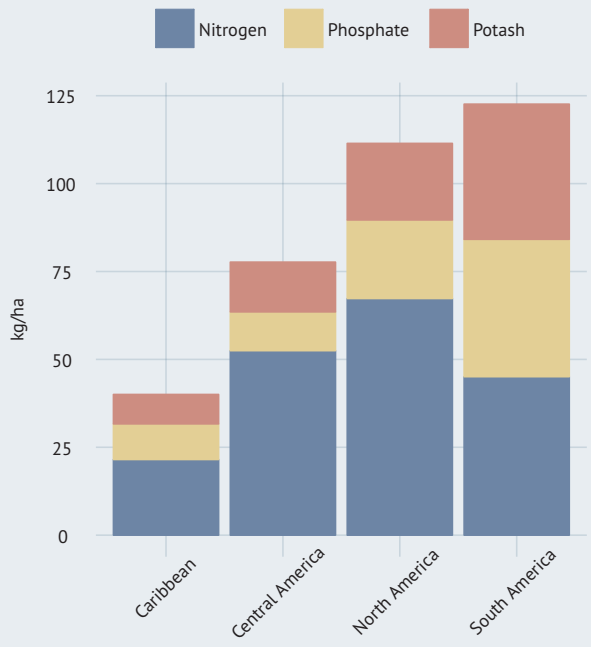
- Schmidhuber, J. and Bruinsma, J. (2011)
- FAO Agriculture Department (www.fao.org/ag/portal/index_en/en/)

CHART 15: **Latin America fertilizer consumption per ha of arable land and permanent crops (2002-2011)**



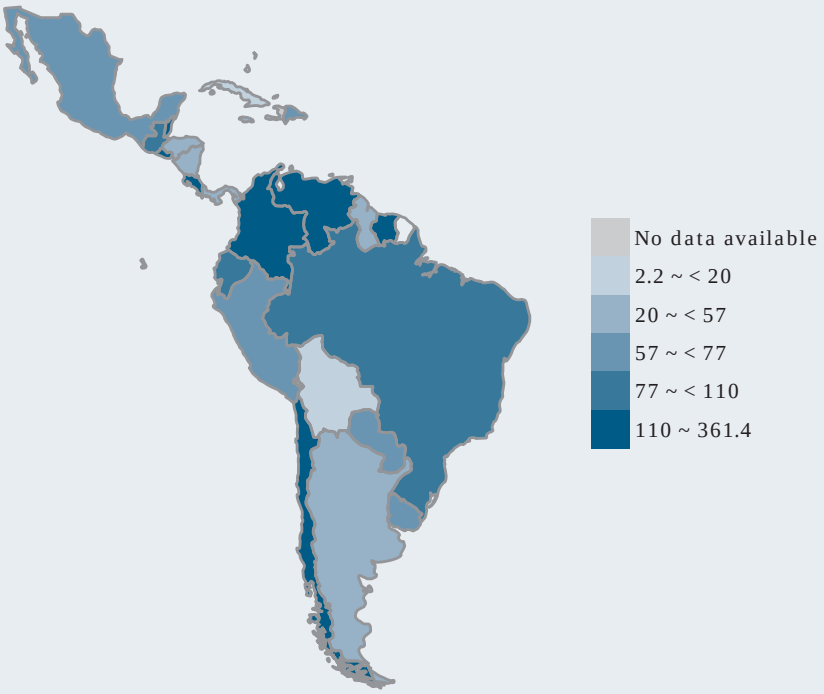
Source: FAO, Statistics Division (FAOSTAT).

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



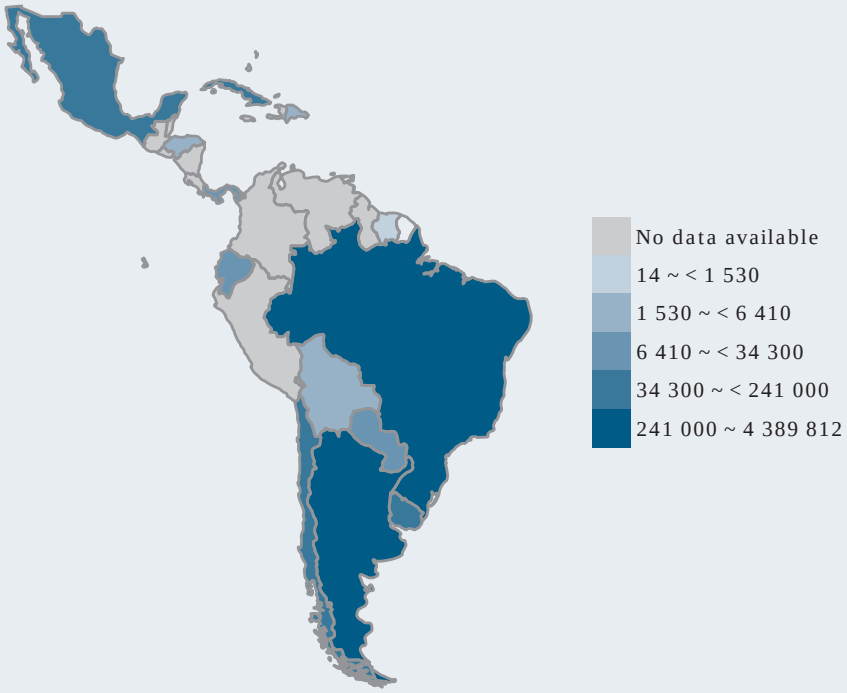
Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Capital and Investment

In many instances, the gaps between high-income and low-income countries are widening as a result of low investment rates or growing labour forces. This is particularly true in countries with low levels of agricultural capital stock (ACS) per worker.

Vulnerable and food-insecure people are likely to channel their savings into assets that reduce their vulnerability to shocks rather than investments that increase resource productivity. In this context, credit to agriculture, including investment-oriented loans provided by the banking sector, relates directly to the rate at which ACS is being accumulated.

In Latin America and the Caribbean, total ACS is US$726 trillion, which is slightly higher than North America. Between 2000 and 2007, South America shows the fastest growth (1.1 percent), followed by Central America (0.6 percent) and the Caribbean (0.2 percent). Guatemala had the fastest growth rate in the region (4.6 percent).

Owing to the imperfect information available to potential investors, and the perceived high risks of longer-term investment, the allocation of foreign direct investment (FDI) to agriculture has tended to bypass many low-income countries, where generating additional food supplies and the incomes necessary to access food remains a critical challenge.

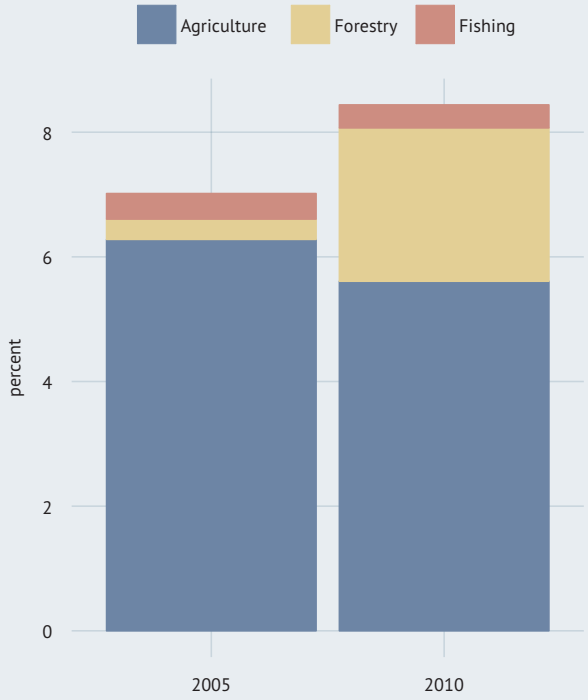
In the subregion of South America, Colombia saw huge increases in FDI for agriculture between 2000 and 2012, while only Ecuador experienced a decline. Most Central American countries, on the other hand, have seen notable declines. In Mexico, for example, FDI for agriculture fell from US$95 million to US$17 million even though FDI for food, beverages and tobacco increased ten-fold, rising from US$230 million to nearly US$3 billion.

Official Development Assistance (ODA) also plays an important role. The percentage of ODA to agriculture, forestry and fisheries to the entire region was 8.5 percent. This percentage was much lower for the Caribbean (3.1 percent) than for Central America (7.4 percent) and South America (13.9 percent). In Belize, nearly half of ODA was directed to agriculture. In most countries, the share of ODA for agriculture was higher than for forestry and fisheries. However, in Brazil, more than 20 percent of ODA went to forestry, and in Argentina 20 percent went to fisheries.

Further reading

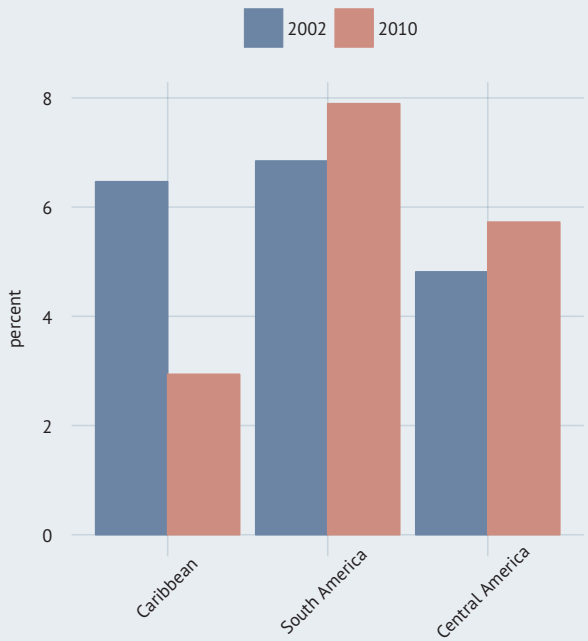
- FAO How to Feed the World in 2050: Investment Brief (www.fao.org/wsfs/forum2050/)
- FAO Foreign Investment in Agriculture (www.fao.org/economic/est/investments/)
- Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources (www.unctad.org/en/Pages/Home.aspx)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

CHART 17: **Latin America and Caribbean region, ODA received in agriculture, forestry and fishing, share of total ODA (2005-2010)**



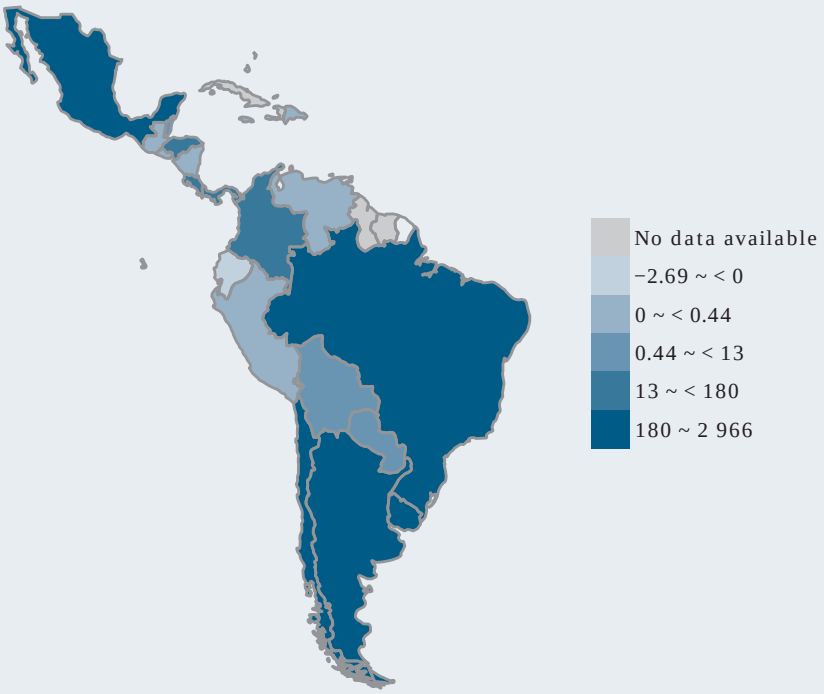
Source: FAO, Statistics Division.

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



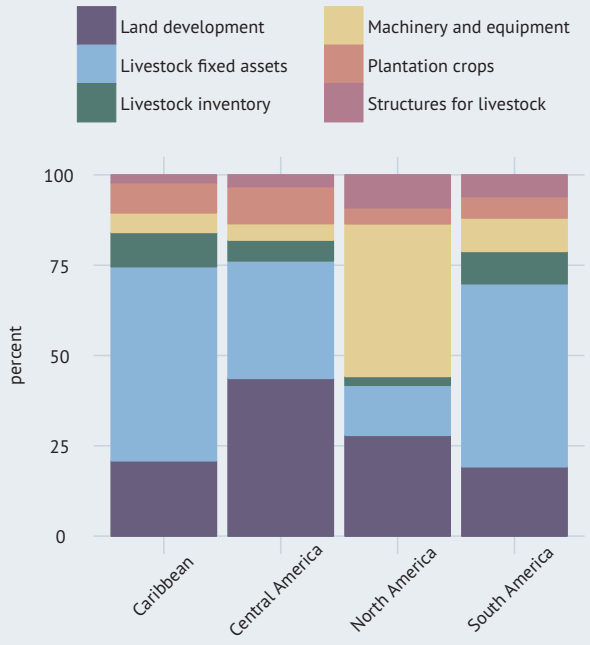
Source: FAO, Statistics Division.

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



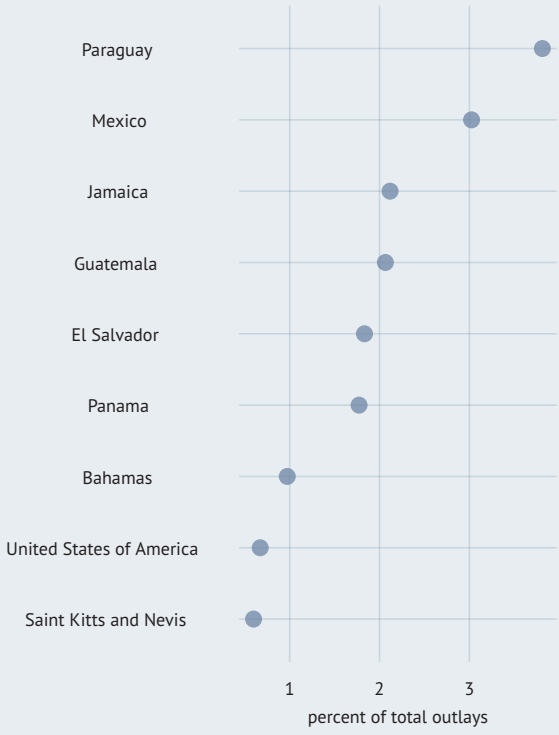
Source: Foreign agriculture investment database.

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Innovation

Economic growth is fostered not only by inputs but also through innovation. For innovation to occur, investments in research and development (R&D) must take place, including within agriculture.

Following a decade of slowing growth in the 1990s, global public spending on agricultural R&D increased steadily from US$26.1 billion in 2000 to US$31.7 billion in 2008. Between 2000 and 2008, spending on agricultural R&D in Latin America and the Caribbean region as a whole increased from US$2.8 billion to US$ 3.3 billion. However, throughout the Caribbean subregion, expenditures in this area declined, with only the Dominican Republic showing a very slight increase. In Central American countries, increases in agricultural R&D spending were fairly uniform. Only Guatemala and Panama reduced spending in this area. In South America, there are greater variations among countries. Argentina, Brazil, Peru, Uruguay, the Bolivarian Republic of Venezuela increased their spending on agricultural R&D, whereas all the others reduced or maintained their spending levels.

The capacity to innovate depends in part on an ability to harness information and communications technology. Mobile telephony and the Internet have become essential tools in development. In Latin America and the Caribbean, the number of fixed internet broadband subscribers per 100 people is 7.7. This is slightly less than the world average (8.3) but considerably higher than Asia and the Pacific (4.3) and Africa (0.2).

Barbados and Saint Kitts and Nevis have the highest number of fixed broadband internet subscribers per 100 people in the entire region. However, the Caribbean as a subregion has the fewest subscribers (2.3 per 100 people) due to the fact that two very populous countries, Cuba and Haiti, have an almost negligible number of users. In Central America, the figure is slightly higher than for South America (9.0 as opposed to 7.7). In South America, the Plurinational State of Bolivia and Paraguay have the lowest number of fixed broadband internet subscribers (0.4 and 0.9 per 100 people respectively).

Between 2005 and 2010, developing countries' share of worldwide mobile telephone subscriptions increased from approximately 50 to 75 percent. In fact, Latin America and the Caribbean now has more subscriptions per 100 people than North America.

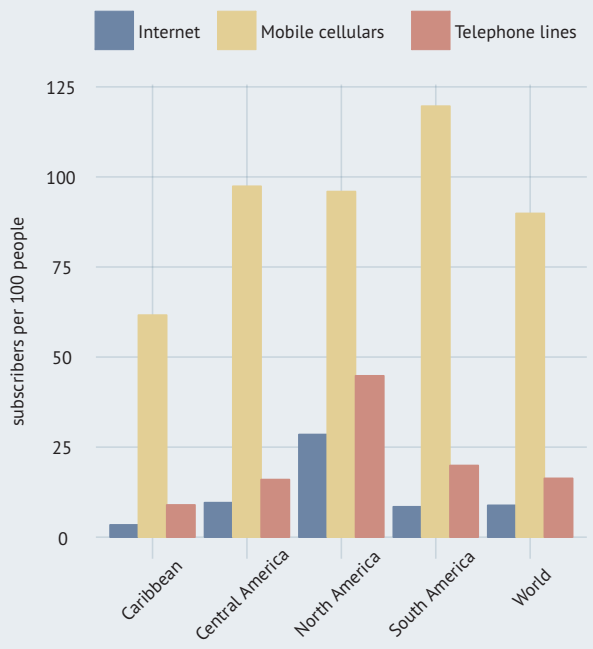
Further reading

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

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

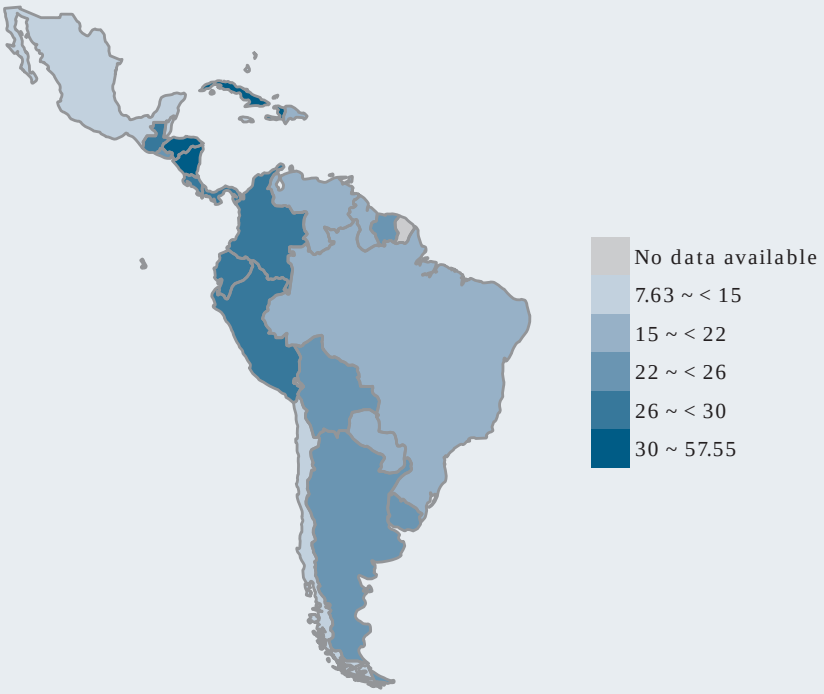
Source: ASTI.

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



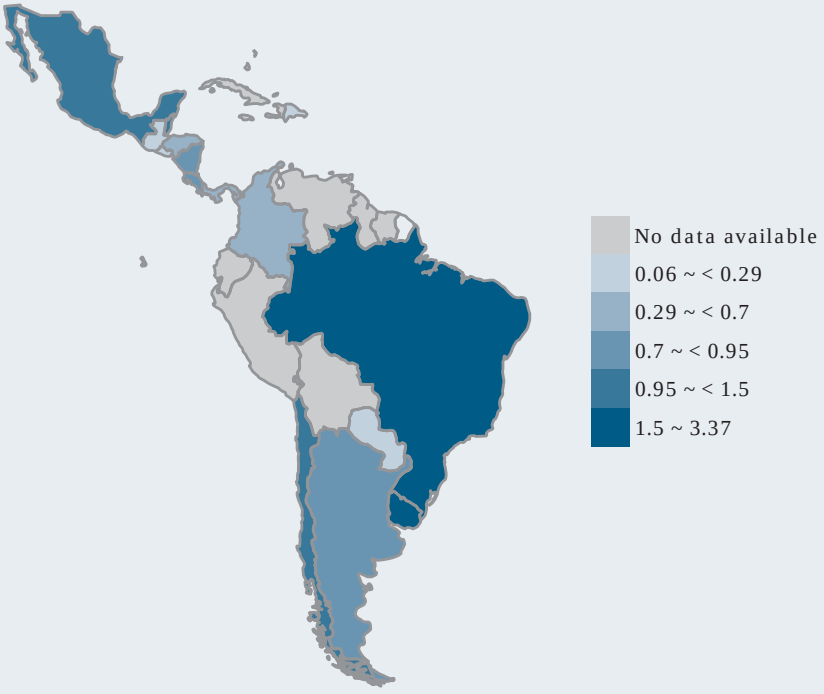
Source: World Bank (WDI).

MAP 14: **Access to mobile cellular phone subscriptions annual growth (percent, 2000-2012)**



Source: World Bank (WDI).

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



Source: ASTI.

TABLE 1: **Population and structure**

	Population									Age composition	
	total		rural		urban		density	agricultural share of total		between 0-14	over 65+
	thousand people	thousand people	percent	percent	percent	percent	people/km²	percent	percent	percent	percent
	2000	2012	2000	2011	2000	2011	2011	2000	2012	2010	2010
North America	313 163	350 466	20.9	17.8	79.1	82.2	19.0	2.3	1.6	19.7	13.2
Canada	30 667	34 675	20.5	19.3	79.5	80.7	3.8	2.6	1.8	16.4	14.1
United States of America	282 496	315 791	20.9	17.6	79.1	82.4	34.1	2.2	1.6	20.1	13.1
Regional Office for Latin America and the Caribbean	516 162	597 748	24.7	21.0	75.3	79.0	29.7	20.6	15.2	27.9	6.8
Caribbean	33 342	37 031	43.6	37.1	56.4	62.9	173.8	28.9	24.5	27.4	7.9
Antigua and Barbuda	78	91	67.9	70.0	32.1	30.0	200.3	23.1	19.8		
Bahamas	298	351	17.8	15.9	81.9	84.4	36.6	3.7	2.3	22.4	7.3
Barbados	268	275	61.6	55.5	38.4	44.5	655.4	4.1	2.5	17.2	11.4
Cuba	11 104	11 249	24.4	24.8	75.6	75.2	105.9	16.6	12.4	17.3	12.4
Dominica	70	68	32.9	32.4	67.1	66.2	95.2	22.9	20.6		
Dominican Republic	8 592	10 183	38.3	30.3	61.7	69.7	210.0	16.9	10.4	31.0	6.3
Grenada	102	105	63.7	61.0	36.3	39.0	309.0	23.5	20.0	27.9	7.7
Haiti	8 645	10 256	64.4	46.6	35.6	53.4	364.0	64.1	57.7	35.9	4.4
Jamaica	2 582	2 761	48.2	48.0	51.8	52.1	249.9	20.9	16.9	29.0	7.8
Saint Kitts and Nevis	46	54	67.4	67.9	32.6	32.1	203.7	23.9	20.4		
Saint Lucia	157	178	72.0	82.4	28.0	17.6	293.9	22.9	19.7	25.9	6.9
Saint Vincent and the Grenadines	108	109	54.6	50.5	45.4	49.5	280.4	23.1	20.2	27.5	7.3
Trinidad and Tobago	1 292	1 351	89.2	86.3	10.8	13.7	259.9	8.5	6.2	20.6	7.0
Latin America	482 988	560 963	23.4	19.9	76.6	80.1	28.2	20.0	14.5	28.0	6.8
Central America	135 555	160 159	31.2	27.6	68.8	72.4	66.4	26.6	19.8	30.8	6.0
Belize	251	324	52.2	55.3	47.4	44.7	13.9	27.1	23.1	34.9	4.2
Costa Rica	3 919	4 794	41.0	35.3	59.0	64.6	92.8	20.5	15.1	24.9	6.5
El Salvador	5 940	6 264	41.1	35.2	58.9	64.8	301.9	32.0	25.1	32.0	7.0
Guatemala	11 237	15 138	54.9	50.2	45.1	49.8	137.2	50.9	41.2	41.5	4.3
Honduras	6 218	7 912	54.6	47.8	45.5	52.2	69.5	34.3	25.0	36.8	4.3
Mexico	99 960	116 147	25.3	21.9	74.7	78.1	61.4	23.6	16.9	29.1	6.3
Nicaragua	5 074	5 955	45.3	42.5	54.7	57.5	49.1	22.3	14.3	34.5	4.6
Panama	2 956	3 625	34.2	24.7	65.8	75.3	50.3	23.1	16.9	29.0	6.6
South America	347 265	400 558	20.3	16.9	79.7	83.1	22.8	17.4	12.4	26.8	7.1
Argentina	36 931	41 119	9.9	7.5	90.1	92.5	14.9	9.5	7.4	24.9	10.6
Bolivia (Plurinational State of)	8 307	10 248	38.2	33.2	61.8	66.8	9.5	42.7	39.4	36.1	4.7
Brazil	174 425	198 361	18.8	15.4	81.2	84.6	23.3	15.9	10.0	25.5	7.0
Chile	15 420	17 423	14.1	10.8	85.9	89.2	23.3	15.9	12.9	22.1	9.3
Colombia	39 764	47 551	27.9	24.7	72.1	75.3	42.4	20.0	14.2	28.7	5.6
Ecuador	12 345	14 865	39.7	32.5	60.3	67.5	61.4	26.0	18.8	30.3	6.2
Guyana	733	758	71.4	71.7	28.6	28.3	4.0	17.5	14.0	33.6	4.2
Paraguay	5 344	6 683	44.7	38.1	55.3	61.9	16.5	35.0	29.1	33.5	5.1
Peru	25 862	29 734	27.0	22.7	73.0	77.3	23.1	28.4	23.2	30.0	6.1
Suriname	467	534	35.1	30.2	64.9	69.8	3.4	18.8	16.5	28.6	6.5
Uruguay	3 319	3 391	8.7	7.5	91.3	92.5	19.3	11.1	9.7	22.5	13.8
Venezuela (Bolivarian Republic of)	24 348	29 891	10.1	6.5	89.9	93.5	33.4	9.5	5.7	29.5	5.6
Regional Office for Africa	668 229	898 226	68.5	63.9	31.5	36.1	37.6	60.4	54.2	42.4	3.2
Regional Office for Asia and the Pacific	3 640 853	4 110 736	50.0	47.3	50.0	52.7	81.2	34.9	30.2	25.1	7.7
Regional Office for Europe and Central Asia	866 961	900 803	31.7	29.6	68.3	70.4	33.5	11.1	7.8	17.4	14.4
Regional Office for the Near East	338 485	432 218	42.6	38.8	57.4	61.2	29.2	29.8	22.7	31.5	4.3
World	6 100 688	7 028 688	50.5	47.5	49.7	52.6	53.5	35.7	31.7	28.5	7.5

TABLE 2: **Demographic indicators**

	GNI per capita current US$		Infant mortality per 1,000 live births		Under-5 mortality per 1,000 live births		Life expectancy at birth total	
	US$ 2000	US$ 2012	rate 2000-01*	rate 2010-12*	rate 2000-01*	rate 2010-12*	years 2000-01*	years 2010-12*
North America	33 640	50 204	6.3	5.5	7.4	6.4	77.0	78.9
Canada	22 130	50 970	5.3	4.7	6.2	5.4	79.5	81.1
United States of America	34 890	50 120	7.0	6.2	8.3	7.3	76.7	78.6
Regional Office for Latin America and the Caribbean	3 847	9 145	26.4	19.4	32.7	23.3	71.8	74.4
Caribbean	3 156	4 057	25.9	21.6	32.8	26.5	69.3	71.8
Antigua and Barbuda	8 680	12 640	13.8	9.5	15.1	10.2	73.6	75.5
Bahamas	20 340		14.5	14.1	17.4	17.2	72.5	74.8
Barbados	9 100		16.7	17.3	18.4	18.8	73.2	75.0
Cuba	2 620		6.2	4.4	8.0	5.7	76.9	78.9
Dominica	3 390	6 460						
Dominican Republic	2 600	5 470	31.4	23.4	38.6	28.0	70.8	73.0
Grenada	3 910	7 110	13.1	11.7	15.6	13.8	70.5	72.5
Haiti		760	73.0	57.7	101.7	77.6	57.7	62.3
Jamaica	3 310	5 140	19.4	14.9	22.8	17.3	70.6	73.1
Saint Kitts and Nevis	6 750	13 330						
Saint Lucia	4 270	6 530	15.0	15.2	17.9	17.9	71.6	74.6
Saint Vincent and the Grenadines	3 080	6 380	19.1	21.3	22.0	23.7	70.6	72.3
Trinidad and Tobago	5 300	14 400	24.2	19.0	27.3	21.3	68.7	69.7
Latin America	3 895	9 437	26.6	18.4	32.6	21.9	72.0	74.5
Central America	4 061	8 063	25.9	18.4	31.5	21.7	73.5	76.0
Belize	3 250		20.4	16.1	24.0	18.8	70.8	73.5
Costa Rica	3 710	8 740	10.6	8.8	12.4	10.1	77.9	79.5
El Salvador	2 110	3 580	25.0	14.2	30.0	16.5	69.8	71.9
Guatemala	1 730	3 140	38.4	27.4	48.5	33.1	68.2	71.3
Honduras	930	2 070	29.8	20.1	36.3	23.7	70.7	73.2
Mexico	4 820	9 600	20.3	14.3	23.9	16.7	74.5	76.9
Nicaragua	960	1 650	31.0	21.3	38.1	25.2	70.1	74.1
Panama	3 610	9 850	21.3	16.3	25.2	19.1	75.3	77.2
South America	3 830	10 048	27.2	18.4	33.5	22.0	71.4	73.9
Argentina	7 470		17.6	13.0	19.7	14.5	74.0	75.8
Bolivia (Plurinational State of)	980	2 220	54.7	34.0	73.8	43.1	63.3	66.6
Brazil	3 860	11 630	27.1	13.6	30.8	15.3	70.6	73.3
Chile	4 920	14 280	8.7	7.9	10.3	9.2	77.1	79.3
Colombia	2 340	6 990	20.7	15.6	24.4	18.1	71.3	73.6
Ecuador	1 550	5 200	27.2	20.4	32.9	24.1	73.7	75.9
Guyana	880	3 410	36.2	29.7	45.3	36.3	63.6	65.9
Paraguay	1 350	3 290	26.3	19.4	31.7	22.8	70.3	72.1
Peru	2 050	5 880	28.4	14.8	37.0	19.1	71.0	74.2
Suriname	1 930	8 480	27.6	19.1	31.3	21.4	68.0	70.6
Uruguay	7 050	13 510	13.9	6.8	16.0	7.9	74.9	76.8
Venezuela (Bolivarian Republic of)	4 090	12 500	17.7	13.4	20.7	15.6	72.6	74.3
Regional Office for Africa	496	1 383	86.1	63.2	140.6	96.1	50.5	55.9
Regional Office for Asia and the Pacific	2 202	5 612	44.8	30.4	58.7	38.0	68.3	70.9
Regional Office for Europe and Central Asia	11 912	24 003	19.1	12.8	22.8	14.9	73.4	76.3
Regional Office for the Near East	1 966		34.6	25.6	46.1	32.7	68.5	70.6
World	5 323	10 116	53.8	38.8	81.5	55.4	67.9	70.5

TABLE 3: **Economy**

	Gross domestic product		Value added, share of GDP			Share of GDP		
	total current US$		agriculture	industry	services	trade	FDI	ODA
	billion US$ 2000	billion US$ 2012	percent 2010-12*	percent 2010-12*	percent 2010-12*	percent 2011-12*	percent 2011-12*	percent 2011
North America	10 624	17 506	1.2	20.2	78.6	33.7	1.8	
Canada	725	1 821				62.1	2.5	
United States of America	9 899	15 685	1.2	20.2	78.6	31.7	1.3	
Regional Office for Latin America and the Caribbean	2 080	5 614	6.3	32.4	61.3	46.6	3.0	0.00
Caribbean	87	119	4.6	32.2	63.2	73.6	3.9	0.03
Antigua and Barbuda	1	1	2.3	18.2	79.5	105.0	5.1	0.01
Bahamas	6	8	2.3	15.9	81.8	101.0	7.6	
Barbados	3					99.7	9.1	
Cuba	31		5.0	20.5	74.5	38.6		
Dominica	0	0	13.8	15.8	70.4	89.6	7.2	0.05
Dominican Republic	24	59	6.0	33.1	61.0	58.9	4.1	0.00
Grenada	1	1	5.3	16.6	78.1	73.8	5.3	0.02
Haiti	4	8				68.8	2.5	0.23
Jamaica	9	15	6.5	21.5	71.9	84.7	1.2	0.00
Saint Kitts and Nevis	0	1	1.8	22.8	75.4	72.6	15.2	0.02
Saint Lucia	1	1	3.4	16.9	79.7	114.1	6.7	0.03
Saint Vincent and the Grenadines	0	1	6.3	19.5	74.2	82.9	15.9	0.03
Trinidad and Tobago	8	24	0.6	57.0	42.4	91.9	2.4	
Latin America	1 992	5 495	6.3	32.5	61.2	45.7	3.0	0.00
Central America	654	1 363	4.5	35.5	60.0	65.8	2.3	0.00
Belize	1					130.8	6.6	0.02
Costa Rica	16	45	6.4	25.5	68.2	79.4	5.3	0.00
El Salvador	13	24	12.5	27.1	60.4	74.9	1.1	0.01
Guatemala	19	51	11.3	29.9	58.8	60.8	2.3	0.01
Honduras	7	19	14.5	27.3	58.1	120.6	5.9	0.04
Mexico	581	1 178	4.1	36.4	59.5	66.9	1.1	0.00
Nicaragua	5	11	19.2	24.9	55.9	98.2	7.7	0.07
Panama	12	36	4.4	17.1	78.5	147.5	9.3	0.00
South America	1 338	4 133	7.2	31.0	61.8	36.8	3.2	0.00
Argentina	284	471	10.1	33.6	56.3	37.1	2.7	0.00
Bolivia (Plurinational State of)	8	27	12.5	38.9	48.5	85.1	3.6	0.03
Brazil	645	2 253	5.2	26.3	68.5	26.5	3.4	0.00
Chile	79	268	3.7	38.0	58.3	68.1	11.3	0.00
Colombia	100	370	6.5	37.5	56.0	38.7	4.3	0.00
Ecuador	18	84	10.1	37.0	52.9	64.4	0.8	0.00
Guyana	1	3	21.3	33.7	44.9		6.4	0.06
Paraguay	8	26	17.4	28.1	54.5	93.5	1.6	0.00
Peru	53	197	6.4	36.4	57.2	49.9	4.7	0.00
Suriname	1	5	9.7	38.3	52.0		3.4	0.02
Uruguay	23	49	9.4	23.9	66.8		4.7	0.00
Venezuela (Bolivarian Republic of)	117	381	5.8	52.2	42.1	50.4	0.6	0.00
Regional Office for Africa	342	1 263				70.8	3.2	0.04
Regional Office for Asia and the Pacific	8 450	23 671	4.9	31.4	63.7	47.6	2.3	0.00
Regional Office for Europe and Central Asia	9 704	21 289	1.8	26.2	72.0	83.6	1.8	
Regional Office for the Near East	818					82.0	1.4	
World	31 979	69 569				58.6	2.5	

TABLE 4: **Land**

	Land area				Agricultural area				Cropland
	total	agricultural	forest	other	total	arable	permanent		per capita
							crops	meadows & pastures	
	million ha	percent	percent	percent	thousand ha	percent	percent	percent	ha/cap
	2011	2011	2011	2011	2011	2011	2011	2011	2011
North America	1824.1	26.0	33.7	40.3	473860	42.9	1.6	55.5	0.61
Canada	909.4	6.9	34.1	59.0	62597	68.6	7.9	23.5	1.39
United States of America	914.7	45.0	33.3	21.8	411263	38.9	0.6	60.4	0.52
Regional Office for Latin America and the Caribbean	2013.2	36.7	46.8	16.4	739587	22.7	2.7	74.6	0.32
Caribbean	21.2	53.9	29.4	16.7	11393	48.6	11.3	40.1	0.19
Antigua and Barbuda	0.0	20.5	22.3	57.3	9	44.4	11.1	44.4	0.06
Bahamas	1.0	1.5	51.4	47.1	15	60.0	26.7	13.3	0.04
Barbados	0.0	34.9	19.4	45.7	15	80.0	6.7	13.3	0.05
Cuba	10.6	61.7	27.3	11.0	6570	54.0	5.9	40.0	0.35
Dominica	0.1	34.7	59.2	6.1	26	23.1	69.2	7.7	0.35
Dominican Republic	4.8	50.6	40.8	8.5	2447	32.7	18.4	48.9	0.12
Grenada	0.0	32.4	50.0	17.7	11	27.3	63.6	9.1	0.10
Haiti	2.8	64.2	3.6	32.1	1770	56.5	15.8	27.7	0.13
Jamaica	1.1	41.5	31.1	27.5	449	26.7	22.3	51.0	0.08
Saint Kitts and Nevis	0.0	23.1	42.3	34.6	6	83.3	1.7	15.0	0.10
Saint Lucia	0.1	18.0	77.0	4.9	11	27.3	63.6	9.1	0.06
Saint Vincent and the Grenadines	0.0	25.6	68.7	5.7	10	50.0	30.0	20.0	0.07
Trinidad and Tobago	0.5	10.5	44.0	45.5	54	46.3	40.7	13.0	0.03
Latin America	2001.5	36.4	47.2	16.4	729342	22.3	2.6	75.2	0.33
Central America	245.2	49.7	34.2	16.1	121763	25.8	4.2	70.0	0.23
Belize	2.3	6.9	60.6	32.5	157	47.8	20.4	31.8	0.34
Costa Rica	5.1	36.8	51.5	11.7	1880	13.3	17.6	69.1	0.12
El Salvador	2.1	73.9	13.6	12.4	1532	43.4	15.0	41.6	0.14
Guatemala	10.7	41.0	33.6	25.4	4395	34.1	21.5	44.4	0.17
Honduras	11.2	28.8	45.3	25.9	3220	31.7	13.7	54.7	0.19
Mexico	194.4	53.1	33.3	13.7	103166	24.7	2.6	72.7	0.25
Nicaragua	12.0	42.8	25.3	31.9	5146	36.9	4.5	58.6	0.36
Panama	7.4	30.5	43.6	25.9	2267	23.8	8.3	67.8	0.20
South America	1746.8	34.7	48.8	16.5	606431	21.6	2.3	76.2	0.36
Argentina	273.7	53.9	10.7	35.4	147548	25.8	0.7	73.5	0.96
Bolivia (Plurinational State of)	108.3	34.2	52.5	13.3	37055	10.4	0.6	89.1	0.40
Brazil	845.9	32.5	61.2	6.3	275030	26.2	2.6	71.3	0.40
Chile	74.4	21.2	21.9	56.9	15789	8.3	2.9	88.8	0.10
Colombia	110.9	39.5	54.4	6.1	43786	4.8	4.3	90.9	0.09
Ecuador	24.8	29.6	38.9	31.5	7346	15.7	18.8	65.5	0.17
Guyana	19.7	8.5	77.2	14.2	1677	25.0	1.6	73.3	0.59
Paraguay	39.7	52.8	43.8	3.4	20990	18.6	0.4	81.0	0.61
Peru	128.0	16.8	53.0	30.2	21500	17.0	4.0	79.1	0.15
Suriname	15.6	0.5	94.6	4.9	82	72.0	7.3	20.7	0.12
Uruguay	17.5	82.2	10.2	7.6	14378	12.6	0.3	87.2	0.55
Venezuela (Bolivarian Republic of)	88.2	24.1	52.1	23.8	21250	12.2	3.1	84.7	0.11
Regional Office for Africa	2126.4	43.6	27.9	30.2	955135	20.3	2.6	77.8	0.25
Regional Office for Asia and the Pacific	5012.6	38.9	31.3	29.8	1951899	30.8	4.0	65.4	0.17
Regional Office for Europe and Central Asia	2693.5	29.7	38.3	32.0	800592	41.5	2.5	56.1	0.39
Regional Office for the Near East	1221.6	33.8	1.9	64.4	521071	13.7	1.9	85.0	0.17
World	12765.7	37.4	31.0	32.0	4911605	28.6	3.2	68.5	0.22

TABLE 5: **Water resources per capita and irrigation**

	Water resources			Irrigation			
	per capita			potential	total area equipped	equipped area actually irrigated	
	m^3/yr/cap	m^3/yr/cap	m^3/yr/cap	thousand ha	thousand ha	year	share percent
	1990	2000	2010	2012	2009	1987-2012	1987-2012*
North America							
Canada	104 762	94 629	85 310		855	2 010	100
United States of America	12 114	10 864	9 888		23 000	2 005	83
Regional Office for Latin America and the Caribbean							
Caribbean							
Antigua and Barbuda	839	667	584	0	0		
Bahamas	78	67	58		1		
Barbados	308	299	293	4	5		
Cuba	3 606	3 433	3 386	2 700	870	1 997	85
Dominica							
Dominican Republic	2 919	2 444	2 115	710	275	2 004	71
Grenada					2		
Haiti	1 969	1 623	1 404	143	92	1 991	71
Jamaica	3 976	3 642	3 431	188	25	2 009	100
Saint Kitts and Nevis	585	522	462		0		
Saint Lucia					3		
Saint Vincent and the Grenadines					1		
Trinidad and Tobago	3 160	2 972	2 864	30	7	1 997	85
Latin America							
Central America							
Belize	97 632	73 904	59 455		4	1 997	100
Costa Rica	36 612	28 681	24 125	430	108	1 997	100
El Salvador	4 731	4 247	4 074	200	45		
Guatemala	12 473	9 905	7 735	2 620	200	2 003	100
Honduras	19 622	15 428	12 621	500	80	2 006	69
Mexico	5 423	4 574	4 031	9 766	6 300	2 003	84
Nicaragua	47 707	38 747	33 967	700	61	2 001	85
Panama	61 258	50 068	42 081	187	43	1 997	81
South America							
Argentina	24 937	22 041	20 143	6 128	1 650	2 011	92
Bolivia (Plurinational State of)	93 497	74 937	62 689	2 000	175	1 999	100
Brazil	55 015	47 201	42 232	29 350	4 500	2 006	100
Chile	69 912	59 792	53 874	2 500	1 900	2 007	91
Colombia	64 211	53 616	46 052	6 589	900	2 011	36
Ecuador	41 360	34 378	29 340	3 136	960	2 000	73
Guyana	332 414	328 786	319 629		150		
Paraguay	79 171	62 874	52 053		67	2 012	100
Peru	88 214	73 970	65 791	6 411	1 196	1 998	93
Suriname	299 754	261 242	232 381		57	1 998	100
Uruguay	44 709	41 880	41 259	1 760	218	1 998	100
Venezuela (Bolivarian Republic of)	62 637	50 641	42 547	1 700	580	2 008	93
Regional Office for Africa							
Regional Office for Asia and the Pacific							
Regional Office for Europe and Central Asia							
Regional Office for the Near East							
World							

TABLE 6: **Labour**

	Employment		Employment in agriculture			Labor force		Children in employment
	female	male	share of total	female	male	participation rate		% of children ages 7-14
				share of female employment	share of male employment	female	male	total
	million people 2010	million people 2010	percent	percent	percent	percent	percent	percent
			2005-12*	2005-12*	2005-12*	2010	2010	2000-12*
North America	75	85	1.6	0.8	2.1	57.9	70.3	
Canada	8	9	2.4	1.3	3.3	61.8	71.5	
United States of America	66	76	1.6	0.8	2.3	57.5	70.2	
Regional Office for Latin America and the Caribbean	105	155	14.9	9.1	19.7	53.3	80.1	
Caribbean	6	9	16.2	5.9	22.1	51.8	73.2	
Antigua and Barbuda								
Bahamas	0	0	2.9	0.5	5.1	69.3	79.4	
Barbados	0	0	2.8	1.9	3.8	64.8	76.3	
Cuba	2	3	18.5	8.4	24.7	43.1	70.1	
Dominica								
Dominican Republic	1	2	12.0	1.8	19.4	50.8	78.7	14.1
Grenada								
Haiti	2	2				59.8	70.5	33.4
Jamaica	0	1	20.2	9.4	28.5	56.0	72.0	9.8
Saint Kitts and Nevis								
Saint Lucia						63.9	77.0	
Saint Vincent and the Grenadines						55.5	78.5	
Trinidad and Tobago	0	0	3.8	1.8	5.2	54.6	78.0	3.4
Latin America	99	146	14.7	8.7	18.9	53.4	80.5	
Central America	23	40	15.1	4.9	21.6	44.7	81.2	
Belize	0	0	19.5	3.3	28.0	48.0	81.8	
Costa Rica	1	1	15.0	4.8	21.0	46.0	78.9	2.5
El Salvador	1	1	20.8	5.4	32.0	47.1	78.7	7.4
Guatemala	2	3	33.2	16.0	43.8	48.8	88.3	18.2
Honduras	1	2	36.0	11.9	49.9	41.9	82.9	8.7
Mexico	17	30	13.1	4.0	18.6	43.9	80.5	6.8
Nicaragua	1	1	32.2	15.2	44.2	46.2	80.0	10.1
Panama	1	1	17.4	7.7	23.3	49.3	82.6	8.9
South America	75	106	14.7	10.7	18.8	56.9	80.2	
Argentina	7	10	1.3	0.4	1.9	47.0	74.9	12.9
Bolivia (Plurinational State of)	2	2	32.1	32.9	31.4	63.8	81.0	20.2
Brazil	40	54	17.0	12.2	20.5	59.4	81.0	4.2
Chile	3	5	10.6	5.1	14.1	46.8	74.3	4.1
Colombia	8	12	17.9	5.0	26.1	55.3	79.7	6.4
Ecuador	2	4	28.2	21.3	32.6	53.7	82.6	3.2
Guyana	0	0				41.3	79.6	
Paraguay	1	2	26.8	19.1	31.5	57.4	86.4	15.3
Peru	6	8	1.4	0.5	1.0	67.4	84.7	42.2
Suriname	0	0				40.1	68.7	
Uruguay	1	1	11.5	4.8	15.6	55.4	76.6	7.3
Venezuela (Bolivarian Republic of)	5	8	8.7	1.8	13.1	51.6	80.2	5.1
Regional Office for Africa	141	169				62.8	76.4	
Regional Office for Asia and the Pacific	728	1 168				49.4	80.0	
Regional Office for Europe and Central Asia	175	213	14.1	12.5	13.5	49.9	67.3	
Regional Office for the Near East	24	97				21.6	73.5	
World	1 201	1 820				50.6	77.3	

TABLE 7: **Inputs**

	Agricultural tractors	Pesticides use	Fertilizers consumption		
	total	per ha of arable land and permanent crops	per ha of arable land and permanent crops		
	tractors 2000-12*	kg/ha 2008-12*	nitrogen kg/ha 2011	phosphate kg/ha 2011	potash kg/ha 2011
North America			67.31	22.34	21.79
Canada	733 182	1.04	50.01	15.43	7.31
United States of America	4 389 812		72.40	24.38	26.05
Regional Office for Latin America and the Caribbean			45.66	32.58	32.64
Caribbean			21.52	10.14	8.38
Antigua and Barbuda		7.85	0.80	1.40	0.40
Bahamas					
Barbados			60.85	18.85	1.77
Cuba	72 602		13.87	5.54	9.89
Dominica			3.25	9.54	11.21
Dominican Republic	1 868	4.97	45.98	22.27	2.60
Grenada					
Haiti					
Jamaica			24.69	21.66	8.10
Saint Kitts and Nevis	22	2.90	8.63	5.88	5.88
Saint Lucia	14		15.50	4.10	3.20
Saint Vincent and the Grenadines	112				
Trinidad and Tobago	5 129		0.00	20.13	38.64
Latin America		5.21	46.57	33.42	33.56
Central America			52.48	11.03	14.16
Belize		7.51	121.80	239.56	12.93
Costa Rica		21.64	147.37	15.45	122.01
El Salvador		13.27	92.35	31.28	20.58
Guatemala		6.09	73.82	21.17	8.30
Honduras	5 200	3.60	39.77	17.16	31.23
Mexico	238 830	4.55	50.32	8.58	12.28
Nicaragua		5.69	25.81	6.81	3.77
Panama	8 066	2.54	33.13	10.12	9.03
South America			45.08	39.08	38.46
Argentina	244 320	6.55	25.65	18.47	0.82
Bolivia (Plurinational State of)	6 000	7.96	5.09	2.30	1.30
Brazil	788 053		45.23	51.22	59.55
Chile	53 915	11.36	243.77	68.77	39.93
Colombia		13.46	150.55	72.64	68.62
Ecuador	14 652	6.85	70.11	13.11	40.81
Guyana		0.90	14.26	11.31	0.60
Paraguay	25 823		25.21	44.67	35.47
Peru		3.09	55.82	20.79	14.05
Suriname	1 013	14.40	142.18	21.23	20.66
Uruguay	36 465	9.44	28.98	39.30	31.56
Venezuela (Bolivarian Republic of)			87.69	22.46	31.38
Regional Office for Africa			6.87	3.24	1.55
Regional Office for Asia and the Pacific			106.76	35.62	22.36
Regional Office for Europe and Central Asia	11 467 067		45.08	11.69	12.29
Regional Office for the Near East	651 197		35.94	26.59	3.66
World			73.34	26.83	19.82

TABLE 8: **Agricultural capital stock**

	Gross capital stock								
	total			share					
		p.a. growth		land development	plantation crops	livestock fixed assets	livestock inventory	structures for livestock	machinery & equipment
	million US$	percent	percent	percent	percent	percent	percent	percent	percent
	2007	1990-2000	2000-07	2007	2007	2007	2007	2007	2007
North America	719 643	0.2	0.2	27.9	4.4	13.9	2.4	9.1	42.2
Canada	100 518	−0.1	0.5	23.4	22.5	8.8	1.6	7.8	35.9
United States of America	619 125	0.2	0.2	28.6	1.5	14.7	2.6	9.3	43.3
Regional Office for Latin America and the Caribbean	725 911	0.5	0.9	24.3	6.9	47.1	8.3	5.2	8.1
Caribbean	42 520	−0.3	0.2	20.9	8.4	53.7	9.5	2.2	5.4
Antigua and Barbuda	39	0.3	0.9	11.6	5.6	56.7	10.0	4.3	11.8
Bahamas	30	1.7	0.6	28.5	31.4	26.3	4.6	0.7	8.5
Barbados	88	−1.6	−3.3	17.7	1.3	45.9	8.1	1.3	25.7
Cuba	24 317	−1.1	−0.6	21.4	3.5	55.7	9.8	1.6	8.1
Dominica	61	1.2	1.1	4.2	57.0	27.6	4.9	2.1	4.2
Dominican Republic	10 301	0.2	2.2	24.2	16.3	47.8	8.4	2.6	0.5
Grenada	39	−0.3	1.7	14.0	56.7	22.8	4.0	1.2	1.3
Haiti	4 949	2.7	0.2	17.3	11.8	55.6	9.8	3.9	1.6
Jamaica	2 273	0.5	0.6	9.7	13.4	59.6	10.5	1.9	5.0
Saint Kitts and Nevis	17	−1.6	−4.0	13.3	0.0	67.8	12.0	3.9	2.9
Saint Lucia	57	0.2	−2.4	23.7	24.8	40.4	7.1	2.3	1.7
Saint Vincent and the Grenadines	28	−1.9	−0.4	23.1	21.9	41.5	7.3	1.8	4.3
Trinidad and Tobago	321	−1.9	0.7	14.6	16.2	44.0	7.8	1.2	16.3
Latin America	683 575	0.6	0.9	24.6	6.9	46.7	8.2	5.4	8.2
Central America	149 716	0.6	0.6	43.7	10.3	32.5	5.7	3.2	4.6
Belize	197	1.8	1.7	21.6	28.4	33.6	5.9	3.6	6.9
Costa Rica	2 165	−0.6	0.3	24.1	27.5	27.2	4.8	5.5	10.9
El Salvador	2 686	−0.0	1.1	28.2	26.8	27.9	4.9	4.9	7.2
Guatemala	9 433	1.6	4.6	25.0	30.5	32.2	5.7	3.2	3.3
Honduras	4 388	−1.2	2.2	25.5	25.9	30.9	5.5	5.7	6.5
Mexico	121 134	0.5	0.1	47.5	7.1	32.3	5.7	2.9	4.5
Nicaragua	6 120	3.1	0.6	41.9	17.0	28.8	5.1	5.7	1.5
Panama	3 592	0.5	1.3	12.8	8.8	56.0	9.9	4.3	8.1
South America	533 675	0.6	1.1	19.2	5.9	50.7	8.9	6.0	9.3
Argentina	79 463	−0.8	0.7	15.2	1.4	52.4	9.2	6.2	15.6
Bolivia (Plurinational State of)	9 239	2.2	2.6	20.6	3.9	55.0	9.7	8.3	2.4
Brazil	212 210	1.0	1.6	21.2	6.9	42.3	7.5	8.8	13.4
Chile	22 663	1.6	−0.2	44.4	5.0	30.8	5.4	1.7	12.8
Colombia	102 648	0.3	0.7	7.8	5.4	70.7	12.5	2.6	1.1
Ecuador	18 931	0.4	−0.8	36.7	22.3	30.8	5.4	2.4	2.4
Guyana	1 049	0.2	−0.1	70.9	4.5	13.6	2.4	1.0	7.6
Paraguay	8 465	1.3	1.5	20.7	1.9	51.2	9.0	11.5	5.7
Peru	23 685	1.2	0.8	34.2	8.1	45.3	8.0	2.4	2.0
Suriname	677	0.5	−1.8	79.7	5.0	9.5	1.7	0.7	3.4
Uruguay	25 136	0.3	1.7	5.9	0.3	73.7	13.0	4.6	2.5
Venezuela (Bolivarian Republic of)	29 509	0.7	0.7	20.1	7.9	50.7	8.9	5.3	7.0
Regional Office for Africa	430 811	1.8	2.0	25.5	7.3	48.0	8.5	7.7	3.0
Regional Office for Asia and the Pacific	1 719 508	0.9	0.7	32.5	10.2	25.9	4.6	4.1	22.6
Regional Office for Europe and Central Asia	1 239 351		−0.4	35.2	5.8	16.5	2.9	4.3	35.3
Regional Office for the Near East	335 938	1.9	1.2	61.9	3.3	21.9	3.9	2.3	6.7
World	4 797 327	0.6	0.6	31.0	7.6	26.8	4.7	5.4	24.5

TABLE 9: **Foreign direct investment and official development assistance**

	FDI, inward flows				ODA				
	agriculture, hunting, forestry, fishing		food, beverages, tobacco		total receipts		agriculture	forestry	fishery
	thousand US$ 2000-01*	thousand US$ 2011-12*	thousand US$ 2000-01*	thousand US$ 2011-12*	million US$ 2000	million US$ 2010	share of total percent 2010	share of total percent 2010	share of total percent 2010
North America					0	0			
Canada	0	0	0	0	0	0			
United States of America					0	0			
Regional Office for Latin America and the Caribbean					8633	13085	5.6	2.5	0.4
Caribbean					929	4516	2.9	0.1	0.1
Antigua and Barbuda					10	13	0.0	0.0	2.1
Bahamas					0	0			
Barbados					4	23	1.7	0.0	0.0
Cuba					88	122	7.1	0.0	0.3
Dominica					21	9	0.0	0.0	0.3
Dominican Republic	0	0	0	0	355	464	4.1	0.1	0.0
Grenada					18	16	0.1	0.0	0.7
Haiti					218	3655	2.0	0.1	0.0
Jamaica	0		0		140	118	24.7	0.1	0.1
Saint Kitts and Nevis					6	26	0.4	0.0	1.8
Saint Lucia					37	12	1.9	0.0	2.1
Saint Vincent and the Grenadines					17	11	3.0	0.0	0.0
Trinidad and Tobago	0		−18100		15	49	0.4	0.0	0.0
Latin America					7704	8569	7.0	3.7	0.5
Central America					2531	3468	5.7	1.6	0.1
Belize		4090	0		26	54	46.7	0.0	0.1
Costa Rica	500	34870	0	0	76	95	2.3	0.0	0.2
El Salvador	30000	0	0	0	173	336	3.3	0.0	0.3
Guatemala					328	480	9.7	0.1	0.1
Honduras	40400	16600	0	0	898	625	7.5	4.6	0.1
Mexico	95240	16840	230240	2949240	346	1177	0.2	1.7	0.0
Nicaragua	3800	400	0	0	646	640	9.6	0.9	0.0
Panama			0		38	62	4.1	1.3	2.9
South America					5173	5101	7.9	5.2	0.8
Argentina	0		5850		75	157	4.0	0.5	20.5
Bolivia (Plurinational State of)	0		0		1285	775	15.5	2.5	0.1
Brazil	73000		453000		292	1035	1.9	20.5	0.0
Chile		194000		0	69	136	1.0	0.2	0.5
Colombia	12460	131440	0	0	1587	1263	9.0	0.0	0.1
Ecuador	18700	−2690	0	0	274	280	10.1	5.1	0.5
Guyana					224	341	7.5	0.0	0.0
Paraguay	−3400	−650	40170	10420	62	223	10.2	0.2	0.1
Peru	0	0	0	0	1016	770	8.2	2.0	0.6
Suriname					37	36	0.0	0.0	0.0
Uruguay	−15130		−6190		22	36	3.7	0.0	2.8
Venezuela (Bolivarian Republic of)	0	0			230	48	0.7	0.1	0.0
Regional Office for Africa					24913	42252	6.6	0.5	0.3
Regional Office for Asia and the Pacific					22256	43802	4.3	0.4	0.1
Regional Office for Europe and Central Asia					5636	8877			
Regional Office for the Near East					6205	11726	3.9	0.0	0.7
World					68583	123943			

TABLE 10: **Government expenditures**

	Agriculture, forestry, fishing, and hunting				Environmental Protection	
	% of total outlays		% of agricultural GDP		% of total outlays	
	cash percent 2009-12*	non-cash percent 2009-12*	cash percent 2009-12*	non-cash percent 2009-12*	cash percent 2009-12*	non-cash percent 2009-12*
North America						
Canada						
United States of America	0.6		14.6		1.2	
Regional Office for Latin America and the Caribbean						
Caribbean						
Antigua and Barbuda						
Bahamas	1.0		9.3			
Barbados						
Cuba						
Dominica						
Dominican Republic		2.7		7.8		0.7
Grenada						
Haiti						
Jamaica	1.6		11.8		0.1	
Saint Kitts and Nevis	0.6		15.9			
Saint Lucia						
Saint Vincent and the Grenadines						
Trinidad and Tobago						
Latin America						
Central America						
Belize						
Costa Rica		1.1		4.2		0.4
El Salvador	1.8	1.8	2.7	2.7	0.5	0.5
Guatemala	2.1		0.8		0.6	
Honduras						
Mexico	3.0		16.3			
Nicaragua						
Panama	1.8		9.9			
South America						
Argentina						
Bolivia (Plurinational State of)						
Brazil						
Chile		1.3		8.6		0.3
Colombia						
Ecuador						
Guyana						
Paraguay	3.4		2.8			
Peru						
Suriname						
Uruguay						
Venezuela (Bolivarian Republic of)						
Regional Office for Africa						
Regional Office for Asia and the Pacific						
Regional Office for Europe and Central Asia						
Regional Office for the Near East						
World						

TABLE 11: **Innovation**

	Agricultural R&D spending		Total public agric. research expenditures	Fixed broadband Internet per 100 people	Mobile cellulars per 100 people	Telephone lines per 100 people	CPIA business regulatory environment rating
	million 2005 PPP US$ 2000	million 2005 PPP US$ 2008	share of GDP percent 2008	subscribers 2011	subscriptions 2011	lines 2011	(1=low to 6=high) rating 2012
North America	4 988	5 461		27.8	93.7	46.5	
Canada	705	636	3.4	31.8	79.7	53.0	
United States of America	4 283	4 825	3.2	27.4	95.3	45.8	
Regional Office for Latin America and the Caribbean	2 826	3 302		7.7	105.3	18.1	
Caribbean	38	32		2.3	56.0	8.9	
Antigua and Barbuda	0	0		6.7	196.4	39.6	
Bahamas	2	2		4.5	86.1	38.3	
Barbados	2	2		22.1	127.0	51.4	
Cuba				0.0	11.7	10.6	
Dominica	1	1		12.3	161.0	22.2	4.0
Dominican Republic	14	15		4.0	87.2	10.4	
Grenada	1	0		13.8	119.2	27.1	4.0
Haiti				0.2	41.5	0.5	2.5
Jamaica	13	10		3.9	108.1	9.9	
Saint Kitts and Nevis	0	0		27.5	154.6	37.3	
Saint Lucia	1	1		12.1	123.0	20.4	4.5
Saint Vincent and the Grenadines	1	1		12.9	120.5	20.8	4.0
Trinidad and Tobago	3	1		11.5	135.6	21.7	
Latin America	2 788	3 269		8.1	108.6	18.7	
Central America	575	688		9.0	92.8	15.9	
Belize	2	2		3.1	70.0	9.1	
Costa Rica	25	33		9.1	92.2	26.1	
El Salvador	6	6		3.3	133.5	16.5	
Guatemala	8	7			132.0	11.0	
Honduras	11	12		0.7	104.0	7.9	3.0
Mexico	483	585	1.1	10.3	82.4	17.2	
Nicaragua	18	24		1.4	82.2	4.9	3.5
Panama	22	20		7.9	188.6	15.7	
South America	2 213	2 580		7.7	114.9	19.8	
Argentina	238	441	0.9	10.4	134.9	24.3	
Bolivia (Plurinational State of)	48	46		0.7	82.8	8.7	2.5
Brazil	1 244	1 403	1.5	8.6	119.2	21.9	
Chile	116	103	1.4	11.6	129.7	19.5	
Colombia	170	143	0.6	6.9	98.5	15.2	
Ecuador	89	70		4.2	104.5	15.1	
Guyana	6	6		2.6	69.9	20.1	3.0
Paraguay	9	5		0.9	99.4	5.6	
Peru	140	167		4.0	110.4	11.1	
Suriname	3	2		4.6	178.9	15.9	
Uruguay	36	61		13.5	140.8	28.5	
Venezuela (Bolivarian Republic of)	115	134		6.1	97.8	24.9	
Regional Office for Africa	1 317	1 748		0.2	53.2	1.4	
Regional Office for Asia and the Pacific	9 942	13 454		6.5	81.0	14.1	
Regional Office for Europe and Central Asia	6 267	7 315		20.0	128.7	36.9	
Regional Office for the Near East	1 541	1 731		2.3	94.9	14.7	
World	26 053	31 744		8.5	85.4	17.0	

PART

2

Hunger dimensions

In Latin America and the Caribbean about 7.9 percent of the population, roughly 47 million people, are estimated to be undernourished in 2011-13. Globally there are 842 million undernourished people. At both the global level and the regional levels, progress is being made to reduce the prevalence of undernourishment. The total number of undernourished has fallen by 17 percent since 1990–92, but in Latin America there has been an even greater drop (28.4 percent) during the same period.

Food insecurity can be caused by insufficient supply of food or insufficient access to food supply. Poverty plays an important role in determining access to food, but the relationship between poverty and food insecurity is not always straightforward. Food security is also conditioned by food prices and other social and economic factors. It can also be affected, often very significantly, by political instability and the presence of natural hazards. An inadequate diet may result from a lack of vitamins or micronutrients or an imbalance in the availability of macronutrients. Food insecurity can arise even when a sufficient and balanced diet is available, but food is unsafe or unclean

this can creates health problems that do not allow food to be utilized correctly. Inadequate health care can compound this problem.

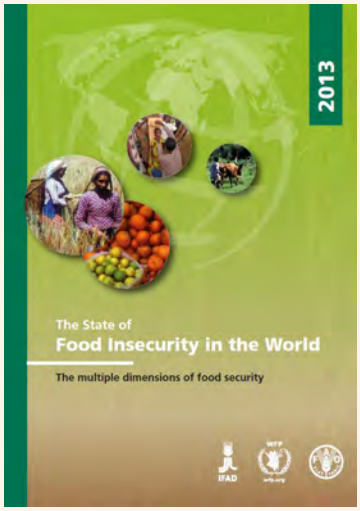
The prevalence of undernourishment provides an indication of the extent and distribution of hunger in the region. However, food security is too complex to be measured by one single indicator. The 2009 Declaration of the World Summit on Food Security states that, "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences for an active and healthy life." Based on this definition, four dimensions of food security can be identified: food availability, economic and physical access to food, food utilization and stability (vulnerability and shocks) over time.

To understand the complexity of the problem of food insecurity and identify measures for addressing it, all its dimensions, manifestations, and underlying factors have to be assessed and measured. To capture the multifaceted character of food insecurity and facilitate its analysis, FAO has compiled a suite of indicators that supplements measurements of the number and prevalence of undernourishment. However, the indicators selected are not always ideal for describing all aspects of food insecurity. Indicator selection is also conditioned by the availability of reliable data and the possibility of establishing meaningful comparisons across regions and time periods. Some indicators look at food insecurity as an outcome: this is the case of the number of undernourished people, the prevalence of undernourishment in the population, the extent of nutrition gaps, and anthropometric evidence. Other indicators focus on the conditions that generate food insecurity, such as poverty; food availability, access, affordability and utilization; and vulnerability and instability.

This chapter presents the main food security indicators computed by FAO, starting from outcomes and moving on to consider the conditions that characterize and can generate food insecurity. The presence of several indicators for one phenomenon poses significant measurement challenges. One challenge is consistently summarizing the information conveyed by multiple indicators; another is understanding and tracing how the various indicators relate to each other. The following sections outline some of the associations and regularities that emerge among different indicators for Latin America and the Caribbean. These are meant to signal areas for further investigation, and do not necessarily imply formal or causal relationships.

Key Resources

The State of Food Insecurity in the World (SOFI)



The State of Food Insecurity in the World raises awareness about global hunger issues, discusses underlying causes of hunger and malnutrition and monitors progress towards hunger reduction targets established at the 1996 World Food Summit and the Millennium Summit. The publication is targeted at a wide audience, including policy-makers, international organizations, academic institutions and the general public with a general interest in linkages between food security, and human and economic development.

2013: The multiple dimensions of food security

2012: Economic growth is necessary but not sufficient ro accellerate reduction of hunger and malnutrition

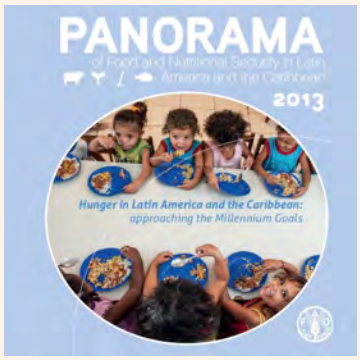
2011: How does international price volatility affect domestic economies and food security?

2010: Addressing food insecurity in protracted crises

Publication cycle: Annual

Webpage: www.fao.org/publications/sofi/en/

Panorama of Food and Nutritional Security in Latin America and the Caribbean



The 2013 edition of the Panorama of Food and Nutritional Security in Latin America and the Caribbean shows that, in recent years, the region maintains a favourable trajectory in economic growth and social protection, amidst a general context of slower growth in industrialized countries. The regional progress made between 1990 and 2015 towards the goal of halving the proportion of people who suffer from hunger, established in the first of the Millennium Development Goals, allows for optimism: if efforts are redoubled, and the positive trend in terms of economic and social development is maintained, it is conceivable that the current generation could be the first in history to live completely free from hunger and malnutrition in all countries of Latin America and the Caribbean.

Publication cycle: Annual

Webpage: www.rlc.fao.org/en/panorama-2013/

Number undernourished and their prevalence in the population

The global community has established two targets for assessing progress in reducing hunger: the 1996 World Food Summit (WFS) target, which is to halve the number of hungry people; and the 2001 Millennium Development Goal (MDG) hunger target, which is to halve the proportion of hungry people in the total population. For both targets, 1990 is used as the base year for measuring progress and 2015 the target year. To monitor progress towards these targets, FAO regularly computes and publishes updated estimates of the number of undernourished people and their prevalence in the total population. This indicator refers to the number and proportion of the population whose energy intake is likely to fall below minimum requirements.

According to the *State of Food Insecurity in the World 2013*, the MDG target has nearly been reached in Latin America and the Caribbean. The report notes that progress in the region has been due largely to, "economic growth, political and institutional stability, incentives to raise agricultural productivity and overall economic development".

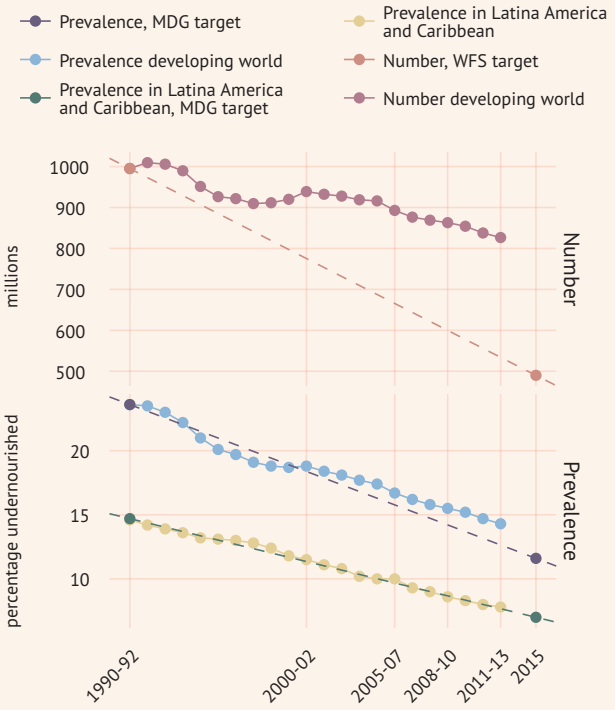
As indicated earlier, about 8 percent of the region's population remains undernourished. The prevalence of undernourishment is highest in the Caribbean subregion, due to the very high prevalence in Haiti where almost half the population is undernourished. Guatemala has the second highest prevalence (30.5 percent). Nicaragua and Paraguay and the Plurinational State of Bolivia are the only other countries in the region where the prevalence of undernourishment is higher than 20 percent.

As part of FAO's new suite of indicators, additional figures are presented for the prevalence of food inadequacy, which indicates the risk that individuals will be living on a diet that prevents them from effectively discharging an economic activity requiring significant physical effort. Compared with the prevalence of undernourishment, the prevalence of food inadequacy also includes individuals with a food energy deficit who would not be considered undernourished under normal conditions, but who may be undernourished when carrying out intense physical work, owing to a lack of alternatives. Trends for this indicator are similar to those for the prevalence of undernourishment, but the indicator's level offers insights into the inadequacy of food supply.

Further reading

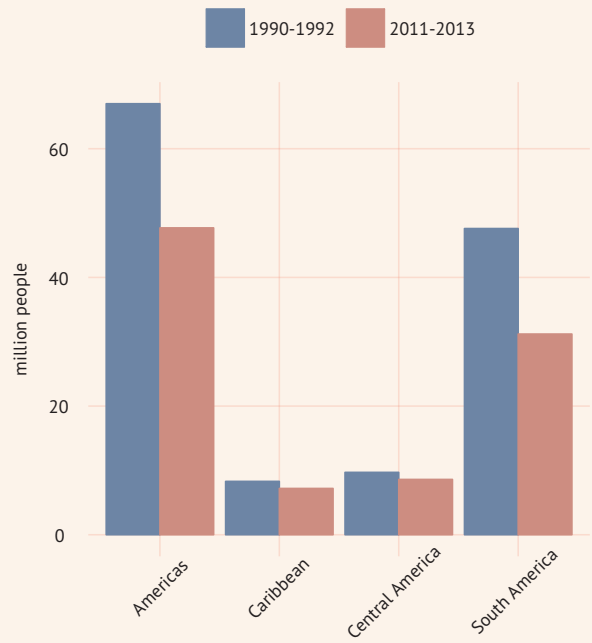
- FAO The State of Food Insecurity in the World 2013 - The multiple dimensions of food security (www.fao.org/publications/sofi/en/)
- FAO The State of Food Insecurity in the World 2012 - Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition (www.fao.org/publications/sofi/en/)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

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



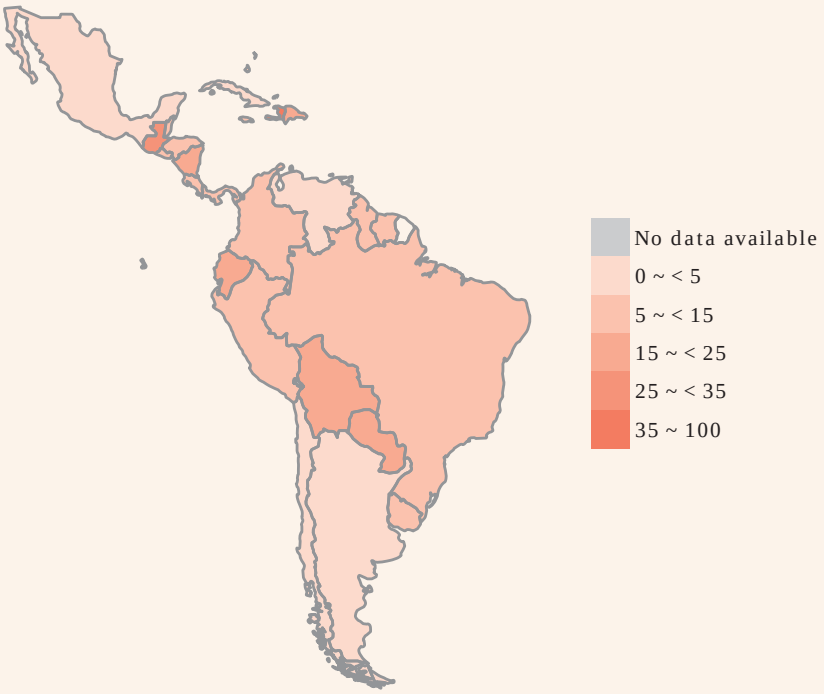
Source: FAO, Statistics Division.

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



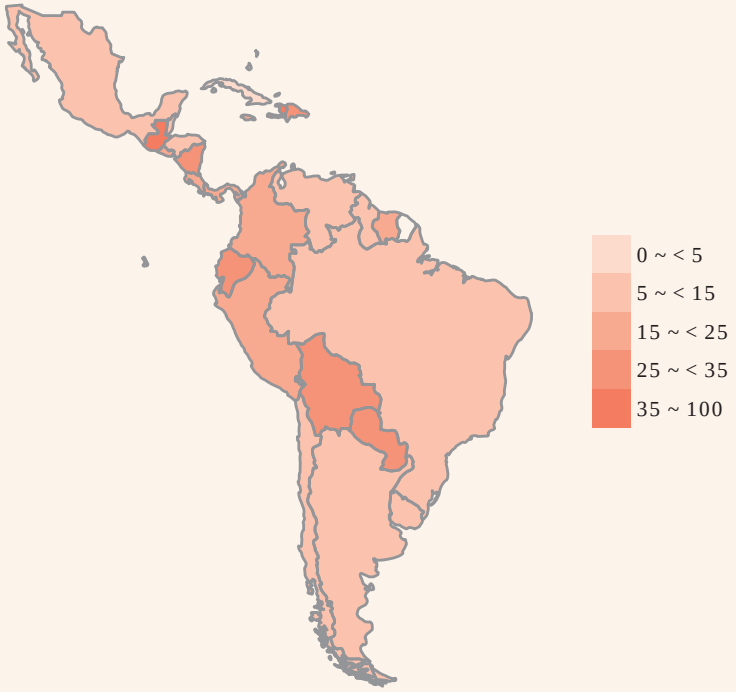
Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

Anthropometric indicators

The extent to how well food is being utilized in a given population is partly captured by anthropometric indicators that reflect undernutrition. These indicators are widely available for children under five years of age. Anthropometric measures, which convey information on the most dramatic and long-lasting consequences of chronic and acute undernourishment, are an important element of the new FAO suite of food security indicators. Measures in children under five years of age can be used to approximate the nutritional status of a population. Stunting is the outcome of prolonged inadequate nutrition and/or repeated infections; wasting results from acute malnutrition; and low body weight reflects a combination of chronic and acute malnutrition. Anthropometric data are less readily available than other indicators and are not updated as regularly, which prevents full comparisons across countries, regions and time periods.

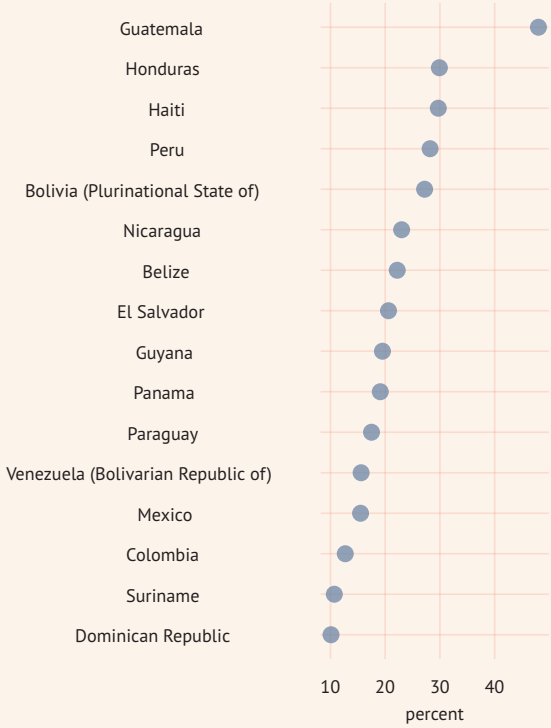
As SOFI 2013 points out, progress in food utilization does not always go hand in hand with progress in food access and availability. This is because anthropometric indicators reflect not only the effects of hunger and food insecurity, but also capture the consequences of poor health and diseases, such as diarrhea, malaria, HIV/AIDS and tuberculosis. In addition, because stunting is a largely irreversible symptom of undernourishment, improvements will only be visible over a longer period of time and will not reflect more immediate gains in food access and availability.

Underweight is a much more sensitive indicator of food utilization, with improvements registering more promptly than does stunting. But again, changes at the global level mask considerable differences between regions. In 1990, Latin America and the Caribbean had a much lower prevalence of underweight children compared to other developing regions. For this reason, even though other regions may have been able to lower the prevalence of underweight children by a greater number of percentage points, the region is the only one that has achieved the MDG target of reducing by half the percentage of underweight children. The greatest improvement in this area was in Argentina, where the percentage of underweight children fell from 21.2 percent between 1990 and 1995 to 2.8 percent between 2005 and 2011.

Further reading

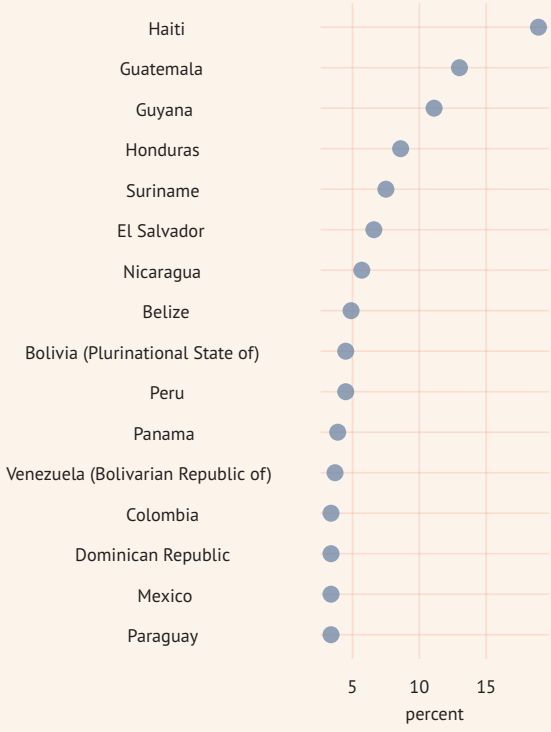
- FAO Nutrition and Consumer Protection Division (www.fao.org/food/)
- UNICEF Nutrition (www.unicef.org/nutrition/)

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



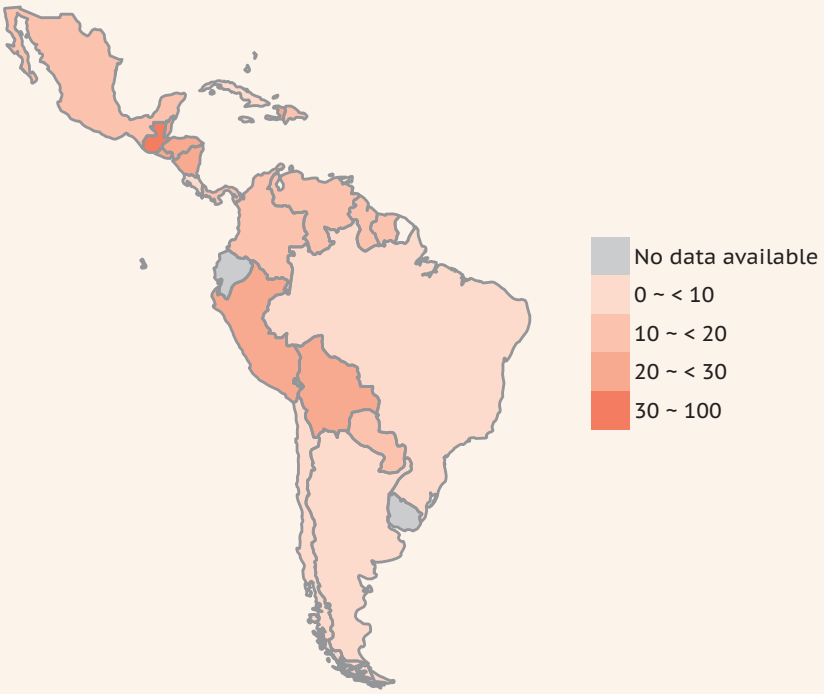
Source: FAO, Statistics Division.

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



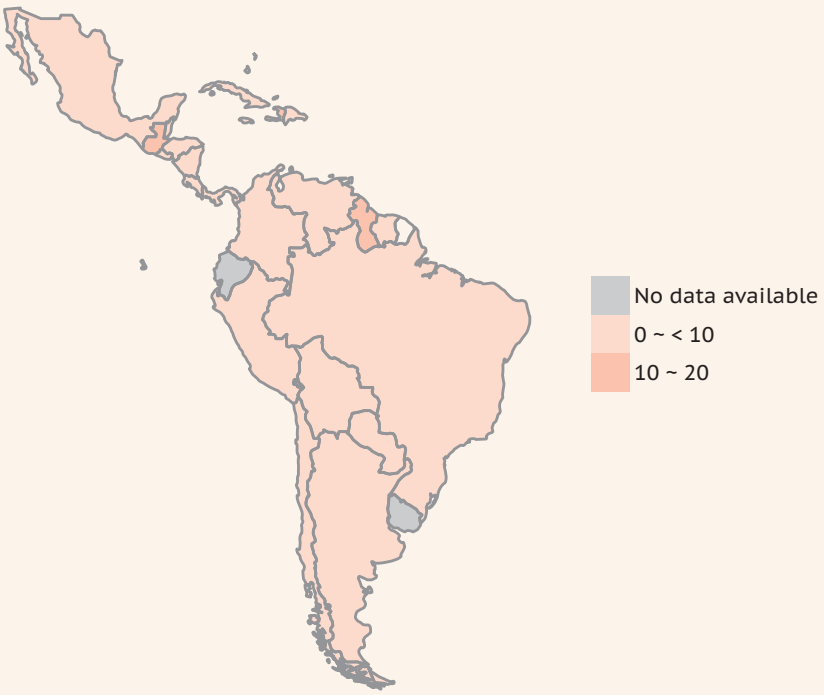
Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

Poverty

Poverty is one of the main determinants of hunger. Poor households generally spend large shares of their incomes on food, and many of them – even those engaged in farming – are net food buyers. Poor families' inability to consume enough food to meet dietary requirements can have long-lasting impacts on labour productivity, which hampers development prospects.

In 2011, the number of people living in poverty in Latin America and the Caribbean was 174 million (30.4 percent), and the number of people living in extreme poverty was 73 million (12.3 percent). Compared to 2010, the number of people living in poverty fell by 3 million, but the number of people living in extreme poverty remained the same. As a result, the percentage of people living in poverty declined slightly, but the percentage of people living in extreme poverty rose. According to the Economic Commission for Latin America (ECLA), the principle cause for the increase in extreme poverty was the rise in food prices.

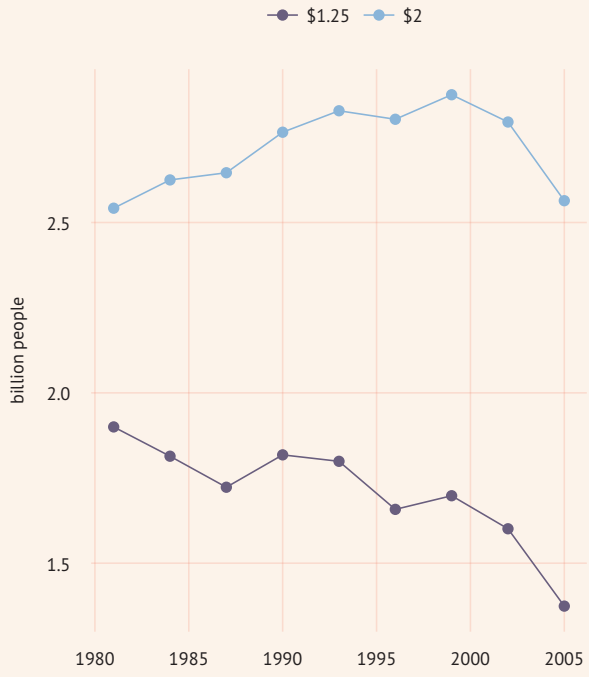
The FAO Director-General noted in his statement to the last FAO Regional Conference for Latin America and the Caribbean, "Our region's food insecurity stems from a problem of access to food, which is still our Achilles heel: while Latin America has a surplus of food, many do not have the money to buy it. Sadly, this arises from the social and economic inequalities that still characterize the region."

Higher levels of poverty are generally associated with higher prevalence of undernourishment. However, SOFI 2013 points out that the correlation between extreme poverty and hunger is not always one-to-one. Small amounts of money may help people escape extreme poverty, but not alleviate their hunger. To illustrate this SOFI 2013 points to figures from Nicaragua where, in 2005, the proportion of people living on $US 1.25 a day was estimated at 12 percent, while more than 25 percent of the population were chronically undernourished. In Nicaragua at that time, the equivalent of $US 1.25 on average purchased 1 459 kilocalories, much less than the minimum daily dietary energy requirement of 1 819 kilocalories. However, many Nicaraguans live just over the extreme poverty threshold, with about 32 percent of the population living on $US 2 or less in 2005. In 2005, on average, $US 2 in Nicaragua could buy 1 792 kilocalories, still less than their minimum dietary energy requirement.

Further reading

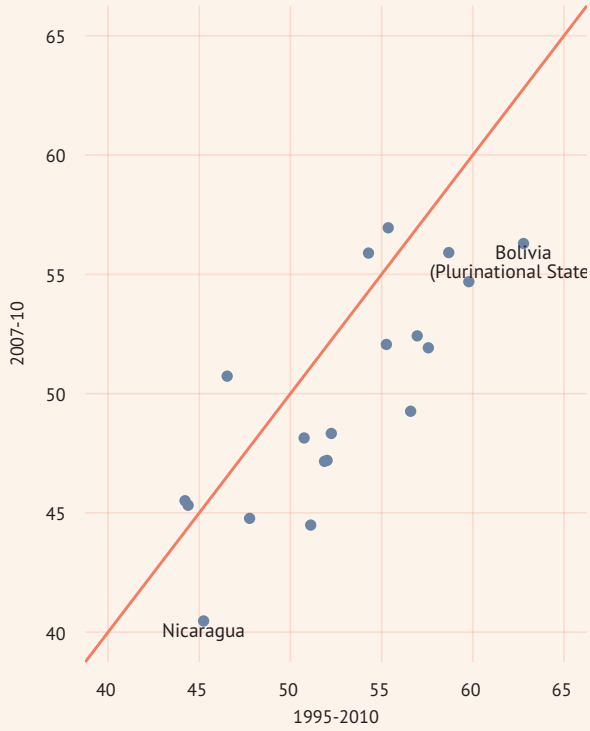
- MDG Indicators web site: http://mdgs.un.org/unsd/mdg/Metadata.aspx?IndicatorId=0&SeriesId=584
- World Bank Poverty Reduction and Equity Group (wwwr.worldbank.org/poverty)

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



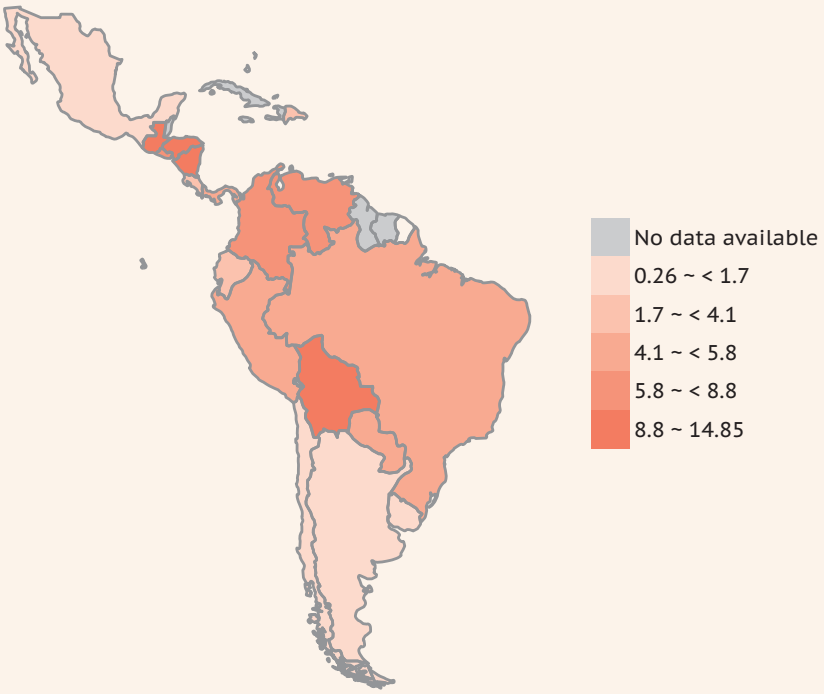
Source: World Bank (WDI).

CHART 28: **Gini coefficient for Latin American countries (1995-2010 and 2007-2010)**



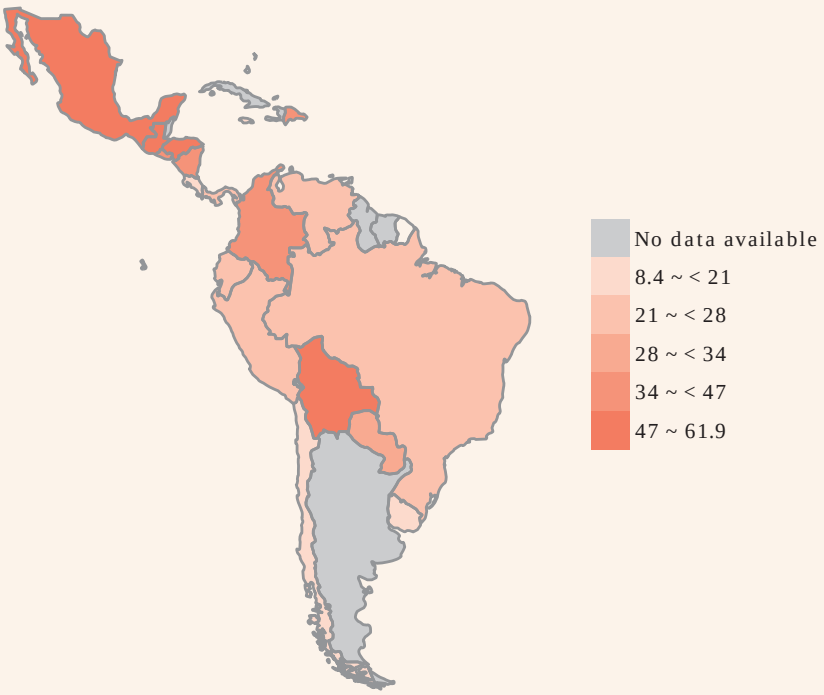
Source: World Bank (WDI).

MAP 20: **Poverty gap at $2 a day PPP (percent, 2005-2012*)**



Source: World Bank (WDI).

MAP 21: **Poverty headcount ratio at national poverty line, share of population (percent, 2005-2012*)**



Source: World Bank (WDI).

Food Availability

Food availability is one of the four dimensions of food security. An adequate supply of food is a necessary, but not a sufficient, condition for securing adequate access to food.

SOFI 2013 notes that over the last 20 years, food supplies have grown faster than the population in developing countries, and consequently there has been an increase in per capita food availability. The report also points out that dietary energy supplies have risen faster than average dietary energy requirements and that as a result average dietary energy supply adequacy – dietary energy supply as a percentage of the average dietary energy requirement – has increased by nearly 10 percent in developing regions.

Progress in increasing food availability is clearly evident in Latin America and the Caribbean. In 1990-92, six countries in the region had an average dietary supply index below 100. Now, only Haiti has yet to cross this threshold.

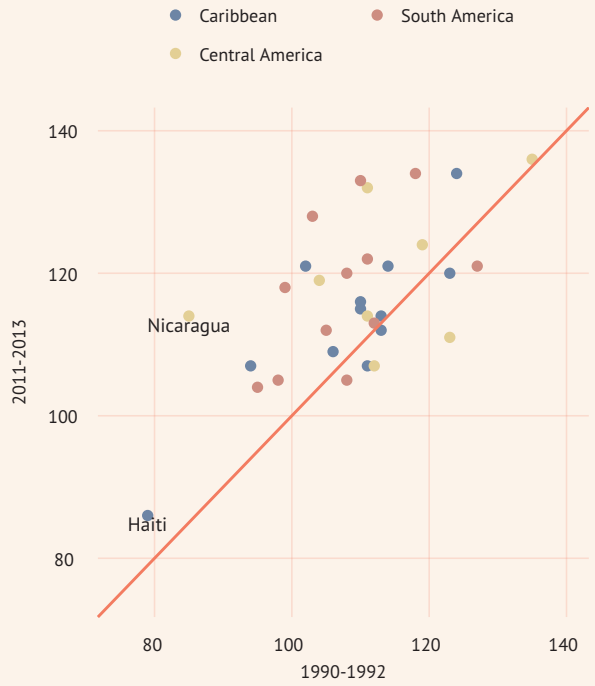
The quality of diets has also improved. This is partly reflected in the decline in the share of dietary energy derived from cereals and roots and tubers in most regions. In Latin America and the Caribbean, the percentage of the energy supplied from cereals, roots and tubers has gone from 43 percent to 40 percent between 1990-92 and 2008-10. Only the Caribbean subregion showed a slight increase. Of the seven countries in the region that had improvements in an increased share of cereals, roots and tubers in the energy supply, four are in the Caribbean. Uruguay showed the greatest increase, from 39 percent in 1990-92 to 49 percent in 2008-10.

Another indication of the overall improvement in the diets of people living in developing regions is the fact that there has been a 20 percent increase in protein availability per person. In Latin America and the Caribbean the average per capita supply of protein in the diet has increased from 68 grams per day to 82 grams per day between 1990-92 and 2008-10.

Further reading

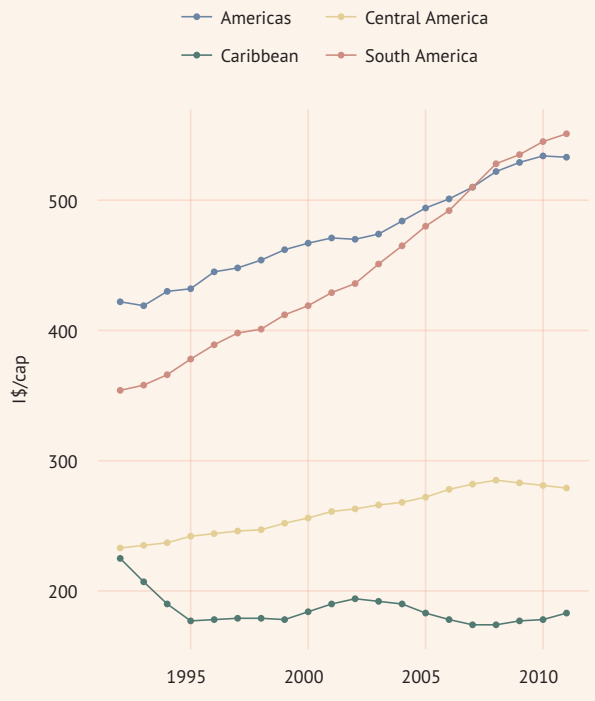
- WHO Nutrition and disorders (www.who.int/topics/nutrition/en/)
- FAO The State of Food Insecurity in the World 2013 - The multiple dimensions of food security (www.fao.org/publications/sofi/en/)

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



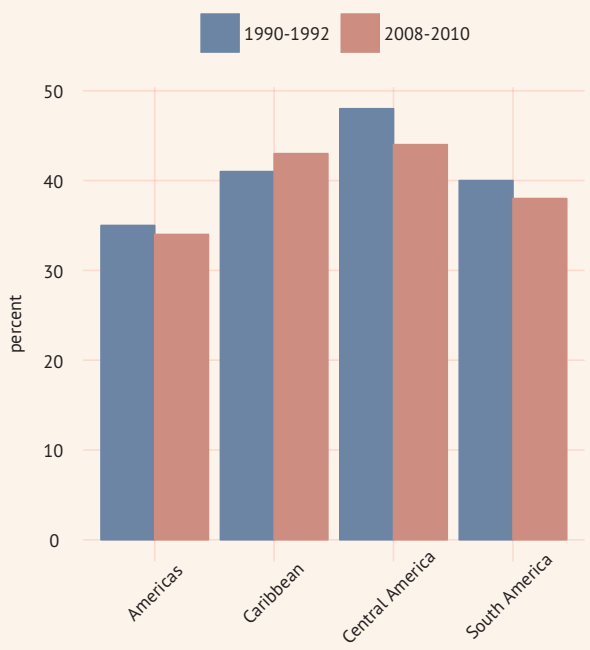
Source: FAO, Statistics Division.

CHART 30: **Trend of the value of food production (1990-1992 to 2009-2011)**



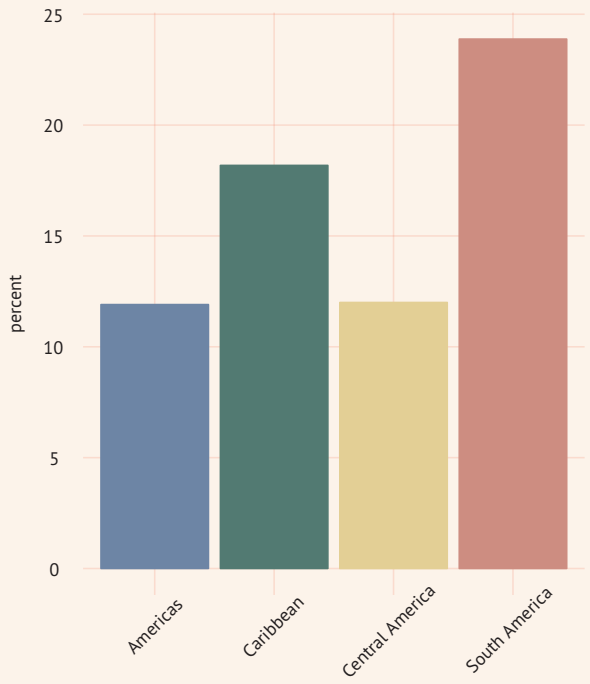
Source: FAO, Statistics Division.

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



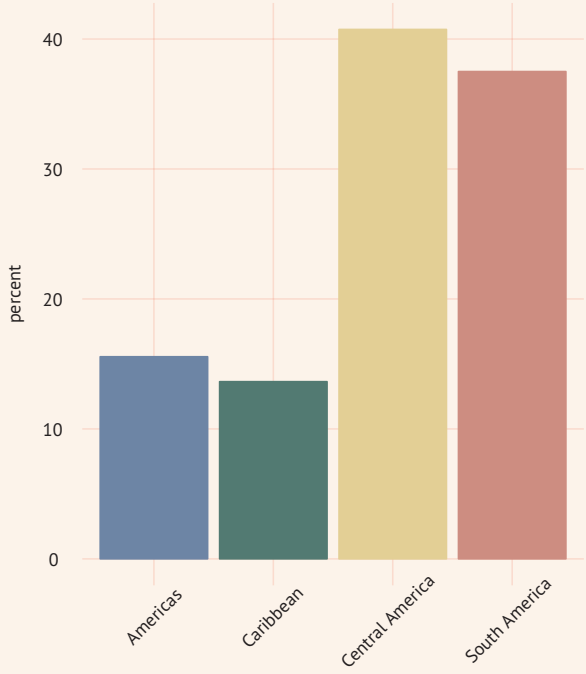
Source: FAO, Statistics Division.

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



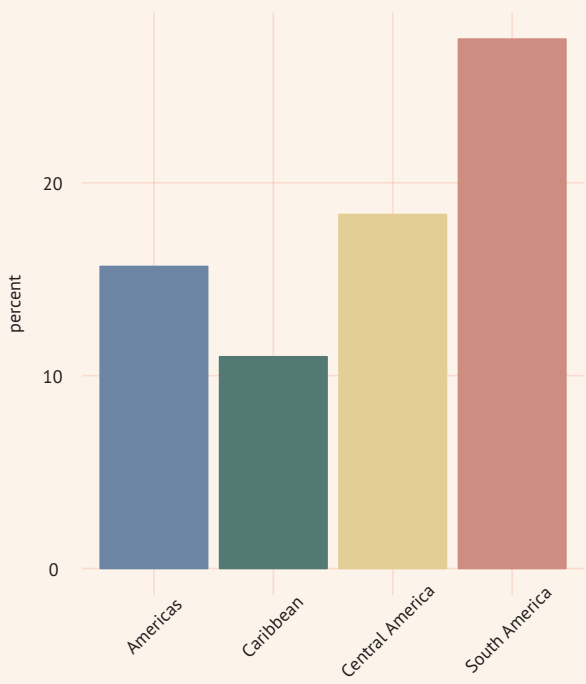
Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

Economic and physical access

Access to food is primarily determined by incomes, food prices and the ability of households and individuals to receive social support. In addition, access to food is also greatly influenced by social variables, including gender and power hierarchies within households.

In general, poor households spend a relatively high share of their disposable incomes on food, making them vulnerable to sudden increases in food prices or losses of income. The degree of exposure to real income swings can be captured by the domestic food price level index, which is the ratio of the food purchasing power parity to the general purchasing power parity. This indicator captures the importance of food in the overall consumption basket. The index is highest in least developed countries, and showed a pronounced spike during the 2007-2008 rise in food prices. More recently, the index has normalized overall but is still on a rising trend in developing countries.

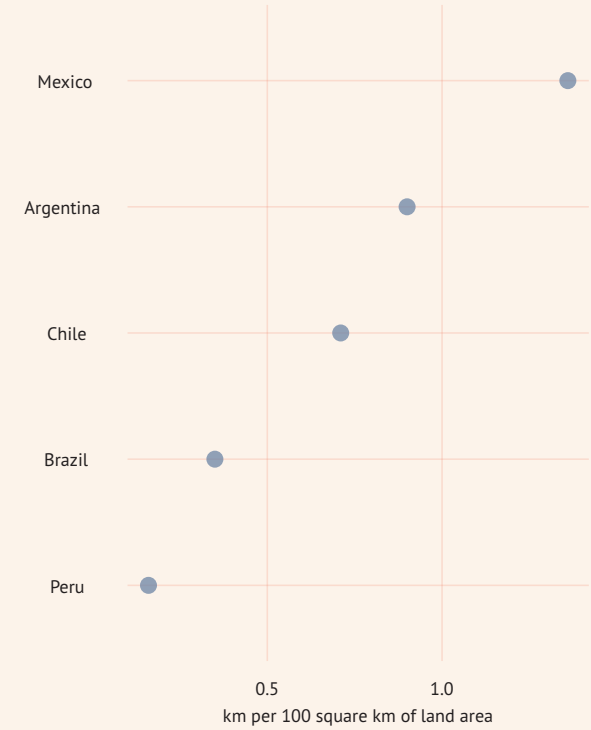
At the last FAO Regional Conference for Latin America and the Caribbean held in 2012, the Organization prepared a document outlining the Organization's priority areas of action in the region. The document stressed that the problem of rising food prices has jeopardized access to food in all countries in the region and put at risk the significant progress achieved in reducing poverty. The report also noted that net-food importing countries in the Caribbean, which have had to budget extra funding to purchase more expensive food, have been particularly hard hit. In addition, Central American countries and Mexico have also had to import grain and oilseeds at higher prices than in the past. On the other hand, in South America, higher export prices and increased food demand from China and India allowed some countries to expand social services that helped ensure access to food for the most vulnerable sector of the population.

As well as economic affordability, physical access to food is also facilitated by adequate infrastructure, such as railway lines and paved roads. These facilitate the functioning of markets, help reduce price arbitrage, and improve the delivery of food and non-food products among regions and between rural and urban areas. Information on infrastructure is even sparser than that on prices, but it shows a clear association with food security outcomes in more than one country.

Further reading

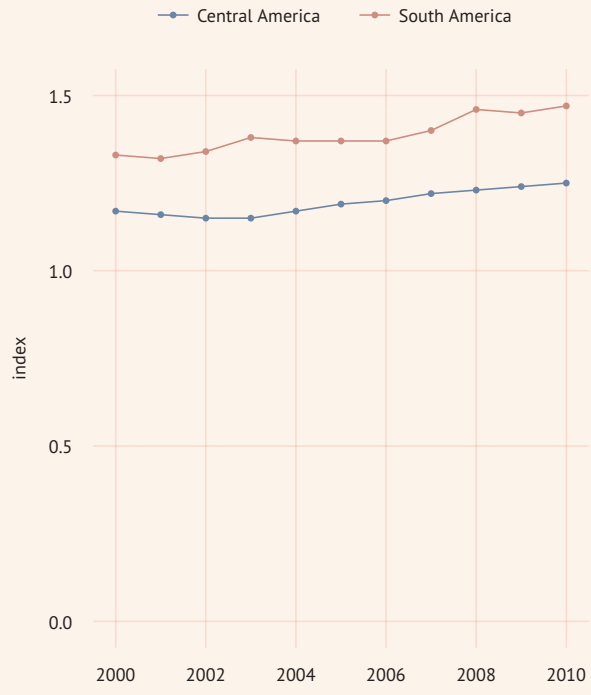
- The Implications of Soaring Food Prices and the Global Financial and Economic Crisis for Agricultural Development and Food and Nutrition Security in the Near East from the 30th Regional Conference (http://www.fao.org/docrep/meeting/020/k9532e.pdf)
- FAO The State of Food Insecurity in the World 2013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

CHART 35: **Rail-lines density (2011)**



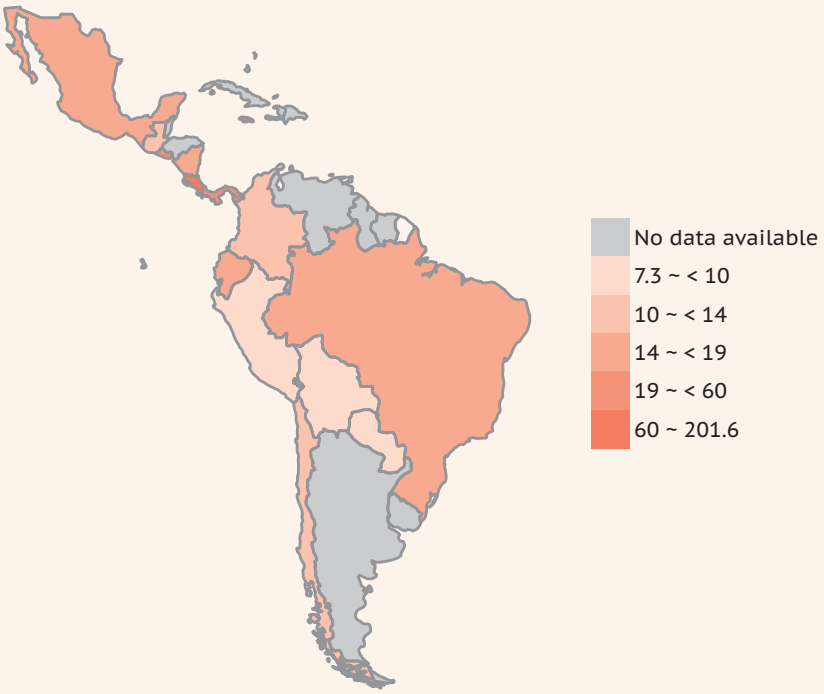
Source: FAO, Statistics Division.

CHART 36: **Relative price of food in Latin America (2000-2010)**



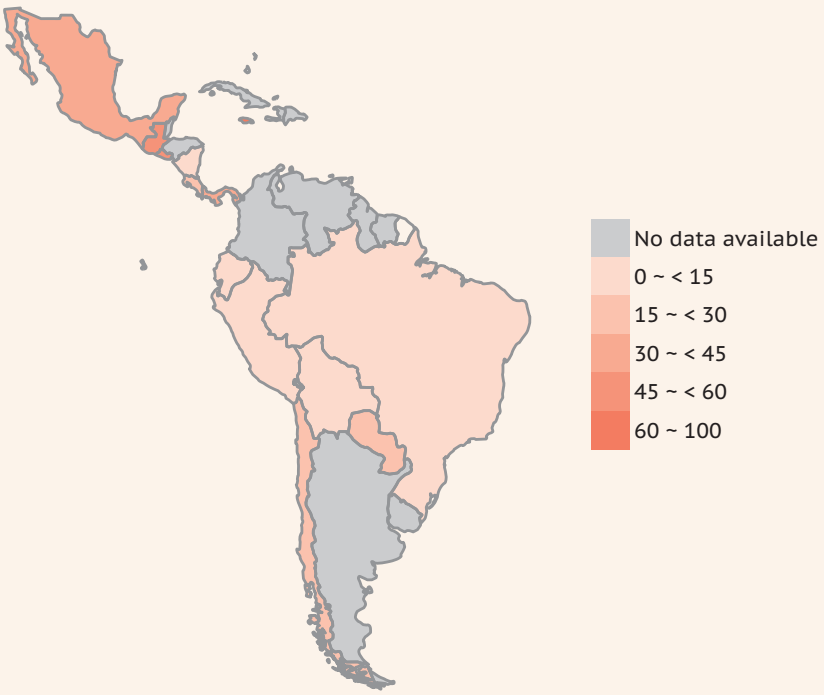
Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

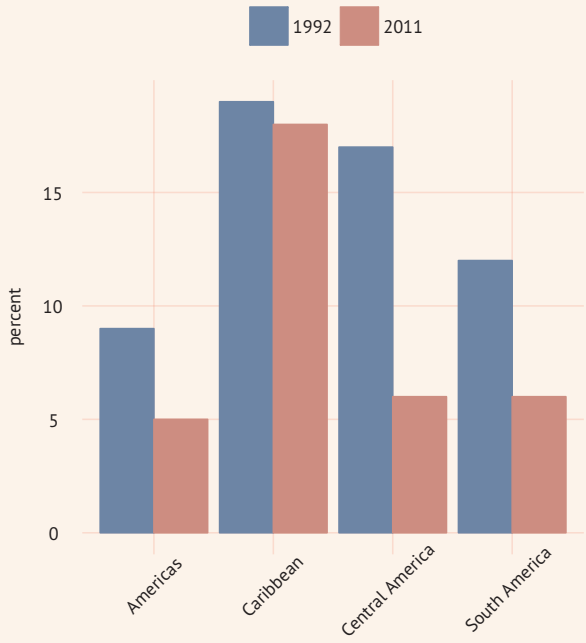
Clean water and sanitation

To absorb nutrients effectively, men, women and children must be in good health. Hygienic food helps keep the body healthy. Access to clean water and sanitation facilities is imperative for the preparation of clean and nutritious food. It is women who are often responsible for collecting and storing water. Improving access to safe water and good sanitation can reduce the tremendous amount of time women spend collecting water and improve child health and well-being, both of which can have a positive effect on the ability to utilize food.

One of the MDGs is to halve the proportion of the population without sustainable access to safe drinking water and basic sanitation by 2015. The safe drinking water target has already been reached at the global level, but progress in this area varies greatly around the world. Ninety percent of the population in Latin America and the Caribbean has access to safe water. Within the Latin America and the Caribbean region, Haiti and the Dominican Republic have the highest percentage of the population without access to clean water (36 percent and 18 percent respectively) followed by Nicaragua and Peru (15 percent).

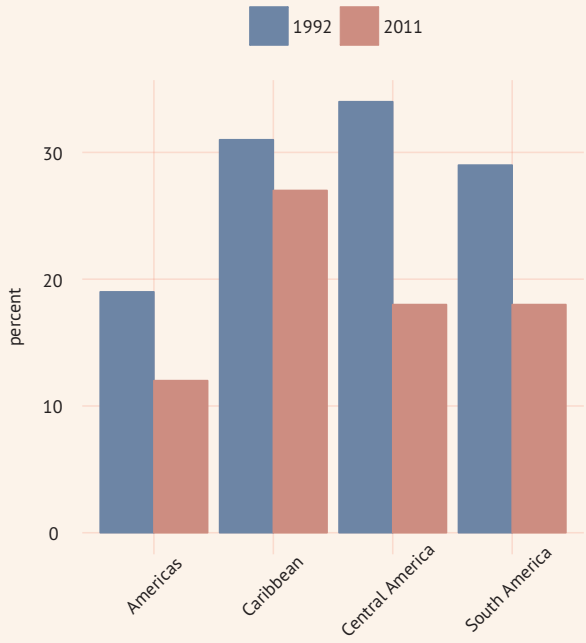
At the global level, the MDG sanitation target has not yet been reached and, given current trends, it is not likely to be achieved by 2015. Over the last two decades, however, progress has been made. In developing countries, access to improved sanitation has increased from 36 to 56 percent of the population. In Latin America and the Caribbean, only 18 percent of the population has no access to improved sanitation. In Haiti, however, the problem is widespread, with nearly three-quarters of the population living without access to improved sanitation. In Nicaragua, just under half of the population lack improved sanitation facilities.

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



Source: FAO, Statistics Division.

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

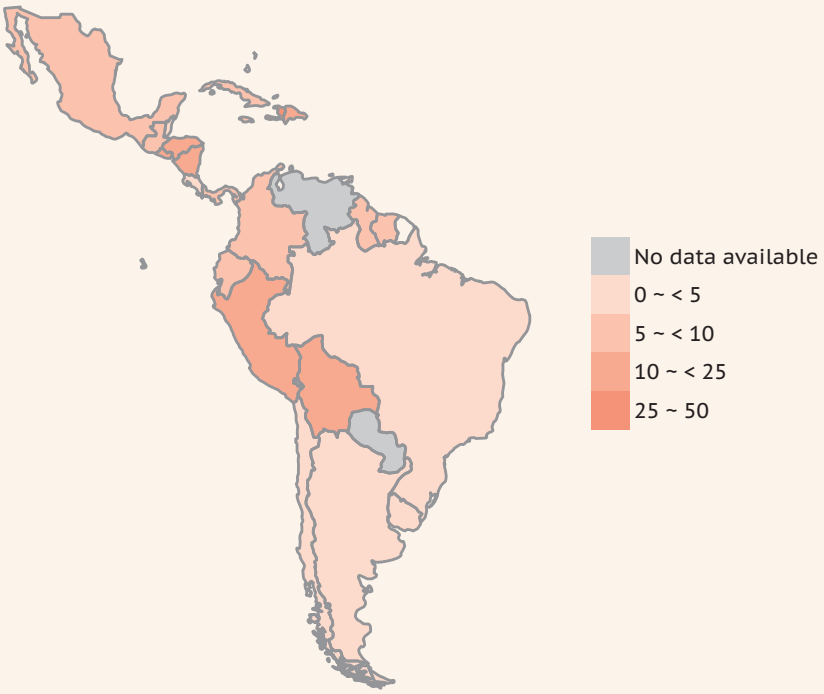


Source: FAO, Statistics Division.

Further reading

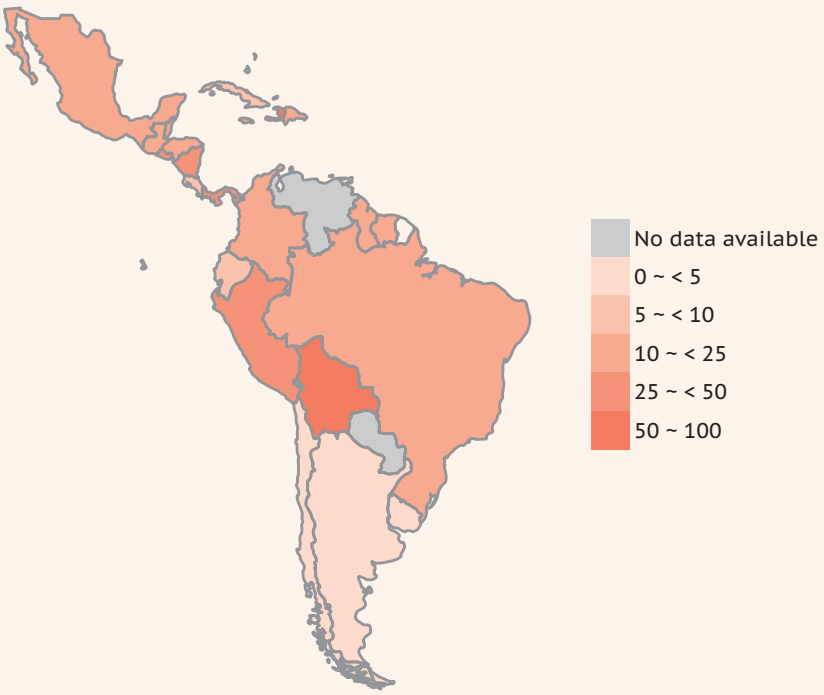
- UNICEF Water, Sanitation and Hygiene (www.unicef.org/wash/)

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



Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

Economic and political stability

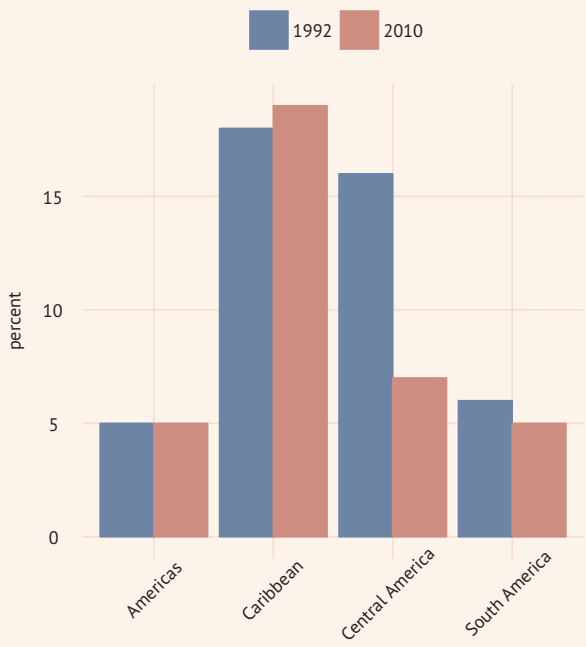
Since the mid-2000s, food and agricultural markets have entered an unexpectedly turbulent phase, characterized by large supply shortfalls, price swings and increased uncertainty about the world's ability to feed itself. These uncertainties have had direct and adverse impacts on food security. On the demand side, high and volatile prices have meant not only that consumers have had to adjust their current food intake, but also that they have been forced to prepare for higher volatility in the future, hence saving more.

At the country level, the outcome of the recent instability has been affected by local conditions and the degree of integration into world markets. High food prices and volatility have caused considerable concerns in many countries with particular exposure to world markets. A country's vulnerability to price changes on world markets also depends on its ability to generate foreign exchange through exports. For this reason, a relevant indicator of food security at the national level is the value share of staple food imports relative to the value of merchandise exports.

In the Caribbean, the value share of staple food imports relative to the value of merchandise exports rose to 22 percent in 2008-2010 from 21 percent in 1990-1992. In addition, Caribbean countries have a very high dependency on cereal imports, with many countries entirely dependent on imports for cereal supplies. Exchange rates failed to appreciate in the Caribbean as they did in the rest of Latin America, as a result of downturn in activities, such as tourism, which led to lower international reserves. With depreciating local currencies or a relatively expensive dollar, the need to import food resulted in high prices in local currency.

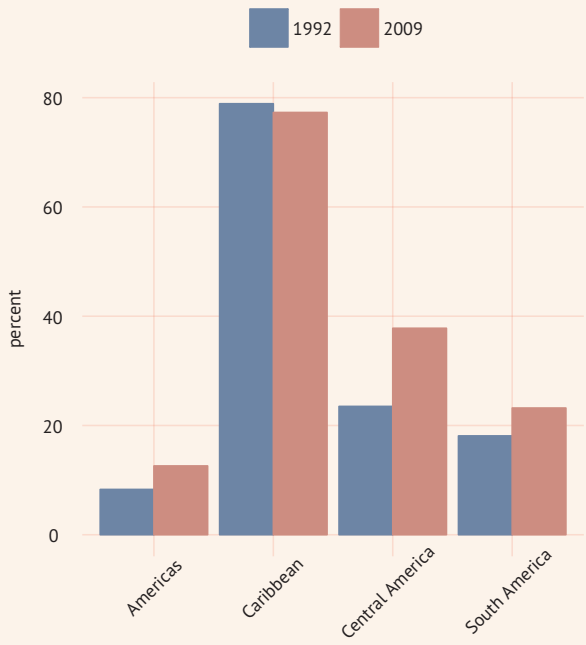
In Central America, the value share of staple food imports relative to the value of merchandise exports has declined from16 percent in 1990-1992 to 7 percent in 2008-2010, although there are wide variations within the subregion, with Panama showing the highest share at 70 percent. Central America is less dependent on cereal imports than the Caribbean. However, every Central American country except Mexico has increased its dependency on cereal imports over the last decade.

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



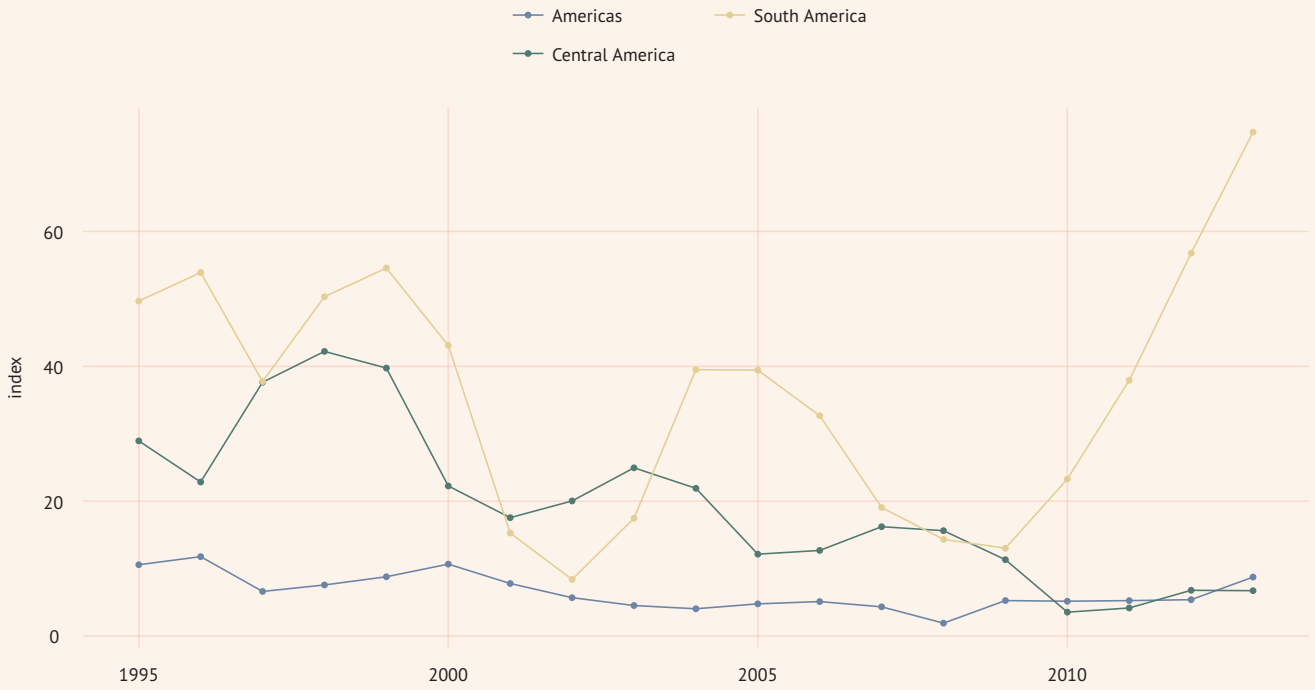
Source: FAO, Statistics Division.

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



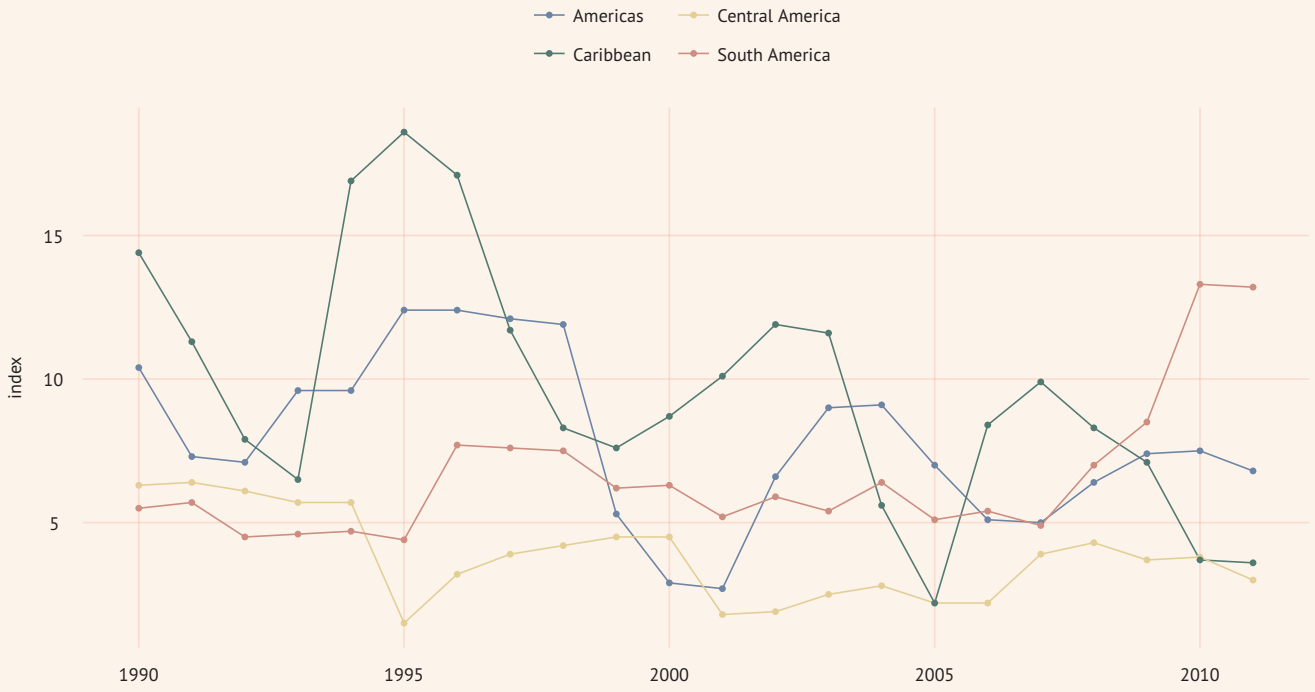
Source: FAO, Statistics Division.

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



Source: FAO, Statistics Division.

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



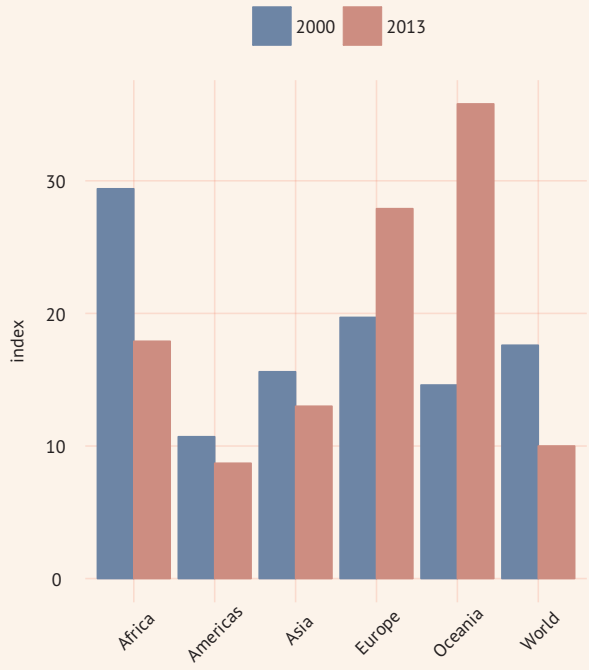
Source: FAO, Statistics Division.

In South America, by contrast, the value share of staple food imports relative to the value of merchandise exports is much lower and has declined in most countries over the last decade. Guyana is the only country where the share is higher than 10 percent. South America, with many large cereal-producing countries, is also far less dependent on cereal imports. Fluctuations in food production, supply and prices also convey important information about the vulnerability of countries and their populations. Three indicators are computed as deviations of the relevant three variables from the trend for the previous five years. Plotting of these indicators highlights sharp fluctuations over recent years, but no trends. High-income countries show high variability of production, but smaller price variability than in other country groups. In developing countries in general, production variability tends to be lower than price variability. The accompanying charts on food price and production variability in the American subregions attest to this trend.

Together with swings in prices, food supplies have seen larger-than-normal variability in recent years. Among the main regions, Africa and Latin America and the Caribbean have experienced the widest fluctuation in food supply since 1990. Variability has been smaller in Asia.

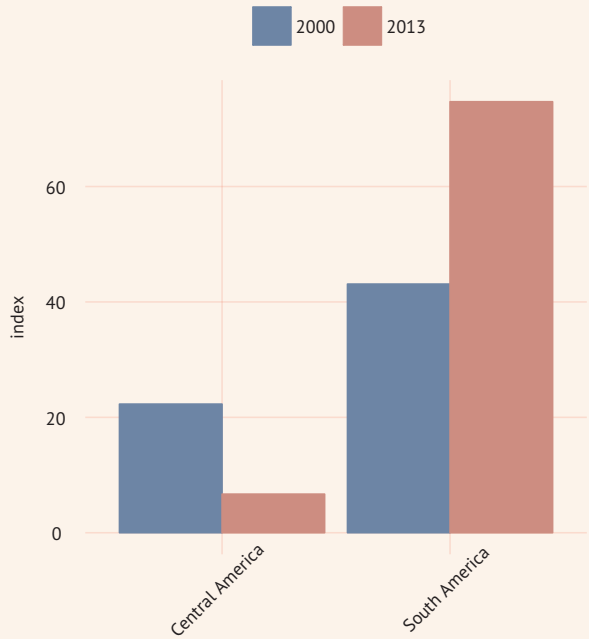
The FAO regional conference document on regional priorities notes that food prices will continue to trend upward, but perhaps less quickly, and that, "price volatility will remain for as long as there is ongoing climate variability and investment migration from the financial sector into commodities, including foodstuffs traded on international markets."

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



Source: FAO, Statistics Division.

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

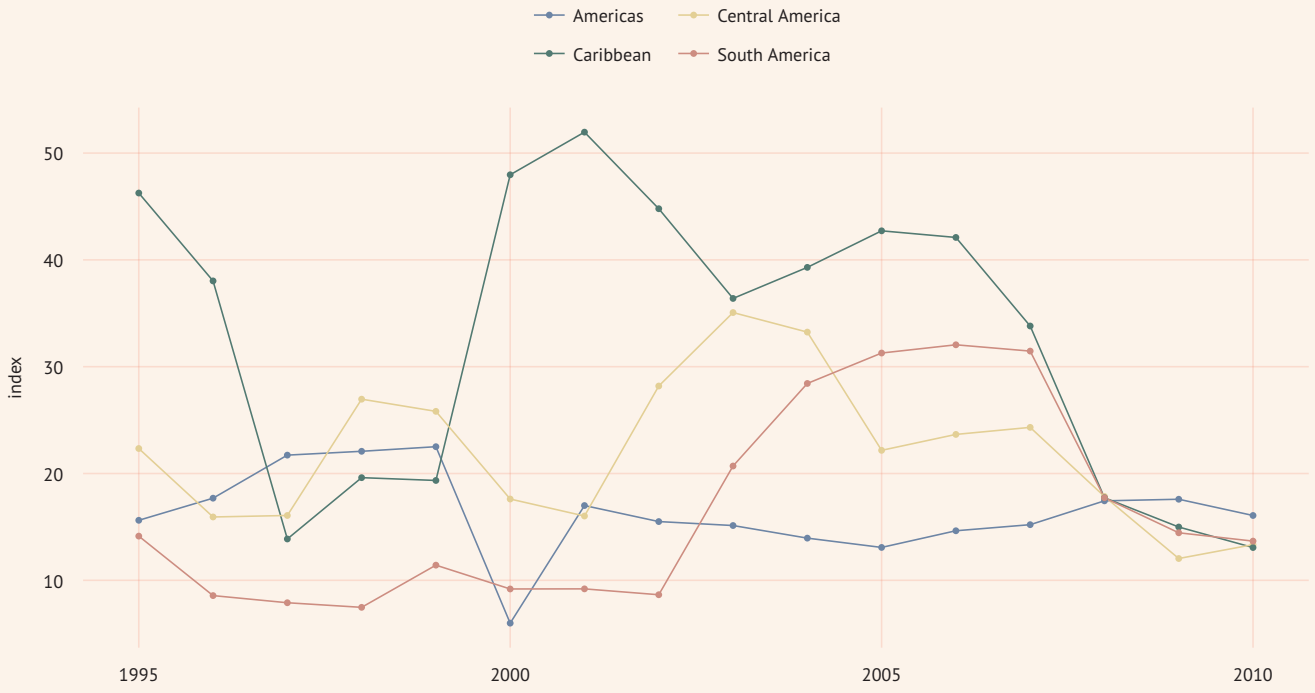


Source: FAO, Statistics Division.

Further reading

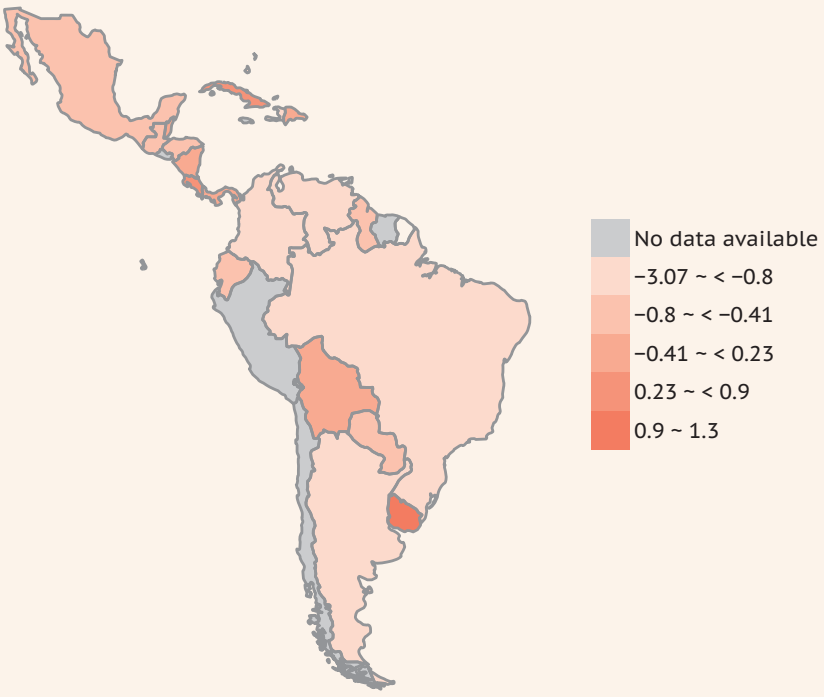
- FAO The State of Food Insecurity in the World 2012 - Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition (www.fao.org/publications/sofi/en/)
- Global Information and Early Warning System (www.fao.org/giews/english/index.htm)
- Prakash (2011) (www.fao.org/economic/est/issues/volatility/vgm/en/)

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



Source: FAO, Statistics Division.

MAP 26: **Political stability and absence of violence/terrorism (index, 2011)**



Source: FAO, Statistics Division.

Education and health

Investments will need to be made in education, especially in rural areas, if chronic hunger and poverty are to be put to an end. Education, particularly for women, has proven to be an effective means of reducing child malnutrition and infant mortality. There is a positive correlation between female literacy and better living conditions for women and their children. Better education, along with knowledge on improved child feeding practices, food preservation and better sanitation, can have a profound impact on improving food security.

Female literacy in Latin America and the Caribbean is relatively high compared to other developing countries. In 16 countries in the region, the percentage of women over 15 that are literate is over 90 percent. The close association between female literacy and undernourishment is clearly demonstrated in Haiti and Guatemala. These two countries, which rank first and second in the region in terms of prevalence of undernourishment, also have the lowest rates of literacy for women over 15. In Haiti female literacy is exceptionally low for the region (45 percent); in Guatemala, it is 70.3 percent.

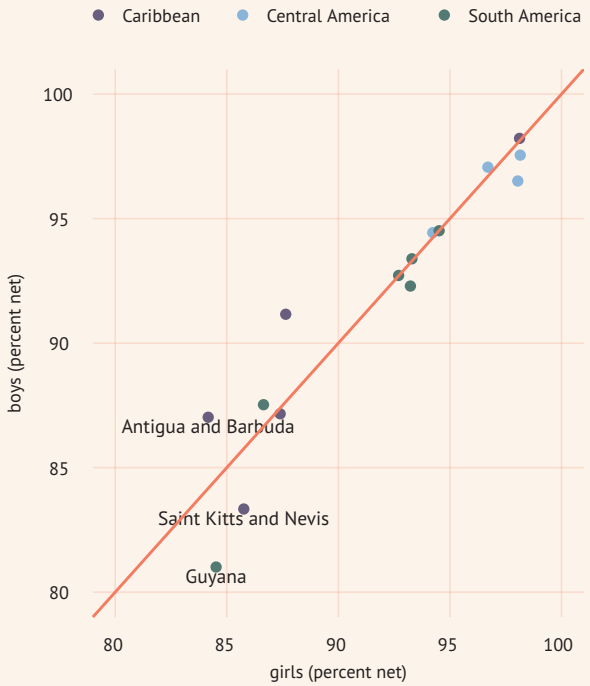
Most countries in the region have explicitly recognized the important link between hunger and education and have set up school feeding programmes, which focus on ensuring school children are properly fed, but also have country-specific objectives. The main objective for most of the programmes (Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala and Nicaragua) is to ensure the right to education, whereas in Argentina, Brazil and the Plurinational State of Bolivia, the objective is to guarantee the right to food. In Mexico, the principal objective is to improve nutrition, reduce poverty and strengthen human capital.

The coverage and strength of health care systems, especially for impoverished and vulnerable groups, is a key factor for determining food access and food security. In 2010, an average of 10 percent of global GDP was spent on health care, ranging from 17 percent in Northern America, to 7.6 percent in Latin America and the Caribbean and 3.6 percent in South-Eastern Asia. Within the Latin American and Caribbean region, Peru and the Plurinational State of Bolivia show the lowest level of investment in health care at just under five percent. The countries that spend the highest share of GDP on health care are Costa Rica (10.9 percent), Nicaragua (10.1 percent) and Paraguay (9.7 percent).

Further reading

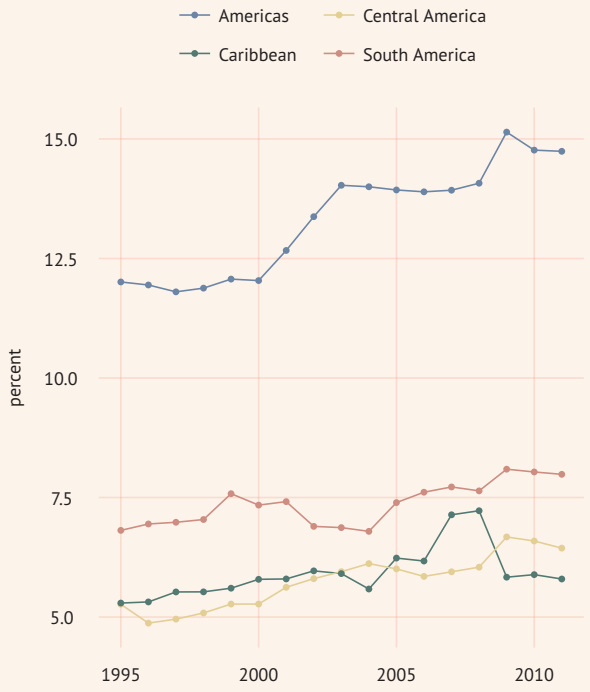
- UNESCO education (www.unesco.org/new/en/education/)
- UNDP Human Development Report 2010 - The Real Wealth of Nations: Pathways to Human Development (hdr.undp.org/en/reports/global/hdr2010/)
- O'Donovan (2008)

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



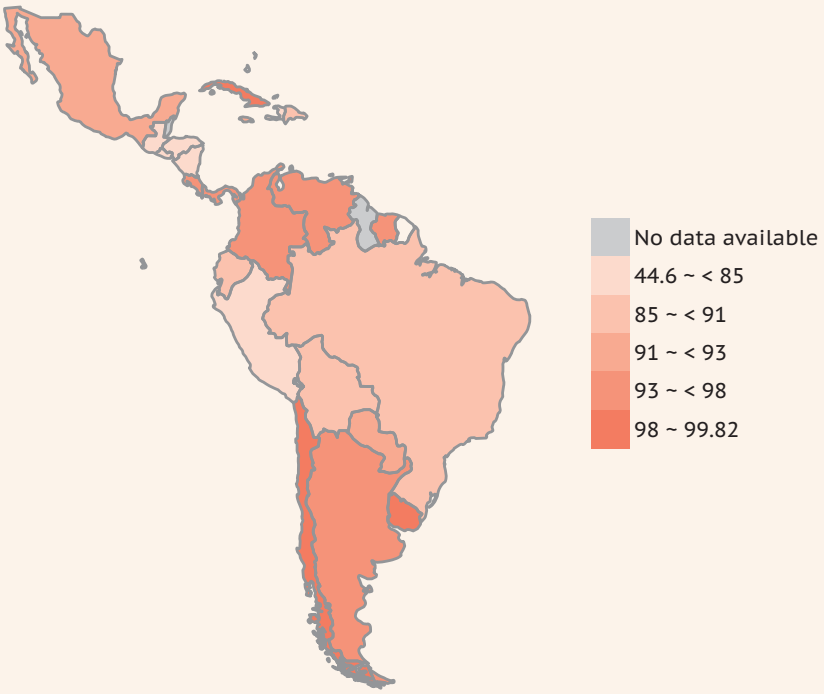
Source: World Bank (WDI).

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



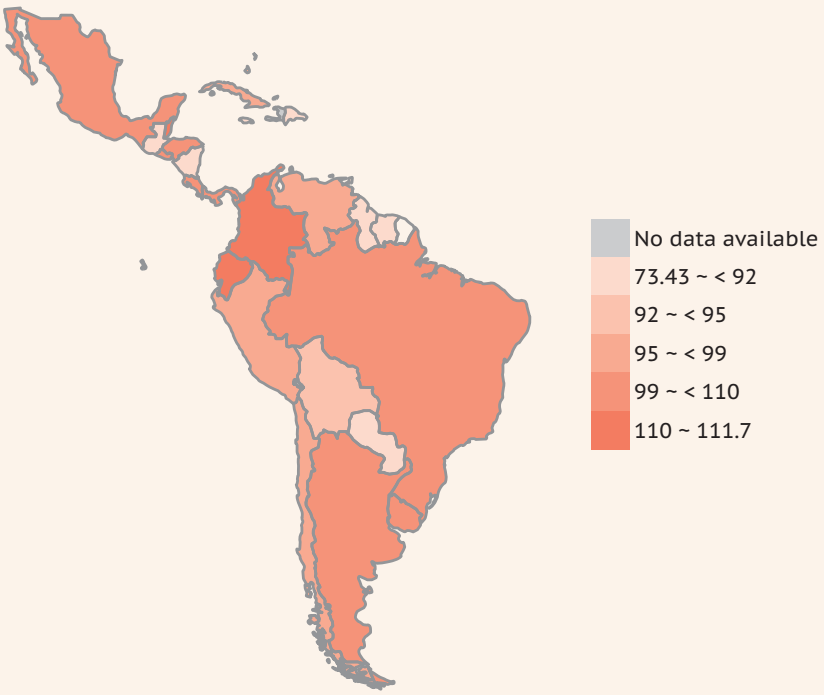
Source: World Bank (WDI).

MAP 27: **Adult female literacy rate, share of females ages 15 and above (percent, 2005-2011*)**



Source: World Bank (WDI).

MAP 28: **Primary completion rate, total (percent, 2005-2011*)**



Source: World Bank (WDI).

Natural and human-made risks

Armed conflict and natural disasters often put food security at risk, especially in countries and areas where poverty is high, institutions are fragile and rural livelihoods are founded on unsustainable natural resource management practices. For this reason, indicators of risks must be considered when addressing the causes of food insecurity and establishing anti-hunger policies. Two groups of indicators are considered here: those from the Office of the United Nations High Commissioner for Refugees (UNHCR), reflecting political and military conditions; and those from the Centre for Research on the Epidemiology of Disasters (CRED), reporting on natural disasters such as droughts, floods and extreme temperatures.

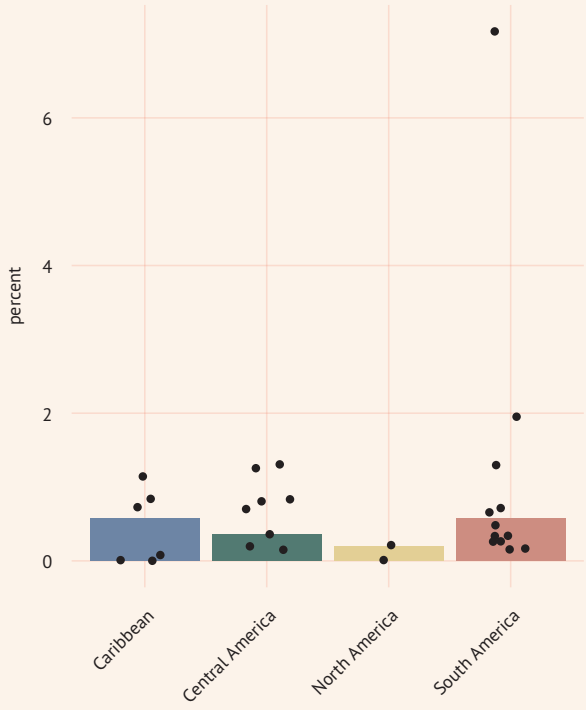
As mentioned earlier, political stability has been one of the factors that contributed to the reduction of undernourishment in the Latin America and the Caribbean. Of the 22 countries FAO has identified as undergoing a state of protracted crisis, only one, Haiti, is in the region. The impact of this protracted crisis in Haiti is evident in the high level of undernourishment. Colombia is the only country in the region where ongoing civil conflict has generated a large number of internally displaced people.

Climate change is likely contributing to increases in natural disasters. In the 2011 edition of FAO's Panorama de la Seguridad Alimentaria y Nutricional en América Latina y el Caribe (Panorama of Food and Nutrition Security in Latin America and the Caribbean) noted that ECLAC had reaffirmed that climate change had increased the intensity of hurricanes and tropical storms in the region, mainly as result of higher atmospheric temperatures and warmer ocean surfaces. The FAO report pointed out that in 2010-2011 there were a number of natural disasters that affected food security and nutrition in the region, causing more than 1 300 deaths and affected more than 9 million people. Tropical storm Agatha in El Salvador caused US$44.8 million dollars in damage and more than US$67 million dollar in losses. In the Plurinational State of Bolivia, the impact of drought has led to more than US$237 million dollars in losses and damages, and Hurricane Tomas in Saint Lucia caused US$5.6 million dollars in losses and damages. In Guatemala, the combined impact of the eruption of the Pacaya volcano, tropical storm Agatha and other storms generated losses of more than US$1.5 billion dollars.

Further reading

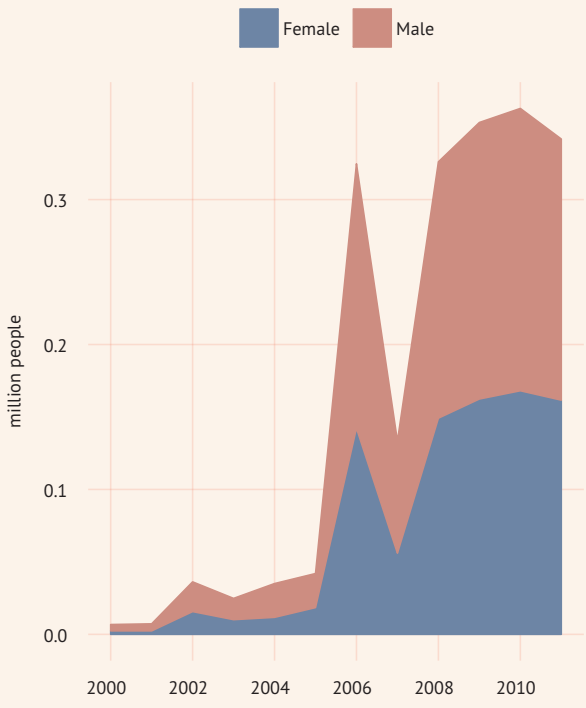
- Centre for Research on the Epidemiology of Disasters (www.cred.be/)
- United Nations High Commissioner for Refugees (www.unhcr.org)
- Internal Displacement Monitoring Centre (www.internal-displacement.org/)

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



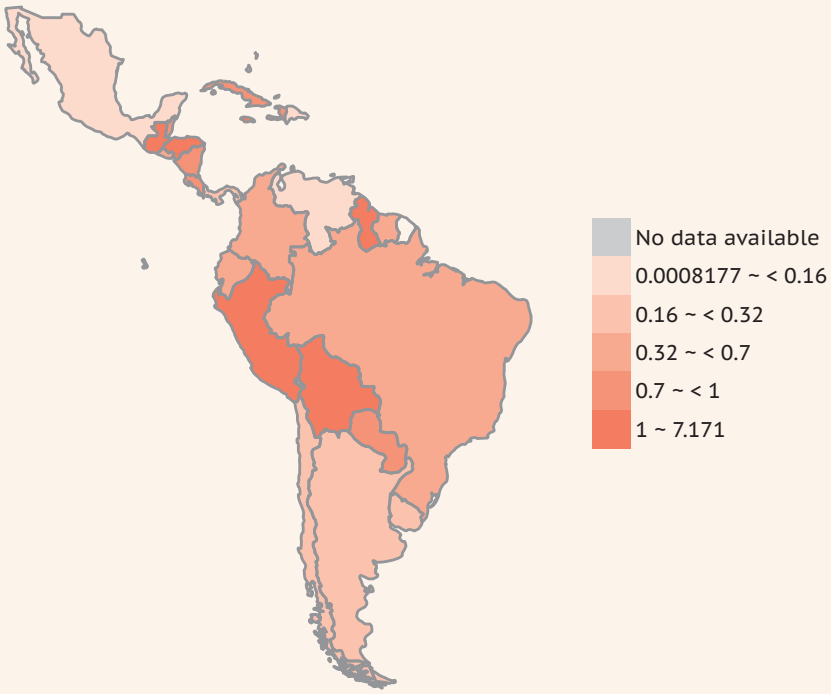
Source: World Bank (WDI).

CHART 49: **Refugees in Latin America region (2000-2011)**



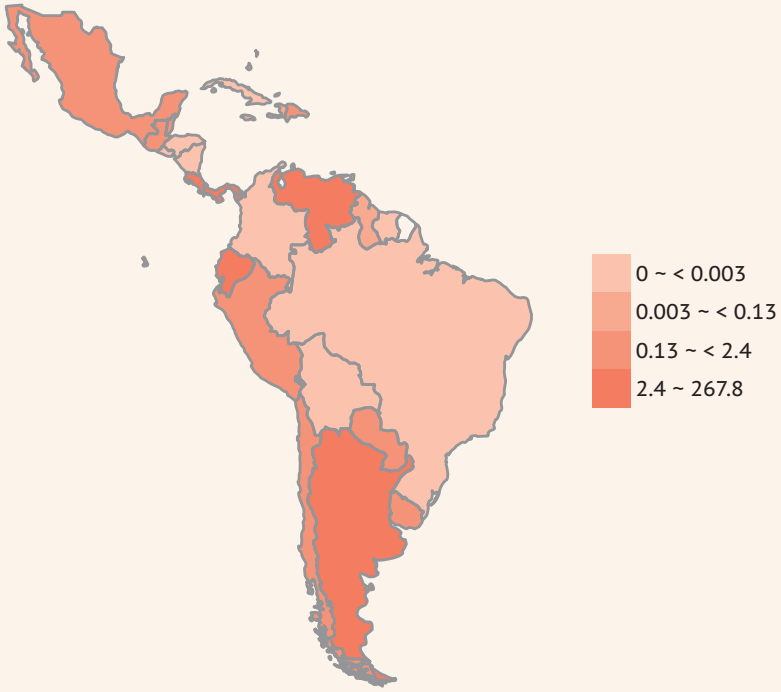
Source: Statistical Online Population Database .

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



Source: World Bank (WDI).

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



Source: Statistical Online Population Database .

TABLE 12: **Outcomes: Inadequate access to food**

	Inadequate access to food								
	prevalence of		number of		% of food expenditure of the poor	depth of the food deficit		prevalence of food inadequacy	
	undernourishment		undernourished						
	percent	percent	million people	million people	percent	kcal/cap/day	kcal/cap/day	percent	percent
	1990-92	2011-13	1990-92	2011-13	2000-12*	1990-92	2011-13	1990-92	2011-13
North America									
Canada									
United States of America									
Regional Office for Latin America and the Caribbean	14.7	7.9	65.6	47.0		97.0	56.0	21.8	14.1
Caribbean	27.5	19.3	8.2	7.1		217.0	157.0	36.7	26.4
Antigua and Barbuda	15.9	13.9	0.0	0.0		109.0	100.0	26.2	24.4
Bahamas	9.5	5.6	0.0	0.0		63.0	40.0	18.1	13.0
Barbados	< 5	< 5	*ns*	*ns*		18.0	23.0	6.8	8.6
Cuba	7.8	< 5	0.8	*ns*		53.0	4.0	15.8	< 5
Dominica	< 5	< 5	*ns*	*ns*		30.0	14.0	9.5	5.2
Dominican Republic	32.5	15.6	2.4	1.6		228.0	107.0	44.9	25.8
Grenada	17.5	18.7	0.0	0.0		113.0	138.0	25.9	28.9
Haiti	62.7	49.8	4.6	5.1		543.0	431.0	70.9	59.6
Jamaica	10.1	8.6	0.2	0.2		66.0	60.0	17.7	16.3
Saint Kitts and Nevis	14.2	10.2	0.0	0.0		97.0	72.0	23.2	17.9
Saint Lucia	12.8	12.2	0.0	0.0		84.0	88.0	20.7	21.3
Saint Vincent and the Grenadines	20.1	5.5	0.0	0.0		137.0	38.0	30.6	11.3
Trinidad and Tobago	12.4	7.6	0.2	0.1		81.0	53.0	20.0	14.4
Latin America									
Central America	8.3	5.3	9.6	8.4		53.0	34.0	13.7	12.2
Belize	9.6	6.4	0.0	0.0		55.0	39.0	15.4	11.6
Costa Rica	< 5	8.2	*ns*	0.4		23.0	57.0	8.1	16.9
El Salvador	15.3	11.9	0.8	0.7		93.0	78.0	23.0	19.7
Guatemala	16.9	30.5	1.5	4.6	53.0	97.0	201.0	25.3	38.2
Honduras	22.0	8.7	1.1	0.7		132.0	46.0	29.2	13.5
Mexico	< 5	< 5	*ns*	*ns*	43.0	22.0	2.0	8.3	7.1
Nicaragua	55.1	21.7	2.3	1.3	63.0	423.0	144.0	62.8	30.1
Panama	23.3	8.7	0.6	0.3	52.0	157.0	57.0	34.3	17.0
South America	15.7	7.7	47.2	30.8		103.0	56.0	23.4	13.7
Argentina	< 5	< 5	*ns*	*ns*		14.0	23.0	5.4	8.4
Bolivia (Plurinational State of)	33.9	21.3	2.3	2.2	54.0	224.0	140.0	45.1	31.5
Brazil	15.0	6.9	22.8	13.6	44.0	97.0	56.0	21.9	11.8
Chile	9.0	< 5	1.2	*ns*		59.0	23.0	17.6	8.6
Colombia	20.3	10.6	6.9	5.1		135.0	70.0	29.3	17.6
Ecuador	26.4	16.3	2.8	2.4	54.0	167.0	106.0	38.6	27.5
Guyana	22.0	5.0	0.2	0.0		155.0	33.0	32.5	9.4
Paraguay	20.2	22.3	0.9	1.5		130.0	157.0	29.8	33.0
Peru	31.6	11.8	7.0	3.5	57.0	212.0	76.0	42.5	21.0
Suriname	17.5	10.2	0.1	0.1		119.0	70.0	28.0	18.8
Uruguay	7.6	6.2	0.2	0.2		51.0	42.0	16.0	14.1
Venezuela (Bolivarian Republic of)	12.8	< 5	2.6	*ns*	61.0	81.0	14.0	21.3	5.1
Regional Office for Africa	32.8	24.8	173.1	222.7		241.0	189.0	41.1	31.2
Regional Office for Asia and the Pacific	20.9	11.8	735.0	528.7		157.0	88.0	31.7	20.5
Regional Office for Europe and Central Asia	8.2	< 5	10.0	*ns*		19.0	12.0	5.9	3.9
Regional Office for the Near East	9.0	10.0	25.8	43.7		59.0	78.0	13.5	14.6
World	18.9	12.0	1 015.3	842.3		128.0	83.0	26.2	18.4

TABLE 13: **Utilization**

	Outcomes						
	children under 5 years of age						adults
	underweight		stunted		wasted		
	percent 1990-95*	percent 2005-11*	percent 1990-95*	percent 2005-11*	percent 1990-95*	percent 2005-11*	underweight percent 1990-2011*
North America							
Canada							2.6
United States of America	0.9		3.2		0.7		2.4
Regional Office for Latin America and the Caribbean							
Caribbean							
Antigua and Barbuda							
Bahamas							
Barbados							3.2
Cuba		1.3		3.7		1.0	
Dominica							
Dominican Republic	8.4	3.4	21.2	10.1	2.2	2.3	
Grenada							
Haiti	24.0	18.9	37.2	29.7	9.4	10.3	
Jamaica	4.0	1.9	9.5	5.7	4.5	2.7	
Saint Kitts and Nevis							
Saint Lucia							
Saint Vincent and the Grenadines							
Trinidad and Tobago							
Latin America							
Central America							
Belize	5.4	4.9		22.2		1.9	
Costa Rica	1.9	1.1		5.6		1.0	
El Salvador	7.2	6.6	29.5	20.6	1.4	1.6	
Guatemala	21.7	13.0	55.4	48.0	3.8	1.1	
Honduras	16.1	8.6	45.7	29.9	2.7	1.4	
Mexico		3.4		15.5		2.0	
Nicaragua	9.6	5.7	29.6	23.0	2.4	1.5	
Panama		3.9		19.1		1.2	1.0
South America							
Argentina	1.7	2.3	7.1	8.2	1.6	1.2	
Bolivia (Plurinational State of)	12.6	4.5	35.2	27.2	5.3	1.4	
Brazil		2.2		7.1		1.6	4.0
Chile	0.8	0.5	3.9	2.0	0.5	0.3	0.8
Colombia	6.3	3.4	19.7	12.7	1.7	0.9	3.9
Ecuador							
Guyana	16.1	11.1		19.5		5.3	
Paraguay	2.8	3.4	18.3	17.5	0.6	1.1	
Peru	8.8	4.5	37.3	28.2	1.9	0.8	
Suriname		7.5		10.7		4.9	
Uruguay							
Venezuela (Bolivarian Republic of)	4.1	3.7	18.9	15.6	3.8	5.0	
Regional Office for Africa							
Regional Office for Asia and the Pacific							
Regional Office for Europe and Central Asia							
Regional Office for the Near East							
World							

TABLE 14: **Poverty**

	Headcount ratio		Gap				GINI	Income share	
	in $ per day (PPP)		in $ per day (PPP)		at national poverty line	at rural poverty line	coefficient	held by highest 20%	held by lowest 20%
	1.25 percent 2005-12*	2 percent 2005-12*	1.25 percent 2005-12*	2 percent 2005-12*	percent 2005-12*	percent 2005-12*	index 2005-12*	percent 2005-12*	percent 2005-12*
North America									
Canada									
United States of America									
Regional Office for Latin America and the Caribbean									
Caribbean									
Antigua and Barbuda									
Bahamas									
Barbados									
Cuba									
Dominica									
Dominican Republic	2.2	9.9	0.5	2.4			47.2	52.8	4.7
Grenada									
Haiti									
Jamaica									
Saint Kitts and Nevis									
Saint Lucia									
Saint Vincent and the Grenadines									
Trinidad and Tobago									
Latin America									
Central America									
Belize									
Costa Rica	3.1	6.0	1.8	2.7			50.7	55.9	3.8
El Salvador	9.0	16.9	4.4	7.6			48.3	53.1	3.7
Guatemala	13.5	26.3	4.7	10.5			55.9	60.3	3.1
Honduras	17.9	29.8	9.3	14.8			57.0	59.9	2.0
Mexico	0.7	4.5	0.2	1.0			47.2	52.8	4.9
Nicaragua	11.9	31.7	2.4	9.6			40.5	47.2	6.2
Panama	6.6	13.8	2.1	5.1			51.9	56.4	3.3
South America									
Argentina	0.9	1.9	0.6	0.9			44.5	49.4	4.4
Bolivia (Plurinational State of)	15.6	24.9	8.6	13.1			56.3	59.3	2.1
Brazil	6.1	10.8	3.6	5.4			54.7	58.6	2.8
Chile	1.4	2.7	0.7	1.2			52.1	57.7	4.3
Colombia	8.2	15.8	3.8	6.8			55.9	60.1	3.0
Ecuador	4.6	10.6	2.1	4.1			49.3	53.8	4.3
Guyana									
Paraguay	7.2	13.2	3.0	5.7	40.0	44.4	52.4	56.4	3.3
Peru	4.9	12.7	1.3	4.1	7.8	18.7	48.1	52.6	3.9
Suriname									
Uruguay	0.2	1.2	0.1	0.3			45.3	50.9	4.9
Venezuela (Bolivarian Republic of)	6.6	12.9	3.7	5.9			44.8	49.4	4.3
Regional Office for Africa									
Regional Office for Asia and the Pacific									
Regional Office for Europe and Central Asia									
Regional Office for the Near East									
World									

TABLE 15: **Determinants: Availability**

	Availability									
	average dietary supply adequacy		value of food production per capita		share of energy supply derived from cereals, roots and tubers		average supply of protein		protein of animal origin	
	percent	percent	I$/cap	I$/cap	percent	percent	g/cap/day	g/cap/day	g/cap/day	g/cap/day
	1990-92	2011-13	1990-92	2009-11	1990-92	2008-10	1990-92	2008-10	1990-92	2008-10
North America	138.0	145.0	595.0	671.0	26.0	25.0	108.0	113.0	69.0	71.0
Canada	123.0	136.0	617.0	751.0	26.0	29.0	96.0	103.0	58.0	58.0
United States of America	140.0	146.0	592.0	661.0	26.0	25.0	110.0	114.0	70.0	73.0
Regional Office for Latin America and the Caribbean	117.0	127.0	315.0	457.0	43.0	40.0	68.0	82.0	30.0	41.0
Caribbean	100.0	113.0	240.0	196.0	42.0	43.0	55.0	65.0	22.0	25.0
Antigua and Barbuda	106.0	109.0	137.0	107.0	27.0	28.0	82.0	85.0	55.0	60.0
Bahamas	110.0	115.0	71.0	91.0	29.0	27.0	78.0	88.0	50.0	58.0
Barbados	123.0	120.0	197.0	170.0	34.0	30.0	87.0	90.0	51.0	53.0
Cuba	114.0	143.0	370.0	234.0	38.0	46.0	63.0	84.0	29.0	27.0
Dominica	124.0	134.0	521.0	399.0	33.0	34.0	76.0	95.0	42.0	55.0
Dominican Republic	94.0	107.0	211.0	264.0	35.0	34.0	48.0	58.0	21.0	29.0
Grenada	111.0	107.0	204.0	119.0	30.0	24.0	68.0	75.0	39.0	48.0
Haiti	79.0	86.0	114.0	98.0	55.0	54.0	42.0	44.0	6.0	9.0
Jamaica	113.0	114.0	210.0	194.0	41.0	38.0	68.0	77.0	33.0	39.0
Saint Kitts and Nevis	110.0	116.0	232.0	42.0	36.0	29.0	70.0	73.0	39.0	43.0
Saint Lucia	113.0	112.0	445.0	125.0	36.0	34.0	79.0	88.0	46.0	53.0
Saint Vincent and the Grenadines	102.0	121.0	320.0	202.0	37.0	35.0	61.0	86.0	33.0	48.0
Trinidad and Tobago	114.0	121.0	107.0	114.0	41.0	36.0	62.0	68.0	25.0	31.0
Latin America										
Central America	128.0	130.0	233.0	280.0	49.0	45.0	75.0	84.0	27.0	38.0
Belize	119.0	124.0	468.0	497.0	39.0	41.0	63.0	67.0	26.0	25.0
Costa Rica	123.0	111.0	477.0	555.0	37.0	34.0	68.0	75.0	34.0	40.0
El Salvador	111.0	114.0	126.0	150.0	57.0	48.0	59.0	72.0	14.0	25.0
Guatemala	112.0	107.0	180.0	258.0	59.0	51.0	59.0	61.0	11.0	19.0
Honduras	111.0	132.0	197.0	208.0	51.0	45.0	55.0	67.0	16.0	26.0
Mexico	135.0	136.0	241.0	284.0	48.0	44.0	81.0	91.0	31.0	42.0
Nicaragua	85.0	114.0	133.0	234.0	49.0	51.0	46.0	66.0	13.0	19.0
Panama	104.0	119.0	293.0	252.0	41.0	44.0	62.0	76.0	33.0	40.0
South America	114.0	127.0	354.0	552.0	41.0	38.0	67.0	83.0	32.0	44.0
Argentina	127.0	121.0	691.0	959.0	35.0	32.0	95.0	94.0	61.0	63.0
Bolivia (Plurinational State of)	95.0	104.0	225.0	306.0	52.0	52.0	53.0	61.0	20.0	27.0
Brazil	118.0	134.0	363.0	646.0	39.0	34.0	67.0	90.0	30.0	47.0
Chile	111.0	122.0	320.0	458.0	48.0	45.0	72.0	90.0	32.0	47.0
Colombia	108.0	120.0	242.0	272.0	41.0	41.0	56.0	69.0	27.0	35.0
Ecuador	98.0	105.0	292.0	412.0	39.0	36.0	47.0	57.0	21.0	32.0
Guyana	103.0	128.0	263.0	451.0	56.0	50.0	62.0	75.0	24.0	31.0
Paraguay	108.0	105.0	457.0	679.0	44.0	43.0	70.0	65.0	37.0	29.0
Peru	99.0	118.0	141.0	278.0	58.0	57.0	54.0	71.0	19.0	25.0
Suriname	105.0	112.0	277.0	215.0	52.0	44.0	61.0	56.0	26.0	23.0
Uruguay	112.0	113.0	625.0	1065.0	39.0	49.0	82.0	81.0	50.0	38.0
Venezuela (Bolivarian Republic of)	110.0	133.0	201.0	199.0	39.0	41.0	63.0	83.0	30.0	45.0
Regional Office for Africa	100.0	111.0	152.0	160.0	62.0	64.0	52.0	59.0	12.0	13.0
Regional Office for Asia and the Pacific	107.0	117.0	175.0	259.0	63.0	57.0	59.0	75.0	15.0	26.0
Regional Office for Europe and Central Asia	132.0	135.0	431.0	419.0	29.0	38.0	79.0	101.0	42.0	53.0
Regional Office for the Near East	131.0	130.0	177.0	226.0	61.0	57.0	74.0	82.0	18.0	24.0
World	114.0	122.0	240.0	302.0	56.0	51.0	69.0	79.0	24.0	31.0

TABLE 16: **Determinants: Physical and economic access**

	Access										
	physical access						economic access			lack of access to	
	% of paved roads		rail-lines density		road density		food price level index			water	sanitation
	percent	percent	km per 100 square km of land area	km per 100 square km of land area	km per 100 square km of land area	km per 100 square km of land area	index	index	index	percent	percent
	1990	2005-10*	1990	2005-11*	1990	2005-10*	2000	2005	2013	2011	2011
North America		91.7			36.0	38.3	1.0	1.0		1.1	0.4
Canada	35.0		0.3	0.6	8.3	10.4	1.2	1.2	1.3	0.0	0.0
United States of America		100.0	2.0	2.3	64.8	66.6	1.0	1.0	1.0	1.0	0.0
Regional Office for Latin America and the Caribbean	15.2	19.8			14.2	15.1	1.3	1.3		5.8	18.7
Caribbean	52.0									17.8	30.4
Antigua and Barbuda										2.0	9.0
Bahamas	52.0				16.0					4.0	
Barbados	86.8				339.5					0.0	
Cuba	50.5			4.6						6.0	8.0
Dominica	45.6	50.4				201.6					
Dominican Republic	44.7				22.8					18.0	18.0
Grenada	55.4										
Haiti	21.9				13.3					36.0	74.0
Jamaica	64.0	73.3			153.8	201.3				7.0	20.0
Saint Kitts and Nevis	38.5									2.0	
Saint Lucia					172.6					6.0	35.0
Saint Vincent and the Grenadines										5.0	
Trinidad and Tobago	46.2				144.2					6.0	8.0
Latin America							1.3	1.3	1.5		
Central America	30.1	34.8			13.6	19.4	1.2	1.2		6.4	17.7
Belize										1.0	10.0
Costa Rica	15.3	26.0			69.6	76.4				4.0	6.0
El Salvador	14.4	46.9			58.2	32.9				10.0	30.0
Guatemala	24.9	59.1			10.7	10.6				6.0	20.0
Honduras	21.1				10.1					11.0	19.0
Mexico	35.1	36.4	1.0	1.4	12.2	18.9	1.2	1.2	1.3	6.0	15.0
Nicaragua	10.5	12.9			11.7	17.0				15.0	48.0
Panama	32.0	42.0			13.0	20.1				6.0	29.0
South America	12.5	16.0			13.9	14.3	1.3	1.4		4.5	18.0
Argentina	28.5		1.2	0.9			1.2	1.4	1.3	1.0	4.0
Bolivia (Plurinational State of)	4.3	8.5		0.3	3.9	7.3	1.7	1.7	1.6	12.0	54.0
Brazil	9.7	13.5	0.1	0.3	19.6	18.6	1.2	1.2		3.0	19.0
Chile	13.8	23.3	0.9	0.7	10.5	10.3	1.4	1.3	1.6	1.0	1.0
Colombia	11.9		0.2	0.1		11.3	1.6	1.6	1.7	7.0	22.0
Ecuador	13.4	14.8			15.2	17.0	1.8	1.5	1.6	8.0	7.0
Guyana	6.6				3.3					5.0	16.0
Paraguay		15.2			6.4	7.9	1.4	1.4	1.7		
Peru	9.9	13.9	0.1	0.2	5.0	9.7	1.6	1.6	1.7	15.0	28.0
Suriname	24.0				2.5					8.0	17.0
Uruguay			1.7	1.7			1.2	1.3	1.4	0.0	1.0
Venezuela (Bolivarian Republic of)	35.6			0.0	8.2		1.3	1.7	2.3		
Regional Office for Africa							1.8	1.9		37.3	69.2
Regional Office for Asia and the Pacific		54.7			17.6	24.0	1.7	1.7		8.8	41.8
Regional Office for Europe and Central Asia					25.9	28.6	1.2	1.2		1.9	6.4
Regional Office for the Near East	54.1				5.4		1.6	1.6		9.6	9.6
World			0.8	0.9	20.9	24.6				11.0	37.0

TABLE 17: **Vulnerability/Stability**

	Value of food imports over total merchandise exports			Cereal import dependency ratio			Percent of arable land equipped for irrigation		
	percent 1990-92	percent 1999-2001	percent 2008-10	percent 1990-92	percent 1999-2001	percent 2007-09	percent 1990-92	percent 1999-2001	percent 2009-11
North America	4.0	4.0	5.0	1.9	3.7	3.8	12.0	12.6	13.5
Canada	4.0	3.0	5.0	4.2	10.6	13.3	1.6	1.7	2.0
United States of America	4.0	4.0	4.0	1.6	2.9	2.9	14.6	15.4	16.6
Regional Office for Latin America and the Caribbean	9.0	8.0	6.0	22.5	30.3	29.9	12.8	13.2	13.1
Caribbean	21.0	26.0	22.0	78.2	76.4	77.2	23.3	23.1	23.8
Antigua and Barbuda	66.0	50.0	118.0	99.1	99.1	99.2		2.5	3.3
Bahamas	9.0	21.0	46.0	97.7	99.4	99.3	12.5	15.0	11.5
Barbados	43.0	45.0	51.0	100.0	100.0	100.0	31.3	33.3	41.7
Cuba	21.0	43.0	41.0	84.4	71.7	76.4	25.6	24.5	24.5
Dominica	34.0	40.0	92.0	98.7	96.8	98.2			
Dominican Republic	39.0	45.0	18.0	66.4	76.3	74.6	25.2	31.7	38.4
Grenada	108.0	47.0	196.0	100.0	100.0	100.0	10.0	22.5	66.7
Haiti	134.0	99.0	143.0	48.2	58.3	58.6	11.7	10.5	9.6
Jamaica	19.0	24.0	41.0	99.6	100.0	100.0	19.7	17.7	20.8
Saint Kitts and Nevis	48.0	51.0	73.0	100.0	100.0	100.0	0.0	0.3	14.1
Saint Lucia	41.0	113.0	51.0	100.0	100.0	100.0	40.0	100.0	100.0
Saint Vincent and the Grenadines	32.0	57.0	143.0	100.0	100.0	100.0	25.0	20.0	20.0
Trinidad and Tobago	11.0	7.0	4.0	98.8	100.0	100.0	10.3	15.0	28.0
Latin America									
Central America	16.0	11.0	7.0	23.5	37.2	37.8	20.9	21.9	22.9
Belize	26.0	18.0	23.0	35.2	30.2	30.3	4.9	4.7	5.4
Costa Rica	7.0	7.0	11.0	66.2	87.0	94.9	30.4	50.6	44.4
El Salvador	28.0	19.0	26.0	26.7	46.8	53.7	7.2	6.8	6.7
Guatemala	15.0	21.0	17.0	22.1	45.0	49.2	9.3	12.9	21.0
Honduras	11.0	29.0	15.0	22.5	45.7	52.2	4.9	6.6	8.6
Mexico	15.0	10.0	6.0	22.4	35.1	34.2	23.9	25.1	25.6
Nicaragua	50.0	44.0	34.0	28.6	30.5	38.5	4.6	3.2	3.2
Panama	33.0	38.0	70.0	42.1	64.1	70.0	6.3	7.8	8.0
South America	6.0	6.0	5.0	18.1	23.8	23.2	9.8	10.2	10.2
Argentina	3.0	4.0	2.0	0.2	0.7	0.4	5.6	5.7	4.5
Bolivia (Plurinational State of)	12.0	17.0	6.0	33.2	28.7	24.2	6.3	4.3	4.6
Brazil	6.0	6.0	3.0	14.3	19.0	14.2	5.2	5.7	7.3
Chile	4.0	5.0	4.0	18.9	45.0	52.1	62.4	100.0	100.0
Colombia	5.0	8.0	8.0	25.6	53.6	59.4	22.3	34.7	55.7
Ecuador	5.0	6.0	6.0	26.8	37.4	36.5	50.8	54.9	83.0
Guyana	10.0	16.0	18.0	42.2	35.6	33.5	30.6	32.6	35.7
Paraguay	6.0	14.0	9.0	6.6	14.6	12.0	3.0	2.2	1.7
Peru	19.0	12.0	7.0	59.1	46.3	48.7	33.5	32.6	32.8
Suriname	12.0	14.0	7.0	35.7	34.3	30.3	83.0	91.3	99.4
Uruguay	5.0	11.0	8.0	21.9	27.3	16.4	10.5	13.8	12.1
Venezuela (Bolivarian Republic of)	5.0	5.0	8.0	52.4	53.6	48.4	17.3	22.5	40.6
Regional Office for Africa	10.0	9.0	9.0	17.7	18.3	21.5	3.7	4.0	2.9
Regional Office for Asia and the Pacific	5.0	4.0	4.0	10.8	10.3	8.6	32.9	30.7	35.6
Regional Office for Europe and Central Asia	7.0	5.0	6.0	18.0	15.9	21.1	16.4	12.8	13.0
Regional Office for the Near East	12.0	9.0	7.0	40.9	53.4	52.8	29.9	32.1	42.1
World	7.0	5.0	5.0	14.6	15.2	15.7	18.8	20.8	22.6

TABLE 18: **Health and education**

	Literacy rate	Primary completion rate		School enrollment				Health expenditure	
	adult female, % of females ages 15 +			primary				share of GDP	
				female		male			
	percent 2005-11*	percent 1990	percent 2011	percent 1990	percent 2011	percent 1990	percent 2011	percent 1995	percent 2011
North America								13.3	17.1
Canada				95.6		94.9		9.0	11.2
United States of America				97.8		97.3		13.6	17.9
Regional Office for Latin America and the Caribbean								6.5	7.6
Caribbean								5.3	5.8
Antigua and Barbuda	99.4		97.7		84.2		87.0	4.9	5.9
Bahamas								6.9	7.7
Barbados			111.3	97.1		99.8		6.3	7.7
Cuba	99.8	93.9	98.6	92.5	98.1	92.5	98.2	5.2	
Dominica			94.3					5.9	5.9
Dominican Republic	89.7		91.9		87.6		91.2	5.5	5.4
Grenada								6.9	6.2
Haiti	44.6							6.6	7.9
Jamaica	91.4	97.0		98.8		99.0		4.1	4.9
Saint Kitts and Nevis			92.9		85.8		83.3	5.4	4.4
Saint Lucia		120.3	93.2	94.5	87.4	96.7	87.2	4.7	7.2
Saint Vincent and the Grenadines								4.5	4.9
Trinidad and Tobago	98.4			92.6		89.3		4.7	5.7
Latin America								6.5	7.6
Central America								5.3	6.4
Belize			110.4					4.3	5.7
Costa Rica	96.4	75.1	99.1	88.0		87.0		6.5	10.9
El Salvador	82.3		100.5		94.2		94.4	6.4	6.8
Guatemala	70.3							3.7	6.7
Honduras	84.7		101.4		98.0		96.5	5.3	8.6
Mexico	91.9	89.0	104.5		98.1		97.5	5.1	6.2
Nicaragua	77.9	39.5		68.7		66.2		8.4	10.1
Panama	93.5		101.2	91.3	96.7	91.5	97.1	7.7	8.2
South America								6.8	8.0
Argentina	97.8							8.3	8.1
Bolivia (Plurinational State of)	86.8	71.5						4.5	4.9
Brazil	90.4							6.7	8.9
Chile	98.5		95.1		93.3		93.4	6.5	7.5
Colombia	93.5	73.9	111.7		86.6		87.5	6.8	6.1
Ecuador	90.5		111.6					4.1	7.3
Guyana			85.5		84.5		81.0	5.1	5.9
Paraguay	92.9	65.4		91.0		92.7		6.7	9.7
Peru	84.6		96.8		94.5		94.5	4.5	4.8
Suriname	94.0		87.7		93.2		92.3	5.2	5.3
Uruguay	98.5	94.7						15.6	8.0
Venezuela (Bolivarian Republic of)	95.4	78.6	95.1		92.7		92.7	4.2	5.2
Regional Office for Africa								5.7	6.3
Regional Office for Asia and the Pacific								5.8	6.4
Regional Office for Europe and Central Asia								8.4	9.5
Regional Office for the Near East								3.8	4.6
World								8.8	10.1

TABLE 19: **Population at risk**

	Droughts, floods, extr temp	UNHCR population of concern				
	% of population affected	total		total refugees	internally displaced persons	others and stateless persons
	percent	thousand people	thousand people	thousand people	thousand people	thousand people
	2009	2000	2011	2011	2011	2011
North America	0.2	0.0	350.5	0.0	0.0	0.0
Canada	0.0	0.0	82.7	0.0	0.0	0.0
United States of America	0.2	0.0	267.8	0.0	0.0	0.0
Regional Office for Latin America and the Caribbean	0.5	33.6	337.6	0.1	3 888.3	0.0
Caribbean	0.6	0.6	2.5	0.0	0.0	0.0
Antigua and Barbuda		0.0	0.0	0.0	0.0	0.0
Bahamas		0.1	0.0	0.0	0.0	0.0
Barbados		0.0	0.0	0.0	0.0	0.0
Cuba	0.7	0.0	0.0	0.0	0.0	0.0
Dominica		0.0	0.0	0.0	0.0	0.0
Dominican Republic	0.1	0.5	2.4	0.0	0.0	0.0
Grenada		0.0	0.0	0.0	0.0	0.0
Haiti	0.8	0.0	0.0	0.0	0.0	0.0
Jamaica	1.1	0.0	0.0	0.0	0.0	0.0
Saint Kitts and Nevis		0.0	0.0	0.0	0.0	0.0
Saint Lucia		0.0	0.0	0.0	0.0	0.0
Saint Vincent and the Grenadines	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad and Tobago	0.0	0.0	0.0	0.0	0.0	0.0
Latin America	0.5	32.9	335.1	0.1	3 888.3	0.0
Central America	0.4	27.6	40.9	0.0	0.0	0.0
Belize	0.8	1.2	0.1	0.0	0.0	0.0
Costa Rica	0.7	5.5	20.5	0.0	0.0	0.0
El Salvador	0.4	0.0	0.0	0.0	0.0	0.0
Guatemala	1.3	0.7	0.2	0.0	0.0	0.0
Honduras	1.3	0.0	0.0	0.0	0.0	0.0
Mexico	0.1	18.5	2.0	0.0	0.0	0.0
Nicaragua	0.8	0.3	0.0	0.0	0.0	0.0
Panama	0.2	1.3	18.1	0.0	0.0	0.0
South America	0.6	5.3	294.2	0.1	3 888.3	0.0
Argentina	0.2	0.5	2.4	0.0	0.0	0.0
Bolivia (Plurinational State of)	1.3	0.0	0.0	0.0	0.0	0.0
Brazil	0.5	3.3	0.0	0.0	0.0	0.0
Chile	0.3	0.4	2.0	0.0	0.0	0.0
Colombia	0.7	0.2	0.0	0.0	3 888.3	0.0
Ecuador	0.3	0.0	68.3	0.0	0.0	0.0
Guyana	7.2	0.0	0.0	0.0	0.0	0.0
Paraguay	0.7	0.0	0.1	0.1	0.0	0.0
Peru	2.0	0.7	1.6	0.0	0.0	0.0
Suriname	0.3	0.0	0.0	0.0	0.0	0.0
Uruguay	0.3	0.1	0.2	0.0	0.0	0.0
Venezuela (Bolivarian Republic of)	0.2	0.1	219.4	0.0	0.0	0.0
Regional Office for Africa	1.9	2 616.4	4 747.2	105.0	4 445.0	11.7
Regional Office for Asia and the Pacific	4.4	3 154.4	6 556.2	1.0	1 566.0	954.9
Regional Office for Europe and Central Asia	0.2	2 009.5	2 589.3	2.9	1 293.8	17.2
Regional Office for the Near East	0.9	273.0	3 900.1	0.1	1 679.7	0.0
World	2.9	8 349.7	17 564.1	109.1	12 844.3	980.2

PART

3

Feeding the world

As a region, Latin America and the Caribbean has experienced high growth in its agriculture and forestry production over the past 15 years. Although lack of access to food remains the main cause of food insecurity in the region, as a whole, Latin America and the Caribbean faces very little food availability problems. In fact, many countries, particularly those in the southern cone of South America, are major food exporters, and as such, have an important role to play in maintaining the global food supply.

In 2012 and 2013 four factors caused the momentum in agricultural growth in the region to slow down: a downturn in global economic activity; reduced growth in trade and lower prices for major agricultural commodities; severe climate events that lowered output; and increased outbreaks of crop and pest diseases. The influence of these factors varied from country to country within the region. For example, Hurricane Sandy caused widespread damage to agriculture in Cuba and Haiti during 2012, while the Dominican Republic benefited from rains and recorded over four percent growth. The large food-exporting countries of South America were primarily affected by the

slowdown in the world economy. The Andean subregion recovered after a downturn in 2010 and expanded its agricultural production, with Colombia and Peru registering particularly dynamic growth.

In response to the recent rise in food prices and increasing volatility, several net food-importing countries in the region have tried to become more self-sufficient in agricultural commodities by increasing the area used to grow foods that are essential to their populations' diet. For example, some Caribbean and Central American countries that are highly dependent on rice and corn imports have increased their production of these crops.

The growth of the livestock sector in the region has produced an economic boom, creating jobs and promoting food and nutrition security. Livestock products satisfy an important and growing portion of the daily nutritional needs of the region's consumers. FAOSTAT data indicate that these products make up a greater proportion of the daily calorie intake per person compared with the overall group of developing countries and the world. A key challenge facing the region is to increase livestock productivity in a manner that does not damage the environment. It is extremely important for the region to develop policies to promote sustainable land use, conservation of water and biodiversity, better disease prevention and improved animal health. In addition, small producers need access to inputs, credit and appropriate technologies to raise productivity and lessen the risk of being economically marginalized.

Fishing and aquaculture, which employ over two million people in the region, also are economically and socially important. The share of employment in agriculture and food is expected to continue growing. However, 85 percent of the fish caught worldwide are from fishing grounds that have been depleted or overfished. In 2010, wild fish landings in the region experienced a severe drop, ending a decade of significant reductions in captures of the main species as well as in those targeted by artisanal fishermen. Nevertheless, the high level of dependence of developed countries on fish imports, combined with the moderate growth of domestic markets in the region, ensures strong future demand for fisheries production, and especially aquaculture.

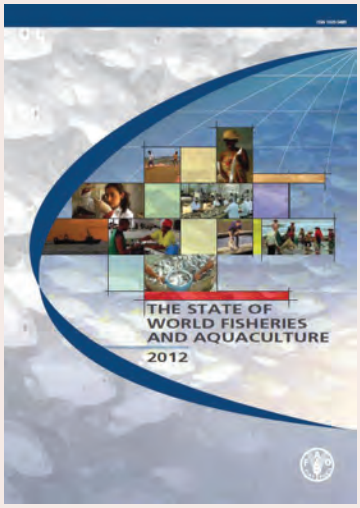
Key Resources

The State of World Fisheries and Aquaculture (SOFIA)

The State of World Fisheries and Aquaculture (SOFIA) is the flagship publication of the FAO Fisheries and Aquaculture Department. This premier advocacy document is published every two years to provide policy-makers, civil society and those whose livelihoods depend on the sector a comprehensive, objective and global view of capture fisheries and aquaculture, including associated policy issues.

Publication cycle: Biennial

Webpage:
www.fao.org/docrep/016/i2727e/i2727e00.htm



Food Outlook

Food Outlook is a biannual publication focusing on developments affecting global food and feed markets. The sub-title "Global Market Analysis" reflects this focus on developments in international markets, with comprehensive assessments and forecasts on a commodity by commodity basis. Food Outlook maintains a close synergy with another major GIEWS publication, Crop Prospects and Food Situation, especially with regard to the coverage of cereals. Food outlook is available in English, French, Spanish and Chinese.

Publication cycle: Twice a year (May/June and November/December)

Webpage:
www.fao.org/giews/english/fo/index.htm

Aggregate agriculture

In recent decades, the productive potential of global agriculture has exceeded population growth. This has led to a slow but steady increase in average per capita food availability. For the world as a whole, per capita food supply rose from about 2 200 kilocalories per day in the early 1960s to more than 2 800 by 2009.

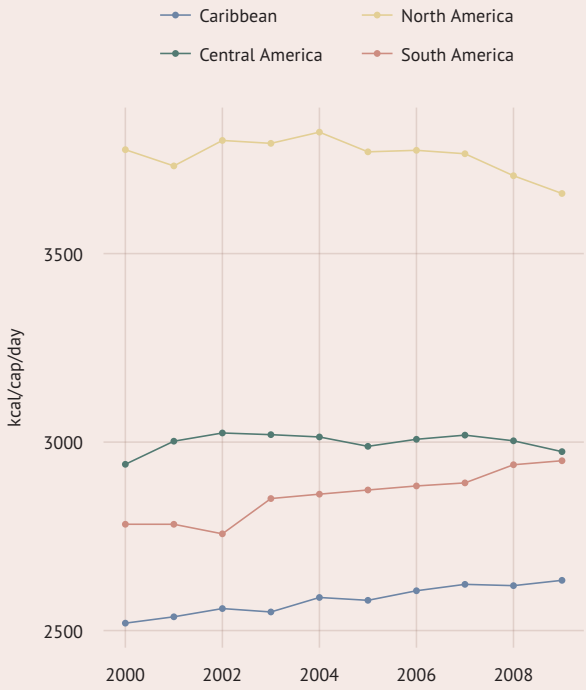
As the charts indicate, Central America has run slightly counter to this global trend in that per capita food supply has declined over the last decade. However, due to its large population, this trend is mainly driven by Mexico, which suffered a small decline in the period between 2000 and 2009, from 3 158 to 3 146 kilocalories per day. All other countries in this subregion registered increases, with Panama recording the greatest per capita increase in food supply, from 2 195 to 2 606 kilocalories per capita per day.

South America has made considerable gains in increasing per capita food supply and has nearly closed the gap with Central America, even though four countries in the subregion recorded declines. Argentina registered the greatest decline in per capita food supply, dropping from 3 268 to 2 918 kilocalories per day between 2000 and 2009. Other countries in the subregion that saw modest declines during this period were Guyana, Paraguay and Uruguay. The Bolivarian Republic of Venezuela registered the greatest increase, moving from 2 484 to 3 014 kilocalories per day.

As shown, the Caribbean subregion has the lowest per capita food supply. However, in many countries in the Caribbean, per capita food supplies are near or higher than the global average. Between 2000 and 2009, only Bahamas and Saint Lucia recorded declines (very slight) in food supply. Haiti has by far the lowest per capita food supply at 1 979, but since 2003 the country has made steady progress in increasing per capita food supply.

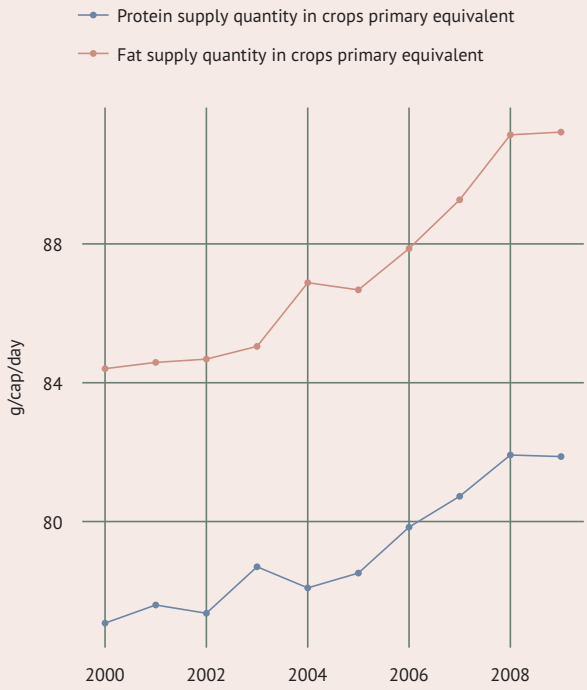
Individual countries' performance regarding per capita food supply in general is reflected in the available supply of proteins and fats. Progress in food supply does not necessarily result in a reduction of hunger, given that food insecurity is often the result of lack of access, poor ability to utilize food and unstable conditions.

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



Source: FAO, Statistics Division (FAOSTAT).

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

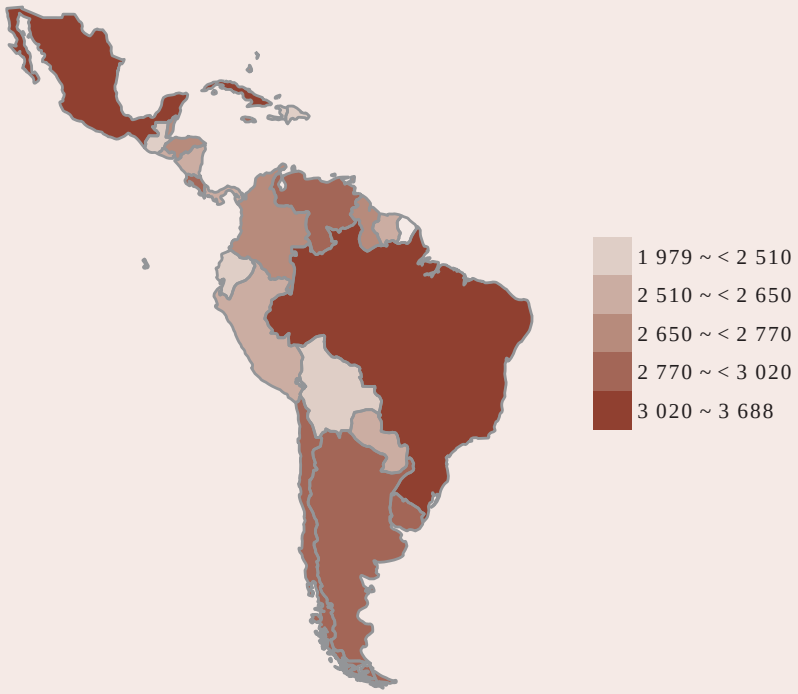


Source: FAO, Statistics Division (FAOSTAT).

Further reading

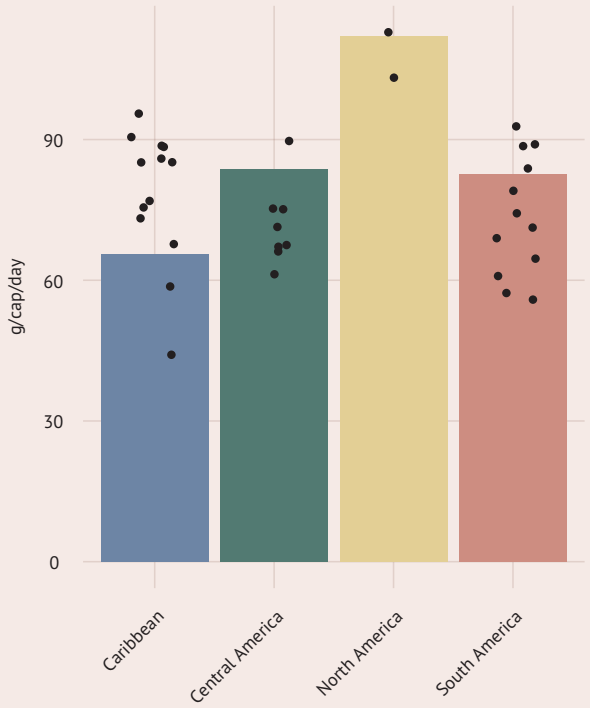
- FAO Agricultural Development Economics Division (www.fao.org/economic/esa/esa-home/en/)
- Bruinsma (2011)

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



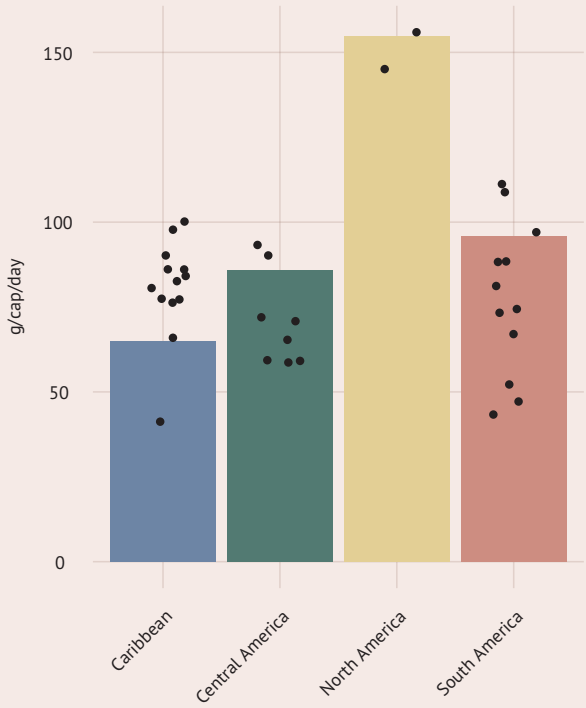
Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Growth in crop production

Over the last decade, crop production in the region has grown faster than the global average. FAO measures growth in crop production using indices of agricultural production that show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 1999-2001. These index numbers 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 disposable production for any use except as seed and feed.

The total area under cultivation has remained largely unchanged in the region. An FAO study carried out in 32 countries in the region and presented in The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2013, showed that most countries had only slight annual variations in the area of land used for farming. Only Dominica, Nicaragua and Paraguay recorded an average annual increase in the area of agricultural land of between one and two percent. Five Caribbean countries and Costa Rica reduced the area of cultivated land by between one and five percent.

Between 1990 and 2009, increased demand for some agricultural commodities prompted significant changes in crop cultivation in several countries. For example, Chile reduced the area planted with annual crops by around four percent annually, but expanded the area under perennial crop cultivation at almost the same rate. Uruguay presents a contrary example; the area under perennial crop cultivation declined by two percent annually while the area used for annual crops expanded by one percent annually.

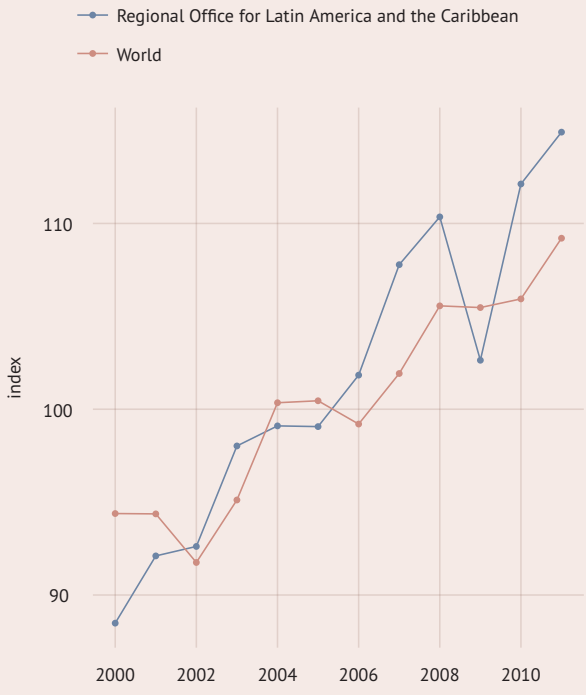
Producers in Argentina, Brazil and Uruguay have become specialized in the production of annual crops (grains and oil crops). As a result, they can take advantage of variations in the prices for these crops and respond to market opportunities by increasing the area planted with crops delivering the highest profits. From 1990 to 2000, Argentina and Brazil tripled the area planted with soybean, while Uruguay expanded the area used for annual crops by 10 percent between 2005-2009.

Countries in the Central and Andean regions, where an increasing proportion of their agriculture is based on perennial crops, such as fruits, coffee, banana and palm, does not respond as easily to price variations. The situation in the Caribbean varies from country to country. However, more countries have reduced the area planted with perennial crops in preference for annual crops.

Further reading

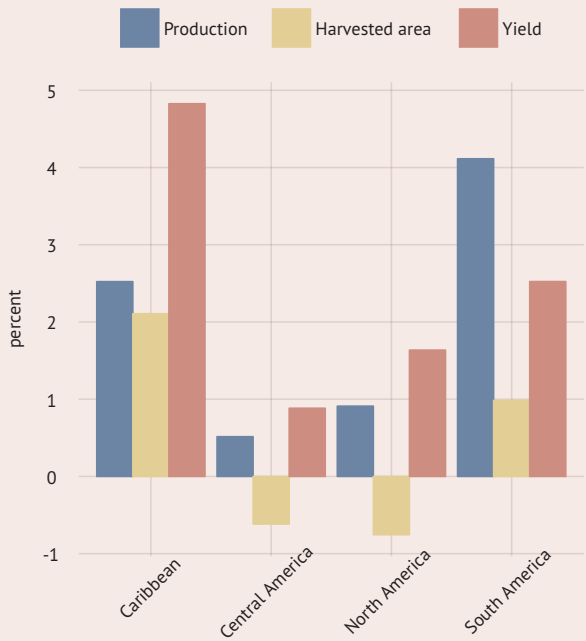
- FAO World Agriculture: Towards 2030/2050 - Prospects for Food, Nutrition, Agriculture and Major Commodity Groups (www.fao.org/docrep/009/a0607e/a0607e00.htm)
- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)

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



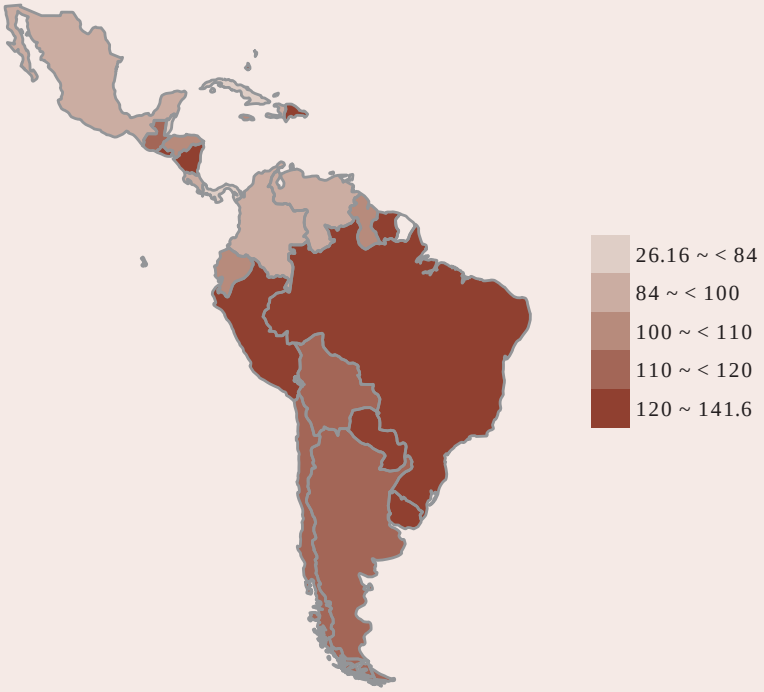
Source: FAO, Statistics Division (FAOSTAT).

CHART 55: **Growth in cereal production (2000-2012)**



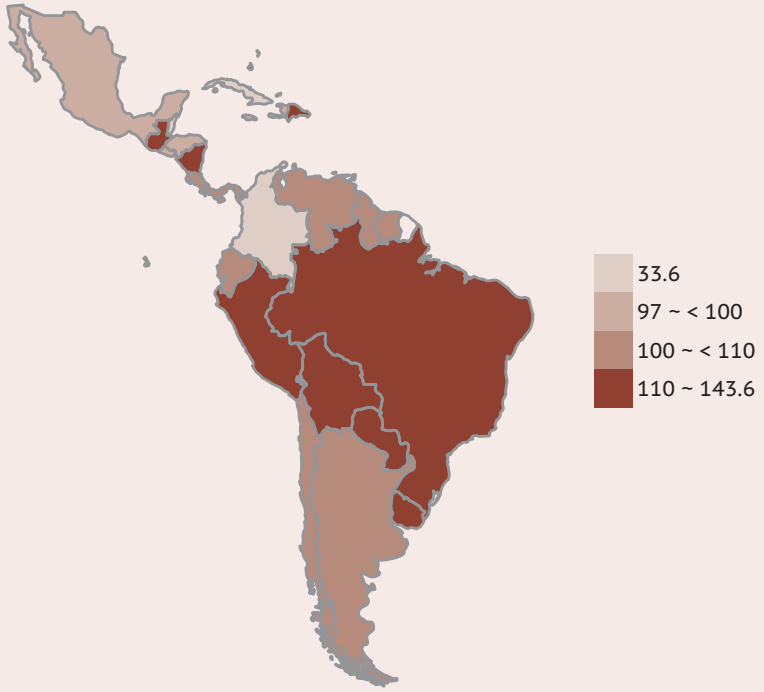
Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Trends in the crop sector

In 2011, Latin America and the Caribbean accounted for roughly seven percent of global cereal production. The amount of land used to cultivate cereals has expanded by 0.7 percent annually, equal to the global rate. There were significant variations within the region, with the Caribbean registering a 2.1 percent annual increase, while Central America showed a 0.6 percent decrease. In South America, the cereal cultivation expanded by one percent per year. Cereal yields in Latin America and the Caribbean increased by 2.5 percent, slightly more than the global rate. In Central America, cereal yields grew at a rate of only 0.9 percent per year, with yields declining in Costa Rica and Honduras. Nicaragua was the only Central American country where cereal yields increased by more than two percent.

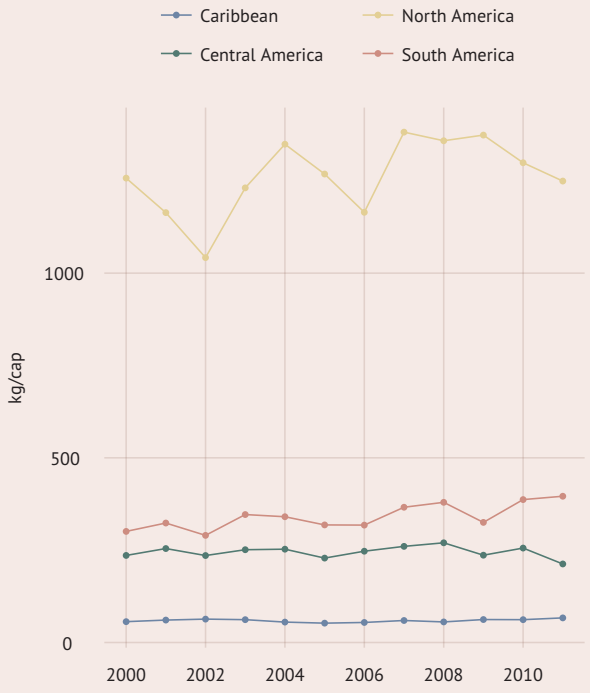
Brazil, Argentina and Mexico rank sixth, tenth and 19th in the world in cereal production. The greatest percentage annual increase in production in the region was in Paraguay (16.5 percent), which had by far the highest rate of expansion (9.9 percent) and the second highest increase in yields (5.9 percent). Although a very small cereal producer, the Bahamas had the highest percentage increase in yields (12.8 percent) and as a result was able to record the second highest annual growth in production despite reducing the area under cultivation by 4.7 percent annually. Chile was the only other country in the region which achieved greater growth in cereal production between 2000 and 2011 (3.9 percent) than between 1990 and 2000 (-1.4 percent) and reduced the area under cereal cultivation. Belize and Uruguay, the only two other countries that had growth rates in cereal production higher than six percent between 2000 and 2011 had relatively high rates of expansion in cultivated area and low increases in yields.

In 2011, Latin America and the Caribbean accounted for more than 10 percent of the global production of coarse grains (primarily maize). Brazil, Mexico and Argentina rank third, fifth and sixth in the world in coarse grain production. As with cereal production, Paraguay expanded the area under cultivation, increased yields and recorded by far the highest percentage increase in production. Ecuador had the highest percentage increase in coarse grain yields (11.8 percent), and as a result the country was able to increase production by 9.2 percent despite a 2.3 percent reduction in cultivated area. In contrast Guyana, where the yield gain was only 1.3 percent, achieved similar production growth by expanding its cultivated area by 7.8 percent, the largest percentage increase of any country in the region.

Latin America and the Caribbean produce a relatively small share of global rice production. Growth in rice production in the region declined from 4.6 percent annually from 1990 to 2000 to 2.4 percent between 2000 and 2011. Africa by contrast has seen a 6.1 percent increase in production between 2000 and 2011, up from 2.6 percent during the preceding decade.

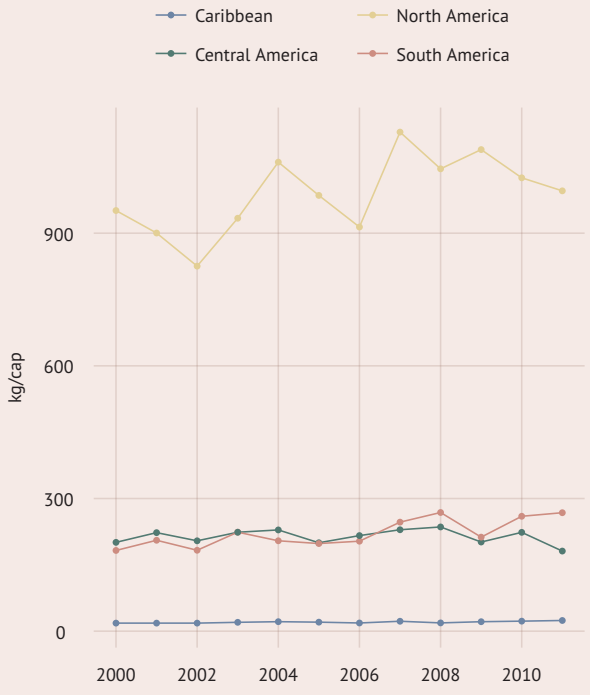
Brazil, the ninth highest rice-producing country in the world, reduced the area under rice cultivation, but by increasing yields by 4.4 percent was able to achieve modest production growth (1.8 percent) between 2000 and 2011. Peru, the next highest rice producer in the region and 22nd in terms of global production, registered a three percent annual growth rate.

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



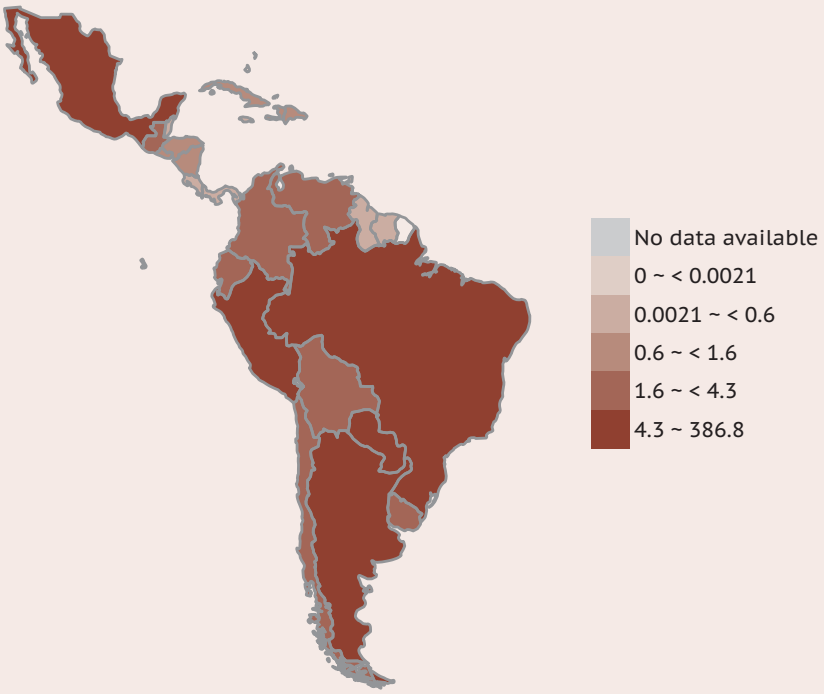
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



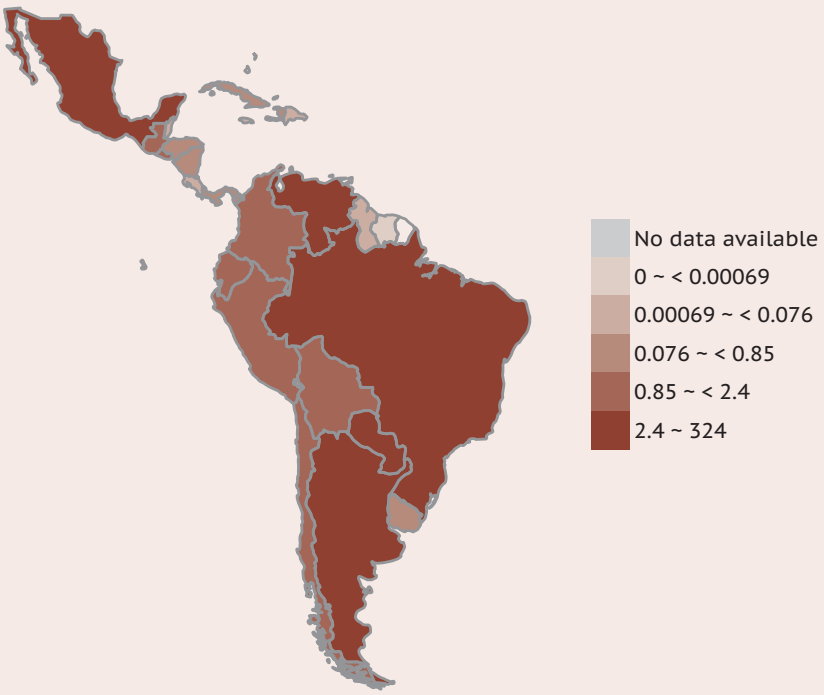
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



Source: FAO, Statistics Division (FAOSTAT).

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



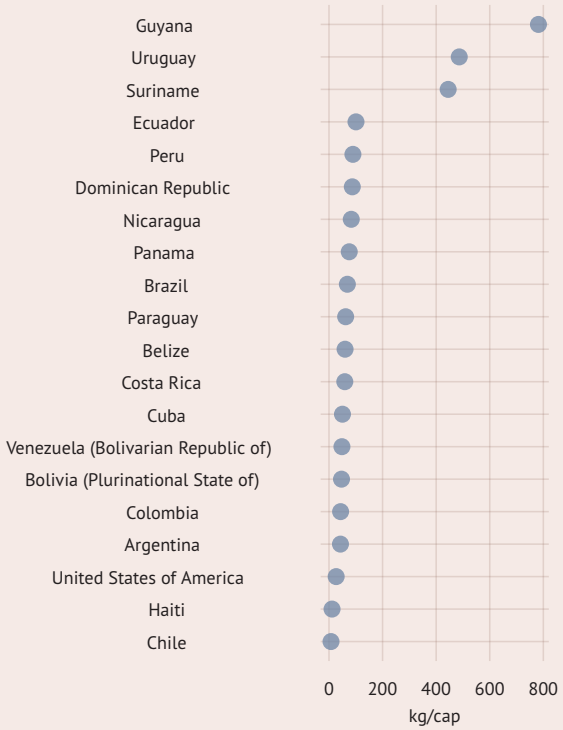
Source: FAO, Statistics Division (FAOSTAT).

Although a very small rice producer, Jamaica had the largest annual increase in the area under rice cultivation (13.9 percent), the largest percentage annual increase in rice yields (15 percent) and achieved the most growth in rice production (31 percent) in the region. In Central America, where overall rice production increased by only 0.5 percent, Honduras stands out for its 19 percent increase in production, which was achieved by expanding the area under cultivation by 11.4 percent and increasing yields by 6.7 percent. Mexico had the largest contraction of the area under rice cultivation (7.9 percent) and consequently one of the greatest percentage declines in production (6.2 percent). Paraguay had the highest growth in production in South America. This was achieved mainly by expanding the area under cultivation by more than 10 percent; increases in rice yields were modest.

Argentina produces the most wheat in the region and ranks 14th in the world. Brazil is the next highest producer in the region, ranked 23rd. Production in Argentina fell by 1.2 percent annually between 2000 and 2011. This was largely due to a contraction in the area under cultivation, and an annual increase in wheat yields (2.1 percent) that was below the global rate. Brazil on the other hand expanded the area under cultivation and increased yields by five percent and as a result production rose by 11.8 percent annually. Paraguay had the highest annual expansion of wheat cultivation (12.5 percent) and the highest annual increase in yields (5.0 percent) and as result had the greatest increase in production (18.8 percent). Uruguay had the next largest percentage in production growth (12.6 percent) with gains made largely through a ten percent annual expansion in cultivated land as yield increases were relatively low (2.4 percent per year).

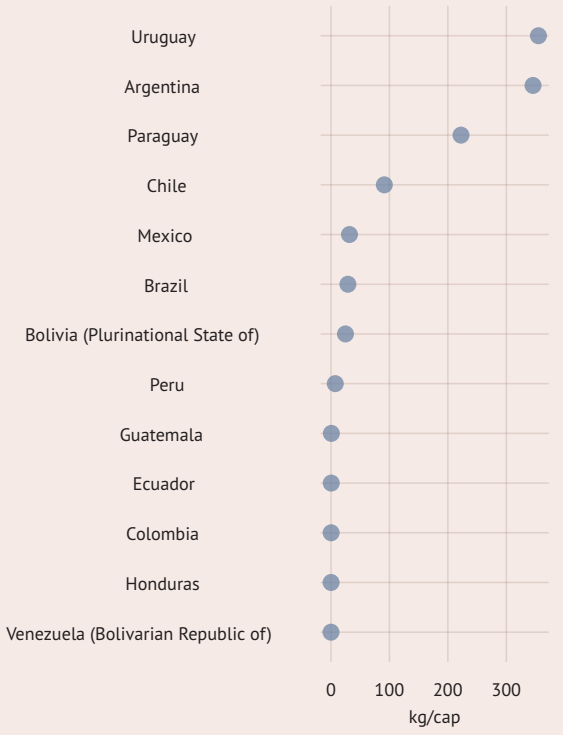
In Colombia and Ecuador, where declines in production were the largest and continued the decline of the preceding decade, the area under wheat cultivation fell by more than 10 percent annually.

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



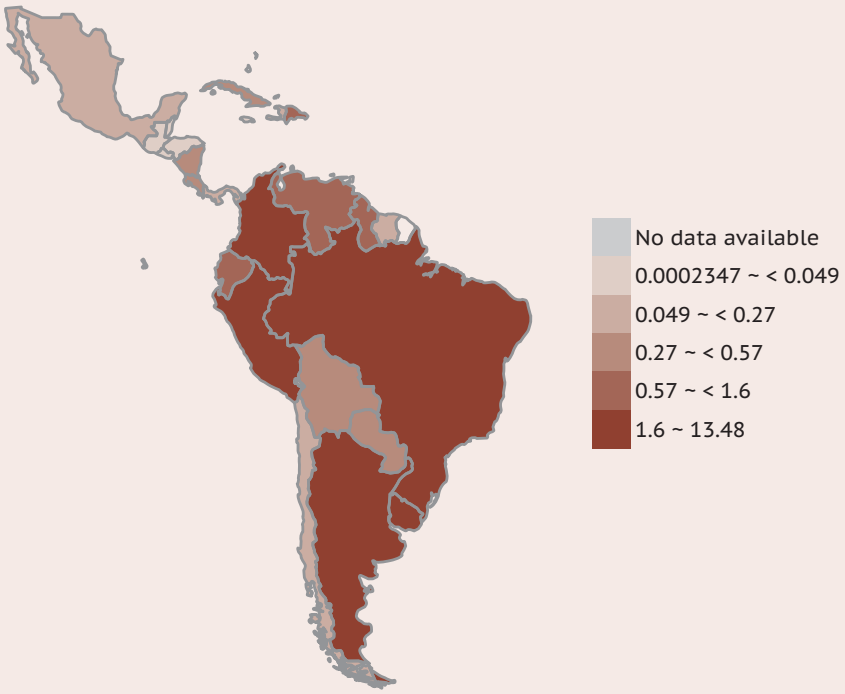
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

CHART 59: **Per capita wheat production (2011)**



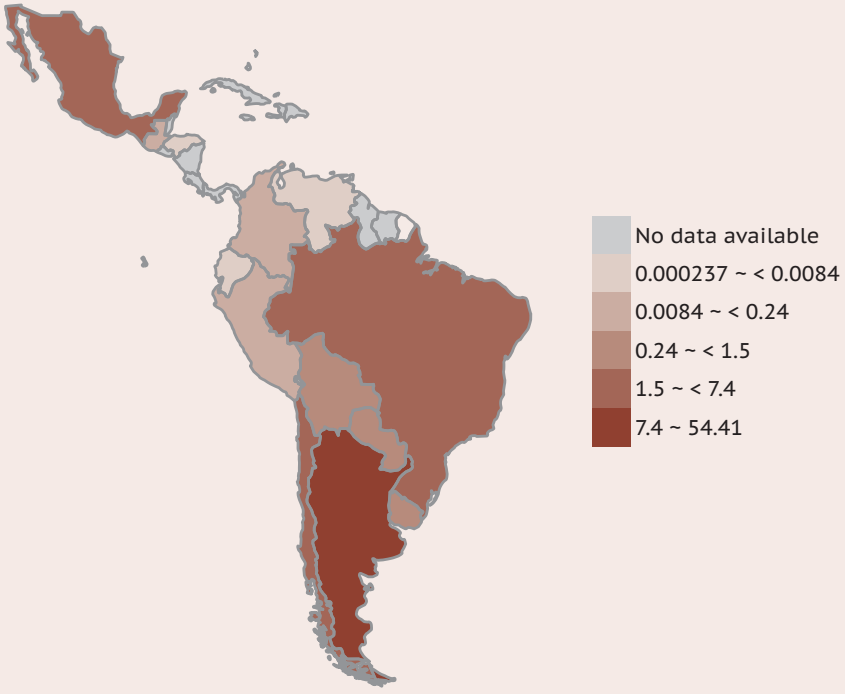
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Latin America and the Caribbean accounts for about 17 percent of global oilcrop production. Between 2000 and 2011, production grew by 6.7 percent, higher than the global rate of production and on par with growth in Asia and Europe. During this period, the area under oilcrop cultivation in the region expanded by 5.3 percent and yields increased by 2.7 percent, the largest percentage increases of any region. In the Caribbean, between 2000 and 2011 the area under cultivation contracted by one percent but production increased by 2.9 percent in the same period.

Brazil is the largest producer of oilcrops in the region and ranks fifth in the world. Argentina ranks seventh. Between 2000 and 2011, Uruguay had by far the region's largest growth in production (29.4 percent per year), resulting from the largest annual expansion of oilcrop cultivation. The increase in oilcrop yield in Uruguay was not as high as the global rate. Peru, which had the second highest annual growth in oilcrop production in South America (8.5 percent), did so by increasing yields by 10 percent per year (the highest in the region) while reducing the area under cultivation by 1.3 percent annually.

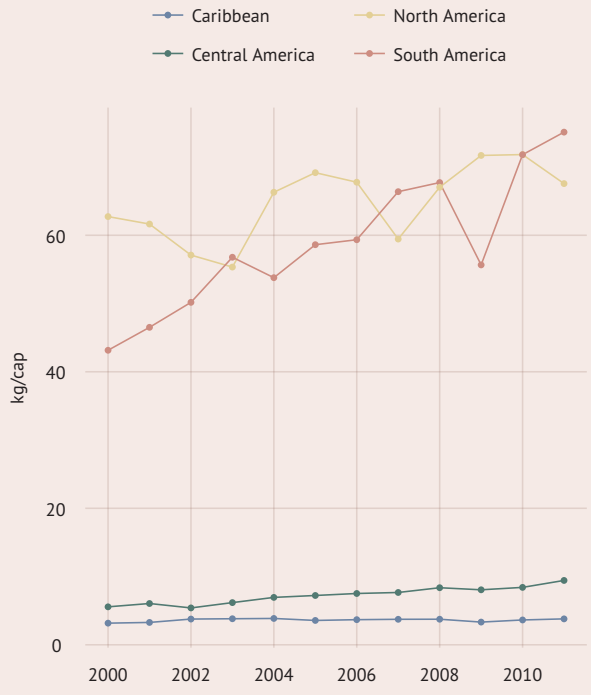
Central America provides another study in contrasts. Both Guatemala and Honduras achieved similar yearly growth in oilcrop production (over 11 percent). However, Guatemala's increased production was due to a 9.6 percent annual increase in yield and relatively little expansion of cultivated area (1.8 percent per year), whereas Honduras' production growth resulted from a 10 percent expansion in the area under cultivation (second only to Uruguay) and a very low annual increase in yield (1.3 percent).

In 2011, the region was responsible for just under 10 percent of the global production of pulses. In Latin America, the area under pulse cultivation contracted by one percent and yields increased only by 0.7 percent. In the Caribbean, however, the area under pulse cultivation expanded by 1.8 percent annually.

Brazil ranks fifth in the world in pulse production. Between 2000 and 2011, Brazil reduced the area of pulse cultivation by 1.5 percent, but as a result of a 2.6 increase in yield (in Latin America, only Costa Rica registered a higher increase in pulse yields) was able to maintain modest growth in production.

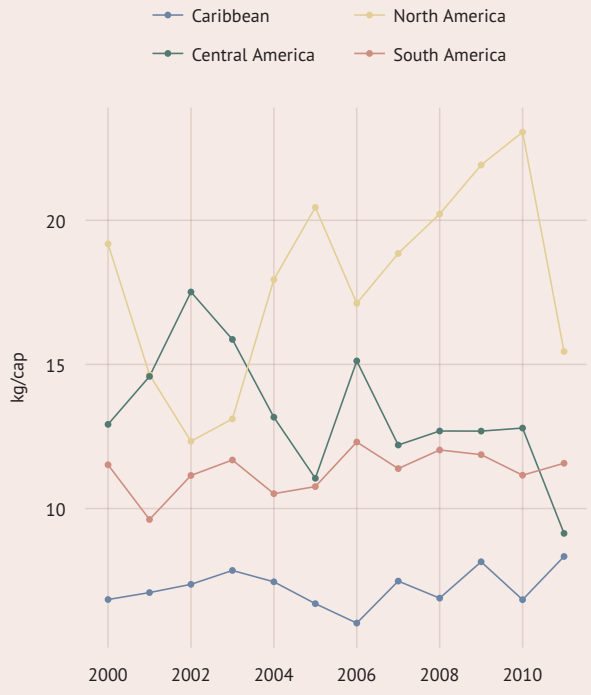
During this period, the Plurinational State of Bolivia had the region's highest annual increase in pulse production as well as the highest yearly rate of expansion of land under pulse cultivation (7.0 percent). Mexico had both the largest contraction in area under pulse cultivation (4.8 percent) and the largest decline in production (4.3 percent per year).

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



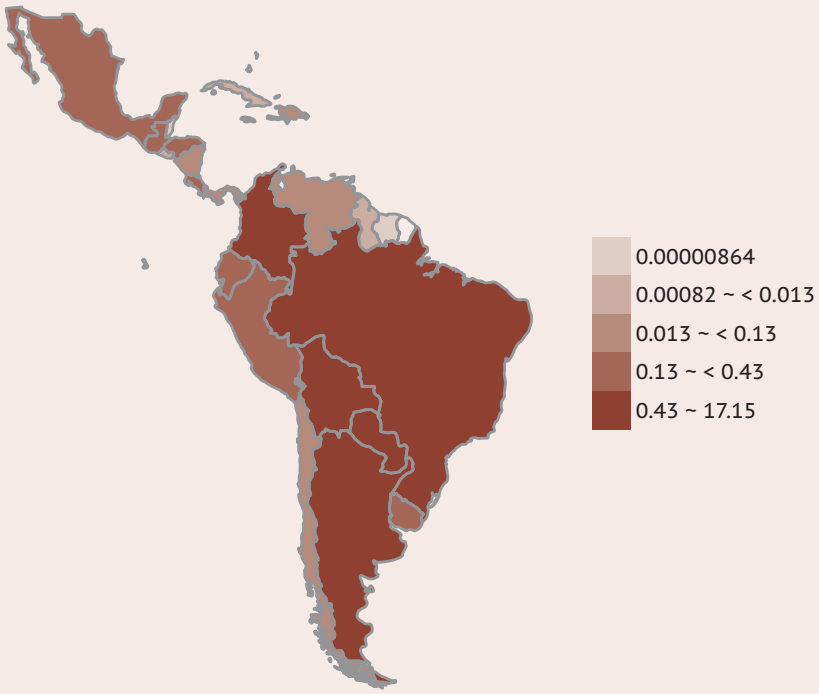
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



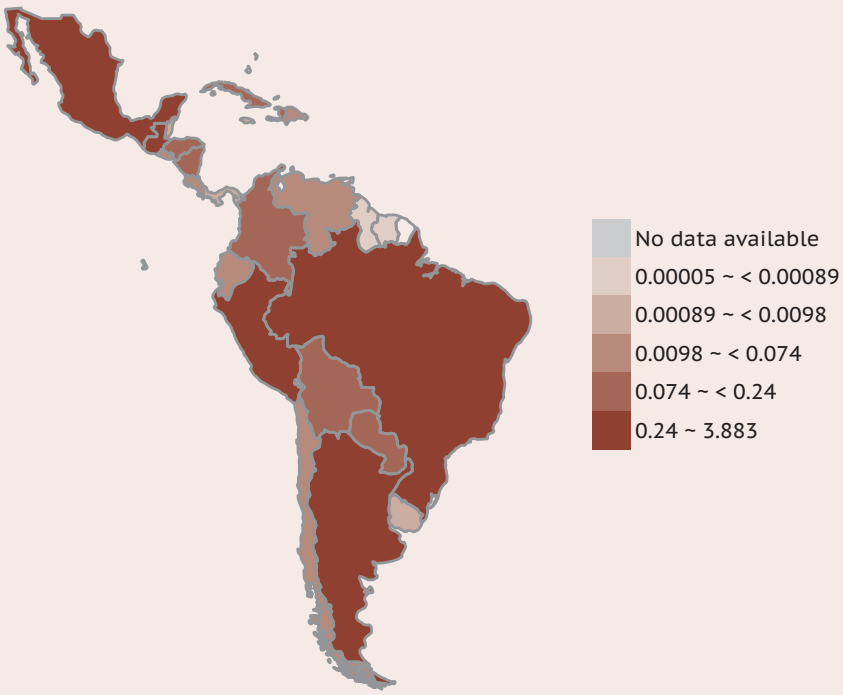
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



Source: FAO, Statistics Division (FAOSTAT).

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



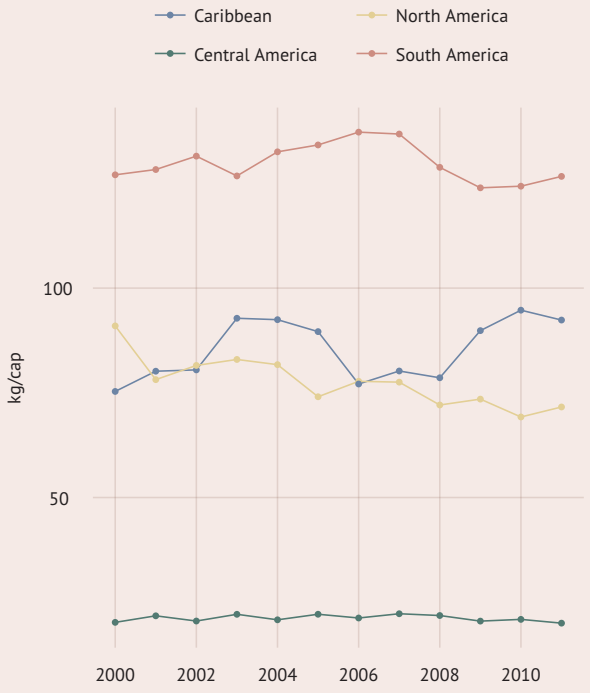
Source: FAO, Statistics Division (FAOSTAT).

Latin America and the Caribbean accounts for eight percent of the global production of roots and tubers. Between 2000 and 2011, the area under root and tuber cultivation expanded by 0.6 percent, somewhat below the global rate. Improvements in yields in the region did not keep pace with global increase and lagged behind all other regions except North America. The Caribbean had the largest percentage annual increase in production (3 percent) resulting from a 3 percent expansion of the area cultivation as yields in the subregion rose by only 0.3 percent.

Brazil ranks fifth in the world in terms of roots and tuber production. Despite a one percent contraction in the area under cultivation, Chile was able to attain the highest percentage annual increase in production (4.9 percent) in South America due to substantial increases in yield (5.9 percent). Guatemala registered the highest percentage increase in production in Latin America (7.2 percent) by expanding the area under cultivation by 2.8 percent annually and achieving a notable increase in yield (4.3 percent). Costa Rica and Nicaragua were exceptional in that they managed relatively strong yearly growth in production (4.3 percent and 3.1 percent) even though yields actually declined. These two countries had the highest percentage increase in the area under root and tuber cultivation (5.1 percent and 4.7 percent respectively) in Latin America. Guyana and Belize had the largest contractions in the area under cultivation (7.3 percent and 6.3 percent) in Latin America and, as a result, the largest percentage decline in production.

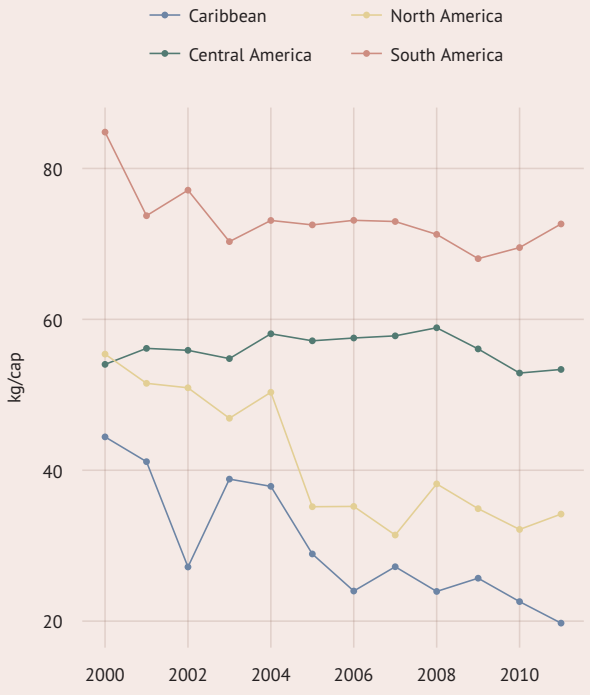
The Bahamas had the highest increase in yields (6.2 percent) in the entire region and, despite the fact that it reduced the area under cultivation, managed to attain the second highest growth in production. Trinidad and Tobago had the highest percentage growth in production (8.9 percent) as a result of a 7.6 percent expansion of the area under cultivation.

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



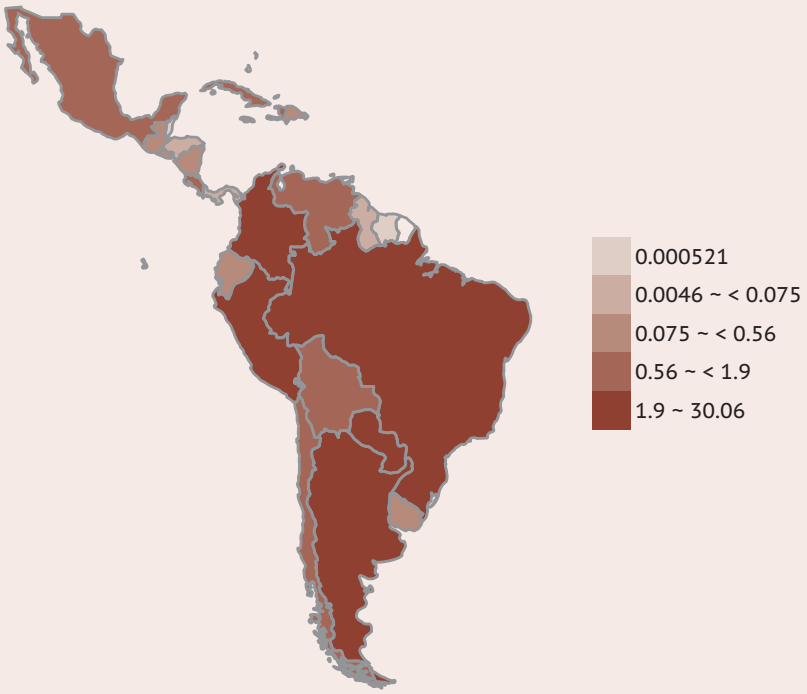
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



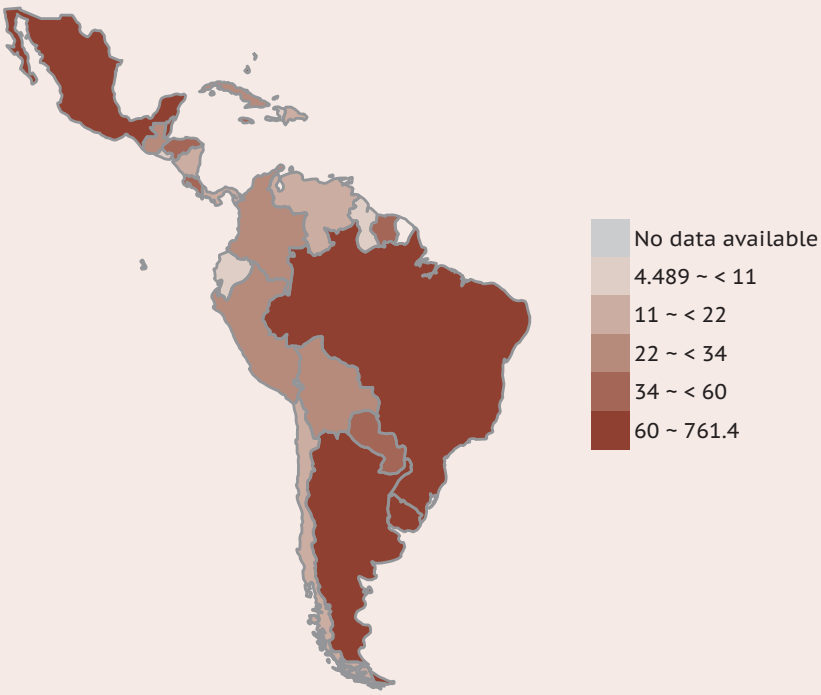
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



Source: FAO, Statistics Division (FAOSTAT).

MAP 41: **Citrus fruit producing countries (tonnes, 2011)**



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

Global fruit and vegetable production has experienced a remarkable increase. Output has been growing at an annual rate of about 3 percent over the last decade. In 2011, almost 640 million tonnes of fruit and more than 1 billion tonnes of vegetables were produced throughout the world. In 2011, Latin America and the Caribbean accounted for a relatively small percentage of the global vegetable output, producing about half as much as Africa. The 2.3 percent annual growth in production was lower than the global rate. The area under vegetable cultivation expanded at an annual rate of 1.3 percent, which was considerably lower than any other developing region. Increases in yields were slightly above the global rate.

Mexico is the largest vegetable producer in the region, followed by Brazil. Respectively, these two countries rank tenth and twelfth in terms of global production. Between 2000 and 2011 Brazil had the highest annual growth rate (4.4 percent) in South America, mainly due to increases in yields (3.0 percent per year) as there was relatively little expansion in the area cultivated. During this period, Honduras, which had the largest yearly increase in yield (6.2 percent) in Latin America, also had the highest yearly increase in production (8.4 percent).

Ecuador, which had the highest percentage annual growth in cultivated area (9.5 percent) in the region, also had the greatest decline in yield (6.9 percent) leading to 1.9 percent annual growth in production. In contrast, Uruguay had the second largest contraction in area under cultivation (5.6 percent per year) and the greatest annual increase in yields (5.3 percent) for a modest decline in production growth.

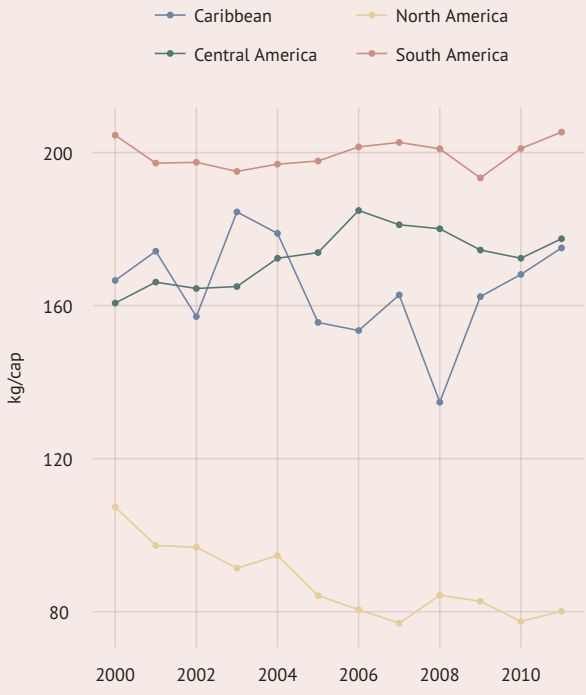
Latin America and the Caribbean account for over 13 percent of global fruit production. However, annual percentage growth in production (1.7 percent) is considerably lower than Asia or Africa. Brazil, Mexico and Ecuador are the largest fruit producers in the region and rank respectively third, seventh and fifteenth in the world.

Between 2000 and 2010, Suriname, which reduced the area under fruit cultivation by 1.4 percent per year, had the highest annual growth in yield (5.9 percent) and as a result was able to register the highest percentage annual growth rate in South America (4.5 percent). Its neighbour, Guyana, recorded the largest contraction in area under fruit cultivation, the greatest decline in yields (3.7 percent) and the greatest annual decline in production (6.7 percent). Guatemala had the highest annual rate of expansion in the area dedicated to fruit cultivation (7.3 percent) and as a consequence the greatest percentage growth in fruit production in Latin America (6.7 percent per year) despite the fact that yields declined slightly. The Dominican Republic had the highest percentage annual increase in production (7.1 percent) in the region due to a combination of increased yields and expanded cultivation.

Further reading

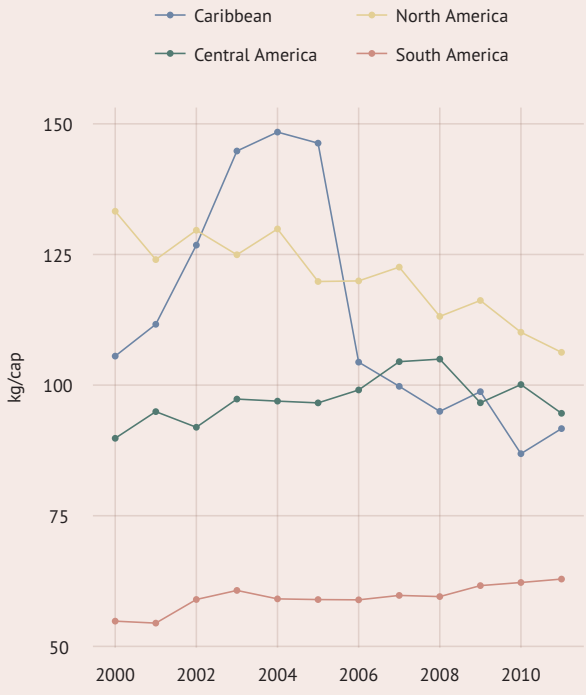
- The State of Food and Agriculture 2012: Investing in agriculture for a better future (www.fao.org/publications/sofa/en/)
- OECD-FAO Agricultural Outlook 2012-2021 (www.oecd.org/site/oecd-faoagriculturaloutlook/)

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



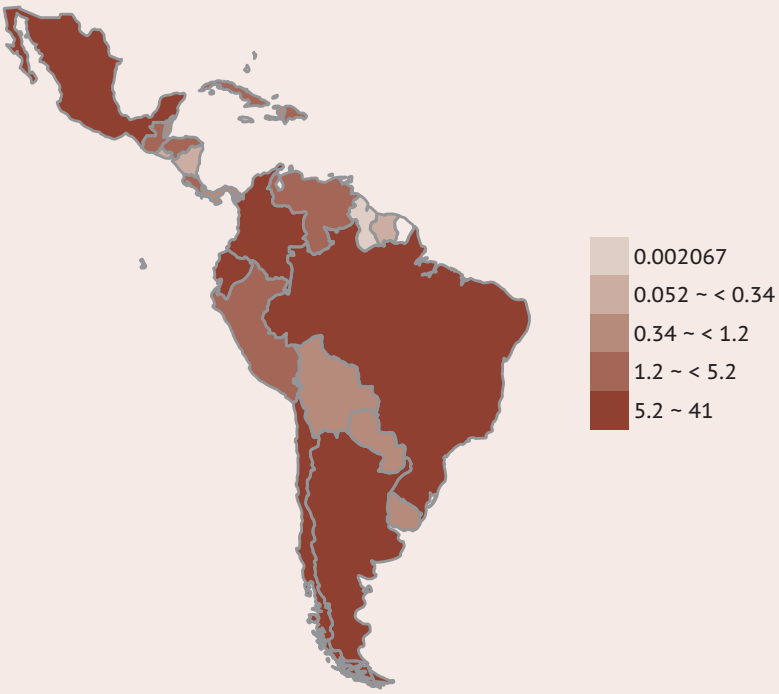
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



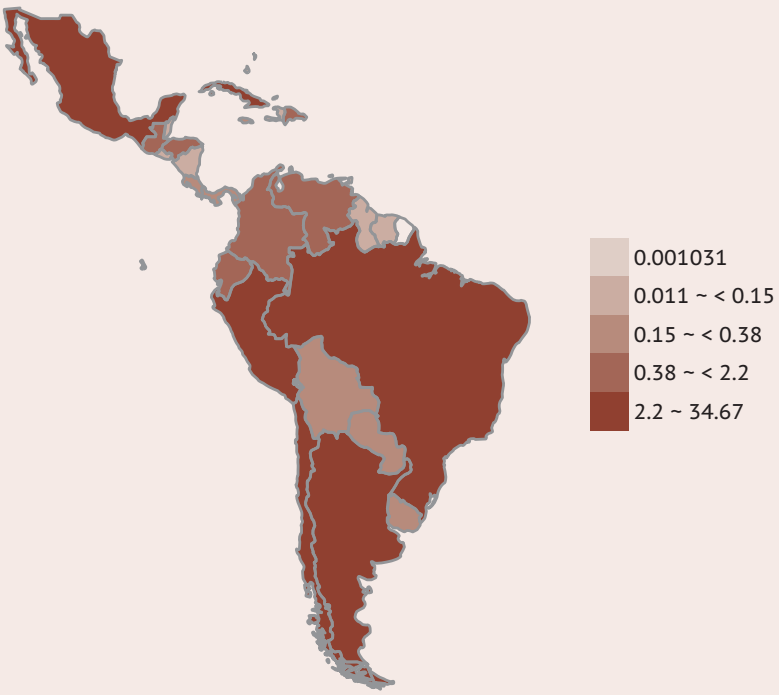
Source: FAO, Statistics Division (FAOSTAT) and United Nations Population Division.

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



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Trends in the livestock sector

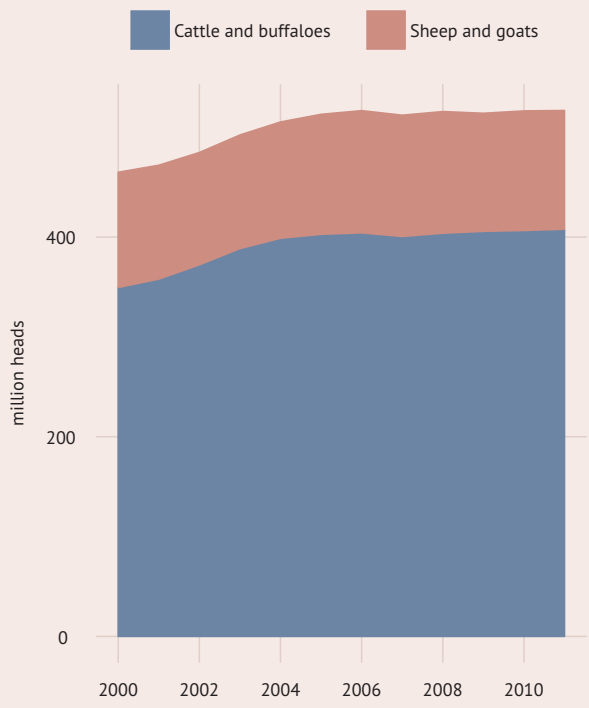
For many rural households in the region, livestock are not merely a source of food. Farm animals also provide income, power for farm work and dung for fertilizer or fuel. Raising livestock allows farming families to improve their economic and social situation when times are good and withstand misfortunes when times go bad. For this reason, indicators of livestock production and consumption of livestock products is an appropriate tool for measuring growth and progress in rural communities, and the improvement of the economic conditions of rural families in developing countries.

Livestock inventories in the region have grown dramatically over the last decade. Latin America and the Caribbean accounts for nearly 14 percent of world inventories of all major livestock species. Poultry inventories have soared 5.3 percent annually to register a 35.6 percent increase over the last decade, and the region now accounts for 14 percent of world poultry numbers.

Brazil, Argentina and Mexico have the greatest numbers of livestock. In 2011, Brazil possessed the largest stock of cattle in the region, at 213 million head, a slight increase over the previous year. Argentina had the second highest number (48 million), which was about 10 million heads lower than 2006 as the country recovers from a severe drought in 2008 that forced producers to sell large numbers of animals. Mexico was third, with 39 million head of cattle. In the Caribbean, the Dominican Republic had the highest number of cattle, pigs and chickens. Cuba had the largest number of sheep and goats.

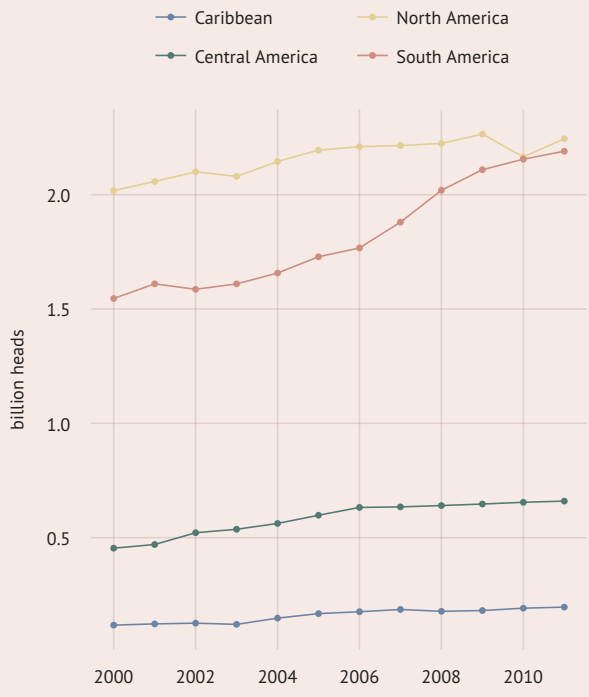
The growth in livestock production reflects the regional trend of consumers increasingly moving away from the consumption of beef and mutton towards poultry, pork, eggs and dairy products. Latin America will need to play a major role in meeting the regional and global demand for livestock products, but also there is the potential for fostering economic growth and food security among Latin America's rural poor by expanding livestock production. This expansion, however, must be balanced against the environmental risks.

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



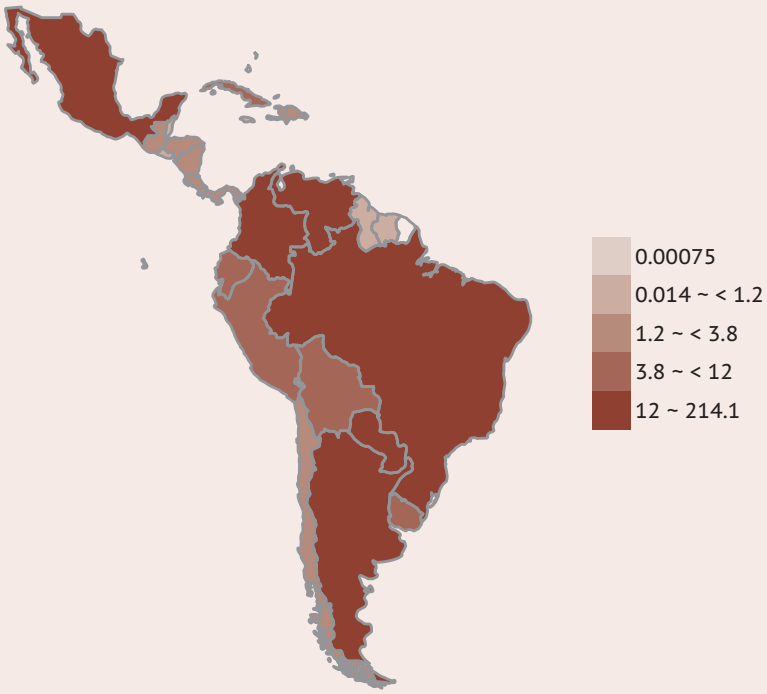
Source: FAO, Statistics Division (FAOSTAT).

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



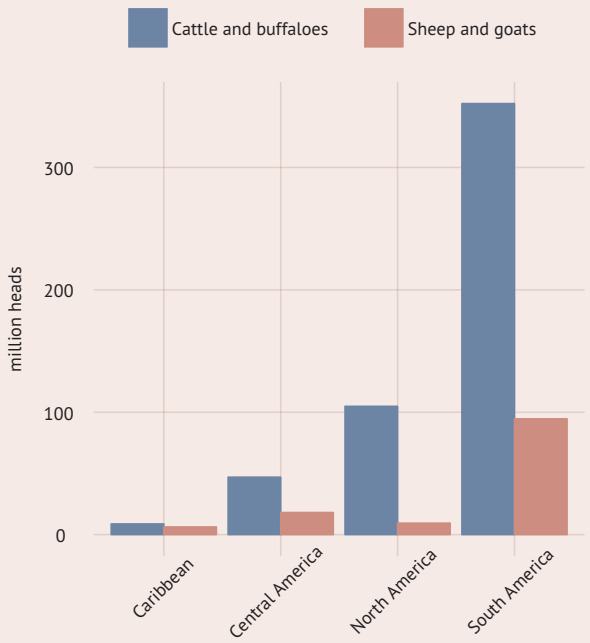
Source: FAO, Statistics Division (FAOSTAT).

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



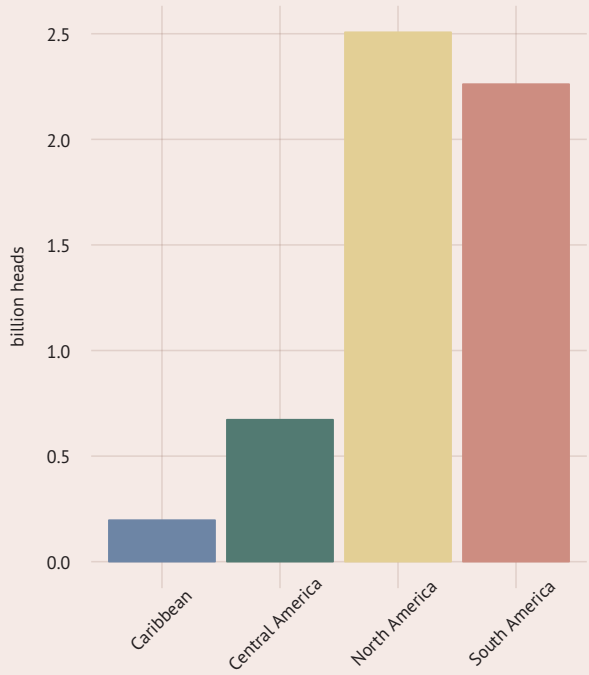
Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

CHART 69: **Stock of poultry birds (2011)**



Source: FAO, Statistics Division (FAOSTAT).

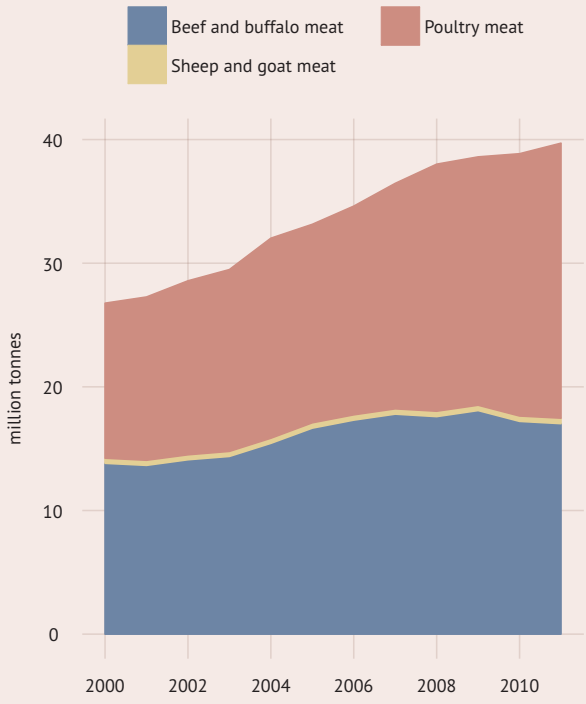
The rapid growth in production in many countries is due to both an increased number of animals and better production efficiency. In 2011, Latin America and the Caribbean accounted for about 13 percent of global meat production. Annual growth in meat production (3.6 percent) is higher than the global growth rate and second only to Asia and the Pacific. The region is the largest producer of beef and buffalo, accounting for 25 percent of global output. Annual growth in this sector (2.1 percent) was again higher than the global rate, but less than Africa and the Near East. The region commanded a much smaller share of global production in pig, sheep and goat meat. Its growth in pork was slightly above the global rate, while growth in sheep and goat meat was well below. As with all other regions, poultry production showed the highest annual rate of growth (5.5 percent), which was higher than the global percentage increase and second only to Asia and the Pacific.

The top meat producers in the region are Brazil and Argentina. Between 2000 and 2011, Argentina's annual growth in total production was relatively modest at one percent annual, and the country's beef and buffalo production fell by 1.1 percent due to the 2008 drought, while in Brazil beef and buffalo production increased by 2.9 percent yearly and total production grew by 4.3 percent.

During this period, Nicaragua had the highest percentage annual growth in total meat production (8.4 percent) and beef and buffalo production (9.7 percent). Suriname and Guyana both had increases in growth of more than 6 percent per year. But in their case, beef and buffalo production declined, while poultry soared by 9.0 percent and 7.3 percent per year respectively. The Plurinational State of Bolivia was the only country in Latin America with a higher annual percentage increase in poultry production (9.8 percent). Guyana also had the region's highest percentage annual growth for pork production (7.9 percent). Guatemala had the highest percentage of annual growth in sheep and goat production (7.0 percent).

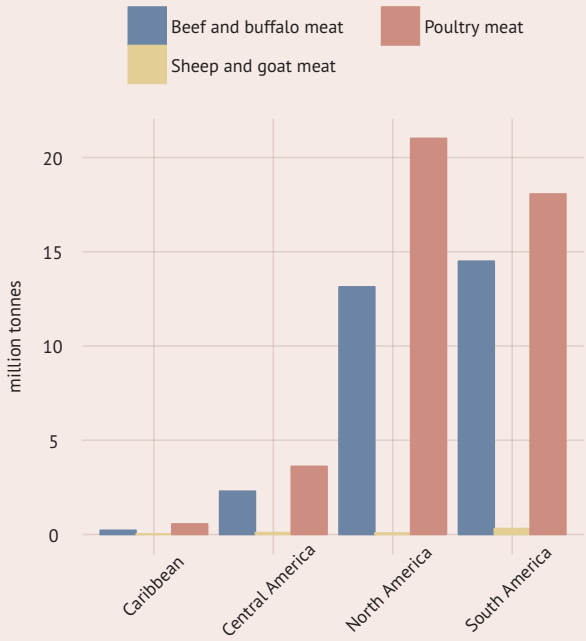
Only three countries (Bahamas, Saint Kitts and Nevis, and Saint Vincent and the Grenadines) showed a decline in total production. Cuba, although it registered modest annual growth in total meat production, had an exceptional decline (6.4 percent) in poultry production.

CHART 70: **Latin America meat production (2000-2011)**



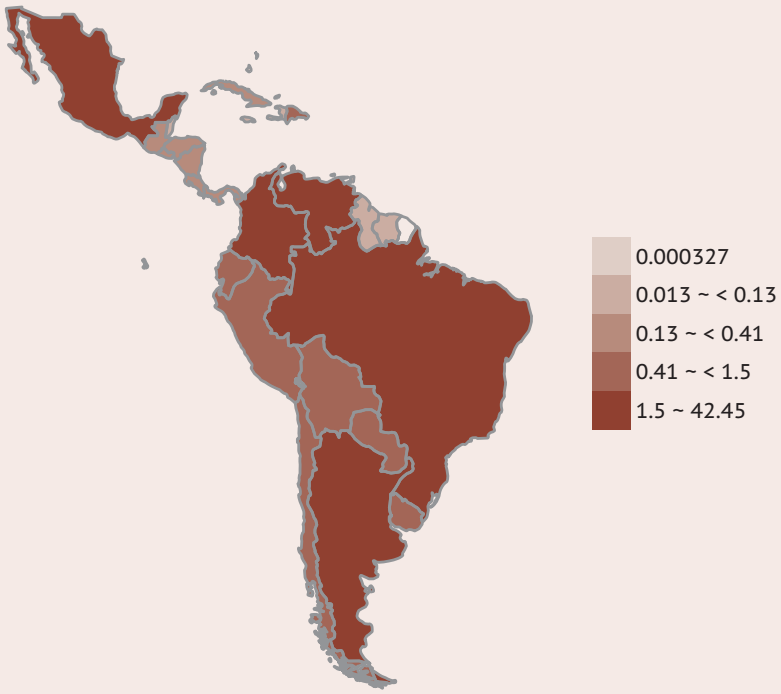
Source: FAO, Statistics Division (FAOSTAT).

CHART 71: **Meat production by type (2011)**



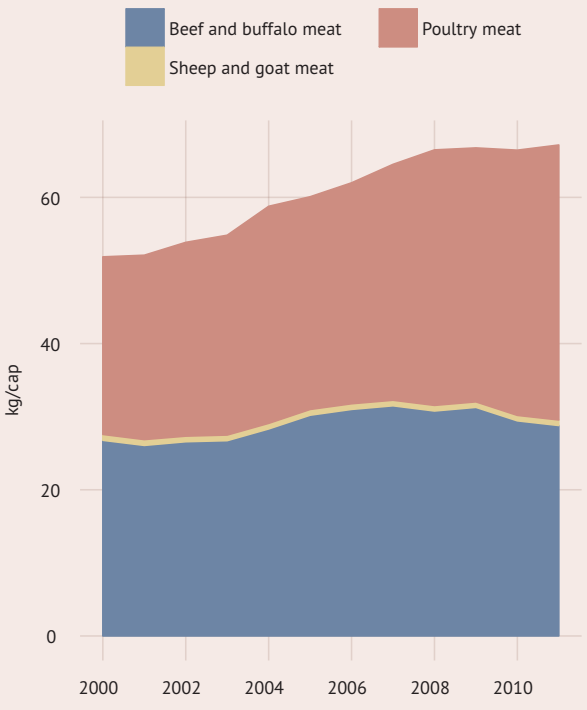
Source: FAO, Statistics Division (FAOSTAT).

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



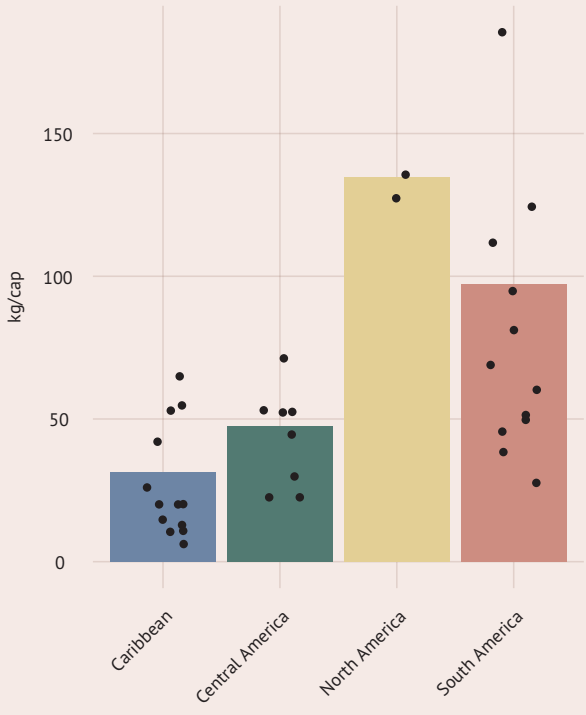
Source: FAO, Statistics Division (FAOSTAT).

CHART 72: **Latin America per capita meat production (2000-2011)**



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

CHART 73: **Per capita total meat production (2011)**



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

Milk production increased by approximately 30 percent in Latin America and the Caribbean between 2000 and 2011, reaching over 80 million tonnes, just under the level of production in the United States of America. Milk productivity in the region in 2010 was about 83 percent below the level in the U.S. but 56 percent above the world average. Milk productivity in the region increased by more than 22 percent over the last decade compared to only about 15 percent in the U.S. and five percent globally.

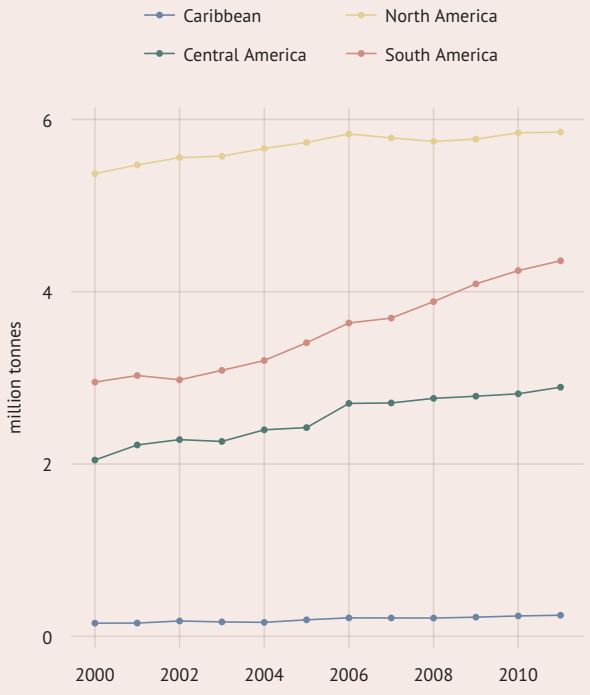
Brazil, Argentina and Mexico were the region's top milk producers. Between 2000 and 2011, Brazil had strong annual growth in production (4.2 percent), whereas in the other countries, annual growth was well below two percent. Ecuador had by far the highest annual growth in production in the region during this period (11.1 percent). In the Caribbean, there were three countries in which annual milk production declined: Barbados, Cuba and Trinidad and Tobago, with the latter country having by far the largest annual drop in production (5.7 percent). Suriname was the only other country in the region where milk production declined.

In 2011, Latin America and the Caribbean produced more than 10 percent of the world's eggs and milk. Between 2000 and 2011, the region's annual growth in the egg and milk sectors was roughly 3.5 percent, well above the global increase and second only to Africa's. Mexico and Brazil are the two top egg producers in the region and, between 2000 and 2011, both had annual growth rates of roughly three percent. Guatemala had the highest percentage annual increase in the region during this period (9.7 percent), followed by Saint Lucia, Panama and Peru. Only three countries registered declines in egg production: El Salvador, Guyana and Suriname. For the latter two countries, the annual drop in production was large (6.7 percent and 7.3 percent respectively).

Further reading

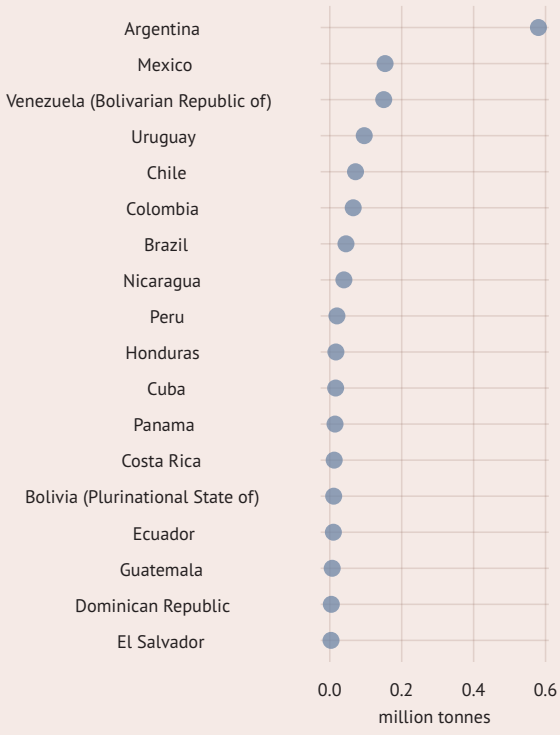
- FAO Animal Production and Health Division (www.fao.org/ag/portal/aga-index/en/)
- The State of Food and Agriculture 2009: Livestock in the balance (www.fao.org/publications/sofa-2009/en/)

CHART 74: **Egg production (2000-2011)**



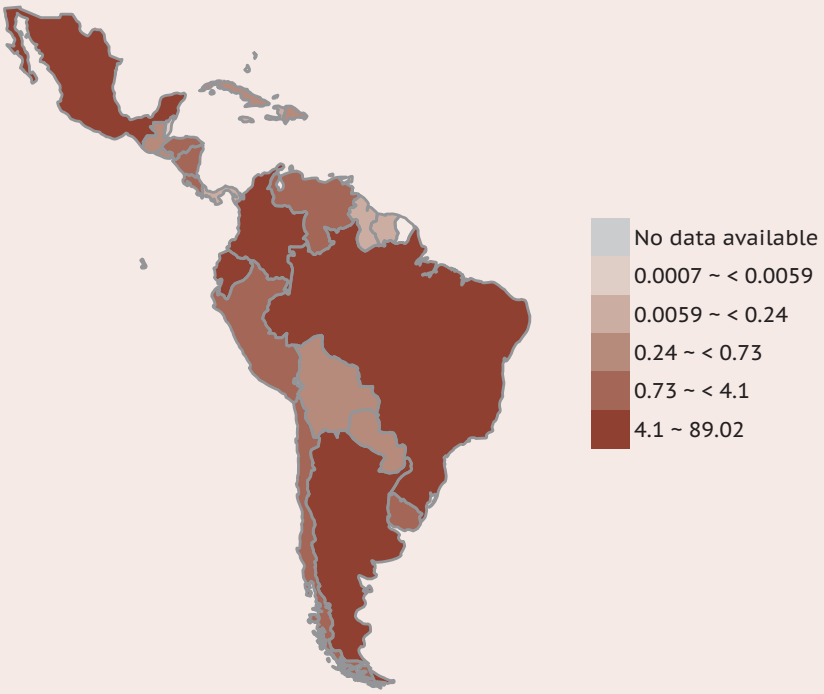
Source: FAO, Statistics Division (FAOSTAT).

CHART 75: **Cheese production (2011)**



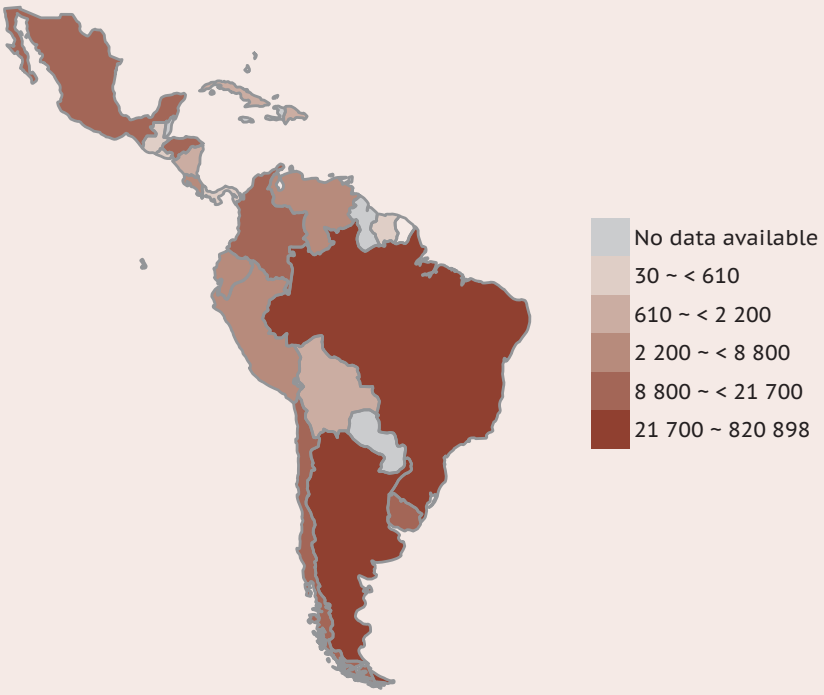
Source: FAO, Statistics Division (FAOSTAT).

MAP 46: **Milk production (million tonnes, 2011)**



Source: FAO, Statistics Division (FAOSTAT).

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



Source: FAO, Statistics Division (FAOSTAT).

Trends in the fisheries sector

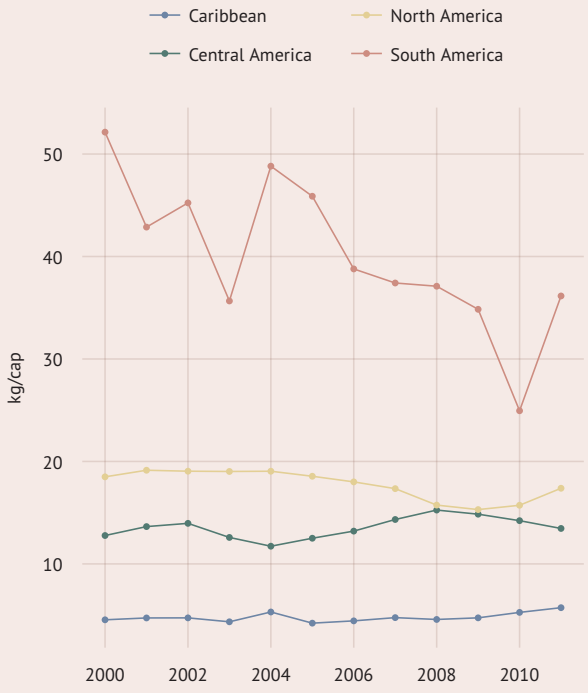
In 2010, Latin America and the Caribbean produced over 11 million tonnes of fish through its capture fisheries, accounting for more than 12 percent of global capture fisheries production. However, between 2000 and 2011, capture fishery production in the region declined by nearly 4.1 percent. Peru, the largest fish producer in the region, saw production decline by 2.3 percent. In Chile, the region's next largest fish producer, production fell by 2.4 percent. In South America, only the Plurinational State of Bolivia, Brazil and Suriname recorded production growth in capture fisheries during this period.

Contrary to the regional trend, the Caribbean subregion showed considerable increases in production (10.1 percent per year), with Saint Kitts and Nevis registering a huge annual percentage growth rate of 37.4 percent. Saint Vincent and the Grenadines, the largest capture fisheries producer in the Caribbean in 2010, had an annual growth rate of nine percent. Of the four Central American countries that showed gains in capture fisheries production between 2000 and 2011, El Salvador recorded the highest annual increase (17.1 percent). Mexico, the third largest fisheries producer in the region saw a 1.5 percent annual increase. Belize and Nicaragua are the only two other Central American countries where capture fisheries production did not decline.

Aquaculture in the region represented a very small share of global production. Between 2000 and 2011, annual production growth was 10.9 percent, above the global rate but less than Africa, Asia and the Pacific and the Near East. Chile, the largest aquaculture producer in the region, had 6 percent annual growth in production. Ecuador, the second largest producer shows 15.8 percent annual growth in production. Mexico, which accounted for more than half the aquaculture production in Central America and ranks third in the region, saw 8.9 percent annual growth in production.

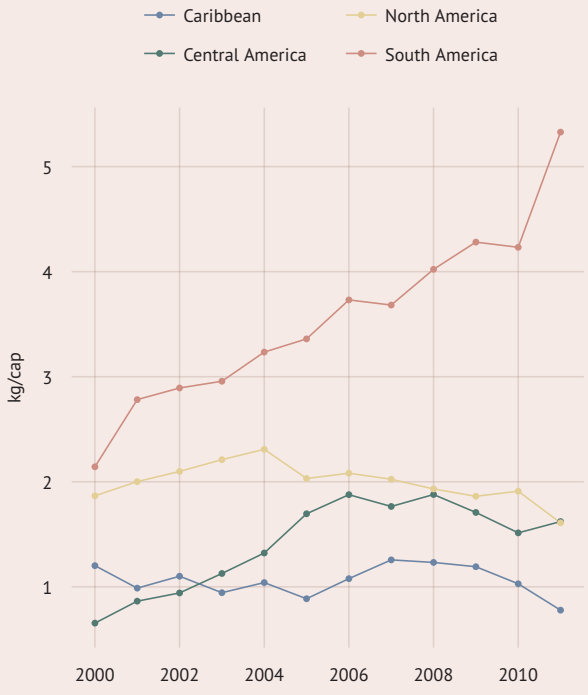
Inland production represents a very small share of total aquaculture production in the region. Brazil accounts for more than half the regional production from inland aquaculture.

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



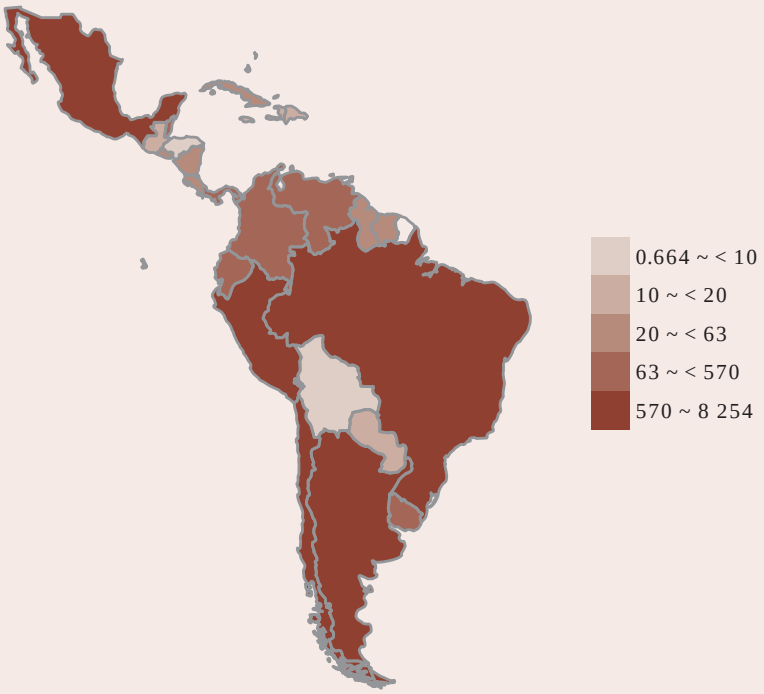
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics) and United Nations Population Division.

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



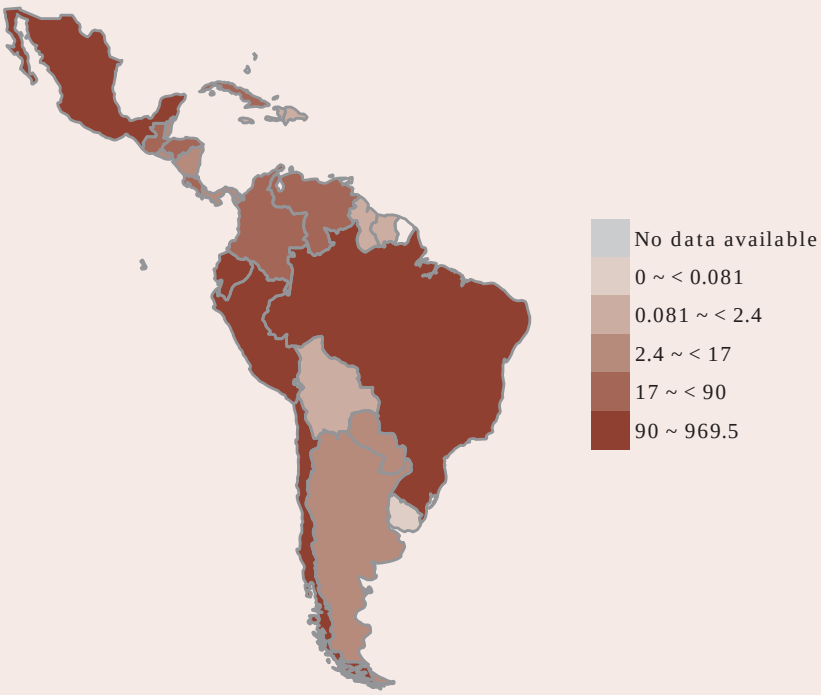
Source: Fisheries and Aquaculture Department (Fishery and Aquaculture statistics) and United Nations Population Division.

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



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

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



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

The drop in marine capture fisheries production in Latin America and the Caribbean reflects declining availability of important fish species. Four pelagic species (anchovy, Chilean herring, Chilean jack mackerel and South American pilchard) accounted for more than half of the total catch between 2001 and 2010. In 2010, the catch for these species was only 57 percent of the volume landed in 2001. In addition, the catch of other species that are important to artisanal fisherfolk declined on average by 18 000 tonnes every year.

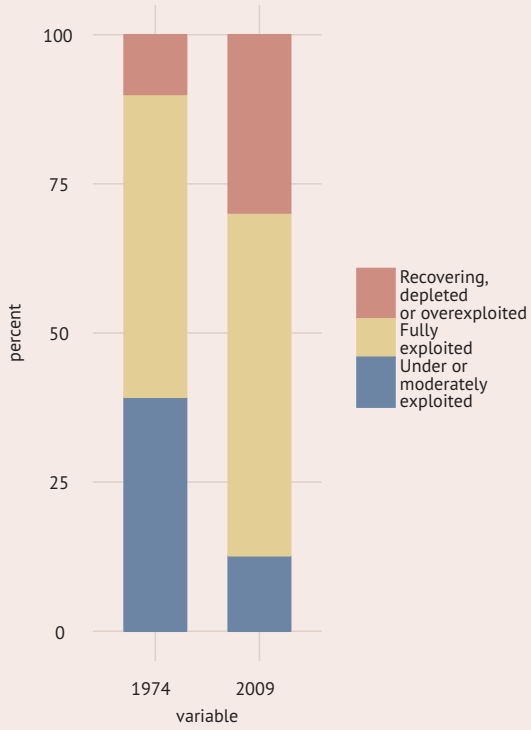
The problem of shrinking marine stocks is not limited to Latin America and the Caribbean. It is a global problem. The proportion of stocks estimated to be under- or moderately exploited declined from 40 percent in the mid-1970s to 12 percent in 2009. In contrast, the proportion of overexploited, depleted or recovering stocks increased from 10 percent in 1974 to 30 percent in 2009. The proportion of fully exploited stocks has remained relatively stable at about 50 to 60 percent since the 1970s. As a whole, these figures indicate that global marine capture production is unlikely to increase, unless effective management plans are put in place to rebuild overfished stocks.

Despite declining marine stocks, it is expected that the global demand for fish products will continue to rise. This demand will largely be met through continued growth in aquaculture, which now represents the fastest-growing, animal-based food production sector. Latin America and the Caribbean is in a position to help meet this global demand and ensure future global supplies of fish products. However, without clear government leadership and improved governance, fish production and, in particular, aquaculture in the region will not achieve its production potential, nor will it bring economic and employment benefits, or strengthen food security.

Further reading

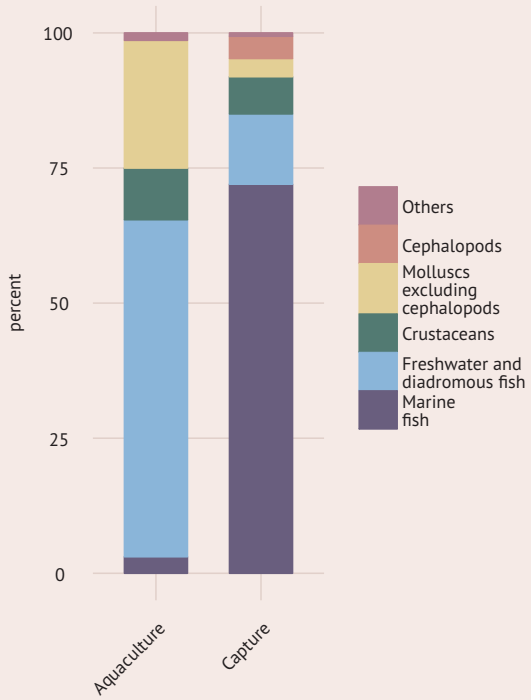
- FAO The State of World Fisheries and Aquaculture (SOFIA) (www.fao.org/fishery/sofia/en)
- FAO Fisheries and Aquaculture Department (www.fao.org/fishery/en)

CHART 78: **State of the world's fishery stocks (1974-2010)**



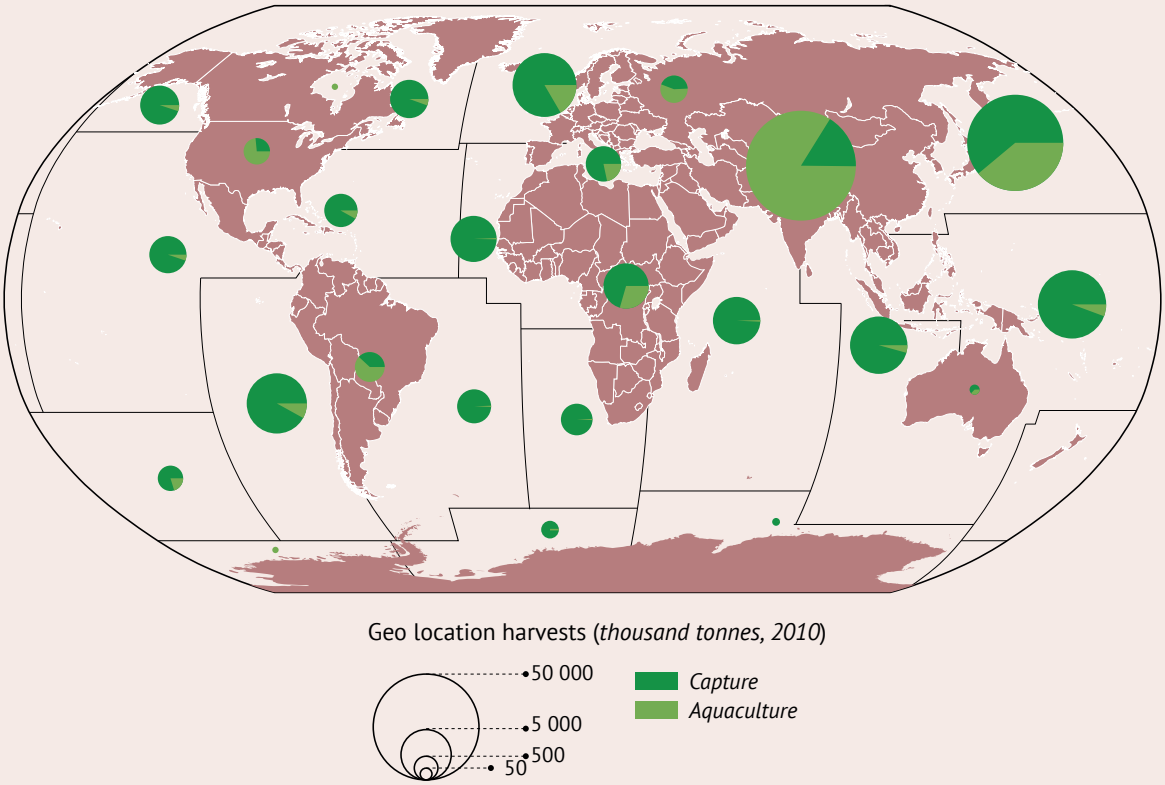
Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

CHART 79: **Composition of fish products (2010)**



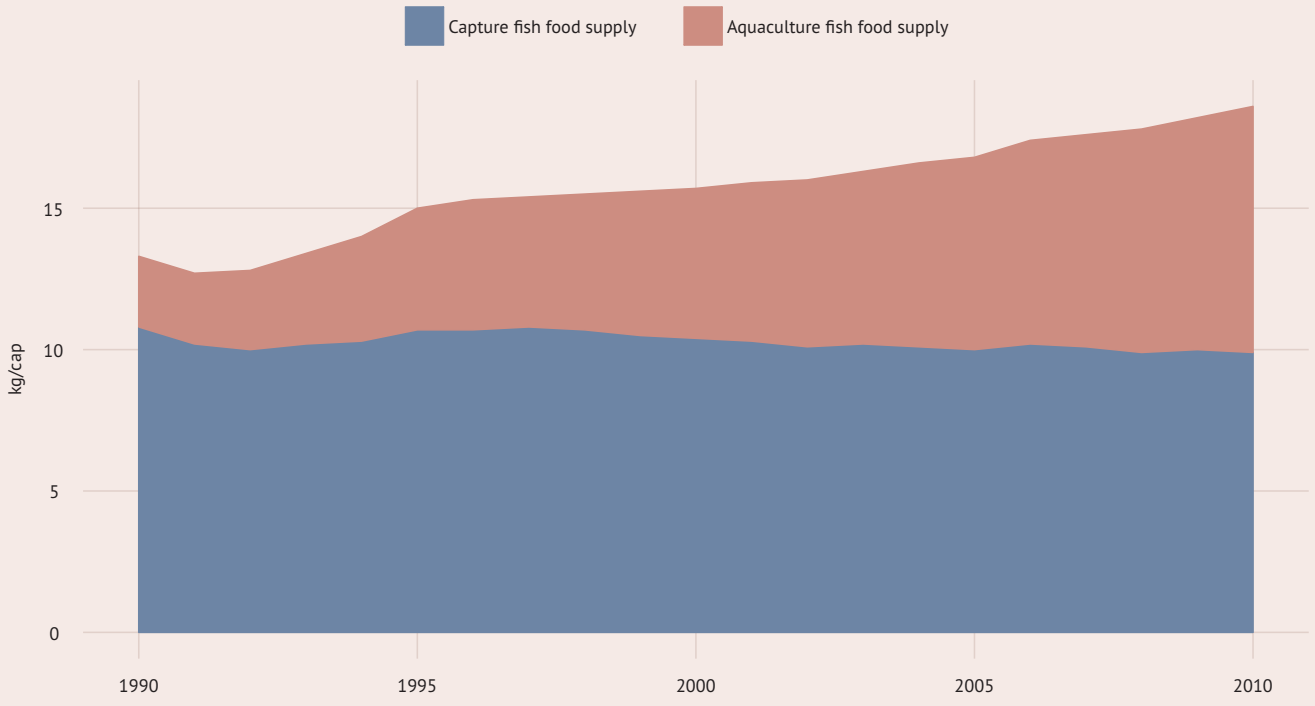
Source: FAO, Fisheries and Aquaculture Department (fishery and aquaculture statistics).

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



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

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



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

Trends in agricultural trade

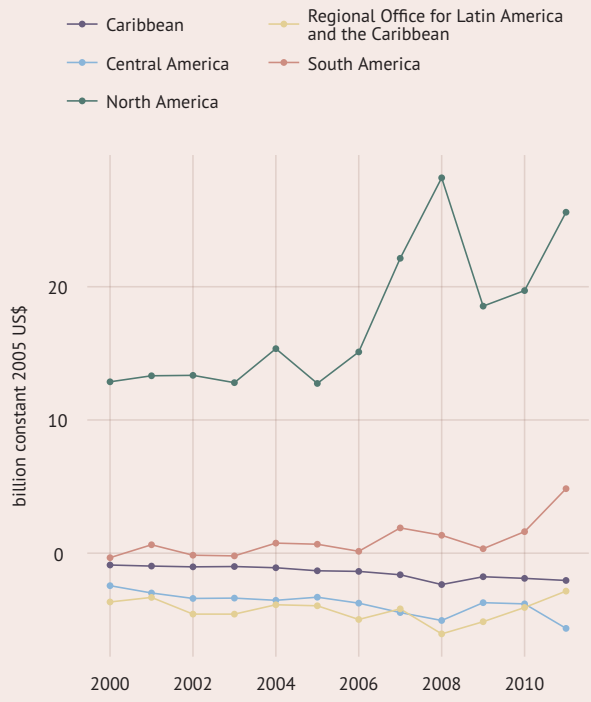
Most of the food consumed worldwide is grown locally. Where there is not enough local production to meet demand, international trade has helped meet food needs. In real terms, the value of international flows in agricultural products has increased about fivefold over the past 50 years, reflecting global trends in the overall volume of trade.

Despite this overall growth in exports, there has been a deterioration in the balance or agricultural and food trade in the region over the last two decades. A comparison of the period between 1995 and 1999 with the five-year period between 2005 and 2009 reveals that the number of net food-importing countries, in terms of both agricultural products and food, has increased from 11 to 16. The number of net food-exporting countries has fallen from nine to six.

As one indicator of agricultural trade, FAOSTAT uses value index numbers that represent the change in the current values of import costs, insurance and freight all expressed in US dollars. For countries that report import values on a free on board basis, these are adjusted to approximate costs, insurance and freight values (by a standard factor of 112 percent).

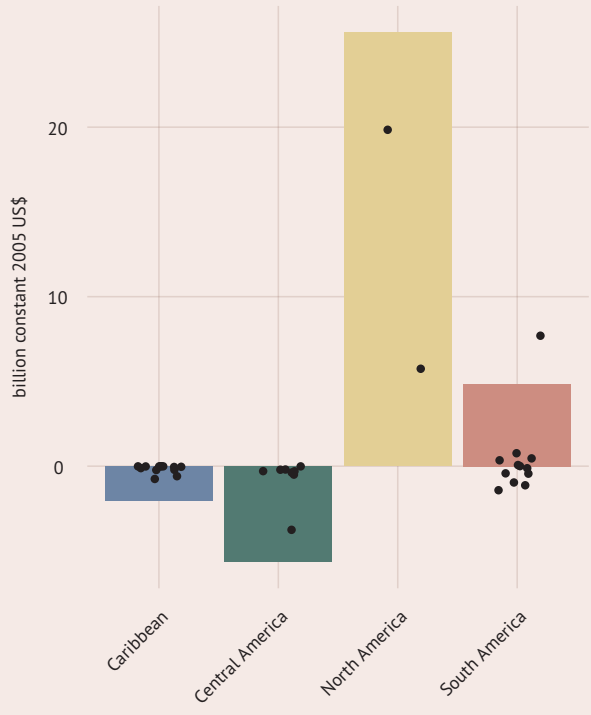
Intraregional agricultural exports account for just 15.9 percent of the region's total agricultural exports, as compared to nearly 60 percent in the European Union and 50 percent in Asia. The main obstacles that prevent countries from maximizing the potential of intraregional trade are non-tariff barriers, the high cost of transport services, inadequate ports and warehouses and general logistical costs.

CHART 81: **Cereal net trade (2000-2011)**



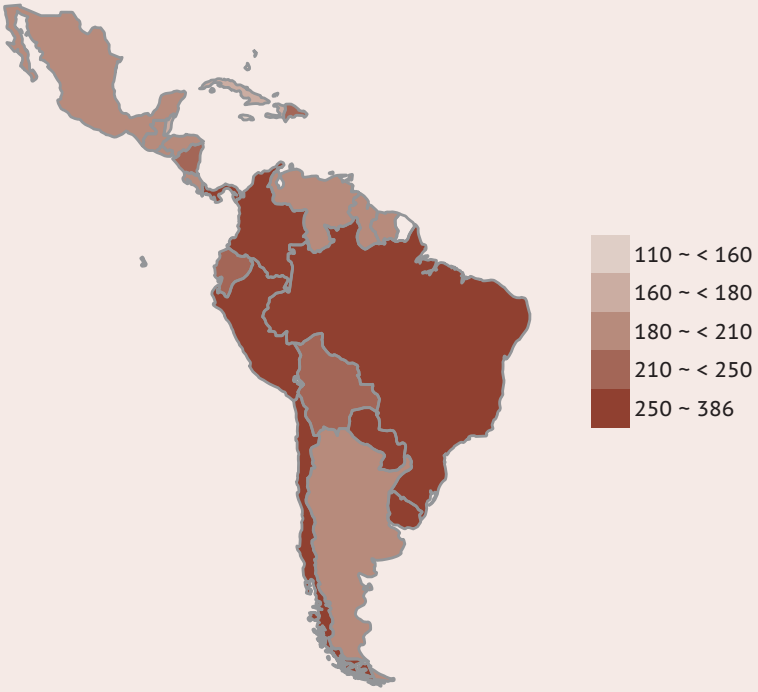
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 82: **Cereal net trade (2011)**



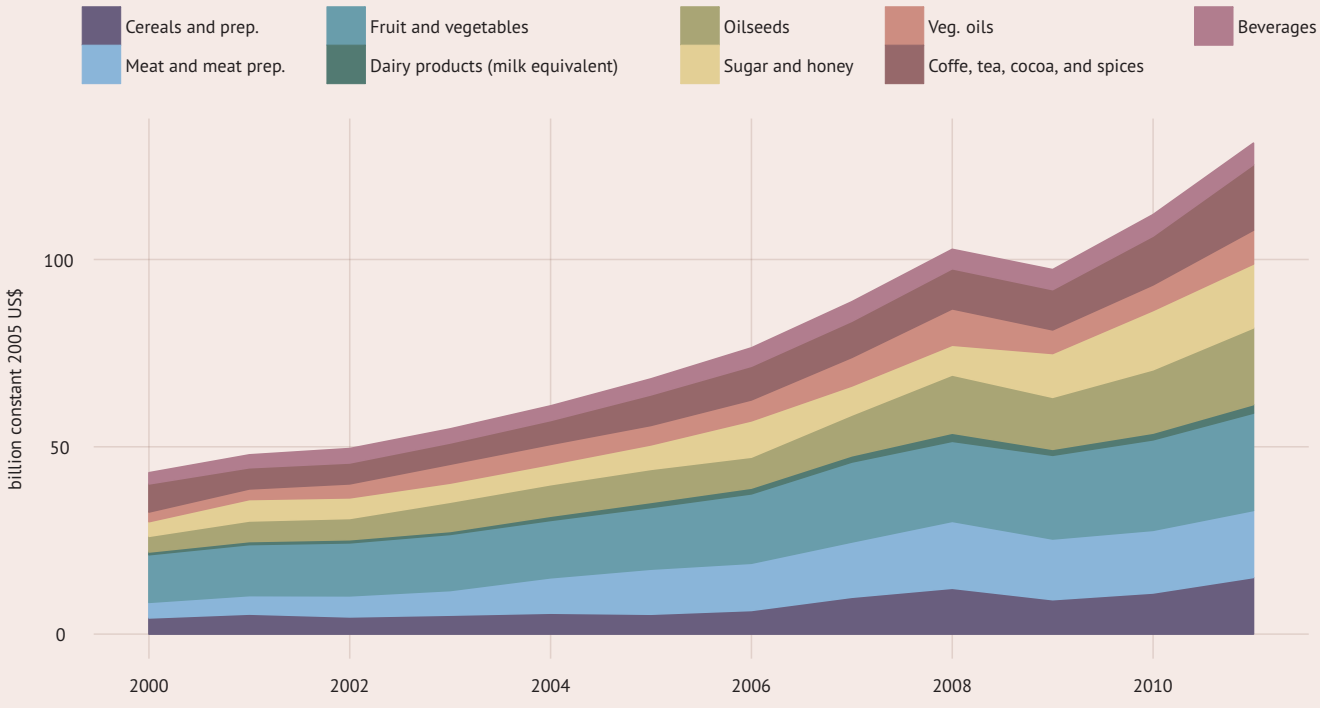
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

MAP 51: **Import value index (index, 2011)**



Source: FAO, Statistics Division (FAOSTAT).

CHART 83: **Latin America composition of global exports (2000-2011)**



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

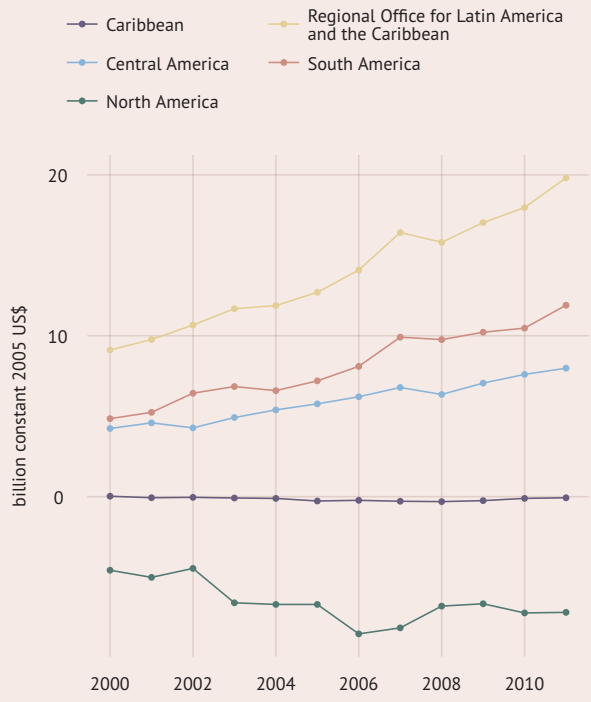
Cereal exports from Latin American and the Caribbean have grown much faster than imports since 2000, to the point where the cereal trade deficit is almost closed. However, there are wide variations within the region. South America, which had a slight cereal trade deficit in 2000, exported almost twice as much cereal as it imported in 2011. The largest cereal exporters in the region are Argentina, Brazil, Paraguay and Uruguay, with exports from these countries account for the bulk of the region's cereal exports.

For fruit and vegetables, as the charts indicate, there has been significant growth in net trade from both Central and South America, while trade has stagnated in the Caribbean. Central America saw significant growth in the export value of their fruit and vegetables, with Mexico's export value by far the highest in the entire region (US$ 8.8 million). Only Belize and Panama registered declines in export value of fruit and vegetables. Panama was the only country in Central America with a trade deficit in terms of the fruits and vegetables.

In South America, only Suriname and the Bolivarian Republic of Venezuela saw declines in the export value of their fruits and vegetables. Chile received the most value for its fruit and vegetable exports (US$ 5.7 million), followed by Brazil (US$ 3.6 million) and Argentina (US$ 3.5 million).

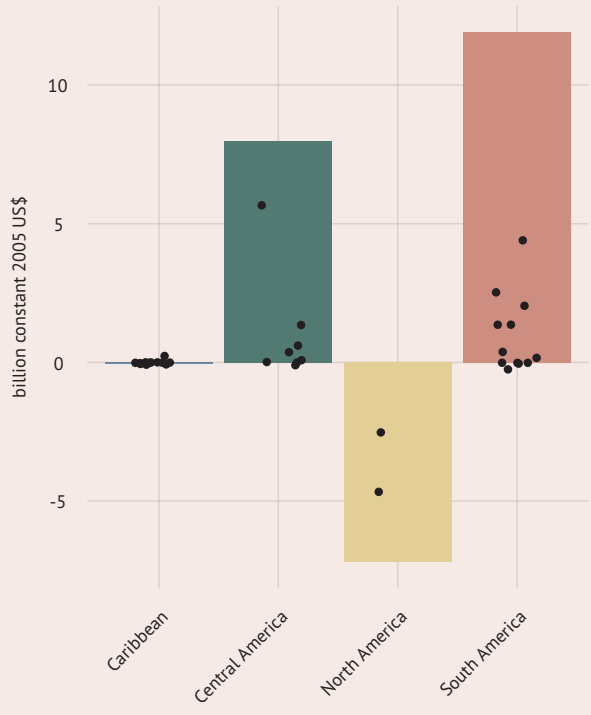
In the Caribbean, most countries registered sharp declines in the export values of fruit and vegetables. The Dominican Republic, which increased its export values for fruits and vegetables from US$ 9 740 000 in 2000 to over US$ 418 791 000 in 2011, recorded the highest values of the subregion and was the only Caribbean country to have a net trade surplus in the value of fruits and vegetables. Barbados, Haiti, Jamaica and Trinidad and Tobago were the only other Caribbean countries that recorded growth in the export values of fruits and vegetables, although they remained net importers.

CHART 84: **Fruit and vegetables net trade (2000-2011)**



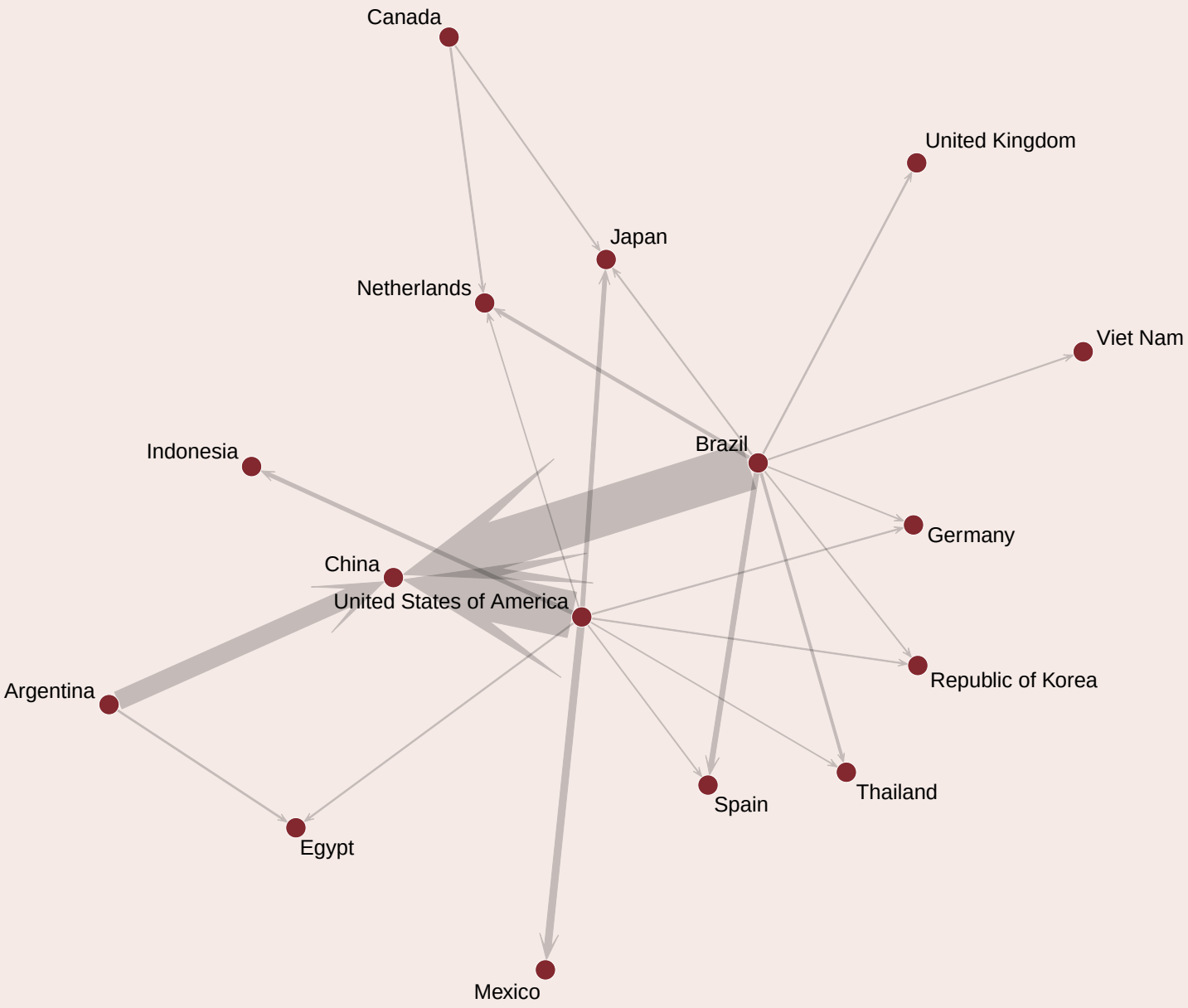
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 85: **Fruit and vegetables net trade (2011)**



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

CHART 86: **Major export flows of soybeans from American countries (US$, 2011)**



Ten largest export flows of soybeans

Exporting country	Importing country	Million US$
Brazil	China	11439.38
United States of America	China	11155.71
Argentina	China	4396.01
United States of America	Mexico	1650.66
Brazil	Spain	1192.92
United States of America	Japan	954.27
United States of America	Indonesia	858.58
Brazil	Netherlands	710.25
Brazil	Thailand	577.80
Argentina	Egypt	368.78

Source: FAO, Statistics Division (FAOSTAT).

The flows cover ninety of the exports of soybeans from American countries.

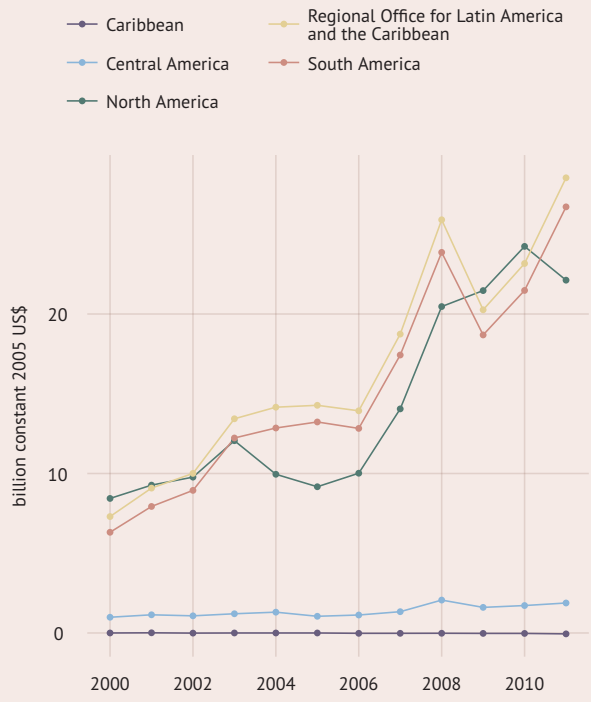
The fall in the value of crop exports during 2012 is partly due to a 20 percent reduction in coffee exports, primarily from Brazil and Colombia, and of oilseeds from Argentina and Paraguay. On the other hand, a severe drought in the United States in 2012 caused a 38 percent reduction of its maize exports. Several countries in the region used this opportunity to increase corn exports. For example, Brazil exported nearly 20 million tonnes of maize that year, nearly doubling its exports compared with 2011, while Argentina exported a little over 16 million tonnes. This marked the first time Brazil's maize exports were higher than Argentina's.

The growing share of international agricultural markets held by countries of South America's Southern Cone is due to the enormous growth in soybean production and exports between 1995 and 2011. During that period, soybean production increased by 198 percent in Brazil and by 287 percent in Argentina, and soybean exports increased by 329 percent in Brazil and 980 percent in Argentina. Brazil and Argentina now lead world exports of soy-based products (beans, oil and meat), accounting for 51 percent of the global total. Paraguay and Uruguay also saw significant increases in their soybean exports. The explosive growth in soybean trade has been driven by intense demand from China, which is by far the largest importer of soybeans from South America. It is expected that as China's population grows, the country will become an even more important trading partner for countries in the region.

Further reading

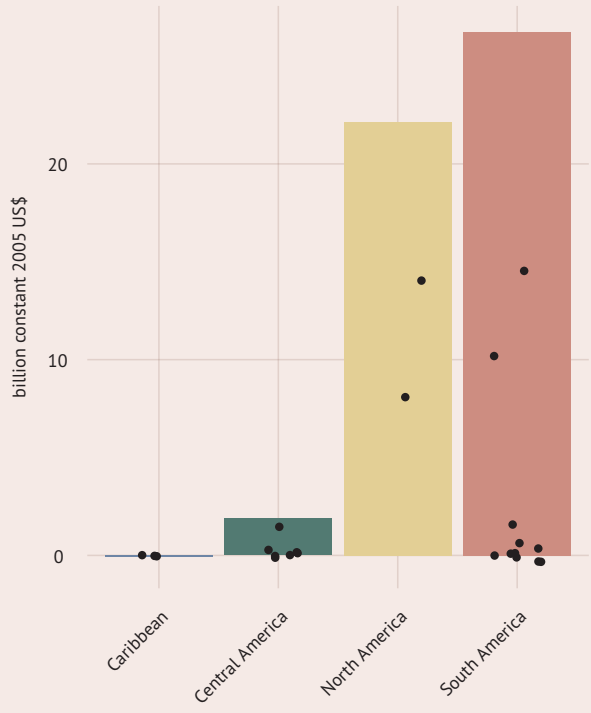
- FAO Trade and Markets Division (www.fao.org/economic/est/)

CHART 87: **Animal fats, oilseeds and veg. oils net trade (2000-2011)**



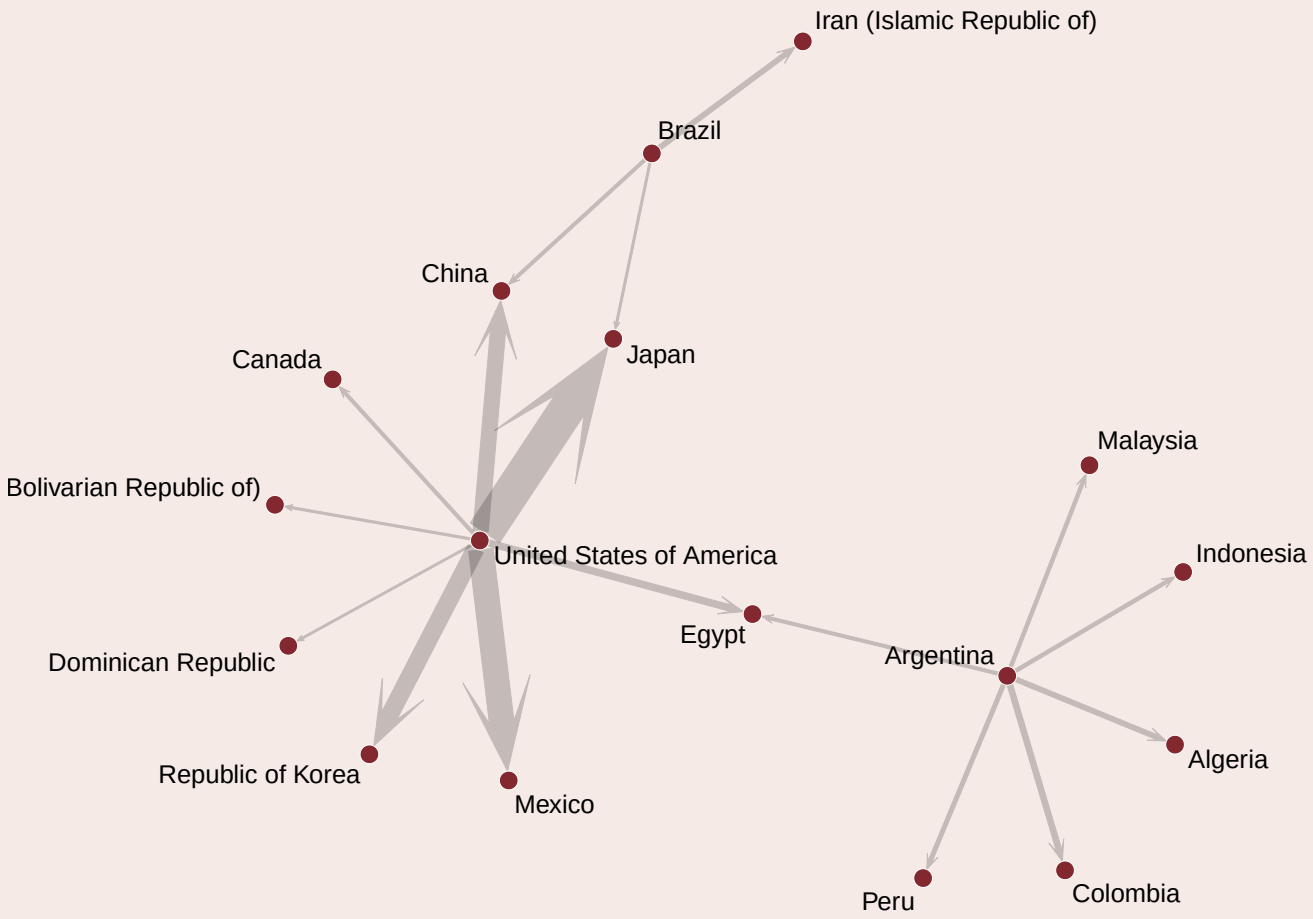
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 88: **Animal fats, oilseeds and veg. oils net trade (2011)**



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

CHART 89: **Major export flows of maize from American countries (US$, 2011)**



Ten largest export flows of maize

Exporting country	Importing country	Million US$
United States of America	Japan	3831.68
United States of America	Mexico	2685.88
United States of America	Republic of Korea	1846.54
United States of America	China	1657.24
United States of America	Egypt	707.24
Argentina	Colombia	610.28
Brazil	Iran (Islamic Republic of)	525.83
Argentina	Algeria	522.41
Argentina	Peru	440.31
Argentina	Indonesia	385.10

Source: FAO, Statistics Division (FAOSTAT).

The flows cover seventy of the exports of maize from American countries.

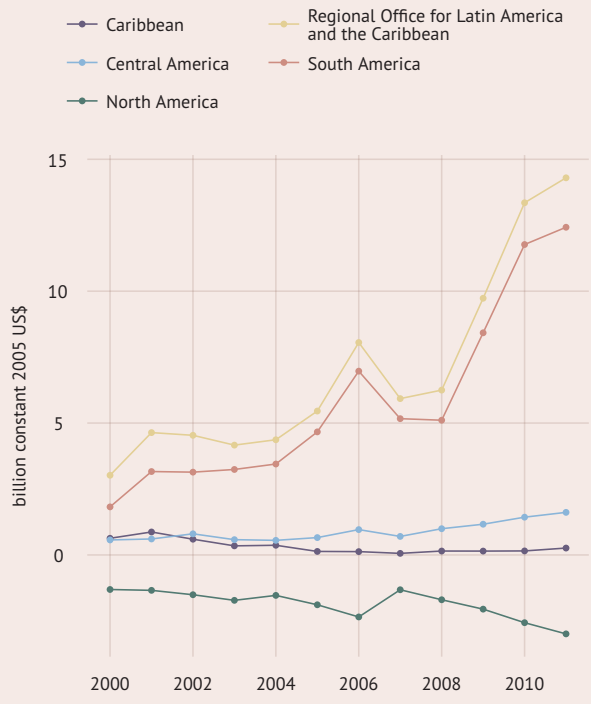
The region is a net exporter of sugar and honey, with exports in these products more than doubling between 2000 and 2011. This growth is due to the tremendous increase in exports from Brazil, which went from exporting 6.5 million tonnes of sugar in 2000 to 25.5 million tons in 2011, becoming by far the world's largest sugar exporter. In 2000, Cuba was the second largest sugar exporter in the region, exporting 3.5 million tonnes, but in 2011 sugar exports fell to 648 thousand tons. Mexico, Guatemala and Colombia are now the top sugar exporters after Brazil.

The region as a whole has become a net exporter of meat products. Since 2000, beef exports have more than doubled, pork exports have almost tripled and poultry meat exports have nearly quintupled. Most of these exports come from the countries of South America. Brazil is now the largest exporter of poultry meat in the world, accounting for almost a third of the global trade volume, slightly greater than the United States of America. Argentina, Paraguay and Uruguay are also net exporters of meat products. In all other countries in the region, import of meat products exceeds exports. In Central America, this trade deficit in meat products is increasing. Costa Rica and Nicaragua are the only two countries in the subregion that export more meat products than they import. In the Caribbean, which exports very little meat products, meat imports have risen by over 100 percent.

Demand for milk products has also increased in the region and their imports represent about 15 percent of the global imports of whole and skim milk powder. Although the region as a whole remains a net importer of milk products, the trade deficit is declining. Exports have declined in the Caribbean, but have increased significantly in Central and South America. Nicaragua has reduced its milk imports by more than half and has increased exports to the point where it is has become a net exporter. Costa Rica and Mexico are the other net exporters of milk in Central America. Between 2000 and 2011, South America, transformed itself from a net importer of milk to a net exporter. Argentina, which accounted for more than half the region's milk exports in 2011, saw its exports more than double.

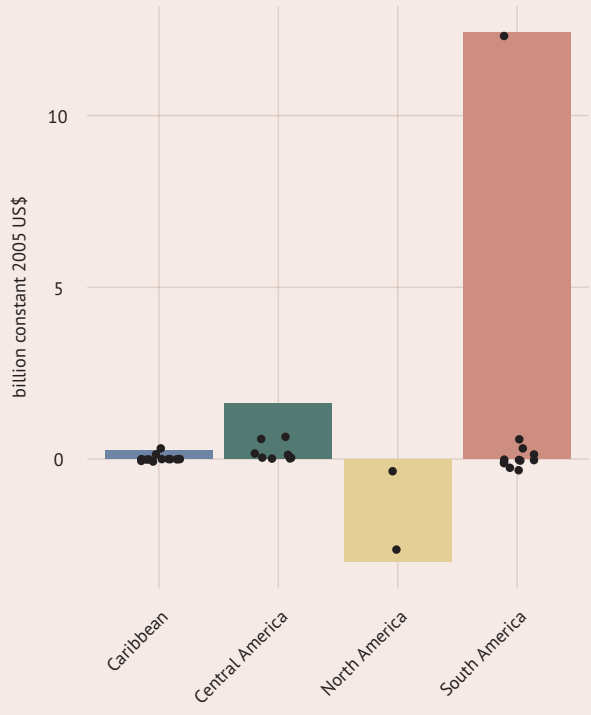
Global trade in fish continues to grow. Trade from Latin America and the Caribbean represents about 12 percent of the trade value and about 17 percent of the volume. The region is a net exporter of fish products, and these revenues are an important part of local trade balances. Chile, followed by Peru and Ecuador, is the largest exporter of fish products, although trade volumes declined in 2009 and 2010.

CHART 90: **Sugar and honey net trade (2000-2011)**



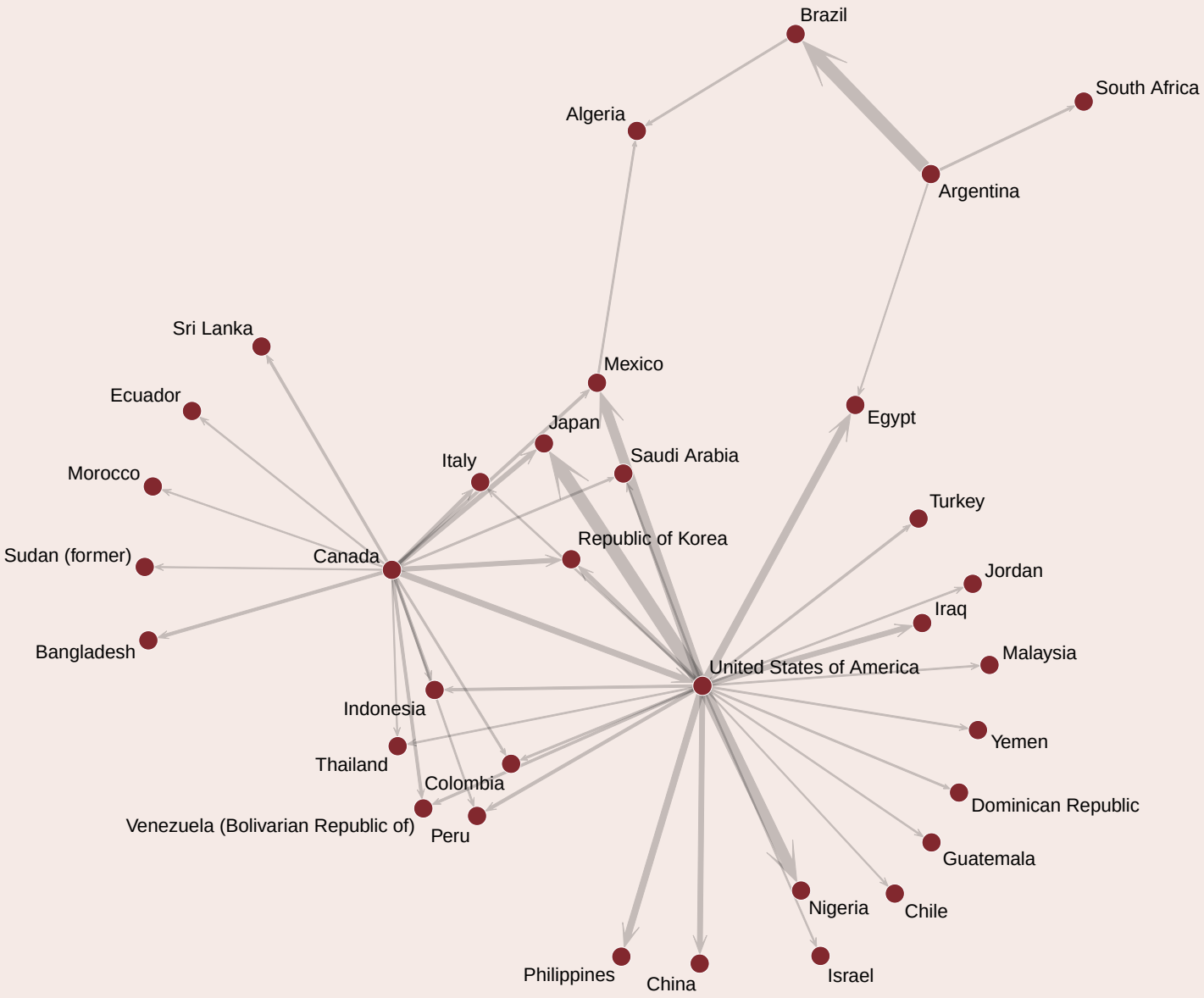
Source: FAO, Statistics Division (FAOSTAT) and World Bank.

CHART 91: **Sugar and honey net trade (2011)**



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

MAP 52: **Major export flows of wheat from American countries (US$, 2011)**



Ten largest export flows of wheat

Exporting country	Importing country	Million US$
Argentina	Brazil	1397.67
United States of America	Japan	1385.86
United States of America	Nigeria	1186.84
United States of America	Mexico	1034.99
United States of America	Egypt	808.06
United States of America	Philippines	705.11
Canada	United States of America	632.64
United States of America	China	558.52
United States of America	Iraq	529.82
Canada	Republic of Korea	481.16

Source: FAO, Statistics Division (FAOSTAT).

The flows cover eighty of the exports of wheat from American countries.

TABLE 20: **Cereal producers and their productivity**

	Cereals							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	70 118.1	−0.8	61.9	1.6	447 320.5	434 026.7	0.7	0.9
Canada	13 385.1	−2.8	35.3	2.1	45 650.5	47 210.7	−1.1	−0.7
United States of America	56 733.0	−0.3	68.2	1.4	401 670.0	386 816.0	0.9	1.1
Regional Office for Latin America and the Caribbean	50 741.7	0.7	38.0	2.5	193 900.4	193 029.1	3.7	3.5
Caribbean	1 176.2	2.1	20.8	4.8	2 250.7	2 445.2	3.0	2.5
Antigua and Barbuda	0.0	3.8	20.0	2.0	0.1	0.1	−0.4	5.9
Bahamas	0.1	−4.7	73.1	12.8	0.7	0.7	−8.4	7.4
Barbados	0.1	−2.2	34.4	2.6	0.3	0.3	−18.4	0.3
Cuba	351.5	0.7	26.2	0.3	779.1	920.7	4.4	1.0
Dominica	0.1	−5.3	22.9	−0.2	0.2	0.2	8.5	−5.5
Dominican Republic	198.1	2.7	46.1	1.0	888.3	912.4	2.3	3.7
Grenada	0.3	3.4	10.3	−3.8	0.3	0.4	3.8	−0.5
Haiti	622.0	2.7	9.7	0.3	573.1	601.0	1.8	3.1
Jamaica	2.2	3.2	13.5	1.5	2.6	3.0	−2.9	4.7
Saint Kitts and Nevis								
Saint Lucia	0.0				0.0	0.0		
Saint Vincent and the Grenadines	0.0	−4.2	276.4	5.7	0.6	0.7	−13.3	1.3
Trinidad and Tobago	1.7	−3.5	34.2	1.8	5.5	5.9	−8.1	−1.8
Latin America	49 569.4	0.6	38.4	2.0	191 659.2	190 593.5	3.7	3.5
Central America	11 367.3	−0.6	29.6	0.9	39 856.7	33 603.8	0.8	0.5
Belize	33.2	4.8	28.2	1.4	89.7	93.4	4.8	6.3
Costa Rica	89.3	1.2	33.3	−0.8	286.5	297.5	−0.1	0.4
El Salvador	370.8	0.2	24.9	1.3	909.1	923.9	−0.6	1.6
Guatemala	884.7	2.8	19.9	1.1	1 723.6	1 760.3	−2.1	3.9
Honduras	559.1	2.1	12.0	−1.2	589.2	670.0	−1.2	0.9
Mexico	8 765.7	−1.3	32.4	1.5	34 922.5	28 405.9	0.9	0.1
Nicaragua	510.5	0.9	21.6	2.3	969.7	1 102.0	4.9	3.2
Panama	154.0	0.3	22.8	1.0	366.3	350.8	−1.3	1.3
South America	38 198.2	1.0	41.1	2.5	151 792.9	156 980.0	4.7	4.1
Argentina	10 904.4	−0.3	44.6	2.4	47 149.0	48 685.3	6.8	2.1
Bolivia (Plurinational State of)	941.5	2.0	23.7	3.4	1 848.9	2 227.0	4.6	5.4
Brazil	19 216.5	1.0	40.4	3.9	75 161.3	77 586.5	3.5	4.9
Chile	570.2	−0.4	69.3	4.3	3 588.5	3 950.3	−1.4	3.9
Colombia	1 015.6	−0.9	37.3	0.2	3 563.6	3 783.5	−0.6	−0.7
Ecuador	727.5	−1.4	32.8	3.6	2 654.2	2 387.9	3.3	2.1
Guyana	134.6	1.1	44.3	1.4	561.2	595.9	11.1	2.5
Paraguay	1 541.6	9.9	34.8	5.9	4 975.6	5 364.7	2.6	16.5
Peru	1 187.2	0.3	38.9	2.1	4 868.1	4 617.2	7.2	2.4
Suriname	56.9	2.8	41.3	0.5	226.7	235.3	−1.8	3.4
Uruguay	764.9	4.5	45.9	1.5	3 348.9	3 514.5	5.1	6.0
Venezuela (Bolivarian Republic of)	1 137.3	2.1	35.5	0.8	3 847.0	4 031.9	4.6	2.9
Regional Office for Africa	98 310.9	2.8	12.9	1.5	130 260.3	126 825.1	2.3	4.2
Regional Office for Asia and the Pacific	375 106.3	0.5	36.4	2.1	1 268 915.1	1 365 849.7	1.5	2.5
Regional Office for Europe and Central Asia	151 096.4	0.0	36.0	2.9	466 580.0	543 366.9		2.4
Regional Office for the Near East	38 551.9	2.3	19.4	10.3	70 082.6	74 896.0	1.1	5.4
World	707 328.2	0.6	36.6	5.0	2 474 121.9	2 589 143.3		2.4

TABLE 21: **Coarse grain producers and their productivity**

	Coarse grains							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	42 019.1	0.3	82.3	2.1	353 064.2	345 963.2	1.6	2.0
Canada	4 841.5	−3.8	45.3	3.6	22 483.7	21 949.3	−0.1	−0.4
United States of America	37 177.6	0.8	87.2	1.3	330 580.5	324 013.9	1.7	2.1
Regional Office for Latin America and the Caribbean	35 959.6	0.9	37.7	2.9	137 614.2	135 733.0	4.4	3.1
Caribbean	740.5	3.1	12.0	6.0	826.0	886.4	7.8	4.2
Antigua and Barbuda	0.0	3.8	20.0	1.8	0.1	0.1	−0.4	5.6
Bahamas	0.1	−4.9	73.1	14.2	0.7	0.7	−8.4	8.6
Barbados	0.1	−0.6	34.4	2.8	0.3	0.3	−18.4	2.2
Cuba	143.5	1.1	24.7	0.6	324.7	354.3	15.3	1.7
Dominica	0.1	−5.8	22.9	−0.6	0.2	0.2	8.5	−6.3
Dominican Republic	23.4	−3.0	16.1	0.4	38.1	37.7	−7.2	−2.6
Grenada	0.3	3.9	10.3	−4.6	0.3	0.4	3.8	−0.9
Haiti	570.0	3.9	8.5	2.4	455.6	486.0	2.7	6.5
Jamaica	2.1	2.2	12.7	0.5	2.4	2.7	−2.0	2.7
Saint Kitts and Nevis								
Saint Lucia	0.0				0.0	0.0		
Saint Vincent and the Grenadines	0.0	−3.3	276.4	6.8	0.6	0.7	−13.3	3.3
Trinidad and Tobago	0.9	2.2	39.3	4.3	3.2	3.4	−11.7	6.6
Latin America	35 219.2	0.8	38.3	2.6	136 788.3	134 846.7	4.4	3.1
Central America	10 350.7	−1.3	27.7	1.1	34 836.2	28 632.0	1.1	−0.6
Belize	28.8	7.1	25.8	−1.9	69.2	74.3	4.2	5.1
Costa Rica	8.2	0.7	22.5	3.1	18.8	18.5	−12.3	3.8
El Salvador	366.1	−0.7	24.5	2.9	874.6	898.3	−0.4	2.2
Guatemala	869.9	3.2	19.8	1.0	1 682.9	1 720.9	−2.0	4.2
Honduras	546.0	2.9	11.4	−2.3	553.7	620.0	−0.6	0.5
Mexico	8 069.4	−2.3	30.5	1.2	31 029.1	24 604.9	1.3	−1.1
Nicaragua	413.5	1.3	14.8	0.5	515.8	614.0	3.0	1.9
Panama	48.7	−2.7	16.6	2.8	92.3	80.9	−2.4	−0.0
South America	24 868.4	1.7	42.7	3.2	101 952.0	106 214.7	5.9	4.1
Argentina	6 152.7	4.0	53.4	1.2	30 030.1	32 843.5	9.6	5.3
Bolivia (Plurinational State of)	575.7	1.8	26.2	3.7	1 144.1	1 505.9	4.8	5.5
Brazil	14 324.6	0.8	40.8	2.2	57 754.1	58 419.4	4.2	3.0
Chile	273.7	3.8	82.0	2.6	1 969.9	2 244.2	−1.6	6.5
Colombia	495.6	−2.5	35.1	5.1	1 536.6	1 737.8	−4.3	2.4
Ecuador	391.1	−2.3	23.1	11.8	940.4	904.0	2.4	9.2
Guyana	3.4	7.8	14.4	1.3	5.0	4.9	2.5	9.2
Paraguay	878.6	7.2	39.8	5.8	3 258.4	3 495.4	4.6	13.4
Peru	682.1	−0.3	26.1	1.9	1 817.3	1 779.0	7.4	1.5
Suriname	0.0	−9.0	22.9	1.6	0.0	0.0	−17.5	−7.5
Uruguay	203.9	−1.4	32.9	3.6	899.4	671.5	−1.2	2.1
Venezuela (Bolivarian Republic of)	887.0	1.2	29.4	−0.2	2 596.8	2 609.0	5.1	1.0
Regional Office for Africa	85 191.7	2.6	11.8	1.8	102 648.1	100 196.3	2.5	3.9
Regional Office for Asia and the Pacific	103 968.3	0.5	33.6	2.9	315 063.1	349 338.4	0.6	4.0
Regional Office for Europe and Central Asia	65 345.5	−1.3	39.2	3.6	215 550.4	255 874.5		1.0
Regional Office for the Near East	19 837.5	1.1	12.9	5.7	25 377.4	25 687.2	1.1	2.2
World	323 285.8	0.9	36.0	3.3	1 121 167.5	1 165 188.4		2.8

TABLE 22: **Rice producers and their productivity**

	Rice							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	1 059.1	−1.3	79.2	1.1	11 027.0	8 388.8	2.0	−0.3
Canada								
United States of America	1 059.1	−1.3	79.2	1.1	11 027.0	8 388.8	2.0	−0.3
Regional Office for Latin America and the Caribbean	5 909.4	−0.3	49.3	2.4	25 828.5	29 156.0	4.6	2.4
Caribbean	435.7	1.5	35.8	3.7	1 424.8	1 558.8	2.1	2.1
Antigua and Barbuda								
Bahamas								
Barbados								
Cuba	208.0	0.4	27.2	−0.1	454.4	566.4	1.6	0.2
Dominica								
Dominican Republic	174.7	3.5	50.1	0.3	850.2	874.7	3.1	3.8
Grenada								
Haiti	52.0	0.0	22.1	−1.1	117.6	115.0	0.0	−1.1
Jamaica	0.1	13.9	43.1	15.0	0.3	0.2	−25.2	31.0
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago	0.9	−7.9	28.9	−0.1	2.3	2.5	−7.4	−8.0
Latin America	5 477.6	−0.4	50.4	1.9	24 413.2	27 606.8	4.7	2.4
Central America	346.7	0.5	38.5	2.3	1 334.1	1 334.2	2.0	2.1
Belize	4.4	1.8	43.3	4.3	20.5	19.1	7.9	6.2
Costa Rica	81.1	1.6	34.4	−1.1	267.8	279.0	2.0	0.4
El Salvador	4.7	−4.9	54.8	−0.5	34.5	25.6	−2.6	−5.4
Guatemala	9.8	−3.6	31.0	0.1	32.0	30.4	0.2	−3.6
Honduras	10.4	11.4	46.9	6.7	34.6	48.9	−16.5	18.9
Mexico	34.0	−7.9	51.0	1.8	216.7	173.5	−1.1	−6.2
Nicaragua	97.0	0.4	50.3	4.4	454.0	488.0	9.1	4.9
Panama	105.2	1.9	25.6	0.5	274.0	269.9	−0.7	2.4
South America	5 127.0	−0.5	51.2	1.7	23 069.7	26 262.9	4.9	2.4
Argentina	257.4	2.8	67.9	3.2	1 243.3	1 748.1	7.8	6.2
Bolivia (Plurinational State of)	176.0	1.1	26.8	3.1	449.5	471.5	3.5	4.2
Brazil	2 752.9	−2.5	49.0	4.4	11 236.0	13 477.0	4.1	1.8
Chile	25.1	−0.2	51.9	−0.1	94.7	130.4	−0.1	−0.3
Colombia	513.7	0.8	39.6	−3.3	2 011.9	2 033.9	2.4	−2.5
Ecuador	330.0	−0.2	44.8	1.8	1 706.2	1 477.9	4.0	1.6
Guyana	131.2	1.1	45.1	1.4	556.2	591.0	11.2	2.5
Paraguay	78.6	10.5	51.9	2.8	315.2	408.2	1.7	13.5
Peru	359.6	2.1	73.0	0.9	2 831.4	2 624.0	7.0	3.0
Suriname	56.9	2.8	41.3	0.5	226.7	235.3	−1.8	3.4
Uruguay	196.0	0.3	83.8	2.5	1 148.7	1 643.0	13.3	2.8
Venezuela (Bolivarian Republic of)	249.6	5.5	57.0	1.4	1 250.0	1 422.6	3.2	7.0
Regional Office for Africa	10 222.6	4.5	19.9	2.3	21 533.4	20 368.4	2.6	6.1
Regional Office for Asia and the Pacific	144 342.4	0.5	45.2	2.1	632 301.3	652 582.7		1.8
Regional Office for Europe and Central Asia								
Regional Office for the Near East								
World								

TABLE 23: **Wheat producers and their productivity**

	Wheat							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America								
Canada	8 543.6	−2.2	29.6	1.7	23 166.8	25 261.4	−1.9	−0.4
United States of America	18 496.4	−1.3	29.4	0.4	60 062.4	54 413.3	−2.0	−1.0
Regional Office for Latin America and the Caribbean								
Caribbean								
Antigua and Barbuda								
Bahamas								
Barbados								
Cuba								
Dominica								
Dominican Republic								
Grenada								
Haiti								
Jamaica								
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago								
Latin America								
Central America								
Belize								
Costa Rica								
El Salvador								
Guatemala	5.0	0.9	18.0	−1.4	8.8	9.0	−11.4	−0.5
Honduras	2.7	2.8	4.0	−0.0	0.9	1.1	0.7	2.8
Mexico	662.2	−0.6	54.8	1.0	3 676.7	3 627.5	−1.2	0.3
Nicaragua								
Panama								
South America								
Argentina	4 494.3	−3.3	31.4	2.1	15 875.7	14 093.7	3.9	−1.2
Bolivia (Plurinational State of)	189.7	4.3	13.2	4.1	255.4	249.7	6.4	8.5
Brazil	2 138.9	6.5	26.6	5.0	6 171.2	5 690.0	−6.0	11.8
Chile	271.4	−3.3	58.1	3.9	1 523.9	1 575.8	−1.4	0.5
Colombia	6.3	−11.1	18.7	1.4	15.1	11.8	−9.9	−9.9
Ecuador	6.4	−10.2	9.2	3.7	7.6	5.9	−8.0	−6.8
Guyana								
Paraguay	584.4	12.5	25.0	5.5	1 402.0	1 461.0	−1.6	18.8
Peru	145.5	−0.1	14.7	1.3	219.5	214.1	7.8	1.2
Suriname								
Uruguay	365.0	10.0	32.9	2.4	1 300.7	1 200.0	−2.5	12.6
Venezuela (Bolivarian Republic of)	0.7	−5.6	3.2	−1.3	0.2	0.2	5.2	−6.8
Regional Office for Africa								
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia	84 730.8	0.9	33.2	2.2	245 028.8	281 512.1		2.7
Regional Office for the Near East	17 555.0	2.2	23.2	2.5	36 998.6	40 794.5	0.4	6.6
World								

TABLE 24: **Oilcrop producers and their productivity**

	Oilcrops							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	44 712.8	0.3	5.3	1.7	24 735.7	23 475.5	4.1	1.9
Canada	9 430.6	3.0	6.7	2.2	5 880.5	6 330.5	6.5	5.3
United States of America	35 282.2	−0.5	4.9	1.1	18 855.2	17 145.0	3.5	0.6
Regional Office for Latin America and the Caribbean	55 340.8	5.3	5.7	2.7	29 614.2	31 404.5	4.9	6.7
Caribbean	181.3	−1.0	7.7	2.4	132.6	139.4	2.9	2.9
Antigua and Barbuda	0.6	−0.7	0.2	0.5	0.0	0.0	−4.3	−0.2
Bahamas	0.3		10.2		0.3	0.3		
Barbados	0.6	0.2	4.5	1.1	0.3	0.3	−0.1	1.3
Cuba	23.4	−5.1	4.3	1.7	11.1	10.1	7.9	−3.5
Dominica	2.2	−4.9	4.3	0.9	1.2	0.9	0.1	−4.1
Dominican Republic	44.2	−0.9	15.8	4.5	63.6	69.9	1.9	3.5
Grenada	1.9	−3.0	4.3	1.8	0.8	0.8	−0.5	−1.3
Haiti	49.2	−0.8	2.9	2.1	12.5	14.0	−3.6	1.3
Jamaica	52.4	1.1	7.3	3.6	38.3	38.5	8.0	4.8
Saint Kitts and Nevis	0.3	0.1	6.1	1.0	0.2	0.2	−3.7	1.1
Saint Lucia	3.0	−1.4	6.5	2.0	1.8	1.9	−7.3	0.6
Saint Vincent and the Grenadines	0.8	−0.0	4.3	0.0	0.3	0.3	−18.4	−0.0
Trinidad and Tobago	2.4	−5.0	8.8	1.9	2.2	2.1	−5.3	−3.2
Latin America	55 159.5	5.3	5.7	2.8	29 481.6	31 265.1	4.9	6.7
Central America	1 129.0	3.0	13.2	2.9	1 310.9	1 489.5	2.6	7.4
Belize	0.6	0.7	4.0	−1.3	0.2	0.2	−11.2	−0.6
Costa Rica	65.3	3.6	40.1	1.5	246.1	262.0	6.1	5.2
El Salvador	16.1	−2.1	7.2	0.4	11.4	11.7	−2.3	−1.8
Guatemala	115.9	1.8	30.4	9.6	265.4	351.8	10.0	11.6
Honduras	115.4	10.1	31.8	1.3	317.1	366.7	2.1	11.5
Mexico	750.8	2.2	5.4	0.1	379.8	409.0	−2.6	2.4
Nicaragua	54.8	2.6	13.6	2.6	72.4	74.3	7.4	5.3
Panama	10.2	−0.1	13.5	−0.4	18.3	13.7	18.8	−0.5
South America	54 030.4	5.4	5.5	2.7	28 170.7	29 775.6	5.0	6.7
Argentina	21 671.9	4.9	4.9	−0.0	10 719.6	10 683.3	5.0	4.9
Bolivia (Plurinational State of)	1 300.8	4.0	3.8	1.6	486.8	491.6	17.9	5.6
Brazil	26 193.5	5.1	5.7	2.4	13 582.3	14 933.8	4.9	7.6
Chile	40.9	2.0	10.7	3.1	33.4	43.8	−2.8	5.2
Colombia	261.3	1.4	41.1	3.8	861.0	1 073.1	5.2	5.3
Ecuador	272.5	3.2	13.1	−0.2	354.0	357.6	2.3	3.0
Guyana	19.0	0.0	5.4	−0.9	10.4	10.2	7.4	−0.9
Paraguay	3 102.9	6.7	5.3	2.3	1 536.3	1 632.4	3.9	9.1
Peru	101.2	−1.3	13.1	10.0	105.3	133.0	−0.2	8.5
Suriname	1.2	−4.2	6.5	−1.4	1.4	0.8	−8.2	−5.5
Uruguay	883.2	26.9	3.3	2.0	338.0	289.4	−1.8	29.4
Venezuela (Bolivarian Republic of)	182.0	4.1	7.0	−2.6	142.2	126.6	−0.1	1.4
Regional Office for Africa	30 822.9	2.7	3.1	1.1	9 060.0	9 448.0	4.0	4.5
Regional Office for Asia and the Pacific	114 835.8	1.8	8.1	2.3	85 313.4	93 018.4	4.9	5.5
Regional Office for Europe and Central Asia	41 076.2	4.2	6.5	2.5	22 841.5	26 526.4		6.8
Regional Office for the Near East	8 720.6	1.0	2.5	1.5	1 912.1	2 152.6	5.8	3.9
World	278 924.6	2.5	6.4	2.4	169 622.8	179 676.1	4.4	5.2

TABLE 25: **Pulse producers and their productivity**

	Pulses							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	2 865.4	−1.0	18.7	−0.1	7 942.0	5 367.5	16.4	−1.0
Canada	2 028.7	−1.3	19.1	0.1	5 347.3	3 882.9	22.4	−1.2
United States of America	836.7	−0.2	17.7	−0.3	2 594.7	1 484.6	−0.6	−0.5
Regional Office for Latin America and the Caribbean	6 887.8	−0.8	9.2	1.0	6 620.3	6 337.9	1.9	0.9
Caribbean	342.3	1.8	8.9	1.8	248.8	305.7	7.8	2.8
Antigua and Barbuda								
Bahamas	0.1	−2.4	13.4	6.4	0.2	0.2	−15.2	3.8
Barbados	0.7	0.7	24.7	3.8	1.5	1.8	2.6	4.5
Cuba	123.9	1.5	10.7	0.6	80.4	133.0	22.5	2.1
Dominica	0.2	−1.9	7.3	5.8	0.1	0.1	0.1	3.8
Dominican Republic	72.2	1.2	10.1	3.0	71.5	72.6	−7.5	4.2
Grenada	0.7	0.7	14.2	3.4	0.7	0.9	−0.8	4.1
Haiti	139.7	2.6	6.5	0.1	89.6	91.4	−3.6	2.7
Jamaica	2.2	−2.8	11.3	1.1	1.9	2.4	−6.9	−1.7
Saint Kitts and Nevis	0.2	−0.7	10.8	0.7	0.2	0.2	2.0	0.0
Saint Lucia	0.0	5.4	20.0	−6.0	0.0	0.0	−0.4	−0.9
Saint Vincent and the Grenadines	0.5	−0.1	16.0	4.3	0.7	0.8	6.8	4.2
Trinidad and Tobago	1.9	4.5	10.9	0.5	2.0	2.1	−8.8	5.0
Latin America	6 545.5	−1.0	9.2	0.7	6 371.5	6 032.2	1.7	0.8
Central America	1 813.8	−1.3	8.0	0.3	1 994.3	1 444.3	−0.8	−0.8
Belize	8.1	−1.1	10.3	0.0	11.7	8.4	13.9	−1.1
Costa Rica	22.1	−3.0	7.1	2.8	12.8	15.7	−7.2	−0.3
El Salvador	97.6	1.9	6.6	−2.3	71.3	64.8	2.6	−0.5
Guatemala	263.5	5.4	9.3	0.7	240.0	244.4	−1.4	6.2
Honduras	127.2	0.5	7.2	0.2	68.5	91.1	1.4	0.6
Mexico	974.5	−4.8	8.0	0.6	1 429.2	778.5	−2.5	−4.3
Nicaragua	303.8	2.9	7.7	−0.1	150.8	234.2	9.3	2.8
Panama	16.9	−1.5	4.2	0.7	9.7	7.1	−1.3	−0.8
South America	4 731.7	−0.9	9.7	0.9	4 377.2	4 587.9	2.8	1.3
Argentina	327.3	0.9	12.4	0.8	412.8	406.3	2.5	1.8
Bolivia (Plurinational State of)	68.1	7.0	11.1	0.9	85.1	75.5	−0.1	7.9
Brazil	3 711.8	−1.5	9.3	2.6	3 172.2	3 455.9	3.0	1.1
Chile	40.5	−3.7	18.1	1.7	102.7	73.3	−3.4	−2.0
Colombia	145.8	0.0	12.5	0.8	191.5	182.6	−1.0	0.8
Ecuador	80.8	1.4	3.0	−4.4	22.0	23.9	−0.8	−3.1
Guyana	1.3	−2.4	6.4	−1.0	1.0	0.8	−1.5	−3.4
Paraguay	82.2	1.9	9.0	2.3	68.0	74.2	−1.5	4.3
Peru	211.8	0.9	11.4	0.9	265.0	241.7	8.8	1.8
Suriname	0.1	0.6	9.3	0.5	0.1	0.1	2.3	1.1
Uruguay	6.6	−0.4	9.8	−0.0	6.9	6.4	1.0	−0.4
Venezuela (Bolivarian Republic of)	55.4	4.6	8.5	0.4	50.0	47.1	−7.5	5.0
Regional Office for Africa	21 702.8	4.4	6.0	1.0	14 520.3	13 033.2	3.2	5.9
Regional Office for Asia and the Pacific	43 794.6	2.9	8.3	0.5	32 612.4	36 302.9		3.4
Regional Office for Europe and Central Asia	4 679.5	0.7	18.3	2.9	8 312.5	8 578.4		1.5
Regional Office for the Near East	2 387.0	0.7	9.7	−2.5	2 170.8	2 312.6	2.2	3.5
World	79 398.6	2.6	8.6	0.7	69 626.9	68 218.5		2.9

TABLE 26: **Root and tuber producers and their productivity**

	Roots and tubers							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	629.4	−1.5	395.3	0.3	23 842.7	24 881.6	2.7	−1.2
Canada	140.9	−1.1	295.9	0.3	4 421.8	4 168.2	4.3	−0.8
United States of America	488.5	−1.6	424.0	0.3	19 420.9	20 713.4	2.4	−1.3
Regional Office for Latin America and the Caribbean	4 247.1	0.6	133.7	1.0	55 490.8	56 775.0	1.0	1.4
Caribbean	568.0	3.0	59.8	0.3	3 454.8	3 395.1	3.4	3.0
Antigua and Barbuda	0.1	5.4	50.6	−0.4	0.6	0.5	1.0	5.0
Bahamas	0.2	−1.0	75.4	6.2	1.8	1.6	−1.8	5.1
Barbados	0.1	−10.4	110.0	−2.0	2.6	1.1	−3.8	−12.2
Cuba	201.0	1.6	71.9	−0.1	1 515.0	1 445.0	7.1	1.5
Dominica	3.8	2.4	95.9	−0.1	38.2	36.1	−1.4	2.3
Dominican Republic	40.7	2.3	84.9	0.7	374.1	346.0	0.8	3.0
Grenada	0.7	2.2	45.0	−3.9	3.0	3.3	1.1	−1.7
Haiti	301.1	4.1	42.8	0.8	1 264.0	1 287.5	−0.1	4.9
Jamaica	14.0	0.5	171.3	0.7	224.7	240.5	−1.0	1.2
Saint Kitts and Nevis	0.2	−0.7	39.3	2.6	0.6	0.9	−6.3	1.8
Saint Lucia	1.3	−0.7	34.6	−3.4	4.4	4.7	−4.4	−4.1
Saint Vincent and the Grenadines	3.5	5.1	45.3	−1.6	14.2	16.0	−3.6	3.4
Trinidad and Tobago	1.1	7.6	105.8	1.2	11.7	11.9	0.1	8.9
Latin America	3 685.7	0.3	144.9	1.3	52 071.5	53 413.2	0.9	1.3
Central America	172.9	2.0	182.8	0.4	3 259.0	3 161.7	2.9	1.9
Belize	0.2	−6.3	110.2	1.5	1.9	1.9	6.1	−5.0
Costa Rica	45.9	5.1	140.0	−0.8	651.0	643.2	4.2	4.3
El Salvador	6.9	3.1	109.8	−4.0	66.4	76.2	9.1	−1.1
Guatemala	25.0	2.8	204.9	4.3	499.0	511.4	2.3	7.2
Honduras	7.0	4.4	87.3	0.5	59.1	61.1	2.0	4.9
Mexico	65.3	−1.5	257.2	0.7	1 791.1	1 679.9	2.6	−0.7
Nicaragua	13.4	4.7	85.9	−1.5	113.5	115.2	0.7	3.1
Panama	9.2	2.4	79.2	−2.0	77.0	72.8	1.6	0.3
South America	3 506.1	0.2	143.2	2.0	48 777.0	50 218.2	0.7	1.2
Argentina	114.3	−0.0	236.3	0.2	2 530.5	2 701.4	2.7	0.1
Bolivia (Plurinational State of)	228.9	2.1	55.4	−1.1	1 289.9	1 267.2	0.4	0.9
Brazil	1 951.6	0.0	154.0	1.1	29 242.7	30 055.3	−0.3	1.1
Chile	54.9	−1.0	307.7	5.9	1 093.7	1 690.0	1.8	4.9
Colombia	345.7	0.8	125.8	1.2	4 397.9	4 348.0	−2.5	2.0
Ecuador	69.5	−0.1	59.3	2.1	465.1	412.4	−4.5	2.0
Guyana	4.2	−7.3	55.1	−2.7	30.5	23.4	9.6	−9.7
Paraguay	186.8	−1.2	134.0	0.2	2 668.3	2 502.7	−2.7	−1.0
Peru	455.1	0.2	126.9	1.7	5 604.4	5 774.0	8.8	1.9
Suriname	0.2	−2.6	197.2	3.8	5.1	4.3	2.7	1.2
Uruguay	12.9	−1.3	127.5	1.0	187.2	164.2	−1.5	−0.3
Venezuela (Bolivarian Republic of)	82.0	−0.2	155.5	1.6	1 261.6	1 275.2	5.8	1.4
Regional Office for Africa	25 250.5	2.1	98.0	1.6	229 331.6	247 366.5	5.5	4.1
Regional Office for Asia and the Pacific	19 840.8	−0.2	182.2	2.3	332 905.7	361 493.8	2.7	1.7
Regional Office for Europe and Central Asia	6 835.7	−2.6	210.1	2.2	121 002.2	143 608.2		−0.2
Regional Office for the Near East	808.5	3.0	233.1	2.2	16 863.8	18 845.7	4.2	5.7
World	54 932.8	0.8	147.6	1.7	749 787.2	810 845.4	2.8	2.1

TABLE 27: **Vegetable producers and their productivity**

	Vegetables (including melons)							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	1 153.4	−2.4	320.1	1.6	37 922.6	36 923.7	2.2	−1.1
Canada	86.8	−2.1	259.7	2.0	2 313.8	2 253.3	0.6	−0.2
United States of America	1 066.6	−2.5	325.0	1.3	35 608.9	34 670.4	2.3	−1.2
Regional Office for Latin America and the Caribbean	2 643.6	1.3	163.6	1.8	43 185.2	43 247.7	4.8	2.3
Caribbean	307.1	0.8	109.7	0.7	3 168.5	3 369.4	13.4	−0.0
Antigua and Barbuda	0.5	2.3	66.9	−2.2	2.7	3.2	3.3	−0.0
Bahamas	3.1	2.2	87.4	0.6	28.0	27.1	−2.8	2.8
Barbados	1.0	−1.1	103.4	−0.4	9.9	10.5	5.4	−1.5
Cuba	217.8	1.4	103.2	−2.1	2 187.8	2 248.1	17.2	−0.7
Dominica	0.8	−0.8	84.9	0.3	6.4	6.5	1.2	−0.5
Dominican Republic	33.2	0.8	188.2	1.7	527.6	625.5	7.5	2.5
Grenada	0.4	1.2	107.6	1.8	3.9	3.8	1.4	3.1
Haiti	28.6	−6.6	52.0	−1.2	158.1	148.9	2.7	−7.7
Jamaica	19.2	4.5	139.6	−0.8	202.7	267.7	3.6	3.7
Saint Kitts and Nevis	0.1	4.5	74.8	−0.6	0.9	1.0	3.9	3.9
Saint Lucia	0.3	3.1	114.6	7.3	3.0	3.0	0.7	10.6
Saint Vincent and the Grenadines	0.6	1.8	110.5	1.8	20.2	6.4	3.5	3.5
Trinidad and Tobago	1.5	−3.4	114.9	−0.2	17.2	17.6	6.5	−3.5
Latin America	2 337.6	1.3	170.7	2.1	40 035.5	39 898.3	3.8	2.5
Central America	835.5	0.7	178.9	2.5	15 604.3	14 949.7	4.8	2.0
Belize	1.0	−0.1	118.3	0.6	10.9	11.4	12.3	0.5
Costa Rica	13.7	−2.7	259.2	3.2	388.7	355.8	8.7	0.4
El Salvador	8.5	−1.7	172.1	1.2	147.3	145.6	−0.1	−0.6
Guatemala	87.5	3.6	181.9	0.8	1 554.0	1 592.0	5.1	4.4
Honduras	26.4	2.0	259.6	6.2	686.1	686.5	3.9	8.4
Mexico	673.2	0.3	177.7	1.1	12 601.7	11 965.2	4.7	1.4
Nicaragua	14.7	2.1	26.5	0.5	36.8	38.9	−1.6	2.6
Panama	10.6	1.8	146.1	1.8	178.7	154.3	6.4	3.6
South America	1 500.9	1.7	166.1	1.8	24 412.4	24 928.7	3.2	2.7
Argentina	185.6	0.2	189.6	1.5	3 351.1	3 518.2	0.5	1.7
Bolivia (Plurinational State of)	91.5	−1.5	39.3	−1.6	358.5	359.3	3.2	−3.1
Brazil	486.9	1.3	238.5	3.0	11 233.4	11 611.0	2.6	4.4
Chile	83.5	−1.8	273.2	0.8	2 268.9	2 280.4	2.9	−1.0
Colombia	105.4	0.5	175.6	−0.1	1 853.6	1 850.4	2.0	0.4
Ecuador	207.4	9.5	20.2	−6.9	447.8	418.5	−0.4	1.9
Guyana	7.2	−3.2	58.4	−1.9	44.1	42.3	16.1	−5.0
Paraguay	43.0	−1.9	59.7	0.3	322.5	256.7	1.7	−1.6
Peru	210.0	1.0	137.4	2.7	2 846.6	2 886.6	8.0	3.7
Suriname	0.8	−8.5	192.1	3.8	15.3	15.3	0.3	−5.0
Uruguay	9.1	−5.6	167.4	5.3	148.1	153.0	4.1	−0.6
Venezuela (Bolivarian Republic of)	70.5	1.0	218.0	1.5	1 522.5	1 536.9	8.8	2.5
Regional Office for Africa	5 387.9	2.1	68.4	1.3	36 810.0	36 846.1	4.7	3.4
Regional Office for Asia and the Pacific	40 228.5	2.6	199.5	1.9	765 574.7	802 500.3	8.4	4.0
Regional Office for Europe and Central Asia	6 180.7	−0.2	239.4	2.4	139 087.9	147 958.1		1.9
Regional Office for the Near East	3 318.6	2.3	225.3	1.8	70 058.3	74 754.6	4.1	4.5
World	56 733.7	2.1	192.2	1.7	1 048 660.4	1 090 425.0	6.7	3.4

TABLE 28: **Treenut producers and their productivity**

	Treenuts							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America								
Canada								
United States of America	544.2	3.6	27.7	0.2	2 266.4	1 508.1	1.1	3.8
Regional Office for Latin America and the Caribbean								
Caribbean								
Antigua and Barbuda								
Bahamas								
Barbados								
Cuba								
Dominica					0.0	0.0		−1.2
Dominican Republic	7.5	2.3	0.9	−5.4	0.7	0.7	0.2	−3.2
Grenada								
Haiti								
Jamaica								
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago								
Latin America								
Central America								
Belize	0.7	7.4	9.3	−7.7	0.7	0.7		−0.8
Costa Rica	0.6	−14.6	10.4	7.8	0.6	0.6	−3.0	−8.0
El Salvador	3.9	0.9	8.7	1.7	3.4	3.4	1.9	2.7
Guatemala	6.4	3.0	28.6	−4.9	18.2	18.3	6.5	−2.0
Honduras	1.4	1.4	13.2	−1.6	1.9	1.9	2.3	−0.2
Mexico	136.5	3.5	11.8	−0.9	140.5	160.8	11.3	2.6
Nicaragua								
Panama								
South America								
Argentina	5.2	2.7	25.4	−0.1	10.6	13.1	1.8	2.6
Bolivia (Plurinational State of)	43.9	5.2	23.3	−1.7	102.0	102.0	6.7	3.4
Brazil	770.7	1.5	3.7	2.8	153.3	282.0	0.9	4.3
Chile	24.8	5.4	23.0	4.6	54.6	57.1	6.3	10.2
Colombia	0.2	5.2	41.7	3.2	0.9	0.9		8.5
Ecuador								
Guyana								
Paraguay								
Peru	2.5	−0.5	23.2	−0.9	5.0	5.7	−2.9	−1.5
Suriname								
Uruguay								
Venezuela (Bolivarian Republic of)								
Regional Office for Africa								
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia	1 743.0	0.6	12.0	2.3	2 160.3	2 090.8		1.3
Regional Office for the Near East	1 005.3	0.7	16.6	10.6	1 565.4	1 664.6	4.6	9.0
World								

TABLE 29: **Fruit producers and their productivity**

	Fruit (excluding melons)							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	1 221.1	−1.1	228.0	−0.9	26 672.4	27 836.9	3.0	−1.7
Canada	81.8	1.1	93.3	−1.8	671.3	763.4	0.6	−0.7
United States of America	1 139.3	−1.2	237.6	−0.5	26 001.2	27 073.5	3.1	−1.7
Regional Office for Latin America and the Caribbean	7 435.5	0.7	155.9	1.1	111 885.6	115 885.2	3.0	1.7
Caribbean	581.3	−0.1	110.7	1.2	6 132.7	6 434.5	2.4	2.5
Antigua and Barbuda	1.4	0.5	70.1	−0.1	9.6	10.0	1.1	0.4
Bahamas	2.0	1.8	236.3	3.7	46.0	48.2	7.6	5.7
Barbados	0.7	5.0	69.1	0.5	4.2	4.6	−0.8	5.5
Cuba	193.8	−2.0	97.1	−0.2	1 798.9	1 881.4	4.4	−2.2
Dominica	8.7	−2.0	60.6	−0.6	53.8	52.4	−3.2	−2.6
Dominican Republic	147.4	2.8	202.9	4.1	2 818.9	2 990.7	2.3	7.1
Grenada	3.1	0.3	44.6	−1.6	13.5	14.0	−4.5	−1.3
Haiti	163.6	−0.4	56.9	−0.3	900.8	930.0	−0.1	−0.7
Jamaica	31.3	−2.6	89.5	−1.1	287.6	280.5	1.7	−3.7
Saint Kitts and Nevis	0.3	1.8	77.1	1.1	1.7	2.1	5.9	3.0
Saint Lucia	4.2	−5.9	81.6	−1.4	31.7	34.4	−8.5	−7.2
Saint Vincent and the Grenadines	7.3	2.4	98.8	0.5	68.9	72.1	−5.1	2.9
Trinidad and Tobago	17.5	5.4	65.2	0.4	97.1	114.2	0.6	5.8
Latin America	6 856.9	0.8	159.7	1.2	105 774.6	109 473.6	3.0	1.6
Central America	1 766.9	1.9	158.7	0.2	26 871.3	28 045.1	3.3	2.5
Belize	19.9	−2.9	179.1	2.3	331.4	355.8	10.4	−0.6
Costa Rica	168.8	2.3	291.3	0.0	4 606.3	4 919.0	4.7	2.3
El Salvador	31.4	2.2	98.3	−0.6	314.5	308.1	−1.4	1.7
Guatemala	161.7	7.3	248.2	−0.6	3 968.4	4 013.3	5.5	6.7
Honduras	67.6	0.3	207.2	3.0	1 361.3	1 400.1	−3.3	3.2
Mexico	1 250.0	1.4	129.6	0.4	15 430.3	16 195.3	3.6	1.8
Nicaragua	35.8	3.0	75.8	−0.6	241.0	271.3	−3.6	2.3
Panama	31.8	0.1	182.9	−3.4	618.1	582.2	−4.3	−3.3
South America	5 087.3	0.4	160.0	2.0	78 881.6	81 405.5	2.9	1.3
Argentina	479.3	0.9	165.5	−0.0	7 645.5	7 929.9	2.0	0.9
Bolivia (Plurinational State of)	120.7	1.1	84.2	−0.9	972.9	1 015.8	2.5	0.1
Brazil	2 447.0	0.2	167.5	0.7	38 793.4	40 996.6	2.2	0.9
Chile	365.4	1.9	168.7	2.4	5 821.6	6 164.2	4.0	4.3
Colombia	658.0	0.6	123.1	0.9	7 936.1	8 096.7	3.9	1.5
Ecuador	415.6	−0.9	211.6	2.2	9 324.8	8 794.3	5.4	1.3
Guyana	8.6	−3.2	40.6	−3.7	50.5	35.0	4.1	−6.7
Paraguay	36.9	−1.2	146.9	2.6	567.5	541.7	−1.1	1.4
Peru	350.0	2.0	137.5	1.8	4 813.8	4 812.0	6.0	3.8
Suriname	4.0	−1.4	303.2	5.9	128.7	119.9	−0.1	4.5
Uruguay	31.1	−1.5	168.0	2.6	532.2	522.8	1.1	1.1
Venezuela (Bolivarian Republic of)	170.8	−1.9	139.1	−0.7	2 294.7	2 376.7	2.2	−2.6
Regional Office for Africa	9 646.2	1.5	72.4	1.7	67 885.9	69 884.2	2.6	4.2
Regional Office for Asia and the Pacific	26 853.4	2.7	114.1	0.6	292 685.3	306 370.0	6.9	5.2
Regional Office for Europe and Central Asia	9 517.2	−0.6	98.1	1.4	89 393.8	93 317.7		0.5
Regional Office for the Near East	3 890.9	1.4	107.0	1.0	40 936.4	41 625.6	4.6	2.5
World	56 642.1	1.6	112.6	1.0	612 512.7	637 575.6	4.0	3.4

TABLE 30: **Citrus fruit producers and their productivity**

	Citrus fruit							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	328.3	−2.5	326.0	−0.9	9 979.0	10 703.0	4.7	−3.4
Canada								
United States of America	328.3	−2.5	326.0	−0.9	9 979.0	10 703.0	4.7	−3.4
Regional Office for Latin America and the Caribbean	2 121.5	0.1	178.9	1.6	36 330.1	37 949.7	3.8	0.1
Caribbean	91.5	−1.4	78.6	0.7	816.3	718.9	1.5	−4.4
Antigua and Barbuda	0.1	1.3	47.0	4.2	0.4	0.4	−1.8	5.5
Bahamas	0.9	−0.4	304.3	3.6	27.7	27.9	23.5	3.1
Barbados								
Cuba	33.8	−6.0	78.9	−5.3	347.3	267.0	−0.5	−11.0
Dominica	2.2	−5.4	90.3	3.2	24.4	20.3	2.2	−2.4
Dominican Republic	21.8	5.7	75.7	−4.3	165.7	165.4	7.3	1.1
Grenada	0.4	−2.0	88.1	−0.4	3.8	3.4	0.5	−2.4
Haiti	13.8	0.2	58.7	1.0	86.4	81.3	−0.4	1.3
Jamaica	15.7	−2.2	86.2	−2.1	141.6	134.9	5.2	−4.3
Saint Kitts and Nevis								
Saint Lucia	0.2	−7.8	86.5	0.3	2.2	1.9	16.9	−7.5
Saint Vincent and the Grenadines	0.4	1.8	58.9	−0.8	1.9	2.4	−0.0	1.0
Trinidad and Tobago	2.0	−0.4	69.8	1.5	15.0	14.0	−3.4	1.0
Latin America	2 031.0	0.2	183.3	1.8	35 516.0	37 233.3	3.9	0.2
Central America	669.4	1.2	126.0	1.5	8 243.5	8 431.6	6.8	1.5
Belize	15.8	−3.5	153.4	2.9	217.0	242.1	9.2	−0.8
Costa Rica	25.8	−0.7	80.0	−5.8	296.4	206.8	13.1	−6.4
El Salvador	4.5	−6.8	144.8	7.2	69.7	65.0	−6.9	−0.0
Guatemala	25.1	7.0	130.8	−4.1	325.6	328.4	1.5	2.6
Honduras	19.9	2.2	151.9	4.7	286.8	301.6	7.0	7.0
Mexico	551.4	1.0	129.5	0.4	6 912.8	7 140.2	6.7	1.5
Nicaragua	21.5	3.3	44.3	0.2	84.4	95.1	−0.2	3.5
Panama	5.4	4.1	96.6	1.8	50.7	52.4	0.4	6.0
South America	1 360.7	−0.3	211.7	1.9	27 270.3	28 799.3	3.2	−0.1
Argentina	131.0	0.4	205.7	−0.8	2 559.4	2 695.3	4.7	−0.5
Bolivia (Plurinational State of)	44.4	4.1	75.2	−1.9	327.4	334.1	2.6	2.1
Brazil	922.1	−0.5	238.8	0.1	20 717.1	22 017.6	2.1	−0.3
Chile	14.9	−0.1	208.8	3.2	289.0	312.0	2.0	3.1
Colombia	77.3	−0.3	158.7	1.0	1 161.2	1 227.1	21.6	0.7
Ecuador	39.3	−3.7	25.6	−3.1	115.2	100.6	1.5	−6.7
Guyana	2.3	−1.5	33.1	−4.5	7.5	7.7	9.0	−5.9
Paraguay	11.1	−3.7	294.2	5.1	325.2	325.2	−0.3	1.3
Peru	62.3	0.9	151.0	2.4	908.1	941.3	4.7	3.4
Suriname	1.5	−1.5	148.4	6.8	20.5	21.8	−2.4	5.1
Uruguay	16.0	−0.7	169.2	2.7	315.2	270.4	0.5	2.0
Venezuela (Bolivarian Republic of)	38.5	−2.0	142.0	−0.6	524.5	546.1	3.7	−2.6
Regional Office for Africa	1 190.5	1.2	78.0	2.0	8 914.4	9 291.4	5.2	3.2
Regional Office for Asia and the Pacific	3 863.9	4.1	125.4	2.3	47 928.5	48 456.5		8.1
Regional Office for Europe and Central Asia								
Regional Office for the Near East	702.3	1.4	173.2	1.0	11 645.8	12 163.4	3.7	2.5
World								

TABLE 31: **Fibre crop producers and their productivity**

	Fibre crops							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America	3 852.7	−2.9	8.9	0.8	3 970.2	3 441.1	1.0	−0.9
Canada	24.0	−5.7	11.9	−0.1	28.5	28.5	0.5	−5.9
United States of America	3 828.7	−2.9	8.9	2.1	3 941.7	3 412.6	1.0	−0.8
Regional Office for Latin America and the Caribbean	2 985.1	4.6	9.8	0.9	1 948.2	2 911.1	−1.7	6.4
Caribbean	31.4	1.3	8.1	3.0	22.0	25.5	−7.9	4.6
Antigua and Barbuda	0.6	−0.7	0.5	2.8	0.0	0.0	−4.2	2.0
Bahamas								
Barbados								
Cuba	11.9	0.4	12.7	4.5	12.8	15.0	−9.5	4.9
Dominica								
Dominican Republic	0.4	−4.2	1.0	−12.1	0.1	0.0	−20.7	−15.8
Grenada	0.2	1.1	0.6	−2.7	0.0	0.0	1.8	−1.6
Haiti	17.7	2.2	5.4	1.9	8.4	9.6	−5.5	4.1
Jamaica	0.6	2.0	12.1	3.5	0.7	0.8	−0.4	5.6
Saint Kitts and Nevis	0.0	4.8	0.0		0.0	0.0	−20.6	
Saint Lucia								
Saint Vincent and the Grenadines	0.0				0.0	0.0		
Trinidad and Tobago								
Latin America	2 953.7	4.6	9.8	0.5	1 926.2	2 885.5	−1.7	6.4
Central America	252.9	4.3	12.4	−1.0	191.2	313.0	−3.5	4.2
Belize								
Costa Rica	1.9	3.1	7.1	−5.4	1.1	1.3	4.5	−2.5
El Salvador	7.1	−1.9	5.7	−2.1	3.5	4.1	−8.6	−4.0
Guatemala	1.7	−1.1	6.8	−1.3	1.1	1.2	−28.2	−2.4
Honduras	1.6	4.5	4.7	1.7	0.8	0.8	−12.9	6.3
Mexico	232.8	4.6	12.9	−0.2	179.3	299.7	−2.9	4.4
Nicaragua	7.8	1.3	7.7	1.1	5.4	6.0	−15.9	2.5
Panama								
South America	2 700.9	4.6	9.5	1.4	1 735.1	2 572.6	−1.4	6.6
Argentina	678.9	6.6	4.4	0.7	233.4	298.9	−7.7	7.3
Bolivia (Plurinational State of)	122.0	2.8	2.4	3.6	29.0	29.0	20.8	6.5
Brazil	1 703.3	4.9	12.1	2.1	1 315.9	2 068.0	0.5	7.2
Chile	18.0	1.6	10.2	0.1	16.3	18.3	−1.6	1.7
Colombia	60.3	−0.8	8.6	0.2	49.9	52.0	−8.8	−0.7
Ecuador	31.2	2.6	12.9	0.0	35.2	40.4	−0.7	2.6
Guyana								
Paraguay	24.8	−17.1	5.2	2.1	5.0	13.0	−9.4	−15.4
Peru	46.0	−5.9	9.6	4.8	42.2	44.3	−4.1	−1.4
Suriname								
Uruguay	0.0				0.0	0.0		
Venezuela (Bolivarian Republic of)	16.2	−3.7	5.4	0.8	8.2	8.7	−10.9	−3.0
Regional Office for Africa	4 089.9	1.1	3.1	1.1	1 197.8	1 264.1	3.7	0.2
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia	3 451.7				2 998.3	3 162.5		
Regional Office for the Near East								
World								

TABLE 32: **Jute and jute-like producers and their productivity**

	Jute and jute-like							
	area		yield		production			
	total	p.a. growth	total	p.a. growth	total		p.a. growth	
	thousand ha	percent	thousand hg/ha	percent	thousand tonnes	thousand tonnes	percent	percent
	2011	2000-11	2011	2000-11	2010	2011	1990-2000	2000-11
North America								
Canada								
United States of America								
Regional Office for Latin America and the Caribbean								
Caribbean								
Antigua and Barbuda								
Bahamas								
Barbados								
Cuba	1.8	−1.0	59.8	8.7	9.1	10.8	−7.0	7.5
Dominica								
Dominican Republic								
Grenada								
Haiti								
Jamaica								
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago								
Latin America								
Central America								
Belize								
Costa Rica								
El Salvador	3.0	−1.8	6.8	−1.0	1.7	2.1	6.4	−2.8
Guatemala	0.4	0.1	6.8	−3.4	0.2	0.3	1.9	−3.3
Honduras								
Mexico								
Nicaragua								
Panama								
South America								
Argentina								
Bolivia (Plurinational State of)								
Brazil	12.1	8.6	13.8	−0.7	14.2	16.7	−10.5	7.8
Chile	10.8	1.9	8.6	0.0	7.9	9.3	−3.1	1.9
Colombia								
Ecuador								
Guyana								
Paraguay								
Peru	0.2	−1.0	14.7	−1.3	0.2	0.3	1.8	−2.3
Suriname								
Uruguay								
Venezuela (Bolivarian Republic of)								
Regional Office for Africa								
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia								
Regional Office for the Near East								
World								

TABLE 33: **Meat producers**

	Total meat production									
	total		beef and buffalo		pig		sheep and goat		poultry	
	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	p.a. growth percent 2000-11
North America	46 825.5	1.1	13 137.5	−0.3	12 284.4	1.7	85.1	−2.7	21 013.7	1.7
Canada	4 373.7	0.8	1 154.2	−0.8	1 953.5	1.6	15.6	2.0	1 221.5	1.3
United States of America	42 451.8	1.1	11 983.3	−0.2	10 330.8	1.7	69.5	−3.8	19 792.2	1.7
Regional Office for Latin America and the Caribbean	47 166.0	3.6	17 021.0	2.1	6 884.8	2.9	446.2	0.9	22 242.2	5.5
Caribbean	1 153.9	2.9	222.8	1.3	331.2	5.0	25.0	3.8	563.9	3.1
Antigua and Barbuda	1.3	2.1	0.6	1.6	0.2	2.0	0.2	2.3	0.4	2.9
Bahamas	7.0	−0.2	0.0	0.3	0.3	0.6	0.1	1.5	6.5	−0.2
Barbados	17.8	2.5	0.2	−13.5	2.8	3.6	0.1	6.4	14.6	2.8
Cuba	292.6	1.4	66.5	−1.2	176.2	5.8	14.2	5.6	35.4	−6.4
Dominica	1.4	0.0	0.5	0.0	0.4	0.0	0.1	0.2	0.3	0.0
Dominican Republic	532.3	4.1	102.0	3.6	103.8	4.9	1.7	4.5	324.7	4.0
Grenada	1.4	1.0	0.1	0.1	0.2	2.5	0.1	3.3	0.7	0.1
Haiti	105.9	1.2	45.5	1.1	35.0	2.0	6.3	−1.1	8.4	0.1
Jamaica	115.6	1.5	5.6	−8.0	7.1	0.6	1.3	8.3	101.5	2.5
Saint Kitts and Nevis	0.3	−4.6	0.1	−4.3	0.1	−7.5	0.0	−16.1	0.2	1.4
Saint Lucia	3.5	4.8	0.5	2.0	1.4	2.9	0.1	0.4	1.6	9.1
Saint Vincent and the Grenadines	1.2	−0.8	0.2	0.1	0.4	−3.5	0.1	1.5	0.5	1.1
Trinidad and Tobago	73.7	5.3	1.0	2.1	3.2	6.0	0.5	1.4	69.0	5.4
Latin America	46 014.3	3.6	16 798.7	2.1	6 553.9	2.8	422.1	0.8	21 678.8	5.6
Central America	7 486.5	3.0	2 298.2	2.6	1 375.6	1.8	104.2	3.2	3 615.2	4.0
Belize	16.9	4.2	1.6	3.1	1.2	3.1	0.0	4.7	14.1	4.4
Costa Rica	248.1	2.6	96.0	1.4	51.8	4.8	0.0	3.2	100.2	2.9
El Salvador	140.5	1.3	23.4	−3.5	8.4	−2.1	0.1	0.8	108.5	3.3
Guatemala	332.7	3.1	81.0	2.5	60.0	6.3	3.3	7.0	185.9	2.6
Honduras	231.5	4.6	60.0	0.8	12.0	2.1	0.3	−0.6	158.7	7.0
Mexico	6 001.0	2.7	1 803.9	2.3	1 202.0	1.4	100.4	3.0	2 807.0	3.8
Nicaragua	261.5	8.4	146.0	9.7	7.8	2.7	0.1	−0.7	105.0	7.5
Panama	254.4	3.6	86.3	2.0	32.3	3.7			135.7	4.8
South America	38 525.7	3.7	14 500.0	2.0	5 178.0	3.1	317.0	−0.0	18 063.2	5.9
Argentina	4 555.4	1.0	2 419.7	−1.1	301.0	3.2	56.9	−0.3	1 694.6	4.9
Bolivia (Plurinational State of)	695.4	5.1	205.2	2.3	86.3	1.1	18.3	−1.4	377.1	9.8
Brazil	24 454.7	4.3	9 030.0	2.9	3 369.6	2.4	113.2	1.1	11 918.5	6.2
Chile	1 401.2	3.6	191.0	−1.5	527.9	6.6	17.1	0.3	656.9	3.7
Colombia	2 138.9	4.1	821.0	0.9	216.2	6.8	15.3	1.1	1 075.1	7.1
Ecuador	753.6	3.9	268.0	4.2	200.0	5.3	9.4	−0.9	266.3	2.9
Guyana	29.0	6.3	1.8	−0.5	0.8	7.9	0.8	0.5	25.6	7.3
Paraguay	622.7	3.5	410.7	5.4	164.0	0.4	3.6	1.1	40.3	1.4
Peru	1 460.8	5.2	177.2	2.8	117.4	2.3	41.4	0.8	1 084.8	6.5
Suriname	14.6	6.5	1.9	−0.1	2.0	5.0	0.0	−2.6	10.6	9.0
Uruguay	627.0	0.5	479.0	0.5	20.9	−2.0	32.0	−4.1	86.1	3.8
Venezuela (Bolivarian Republic of)	1 772.4	1.7	494.5	1.3	172.0	2.9	8.9	−0.4	827.0	1.6
Regional Office for Africa	12 271.1	3.4	4 531.9	2.8	1 266.8	5.8	2 089.0	2.8	2 804.0	5.3
Regional Office for Asia and the Pacific	129 303.1	3.5	19 607.6	2.0	63 596.5	3.4	7 753.5	2.2	35 422.1	5.3
Regional Office for Europe and Central Asia	63 842.0	1.8	13 132.1	0.5	27 807.7	1.2	2 200.7	0.6	19 312.9	5.3
Regional Office for the Near East	9 808.7	3.0	2 238.8	2.7			1 823.3	0.8	5 269.5	4.9
World	298 871.1	2.7	66 333.8	1.4	110 270.2	2.6	13 407.0	2.0	102 249.0	4.3

TABLE 34: **Eggs, milk, and processed milk**

	Production							
	eggs		milk		butter and ghee	cheese	evaporat and condensed milk	skim milk and buttermilk
	thousand tonnes 2011	p.a. growth percent 2000-11	million tonnes 2011	p.a. growth percent 2000-11	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011	thousand tonnes 2011
North America	5 852.4	0.8	97.4	1.3				
Canada	436.8	1.5	8.4	0.3	86.6	408.5	49.3	78.3
United States of America	5 415.6	0.7	89.0	1.4	820.9	5 161.9	999.4	830.4
Regional Office for Latin America and the Caribbean	7 495.4	3.6	81.8	3.4				
Caribbean	244.5	4.4	1.4	0.7				
Antigua and Barbuda	0.3	2.0	0.0	1.2				
Bahamas	1.3	4.1	0.0	4.6				
Barbados	2.1	4.9	0.0	−2.8				
Cuba	115.3	3.9	0.6	−0.2	1.4	16.3	35.0	
Dominica	0.2	2.0	0.0	1.7				
Dominican Republic	105.7	5.5	0.5	1.5	2.1	4.2		
Grenada	1.4	4.5	0.0	2.7				
Haiti	5.7	1.8	0.1	3.2				
Jamaica	6.0	0.3	0.2	0.4			1.0	
Saint Kitts and Nevis	0.3	2.2						
Saint Lucia	1.2	7.8	0.0	3.8				
Saint Vincent and the Grenadines	0.8	4.9	0.0	0.2				
Trinidad and Tobago	4.3	2.3	0.0	−5.7			0.0	
Latin America	7 251.5	3.6	80.4	3.5	252.0	1 295.2		
Central America	2 891.6	3.4	14.5	1.7				
Belize	2.2	2.1	0.0	9.9				
Costa Rica	50.8	2.0	1.0	2.7	6.6	12.2		1.0
El Salvador	59.7	−0.2	0.4	0.7	0.2	3.4		0.7
Guatemala	224.6	9.7	0.5	5.1	0.6	6.7		1.8
Honduras	44.2	0.6	0.8	3.4	8.8	17.0		0.3
Mexico	2 458.7	2.9	10.9	1.3	20.5	153.7	166.8	26.2
Nicaragua	26.2	2.6	0.8	2.8	0.6	39.3	1.0	0.0
Panama	25.3	6.7	0.2	1.2	0.1	14.6	28.4	
South America	4 359.2	3.7	65.8	3.8				
Argentina	505.0	4.0	11.2	0.9	51.0	580.3	9.6	19.1
Bolivia (Plurinational State of)	68.5	5.3	0.4	4.6	0.9	10.8		1.1
Brazil	2 192.8	3.1	32.2	4.2	92.6	45.0	55.7	
Chile	198.3	5.5	2.6	2.5	21.7	71.5	37.0	14.0
Colombia	639.7	4.7	6.3	0.2	20.0	65.1	21.5	
Ecuador	94.0	2.4	6.4	11.1	6.5	9.9		
Guyana	0.7	−6.7	0.0	3.2				
Paraguay	128.9	5.9	0.4	1.8				
Peru	317.7	6.3	1.8	4.5	2.9	19.9	466.1	
Suriname	1.3	−7.3	0.0	−1.9	0.0			
Uruguay	52.5	3.2	2.1	3.4	16.9	95.8	0.1	23.5
Venezuela (Bolivarian Republic of)	159.8	−0.8	2.4	4.8	2.2	150.0	10.0	3.2
Regional Office for Africa	1 843.9	4.4	29.2	5.0				
Regional Office for Asia and the Pacific	43 830.4	2.7	304.7	4.4				
Regional Office for Europe and Central Asia	12 239.2	1.6	249.8	0.6	2 599.7	10 609.2	2 079.9	1 411.8
Regional Office for the Near East	2 384.0	3.2	30.4	2.8	411.3	1 386.9		
World	70 615.6	2.5	739.4	2.8				

TABLE 35: **Fish production**

	Fish production									
	capture					aquaculture				
	total		inland	marine	p.a. growth	total		inland	marine	p.a. growth
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	percent	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	percent
	2010	2011	2011	2011	2000-11	2009	2010	2011	2011	2000-11
North America	5 414.6	6 039.4	48.2	5 991.2	0.4	635.6	657.8	250.2		−0.3
Canada	979.5	876.2	25.8	850.4	−1.5	154.4	161.1	7.4	155.0	2.2
United States of America	4 435.1	5 163.2	22.4	5 140.8	0.7	481.2	496.7	242.7	154.1	−1.3
Regional Office for Latin America and the Caribbean	12 195.8	16 669.0	508.0	16 161.0	−1.1	1 967.3	1 933.3	1 009.3		10.9
Caribbean	192.2	210.6	3.3	207.3	10.1	42.7	37.2	26.2		−1.8
Antigua and Barbuda	2.3	2.3	0.0	2.3	2.5					
Bahamas	11.8	10.4	0.0	10.4	−0.7	0.0	0.0	0.0	0.0	
Barbados	3.3	1.8	0.0	1.8	−4.9	0.0	0.0	0.0		
Cuba	24.0	24.0	1.3	22.7	−9.1	36.0	31.4	22.8	1.8	−2.6
Dominica	0.7	0.7	0.0	0.7	−5.2	0.0	0.0	0.0		15.8
Dominican Republic	14.5	14.0	1.0	13.0	2.2	1.2	1.3	1.6	0.4	−0.8
Grenada	2.5	2.3	0.0	2.3	2.9					
Haiti	13.7	16.5	0.6	15.9	7.6	0.2	0.4	0.6		42.7
Jamaica	15.4	15.1	0.4	14.7	9.5	5.2	4.0	1.2	0.0	−11.7
Saint Kitts and Nevis	21.7	31.0	0.0	31.0	37.4			0.0		
Saint Lucia	2.0	2.0	0.0	2.0	−0.7	0.0	0.0	0.0	0.0	25.3
Saint Vincent and the Grenadines	66.4	76.6	0.0	76.6	11.6					
Trinidad and Tobago	13.9	13.9	0.0	13.9	−0.2	0.0	0.0	0.0		−11.5
Latin America	12 107.2	16 529.3	504.7	16 024.7	−1.3	1 924.6	1 896.2	983.1	1 385.4	11.0
Central America	2 216.9	2 127.2	121.5	2 005.7	3.8	262.6	236.0	139.0		10.7
Belize	385.4	263.4	0.0	263.4	21.7	5.7	4.7	4.7	0.1	2.6
Costa Rica	21.0	20.5	1.0	19.5	−4.9	24.7	26.8	27.8	0.0	10.0
El Salvador	39.0	54.3	2.4	51.9	17.1	4.4	4.5	4.9	0.0	30.5
Guatemala	21.9	19.7	2.4	17.3	−6.1	16.6	22.8	21.5		16.6
Honduras	11.1	9.2	0.1	9.1	−5.8	28.9	27.5	37.0		12.6
Mexico	1 530.7	1 572.0	113.1	1 458.9	1.4	157.0	126.2	20.4	116.8	8.9
Nicaragua	37.9	30.9	1.0	29.9	3.0	18.9	17.0	15.8	0.0	10.2
Panama	169.9	157.3	1.6	155.7	−3.3	6.4	6.4	7.1	0.3	13.8
South America	9 786.8	14 331.2	383.2	13 948.0	−2.0	1 662.0	1 660.2	844.1		11.0
Argentina	811.7	792.5	18.3	774.2	−1.4	2.6	2.7	2.8	0.4	5.4
Bolivia (Plurinational State of)	6.9	6.7	6.7		0.8	0.8	0.9	1.0		8.2
Brazil	785.4	803.3	248.8	554.5	1.7	416.2	480.1	611.0	19.1	12.5
Chile	3 048.3	3 466.9		3 466.9	−2.4	881.1	713.2	42.5	927.0	7.8
Colombia	79.7	85.5	24.9	60.6	−4.2	80.6	80.4	74.2	9.5	2.8
Ecuador	399.2	508.5	0.4	508.1	−1.4	218.4	271.9	48.9	260.0	15.8
Guyana	45.2	43.2	0.8	42.4	−1.1	0.5	0.5	0.3	0.0	−7.3
Paraguay	17.8	17.0	17.0		−4.4	2.6	3.0	4.9		42.1
Peru	4 265.5	8 254.3	36.8	8 217.5	−2.3	44.3	89.0	40.0	52.2	27.1
Suriname	34.4	34.4	0.6	33.8	4.4	0.0	0.1	0.1		−11.0
Uruguay	74.2	89.0	1.0	88.0	−2.2	0.1	0.1	0.1	0.0	−0.8
Venezuela (Bolivarian Republic of)	218.5	230.0	28.0	202.0	−4.0	14.8	18.4	18.4		2.9
Regional Office for Africa	5 901.4	6 010.6	2 440.7	3 569.8	2.3	390.4	497.0	396.9		22.8
Regional Office for Asia and the Pacific	52 193.1	52 427.4	7 584.3	40 830.9	1.6	66 453.2	71 078.9	40 619.5		7.9
Regional Office for Europe and Central Asia	14 138.8	13 647.7	470.0		−1.3	2 609.9	2 665.7	578.3		4.0
Regional Office for the Near East	3 096.1	3 029.1	453.1	2 576.0	2.2	951.6	1 208.3	1 295.8		11.9
World	89 956.7	94 497.1	11 053.9	79 033.6	0.6	73 067.6	78 066.9	43 994.8		

TABLE 36: **Volume of total cereal trade**

	Cereals							
	imports				exports			
	thousand tonnes 2000	thousand tonnes 2009	thousand tonnes 2010	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2009	thousand tonnes 2010	thousand tonnes 2011
North America	7 024.4	8 746.0	8 024.1	7 272.5	110 243.3	100 358.0	109 730.1	106 742.2
Canada	1 933.3	2 663.0	2 330.2	1 745.2	22 885.1	23 256.4	22 774.1	20 775.7
United States of America	5 091.0	6 083.0	5 693.9	5 527.3	87 358.2	77 101.6	86 956.0	85 966.5
Regional Office for Latin America and the Caribbean	43 983.9	46 538.7	49 685.7	51 468.6	26 006.6	33 720.0	43 685.7	49 072.7
Caribbean	4 358.3	4 742.5	5 372.2	5 208.5	42.6	52.8	69.3	32.9
Antigua and Barbuda	5.3	6.4	5.4	9.0	0.0	0.0	0.0	0.0
Bahamas	22.6	14.7	19.6	19.6	0.0	0.0	0.0	0.0
Barbados	56.9	65.8	65.6	67.6	4.6	3.6	3.8	3.9
Cuba	1 606.9	1 982.6	2 063.4	2 096.5	0.0	0.0	0.7	1.0
Dominica	8.1	7.5	3.1	4.2	0.0	0.0	0.0	0.0
Dominican Republic	1 353.2	1 393.9	1 687.6	1 625.9	0.0	2.2	18.3	4.7
Grenada	25.7	8.7	22.1	36.1	14.1	0.0	0.0	1.3
Haiti	528.7	627.0	832.6	544.7	0.0	0.0	0.0	0.0
Jamaica	481.0	395.2	459.1	536.0	0.0	8.0	9.2	7.7
Saint Kitts and Nevis	3.8	5.2	10.0	9.1	0.0	0.0	0.0	0.0
Saint Lucia	21.5	15.9	15.9	5.5	0.0	0.0	0.0	0.0
Saint Vincent and the Grenadines	34.8	31.4	30.3	28.9	15.0	18.5	20.7	8.4
Trinidad and Tobago	209.7	188.3	157.4	225.5	8.9	20.5	16.6	5.8
Latin America	39 625.7	41 796.2	44 313.5	46 260.1	25 964.0	33 667.2	43 616.3	49 039.7
Central America	17 003.6	17 775.7	18 978.3	21 793.8	634.6	1 648.1	1 243.6	1 284.4
Belize	16.7	20.8	22.2	14.8	0.6	0.0	10.7	4.3
Costa Rica	769.2	954.3	960.7	893.4	26.7	29.1	26.8	30.6
El Salvador	681.1	738.7	759.3	950.2	28.7	18.6	22.5	49.2
Guatemala	637.5	1 182.5	1 215.3	1 320.1	8.9	19.5	23.1	27.9
Honduras	267.2	718.6	621.1	770.5	1.7	2.8	4.5	25.9
Mexico	14 064.5	13 363.3	14 444.6	16 923.3	566.8	1 554.6	1 127.7	1 087.7
Nicaragua	185.1	331.3	353.8	378.3	0.7	22.9	28.3	58.8
Panama	382.4	466.1	601.3	543.3	0.5	0.6	0.0	0.0
South America	22 622.0	24 020.6	25 335.1	24 466.3	25 329.4	32 019.1	42 372.8	47 755.4
Argentina	47.7	16.8	17.8	17.5	23 728.4	17 678.1	25 449.6	30 310.0
Bolivia (Plurinational State of)	459.7	498.3	371.5	446.0	6.4	70.1	34.2	27.1
Brazil	10 814.2	8 614.8	8 785.3	8 353.9	36.5	8 770.2	12 567.5	13 153.6
Chile	1 947.8	2 161.0	2 061.4	2 223.5	49.9	112.4	134.2	205.8
Colombia	3 272.2	5 112.8	5 471.8	5 145.3	0.4	2.5	3.6	5.8
Ecuador	600.1	920.7	1 187.6	1 202.7	93.9	32.5	27.8	47.7
Guyana	65.5	83.8	67.2	70.1	207.2	231.0	170.3	91.4
Paraguay	170.1	11.1	15.7	21.3	299.8	2 872.5	1 888.6	2 272.4
Peru	2 312.2	3 257.4	3 871.5	3 998.1	10.2	71.8	24.4	21.6
Suriname	39.2	24.2	58.1	49.6	40.7	28.3	77.5	42.2
Uruguay	312.1	177.1	185.5	247.2	780.2	2 149.2	1 990.6	1 577.8
Venezuela (Bolivarian Republic of)	2 581.1	3 142.5	3 241.7	2 691.2	75.8	0.4	4.4	0.0
Regional Office for Africa	17 536.8	31 901.7	30 038.8	32 563.3	1 399.2	2 642.8	3 135.6	4 589.6
Regional Office for Asia and the Pacific	85 147.4	86 287.1	90 411.0	90 783.1	58 783.7	74 750.4	71 967.3	86 798.4
Regional Office for Europe and Central Asia	64 609.5	85 544.0	84 544.8	88 890.3	82 249.3	144 818.9	131 167.7	126 372.3
Regional Office for the Near East	61 417.3	77 898.1	79 128.3	75 818.5	1 548.2	2 695.8	3 414.8	1 111.9
World	271 019.8	328 858.6	336 408.2	343 234.5	273 088.0	330 193.0	340 306.1	349 647.4

TABLE 37: **Volume of total oilseeds, and sugar and honey trade**

	Oilseeds				Sugar and honey			
	imports		exports		imports		exports	
	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011
North America	1 834.7	2 129.7	33 839.8	47 410.4	5 105.3	7 367.1	1 552.3	4 006.4
Canada	691.0	610.2	5 482.1	11 148.6	1 735.1	1 808.0	354.3	577.4
United States of America	1 143.7	1 519.5	28 357.7	36 261.8	3 370.2	5 559.2	1 198.1	3 429.0
Regional Office for Latin America and the Caribbean	7 883.2	7 069.5	18 651.6	51 548.5	1 836.1	5 393.5	16 386.6	33 548.6
Caribbean	135.1	224.0	0.1	3.9	425.0	447.4	4 247.4	1 127.9
Antigua and Barbuda	0.0	0.1	0.0	0.0	2.6	2.9	0.0	0.1
Bahamas	0.2	0.1			10.7	13.0	0.0	0.0
Barbados	26.5	26.0	0.0	0.0	29.8	40.1	54.8	23.1
Cuba	23.4	181.2	0.0	0.0	2.2	3.4	3 590.2	648.8
Dominica	0.0	0.0	0.0	0.0	6.8	1.9	0.0	0.0
Dominican Republic	0.1	8.8	0.0	0.0	32.4	28.2	333.0	342.4
Grenada	0.0	0.0	0.0	0.0	5.3	6.9	0.0	0.0
Haiti	0.0	0.0	0.0	0.0	130.0	118.0	0.0	0.0
Jamaica	0.2	0.9	0.0	0.0	95.8	111.0	169.1	112.0
Saint Kitts and Nevis	0.0	0.0	0.0	0.0	1.6	2.2	12.3	0.0
Saint Lucia	0.1	0.2	0.0	0.0	13.0	10.5	0.0	0.0
Saint Vincent and the Grenadines	0.0	1.2	0.0	0.0	7.8	6.1	0.0	0.2
Trinidad and Tobago	84.7	5.5	0.0	3.8	87.1	103.1	87.9	1.3
Latin America	7 748.0	6 845.5	18 651.6	51 544.6	1 411.1	4 946.1	12 139.2	32 420.8
Central America	5 665.4	5 848.0	123.4	144.4	497.1	2 341.4	3 388.6	5 084.1
Belize	0.0	0.0	0.0	0.1	0.4	0.6	132.7	106.2
Costa Rica	235.7	228.8	1.8	25.3	13.1	41.6	183.2	128.6
El Salvador	6.9	5.4	3.4	0.3	15.3	17.1	415.3	525.6
Guatemala	5.5	38.3	19.9	18.2	15.2	38.5	1 528.9	1 697.6
Honduras	1.8	8.2	0.5	0.7	16.5	24.1	69.7	169.0
Mexico	5 413.0	5 535.3	45.3	14.3	423.2	2 195.6	801.6	2 026.8
Nicaragua	1.3	1.1	52.4	79.7	7.3	13.2	190.1	386.6
Panama	1.2	31.0	0.0	5.8	6.2	10.7	67.0	43.6
South America	2 082.6	997.5	18 528.2	51 400.2	914.0	2 604.7	8 750.6	27 336.7
Argentina	253.4	24.7	4 662.0	11 223.0	19.2	63.9	388.1	332.7
Bolivia (Plurinational State of)	267.8	15.1	408.9	111.4	11.6	110.1	23.1	5.6
Brazil	825.5	85.2	11 519.8	33 079.1	31.6	44.7	6 588.8	25 501.0
Chile	85.4	174.6	9.0	20.4	266.0	1 040.3	16.0	19.9
Colombia	353.4	290.6	0.2	0.4	30.8	208.4	1 247.8	976.8
Ecuador	6.8	3.3	27.9	0.7	26.9	96.1	32.9	32.4
Guyana	1.2	6.2	1.6	0.6	8.4	15.4	329.9	353.1
Paraguay	13.2	22.1	1 819.6	5 136.0	9.9	36.8	17.0	21.8
Peru	57.0	143.9	0.6	0.5	182.4	229.2	45.5	77.7
Suriname	0.3	0.6	0.0	0.5	16.7	23.7	0.0	0.2
Uruguay	16.0	24.0	3.9	1 813.7	105.5	132.8	10.4	15.5
Venezuela (Bolivarian Republic of)	202.6	207.3	74.8	13.7	204.8	603.3	51.2	0.0
Regional Office for Africa	268.2	310.2	1 056.0	1 221.6	2 854.6	6 448.1	4 122.5	2 886.2
Regional Office for Asia and the Pacific	28 711.6	71 606.6	5 406.5	5 458.7	18 284.5	21 563.1	13 966.0	15 656.7
Regional Office for Europe and Central Asia	26 913.0	34 699.6	10 010.2	16 697.5	20 140.5	25 011.2	14 318.4	13 673.1
Regional Office for the Near East	1 700.7	4 934.7	339.4	201.2	6 967.1	12 436.2	1 327.0	2 101.9
World	68 961.3	121 238.8	67 741.0	121 908.8	49 827.8	74 548.3	51 314.1	71 486.3

TABLE 38: **Volume of total meat and dairy products trade**

	Total meat				Dairy products (milk equivalent)			
	imports		exports		imports		exports	
	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011	thousand tonnes 2000	thousand tonnes 2011
North America	2 314.0	2 122.7	5 880.7	8 713.2	2 680.4	1 890.2	3 543.8	8 830.9
Canada	482.3	693.0	1 187.1	1 673.6	728.3	496.9	656.3	337.0
United States of America	1 831.7	1 429.7	4 693.6	7 039.7	1 952.1	1 393.3	2 887.5	8 493.9
Regional Office for Latin America and the Caribbean	1 811.9	3 301.8	2 418.4	7 838.4	6 861.9	7 310.7	2 029.1	4 711.4
Caribbean	239.2	542.7	2.9	4.4	848.6	879.2	11.8	8.3
Antigua and Barbuda	4.3	9.4	0.0	0.0	6.0	10.3	0.0	0.2
Bahamas	39.0	34.5	0.0	0.0	40.3	29.4	0.0	0.0
Barbados	10.4	9.6	0.8	0.5	22.8	25.1	0.1	0.8
Cuba	69.3	243.0	0.0	0.0	342.9	442.5	0.1	0.0
Dominica	4.4	4.0	0.0	0.0	8.6	5.1	0.0	0.0
Dominican Republic	4.0	35.0	0.0	0.7	109.4	85.2	0.0	0.8
Grenada	6.6	7.3	0.0	0.0	9.1	5.9	0.0	0.0
Haiti	19.4	77.2	0.0	0.0	58.5	94.1	0.0	0.3
Jamaica	42.1	56.6	0.3	0.6	96.8	53.5	1.9	3.2
Saint Kitts and Nevis	4.2	4.9	0.0	0.0	4.3	3.3	0.0	0.0
Saint Lucia	13.9	13.3	0.0	0.0	16.2	11.1	0.0	0.9
Saint Vincent and the Grenadines	5.4	9.3	0.0	0.0	6.2	7.7	0.0	0.0
Trinidad and Tobago	16.3	38.5	1.6	2.5	127.4	106.1	9.7	2.1
Latin America	1 572.8	2 759.1	2 415.5	7 834.0	6 013.3	6 431.5	2 017.4	4 703.1
Central America	1 167.9	1 772.2	152.8	471.1	2 990.8	3 597.9	255.7	552.4
Belize	2.6	3.2	0.0	0.0	18.9	14.2	0.0	0.2
Costa Rica	3.9	15.8	23.4	29.3	32.9	37.3	43.6	175.0
El Salvador	18.5	44.3	4.9	9.6	181.0	184.1	6.4	12.1
Guatemala	28.1	113.8	6.2	29.2	206.8	262.7	1.2	5.3
Honduras	16.3	46.4	1.3	9.1	101.0	97.1	11.3	14.4
Mexico	1 081.0	1 504.2	80.9	247.7	2 310.8	2 881.1	107.9	154.2
Nicaragua	3.8	12.6	30.6	135.4	74.1	34.4	67.2	184.7
Panama	13.8	31.9	5.4	10.8	65.4	86.9	18.1	6.5
South America	404.8	986.9	2 262.7	7 362.8	3 022.5	2 833.6	1 761.7	4 150.6
Argentina	124.5	70.8	358.5	527.6	51.6	86.3	1 140.6	2 728.9
Bolivia (Plurinational State of)	2.7	2.0	0.6	2.6	68.0	28.2	19.4	25.2
Brazil	66.6	43.5	1 549.7	6 009.7	1 561.9	967.5	17.3	101.7
Chile	119.0	545.3	48.0	288.3	186.9	298.1	86.3	325.8
Colombia	38.8	77.0	2.3	11.4	132.9	104.1	78.9	6.7
Ecuador	1.7	11.5	5.1	3.3	5.0	6.9	7.7	27.1
Guyana	12.3	3.3	0.0	0.0	55.1	42.5	0.4	0.6
Paraguay	1.7	4.4	50.8	222.8	22.7	24.1	0.1	7.8
Peru	15.4	28.1	0.2	3.4	281.3	275.4	6.8	140.9
Suriname	6.8	23.0	0.0	1.1	4.8	19.0	0.0	2.6
Uruguay	8.1	22.1	247.1	292.4	3.5	16.7	400.7	783.3
Venezuela (Bolivarian Republic of)	7.0	155.9	0.6	0.0	648.9	964.9	3.5	0.0
Regional Office for Africa	543.1	1 672.3	116.7	147.5	2 110.1	3 396.9	287.2	315.2
Regional Office for Asia and the Pacific	6 190.9	9 817.4	4 121.5	5 067.9	12 510.4	23 445.3	15 810.3	16 051.4
Regional Office for Europe and Central Asia	10 721.7	18 661.5	10 998.0	18 942.4	37 263.0	54 808.8	50 444.3	70 629.3
Regional Office for the Near East	1 174.4	3 176.3	49.2	213.3	6 638.0	12 710.8	541.1	4 571.4
World	23 347.1	39 266.2	24 457.2	42 014.0	69 181.6	103 361.9	72 773.4	105 486.8

TABLE 39: **Value of fish trade**

	Fish							
	imports				exports			
	million US$ 2000	million US$ 2009	million US$ 2010	million US$ 2011	million US$ 2000	million US$ 2009	million US$ 2010	million US$ 2011
North America	11 839.0	15 871.4	17 760.0	20 112.1	5 873.7	7 384.2	8 508.7	9 986.8
Canada	1 388.3	2 013.2	2 263.5	2 645.8	2 818.4	3 239.5	3 847.3	4 198.6
United States of America	10 450.7	13 858.2	15 496.4	17 466.3	3 055.3	4 144.6	4 661.3	5 788.1
Regional Office for Latin America and the Caribbean	1 061.5	3 019.9	3 544.2	4 098.5	6 821.2	11 241.0	11 546.2	14 436.6
Caribbean	202.7	375.8	362.1	435.7	228.7	143.9	177.3	185.3
Antigua and Barbuda	4.0	5.8	6.0	6.4	0.2	0.3	0.4	0.9
Bahamas	14.8	20.8	20.1	21.9	108.2	65.1	74.6	75.3
Barbados	10.9	18.1	18.0	22.2	1.3	0.4	0.6	0.5
Cuba	43.0	43.3	25.7	27.9	87.2	45.7	59.7	55.0
Dominica	1.6	2.4	1.8	1.8	0.0	0.0	0.0	
Dominican Republic	53.0	126.2	137.6	158.2	3.0	4.5	7.1	14.8
Grenada	2.2	3.8	2.9	2.8	3.4	4.9	6.5	5.8
Haiti	5.9	26.5	20.4	34.6	3.6	5.0	6.7	10.1
Jamaica	51.6	88.6	90.3	105.1	10.0	6.5	10.1	12.0
Saint Kitts and Nevis	2.8	3.1	3.8	3.2	0.2	0.5	0.5	0.7
Saint Lucia	4.8	6.3	5.5	7.4	0.0	0.1	0.1	0.1
Saint Vincent and the Grenadines	1.1	1.9	2.0	1.2	1.0	0.4	0.5	0.4
Trinidad and Tobago	7.1	28.9	28.0	42.8	10.6	10.5	10.6	9.7
Latin America	859.1	2 644.3	3 182.4	3 663.0	6 704.2	11 189.9	11 548.2	14 436.3
Central America	221.6	621.6	771.1	896.5	1 491.5	1 785.9	1 600.5	1 871.7
Belize	3.3	1.3	1.2	0.5	32.3	26.3	31.3	25.4
Costa Rica	19.7	54.7	49.3	73.4	117.8	116.3	104.9	129.6
El Salvador	8.8	77.0	42.7	31.7	26.6	94.2	77.9	79.1
Guatemala	8.2	43.8	75.5	76.7	35.1	86.7	98.4	106.2
Honduras	16.0	21.3	27.1	26.1	188.7	170.3	169.1	144.2
Mexico	143.0	384.6	529.9	632.0	706.7	802.7	772.7	1 110.7
Nicaragua	7.2	5.8	7.2	9.3	127.8	108.0	136.7	143.9
Panama	15.4	33.0	38.2	46.9	256.5	381.4	209.5	132.7
South America	637.2	2 022.5	2 411.0	2 766.2	5 101.0	9 311.2	9 768.4	12 379.6
Argentina	84.2	97.8	124.6	160.4	806.2	1 147.9	1 345.7	1 482.7
Bolivia (Plurinational State of)	9.2	10.3	10.0	17.8	0.0	0.0	0.0	0.0
Brazil	324.2	721.6	1 056.7	1 261.9	239.1	196.6	218.1	223.1
Chile	48.0	113.6	255.4	372.2	1 793.8	3 606.3	3 401.2	4 504.7
Colombia	74.8	228.3	259.6	315.1	191.0	208.7	179.5	188.1
Ecuador	2.2	225.1	228.2	293.7	587.1	1 610.8	1 809.7	2 494.1
Guyana	2.0	1.6	1.7	2.5	51.3	53.3	49.2	53.6
Paraguay	1.7	4.2	5.9	6.8	0.0	0.0	0.0	0.0
Peru	15.9	78.5	162.8	145.2	1 128.5	2 208.9	2 532.1	3 148.0
Suriname	6.2	6.6	4.7	3.0	40.9	71.8	31.1	34.7
Uruguay	12.2	50.9	61.8	61.8	110.2	176.4	190.7	236.7
Venezuela (Bolivarian Republic of)	56.6	484.0	239.6	125.9	153.0	30.5	11.1	13.9
Regional Office for Africa	743.5	2 643.1	2 825.3	3 685.7	1 639.3	3 149.8	3 246.0	3 254.8
Regional Office for Asia and the Pacific	20 975.7	28 093.6	32 446.0	38 951.7	19 834.0	35 430.0	42 662.0	51 368.6
Regional Office for Europe and Central Asia	21 967.8	46 172.3	49 713.8	56 548.3	18 231.7	35 791.9	40 469.7	45 602.9
Regional Office for the Near East	598.2	1 789.9	2 151.9	2 478.8	1 358.6	2 388.6	2 632.0	2 747.3
World	60 089.2	99 895.9	111 137.9	128 985.4	55 759.5	96 372.7	109 629.6	128 161.4

PART

4 Sustainability dimensions

The goal of ending food insecurity in the Latin America and the Caribbean region in part depends on their ability to use agricultural growth to spur rural economic development that ensures vulnerable communities have better access to food. In addition, the region can bolster global food supply by increasing its agricultural exports. Trade can be an important element in the management of natural resources at the global level. Areas where resources do not permit sustainable food and agriculture production can purchase food on the international market using earnings obtained through the provision of goods and services suited to their local environment.

If agricultural growth in the region is not founded on sustainable management of natural resources, global and regional food security will be compromised. Agriculture is the main human activity responsible for natural resource management at the local and regional levels. As the population expands, competition for natural resources from cities and industry will grow, and the agricultural sector will need to become more efficient in its uses of these resources.

Consumers have become more attuned to the issue of sustainability, increasingly demanding food be produced, processed and distributed in ways that are environmentally sound and sustainable livelihoods for those working in the food chain. Latin America and the Caribbean is in a position to tap into this growing market. Currently, however, some agricultural practices in the region are not sustainable and contribute to the degradation of water resources, erosion of the soil and loss of biodiversity.

Global warming and climate change have become some of the main challenges to sustainability of agricultural systems. Emissions of greenhouse gases (GHGs) from agriculture, forestry and other land uses contribute significantly to the threat of global warming. The land sectors are responsible for nearly 30 percent of all human-induced GHG emissions into the atmosphere, a contribution comparable to that of the energy sector and far exceeding total emissions from transportation. Crop and livestock production alone is responsible for half of the methane and two-thirds of the nitrous oxide emitted into the atmosphere by human activity. One of the ways countries have tried to mitigate global warming is to encourage the use of bioenergy as a substitute for fossil fuels. The growth of the biofuel sector in Latin America and the Caribbean has been significant, especially in Brazil.

Although agriculture is a cause of GHG emissions, the sector will also be severely affected by the expected impacts of climate change, including changes in temperature, disruptions in traditional precipitation patterns and water availability, extreme climatic events and rising sea levels. To move toward sustainable food and agriculture systems, governments, public institutions and farmers, particularly food insecure producers, in the region need to be supported in their efforts to adapt to and, where appropriate, mitigate climate change.

This chapter presents data to capture different aspects of the sustainable management of natural resources in the agriculture, forestry and fisheries sector.

Key Resources

Sustainable Development in Latin America and the Caribbean: follow-up to the United Nations development agenda beyond 2015 and to Rio+20

This inter-agency document is a contribution by the United Nations system to the discussion of the sustainable development agenda based on common concerns. The international community is counting down to 2015, the target date for achieving the Millennium Development Goals. But it also has a unique opportunity to think about a new development paradigm for the planet beyond 2015, based on the Rio+20 commitments, as reflected in the document "The Future We Want". This text will help stimulate and inform the debate on the new post-2015 development agenda, with a focus on sustainable development, equality and structural change, and will guide discussions within the region and among the global community on the steps needed to achieve a new paradigm of change.

Webpage: www.cepal.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/6/50796/P50796.xml&xsl=/publicaciones/ficha.xsl&base=/publicaciones/top_publicaciones.xsl

Sustainable development in Latin America and the Caribbean 20 years on from the Earth Summit: progress, gaps and strategic guidelines

The present document is divided into two parts: an analysis of progress made and difficulties encountered in Latin America and the Caribbean in implementing global commitments on sustainable development since 1992, and proposed guidelines for moving towards sustainable development in the region.

One of the milestone achievements of the Earth Summit in 1992 was the international community's acceptance of the concept of sustainable development, which was broadly disseminated in the Rio Declaration on Environment and Development. Yet, twenty years later — and despite significant advances — the development model is still unable to bring about simultaneous and synergic progress on the social, economic and environmental fronts

Webpage: www.eclac.cl/cgi-bin/getProd.asp?xml=/publicaciones/xml/8/46098/P46098.xml&xsl=/dmaah/tpl-i/p9f.xsl&base=/dmaah/tpl/top-bottom.xslt

Land and Forestry

Forests play an essential role in mitigating climate change and providing products and ecosystem services that are essential to the prosperity of humankind.The latest estimate of the world's total forest area is more than four billion hectares, corresponding to about 30 percent of total land area. The five most forest-rich countries – the Russian Federation, Brazil, Canada, the United States of America and China – account for more than half of the planet's total forest area. At the global level, deforestation has decreased from an estimated 16 million hectares per year in the 1990s to about 13 million hectares per year in the last decade.

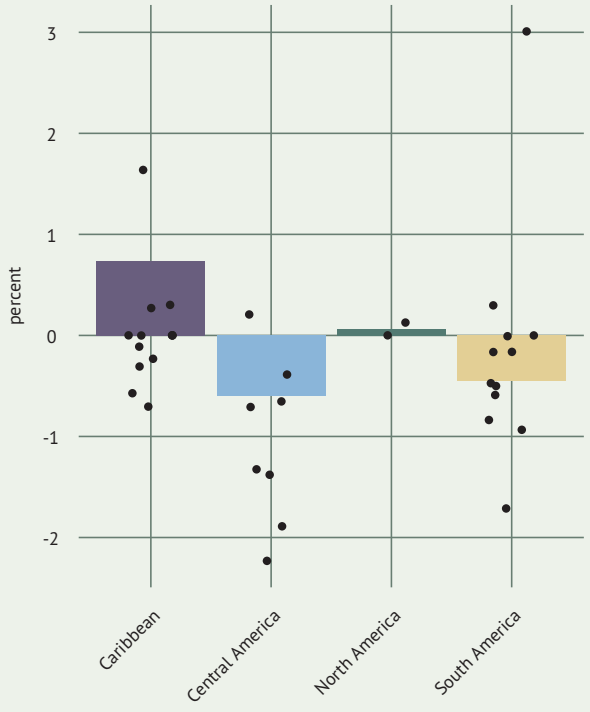
Changes in land cover have caused the most pressing environmental issue in recent decades. Deforestation and land use intensification, especially their impact on soil degradation, are at the heart of the issue. Latin America and the Caribbean suffered the highest deforestation rate of all regions in the world, -0.46 percent between 2000 and 2010, more than three times the global rate in the same period. In 1990, Latin America and the Caribbean was the most heavily forested region, but it was overtaken by Asia and the Pacific and Europe, where the percentage of forest area has expanded. However, in much of the world, including Latin America and the Caribbean, the current picture of land-cover change shows a continuing slowdown in the conversion of forests to areas for crop or livestock production and a steady growth of protected areas.

In the Caribbean, the percentage of forested area increased from 25.5 to 29.4 percent, largely as a result an expansion of forest land in Cuba, which went from having 19.2 percent forest cover in 1990 to 27.3 percent in 2011. Only two other countries, Saint Lucia and Saint Vincent and the Grenadines, increased their forest land. In the other Caribbean countries, the percentage of forest land stayed the same or declined.

In Central America, the percentage of forest cover declined from 39.2 to 34.2 percent. Only Costa Rica increased its percentage of forest area, moving from 50.2 to 51.5 percent. In South America, the percentage of forest area fell from 53.6 to 48.8 percent. The greatest decline was in Ecuador where the percentage declined to 38.9 percent in 2011 from 49.9 percent in 1990. Chile and Uruguay are the only two South American countries where the percentage of forest area increased.

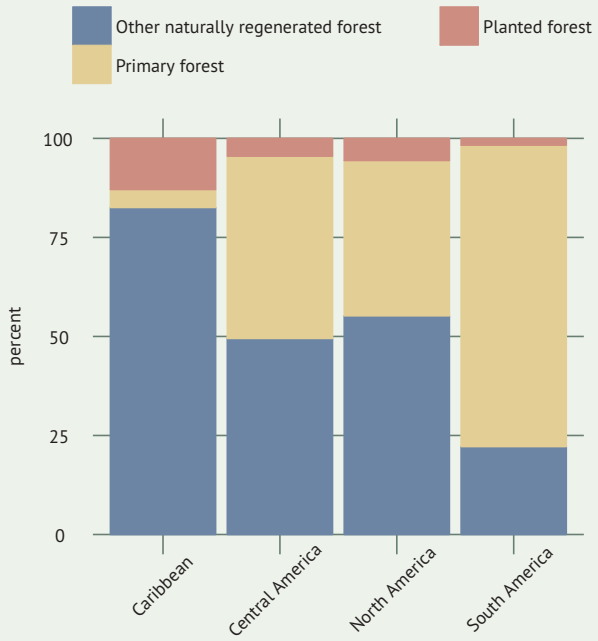
Of the total forest area in the region, 72.9 percent is primary forest. The highest percentage is in South America (76.1 percent), with three countries having particularly high percentages: Surinam (94.9 percent), Brazil (91.7 percent) and Peru (88.5 percent). The forest area in the Caribbean is only 4.5 percent primary forest, with Dominica having by far the highest percentage (59.8 percent).

CHART 92: **Annual growth rate in forest area (1990-2011)**



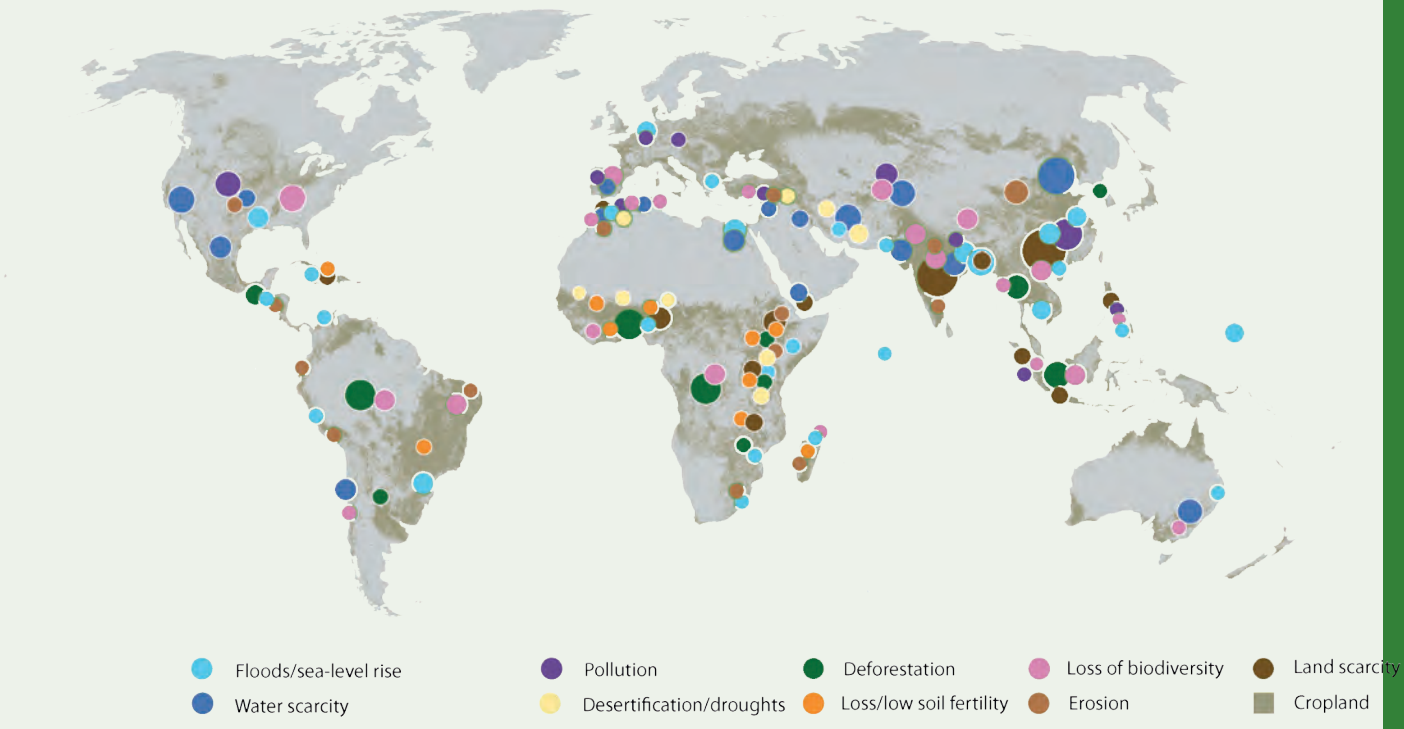
Source: FAO, Statistics Division (FAOSTAT).

CHART 93: **Forest characteristics (2010)**



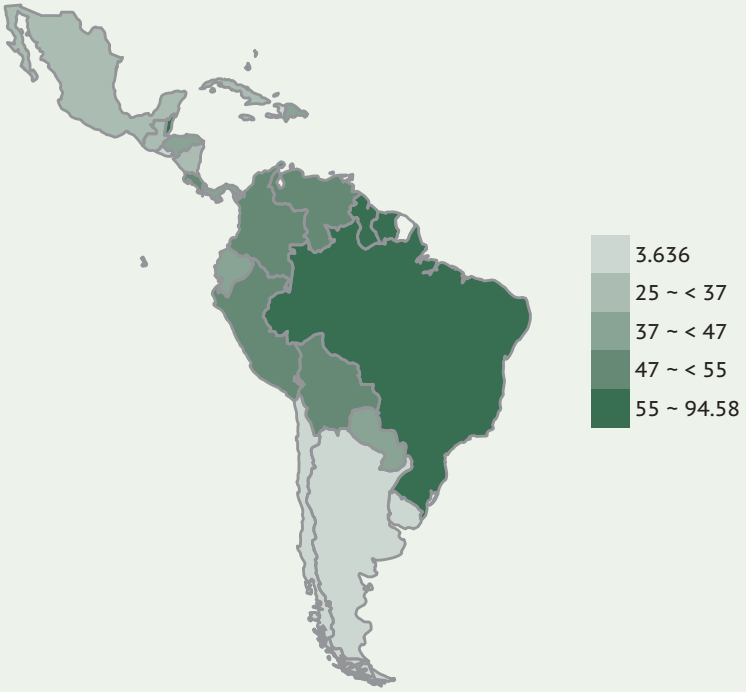
Source: Global Forest Resources Assessment.

MAP 53: **Global distribution of risks associated with main agricultural production systems**



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

MAP 54: **Forest area as share of total land area (percent, 2011)**



Source: FAO, Statistics Division (FAOSTAT).

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. Proper management of these resources is essential, to ensure that production and harvesting do not compromise these valuable options for future generations and the overall sustainability of forests.On average, global production of the main forest products was between one and four percent higher in 2011 than in 2010. This shows that countries are slowly coming out of recession. For example, production of wood-based panels and paper in 2011 was above the pre-crisis levels of 2007 and appeared to be growing relatively strongly in most regions. On the other hand, global production of industrial roundwood – despite a three percent increase from 2010 – has not yet reached its pre-crisis levels.

In the markets for pulp and paper, overall growth was very modest over the period 2007–2011, with a growth trend of about one percent per year. However, this overall result conceals major differences at the regional level, with pulp and paper production and consumption increasing significantly in the Asia and the Pacific region, but generally declining in Europe and Northern America.

In 2011-2012, Latin America and the Caribbean produced 221 million cubic metres of industrial roundwood, (roughly 13 percent of global production), 17 million cubic metres of wood-based panels (roughly six percent of global production), about 22 million tonnes of wood pulp (roughly 12 percent of global production) and 20 million tonnes of paper and paperboard (roughly five percent of global production). Brazil accounted for more than half of the production for all these forest products. Chile was the next largest producer of industrial round wood, wood-based panels and wood pulp. Mexico was the second largest producer of paper and paperboard.

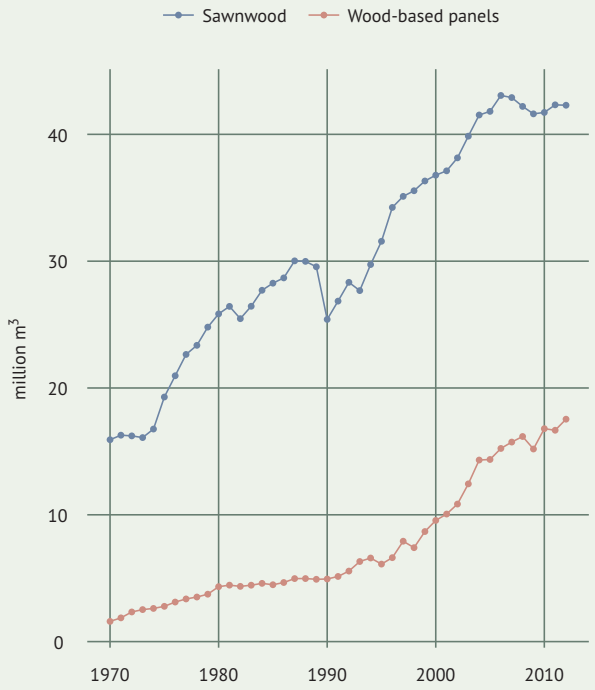
Between 1962 and 2012, the production of industrial roundwoood grew by 4.2 percent per year in the region. Most of this increase was in South America, where every country recorded increases in production, with Uruguay showing by far the highest growth rate (7.6 percent). In Central America, growth was only 1.1 percent, with three countries, Belize, Honduras and Nicaragua, registering declines in production. Uruguay also showed the highest growth rate for wood pulp production (13.4 percent). Ecuador had the highest growth rate for paper and paperboard production (14.3 percent) and wood-based panels (18.3 percent).

Given current rates of population growth, demand for roundwood is expected reach approximately 590 million cubic metres by 2050, an increase of annual net consumption of about 24 percent compared to 2010.

Further reading

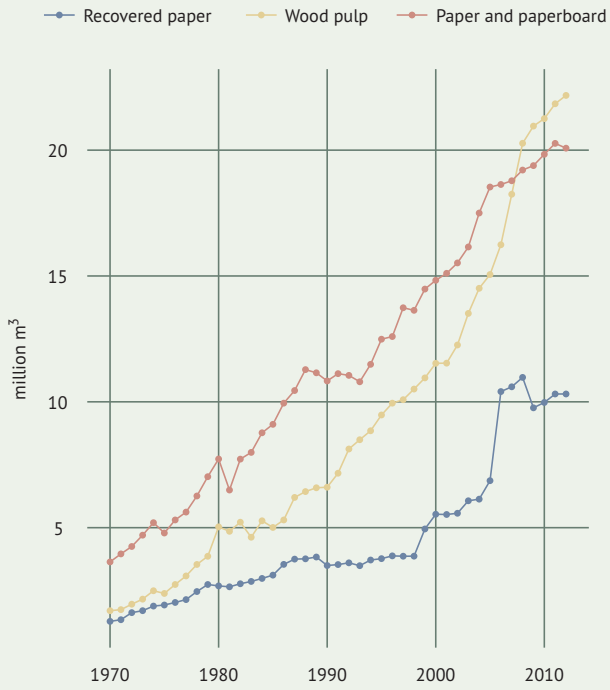
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 (www.fao.org/nr/solaw/solaw-home/en/)
- UN International Year of Forests 2011 (www.fao.org/forestry/iyf2011/en/)
- FAO Land degradation assessment (www.fao.org/nr/land/degradation/en/)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

CHART 94: **Latin America production of selected forest products (1970-2012)**



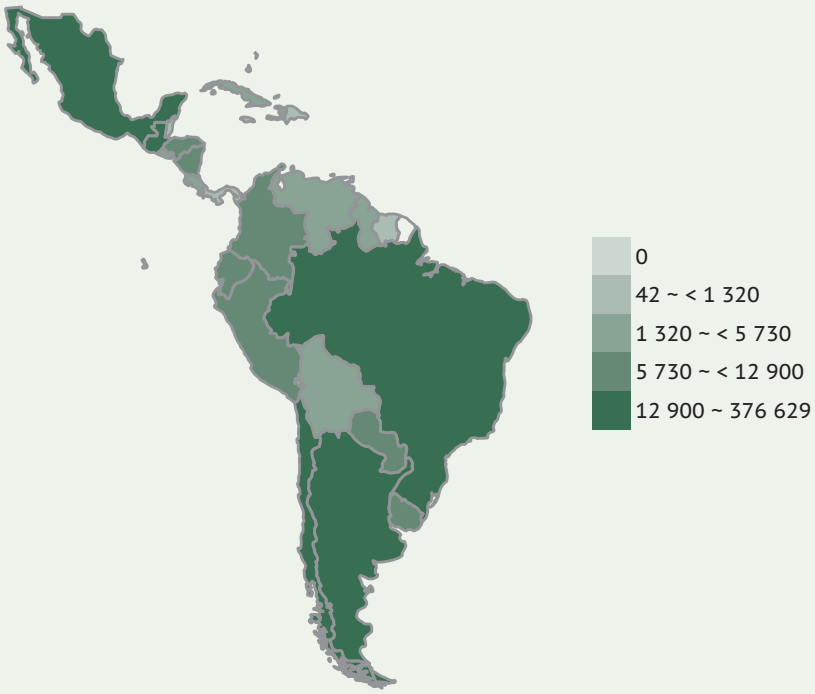
Source: FAO, Statistics Division (FAOSTAT).

CHART 95: **Latin America production of selected forest products (1970-2012)**



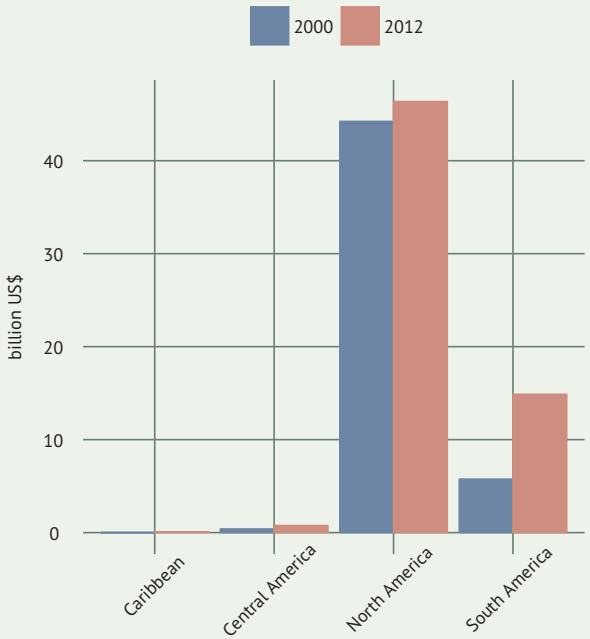
Source: FAO, Statistics Division (FAOSTAT).

MAP 55: **Roundwood production (thousand m^3, 2012)**



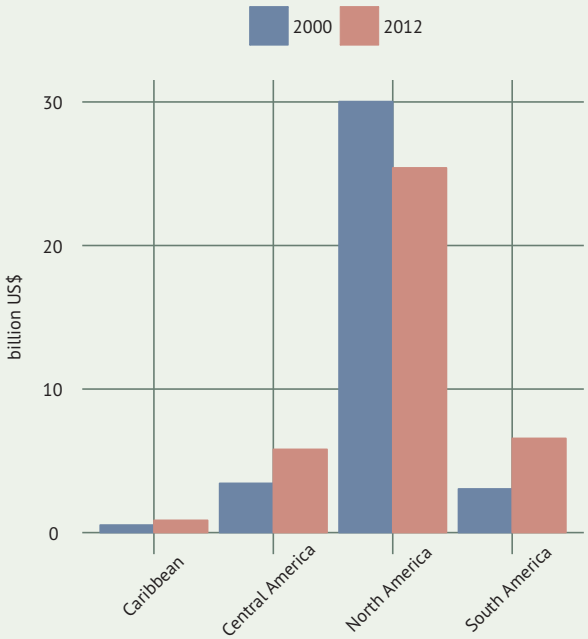
Source: FAO, Statistics Division (FAOSTAT).

CHART 96: **Exports of forest products (2000 and 2012)**



Source: FAO, Statistics Division (FAOSTAT).

CHART 97: **Imports of forest products (2000 and 2012)**



Source: FAO, Statistics Division (FAOSTAT).

Water

Global demand for water has risen sharply over the last century. Total annual water withdrawal (for agriculture, industries and municipalities) rose from less than 600 cubic kilometres per year at the beginning of the twentieth century, to 1 350 in the middle of the century and to more than 3 800 by the beginning of the twenty-first.

Today, irrigated agriculture accounts for about 70 percent of freshwater withdrawals throughout the world. In keeping with the global trend, the countries of Latin America and the Caribbean withdraw most of their freshwater resources for agriculture. In seven countries in the region, agriculture accounts for well over 80 percent of total freshwater withdrawals. In only five countries (Antigua and Barbuda, Colombia, Jamaica, Trinidad and Tobago and the Bolivarian Republic of Venezuela) does the water withdrawn for municipal purposes exceed the amount withdrawn for agriculture. Belize is the only country in the region where the amount of water used for industry is higher than for agriculture.

Because of the abundant water resources in Central and South America, the percentage of total renewable freshwater resources used is relatively low. However, water resources are not evenly spread over the region or within countries. And some areas, including parts of Chile, Argentina, the Pacific run or the dry corridor of Central America suffer scarcity of water. Mexico, which withdraws the most water per year of any country in the region (nearly 80 billion cubic metres), uses 17.5 percent of its renewable freshwater resources, a percentage only slightly higher than the United States of America.

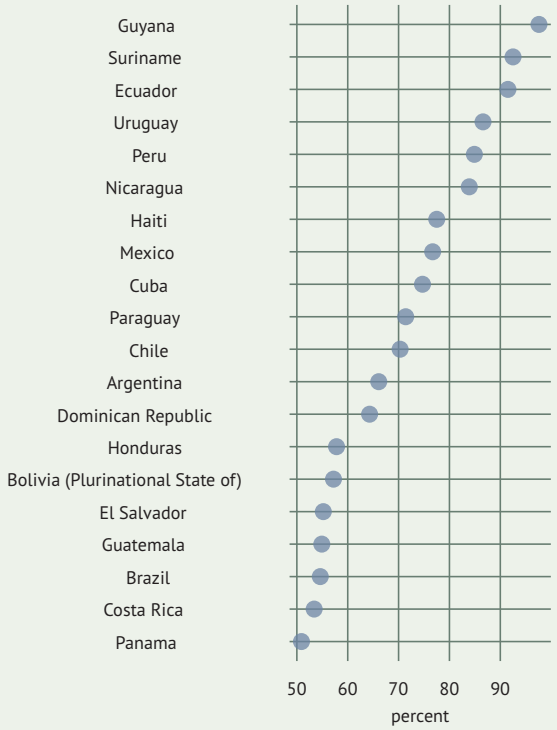
The situation in the Caribbean is very different. Water resources are not as abundant, and the percentage of renewable freshwater resources withdrawn annually is much higher than in Latin America. Only Antigua and Barbuda uses less than four percent of its renewable freshwater resources. Cuba, which withdraws the most water annually (7.5 billion cubic metres), uses almost 20 percent.

Precipitation provides some of the water needed by crops to satisfy their evapotranspiration requirements. The soil, acting as a buffer, stores part of precipitation water as soil moisture, returning it to the crops in times of deficit. In humid climates, this mechanism is usually sufficient to ensure satisfactory growth in rainfed agriculture. In arid climates or during the dry season, irrigation is required to compensate for the deficit resulting from insufficient or erratic precipitation. In regions where climate change is projected to decrease water availability, investment in water storage and delivery to soils is crucial for adaptation.

Further reading

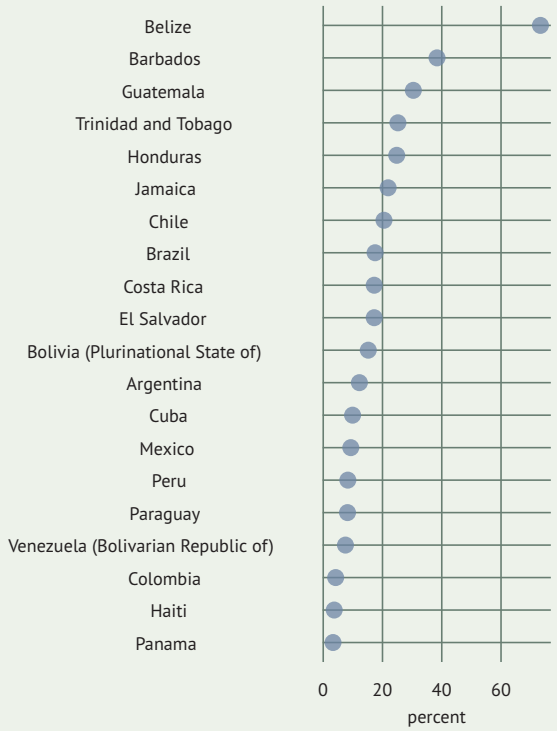
- FAO The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) - Managing Systems at Risk 2011 (www.fao.org/nr/solaw/solaw-home/en/)
- FAO Water (www.fao.org/nr/water/)
- FAO AQUASTAT (www.fao.org/nr/aquastat/)

CHART 98: **Freshwater withdrawal by agricultural sector, shares of total (2000 and 2010*)**



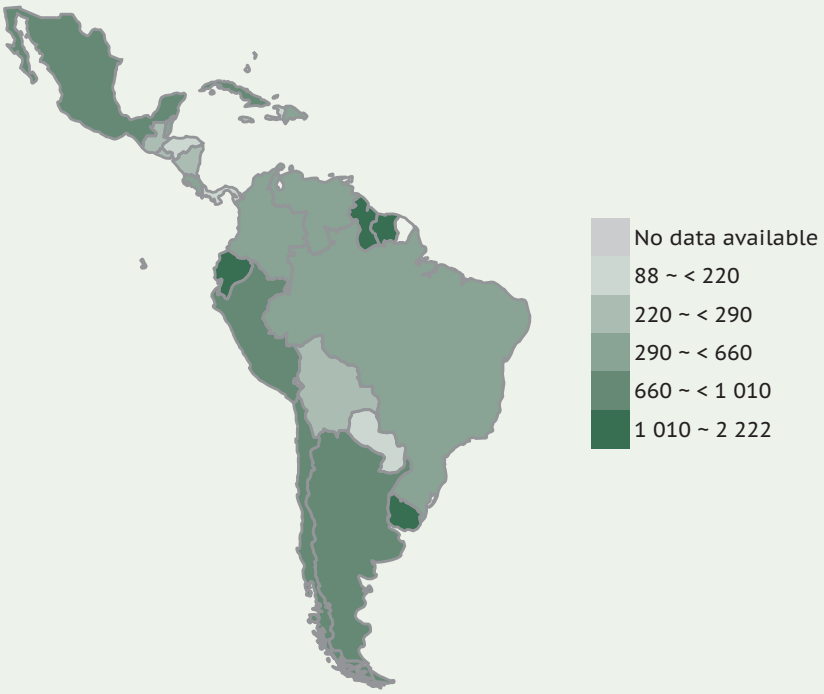
Source: Land and Water Division (AQUASTAT).

CHART 99: **Freshwater withdrawal by industrial sector, shares of total (2000 and 2010*)**



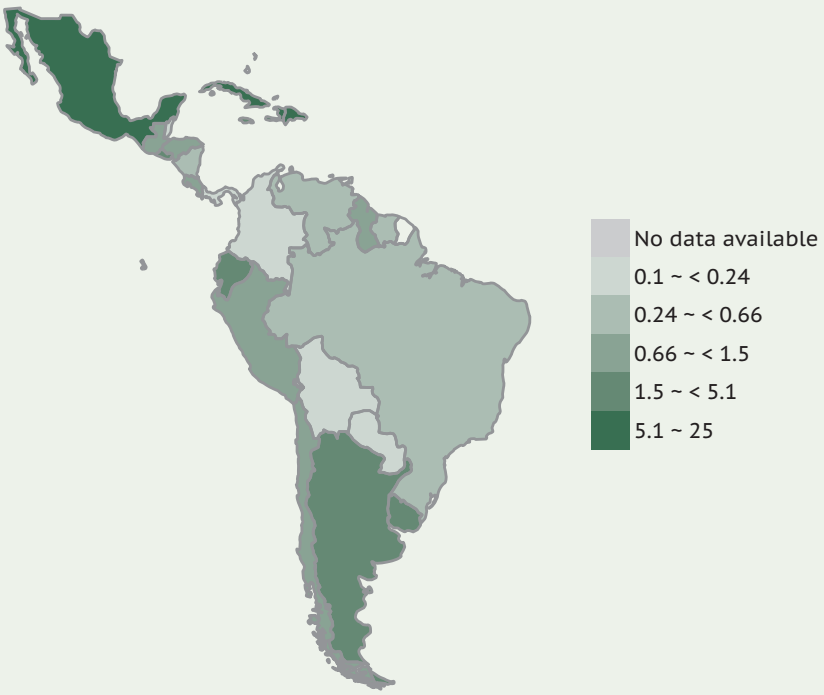
Source: Land and Water Division (AQUASTAT).

MAP 56: **Total water withdrawal per capita (m^3/yr/cap, 2000-2010*)**



Source: Land and Water Division (AQUASTAT).

MAP 57: **Renewable freshwater resources withdrawn by agriculture (percent, 2000-2010*)**



Source: Land and Water Division (AQUASTAT).

Biodiversity

Biodiversity refers to the degree of variation of life forms within a given ecosystem and serves as a measure of the health of the environment. Biodiversity for food and agriculture includes the components of biological diversity that are essential for feeding human populations and improving the quality of life.

To achieve sustainable increases in productivity, and provide a sounder ecological basis for agriculture, a large reservoir of genetic and species diversity needs to be maintained and sustainably used. There are two major centres of origin of cultivated plants in Latin America and the Caribbean: Central America for important crops, including maize, and the Andes for the potato and many other crops. Cassava originated in the South American tropics.

Latin America and the Caribbean has more than 4 000 threatened higher plant species. Ecuador has by far the greatest number of threatened higher plant species (over 1 700). Yet countries in the Latin American region have made considerable efforts to protect vulnerable ecosystems. Between 1990 and 2000, the percentage of land covered by nationally protected areas more than doubled, increasing from 9.7 to 20.2 percent. During the same period, the global percentage rose from 9.1 percent to 12.3 percent.

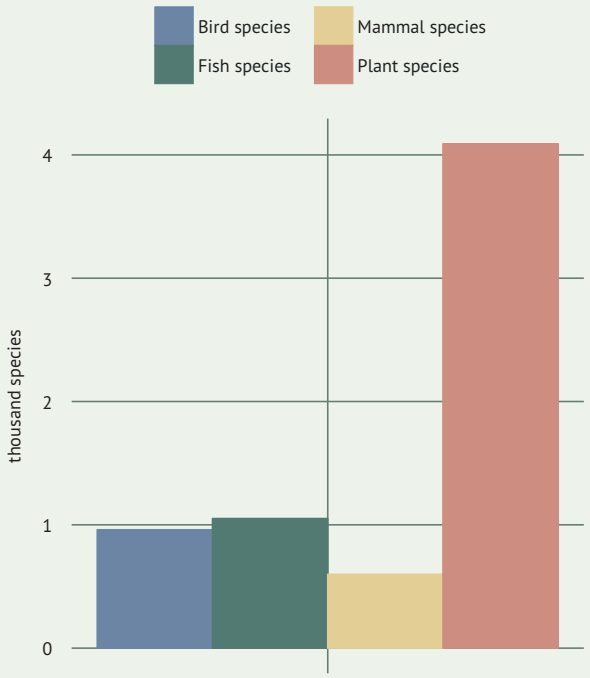
In South America, Brazil has shown the greatest increase in the extent of protected land, the percentage rose from 9.0 percent of country's total land area in 1990 to 26.3 percent in 2000. The Bolivarian Republic of Venezuela, where more than half of the total land area is protected, has by far the largest percentage in the entire region. In Central America, the extent of protected area has tripled. Mexico has made notable progress in increasing the extent of its protected lands, moving from 2.2 percent to 11.1 percent. The Caribbean has seen relatively little expansion of protected lands.

In Latin America and the Caribbean the percentage of territorial waters that are protected has risen less dramatically, moving from 21 percent to 28.6 percent between 1990 and 2000. The most pronounced increase was in Ecuador, which now protects more than 75 percent of its territorial waters. The next highest percentages are in Nicaragua (37.2 percent) and the Dominican Republic (30.4 percent).

Further reading

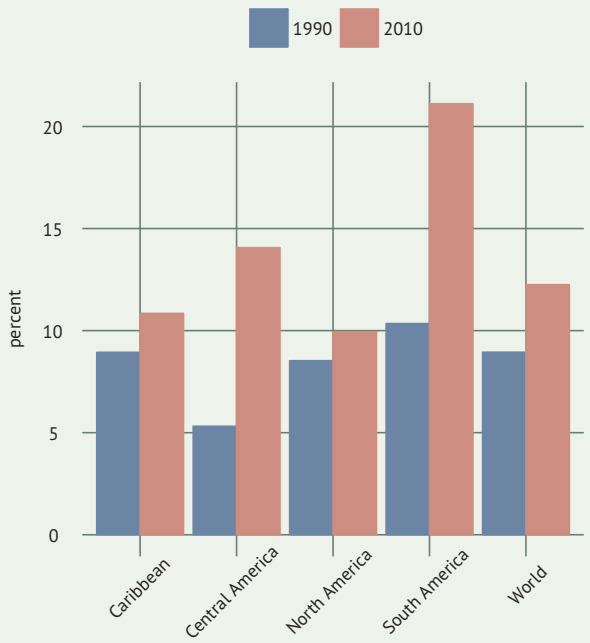
- FAO Biodiversity (www.fao.org/biodiversity)
- UN International Year of Biodiversity 2010 (www.fao.org/biodiversity/2010-international-year-of-biodiversity)
- FAO/INFOODS: Nutrition and Biodiversity (www.fao.org/infoods/infoods/food-biodiversity/en/)

CHART 100: **Species threatened in Latin America and the Caribbean (2012)**



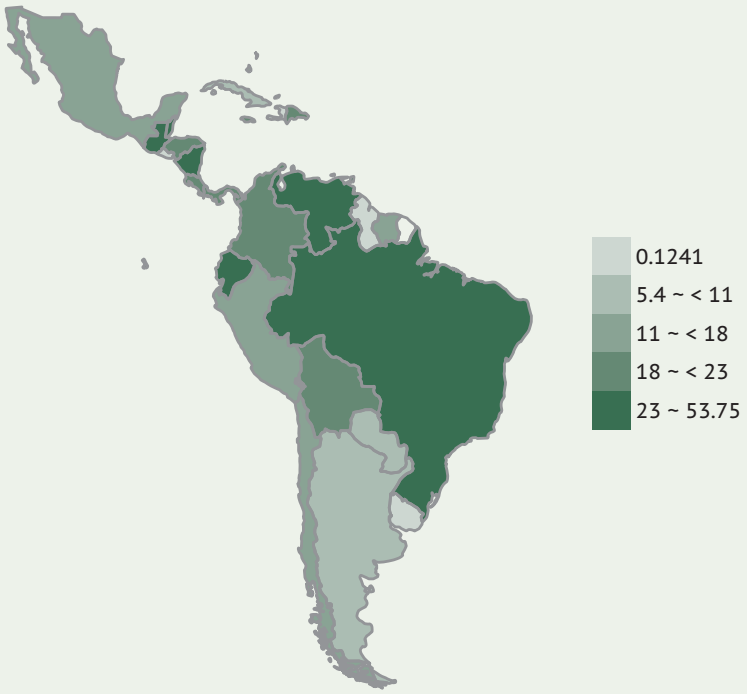
Source: World Bank (WDI).

CHART 101: **Terrestrial protected areas, share of total land area (1990 and 2010)**



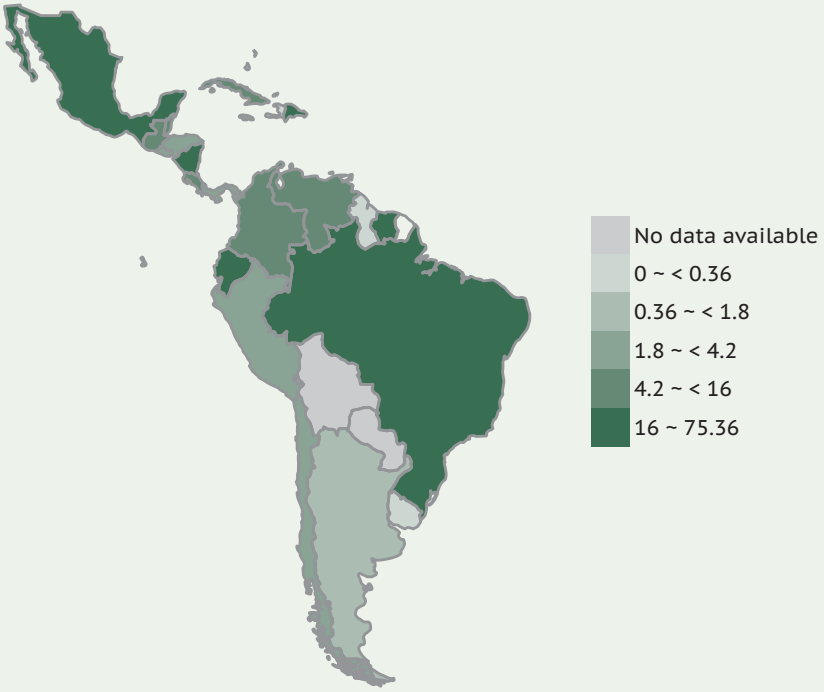
Source: World Bank (WDI).

MAP 58: **Terrestrial protected areas, share of total land area (percent, 2010)**



Source: World Bank (WDI).

MAP 59: **Marine protected areas, share of territorial waters (percent, 2010)**



Source: World Bank (WDI).

Agri-environmental indicators

Agri-environmental indicators are quantitative tools that help assess and quantify the status of and trends in the environmental performance of agriculture. They facilitate the identification of effective management solutions and policy measures for avoiding potential damage, including soil and water degradation, air pollution and loss of biodiversity. Most of the data presented in this section are from a selection of core indicators originally developed by OECD and Eurostat for their member countries, and recently expanded by FAO to achieve global coverage.

Agricultural production systems require stewardship of their underlying ecosystems and respect of the natural resource boundaries within which they operate. In recent decades, however, increasing population and socio-economic pressures on the land, water and genetic resources that underpin the provision of food and other valuable environmental services are cause for concern, given that food production should roughly double by 2050 to satisfy the projected global population of 9 billion people. Agriculture already uses two-thirds of the freshwater resources withdrawn for human use, with irrigated crops providing about 40 percent of the total cereal harvest. Additional land suitable for good production is scarce, while the pressure to produce more food on marginal areas can lead to degradation and poverty.

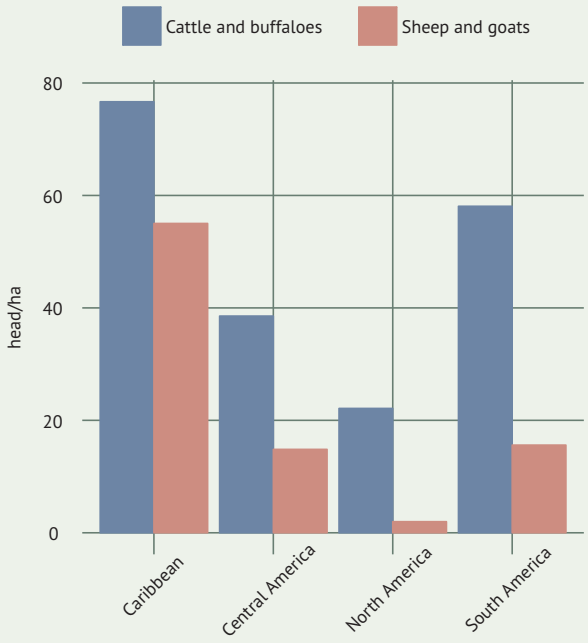
Although there are wide variations within the region, the amount of nitrogen fertilizers applied per hectare of agricultural land is lower in Latin America and the Caribbean than in Asia and North America. However, the application of nitrogen fertilizers per hectare is considerably higher than Africa. The Latin American and the Caribbean region applies the most phosphates and potash fertilizers per hectare of arable land.

Latin America and the Caribbean has the highest density of cattle and buffaloes of any region in the world. On the other hand, the density of sheep and goats is comparatively low. As might be expected, in the Caribbean where human population densities are much higher than Central and South America, so too are livestock densities.

Further reading

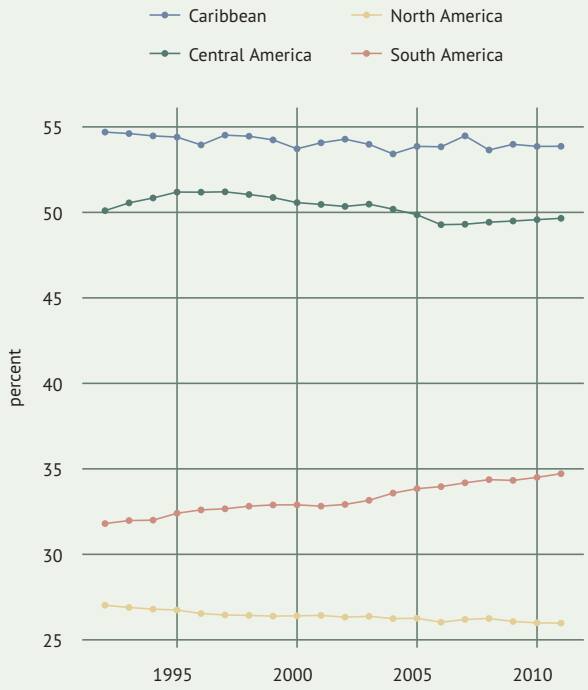
- OECD (www.oecd.org/agriculture/env/indicators)
- EUROSTAT (http://epp.eurostat.ec.europa.eu/portal/page/portal/agri_environmental_indicators/introduction)

CHART 102: **Livestock density per ha of agricultural land, cattle and buffaloes, sheep and goats (2011)**



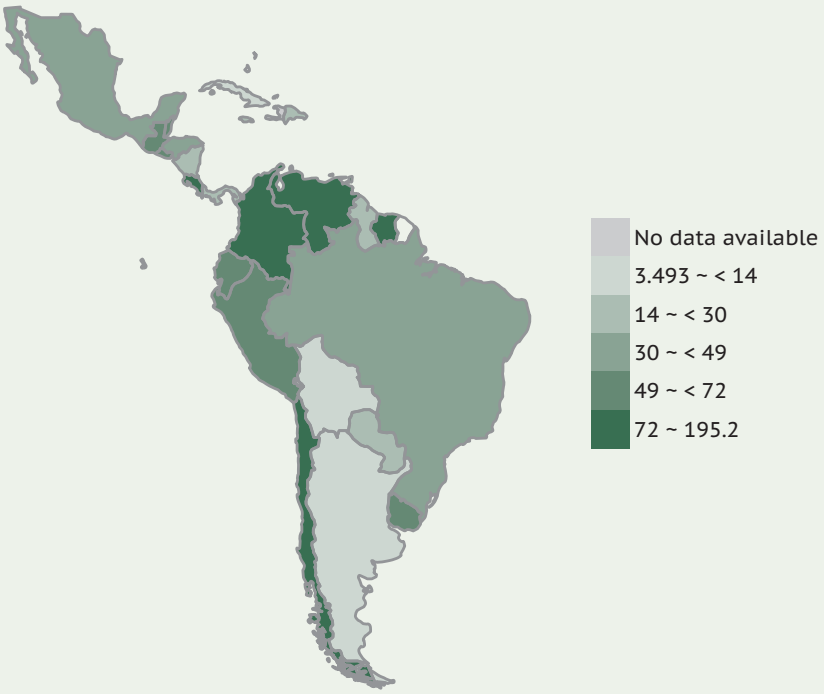
Source: FAO, Statistics Division (FAOSTAT).

CHART 103: **Agricultural land, share of total land area (1992-2011)**



Source: FAO, Statistics Division (FAOSTAT).

MAP 60: **Nitrogen fertilizer consumption per ha of arable area and permanent crops (kg/ha, 2009)**

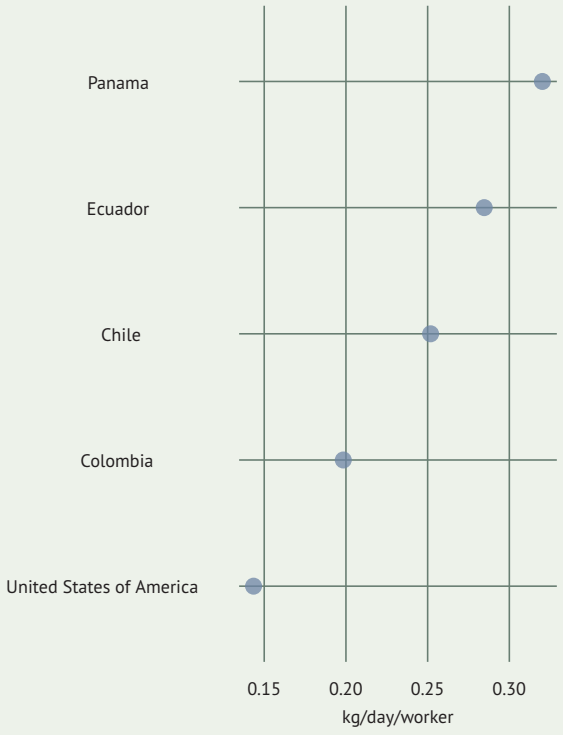


Source: FAO, Statistics Division (FAOSTAT).

CHART 104: **Organic water pollutant (BOD) emissions (2005)**

Source: World Bank (WDI).

CHART 105: **Organic water pollutant (BOD) emissions per worker (2005)**



Source: World Bank (WDI).

Organic farming

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

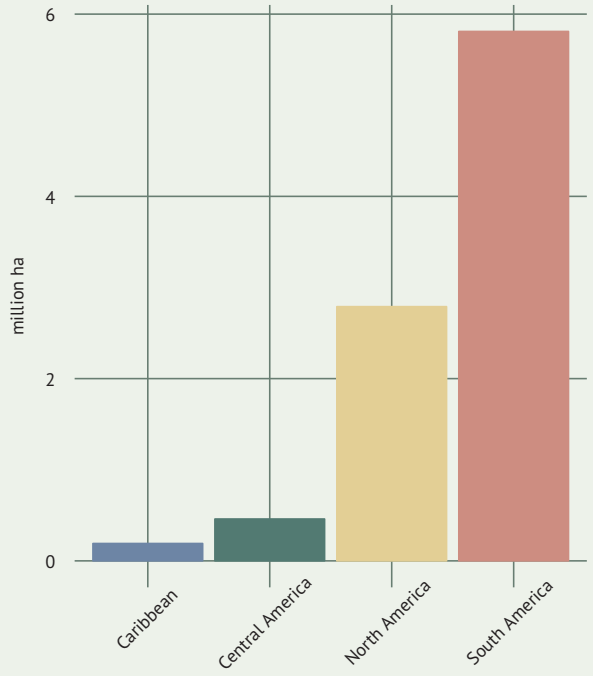
The land area under organic management has been steadily increasing worldwide for several decades, reaching 37.2 million hectares in 2011, up from 11 million hectares in 1999. The total value of organic food and beverages sold in 2011 was almost US$63 billion. The organic market has grown considerably since 2002, and – unlike the rest of the food sector – has continued to grow, despite the global economic slowdown.

In Latin America and the Caribbean, almost one percent of total farm land is dedicated to organic agriculture, second only to Europe and Central Asia (1.4 percent). The region has more than twice the amount of area under organic agriculture as North America. Most of the land used for organic agriculture in the region is in South America. The Dominican Republic and Uruguay have the largest percentage of agricultural land dedicated to organic farming in the region (7.6 and 6.5 percent respectively). These are the highest percentages for organic agriculture outside of Europe. Argentina is next (2.2 percent).

Further reading

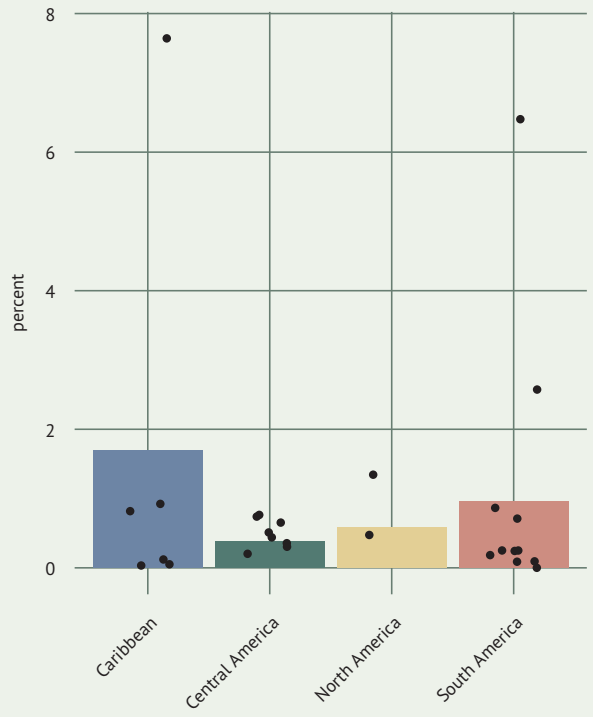
- FAO Organic Agriculture (www.fao.org/organicag/en/)
- FAO Organic Agriculture and Environmental Stability of the Food Supply - FAO (ftp://ftp.fao.org/docrep/fao/meeting/012/ah950e.pdf)

CHART 106: **Organic agriculture area (2011)**



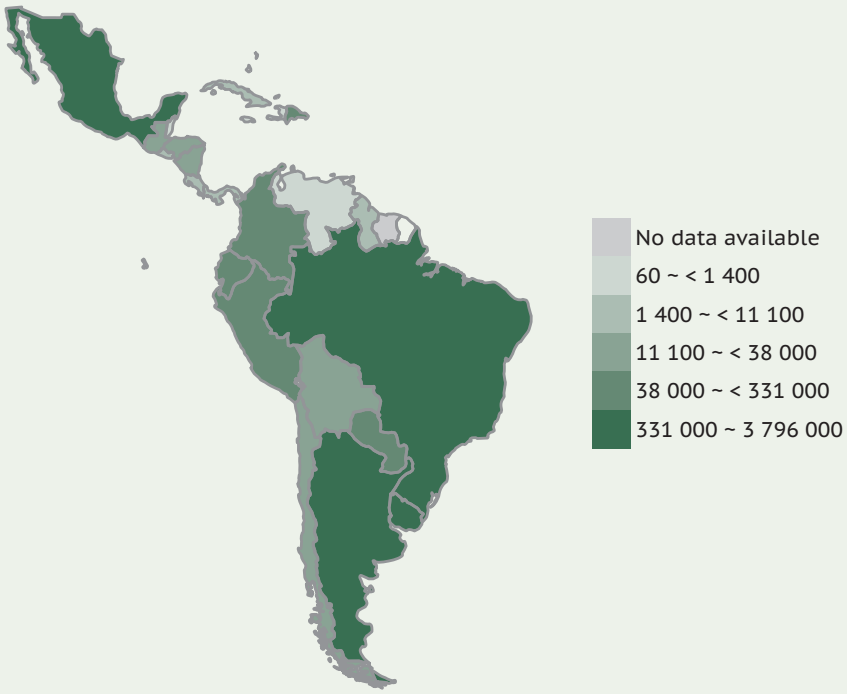
Source: FAO, Statistics Division (FAOSTAT).

CHART 107: **Organic agriculture, share of total agricultural area (2011)**



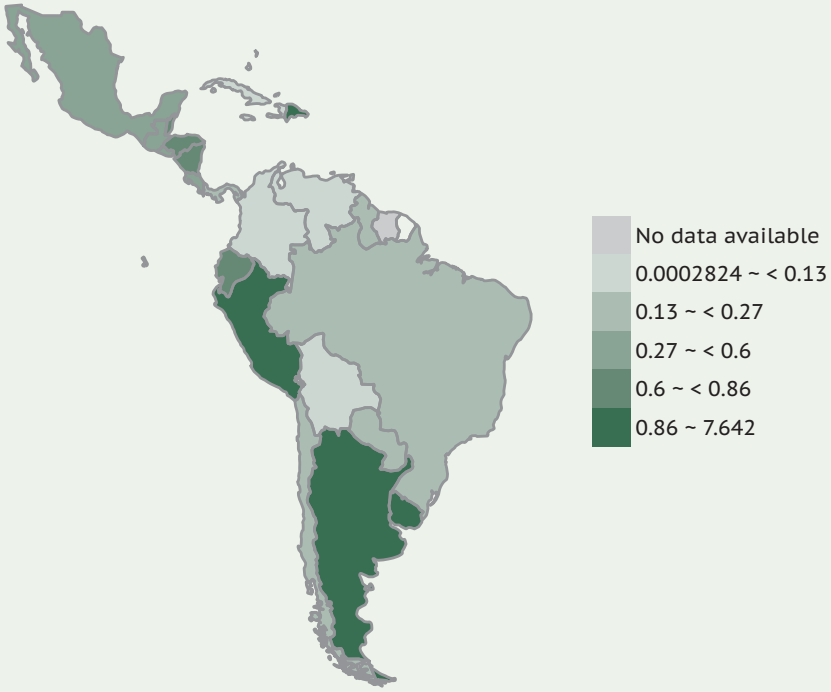
Source: FAO, Statistics Division (FAOSTAT).

MAP 61: **Organic agriculture area (ha, 2011)**



Source: FAO, Statistics Division (FAOSTAT).

MAP 62: **Organic agriculture, share of total agricultural area (percent, 2011)**



Source: FAO, Statistics Division (FAOSTAT).

Bio-based economy

Agriculture is playing an increasingly important role in the bio-based economy, which is emerging as a way of mitigating climate change and establishing sustainable development. Agriculture provides feedstocks for the production of liquid fuels, chemicals and advanced materials, such as natural fibre composites for industry. The potential for growth in this area is already being realized, especially through the rapid expansion of the biofuel sector. Currently, ethanol is produced from easily fermentable agricultural feedstocks such as sugar cane, sugar beet, cereal grains and cassava. Biodiesel is produced from vegetable oil (typically rapeseed, soybean and palm oils) using a process of chemical modification.

In 2009, Latin America and the Caribbean produced 123 000 kilotonnes of biofuel, about 10 percent of the global total. Between 2000 and 2009 South America registered a 30 percent increase in production. Almost all of this increased production took place in Brazil, where biofuel production (ethanol from sugar cane) rose from 46 500 kilotonnes to 76 700 kilotonnes. However, almost all biofuel-producing countries in South America showed modest increases in production. Only Ecuador had a slight decline.

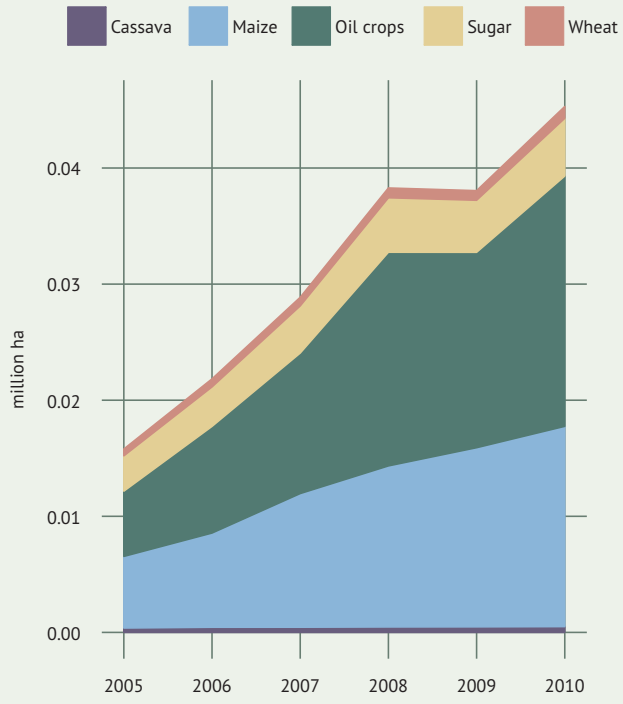
Although Mexico is the next highest biofuel producer in the region (8 400 tonnes), its production fell between 2000 and 2009. Panama was the only other Central American country where biofuel production declined. In all other Central American countries, production either remained constant or increased slightly. After Brazil, Guatemala had the largest increase in production, moving from 3 900 kilotonnes to 5 100 kilotonnes to match Chile as the third largest producer in the region.

Production fell in the Caribbean due to a sharp drop in production in Cuba, which recorded the largest decline in biofuel production in the region, falling from 4 700 kilotonnes to 1 800 kilotonnes. The Dominican Republic and Haiti saw minor production gains. Jamaica, the only other biofuel producer in the Caribbean, registered a very slight decline.

Further reading

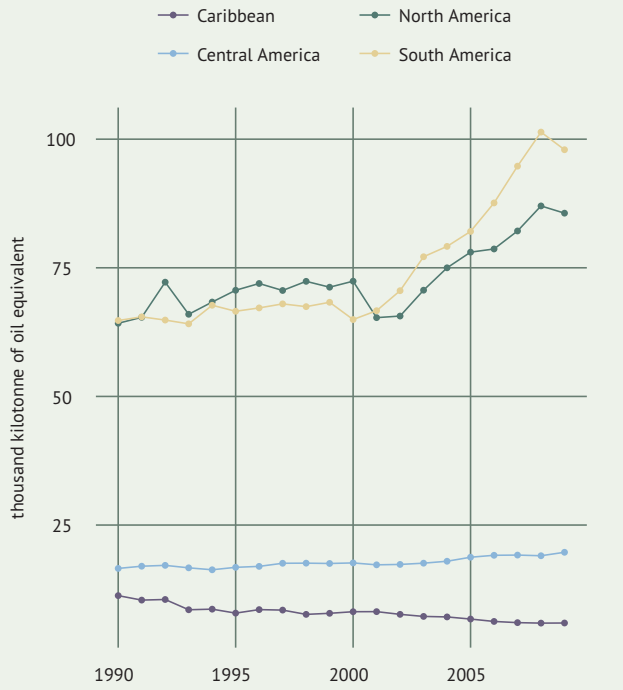
- FAO Bioenergy (www.fao.org/bioenergy)
- UN International Year of Natural Fibres (www.naturalfibres2009.org/en/index.html)

CHART 108: **World area under bioenergy crops (2005-2010)**



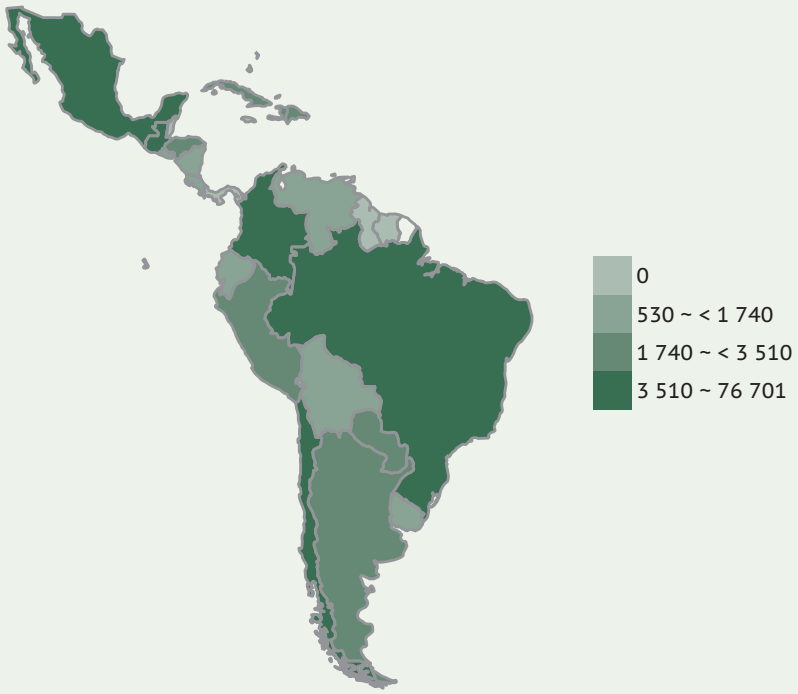
Source: FAO.

CHART 109: **Biofuel production (1990-2009)**



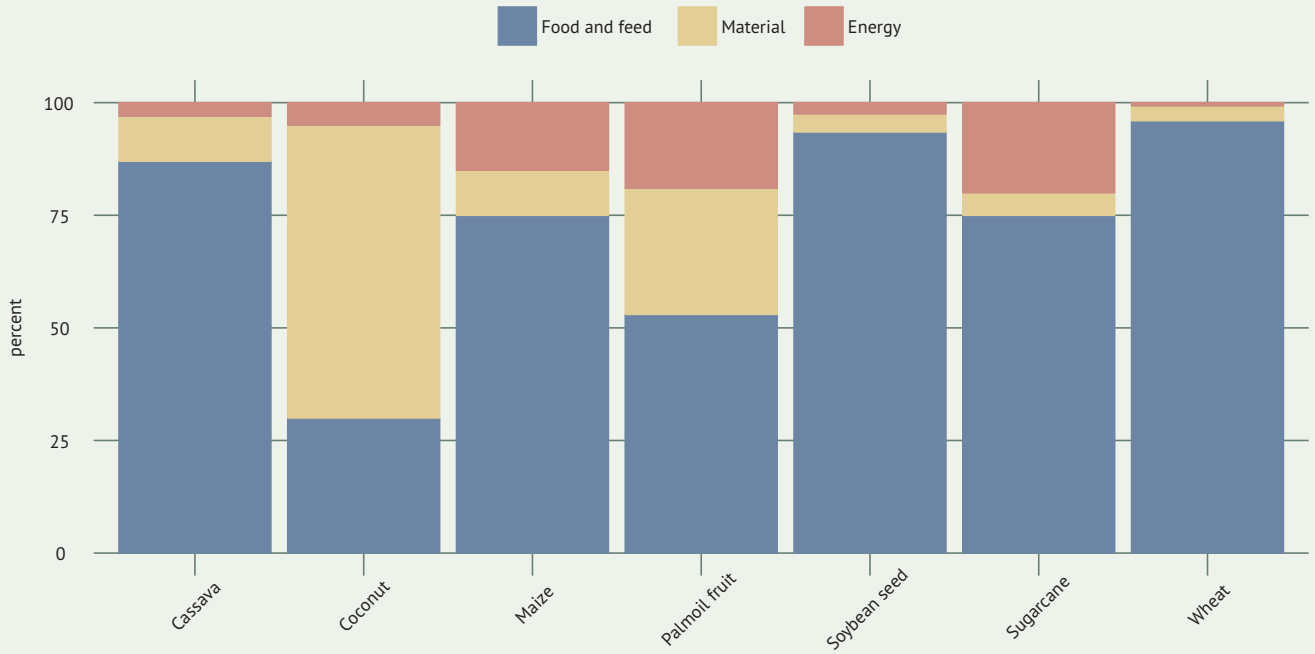
Source: IEA.

MAP 63: **Biofuel production (kilotonne of oil equivalent, 2009)**



Source: IEA.

CHART 110: **Share of food crop usage in world bio-based economy (2009)**



Source: FAO, Statistics Division.

Climate change

The severity and pace of climate change in the twenty-first century is presenting an unprecedented challenge to global agriculture. Current global surface temperatures are now about 0.6° Celsius higher than the average for the last century. This increase is consistent with model predictions of the effects of rising atmospheric concentrations of carbon dioxide (CO_2) and other GHGs, which are a result of human activity. Also in line with the same model simulations, the observed warming is greater at higher latitudes – particularly in the northern hemisphere, where most land masses are located – than in the tropics.

A document prepared for the 31st FAO Regional Conference for Latin America and the Caribbean in 2010 summarized some of the expected impacts of climate change in the region. In temperate zones, such as south-eastern South America, yields are expected to increase for some crops, most notably soy and wheat, and to a lesser degree, maize. In tropical and subtropical regions, where temperatures are currently close to the maximum that crops can tolerate, productivity is expected to drop to one third of present levels as a result of increased thermal stress and drier soils. It is also possible that arid zones (central and northern Chile, the Peruvian coast, north-eastern Brazil) may see increased salinization and desertification of agricultural land.

Global warming is also expected to cause sea levels to rise, which will create significant hardships for rural, low-lying areas in many poor developing countries. In Latin America, Guyana and Suriname, which have large populations living at altitudes less than five metres, would be particularly vulnerable to rising sea levels.

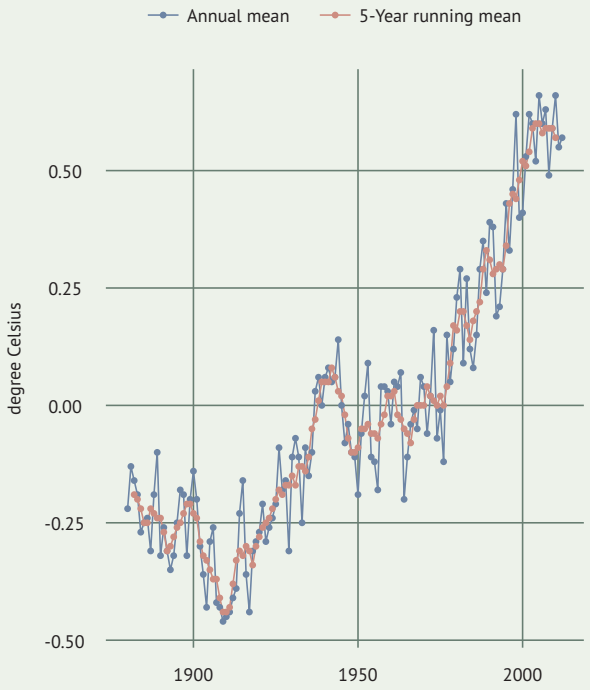
Climate change is also expected to increase the frequency and severity of extreme weather events, causing increased damage to ecosystems, agriculture and human health. Central America and the Caribbean are particularly exposed to these events. In 2010, tropical storm Agatha caused widespread damage and losses in Central America, as did Hurricane Tomas in the Caribbean. Droughts, such as the one that devastated the livestock in Argentina in 2008, may also become more common and more destructive.

It is clear that countries in the region must target investment to climate change adaptation, and most have adopted policies for adaptation to and mitigation of the effects of climate change on agriculture.

Further reading

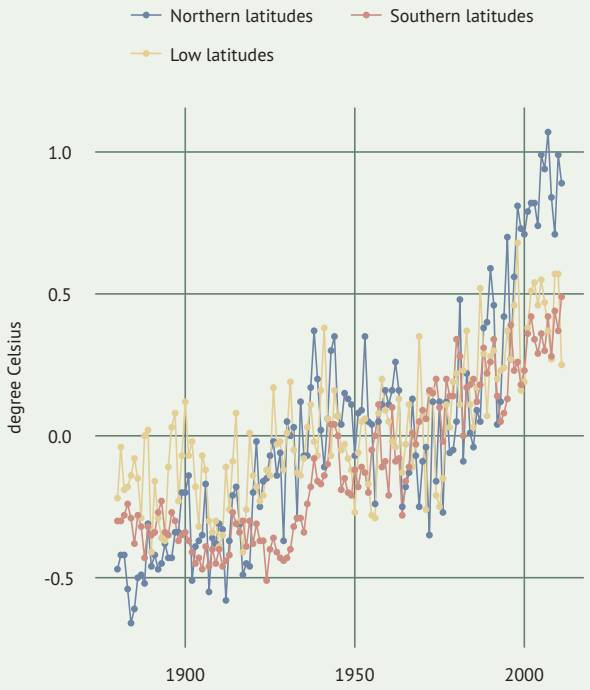
- FAO Climate Change (www.fao.org/climatechange/)
- FAO Climate Change, Water and Food Security 2011
- FAO Energy-smart food for people and climate (www.fao.org/docrep/014/i2454e/i2454e00.pdf)
- Intergovernmental Panel on Climate Change (IPCC) (www.ipcc.ch/)
- NASA (http://data.giss.nasa.gov/gistemp/)

CHART 111: **Global land-ocean temperature index, base period 1951-1980 (1880-2012)**



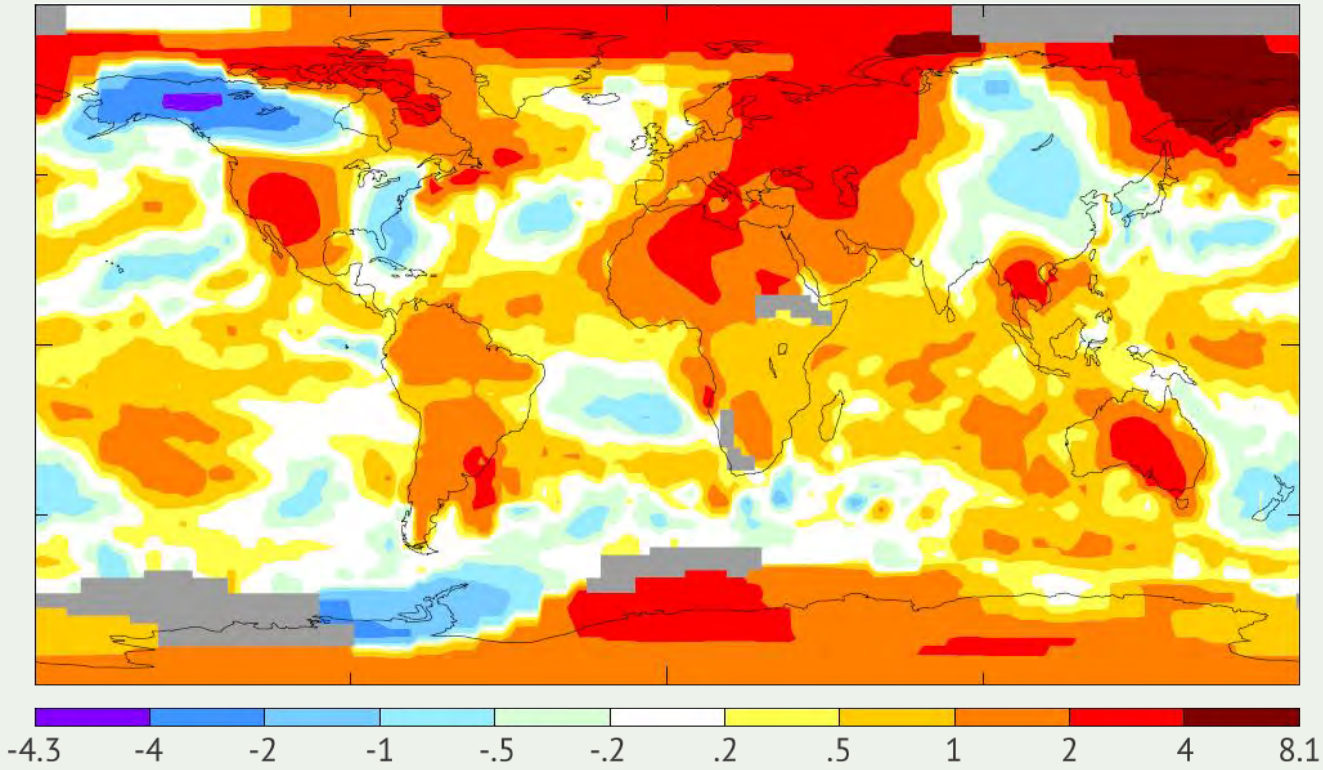
Source: NASA.

CHART 112: **Global land-ocean temperature index for three latitude bands, base period 1951-1981 (1880-2011)**



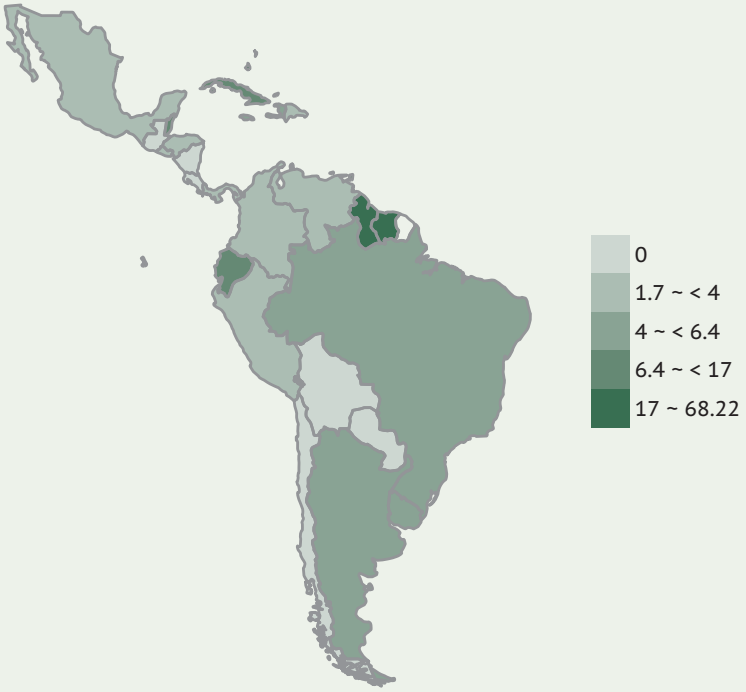
Source: NASA.

MAP 64: **Surface temperature, anomaly versus 1951-1980 (degrees Celsius, 2012)**



Source: NASA, GISS Surface Temperature Analysis.

MAP 65: **Share of population living in areas with elevation of 5 meters or less (percent, 2000)**



Source: World Bank (WDI).

Greenhouse gas emissions

GHG emissions from agriculture, including crop and livestock production, forestry and associated land-use changes, are responsible for a significant fraction of human-induced emissions – up to 30 percent globally, according to the Intergovernmental Panel on Climate Change (IPCC).

GHG emissions from agriculture are dominated by non-CO_2 gases such as methane and nitrous oxide, arising from crop and livestock production and management. These include emissions from the following categories: enteric fermentation, manure management systems, synthetic fertilizers, manure applied to soils, manure left on pastures, crop residues, rice cultivation, cultivated organic soils, and burning of crop residues. These emissions have increased by an average of 1.6 percent per year since 1990.

As is the case all over the world, the largest source of agricultural GHG emissions in Latin America and the Caribbean comes from enteric fermentation. The region is the second highest source of these emissions after Asia and the Pacific and is the largest source of GHG emissions from manure left on pasture. Synthetic fertilizers are the region's third highest source of emissions, but these emissions make a relatively small contribution to the global total.

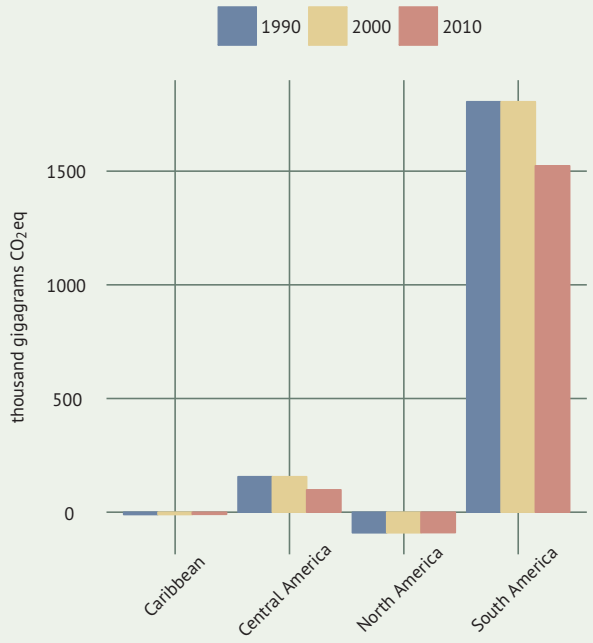
Emissions from the cultivation of organic soils are receiving increased attention because of their importance in terms of absolute carbon stock changes when peat lands are drained and degraded, thus becoming a significant source of GHG emissions. Latin America and the Caribbean is the region that produces the fewest emissions from the cultivation of organic soils.

Global GHG emissions from net forest conversion, which is often driven by agricultural expansion, decreased from 3.6 gigatonnes of CO_2 per year to 2.6 gigatonnes of CO_2 per year between 1990 and 2010. Almost all Central American countries have reduced their emissions from forest conversion. Mexico, Central America's largest emitter of GHG's from forest conversion, has cut its emissions in this sector by more than half. Costa Rica has gone from a net emitter to a net remover of CO_2 through forest conversion.

Further reading

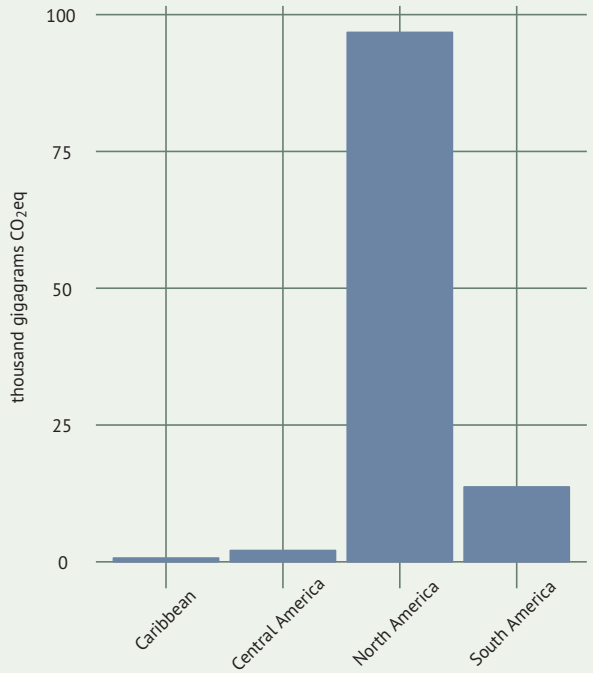
- IPCC (www.ipcc.ch/)
- FAOSTAT (http://faostat.fao.org/)
- Monitoring and Assessment of GHG Emissions and Mitigation Potentials in Agriculture, MICCA (www.fao.org/climatechange/micca/ghg/en/)

CHART 113: **Net emissions/removals from net forest conversions (1990, 2000 and 2010)**



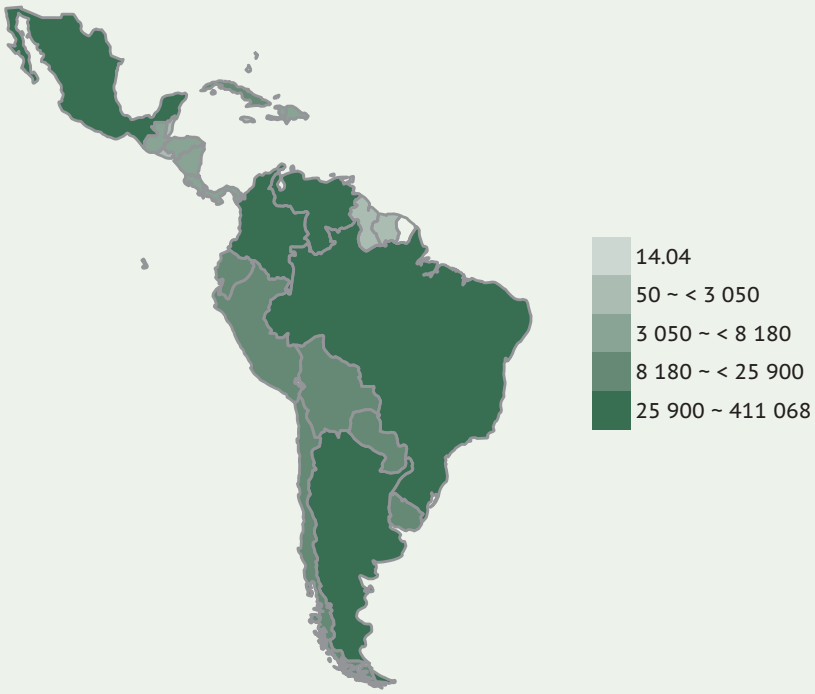
Source: FAO, Statistics Division (FAOSTAT).

CHART 114: **Greenhouse gas emissions from cultivated organic soils (2010)**



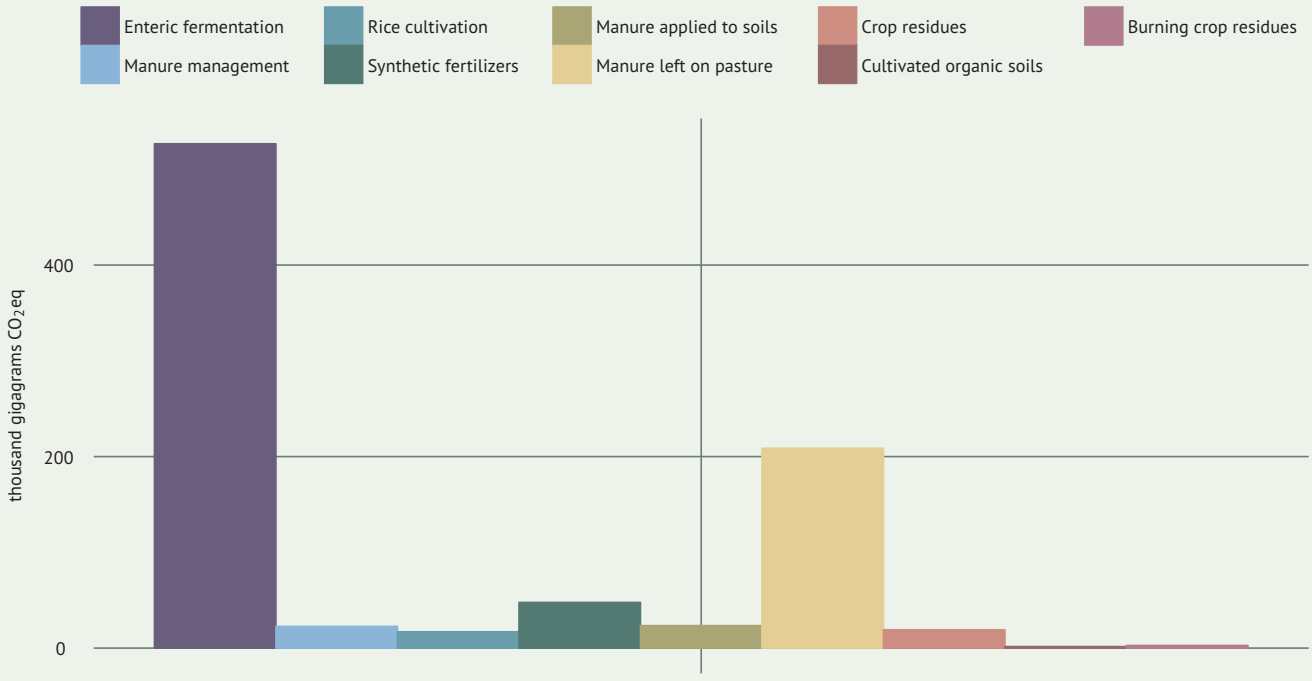
Source: FAO, Statistics Division (FAOSTAT).

MAP 66: **Total agricultural greenhouse gas emissions (gigagrams CO_2eq, 2010)**



Source: FAO, Statistics Division (FAOSTAT).

CHART 115: **Latin America agricultural greenhouse gas emissions by sector (2010)**



Source: FAO, Statistics Division (FAOSTAT).

TABLE 40: **Land and forestry**

	Forest area				Forest characteristics					
	total		% total land		primary forest		other naturally regenerated forest		planted forest	
	thousand ha 1990	thousand ha 2011	percent 1990	percent 2011	percent 1990	percent 2010	percent 1990	percent 2010	percent 1990	percent 2010
North America	606 469.0	614 538.8	33.2	33.7	38.8	39.2	58.0	55.2	3.2	5.6
Canada	310 134.0	310 134.0	34.1	34.1	53.3	53.3	46.2	43.8	0.4	2.9
United States of America	296 335.0	304 404.8	32.4	33.3	23.6	24.8	70.3	66.9	6.1	8.3
Regional Office for Latin America and the Caribbean	1 039 686.1	942 806.3	51.6	46.8	75.1	72.9	24.0	25.0	0.9	2.0
Caribbean	5 412.1	6 218.5	25.5	29.4	5.7	4.5	83.0	82.6	11.3	12.9
Antigua and Barbuda	10.3	9.8	23.4	22.3						
Bahamas	515.0	515.0	51.4	51.4	0.0	0.0	100.0	100.0	0.0	0.0
Barbados	8.4	8.4	19.4	19.4	0.0	0.0	99.5	99.0	0.5	1.0
Cuba	2 058.0	2 904.6	19.2	27.3	0.0	0.0	83.1	83.1	16.9	16.9
Dominica	50.0	44.4	66.7	59.2	56.8	59.8	43.2	39.9	0.0	0.2
Dominican Republic	1 972.0	1 972.0	40.8	40.8						
Grenada	17.0	17.0	50.0	50.0	13.7	13.7	85.1	85.1	1.2	1.2
Haiti	116.0	100.2	4.2	3.6	0.0	0.0	89.7	72.3	10.3	27.7
Jamaica	344.6	336.7	31.8	31.1	25.8	26.0	71.6	71.8	2.6	2.2
Saint Kitts and Nevis	11.0	11.0	42.3	42.3						
Saint Lucia	43.8	47.0	71.8	77.0	23.5	24.5	73.8	73.0	2.7	2.6
Saint Vincent and the Grenadines	25.3	26.8	64.9	68.7		0.0		99.6		0.4
Trinidad and Tobago	240.7	225.7	46.9	44.0	25.9	27.6	67.8	64.5	6.2	8.0
Latin America	1 042 462.0	944 666.2	52.0	47.2	75.5	73.5	23.6	24.6	0.9	2.0
Central America	96 008.0	83 896.6	39.2	34.2	51.7	46.0	47.9	49.5	0.4	4.5
Belize	1 586.0	1 383.4	69.5	60.6	37.8	43.0	62.1	56.8	0.1	0.2
Costa Rica	2 564.0	2 627.8	50.2	51.5	24.3	23.9	64.2	66.8	11.5	9.2
El Salvador	377.0	282.6	18.2	13.6	1.3	1.7	96.1	93.1	2.6	5.2
Guatemala	4 748.0	3 600.8	44.3	33.6	49.7	44.3	49.2	51.0	1.1	4.7
Honduras	8 136.0	5 072.0	72.7	45.3		8.8		91.2		0.0
Mexico	70 291.0	64 646.8	36.2	33.3	56.2	52.9	43.8	42.1	0.0	4.9
Nicaragua	4 514.0	3 044.0	37.5	25.3		37.9		59.8		2.4
Panama	3 792.0	3 239.2	51.0	43.6	0.0	0.0	99.7	97.6	0.3	2.4
South America	938 266.0	852 691.2	53.6	48.8	77.6	76.1	21.4	22.2	0.9	1.7
Argentina	34 793.0	29 160.2	12.7	10.7	5.0	5.9	92.8	89.3	2.2	4.7
Bolivia (Plurinational State of)	62 795.0	56 888.4	58.0	52.5	65.0	65.0	35.0	35.0	0.0	0.0
Brazil	574 839.0	517 327.6	68.0	61.2	92.2	91.7	6.9	6.8	0.9	1.4
Chile	15 263.0	16 268.6	20.5	21.9	30.3	27.3	58.5	58.0	11.2	14.7
Colombia	62 519.0	60 398.0	56.3	54.4	14.1	14.1	85.7	85.2	0.2	0.7
Ecuador	13 817.0	9 667.4	49.9	38.9		48.7		49.6		1.7
Guyana	15 205.0	15 205.0	77.2	77.2		44.7		55.3		0.0
Paraguay	21 157.0	17 403.4	53.3	43.8	8.7	10.5	91.1	89.2	0.1	0.3
Peru	70 156.0	67 842.0	54.8	53.0	89.7	88.5	10.0	10.0	0.4	1.5
Suriname	14 776.0	14 754.4	94.7	94.6	96.2	94.9	3.8	5.0	0.1	0.1
Uruguay	920.0	1 788.8	5.3	10.2	31.3	17.5	46.8	26.4	21.8	56.1
Venezuela (Bolivarian Republic of)	52 026.0	45 987.4	59.0	52.1						
Regional Office for Africa	724 069.8	592 368.7	32.1	27.9	2.2	11.9	97.4	85.6	0.4	13.1
Regional Office for Asia and the Pacific	744 278.1	1 567 563.9	24.3	31.3	41.8	36.4	55.1	53.1	3.2	10.5
Regional Office for Europe and Central Asia		1 031 345.6		38.3	22.4	23.1	70.2	68.1	7.4	8.8
Regional Office for the Near East	98 672.6	22 656.0	6.8	1.9	16.1	15.7	75.7	73.9	8.2	10.4
World	4 168 398.7	3 957 571.2	32.0	31.0	28.0	38.2	69.1	52.9	3.0	9.9

TABLE 41: **Forestry production and trade**

	Production of selected forest products							
	industrial roundwood		woodfuel		roundwood			
	total	p.a. growth	total	p.a. growth	total	p.a. growth	export	import
	thousand m^3	percent	thousand m^3	percent	thousand m^3	percent	thousand m^3	thousand m^3
	2011-12	1962-2012	2011-12	1962-2012	2011-12	1962-2012	2011-12	2011-12
North America	487 343.1	0.7	41 879.5	0.3	529 222.6	0.6	19 203.1	6 149.8
Canada	151 151.1	1.0	1 442.8	−3.0	152 593.9	0.9	6 136.5	4 528.9
United States of America	336 192.0	0.5	40 436.7	0.4	376 628.7	0.5	13 066.6	1 620.9
Regional Office for Latin America and the Caribbean	221 275.7	4.2	289 182.3	1.2	510 458.1	2.1	1 430.0	242.5
Caribbean	1 190.1	0.5	4 760.8	0.7	5 950.9	0.5	13.9	142.5
Antigua and Barbuda	0.0		0.0		0.0		0.0	0.4
Bahamas	17.0	−5.8	33.3	0.6	50.3	−3.9	0.6	17.5
Barbados	6.0		4.9	−0.2	10.9	1.4	0.1	1.0
Cuba	719.4	1.0	1 141.0	−1.1	1 860.4	−0.5	0.0	14.8
Dominica	0.0		7.5	−0.8	7.5	−0.8	0.1	0.8
Dominican Republic	9.7	−6.7	927.6	1.6	937.3	0.5	7.3	40.2
Grenada	0.0		0.0		0.0		0.0	0.0
Haiti	239.0	0.0	2 059.9	1.0	2 298.9	0.9	0.0	10.4
Jamaica	152.0		537.0	1.5	689.0	2.0	0.0	12.2
Saint Kitts and Nevis	0.0		0.0		0.0		0.0	1.1
Saint Lucia	0.0		9.9	0.8	9.9	0.8	0.0	6.8
Saint Vincent and the Grenadines	0.0		7.4	−1.0	7.4	−1.0	0.0	0.6
Trinidad and Tobago	47.0	−1.4	32.2	1.3	79.2	−0.7	5.7	36.9
Latin America	220 169.5	4.2	284 559.5	1.3	504 729.0	2.1	1 420.1	100.7
Central America	8 110.0	1.1	81 018.6	1.2	89 128.6	1.1	467.8	61.5
Belize	41.0	−1.4	126.0	2.4	167.0	0.6	3.5	12.5
Costa Rica	1 326.0	2.1	3 351.7	0.1	4 677.7	0.5	293.6	1.6
El Salvador	682.0	3.7	4 215.4	1.0	4 897.4	1.2	23.8	0.7
Guatemala	454.0	1.0	18 767.8	2.5	19 221.8	2.4	14.5	1.1
Honduras	431.0	−1.1	8 497.3	0.2	8 928.3	0.1	2.0	0.2
Mexico	4 870.0	0.8	38 839.9	1.0	43 709.9	1.0	40.4	38.4
Nicaragua	118.0	−2.5	6 124.6	0.7	6 242.6	0.6	3.8	7.2
Panama	188.0	0.9	1 096.0	−0.4	1 284.0	−0.2	86.2	0.0
South America	211 975.6	4.3	203 402.9	1.3	415 378.5	2.3	948.4	38.4
Argentina	10 640.3	3.3	4 547.1	−1.2	15 187.5	0.7	26.9	2.7
Bolivia (Plurinational State of)	913.0	4.8	2 386.3	1.1	3 299.3	1.6	5.9	3.2
Brazil	139 969.0	4.2	145 016.2	1.0	284 985.2	2.0	70.6	18.4
Chile	39 150.0	4.9	15 998.0	3.9	55 148.0	4.6	53.0	3.0
Colombia	3 550.0	0.5	8 826.0	1.0	12 376.0	0.8	28.4	0.2
Ecuador	2 091.0	1.9	4 965.1	2.3	7 056.1	2.2	128.0	0.0
Guyana	501.0	1.9	842.7	0.1	1 343.7	0.6	124.0	0.3
Paraguay	4 044.0	4.8	6 793.1	2.9	10 837.1	3.4	16.2	0.0
Peru	1 496.0	2.1	7 425.0	1.2	8 921.0	1.3	1.2	1.2
Suriname	365.3	1.1	48.5	−1.2	413.8	0.7	110.0	0.0
Uruguay	8 000.0	7.6	2 430.0	0.8	10 430.0	3.5	384.0	9.0
Venezuela (Bolivarian Republic of)	1 256.0	2.7	4 124.8	2.2	5 380.8	2.3	0.0	0.4
Regional Office for Africa	69 066.5	2.5	586 388.1	2.2	655 454.6	2.1	3 898.2	166.3
Regional Office for Asia and the Pacific	492 828.6		791 993.2	0.4	1 284 821.8	0.6	45 379.5	60 337.6
Regional Office for Europe and Central Asia	548 724.8		158 139.4		706 864.2		61 838.4	55 978.3
Regional Office for the Near East	4 058.7		53 679.6	1.3	57 738.3	1.2	40.9	964.5
World	1 652 146.1		1 882 369.5	1.1	3 534 515.6	1.1	116 680.1	124 720.0

TABLE 42: **Forestry production: finished products**

	Production of selected forest products							
	sawnwood		wood-based panels		wood pulp		paper and paperboard	
	total	p.a. growth	total	p.a. growth	total	p.a. growth	total	p.a. growth
	thousand m^3	percent	thousand m^3	percent	thousand tonnes	percent	thousand tonnes	percent
	2011-12	1962-2012	2011-12	1962-2012	2011-12	1962-2012	2011-12	1962-2012
North America	104 960.8	0.8	42 845.7		69 364.7		86 288.1	
Canada	40 715.0	2.0	10 351.0	3.7	17 850.0	1.0	10 755.0	0.6
United States of America	64 245.8	0.1	32 494.7	2.0	51 514.7	1.6	75 533.1	1.7
Regional Office for Latin America and the Caribbean	42 296.2	2.6	17 537.9		22 173.6		20 077.6	
Caribbean	281.6	−0.1	151.0		0.0		155.0	
Antigua and Barbuda	0.0		0.0		0.0		0.0	
Bahamas	1.4	−2.9	0.0		0.0		0.0	
Barbados	0.0		0.0		0.0		2.0	
Cuba	157.2	0.4	149.0	4.7	0.0		23.0	−2.7
Dominica	0.0		0.0		0.0		0.0	
Dominican Republic	12.0	−3.8	0.0		0.0		130.0	8.8
Grenada	0.0		0.0		0.0		0.0	
Haiti	13.8	−0.5	0.0		0.0		0.0	
Jamaica	66.2		0.0		0.0		0.0	
Saint Kitts and Nevis	0.0		0.0		0.0		0.0	
Saint Lucia	0.0		0.0		0.0		0.0	
Saint Vincent and the Grenadines	0.0		0.0		0.0		0.0	
Trinidad and Tobago	31.0	−0.6	2.0		0.0		0.0	
Latin America	42 046.1	2.7	17 386.9	8.1	22 173.6		19 922.6	
Central America	3 401.6	1.2	824.0		271.8		5 024.2	
Belize	35.3	−0.2	0.0		0.0		0.0	
Costa Rica	540.0	1.4	69.0	4.0	2.8		20.0	4.1
El Salvador	16.3	0.6	0.0		0.0		115.2	11.1
Guatemala	146.0	0.5	57.0	5.8	0.0		31.0	4.8
Honduras	233.0	−1.4	19.0	4.6	7.0		95.0	
Mexico	2 344.0	1.7	667.0	4.5	262.0	0.8	4 763.0	4.9
Nicaragua	62.0	−1.5	0.0		0.0		0.0	
Panama	25.0	−1.1	12.0	2.2	0.0		0.0	
South America	38 613.0	2.8	16 562.9		21 901.8		14 898.4	
Argentina	2 159.0	1.8	1 284.9	6.0	1 007.0	5.8	1 284.0	2.5
Bolivia (Plurinational State of)	466.0	5.2	45.0	9.4	0.0		0.0	
Brazil	25 210.0	2.7	10 164.0	7.4	14 401.0	7.7	10 171.0	5.8
Chile	6 785.0	3.5	2 890.0	10.0	5 080.0	7.4	1 170.0	4.6
Colombia	693.0	−0.9	333.0	4.1	257.0	6.7	1 153.0	5.1
Ecuador	519.0	0.8	882.0	18.3	2.0		239.7	14.3
Guyana	76.0	0.6	15.0	6.3	0.0		0.0	
Paraguay	550.0	5.1	161.0	8.7	0.0		13.0	7.2
Peru	711.0	3.2	91.0		0.0		215.0	2.8
Suriname	118.0	2.4	6.0	−3.6	0.0		0.0	
Uruguay	376.0	3.4	200.0	7.1	1 095.0	13.4	96.0	2.6
Venezuela (Bolivarian Republic of)	950.0	3.7	491.0	7.7	59.8		556.7	3.4
Regional Office for Africa	8 353.5		2 622.8		2 370.7		2 748.4	
Regional Office for Asia and the Pacific	140 472.9		165 940.7		39 878.3		184 549.0	
Regional Office for Europe and Central Asia	143 131.5		81 609.8		47 313.9		107 208.9	
Regional Office for the Near East	285.0		1 742.9		508.5		3 290.4	
World	408 768.4		299 008.4		173 722.0		399 733.6	

TABLE 43: **Water withdrawal and pressure on renewable water resources**

	Years	Water withdrawal by sector			Water withdrawal		% of renewable freshwater resources	
		% of total			total	per capita	withdrawn	
	year	agricultural percent	industrial percent	municipal percent	million m^3/yr	m^3/yr/cap	total percent	by agriculture percent
	1975-2010	2010*	2010*	2010*	2010*	2010*	2010*	2010*
North America								
Canada	2 000	12	68.7	19.6	45 970.0	1 470.0	1.6	0.2
United States of America	2 005	40	46.1	13.7	478 440.0	1 583.0	15.6	6.3
Regional Office for Latin America and the Caribbean								
Caribbean								
Antigua and Barbuda	1 990	20	20.0	60.0	5.0	78.0	3.3	1.9
Bahamas								
Barbados	2 000	33	38.4	28.7	61.0	226.0	76.1	25.0
Cuba	2 000	75	9.9	15.4	7 555.0	676.0	19.8	14.8
Dominica								
Dominican Republic	2 000	64	1.9	33.9	3 485.0	393.0	16.5	10.7
Grenada								
Haiti	2 000	78	3.7	18.8	1 200.0	134.0	8.6	6.6
Jamaica	2 000	34	21.9	43.9	585.0	223.0	6.2	2.1
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago	2 000	9	25.2	66.1	232.0	178.0	6.0	0.5
Latin America								
Central America								
Belize	2 000	20	73.3	6.7	150.0	570.0	0.8	0.2
Costa Rica	2 000	53	17.2	29.5	2 680.0	656.0	2.4	1.3
El Salvador	2 000	55	17.2	27.5	1 376.0	230.0	5.5	3.0
Guatemala	2 000	55	30.4	14.7	2 933.0	249.0	2.6	1.4
Honduras	2 000	58	24.8	17.4	1 194.0	184.0	1.2	0.7
Mexico	2 008	77	9.3	14.0	79 800.0	704.0	17.5	13.4
Nicaragua	2 000	84	2.1	14.1	1 288.0	247.0	0.7	0.5
Panama	2 000	51	3.3	45.8	452.0	147.0	0.3	0.2
South America								
Argentina	2 000	66	12.2	21.7	32 566.0	865.0	4.0	2.6
Bolivia (Plurinational State of)	2 000	57	15.2	27.6	2 027.0	234.0	0.3	0.2
Brazil	2 006	55	17.5	27.9	58 070.0	306.0	0.7	0.4
Chile	2 000	70	20.5	9.2	11 337.0	718.0	1.2	0.9
Colombia	2 000	39	4.2	56.9	12 651.0	308.0	0.6	0.2
Ecuador	2 000	92	2.5	5.9	15 253.0	1 194.0	3.6	3.3
Guyana	2 000	98	0.6	1.8	1 640.0	2 222.0	0.7	0.7
Paraguay	2 000	71	8.2	20.4	490.0	88.0	0.1	0.1
Peru	2 000	85	8.3	6.8	19 341.0	728.0	1.0	0.9
Suriname	2 000	92	3.0	4.5	670.0	1 396.0	0.5	0.5
Uruguay	2 000	87	2.2	11.2	3 660.0	1 101.0	2.6	2.3
Venezuela (Bolivarian Republic of)	2 000	44	7.5	48.7	9 064.0	359.0	0.7	0.3
Regional Office for Africa								
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia								
Regional Office for the Near East								
World								

TABLE 44: **Species threatened and nationally protected areas**

	Threatened species				Nationally protected areas			
	mammals	birds	fish	higher plants	terrestrial		territorial waters	
					% of total land area		% of territorial waters	
	species 2012	species 2012	species 2012	species 2012	percent 1990	percent 2010	percent 1990	percent 2010
North America	47.0	95.0	220.0	233.0	8.5	9.9		
Canada	11.0	16.0	35.0	1.0	4.7	7.5	0.6	1.2
United States of America	36.0	79.0	185.0	232.0	12.4	12.4	21.0	28.6
Regional Office for Latin America and the Caribbean	599.0	960.0	1 051.0	4 090.0	9.7	20.2		
Caribbean	55.0	79.0	289.0	454.0	8.9	10.8		
Antigua and Barbuda	2.0	1.0	18.0	4.0	6.4	7.0	0.5	0.7
Bahamas	6.0	6.0	29.0	5.0	6.1	13.7	0.2	0.4
Barbados	3.0	2.0	20.0	2.0	0.1	0.1	0.1	0.1
Cuba	14.0	17.0	35.0	155.0	4.3	6.4	1.3	4.4
Dominica	3.0	3.0	19.0	9.0	21.4	21.7	0.1	0.1
Dominican Republic	6.0	14.0	22.0	29.0	22.2	22.2	30.4	30.4
Grenada	3.0	1.0	19.0	3.0	1.7	1.7	0.0	0.0
Haiti	5.0	13.0	21.0	29.0	0.3	0.3	0.0	0.0
Jamaica	5.0	10.0	22.0	206.0	10.2	18.9	0.2	4.2
Saint Kitts and Nevis	2.0	1.0	19.0	2.0	3.6	3.6	0.5	0.5
Saint Lucia	2.0	5.0	20.0	5.0	14.3	14.3	0.1	0.1
Saint Vincent and the Grenadines	2.0	2.0	20.0	4.0	10.9	10.9	0.6	0.6
Trinidad and Tobago	2.0	4.0	25.0	1.0	30.5	31.2	0.2	2.8
Latin America	544.0	881.0	762.0	3 636.0	9.7	20.2		
Central America	166.0	152.0	371.0	769.0	5.3	14.1		
Belize	8.0	5.0	30.0	27.0	15.4	27.9	0.3	11.9
Costa Rica	9.0	22.0	50.0	113.0	18.7	20.9	11.9	12.2
El Salvador	5.0	6.0	14.0	23.0	0.4	0.8	3.1	3.1
Guatemala	16.0	14.0	25.0	73.0	25.9	30.6	0.3	12.5
Honduras	7.0	11.0	28.0	107.0	13.6	18.2	0.0	1.9
Mexico	100.0	61.0	152.0	196.0	2.2	11.1	1.1	16.7
Nicaragua	6.0	14.0	31.0	39.0	15.4	36.7	0.6	37.2
Panama	15.0	19.0	41.0	191.0	17.2	18.7	3.1	4.0
South America	378.0	729.0	391.0	2 867.0	10.3	21.1		
Argentina	38.0	50.0	37.0	36.0	4.6	5.5	0.8	1.1
Bolivia (Plurinational State of)	20.0	53.0	0.0	73.0	8.8	18.5		
Brazil	81.0	152.0	83.0	400.0	9.0	26.3	8.2	16.5
Chile	20.0	33.0	20.0	34.0	16.0	16.6	3.5	3.7
Colombia	53.0	112.0	54.0	215.0	19.3	20.9	0.9	15.5
Ecuador	43.0	93.0	50.0	1 714.0	21.6	25.1	0.2	75.4
Guyana	10.0	13.0	28.0	21.0	2.9	5.0	0.0	0.0
Paraguay	8.0	28.0	0.0	10.0	2.9	5.4		
Peru	54.0	124.0	20.0	270.0	4.7	13.6	2.8	2.8
Suriname	8.0	7.0	26.0	26.0	3.5	11.6	22.9	22.9
Uruguay	11.0	24.0	36.0	0.0	0.3	0.3	0.2	0.3
Venezuela (Bolivarian Republic of)	32.0	40.0	37.0	68.0	40.1	53.8	7.0	15.3
Regional Office for Africa	728.0	751.0	1 765.0	2 555.0	10.8	11.7		
Regional Office for Asia and the Pacific	1 147.0	1 204.0	1 549.0	2 978.0	9.0	10.5		
Regional Office for Europe and Central Asia	328.0	478.0	1 047.0	648.0		9.0		
Regional Office for the Near East	219.0	209.0	460.0	245.0	3.9	7.9		
World	3 075.0	3 753.0	6 229.0	11 212.0	9.1	12.3		

TABLE 45: **Agri-environmental indicators**

	Stock of						Organic water pollutant (BOD) emissions	
	cattle and buffaloes		sheep and goats		poultry birds			
	per ha of agricultural area head/ha	head/ha	per ha of agricultural area head/ha	head/ha	per ha of agricultural area head/ha	head/ha	kg/day	kg/day/worker
	2000	2011	2000	2011	2000	2011	2005-06*	2005-06*
North America	0.2	0.2	0.0	0.0	4.8	5.3		
Canada	0.2	0.2	0.0	0.0	2.4	2.7		
United States of America	0.2	0.2	0.0	0.0	5.2	5.7	1 850 753.0	0.1
Regional Office for Latin America and the Caribbean	0.5	0.6	0.2	0.2	3.1	4.2		
Caribbean	0.7	0.8	0.6	0.6	10.3	17.3		
Antigua and Barbuda	1.5	1.6	5.8	6.6	12.2	16.7		
Bahamas	0.1	0.0	1.5	1.4	180.8	200.0		
Barbados	1.3	0.7	0.6	1.2	194.6	244.0		
Cuba	0.6	0.6	0.5	0.5	4.3	5.1		
Dominica	0.6	0.5	0.8	0.7	9.0	7.3		
Dominican Republic	0.8	1.2	0.1	0.2	18.3	41.7		
Grenada	0.4	0.4	1.7	1.9	12.5	24.5		
Haiti	0.8	0.8	1.2	1.2	3.5	3.4		
Jamaica	0.8	0.4	0.9	1.1	24.4	29.0		
Saint Kitts and Nevis	0.5	0.6	3.0	2.7	6.3	13.3		
Saint Lucia	0.6	1.0	1.4	1.8	13.8	40.9		
Saint Vincent and the Grenadines	0.6	0.5	1.9	2.1	20.0	27.0		
Trinidad and Tobago	0.5	0.7	0.9	1.2	287.2	629.6		
Latin America	0.5	0.5	0.2	0.2	2.9	4.0		
Central America	0.3	0.4	0.1	0.1	3.8	5.5		
Belize	0.4	0.6	0.0	0.1	6.6	10.2		
Costa Rica	0.7	0.7	0.0	0.0	9.3	11.2		
El Salvador	0.7	0.7	0.0	0.0	6.6	10.1		
Guatemala	0.6	0.8	0.1	0.2	6.9	7.7		
Honduras	0.6	0.8	0.0	0.0	5.9	12.3		
Mexico	0.3	0.3	0.1	0.2	3.4	5.1		
Nicaragua	0.6	0.7	0.0	0.0	2.6	3.8		
Panama	0.6	0.8	0.0	0.0	6.6	8.3	13 734.3	0.3
South America	0.5	0.6	0.2	0.2	2.8	3.7		
Argentina	0.4	0.3	0.1	0.1	0.9	0.7		
Bolivia (Plurinational State of)	0.2	0.2	0.3	0.3	1.6	5.3		
Brazil	0.7	0.8	0.1	0.1	3.3	4.7		
Chile	0.3	0.2	0.3	0.3	3.8	5.0	92 501.0	0.3
Colombia	0.5	0.6	0.1	0.1	2.3	3.7	86 991.8	0.2
Ecuador	0.6	0.7	0.3	0.3	16.9	14.3	44 748.0	0.3
Guyana	0.1	0.1	0.1	0.1	6.1	13.1		
Paraguay	0.5	0.6	0.0	0.0	0.8	1.1		
Peru	0.2	0.3	0.8	0.7	4.4	6.0		
Suriname	1.3	0.7	0.2	0.2	40.5	87.8		
Uruguay	0.7	0.8	0.9	0.5	0.9	1.2		
Venezuela (Bolivarian Republic of)	0.7	0.8	0.1	0.1	5.6	5.6		
Regional Office for Africa	0.2	0.3	0.4	0.5	0.8	1.3		
Regional Office for Asia and the Pacific	0.3	0.4	0.5	0.5	3.9	6.5		
Regional Office for Europe and Central Asia	0.2	0.2	0.3	0.3	2.8	3.3		
Regional Office for the Near East	0.1	0.1	0.5	0.8	1.9	6.9		
World	0.3	0.3	0.4	0.4	3.3	4.8		

TABLE 46: **Water pollution**

	Water pollution							
	% of total BOD emissions							
	chemical industry	clay and glass industry	food industry	metal industry	other industry	paper and pulp industry	textile industry	wood industry
	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*	percent 2005-06*
North America								
Canada								
United States of America	13.1	3.9	12.0	3.5	51.1	8.1	4.3	4.1
Regional Office for Latin America and the Caribbean								
Caribbean								
Antigua and Barbuda								
Bahamas								
Barbados								
Cuba								
Dominica								
Dominican Republic								
Grenada								
Haiti								
Jamaica								
Saint Kitts and Nevis								
Saint Lucia								
Saint Vincent and the Grenadines								
Trinidad and Tobago								
Latin America								
Central America								
Belize								
Costa Rica								
El Salvador								
Guatemala								
Honduras								
Mexico								
Nicaragua								
Panama	6.9	4.0	55.2	0.9	15.0	11.6	4.7	1.6
South America								
Argentina								
Bolivia (Plurinational State of)								
Brazil								
Chile	13.7	3.6	35.1	7.6	17.7	6.3	9.1	6.9
Colombia	17.3	5.3	21.3	2.3	19.9	8.9	24.1	0.9
Ecuador	12.8	4.4	46.4	1.8	12.3	7.8	12.3	2.2
Guyana								
Paraguay								
Peru								
Suriname								
Uruguay								
Venezuela (Bolivarian Republic of)								
Regional Office for Africa								
Regional Office for Asia and the Pacific								
Regional Office for Europe and Central Asia								
Regional Office for the Near East								
World								

TABLE 47: **Renewable feedstocks**

	Production		Organic agriculture	Production			
	biofuel		% of total area	natural fibre		recovered paper	
				total			
	thousand kilotonne of oil equivalent	thousand kilotonne of oil equivalent	percent	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes
	2000	2009	2011	1992	2011	2000	2012
North America	72.4	85.6	0.6	3 567.7	3 441.1	45 994.0	49 055.4
Canada	11.5	11.3	1.3	36.6	28.5	2 624.0	2 705.0
United States of America	60.9	74.3	0.5	3 531.0	3 412.6	43 370.0	46 350.4
Regional Office for Latin America and the Caribbean	90.7	123.6	0.9	1 830.2	2 911.1	5 533.0	10 311.2
Caribbean	8.2	6.0	1.7	39.9	25.5	60.0	111.0
Antigua and Barbuda	0.0	0.0		0.0	0.0	0.0	0.0
Bahamas	0.0	0.0				0.0	0.0
Barbados	0.0	0.0				0.0	0.0
Cuba	4.7	1.8	0.0	28.1	15.0	23.0	28.0
Dominica	0.0	0.0	0.9			0.0	0.0
Dominican Republic	1.4	1.8	7.6	1.5	0.0	23.0	65.0
Grenada	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Haiti	1.5	1.8	0.1	9.8	9.6	0.0	0.0
Jamaica	0.6	0.5	0.1	0.5	0.8	10.0	10.0
Saint Kitts and Nevis	0.0	0.0		0.0	0.0	0.0	0.0
Saint Lucia	0.0	0.0				1.0	1.0
Saint Vincent and the Grenadines	0.0	0.0		0.0	0.0	0.0	0.0
Trinidad and Tobago	0.0	0.0				3.0	7.0
Latin America	82.6	117.7	0.9	1 790.3	2 885.5	5 473.0	10 200.2
Central America	17.6	19.7	0.4	178.8	313.0	1 018.0	3 155.0
Belize	0.0	0.0	0.8			0.0	0.0
Costa Rica	0.2	0.8	0.5	0.7	1.3	11.0	29.0
El Salvador	1.3	1.7	0.4	16.8	4.1	5.0	5.0
Guatemala	3.9	5.1	0.3	41.9	1.2	18.0	18.0
Honduras	1.3	2.0	0.7	1.4	0.8	51.0	51.0
Mexico	8.9	8.4	0.4	88.5	299.7	920.0	3 039.0
Nicaragua	1.4	1.4	0.7	29.5	6.0	0.0	0.0
Panama	0.5	0.3	0.2			13.0	13.0
South America	64.9	97.9	1.0	1 611.5	2 572.6	4 455.0	7 045.2
Argentina	3.0	3.3	2.6	256.0	298.9	927.0	987.0
Bolivia (Plurinational State of)	0.7	1.1	0.1	9.9	29.0	0.0	0.0
Brazil	46.5	76.7	0.2	937.5	2 068.0	2 612.0	4 348.0
Chile	4.3	5.1	0.2	17.3	18.3	136.0	489.0
Colombia	4.4	4.5	0.1	138.2	52.0	355.0	699.2
Ecuador	0.7	0.6	0.7	34.9	40.4	68.0	150.0
Guyana	0.0	0.0	0.3			0.0	0.0
Paraguay	2.2	2.7	0.2	143.4	13.0	30.0	30.0
Peru	2.2	2.4	0.9	35.3	44.3	72.0	72.0
Suriname	0.0	0.0				0.0	0.0
Uruguay	0.4	1.1	6.5	0.1	0.0	13.0	25.0
Venezuela (Bolivarian Republic of)	0.5	0.5	0.0	38.9	8.7	242.0	245.0
Regional Office for Africa	188.2	244.2		1 035.1	1 264.1	838.7	1 205.2
Regional Office for Asia and the Pacific	521.2	560.7	0.8			42 391.1	90 639.3
Regional Office for Europe and Central Asia	69.9	104.7	1.4		3 162.5	44 836.7	56 745.3
Regional Office for the Near East	3.5	4.2				753.0	2 247.0
World	942.0	1 120.4				142 813.5	212 515.9

TABLE 48: **Agricultural emissions**

	Enteric fermentation	Manure management	Rice cultivation	Synthetic fertilizers	Manure applied to soils	Manure left on pasture	Crop residues	Cultivated organic soils	Burning crop residues
	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010	gigagrams CO_2eq 2010
North America	142 856.4	55 233.2	10 752.7	86 960.0	21 088.3	42 890.2	27 057.9	11 642.2	2 985.1
Canada	16 705.7	6 415.7	0.0	12 806.5	1 877.3	5 276.6	2 951.9	2 750.1	308.8
United States of America	126 150.7	48 817.5	10 752.7	74 153.5	19 211.0	37 613.6	24 105.9	8 892.1	2 676.3
Regional Office for Latin America and the Caribbean	526 629.2	22 670.1	17 026.9	47 721.3	23 512.4	208 744.8	19 177.3	1 604.9	2 756.6
Caribbean	11 985.2	822.5	2 236.2	1 157.7	938.4	5 214.6	147.3	67.0	73.5
Antigua and Barbuda	26.1	1.4	0.0	0.0	2.1	12.0	0.0	0.0	0.0
Bahamas	3.6	3.6	0.0	0.0	7.5	10.6	0.0	0.0	0.1
Barbados	17.8	3.2	0.0	2.8	2.5	8.1	0.0	0.0	0.3
Cuba	5 458.9	308.6	1 037.4	303.8	272.1	2 285.9	56.4	0.0	37.8
Dominica	20.5	1.2	0.0	0.5	2.6	7.5	0.0	0.0	0.0
Dominican Republic	3 828.5	253.4	1 073.3	355.5	392.1	1 633.1	53.2	0.0	12.0
Grenada	7.8	0.9	0.0	0.0	1.0	4.8	0.0	0.0	0.0
Haiti	2 269.8	165.4	123.3	0.0	125.1	944.0	36.9	0.0	21.7
Jamaica	266.2	38.5	0.0	31.2	46.2	177.2	0.3	67.0	1.4
Saint Kitts and Nevis	1.8	0.8	0.0	0.2	0.5	2.1	0.0	0.0	0.0
Saint Lucia	16.4	3.2	0.0	0.0	2.3	9.5	0.0	0.0	0.0
Saint Vincent and the Grenadines	9.1	1.4	0.0	0.0	1.3	5.5	0.0	0.0	0.1
Trinidad and Tobago	58.8	40.9	2.2	463.8	83.0	114.4	0.3	0.0	0.1
Latin America	514 741.3	21 852.9	14 812.2	46 563.5	22 576.3	203 598.8	19 030.6	1 555.5	2 683.3
Central America	63 316.4	4 189.6	238.9	10 090.4	4 170.9	25 828.4	2 076.0	199.4	655.8
Belize	113.4	4.2	2.6	15.1	2.5	44.9	4.5	57.7	2.1
Costa Rica	1 883.2	110.5	39.1	368.6	245.8	603.5	17.3	7.4	5.2
El Salvador	1 597.7	91.3	2.9	399.3	116.3	617.6	53.4	0.0	18.6
Guatemala	4 294.3	379.2	5.4	917.5	384.5	1 785.2	120.9	0.0	64.3
Honduras	3 458.9	163.2	6.1	209.7	260.6	1 313.3	44.0	0.0	33.0
Mexico	45 078.2	3 175.3	100.6	7 782.1	2 733.4	19 012.1	1 749.7	0.0	497.8
Nicaragua	4 825.4	175.6	51.9	257.8	328.1	1 642.8	63.4	5.9	26.7
Panama	2 065.4	90.4	30.2	140.3	99.6	809.1	22.8	128.4	8.2
South America	451 327.6	17 658.0	14 551.8	36 473.1	18 403.2	177 701.7	16 954.0	1 338.5	2 027.3
Argentina	61 944.4	1 660.1	1 264.5	5 890.8	1 081.6	24 773.0	5 960.8	118.6	327.4
Bolivia (Plurinational State of)	13 968.3	814.7	284.9	126.3	673.9	5 477.5	292.4	0.0	36.8
Brazil	261 675.0	10 389.7	3 713.9	18 426.8	11 258.7	103 651.2	8 440.1	3.7	1 328.9
Chile	5 484.5	503.8	113.9	2 662.6	747.7	2 593.8	188.8	24.5	16.0
Colombia	35 857.3	1 152.0	2 022.4	3 397.1	1 810.8	13 074.3	236.5	325.0	52.4
Ecuador	6 983.3	452.6	1 733.7	1 026.9	711.9	2 963.4	158.1	15.9	45.8
Guyana	165.5	28.1	734.0	91.2	60.1	122.3	36.2	340.0	9.2
Paraguay	14 727.7	421.2	174.9	526.8	189.5	5 929.5	774.9	0.0	71.8
Peru	13 919.0	876.8	1 919.7	1 442.1	684.2	4 411.5	283.2	144.3	52.1
Suriname	72.0	12.7	314.9	63.5	19.5	50.3	12.4	208.4	2.0
Uruguay	15 101.2	352.2	952.0	977.7	266.4	6 103.0	323.5	10.9	23.3
Venezuela (Bolivarian Republic of)	21 429.4	994.1	1 323.0	1 841.1	898.8	8 551.9	247.1	147.2	61.7
Regional Office for Africa	228 465.8	14 842.2	23 644.9	8 309.0	6 520.1	157 705.5	7 777.5	5 177.3	2 287.6
Regional Office for Asia and the Pacific	809 433.7	169 122.4	457 990.0	435 707.4	127 041.5	264 046.6	74 036.0	56 496.3	9 150.0
Regional Office for Europe and Central Asia	274 239.6	99 643.4	7 909.3	100 457.1	48 548.5	49 963.0	27 896.5	29 123.6	3 218.1
Regional Office for the Near East	57 726.1	6 345.9	5 780.6	17 311.0	4 986.1	37 525.2	4 417.0	0.0	634.5
World	1 960 484.5	348 078.7	519 531.4	682 636.1	220 255.4	741 025.3	152 902.7	99 047.6	19 701.7

PART

5

Metadata

Americas			
Caribbean	Central America	South America	North America
Antigua and Barbuda	Belize	Argentina	Canada
Bahamas	Costa Rica	Bolivia (Plurinational State of)	United States of America
Barbados	El Salvador	Brazil	
Cuba	Guatemala	Chile	
Dominica	Honduras	Colombia	
Dominican Republic	Mexico	Ecuador	
Grenada	Nicaragua	Guyana	
Haiti	Panama	Paraguay	
Jamaica		Peru	
Saint Kitts and Nevis		Suriname	
Saint Lucia		Uruguay	
Saint Vincent and the Grenadines		Venezuela (Bolivarian Republic of)	
Trinidad and Tobago			

Metadata

Aggregation

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

Agricultural area (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Agricultural area organic (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Agricultural population, total

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Agricultural production indices

The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 1999-2001. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed. All the indices at the country, regional and world levels are calculated by the Laspeyres formula. Production quantities of each commodity are weighted by 1999-2001 average international commodity prices and summed for each year. To obtain the index, the aggregate for a given year is divided by the average aggregate for the base period 1999-2001. Since the FAO indices are based on the concept of agriculture as a single enterprise, amounts of seed and feed are subtracted from the production data to avoid double counting , once in the production data and once with the crops or livestock produced from them. Deductions for seed (in the case of eggs, for hatching) and for livestock and poultry feed apply to both domestically produced and imported commodities. They cover only primary agricultural products destined to animal feed (e.g. maize, potatoes, milk, etc.). Processed and semi-processed feed items such as bran, oilcakes, meals and molasses have been completely excluded from the calculations at all stages. It should be noted that when calculating indices of agricultural, food and nonfood production, all intermediate primary inputs of agricultural origin are deducted. However, for indices of any other commodity group, only inputs originating from within the same group are deducted; thus, only seed is removed from the group "crops" and from all crop subgroups, such as cereals, oil crops, etc.; and both feed and seed originating from within the livestock sector (e.g. milk feed, hatching eggs) are removed from the group "livestock products". For the main two livestock subgroups, namely, meat and milk, only feed originating from the respective subgroup is removed. Indices which take into account deductions for feed and seed are referred to as "net". Indices calculated without any deductions for feed and seed are referred to as "gross".The"international commodity prices" are used in order to avoid the use of exchange rates for obtaining continental and world aggregates, and also to improve and facilitate international comparative analysis of productivity at the national level. These" international prices", expressed in so-called"international dollars", are derived using a Geary-Khamis formula for the agricultural sector. This method assigns a single "price" to each commodity. For example, one metric ton of wheat has the same price regardless of the country where it was produced. The currency unit in which the prices are expressed has no influence on the indices published. The commodities covered in the computation of indices of agricultural production are all crops and livestock products originating in each country. Practically all products are covered, with the main exception of fodder crops. The category of food production includes commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities because, although edible, they have practically no nutritive value. Prices applied to meat in reality represent the prices of animals for slaughtering in terms of live weight. For example, if the price of one metric ton (1000 kg) of pigs alive is 825 dollars and the ratio meat to live weight is 75 to 100, the price applicable to 750 kg of pig meat will be 825 dollars, corresponding to 1100 dollars per metric tons. The indices are calculated from production data presented on a calendar year basis. The FAO indices may differ from those produced by the countries themselves because of differences in concepts of production, coverage, weights, time reference of data and methods of calculation.

Agricultural tractors, total (tractors)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

Agricultural water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Agriculture value added per worker (constant 2000 US$)

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

Source: World Bank (WDI)

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

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Agriculture, value added (percent of GDP)

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

Source: World Bank (WDI)

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

All GHG agricultural sectors, total emissions in CO_2eq (gigagrams)

Agriculture Total contains all the emissions produced in the different agricultural emissions sub-domains, providing a picture of the contribution to the total amount of GHG emissions from agriculture. GHG Emissions from agriculture consist of non-CO_2 gases, namely methane (CH4) and nitrous oxide (N2O), produced by crop and livestock production and management activities.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Aquaculture fish production (tonnes)

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

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

Owner: FAO

Aquaculture fish production inland (tonnes)

Aquaculture production from inland areas.

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

Owner: FAO

Aquaculture fish production marine (tonnes)

Aquaculture production from marine areas.

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

Owner: FAO

Arable land (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Arable land and permanent crops (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Area under bioenergy crops (ha)

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

Source: FAO

Owner: Based on IEA biofuel production data

Artificial sweeteners

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

Average dietary supply adequacy (index)

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

Source: FAO, Statistics Division

Owner: FAO

Average fat supply (g/cap/day)

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

Source: FAO, Statistics Division

Owner: FAO

Average protein supply (g/cap/day)

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

Source: FAO, Statistics Division

Owner: FAO

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

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

Source: FAO, Statistics Division

Owner: FAO

Beef and buffalo meat (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Biofuel production (energy, kilotonne of oil equivalent)

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

Source: IEA

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

Bird species, threatened

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

Source: World Bank (WDI)

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

Buffaloes

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

Burning crop residues, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Butter and ghee production (tonnes)

See 'Butter, ghee' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Butter, Ghee

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

Capture fish production (tonnes)

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

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

Owner: FAO

Capture fish production inland (tonnes)

Capture fishery production from inland areas.

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

Owner: FAO

Capture fish production marine (tonnes)

Capture fishery production from marine areas.

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

Owner: FAO

Cassava

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

Cattle

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

Cattle and buffaloes (heads)

See 'Cattle' and 'Buffaloes'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cereal exports (tonnes)

Exports (volume) of cereals.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cereal import dependency ratio (percent)

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

Source: FAO, Statistics Division

Owner: FAO

Cereal imports (tonnes)

Imports (volume) of cereals.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cereals

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

Cereals harvested area (ha)

See 'Cereals' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cereals production (tonnes)

See 'Cereals' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cereals yield (hg/ha)

See 'Cereals' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cheese (all kinds) production (tonnes)
All kinds of cheese. See also 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

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

Chickens (heads)
See 'Chickens' and 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Children in employment, total (share of children ages 7-14)
Children in employment refer to children involved in economic activity for at least one hour in the reference week of the survey.
Source: World Bank (WDI)
Owner: Understanding Children's Work project based on data from ILO, UNICEF and the World Bank.

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

Citrus fruit harvested area (ha)
See 'Fruit, citrus nes' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Citrus fruit production (tonnes)
See 'Fruit, citrus nes' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Citrus fruit yield (hg/ha)
See 'Fruit, citrus nes' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

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

Coarse grain harvested area (ha)
See 'Coarse grain' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Coarse grain production (tonnes)
See 'Coarse grain' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Coarse grain yield (hg/ha)
See 'Coarse grain' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

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

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

Coconut Oil
Default composition: Oil, coconut (copra)

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

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

Cottonseed Oil
Default composition: Oil, cottonseed

CPIA business regulatory environment rating (1=low to 6=high)
Business regulatory environment assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive.
Source: World Bank (WDI)
Owner: World Bank Group, CPIA database (http://www.worldbank.org/ida).

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

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

Crop residues, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Crop yield

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

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

See 'Agricultural production indices'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Cultivated organic soils, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Dairy products (milk equivalent) exports (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Dairy products (milk equivalent) imports (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: FAO, Statistics Division

Owner: FAO

Domestic food price volatility (index)

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

Source: FAO, Statistics Division

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

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

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

Source: World Bank (WDI)

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

Egg production

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

Eggs

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

Eggs primary production (tonnes)

See 'Eggs' and 'Egg production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Emissions

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

Employees, agriculture, female (share of female employment)

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

Source: World Bank (WDI)

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

Employees, agriculture, male (share of male employment)

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

Source: World Bank (WDI)

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

Employment in agriculture (share of total employment)

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

Source: World Bank (WDI)

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

Employment, total

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

Source: World Bank

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

Enteric fermentation, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

See 'Government expenditure'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Evaporated and condensed milk production (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Export of forest products (USD)

Forest materials for commercial use.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Export of roundwood (m^3)

See 'Roundwood'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of beverages (US$)

Value of exports of beverages in current US$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of cereals and prep. (US$)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

Value of exports of milk equivalent in current US$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of fish (US$)

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

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

Owner: FAO

Exports of fruit and vegetables (US$)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of meat and meat prep. (US$)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of oilseeds (US$)

Value of exports of oilseeds in current US$.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of sugar and honey (US$)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Exports of veg. oils (US$)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

Fat supply quantity in crops primary equivalent.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fats, Animals, Raw

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

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

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

Source: Foreign agriculture investment database

Owner: UNCTAD

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

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

Source: Foreign agriculture investment database

Owner: UNCTAD

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

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

Source: Foreign agriculture investment database

Owner: UNCTAD

Female employment, total

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

Source: World Bank

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

Fertilizers consumption

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

Fertilizers Manufactured, nes

Mineral or chemical fertilizers not elsewhere specified.

Fertilizers, Organic

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

Fibre crop harvested area (ha)

See 'Fibre crops' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fibre crop yield (hg/ha)

See 'Fibre crops' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fibre crops

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

Fibre crops production (tonnes)

See 'Fibre crops' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fish species, threatened

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

Source: World Bank (WDI)

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

Fixed broadband Internet subscribers (per 100 people)

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

Source: World Bank (WDI)

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

Food

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

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

See 'Agricultural production indices'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Food Price Level Index (index)

The Domestic Food Price Level Index is calculated by dividing the Food Purchasing Power Parity (FPPP) by the General PPP, thus 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.

Source: FAO, Statistics Division

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

Food production

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

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

Food supply in crops primary equivalent.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Foreign direct investment, net inflows (percent of GDP)

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

Source: World Bank (WDI)

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

Forest area (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Freshwater Fish

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

Fruit harvested area (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fruit production, excluding melons (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fruit yield (hg/ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Fruit, citrus nes

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

Fruit, excluding melons

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

Fruit, fresh nes

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

GDP (current US$)

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

Source: World Bank (WDI)

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

GINI index

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

Source: World Bank (WDI)

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

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

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

Source: NASA

Owner: Hansen et al. 2007

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

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

Source: NASA

Owner: Hansen et al. 2006

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

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

Source: NASA

Owner: Hansen et al. 2009

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

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

Source: NASA

Owner: Hansen et al. 2008

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

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

Source: NASA

Owner: Hansen et al. 2010

GNI per capita, Atlas method (current US$)

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

Source: World Bank (WDI)

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

Goats

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

Government expenditure

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

Government expenditure allocated to agricultural and rural development

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

Grain, mixed

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

Grapes

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

Gross capital stock (constant 2005 prices)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Gross capital stock, land development (constant 2005 prices)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Gross capital stock, livestock inventory (constant 2005 prices)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Gross capital stock, plantation crops (constant 2005 prices)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Groundnut Oil

Default composition: 244 Oil, groundnut

Health expenditure, total (percent of GDP)

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

Source: World Bank (WDI)

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

Honey, natural

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

Import of forest products (USD)

Forest materials for commercial use.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Import of roundwood (m^3)

See 'Roundwood'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Import value index (2004-2006 = 100)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Imports of fish (US$)

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

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

Owner: FAO

Income share held by highest 20% (percent)

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

Source: World Bank (WDI)

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

Income share held by lowest 20% (percent)

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

Source: World Bank (WDI)

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

Industrial roundwood

The wood removed (volume of roundwood under bark) for production of goods and services other than energy production (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 roundwood production (m^3)

See 'Industrial roundwood' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

Industrial water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Industry, value added (percent of GDP)

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

Source: World Bank (WDI)

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

Internally displaced persons, total

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

Source: Statistical Online Population Database

Owner: UNHCR

Irrigation potential (ha)

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

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Jute and jute-like

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

Jute and jute-like harvested area (ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Jute and jute-like production (tonnes)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Jute and jute-like yield (hg/ha)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

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

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

Source: World Bank (WDI)

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

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

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

Source: World Bank (WDI)

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

Land area (sq. km)

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

Source: World Bank (WDI)

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

Life expectancy at birth, total (years)

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

Source: World Bank (WDI)

Owner: UNPD World Population Prospects 2010

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

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

Source: World Bank (WDI)

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

Livestock

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

Maize

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

Male employment, total

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

Source: World Bank

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

Mammal species, threatened

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

Source: World Bank (WDI)

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

Manufactures Unit Value (MUV) (index)

The MUV is a composite index of prices for manufactured exports from the fifteen major developed and emerging economies to low- and middle-income economies, valued in U.S. dollars. For the MUV (15) index, unit value indexes in local currency for each country are converted to U.S. dollars using market exchange rates and are combined using weights determined by the share of each country's exports in G15 exports to low- and middle-income countries. The shares are calculated using SITC revision 3 Manufactures exports data from UN COMTRADE in 2005, the base year. The primary manufacturing prices index source is OECD's Domestic Producer Price Index (PPI) for manufacturing. Whenever PPI is not available, export price indexes or the export unit values are used as proxies. The countries and relative weights (in parentheses) are: Brazil (2.95%), Canada (0.93%), China (11.79%), France (5.87%), Germany (13.29%), India (1.77%), Italy (6.07%), Japan (16.70%), Mexico (0.93%), South Africa (0.75%), South Korea (10.95%), Spain (2.30%), Thailand (2.51%), United Kingdom (3.50%), and United States (19.68%).

Source: World Bank

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

Manure applied to soils, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Manure left on pasture, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Manure management, total emissions in CO_2eq (gigagrams)

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

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Marine protected areas (share of territorial waters)

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

Source: World Bank (WDI)

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

Meat, ass

Including frog legs, marine mammals, etc. Some countries includeunder this heading meats that are listed above, but which are notreported separately. Fresh, chilled or frozen.

Meat, beef, preparations

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

Meat, total

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

Meat, total (tonnes)

See 'Meat, total' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Milk

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

Milk excluding butter

Default composition: 882 Milk, whole fresh cow, 888 Milk, skimmed cow, 889 Milk, whole condensed, 890 Whey, condensed, 891 Yoghurt, 892 Yoghurt, concentrated or not, 893 Buttermilk, curdled, acidified milk, 894 Milk, whole evaporated, 895 Milk, skimmed evaporated, 896 Milk, skimmed condensed, 897 Milk, whole dried, 898 Milk, skimmed dried, 899 Milk, dry buttermilk, 900 Whey, dry, 901 Cheese, whole cow milk, 904 Cheese, skimmed cow milk, 905 Whey, cheese, 907 Cheese, processed, 908 Milk, reconstituted, 917 Casein, 951 Milk, whole fresh buffalo, 954 Milk, skimmed buffalo, 955 Cheese, buffalo milk, 982 Milk, whole fresh sheep, 984 Cheese, sheep milk, 985 Milk, skimmed sheep, 1020 Milk, whole fresh goat, 1021 Cheese of goat mlk, 1023 Milk, skimmed goat, 1130 Milk, whole fresh camel; nutrient data only: 903 Whey, fresh, 909 Milk, products of natural constituents nes, 910 Ice cream and edible ice

Milk production (tonnes)

Production data of milk indicates the quantity of milk produced during the year from the animals of the species to which the Supply Utilization Accounts refer. Milk production data is reported according to the concept of net milk production: total production of whole fresh milk, excluding the milk sucked by young animals but including amounts fed to livestock.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Mobile cellular subscriptions (per 100 people)

Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and prepaid subscriptions are included.

Source: World Bank (WDI)

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

Mobile cellular subscriptions (subscriptions)

Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and prepaid subscriptions are included.

Source: World Bank (WDI)

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

Mortality rate, infant (per 1000 live births)

Infant mortality rate is the number of infants dying before reaching one year of age, per 1000 live births in a given year.

Source: World Bank (WDI)

Owner: UNICEF, WHO, World Bank and UNPD

Mortality rate, under-5 (per 1,000 live births)

Under-five mortality rate is the probability per 1,000 that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates.

Source: World Bank (WDI)

Owner: Level & Trends in Child Mortality. Report 2011. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA, UNPD).

Municipal water withdrawal, share of total water withdrawal (percent)

Municipal water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Natural Phosphates

Products obtained by grinding soft mineral phosphates and containing tricalcium phosphate and calcium carbonate as essential ingredients. The minimum content of nutrients is 25% P2O5 (Phosphorus expressed as P2O5 soluble in mineral acids, at least 55% of the declared content of P2O5 being soluble in 2% formic acid).

Natural Sodium Nitrate

Chemically obtained product containing sodium nitrate as its essential ingredient. The minimum content of nutrients is 15% N (Nitrogen expressed as nitric nitrogen).

Net forest conversion, net emissions/removal in CO_2eq (gigagrams)

GHG emissions data from forest land are currently limited to emissions from net forest conversion to non-forest land. They consist of the balance of CO_2 sources and sinks associated with deforestation and afforestation activities within a country.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Net official development assistance and official aid received (current US$)

Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is provided under terms and conditions similar to those for ODA. Part II of the DAC List was abolished in 2005. The collection of data on official aid and other resource flows to Part II countries ended with 2004 data. Data are in current U.S. dollars.

Source: World Bank (WDI)

Owner: Development Assistance Committee of the Organisation for Economic Co-operation and Development, Geographical Distribution of Financial Flows to Developing Countries, Development Co-operation Report, and International Development Statistics database. Data

Nitrogen and phosphate fertilizers consumption (tonnes of K20 total nutrients)

Nitrogen and phosphate fertilizers consumption.

Source: FAO, Statistics Division

Owner: FAO

Nitrogen fertilizers consumption (tonnes of N total nutrients)

Nitrogen fertilizers consumption.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Number of people undernourished, total

Estimated number of people at risk of undernourishment. It is calculated by applying the estimated prevalence of undernourishment to the total population in each period.

Source: FAO, Statistics Division

Owner: FAO

ODA received for agriculture sector (US$)

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

ODA received for fishing sector (US$)

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

ODA received for forestry sector (US$)

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

Official Development Assistance

The concessional (Official Development Assistance, ODA) and non-Concessional commitments made by bilateral and multilateral donors to developing countries is referred to as 'External Assistance to Agriculture'. The term 'Agriculture' is generally used in the broad sense to cover agriculture, forestry, fisheries, land and water, agro-industries, environment, manufacturing of agricultural inputs and machinery, regional and river development, and rural development. The narrow concept of agriculture has also been defined to look at the contribution made to develop agriculture in a strict sense. This includes assistance provided for the development of agriculture (crop and animal husbandry), forestry, fisheries (including training, extension and research) and development of land and water resources.

Oil-bearing crops

Oil-bearing crops or oil crops include both annual (usually called oilseeds) and perennial plants whose seeds, fruits or mesocarp and nuts are valued mainly for the edible or industrial oils that are extracted from them. They include: Castor oil seed, Coconuts, Cottonseed, Groundnuts, with shell, Hempseed, Jojoba Seeds, Karite Nuts (Sheanuts), Linseed, Melonseed, Mustard seed, Oil palm fruit, Oilseeds, Nes, Olives, Palm kernels, Palm oil, Poppy seed, Rapeseed, Safflower seed, Seed cotton, Sesame seed, Soybeans, Sunflower seed and Tung Nuts.

Oil-bearing crops harvested area, share of world total

See 'Oil-bearing crops' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Oil-bearing crops production (tonnes)

See 'Oil-bearing crops' and 'Crop production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Oil-bearing crops yield (hg/ha)

See 'Oil-bearing crops' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Oil, maize

Extracted from germ by pressure or by solvents.

Oil, palm

Obtained from the mesocarp of the fruit of the oil palm by pressure, and also by solvent from the residues of the pressure extraction.

Oilcrops Oil, Other

Default composition: 263 Karite nuts (sheanuts), 265 Castor oil seed, 275 Tung nuts, 277 Jojoba seed, 280 Safflower seed, 296 Poppy seed, 299 Melonseed, 305 Tallowtree seed, 310 Kapok fruit, 311 Kapokseed in shell, 312 Kapokseed shelled, 333 Linseed, 336 Hempseed, 339 Oilseeds nes, 343 Flour, oilseeds

Oilseeds exports (tonnes)

Exports (volume) of oilseeds.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Oilseeds imports (tonnes)

Imports (volume) of oilseeds.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Oilseeds nes

Includes inter alia: beech nut (Fagus sylvatica);(Aleurites moluccana);(Carapa guineensis);(Croton tiglium);(Bassia latifolia);(Guizotia abyssinica);(Licania rigida);(Perilla frutescens);(Jatropha curcas);(Shorea robusta);(Pongamia glabra);(Astrocaryum spp.). Other oilseeds, oleaginous fruits and nuts that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report commodities under this heading that are classified individually by FAO. Also included under this code are tea seeds, grape pips and tomato seeds from which oil is extracted.

Olive Oil

Default composition: 261 Oil, olive, virgin, 274 Oil, olive residues

Organic water pollutant (BOD) emissions (kg per day per worker)

Emissions per worker are total emissions of organic water pollutants divided by the number of industrial workers. Organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: World Bank and UNIDO's industry database.

Organic water pollutant (BOD) emissions (kg per day)

Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: 1998 study by Hemamala Hettige, Muthukumara Mani, and David Wheeler, "Industrial Pollution in Economic Development: Kuznets Revisited" (available at www.worldbank.org/nipr). The data were updated by the World Bank's Development Research Group using the same methodology as the initial study.

Other land (ha)

Other land is the land not classified as Agricultural land and Forest area. It includes built-up and related land, barren land, other wooded land, etc.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Other naturally regenerated forest (ha)

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. Other naturally regenerated forest is forest where there are clearly visible indications of human activities.

Source: Global Forest Resources Assessment

Owner: FAO

Others and stateless, total

Population of concern to UNHCR, others and stateless.

Source: Statistical Online Population Database

Owner: UNHCR

Palmkernel Oil

Default composition: 258 Oil, palm kernel

Paper and paperboard

The sum of Paper and Paperboard, Newsprint, Paper and Paperboard other than Newsprint, Printing and Writing Paper, Other Paper and Paperboard, Household and Sanitary Paper, Wrapping and Packaging Paper and Paperboard and Other Paper and Paperboard Not Elsewhere Specified. See http://www.fao.org/forestry/62283/en/ for further information.

Paper and paperboard production (tonnes)

See 'Paper and paperboard' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Part of equipped area actually irrigated (percent)

Percent of area equipped for irrigation that is actually irrigated in any given year, expressed in percentage. Irrigated land that is cultivated more than once a year is counted only once.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Pastry

All baked products excluding those listed under bread. Pastry products may contain ingredients other than wheat flour, such as milk, eggs, sugar, honey, starch, fats, fruit, seeds, etc.

Per Capita food production variability (index)

Per capita food production variability corresponds to the variability of the net food production value in constant 2004-2006 1000 International $ (Net Food PIN) divided by the population number as from UN 2010 estimates. Variability is based on the trend of the Net Food PIN per capita over the period 1985 to 2010 and corresponds to the standard deviation of the deviation from the trend over a period of 5 years. Missing values for Eritrea/Ethiopia, former Yugoslavia and Caucasus countries for 1985 to 1992 are estimated backward using the share of the value of food production of each country in the total value of the region it belonged to prior to 1992.

Source: FAO, Statistics Division

Owner: FAO

Per Capita food supply variability (index)

Food supply variability correspond to the variable Food supply total in kcal/person/day as estimated by the FAO Statistic Division. The variability is obtained as the standard deviation over 5 years of the deviation from the trend of per capita food supply observed during the period 1990 to 2010.

Source: FAO, Statistics Division

Owner: FAO

Per capita supply

Estimates of per capita food supplies available for human consumption during the reference period in terms of quantity, caloric value, protein and fat content. Calorie supplies are reported in kilocalories (1 calorie = 4.19 kilojoules). Per capita supplies in terms of product weight are derived from the total supplies available for human consumption (i.e. Food) by dividing the quantities of Food by the total population actually partaking of the food supplies during the reference period, i.e. the present in-area (de facto) population within the present geographical boundaries of the country. In other words, nationals living abroad during the reference period are excluded, but foreigners living in the country are included. Adjustments are made wherever possible for part-time presence or absence, such as temporary migrants, tourists and refugees supported by special schemes (if it has not been possible to allow for the amounts provided by such schemes under imports). In almost all cases, the population figures used are the mid-year estimates published by the United Nations Population Division. Per capita supply figures shown in the commodity balances therefore represent only the average supply available for the population as a whole and do not necessarily indicate what is actually consumed by individuals. Even if they are taken as approximation to per capita consumption, it is important to note that the amount of food actually consumed may be lower than the quantity shown here, depending on the degree of losses of edible food and nutrients in the household, e.g. during storage, in preparation and cooking etc. In many cases commodities are not consumed in the primary form in which they are presented in the commodity balance, e.g. cereals enter the household mainly in processed form like flour, meal, husked or milled rice. To take this fact into account, the caloric value, the protein and fat content shown against primary commodities in the commodity balances have been derived by applying the appropriate food composition factors to the quantities of the processed commodities and not by multiplying the quantities shown in the commodity balance with the food composition factors relating to primary commodities.

Percent of adults who are underweight (percent)

Percentage of adults who are underweight, as defined by a Body Mass Index (BMI) below the international reference standard of 18.5. To calculate an individual's BMI, weight and height data are need. The BMI is weight (kg) divided by squared height (m).

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Percent of arable land equipped for irrigation (percent)

Percent of arable land equipped for irrigation. The indicator is calculated on 3 year averages.

Source: FAO, Statistics Division

Owner: FAO

Percent of paved roads over total roads (percent)

Paved roads are those surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones, as a percentage of all the country's roads, measured in length. Regional aggregates are computed as weighted average using total road network as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using the closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total lenght of road network of the region they belong to.

Source: FAO, Statistics Division

Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

Percentage of children under 5 years of age who are stunted (percent)

Percentage of stunting (height-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Percentage of children under 5 years of age who are underweight (percent)

Percentage of underweight (weight-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Percentage of children under 5 years of age who are wasted (percent)

Percentage of (weight-for-height less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Percentage of population with no reasonable access to improved sanitation facilities (percent)

Access to improved sanitation facilities refers to the percentage of the population with at least adequate access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. To be effective, facilities must be correctly constructed and properly maintained.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Percentage of population with no reasonable access to improved water sources (percent)

Access to an improved water source refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling.

Source: FAO, Statistics Division

Owner: World Health Organization (WHO)

Permanent crops (ha)

Permanent crops is the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Permanent meadows and pastures (ha)

Permanent meadows and pastures is the land used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land). Data are expressed in 1000 hectares.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Pesticide consumption

Data refer to quantities of pesticides applied to crops and seeds in the agriculture sector. Figures are generally expressed in terms of active ingredients. Data are expressed in tonnes (t). However, due to some country reporting practices, the data may be reported by: consumption in formulated product (including diluents and adjuvants); sales; distribution or imports for use in the agricultural sector. In these cases it is specified in the country notes.

Pesticides

Pesticides refer to insecticides, fungicides, herbicides, disinfectants and any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport.

Phosphate fertilizers consumption (tonnes of P205 total nutrients)

Phosphate fertilizers consumption.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Pig meat

Meat, with the bone in, of domestic or wild pigs (e.g. wild boars),whether fresh, chilled or frozen.

Pig meat per capita (tonne/cap)

See 'Pig meat' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Pigs

Domestic pig (Sus domestica); wild boar (Sus scrofa). See 866. Excludes non-domesticated wild boars.

Plant species (higher), threatened

Higher plants are native vascular plant species. Threatened species are the number of species classified by the IUCN as endangered, vulnerable, rare, indeterminate, out of danger, or insufficiently known.

Source: World Bank (WDI)

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

Planted forest (ha)

Planted forest is forest predominantly composed of trees established through planting and/or deliberate seeding.

Source: Global Forest Resources Assessment

Owner: FAO

Political stability and absence of violence/terrorism (index)

Political stability and absence of violence measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

Source: FAO, Statistics Division

Owner: WorldWide Governance Indicators

Population ages 0-14, total

Population with age between 0 and 14 years.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

Population ages 15-64, total

Population with age between 15 and 64 years.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

Population ages 65 and above, total

Population with age above 65.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

Population density (people per sq. km of land area)

Population density is midyear population divided by land area in square kilometers. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship–except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Land area is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

Source: World Bank (WDI)

Owner: Food and Agriculture Organization and World Bank population estimates.

Population living in areas where elevation is below 5 meters (share of total population)

Population below 5m is the percentage of the total population living in areas where the elevation is 5 meters or less.

Source: World Bank (WDI)

Owner: Center for International Earth Science Information Network (CIESIN), Place II dataset.

Population, total

Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship–except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. The values shown are midyear estimates.

Source: United Nations Population Division

Owner: United Nations Population Division, World Population Prospects.

Potash fertilizers consumption (tonnes of K20 total nutrients)

Potash fertilizers consumption.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Potassium Sulphate

Is a white crystalline salt and contains 48 to 52 per cent potash (K20). Potassium sulfate can be extracted from naturally occurring brines or by the decomposition of potassium chloride with sulfuric acid.

Poultry birds (heads)

Domesticated birds for commercial use.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Poultry meat

Poultry birds, fresh, chilled or frozen, with bone in. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats. Poultry meat includes Bird meat, nes, Chicken meat, Duck meat, Goose and guinea fowl meat and Turkey meat.

Poultry meat (tonnes)

See 'Poultry meat' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Poverty gap at $1.25 a day PPP (percent)

Poverty gap is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Source: World Bank (WDI)

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

Poverty gap at $2 a day PPP (percente)

Poverty gap is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Source: World Bank (WDI)

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

Poverty gap at national poverty line (percent)

Poverty gap at national poverty line is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Source: World Bank (WDI)

Owner: Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

Poverty gap at rural poverty line (percent)

Poverty gap at rural poverty line is the mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the national rural poverty line. This measure reflects the depth of poverty as well as its incidence.

Source: World Bank (WDI)

Owner: Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

Poverty headcount ratio at $1.25 a day PPP (percent of population)

Population below $1.25 a day is the percentage of the population living on less than $1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

Source: World Bank (WDI)

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

Poverty headcount ratio at $2 a day PPP (percent of population)

Population below $2 a day is the percentage of the population living on less than $2.00 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

Source: World Bank (WDI)

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

Poverty headcount ratio at national poverty line (percent of population)

Poverty headcount ratio at national poverty line (% of population).

Source: World Bank (WDI)

Owner: Global Poverty Working Group. Data are based on World Bank's country poverty assessments and country Poverty Reduction Strategies.

Prevalence of food inadequacy (percent)

It is conceptually analogous to the prevalence of undernourishment , but calculated setting the caloric threshold to a higher level, by using a Physical Activity Level (PAL) coefficient of 1.75, as opposed to 1.55. It measures the percentage of the population that is at risk of not covering the food requirements associated with normal physical activity, and therefore including also those who, even though cannot be considered chronically undernourished, are likely being conditioned in their economic activity by insufficient food. While the PoU is an estimator of chronic food deprivation ("hunger"), this new estimator is a less conservative measure of food inadequacy in the population. The indicator is calculated on 3 year averages.

Source: FAO, Statistics Division

Owner: FAO

Prevalence of undernourishment (percent)
Proportion of the population estimated to be at risk of caloric inadequacy. This is the traditional FAO hunger indicator, adopted as official Millenium Development Goal indicator for goal 1, target 1.9. The indicator is calculated on 3 year averages.
Source: FAO, Statistics Division
Owner: FAO

Primary completion rate, total (percent of relevant age group)
Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.
Source: World Bank (WDI)
Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

Primary forest (ha)
Primary forest is naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Source: Global Forest Resources Assessment
Owner: FAO

Production
Figures relate to the total domestic production whether inside or outside the agricultural sector, i.e. it includes non-commercial production and production from kitchen gardens. Unless otherwise indicated, production is reported at the farm level for crop and livestock products (i.e. in the case of crops, excluding harvesting losses) and in terms of live weight for fish items (i.e. the actual ex-water weight at the time of the catch). All data shown relate to total meat production from both commercial and farm slaughter. Data are expressed in terms of dressed carcass weight, excluding offal and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight.

Production - Livestock primary
Livestock primary products include products from live and slaughtered animals. Products from slaughtered animals include meat, offals, raw fats, fresh hides and skins. Products from live animals include milk, eggs, honey, beeswax and fibres of animal origin. All data shown relate to total meat production from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, i.e. excluding offals and slaughter fats. Production of beef and buffalo meat includes veal; mutton and goat meat includes meat from lambs and kids, respectively; pig meat includes bacon and ham in fresh equivalent. Poultry meat includes meat from all domestic birds and refers, wherever possible, to ready-to-cook weight. Cow milk production relates to total production of whole fresh milk, excluding the milk sucked by young animals but including amounts fed to livestock. The concept of production of buffalo, sheep and goat milk is the same as for cow milk; however, the coverage is probably less adequate. Egg production covers all domestic birds which have contributed to egg production during the year, wherever they lay and the corresponding total production, including eggs intended to be used for hatching but excluding waste on farms.

Protein supply quantity in crops primary equivalent (g/cap/day)
Protein supply quantity in crops primary equivalent.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Pulses
Pulses are annual leguminous crops yielding from one to 12 grains or seeds of variable size, shape and colour within a pod. They are used for both food and feed. The term "pulses" is limited to crops harvested solely for dry grain, thereby excluding crops harvested green for food (green peas, green beans, etc.) which are classified as vegetable crops. Also excluded are those crops used mainly for oil extraction (e.g. soybean and groundnuts) and leguminous crops (e.g. seeds of clover and alfalfa) that are used exclusively for sowing purposes. They include Bambara beans, Beans, dry, Broad beans, horse beans, dry, Chick peas, Cow peas, dry, Lentils, Lupins, Peas, dry, Pigeon peas, Pulses, nes, and Vetches.

Pulses harvested area (ha)
See 'Pulses' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Pulses production (tonnes)
See 'Pulses' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Pulses yield (hg/ha)
See 'Pulses' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rail-lines density (percent)
Rail lines density corresponds to the ratio between the length of railway route available for train service, irrespective of the number of parallel tracks (rail lines, total route in km) with the area of the country. Regional aggregates are computed as weighted average using surface area as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total area of the region they belong to.
Source: FAO, Statistics Division
Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

Rape and Mustard Oil
Default composition: Oil, rapeseed, mustard

Recovered paper
Waste and scraps of paper or paperboard that have been collected for re-use as a raw material for the manufacture of paper and paperboard. It includes: paper and paperboard that has been used for its original purpose and residues from paper and paperboard production. See http://www.fao.org/forestry/62283/en/ for further information.

Recovered paper production (tonnes)
See 'Recovered paper' and 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rice (paddy)
Oryza spp., mainly oryza sativa. Rice grain after threshing and winnowing. Also known as rice in the husk and rough rice. Used mainly for human food.

Rice (paddy) production (tonnes)
See 'Rice (paddy)' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rice cultivation, total emissions in CO_2eq (gigagrams)
Greenhouse gas (GHG) emissions from rice cultivation consist of methane gas from the anaerobic decomposition of organic matter in paddy fields.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rice harvested area (ha)
See 'Rice (paddy)' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rice yield (hg/ha)
See 'Rice (paddy)' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Road density (percent)
Road density is the ratio of the length of the country's total road network to the country's land area. The road network includes all roads in the country: motorways, highways, main or national roads, secondary or regional roads, and other urban and rural roads. Regional aggregates are computed as weighted average using surface area as weight. Because of the low coverage, missing values were interpolated using linear trend between two points or extrapolated backward and forward using the closest point. Note that regional aggregates were calculated only if countries for which data were available represented more than 70% of the total area of the region they belong to.
Source: FAO, Statistics Division
Owner: International Road Federation, World Road Statistics and electronic files, except where noted.

Root and tuber crops
Roots and tubers are plants yielding starchy roots, tubers, rhizomes, corms and stems. They include Potatoes, Sweet Potatoes, Cassava, Yautia (Cocoyam), Taro (Cocoyam), Yams, Roots And Tubers Nes.

Root and tuber crops production (tonnes)
See 'Root and tuber crops' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Roots and tubers harvested area (ha)
See 'Root and tuber crops' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Roots and tubers yield (hg/ha)
See 'Root and tuber crops' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Roots and tubers, nes
Including inter alia: arracacha (Arracacoa xanthorrhiza); arrowroot (Maranta arundinacea); chufa (Cyperus esculentus); sago palm (Metroxylon spp.); oca and ullucu (Oxalis tuberosa and Ullucus tuberosus); yam bean, jicama (Pachyrxhizus erosus, P. angulatus); mashua (Tropaeolum tuberosum); Jerusalem artichoke, topinambur (Helianthus tuberosus). Other tubers, roots or rhizomes, fresh, that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report roots and tubers under this commodity heading that are classified individually by FAO.

Roundwood
All roundwood felled or otherwise harvested and removed. It comprises all wood obtained from removals, i.e. the quantities removed from forests and from trees outside the forest, including wood recovered from natural, felling and logging losses during the period, calendar year or forest year. It includes: all wood removed with or without bark, including wood removed in its round form, or split, roughly squared or in other form (e.g. branches, roots, stumps and burls (where these are harvested) and wood that is roughly shaped or pointed. In the production statistics, it represents the sum of: wood fuel, including wood for charcoal; sawlogs and veneer logs; pulpwood, round and split; and other industrial roundwood. See http://www.fao.org/forestry/62283/en/ for further information.

Roundwood production (m^3)
See 'Roundwood' and 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Rural population, total
Rural population refers to people living in rural areas as defined by national statistical offices.
Source: United Nations Population Division
Owner: United Nations Population Division, World Urbanization Prospects.

Safflower seed
Carthamus tinctorius. Valued mainly for its oil. Minor uses include as a human food and as poultry feed.

Safflower seed
Glycine soja. The most important oil crop. Also widely consumed as a bean and in the form of various derived products because of its high protein content, e.g. soya milk, meat, etc.

Sawnwood
Wood that has been produced from both domestic and imported roundwood, either by sawing lengthways or by a profile-chipping process and that, with a few exceptions, exceeds 5 mm in thickness. It includes: planks, beams, joists, boards, rafters, scantlings, laths, boxboards, sleepers and "lumber", etc., in the following forms: 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.

Sawnwood production (m^3)
See 'Sawnwood' and 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

School enrollment, primary, female (percent net)
Net enrollment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.
Source: World Bank (WDI)
Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

School enrollment, primary, male (percent net)
Net enrollment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.
Source: World Bank (WDI)
Owner: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

Services, etc., value added (percent of GDP)
Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for

depreciation of fabricated assets or depletion and degradation of natural resources. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.
Source: World Bank (WDI)
Owner: World Bank national accounts data, and OECD National Accounts data files.

Sesameseed Oil
Default composition: Oil, sesame

Share of energy supply derived from cereals, roots and tubers (percent)
Energy supply (in kcal/caput/day) provided by cereals, roots and tubers divided by total Dietary Energy Supply (DES) (in kcal/caput/day) calculated from the 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.
Source: FAO, Statistics Division
Owner: FAO

Share of feedstocks used in bioenergy production (percent)
Estimated shares of commodity globally used in non-food sectors, including industrial renewable materials and bioenergy.
Source: FAO, Statistics Division
Owner: FAO

Share of food expenditure of the poor (percent)
Proportion of food consumption over total consumption (food and non-food) for the lowest income quintile of the population.
Source: FAO, Statistics Division
Owner: FAO

Share of freshwater resources withdrawn by agriculture (percent)
Water withdrawn for irrigation in a given year, expressed in percent of the total actual renewable water resources (TRWR_actual). This parameter is an indication of the pressure on the renewable water resources caused by irrigation.
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Sheep
Ovis spp.. See 'Cattle'. Includes Uriel, Argali, Bighorn, Karakul and Astrakhan.

Sheep and goat meat (tonnes)
See 'Sheep', 'Goats', 'Meat, total', and 'Production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sheep and goats (heads)
See 'Sheep' and 'Goats'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Skim milk and buttermilk production, dry (tonnes)
See 'Milk excluding butter' and 'Milk production (tonnes)'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Soyabean Oil
Default composition: Oil, soybean

Sugar
Beta vulgaris var. altissima. In some producing countries, marginal quantities are consumed, either directly as food or in the preparation of jams.

Sugar (Raw Equivalent)
Default composition: 158 Sugar, cane, raw, centrifugal, 159 Sugar, beet, raw, centrifugal, 162 Sugar Raw Centrifugal, 164 Sugar refined, 168 Sugar confectionery, 171 Sugar flavoured

Sugar and honey exports (tonnes)
Exports (volume) of sugar and honey.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sugar and honey imports (tonnes)
Imports (volume) of sugar and honey.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sugar beet
Beta vulgaris var. altissima. In some producing countries, marginal quantities are consumed, either directly as food or in the preparation of jams.

Sugar cane
Saccharum officinarum. In some producing countries, marginal quantities of sugar cane are consumed, either directly as food or in the form of juice.

Sugar harvested area (ha)
See 'Sugar' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sugar production (tonnes)
See 'Sugar' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sugar yield (hg/ha)
See 'Sugar' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Sunflower seed
Helianthus annuus. Valued mainly for its oil. Minor uses include as a human food and as feed for birds.

Sunflowerseed Oil
Default composition: Oil, sunflower

Synthetic fertilizers, total emissions in CO_2eq (gigagrams)
Greenhouse gas (GHG) emissions from synthetic fertilizers consist of nitrous oxide gas from synthetic nitrogen additions to managed soils.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Telephone lines (per 100 people)
Telephone lines are fixed telephone lines that connect a subscriber's terminal equipment to the public switched telephone network and that have a port on a telephone exchange. Integrated services digital network channels ands fixed wireless subscribers are included.
Source: World Bank (WDI)
Owner: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates.

Terrestrial protected areas (share of total land area)

Terrestrial protected areas are totally or partially protected areas of at least 1,000 hectares that are designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use. Marine areas, unclassified areas, littoral (intertidal) areas, and sites protected under local or provincial law are excluded.

Source: World Bank (WDI)

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

Total area equipped for irrigation (ha)

Area equipped to provide water (via irrigation) to crops. It includes areas equipped for full/partial control irrigation, equipped lowland areas, and areas equipped for spate irrigation.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Total female population of concern to UNHCR, total

See 'Total population of concern to UNHCR, total'.

Source: Statistical Online Population Database

Owner: UNHCR

Total forest (ha)

Sum of 'Other naturally regenerated forest (ha)', 'Primary forest (ha)', and 'Planted forest (ha)'.

Source: Global Forest Resources Assessment

Owner: FAO

Total land area (ha)

Land area is the total area of the country excluding area under inland water bodies. Possible variations in the data may be due to updating and revisions of the country data and not necessarily to any change of area. Data are expressed in 1 000 hectares.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Total male population of concern to UNHCR, total

See 'Total population of concern to UNHCR, total'.

Source: Statistical Online Population Database

Owner: UNHCR

Total meat exports (tonnes)

Exports (volume) of total meat.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Total meat imports (tonnes)

Imports (volume) of total meat.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Total ODA received (US$)

See 'Official Development Assistance'

Source: FAO, Statistics Division

Owner: The EAA dataset is compiled from OECD (as given included in the OECD internet home-page), DAC Reports, Annual Reports of the World Bank and data received from other organizations on regional development. The data are processed by following a series of steps such as analyses, including systematic checking and verifications at various stages for enhancing the quality of the data prior to dissemination on FAOSTAT.

Total pesticides use (tonnes)

Pesticides refer to insecticides, fungicides, herbicides, disinfectants and any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. Pesticides use data refers to quantities of pesticides applied to crops and seeds in the agriculture sector. Figures are expressed in metric tons of active ingredients. However, due to some country reporting practices, the data may be reported by: use in formulated product; sales; distribution or imports for use in the agricultural sector. In these cases it is specified in the country notes.

Source: FAO FAO, Statistics Division

Owner: FAO

Total population of concern to UNHCR, total

Population of concern to UNHCR includes: refugees, asylum-seekers, returned refugees, internally displaced persons (IDPs) protected/assisted by UNHCR, returned IDPs, stateless persons, and others of concern to UNHCR.

Source: Statistical Online Population Database

Owner: UNHCR

Total public agricultural expenditures in R & D (2005 PPP US$)

Total public agricultural expenditures in R & D.

Source: ASTI

Owner: ASTI 2012, Eurostat 2012, OECD, 2012, and various country-level secondary sources (see for more information on data sources and estimations on http://www.asti.cgiar.org/pdf/CountrySourcesEstimations.pdf). Agricultural GDP from World Bank (2012).

Total public agricultural research expenditures (share of agricultural GDP)

Total public agricultural research expenditures as share of agricultural GDP.

Source: ASTI

Owner: ASTI 2012, Eurostat 2012, OECD, 2012, and various country-level secondary sources (see for more information on data sources and estimations on http://www.asti.cgiar.org/pdf/CountrySourcesEstimations.pdf). Agricultural GDP from World Bank (2012).

Total refugees, total

In UNHCR statistics, refugees include individuals recognized under the 1951 Convention relating to the Status of Refugees; its 1967 Protocol; the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa; those recognized in accordance with the UNHCR Statute; individuals granted complementary forms of protection; or, those enjoying 'temporary protection'. The 2007 refugee population category also includes people in a refugee-like situation, most of who were previously included in the Others of concern group. This sub-category is descriptive in nature and includes groups of persons who are outside their country or territory of origin and who face protection risks similar to those of refugees, but for whom refugee status has, for practical or other reasons, not been ascertained.

Source: Statistical Online Population Database

Owner: UNHCR

Total share of freshwater resources withdrawn (percent)

Total freshwater withdrawn in a given year, expressed in percentage of the actual total renewable water resources (TRWR_actual). This

parameter is an indication of the pressure on the renewable water resources.
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Total water withdrawal (m^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.
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Total water withdrawal per capita (m^3/yr/person)
Total annual amount of water withdrawn per capita.
Source: Land and Water Division (AQUASTAT)
Owner: FAO

Trade (percent of GDP)
Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.
Source: World Bank (WDI)
Owner: World Bank national accounts data, and OECD National Accounts data files.

Treenuts harvested area (ha)
See 'Treenuts' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Treenuts production (tonnes)
See 'Treenuts' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Treenuts yield (hg/ha)
See 'Treenuts' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Urban population, total
Urban population refers to people living in urban areas as defined by national statistical offices.
Source: United Nations Population Division
Owner: United Nations Population Division, World Urbanization Prospects.

Value of agricultural exports
Value of agricultural exports should be reported in national currency, US dollars or other currency. Export values are mostly reported as FOB. In the FAOSTAT database export values are expressed in thousand US dollars.

Value of agricultural imports
Value of agricultural imports should be reported in national currency, US dollars or other currency. Import values are mostly reported as CIF. In the FAOSTAT database import values are expressed in thousand US dollars.

Value of food imports over total merchandise exports (percent)
Value of food (excl. fish) imports over total merchandise exports. The indicator is calculated on 3 year averages.
Source: FAO, Statistics Division
Owner: FAO

Value of food production per capita (I$/cap)
The total value of Annual Food Production, as estimated by FAO and published by FAOSTAT in International Dollars (I$) divided by the total population. It provides a cross country comparable measure of the relative economic size of the food production sector in the country. The indicator is calculated on 3 year averages.
Source: FAO, Statistics Division
Owner: FAO

Vegetable production (tonnes)
See 'Vegetable, including melons' and 'Crop production'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Vegetable, including melons
Vegetables, as classified in this group, are mainly annual plants cultivated as field and garden crops in the open and under glass, and used almost exclusively for food. Vegetables grown principally for animal feed or seed should be excluded. Certain plants, normally classified as cereals and pulses, belong to this group when harvested green, such as green maize, green peas, etc. This grouping differs from international trade classifications for vegetables in that it includes melons and watermelons, which are normally considered to be fruit crops. But, whereas fruit crops are virtually all permanent crops, melons and watermelons are similar to vegetables in that they are temporary crops. Chillies and green peppers are included in this grouping when they are harvested for consumption as vegetables and not processed into spices. FAO production data for green peas and green beans refer to the total weight including pods, although some countries report on a shelled weight basis. The weight of the pods ranges from 40 to 50 percent for peas to up to 70 percent for broad beans. Area data on small vegetable gardens are often omitted in agricultural surveys, although production estimates may be reported. Trade data for fresh vegetables also include chilled vegetables, meaning the temperature of the products has been reduced to around 0C without the products being frozen.

Vegetables harvested area (ha)
See 'Vegetable, including melons' and 'Crop area'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Vegetables yield (hg/ha)
See 'Vegetable, including melons' and 'Crop yield'.
Source: FAO, Statistics Division (FAOSTAT)
Owner: FAO

Vegetables, fresh nes
Including inter alia: bamboo shoots (Bambusa spp.); beets, chards (Beta vulgaris); capers (Capparis spinosa); cardoons (Cynara cardunculus); celery (Apium graveolens); chervil (Anthriscus cerefolium); cress (Lepidium sativum); fennel (Foeniculum vulgare); horseradish (Cochlearia armoracia); marjoram, sweet (Majorana hortensis); oyster plant (Tragopogon porrifolius); parsley (Petroselinum crispum); parsnips (Pastinaca sativa); radish (Raphanus sativus); rhubarb (Rheum spp.); rutabagas, swedes (Brassica napus); savory (Satureja hortensis); scorzonera (Scorzonera hispanica); sorrel (Rumex acetosa); soybean sprouts tarragon (Artemisia dracunculus); watercress (Nasturtium officinale). Other vegetables that are not identified separately because of their minor relevance at the international level. Because of their limited local importance, some countries report vegetables under this heading that are classified individually by FAO.

Waste
Amount of the commodity in question lost through wastage (waste) during the year at all stages between the level at which production is recorded and the household, i.e. storage and transportation. Losses occurring before and during harvest are excluded. Waste from both edible and inedible parts of the commodity occurring in the household is also excluded. Quantities lost during the transformation of primary commodities into processed products are taken

into account in the assessment of respective extraction/conversion rates. Distribution wastes tend to be considerable in countries with hot humid climate, difficult transportation and inadequate storage or processing facilities. This applies to the more perishable foodstuffs, and especially to those which have to be transported or stored for a long time in a tropical climate. Waste is often estimated as a fixed percentage of availability, the latter being defined as production plus imports plus stock withdrawals.

Water pollution, chemical industry (share of total BOD emissions)

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: chemicals (35). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: 1998 study by Hemamala Hettige, Muthukumara Mani, and David Wheeler, "Industrial Pollution in Economic Development: Kuznets Revisited" (available at www.worldbank.org/nipr). The data were updated by the World Bank's Development Research Group using the same methodology as the initial study.

Water pollution, clay and glass industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, food industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, metal industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, other industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, paper and pulp industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, textile industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water pollution, wood industry (share of total BOD emissions)

See 'Water pollution, chemical industry (% of total BOD emissions)'.

Source: World Bank (WDI)

Owner: See 'Water pollution, chemical industry (% of total BOD emissions)'.

Water resources per capita (m^3/yr/person)

Total annual internal renewable water resources per inhabitant.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Wheat

Triticum spp.: common (T. aestivum) durum (T. durum) spelt (T. spelta). Common and durum wheat are the main types. Among common wheat, the main varieties are spring and winter, hard and soft, and red and white. At the national level, different varieties should be reported separately, reflecting their different uses. Used mainly for human food.

Wheat harvested area (ha)

See 'Wheat' and 'Crop area'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Wheat production (tonnes)

See 'Wheat' and 'Crop production.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Wheat yield (hg/ha)

See 'Wheat' and 'Crop yield'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Wood-based panels

The wood-based panels category is an aggregate category. In the production and trade statistics, it represents the sum of: veneer sheets, plywood, particle board, and fibreboard. See http://www.fao.org/forestry/62283/en/ for further information.

Wood-based panels production (m^3)

See 'Wood-based panels' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Wood pulp

Wood pulp is a fibrous material prepared from pulpwood, wood chips, particles, residues or recovered paper by mechanical and/or chemical process for further manufacture into paper, paperboard, fibreboard or other cellulose products. In the production and trade statistics, it represents the sum of: mechanical wood pulp; semi-chemical wood pulp; chemical wood pulp; and dissolving wood pulp. See http://www.fao.org/forestry/62283/en/ for further information.

Wood pulp production (tonnes)

See 'Wood pulp' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Woodfuel

Roundwood that will be used as fuel for purposes such as cooking, heating or power production. It includes: wood harvested from main stems, branches and other parts of trees (where these are harvested for fuel) and wood that will be used for charcoal production (e.g. in pit kilns and portable ovens). The volume of roundwood used in charcoal production, is estimated by using a factor of 6.0 to convert from the weight (MT) of charcoal produced to the solid volume (CUM) of roundwood used in production. It is reported in cubic metres underbark (i.e. excluding bark). See http://www.fao.org/forestry/62283/en/ for further information.

Woodfuel production (m^3)

See 'Woodfuel' and 'Production'.

Source: FAO, Statistics Division (FAOSTAT)

Owner: FAO

Bibliography

Bruinsma, J. 2011. The Resources Outlook: By How Much Do Land, Water and Crop Yields Need to Increase by 2050?, in *Looking Ahead in World Food and Agriculture: Perspectives to 2050*, ed. by Conforti, P. FAO, Rome.

ECLAC, FAO, I. 2012. *The Outolook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean,* FAO, Santiago, Chile.

FAO 2009. *The State of Food and Agriculture 2009 - Livestock in the Balance,* FAO, Rome.

——— 2010. *Global Forest Resources Assessment 2010 - Main Report,* FAO, Rome.

——— 2011a. *Climate Change, Water and Food Security,* FAO, Rome.

——— 2011b. *The State of Food and Agriculture 2010-11 - Women in Agriculture: Closing the Gender Gap for Development,* FAO, Rome.

——— 2011c. *The State of Food Insecurity in the World 2011 - How Does International Price Volatility Affect Domestic Economies and Food Security?,* FAO, Rome.

——— 2011d. *The State of the World's Land and Water Resources for Food and Agriculture - Managing Systems at Risk,* FAO, Rome.

——— 2012a. *State of the World's Forests 2012 - The Role of Forests in Human History,* FAO, Rome.

——— 2012b. *The State of Food and Agriculture 2012 - Investing in Agriculture for a Better Future,* FAO, Rome.

——— 2012c. *The State of Food Insecurity in the World 2012 - Economic growth is necessary but not suffcient to accelerate reduction of hunger and malnutrition,* FAO, Rome.

——— 2012d. *The State of World Fisheries and Aquaculture 2012,* FAO, Rome.

——— 2012e. *World Agriculture: Towards 2030/2050 - The 2012 Revision,* FAO, Rome.

——— 2013a. *Panorama of Food and Nutritional Security in Latin America and the Caribbean,* FAO, Santiago, Chile.

——— 2013b. *The State of Food and Agriculture 2013 - Food Systems for Better Nutrition,* FAO, Rome.

——— 2013c. *The State of Food Insecurity in the World 2013 - The Multiple Dimensions of Food Security,* FAO, Rome.

IEA 2009. *World Energy Outlook 2009 Fact Sheet: Why Is Our Current Pathway Unsustainable?,* International Energy Agency (IEA), Paris.

——— 2010. *World Energy Outlook 2010,* IEA, Paris.

——— 2013. *World Energy Outlook 2013,* IEA, Paris.

——— Various years a. *Energy Balances of Non-OECD Countries,* IEA, Paris.

——— Various years b. *Energy Balances of OECD Countries,* IEA, Paris.

——— Various years c. *Energy Statistics of Non-OECD Countries,* IEA, Paris.

——— Various years d. *Energy Statistics of OECD Countries,* IEA, Paris.

IFAD 2011. *Rural Poverty Report 2011 - New Realities, New Challenges: New Opportunities for Tomorrow's Generation,* International Fund for Agricultural Development (IFAD), Rome.

ILO 2009. *Guide to the New Millennium Development Goals Employment Indicators,* International Labour Organization (ILO), Geneva.

——— 2012. *Global Employment Trends 2012. Preventing a deeper job crisis,* ILO, Geneva.

——— 2013. *Global Employment Trends 2013 - Recovering from a second jobs dip,* ILO, Geneva.

——— Various years a. *Key Indicators of the Labour Market (KILM),* ILO, Geneva.

——— Various years b. *Yearbook of Labour Statistics,* ILO, Geneva.

IMF Various years . *International Financial Statistics Yearbook,* International Monetary Fund (IMF), Washington, D.C.

O'Donovan, D. 2008. *The Atlas of Health: Mapping the Challenges and Causes of Disease.* Earthscan, London.

OECD Various years a. *Development Co-operation Report,* Organization for Economic Co-operation and Development (OECD), Paris.

——— Various years b. *Geographical Distribution of Financial Flows to Developing Economies,* OECD, Paris.

OECD and FAO 2012. *Agricultural Outlook 2012-2021,* Organisation for Economic Co-operation and Development (OECD) and FAO.

Partnership on Measuring ICT for Development 2008. *The Global Information Society: A Statistical View,* United Nations, Santiago.

Prakash, A. (ed.) 2011. *Safeguarding Food Security in Volatile Global Markets*. FAO, Rome.

R Core Team 2012.*R: A Language and Environment for Statistical Computing*, R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0.

Schmidhuber, J., Bruinsma, J. & Boedeker, G. 2011. Capital Requirements for Agriculture in Dveloping Countries to 2050, in *Looking Ahead in World Food and Agriculture: Perspectives to 2050*, ed. by Conforti, P. Food and Agriculture Organization.

Schmidhuber, J. and Bruinsma, J. 2011. Investing Towards a World Free of Hunger, Lowering Vulnerability and Enhancing Resilience, in *Safeguarding Food Security in Volatile Global Markets*, ed. by Prakash, A. FAO, Rome.

UN 2008a. *International Standard Industrial Classification of All Economic Activities, 4th Revision. Statistical Papers Series M, No. 4, Rev. 4,* United Nations (UN), New York.

——— 2008b. *Kyoto Protocol to the United Nations Framework Convention on Climate Change,* United Nations Framework Convention on Climate Change, New York.

——— 2009a. *Copenhagen Accord,* United Nations Framework Convention on Climate Change, Copenhagen.

——— 2009b. *Fact Sheet: Stepping Up International Action on Climate Change: The Road to Copenhagen,* United Nations Framework Convention on Climate Change, New York.

UNDP 2010. *Human Development Report - The Real Wealth of Nations: Pathways to Human Development,* United Nations Development Programme (UNDP), New York.

——— 2011. *Human Development Report - Sustainability and Equity: A Better Future for All,* UNDP, New York.

UNESCO 2009. *World Water Development Report 3: Water in a Changing World,* UNESCO, Paris.

——— 2010. *UNESCO Science Report 2010,* UNESCO, Paris.

——— 2011. *International Standard Classification of Education, 2011 revision,* United Nations Educational, Scientific, and Cultural Organization (UNESCO), Paris.

——— Various years a. *EFA Global Monitoring Report,* UNESCO, Paris.

——— Various years b. *Global Education Digest,* UNESCO, Paris.

United Nations 2011. *Sustainable development in Latin America and the Caribbean 20 years on from the Earth Summit: progress, gaps and strategic guidelines,* ECLAC.

——— 2013. *Sustainable Development in Latin America and the Caribbean: Follow-up to the United Nations Development Agenda Beyond 2015 and to Rio+20,* ECLAC.

UNPD 2011. *World Population Prospects: The 2010 Revision,* UNPD, United Nations, Department of Economic and Social Affairs, New York.

——— 2013. *Trends in Total Migrant Stock: 2013 Revision,* United Nations Population Division (UNPD), United Nations, Department of Economic and Social Affairs, New York.

——— Various years. *World Urbanization Prospects,* UNPD, United Nations, Department of Economic and Social Affairs, New York.

von Cramon-Taubadel, S. and Gustavo, A. and de Haen, H. and Nivyevskyi, O. 2011. Investment in Developing Countries Food and Agriculture - Assessing Agricultural Capital Stocks and Their Impact on Productivity, in *Looking Ahead in World Food and Agriculture: Perspectives to 2050*, ed. by Conforti, P. FAO, Rome.

WHO and UNICEF 2012. *Progress on Drinking Water and Sanitation,* World Health Organization (WHO) and United Nations Children's Fund (UNICEF), New York.

World Bank 2013. *World Development Report 2013: Jobs*. Oxford University Press, New York.

——— Various years . *World Development Indicators - Various issues,* WB, Washington, D.C.

World Bank and IMF 2012. *Global Monitoring Report: Food Prices, Nutrition, and the Millennium Development Goals,* World Bank and International Monetary Fund (IMF), Washington, D.C.

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The FAO Statistical Yearbook for Latin America and the Caribbean is divided into four thematic parts:

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

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

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

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