



FAO Statistical Yearbook

2012

World food
and
agriculture



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Foreword

Achieving food security for all is at the heart of FAO's mission, by making sure people have regular access to enough high-quality food to lead active, healthy lives. Our mission is premised on the need to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and ensure that agriculture can be a sustainable platform for economic growth. Beyond its essential role in food security, sustainable agricultural development is now regarded as pivotal in strategies towards poverty alleviation. In addition, policy makers agree that agriculture will be key to effectively address challenging issues of our time, including climate change, water scarcity, environmental pollution and land degradation. Agriculture has a clear role in providing ecosystem services to protect the environment and preserve our planet's natural resource base. With the sector now intertwined with almost every topic in the development agenda, a major challenge is to capture and monitor the multiple roles of agriculture.

Providing reliable and timely information on the status of food and agricultural sectors in multiple contexts is an important part of the FAO mandate and in particular of the FAO Statistics Division. In response to the demands for a more comprehensive set of statistics and indicators that are amenable to an ever-widening audience, we have attempted to meet the challenge through radically overhauling the usual FAO Statistical Yearbook format. The revised publication will continue the long tradition of the FAO Statistical Yearbook series as the foremost collection and reference point of statistical data on food and agriculture, but the new publication marks a transition. In rising to the call for a broader and more in-depth examination of the many roles of agriculture, this edition leans towards a thematically-driven, statistical snapshot of the major trends and issues related to world food and agriculture. Divided into four parts and encompassing 34 dimensions of food and agriculture, the new FAO Statistical Yearbook employs over 350 indicators drawn from data sources within FAO, sister UN agencies, the World Bank and other international organizations.

The new Yearbook approach makes us all keenly aware of the need to improve the quality, quantity and scope of agricultural and development statistics. Concerted efforts are, however, being made by FAO and our partners to enhance country capacities in providing better and more statistical information. Though presenting an accessible statistical synthesis of the key issues affecting world food and agriculture, it is our desire that the book raises awareness about the multiple challenges confronting the sector, thereby strengthening FAO's resolve towards fighting hunger and improving the livelihoods of the rural poor.

A handwritten signature in black ink, appearing to read 'Pietro', followed by a long, sweeping horizontal stroke that ends in a small upward tick.

Pietro Gennari
Director, FAO Statistics Division

How to use this book

The 2011 edition of the FAO Statistical Yearbook represents a break away from FAO tradition. Through employing data from global statistical providers, including FAO, the publication presents a visual synthesis of the 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 strives to serve as a unique reference point on the state of world food and agriculture for policy-makers, donor agencies, researchers and analysts as well as the general public.

The book is subdivided into four thematic parts, where an attempt is made to exhaustively present the 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, inputs and the adequacy of infrastructure, and also examines 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 those that 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 in relation to the bio-based economy

Multiple page spreads are used to present each thematic issue. Each spread contains a visualization of the data by way of maps and charts and is accompanied by text that provides a background to the salient issues as well as an assessment of current trends.

Data are made available for virtually all countries in the world, excluding principalities and minor territories.

We follow the M49 convention of the United Nations Statistics Division in reporting “geographical regions for statistical use”. See (<http://unstats.un.org/unsd/methods/m49/m49regin.htm>). The most recent data are given - typically 2010 or 2009, but when country data have not been reported for the reference year, an asterisk (*) is placed on the year label to indicate “closest to” that year.

How to retrieve Yearbook data

The data used in this book are presented via charts and maps that form the basis of key indicators. A more detailed overview of the data is provided by way of tables located at the end of each thematic part. Documentation about the data, their methodology and sources can be found through the *MetaLink* key below each indicator. For the web version, the user can simply click on the MetaLink key, and will be directed to information about the data. Furthermore, a small icon allows the user to directly download the data presented in each indicator.

PART

1

The setting

Introduction

Well over half of the developing world's population – 3.1 billion people, or 45 percent of all humanity – live in rural areas. Of them, roughly 2.5 billion derive their livelihoods from agriculture. For many economies, especially those of developing countries, agriculture can be an engine of economic growth. Approximately two-thirds of the world's agricultural value added is generated in developing countries, and in many of them the agricultural sector contributes as much as 30 percent to the Gross Domestic Product (GDP) and is a source of employment for two-thirds of the labour force. According to the World Bank, growth in the agricultural sector can be up to 3.2 times more effective at reducing US\$1/day poverty than growth in other sectors. Importantly, agriculture can provide a haven of resilience against global economic and financial turmoil, often more effectively than other sectors.

A look back through history reveals that growth in agriculture has tended to be the antecedent of wider economic development. From the Industrial Revolution that began in England in the 18th century and spread to other now-developed countries, through to more recent examples of China or Viet Nam, agriculture has always been the precursor to the rise of industry and services. In many poor developing countries, primary activities such as agriculture still constitute the backbone of the economy. Inadequate infrastructure, incomplete markets and a large presence of subsistence producers are

frequent characteristics of these economies. Strategies to promote economic growth must be firmly anchored in agriculture. Increasing productivity in the sector is a necessary condition for resources to migrate towards non-agricultural activities, thus gradually diversifying the economy.

Yet, a profound and prolonged lack of investment in agriculture is evident in many countries. Notably, infrastructure is missing or weak in rural areas, agricultural productivity is stagnant and the lack of opportunities for income diversification combines with poor functioning markets to undermine economic growth.

These conditions, however, can be changed. There is now a growing recognition among governments and donor agencies that agriculture must be the mainstay of any development agenda and of policies towards economic growth. The reaffirmation of the sector's role in this context provides fresh impetus for fostering investment and raising productivity in agriculture.

Key Resources

The State of Food and Agriculture

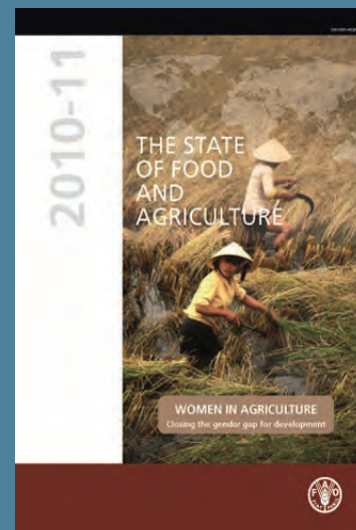
The State of Food and Agriculture, FAO's major annual flagship publication, aims at bringing to a wider audience balanced science-based assessments of important issues in the field of food and agriculture. Each edition of the report contains a comprehensive, yet easily accessible, overview of a selected 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.

2010: Livestock in the balance

2011: Women in Agriculture, Closing the gender gap for development

Publication cycle: Annual

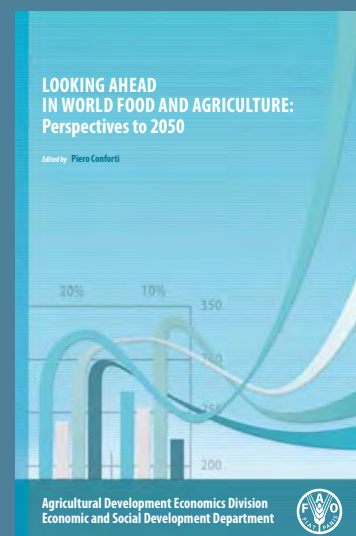
Webpage: www.fao.org/publications/sofa



Looking Ahead in World Food and Agriculture

How will the world feed itself in 2050? This volume, which is a compilation of papers authored by world-class experts, addresses this very question. Agricultural and food demand is expected to slow over the next decades, following slowing population growth and rising incomes. However, population will still grow considerably in the coming decades, and require world agricultural production to increase substantially by 2050. Other areas explored in the volume are natural resources – notably land and water – as well as capital, investment and technology.

Webpage: <http://www.fao.org/economic/esa/esag/en/>



People and demography

Even though growth rates have been slowing since the late 1970s, the **world's population** has nevertheless doubled since that time to 6.9 billion, and is projected to increase considerably over the next decades. In many developing countries, a combination of declining mortality rates, prolonged life expectancy, youthful age structures and high fertility warrant considerable population increases that are likely to continue until the end of the twenty-first century. Of concern is that where population growth is the highest, income levels are the lowest. For poor population groups, consumption tends to be heavily influenced by local production. This may lead to the emergence of "Malthusian Islands", particularly in parts of sub-Saharan Africa, where population growth is outstripping the current productive capacity of the land.

According to the most recent revision of the UN's World Population Prospects, countries with low **fertility** rates – that is, most developed countries and much of East Asia – currently account for around 40 percent of the world's population. In these countries, each woman does not have enough children to ensure that, on average, she will be replaced by a daughter who survives to the age of procreation. Another 40 percent is situated in intermediate-fertility countries, where each woman has, on average, between 1 and 1.5 female offspring. The remaining 18 percent – in much of sub-Saharan Africa, parts of the Near East and South Asia – is located in high-fertility countries where the average woman has more than 1.5 daughters. These countries provide the highest potential for future population growth.

The trajectory of the world's future population rests heavily on assumptions about fertility rates. If rates in high-fertility countries continue to grow unabated, an additional two billion people will need to be fed by the turn of the century. This underscores the importance of empowering women and couples through education and promoting family planning, especially in the poorest countries where population growth rates are currently the fastest. Indeed, though most people would like to and do have smaller families than they did in the past, many in fact have more children than they desire. According to the United Nations Population Fund, approximately 215 million women who would use **contraceptives** lack access to them. At the same time, there are contexts in which poverty can be a reason for high fertility, given the role of children in providing a labour force for the household and support for the elderly.

Worldwide, people can expect to live longer than ever before. In the past two decades alone, global **life expectancy** has risen approximately five years to nearly 69 years. In all countries, the wealthy live longer than the poor, and in most populations women usually outlive men. In 2011, people in those least-developed countries characterized by high fertility rates are expected to live on average 58 years, some 20 years less than their counterparts in developed countries. Nevertheless, this average marks a significant increase when compared to life expectancy in 1990, which stood at only 50 years.

Map 1:



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: [P1.DEM.UN.WPP.POP.TOT](#), p. 73 

- 6896 million people living in the world in 2010
- Virtually all global population growth centred in developing countries
- However, world population growth today is half of what it was in the 1960s

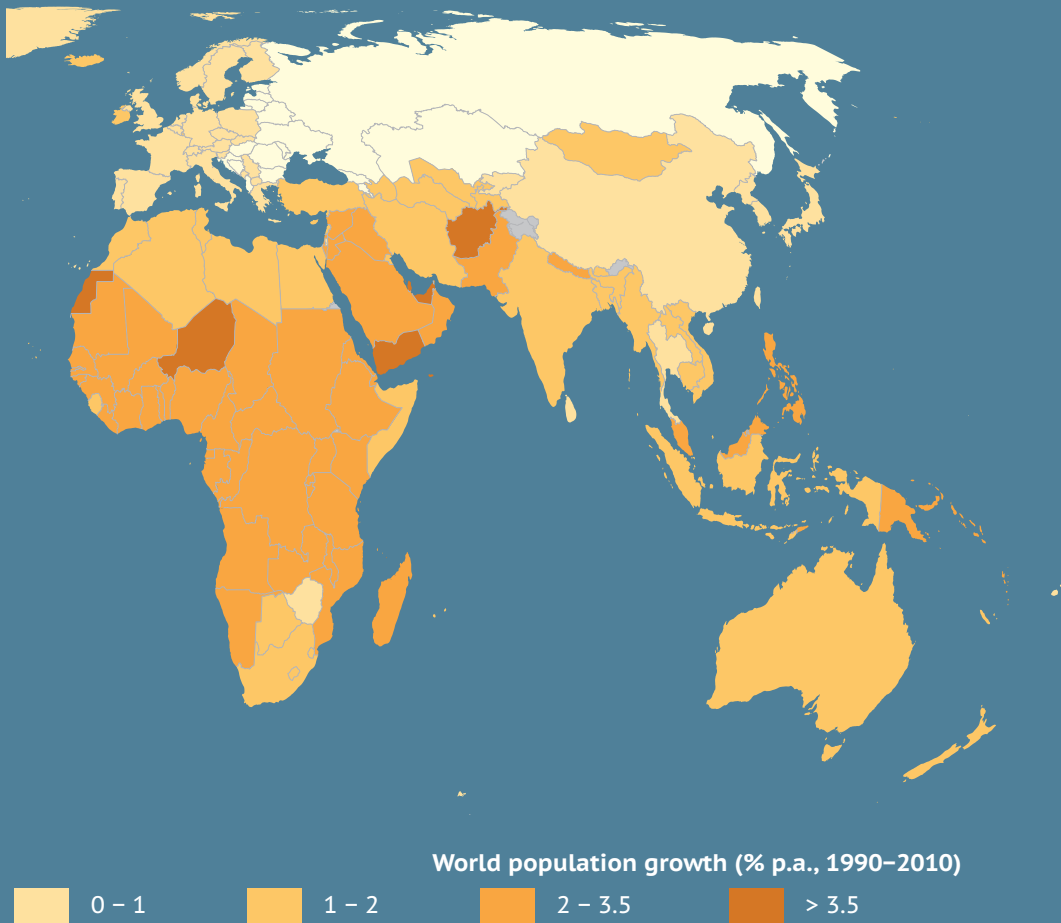
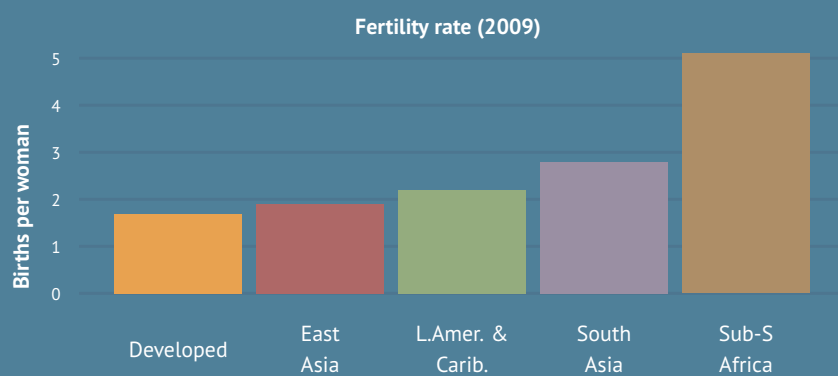


Chart 1: Very high fertility rates behind faster population growth in developing regions



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: [P1.DEM.UN.WPP.FER.TOT](#), p. 72 

Improved access to clean water, better nutrition, living and working conditions, and greater access to health services can account for the increase in life expectancy. These factors, in tandem with higher life expectancy, have led to the decline in **infant mortality** rates.

The world's population is **aging**. Today, roughly 27 percent is below the age of 15 and approximately 8 percent is 65 years or older. In the past two decades these statistics stood at 33 and 6 percent, respectively. This aging profile is being shaped by rising longevity twinned with low fertility rates in the more developed countries.

Unprecedented change has also occurred in where people reside. During 2008, the world's **urban** population turned, for the first time, larger than the rural population. But only part of this trend was caused by increased rural-urban migration. Other reasons include the transformation of rural settlements into urban areas and, most importantly, natural urban population growth. Essentially, much of the global population growth has taken place in less developed countries (LDCs), predominately in poor urban areas and slums. Urbanization rates in LDCs reached 4 percent per annum in the last decade. The three fundamental dimensions of food security: availability, access and utilization differ in urban and rural contexts and across urban socio-economic groups. A greater diversity of both local and imported food products is available in cities although, most of the food is not produced within city boundaries. Access to food in urban areas is dependent on cash exchange, with some exceptions, where urban food production contributes directly to household intake. Reliance on purchased food is a leading factor in household food insecurity of poor urban populations, who lack a fixed income.

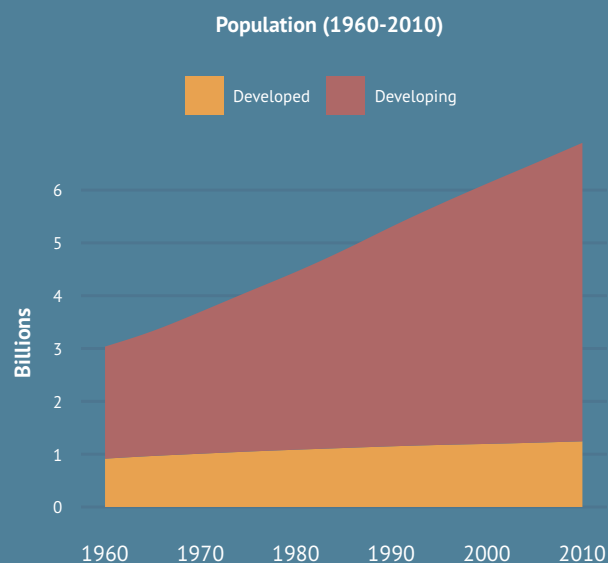
Allied to rising urbanization is an increase in **population densities**. At the world level, there are on average 50 people living in every square kilometre. At 68 persons per km², densities in developing countries are three times as high as those in developed countries. In south East Asia, for instance, population density stands at 132 per km².

Beside birth and death rates, **international migration** is the only other factor that directly accounts for a country's population growth. Immigration from developing to developed countries over the period 1990 to 2010 amounted to 45 million people. Presently, around 214 million people (over 3 percent of the world population) officially live outside their home country.

Further reading

- World Population Prospects: the 2010 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)

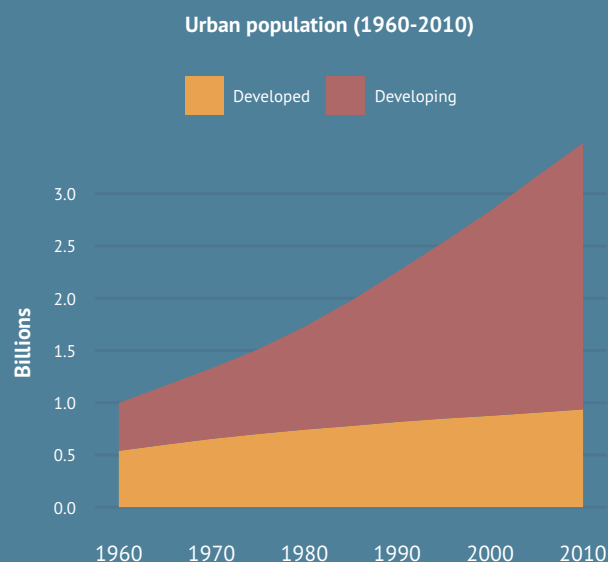
Chart 2: Virtually all population growth centred in developing countries



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: P1.DEM.UN.WPP.POP.TOT, p. 73

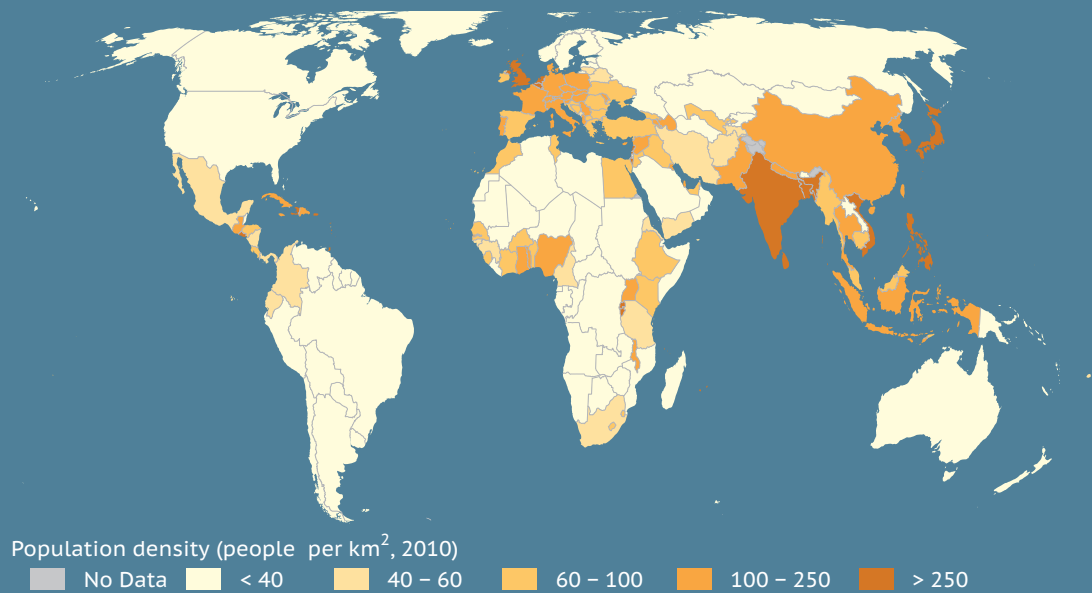
Chart 3: ... and in cities



Source: World Urbanization Prospects (UNESA)

Metalink: P1.DEM.UN.WUP.POP.URB, p. 73

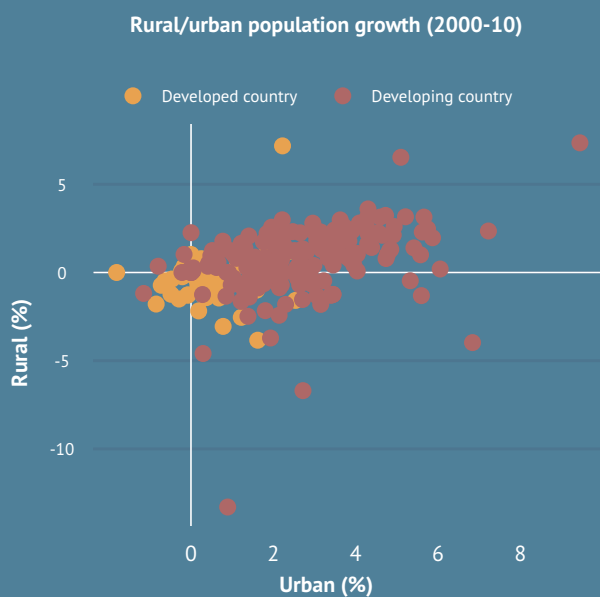
Map 2: Population density highest in Asia and Europe but rising in coastal Africa



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: P1.DEM.UN.WPP.POP.DEN, p. 72

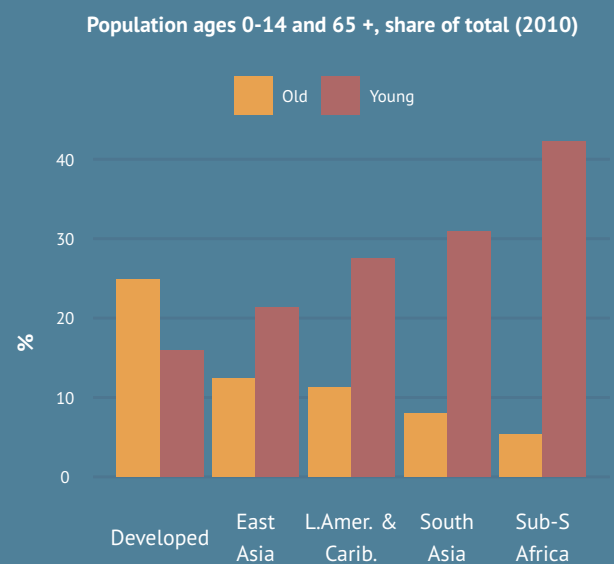
Chart 4: Rural to urban population shift more prevalent in developing countries



Source: World Urbanization Prospects (UNESA)

Metalink: P1.DEM.UN.WUP.POP.URB, p. 73

Chart 5: Populations in developing regions getting younger, but aging in developed regions



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: P1.DEM.UN.WPP.POP.AGE, p. 72

Women in agriculture

Women make significant contributions to the rural economy in all developing country regions. Roles differ across regions, yet they consistently have less access than men to the resources and opportunities they need to be more productive. Closing the gender gap in agricultural inputs alone could lift 100–150 million people out of hunger.

Women comprise, on average, 43 percent of the agricultural labour force in developing countries, ranging from 20 percent in Latin America to 50 percent in Eastern Asia and sub-Saharan Africa. Their contribution to agricultural work varies even more widely depending on the specific crop and activity. But a gender gap is found for many assets, inputs and services – land, livestock, labour, education, extension and financial services, and technology – and it imposes costs on the agriculture sector, the broader economy and society as well as on women themselves.

Closing the gender gap in agriculture would generate significant gains for the agriculture sector and for society. If women had the same access to productive resources as men, they could increase yields on their farms by 20–30 percent. This could raise total agricultural output in developing countries by 2.5–4 percent, which could in turn reduce the number of hungry people in the world by 12–17 percent. The potential gains would vary by region depending on how many women are currently engaged in agriculture, how much production or land they control, and how wide a gender gap they face.

No blueprint exists for closing the gender gap, but some basic principles are universal: governments, the international community and civil society should work together to eliminate discrimination under the law, to promote equal access to resources and opportunities, to ensure that agricultural policies and programmes are gender-aware, and to make women's voices heard as equal partners for sustainable development. Achieving gender equality and empowering women in agriculture is not only the right thing to do – it is also crucial for agricultural development and food security.

Further reading

- FAO The State of Food and Agriculture 2010-11: Women in Agriculture - closing the gender gap for development (www.fao.org/publications/en/)
- FAO Gender (www.fao.org/gender) en/)

Map 3:



Source: KILM (ILO)

Metalink: P1.RES.ILO.LAB.GEND, p. 77 

- Increasing women's access to land, livestock, education, financial services, extension, technology and rural employment would boost agricultural productivity
- Closing the gender gap in agricultural inputs alone could lift 100-150 million people out of hunger

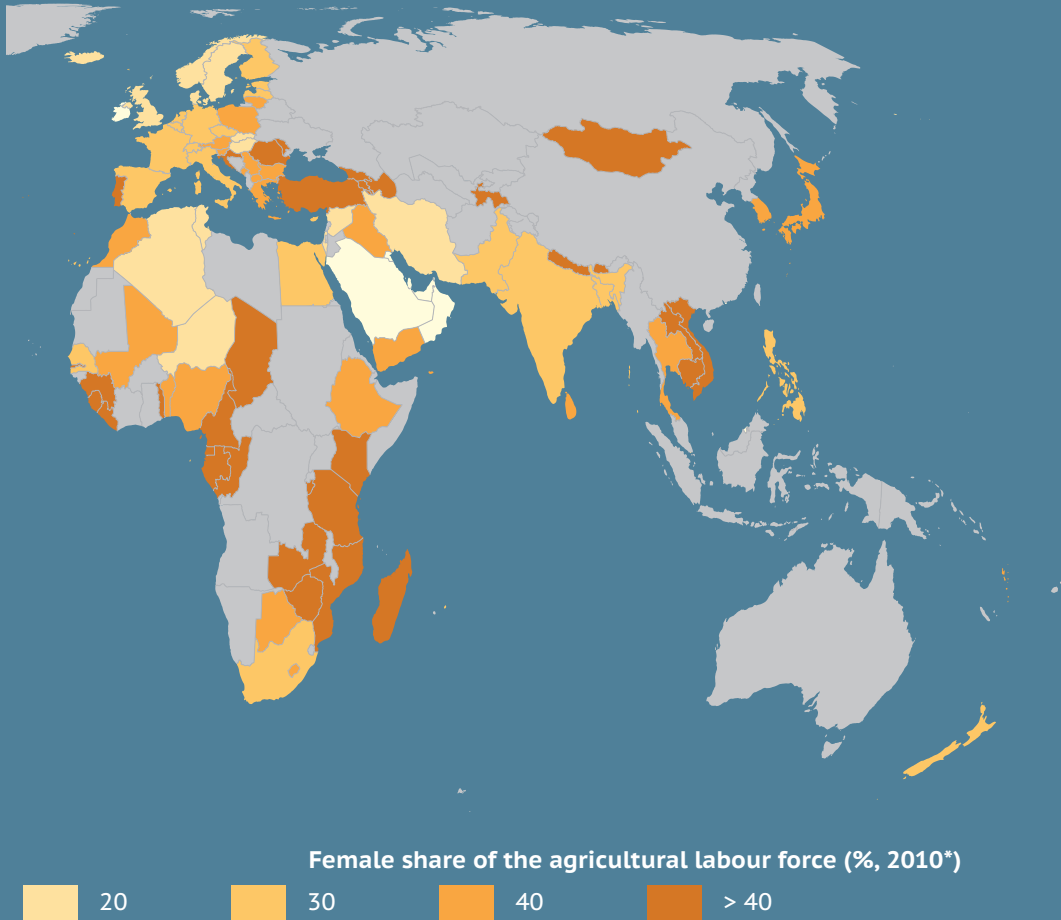
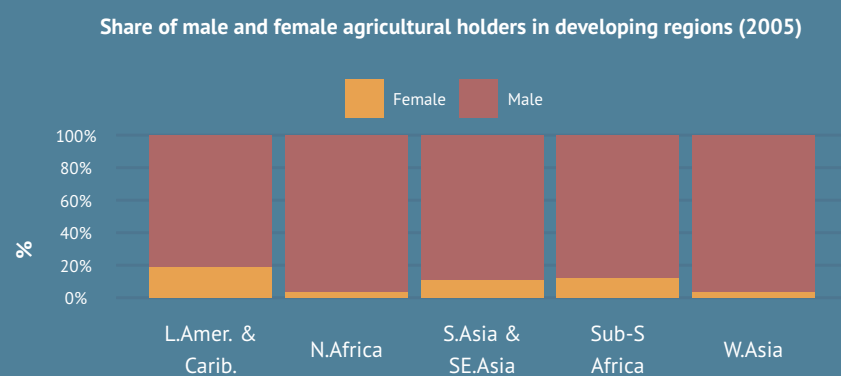


Chart 6: Stark gender disparities in land holdings are apparent in all regions



Source: FAO, Gender and Land Rights Database

Metalink: P1.RES.ILO.GEND.HLD, p. 77

Land and water resources

At present, more than 1.5 billion hectares of the globe's **land surface** (about 12 percent) is used for crop production (arable land and land under permanent crops). According to FAO, there is little scope for further expansion of agricultural land. Despite the presence of considerable amounts of land potentially suitable for agriculture, much of it is covered by forests, protected for environmental reasons, or employed for urban settlements.

Potentially accessible agricultural land is very unevenly distributed between regions and countries. Some 90 percent is situated in Latin America and sub-Saharan Africa, and half is concentrated in just seven countries (Brazil, Democratic Republic of the Congo, Angola, the Sudan, Argentina, Colombia and the Plurinational State of Bolivia). At the other extreme, there is virtually no spare land available for agricultural expansion in South Asia, the Near East and North Africa.

So far, land and water management systems have been able to meet the rapidly rising demands placed on them. This was made possible through gains in yields thanks to increased use of inputs, technology and irrigation.

World agricultural production has grown between 2.5 and 3 times over the last 50 years while the cultivated area (permanent cropland and arable land) has grown by only 12 percent. More than 40 percent of the increase in food production came from irrigated areas, which have doubled in surface. These outcomes underscore the steady trend toward precision agriculture and commercialization of all types of food and industrial crops.

In the same period, **global cultivated land per person** gradually declined from 0.44 hectares to less than 0.25 hectares - a clear measure of successful agricultural intensification. But, the distribution of land suitable for cropping is skewed against those countries which have most need to raise production. In low-income countries, cultivated land area per person is less than half of that in high-income countries, and its suitability for agriculture is generally lower. Availability of land for cultivation does not necessarily equate to equitable access in reality, as women, indigenous people and ethnic minorities often lack access to land for farming enterprise.

The concentration of high-input irrigated agriculture on prime land has relieved pressure on land expansion to some extent. However, many irrigation systems are performing well below their potential, and there is considerable scope for improving the productivity and the efficiency of land and water use in agriculture. While much of the prime agricultural land suitable for irrigation has been developed, the global expansion of **irrigated area** has virtually stalled to 0.6 percent per year after growing twice as much in the 1990s. Growth remains fractional, even when the stagnation of irrigation-intensive rice cultivation in Asia is taken into account.

Map 4:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P1.RES.FAO.ESS.LDAQ.ARL](https://www.fao.org/ess/land/land_use/land_use_en.asp), p. 75



- 0.2 hectares of arable land available per person in 2009, less than half the amount 50 years ago
- Arable land availability per person lowest in Near East and many parts of Asia, but higher availability in developed regions and in South America
- In many low income countries, cropland per person is far more scarce, therefore bridging yield gaps will be needed to sustain production with high population growth

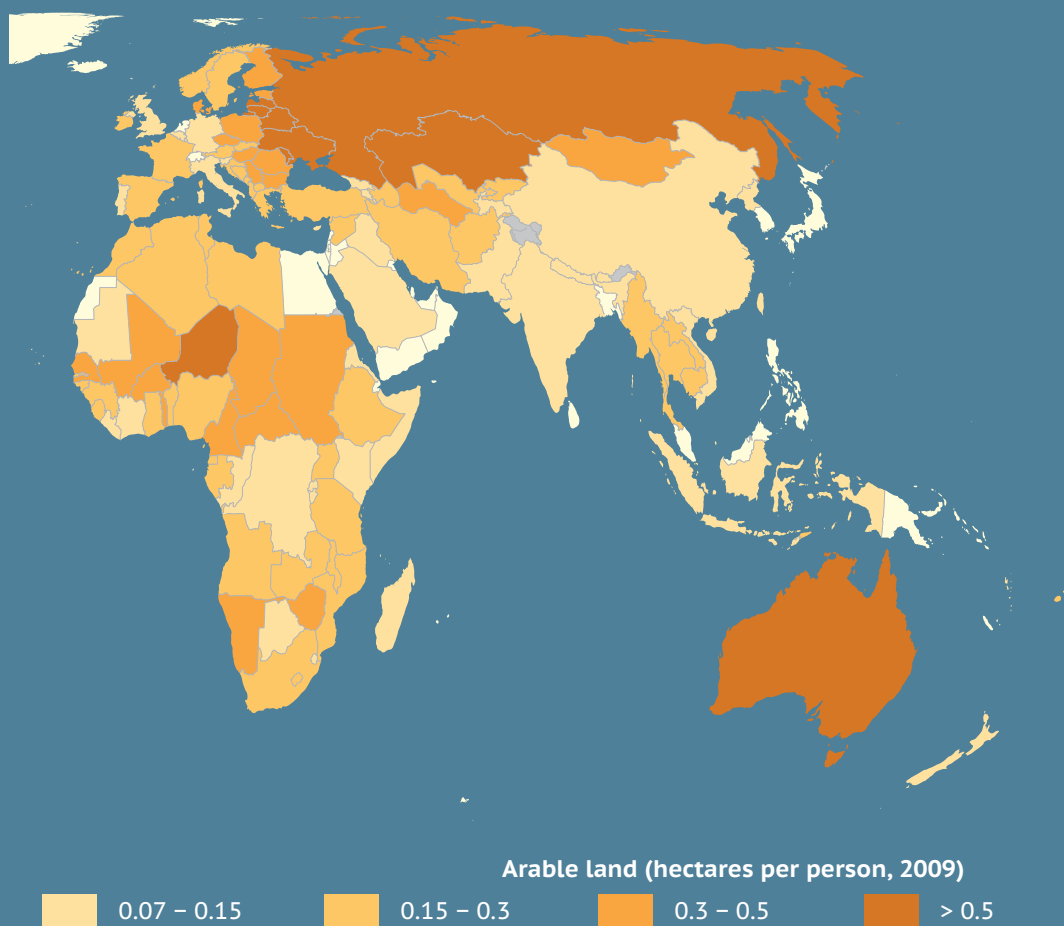
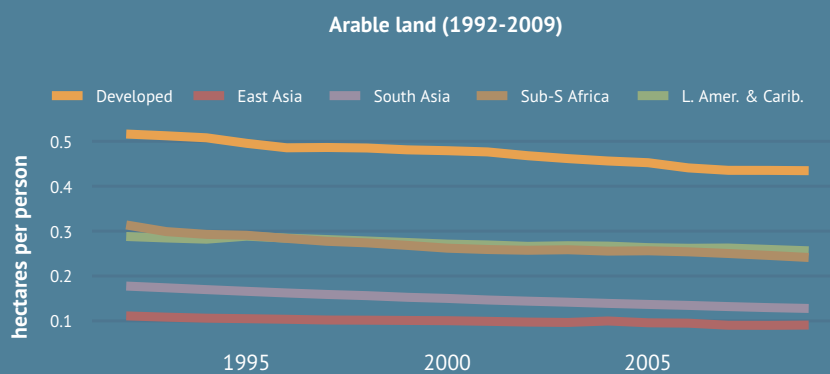


Chart 7: Arable land per person declining in all regions, and at very low levels in developing regions



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P1.RES.FAO.ESS.LDAQ.ARL](#), p. 75



Although **rainfed agriculture** is the world's predominant agricultural production system, increasing climate variability is bringing greater uncertainty in production levels. Current productivity in rainfed systems is, on average, reaching little more than half of its potential. In the poorest countries, only one-fifth of productivity potential is obtainable under conditions where the required agricultural inputs are available and appropriate management is applied.

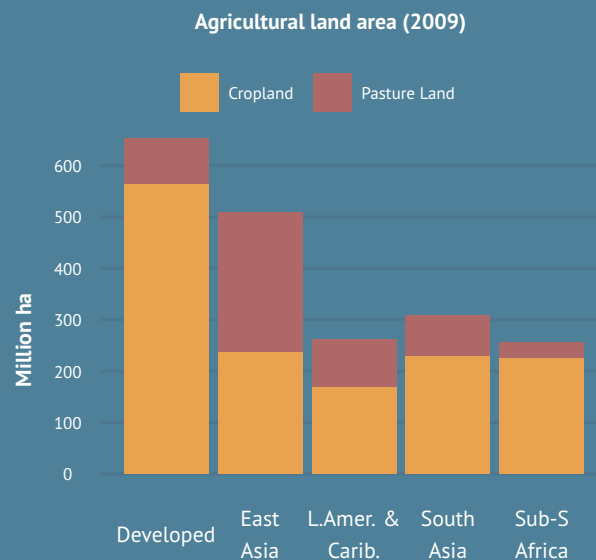
Water availability is a growing constraint in areas where a high proportion of renewable water resources is already used, or where transboundary water resource management cannot be developed because agreements on cooperative use are not in place. Overall, increasing water scarcity constrains irrigated production, particularly in the most highly stressed countries and areas. Because many important food production zones are dependent on groundwater, declining aquifer levels and abstraction of non-renewable groundwater present a growing risk to food production systems.

In the coming decades, climate change may bring further risks and unpredictability to harvests, whether from warming and related aridity, shifts in rainfall patterns, or the frequency and duration of extreme weather events. Water availability and its distribution may also be profoundly affected. While warming may extend the frontier of agriculture in higher-latitude areas (both northern and southern hemispheres), it is anticipated that key agricultural systems will have to cope with new temperature, humidity and water stress. This makes the need to increase the efficiency of land and water use even more urgent.

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/)
- Bruinsma (2011)
- FAO Natural Resources and Environment Department (<http://www.fao.org/nr/>)

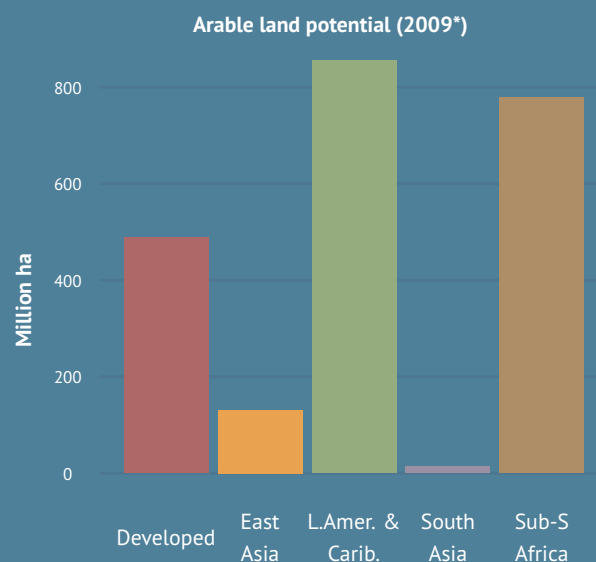
Chart 8: Agricultural land availability low in food-insecure regions



Source: FAO, Statistics Division (FAOSTAT)

Metalink: P1.RES.FAO.ESS.LDAQ.ARPCL, p. 75 

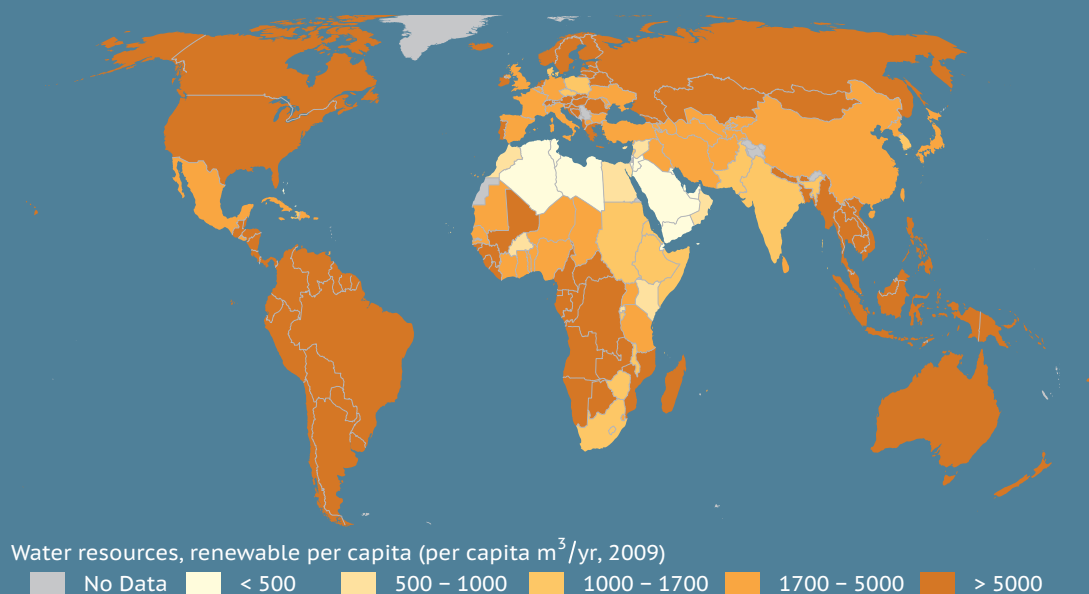
Chart 9: But large potential for arable land expansion in Latin America and in sub-Saharan Africa



Source: FAO, Statistics Division

Metalink: P1.RES.FAO.LAN.ALP, p. 76

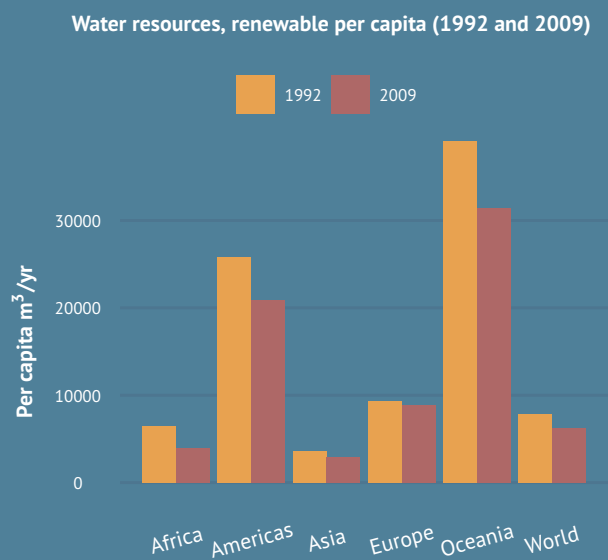
Map 5: Per capita renewable water resources lowest in North Africa and the Near East



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: P1.RES.FAO.NRL.WTRpc, p. 76

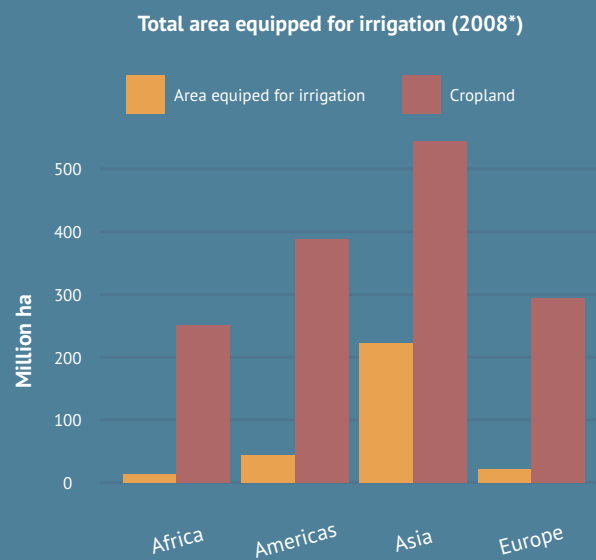
Chart 10: Greater abundance of water resources on a per capita basis in Oceania and the Americas



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: P1.RES.FAO.NRL.WTRpc, p. 76

Chart 11: Africa lags behind other regions in the share of land equipped for irrigation



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: P1.RES.FAO.NRL.TAEI, p. 76

Labour

In developing regions, especially those least developed and those experiencing rapidly rising populations, employment growth is driven mostly by demographic changes. The majority of workers of these regions do not enter into formal wage employment, but instead are engaged in self-employment or unpaid family work, such as in agriculture, and especially subsistence farming. Consequently, economic downturns tend to have only a limited impact on overall employment growth in these economies, in contrast to industrialized economies where employment growth is closely linked to the business cycle. Considering that the large share of the working poor are engaged in **agriculture**, developments in that sector have a major impact on welfare throughout much of the world.

Until 2000, agriculture was the mainstay of employment around the world. Since then, the services sector has assumed this mantle and the gap between the two has widened. Although employment growth in agriculture has slowed, the number of workers in this sector reached over one billion in 2009.

In sub-Saharan Africa, growth in agricultural employment accounted for half of all employment growth between 1999 and 2009. In South Asia, nearly 33 per cent of all employment growth since 1999 was in agriculture. By contrast, agricultural employment is falling in the developed economies, East Asia and Latin America and the Caribbean regions. At the global level, **women** are more active in the agricultural sector than men – some 38 per cent versus 33 per cent.

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

Poverty is the principal driver of the high rate of child labour in agriculture. Around 60 percent of all child labourers – 129 million girls and boys – work in agriculture. More than two-thirds of them are unpaid family members. The agricultural sector has the highest incidence of both unpaid child labour and early entry into the workforce, which often occurs between the ages of five and seven.

Map 6:



Source: KILM (ILO)

Metalink: [P1.RES.WBK.WDI.LAB.EAT](#), p. 78 

- Over 1 billion people are employed in world agriculture, representing 1 in 3 of all workers
- In sub-Saharan Africa over 60 percent of the entire workforce are involved in agriculture

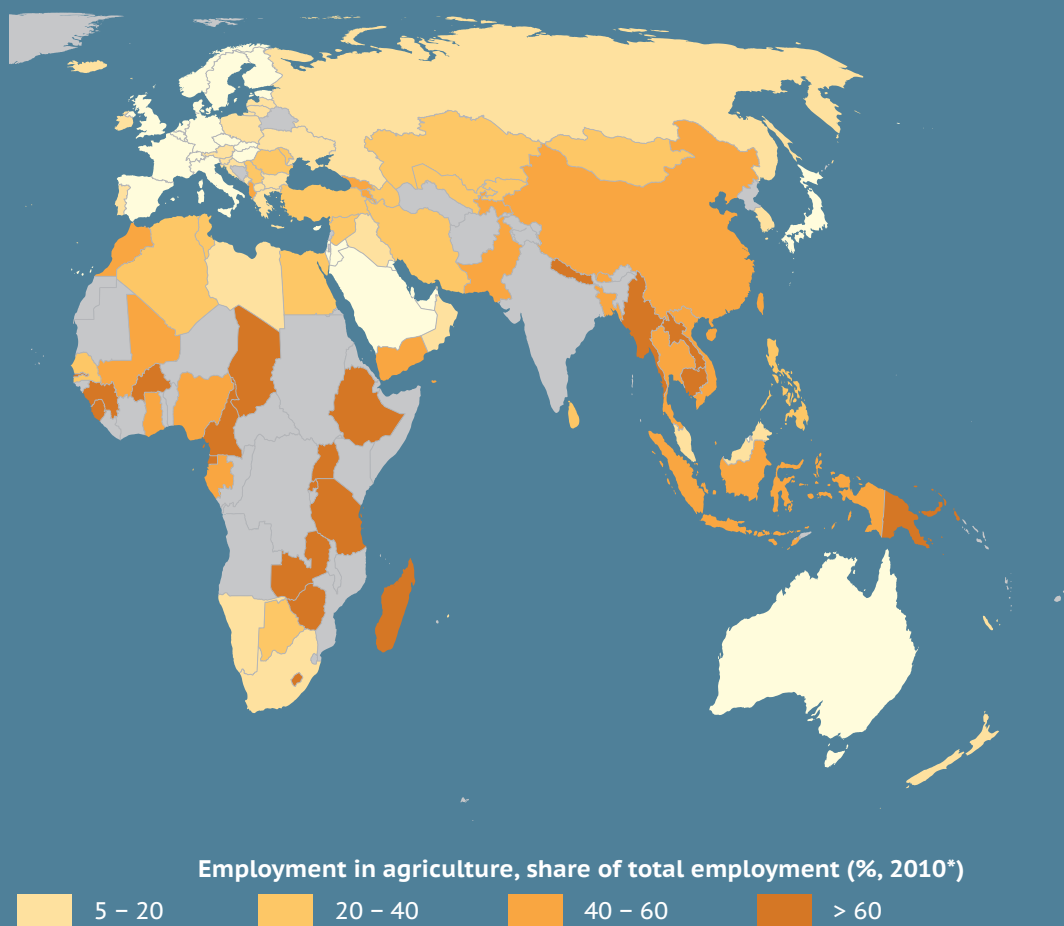
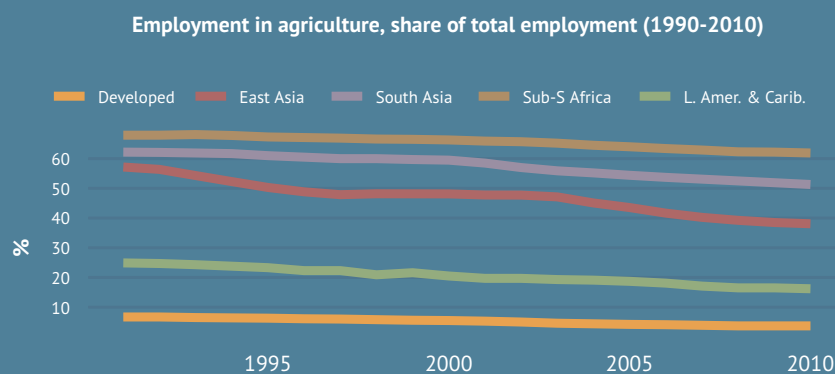


Chart 12: Employment in agriculture falling worldwide, but the sector still accounts for more than half of total employment in sub-Saharan Africa and South Asia



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.EATx, p. 78

High rates of child labour are also caused by lack of access to education, poor quality of education, limited supplies of affordable agricultural technology and adult labour, hazardous practices, and the dominance of traditional attitudes towards children's participation in agricultural activities. However, in the context of family farming not all participation of children in productive activities is considered child labour. For instance, age-appropriate tasks that do not interfere with a child's compulsory schooling and that are not hazardous can be important contributions to the household food security and can provide children with agricultural and other skills for their future.

In the overall labour market, world **unemployment** in 2010 stood at 205 million (a rate of 6.2 percent), which was virtually unchanged from the previous year, but over 15 percent higher than the pre-recession level of 2007. Well over half of the increase in global unemployment between 2007 and 2010 arose in the developed economies, even though this group comprises only one-seventh of the world labour force.

The **employment-to-population** ratio, which indicates the employment-generating capacity of an economy, globally stood at 61 per cent in 2010, around a percentage point lower than at the onset of global economic turmoil. Put simply, this means that economies around the world are not generating sufficient employment opportunities to absorb additions to the working-age population.

Further reading

- Global Employment Trends 2011 (www.ilo.org/empelm/what/WCMS_114243)
- Key Indicators of the Labour Market (KILM) (www.ilo.org/kilm)
- FAO Gender, Equity and Rural Employment Division (www.fao.org/economic/esw/)
- Food, Agriculture & Decent Work (www.fao-ilo.org)

Chart 13: Wide variation in the depth of women's participation in agriculture, but their role more prominent in developing countries

Women in agriculture, % of female employment (2010*)



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.GENDAG, p. 79

Chart 14: The need for paid employment is much higher in developing countries and among women

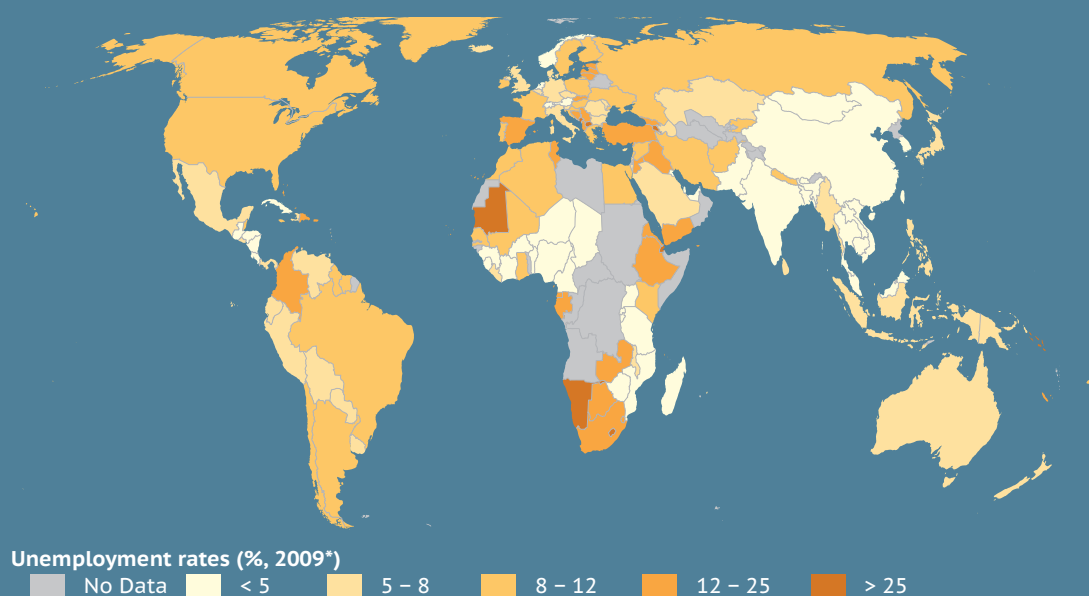
Gender employment to gender population ratio (2010*)



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.EPRF, p. 78 

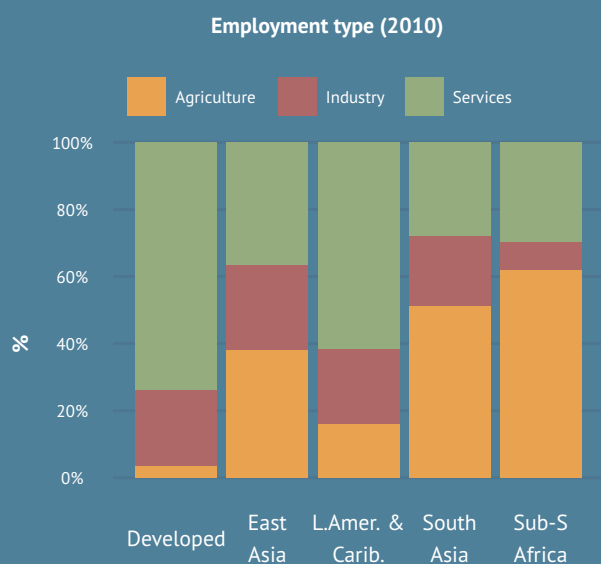
Map 7: High rates of unemployment afflict many regions, except Asia



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.UNFT, p. 79 

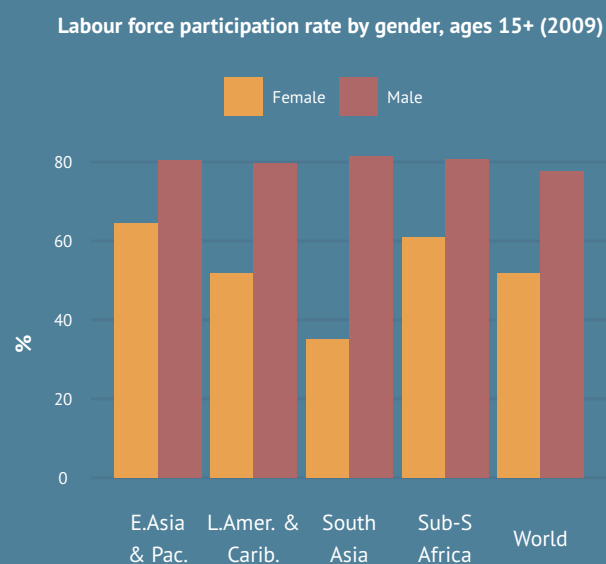
Chart 15: Agriculture forms the bedrock of employment in the poorest regions



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.EATx, p. 78

Chart 16: Considerably less women participate in income generating activities than men



Source: KILM (ILO)

Metalink: P1.RES.WBK.WDI.LAB.PTRF, p. 79 

Capital and investment

Investment drives growth and development. Additional net investment in capital goods (**capital formation**) such as expenditure on new machinery, infrastructure and technology enables an economy to produce more, and more efficiently in the future. Investment is vital to promoting long-run economic growth by improving productivity and productive capacity.

Given its strong impact on welfare, investment is particularly important in agriculture: countries that performed best in terms of reducing poverty and hunger are also those that achieved higher net investment rates per agricultural worker. However, there has been a global slowdown in the rate of capital formation in primary agriculture. While the rate grew annually at 1.1 percent in the period 1975–1990, the rate of capital formation was only 0.5 percent during 1991–2007. This reduction was recorded in both developed and developing countries.

As a consequence, in sub-Saharan Africa and South Asia – that is, regions where many countries experience the highest prevalence and greatest depth of hunger – the growth of the population active in agriculture has outstripped growth of agricultural capital stock.

Government expenditure on agriculture is positively and highly correlated with capital formation, confirming the decisive role of such expenditure in creating an enabling environment for infrastructure and sustainable access to natural resources. It also has a significant positive impact on productivity: research has shown that increasing public spending on agriculture by 10 percent leads to a 0.34 percent increase in a country's agricultural total factor productivity.

Poorer developing countries have less capacity to fill the investment gap. The share of public spending on agriculture has fallen to an average of approximately 7 percent in developing countries and even less in Africa. Agricultural **Official Development Assistance (ODA)** decreased by some 58 percent in real terms between 1980 and 2005, even though total ODA increased significantly – by 112 percent – over the same period. This means that the share of ODA going to the agricultural sector fell from 17 percent in 1980 to between 5 and 6 percent in 2009, with the same downward trend observed in national budgets.

In the absence of national funding channels, financing for the rural agenda has been bolstered by increased donor funding. Such assistance represents a large part of the agricultural budget in most rural-based economies. For 24 sub-Saharan countries, ODA averages 28 percent of total agricultural spending, and for Mozambique, Niger, and Rwanda, ODA averages more than 80 percent.

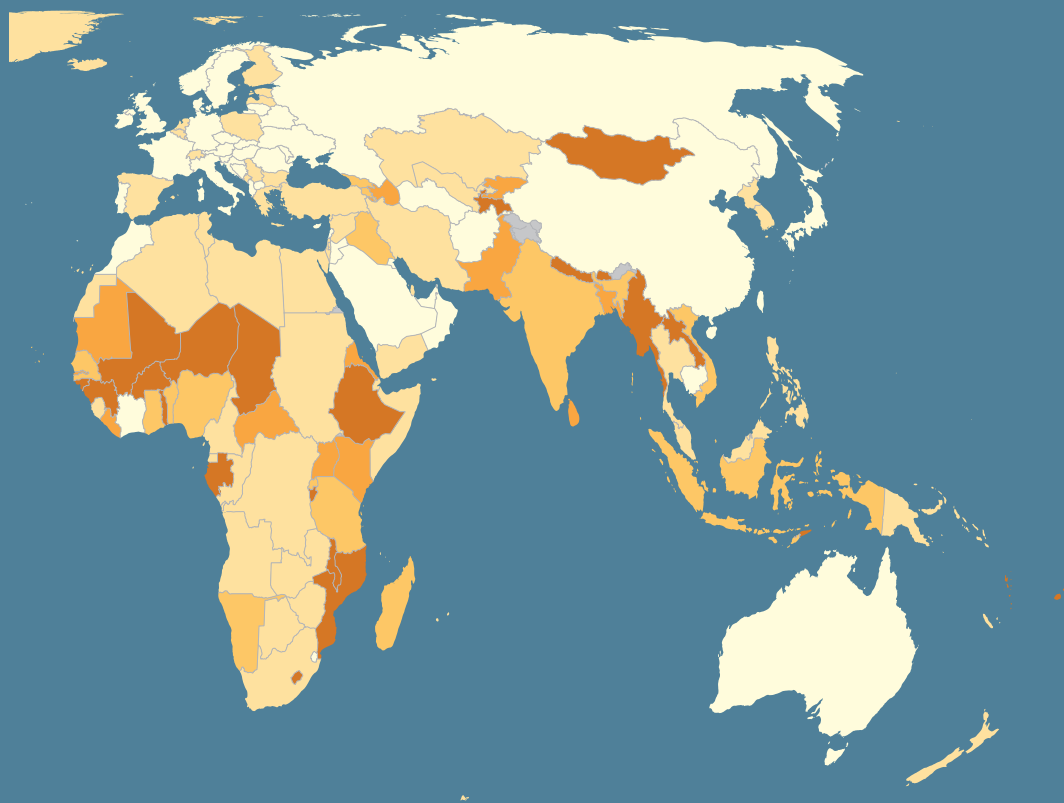
Map 8:



Source: FAO & World Bank

Metalink: [P1.RES.FAO.ESS.CAP.STK](#), p. 75 

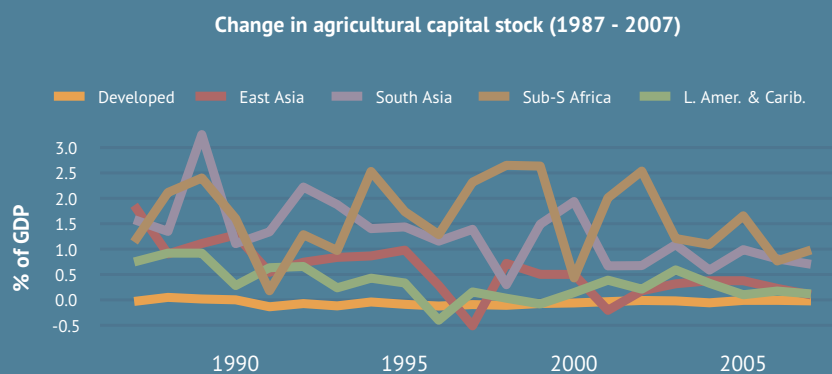
- Around USD 100 billion dollars of investment was put into agriculture globally in 2007
- But this is a fraction of the 5 trillion dollars added to world GDP in that year
- Growth in investment also lags behind population growth in many developing countries



Annual change in agricultural capital stock (% of GDP, 2006 – 2007)



Chart 17: Investment in agriculture as a share of GDP extremely low



Source: FAO & World Bank

Metalink: [P1.RES.FAO.ESS.CAP.STK](#), p. 75



Investments in **agricultural research and development** (R&D) have shown to have very high rates of return, and thus can play an important role in alleviating hunger and poverty. While global private funding is commonplace in high-income countries, it is limited in most developing countries owing to a lack of financing opportunities and incentives for private research, and to uncertain returns.

Even though the benefits of public research initiatives such as the Consultative Group on International Agricultural Research (CGIAR) and affiliated organizations (which have contributed enormously to the global pool of available agricultural technology and knowledge) have been recognized, the question of how to increase and sustain the financing of such bodies is not straightforward. Governments are often hesitant to make substantial contributions towards entities whose benefits will be spread well beyond the scope of their constituents or borders.

Commercial bank lending to agriculture in developing countries is also low; it is less than 10 percent, for example, in sub-Saharan Africa. While the growth in private investment funds targeting African agriculture is an interesting recent development, these current investments remain minor.

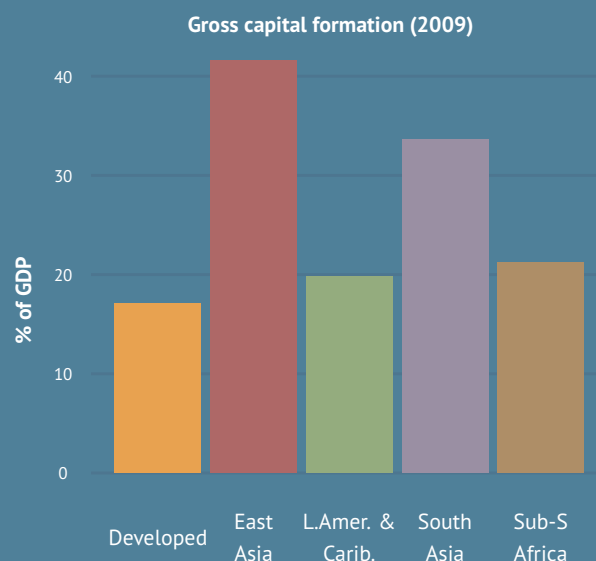
Given the limitations of alternative sources of investment finance, **Foreign Direct Investment** (FDI) in developing country agriculture could make a significant contribution to bridging the investment gap. FDI is also found to positively impact productivity growth, but only when governance is sound. Given the limitations of alternative sources of investment finance, many developing countries are making strenuous efforts to attract and facilitate foreign investment into their agriculture sectors. For them, FDI is seen as a potentially important contributor to filling the investment gap and providing developmental benefits, for example through technology transfer, employment creation and infrastructure development.

Whether these potential developmental benefits are actually likely to be realized is a key concern, as FDI has also the potential to harm host countries. Care must be taken in the selection and formulation of business models that are capable of meeting the needs of both host countries and investors. In addition, appropriate policy and regulatory frameworks need to be in place to ensure that development benefits are maximized and the risks minimized. FAO promotes responsible investment in agriculture, including building international consensus on Principles for Responsible Agricultural Investment (RAI Principles).

Further reading

- FAO Investment Centre (www.fao.org/tc/tci)
- 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/)
- von Cramon-Taubadel et al. (2011)
- Schmidhuber et al. (2011)

Chart 18: Investment relative to GDP highest in Asia among developing regions

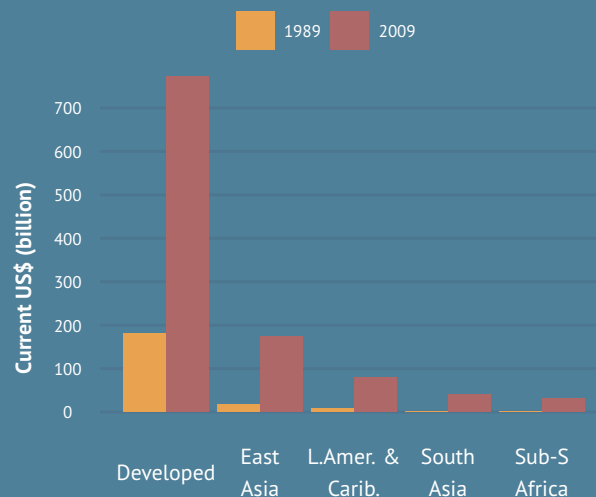


Source: World Bank

Metalink: [P1.RES.WBK.WDI.GCF.GDP](#), p. 77

Chart 19: Developed economies attract the lion's share of foreign investment

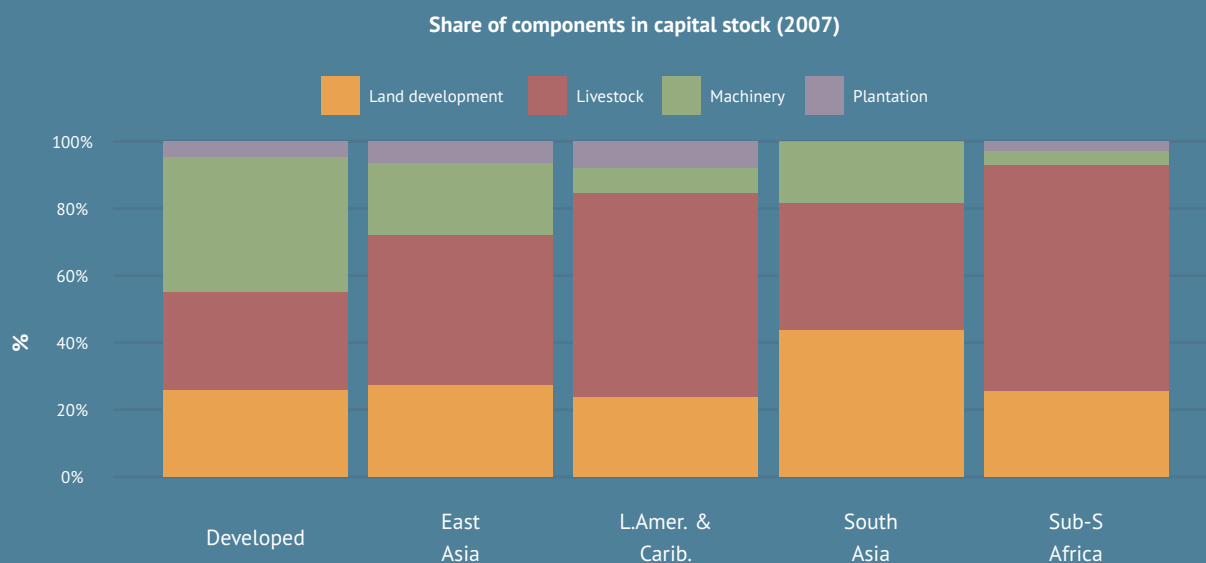
Foreign direct investment, Balance of Payment net inflows (2009)



Source: UNCTAD

Metalink: [P1.RES.WBK.WDI.FDI.INF](#), p. 77

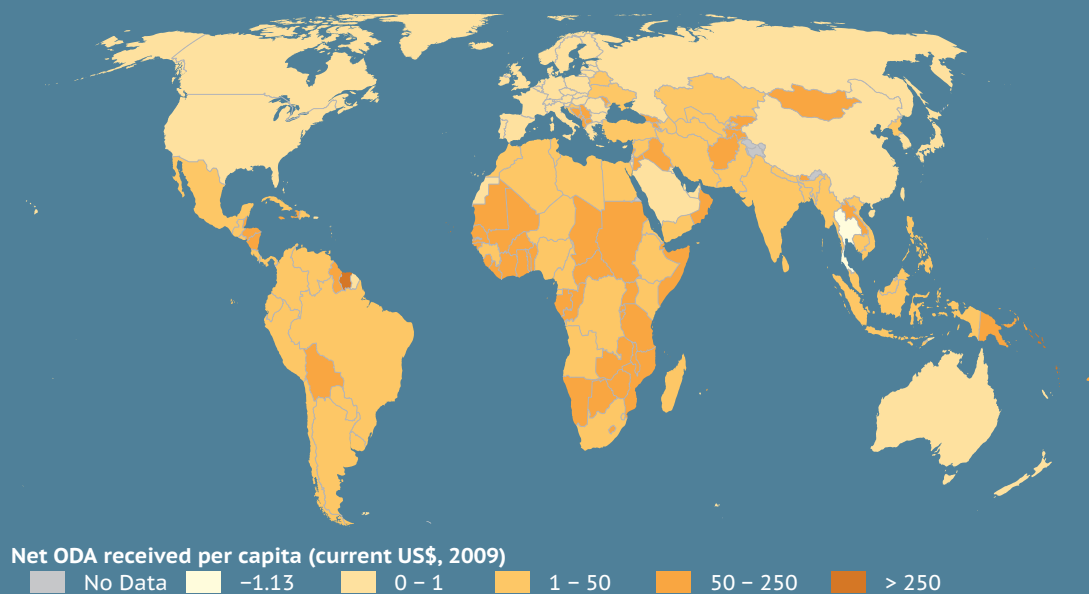
Chart 20: Investments in mechanization low in food-insecure regions



Source: FAO, Statistics Division

Metalink: P1.RES.FAO.ESS.CAP.STK, p. 75

Map 9: Sub-Saharan Africa beneficiary to highest rates of official development assistance



Source: UNCTAD

Metalink: P1.RES.WBK.WDI.ODA.PCP, p. 80

Inputs

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

Today, Asian farmers are the major users of fertilizer. Indeed, one-third of the increase in cereal production worldwide and half of the increase in India's grain production during the 1970s and 1980s has been attributed to increased fertilizer consumption. The increased use of fertilizer is becoming even more crucial in light of other factors, such as the impact of more intensive cultivation practices and shorter fallow periods on soil fertility.

Pesticides can increase agricultural productivity, but when handled improperly, they are toxic to humans and other species. Usage can be reduced through Integrated Pest Management (IPM), which uses information on pest populations to estimate losses and adjust pesticide doses accordingly. IPM has brought about tremendous benefits to farm profitability, the environment, and human health. Adoption has often been limited because of its complexity, but results can be extraordinarily successful. For instance, the successful control of the cassava mealybug in East Africa, which hitherto caused significant losses, was achieved by introducing a parasitoid wasp that is the mealybug's natural enemy.

Plant breeding also plays an important role in bolstering productivity by adapting cultivated varieties to local conditions and making them more resilient to biotic (e.g. insects, diseases, viruses) and abiotic stresses (e.g. droughts, floods). Studies estimate that the global yield loss due to biotic stresses averages over 23 percent of the estimated attainable yield across major cereals.

Further reading

- Schmidhuber & Bruinsma (2011)
- FAO Agriculture Department (www.fao.org/ag/)

Map 10:



Source: FAO, Statistics Division

Metalink: [P1.RES.WBK.WDI.FER.HA](https://www.fao.org/ag/def/comm/infocentre/infocentre.do), p. 77

- 119 kg of fertilizer applied on average to every hectare of cropland in the world
- Fertilizer use lowest in sub-Saharan Africa but exploiting land potential holds the key to higher production in the region

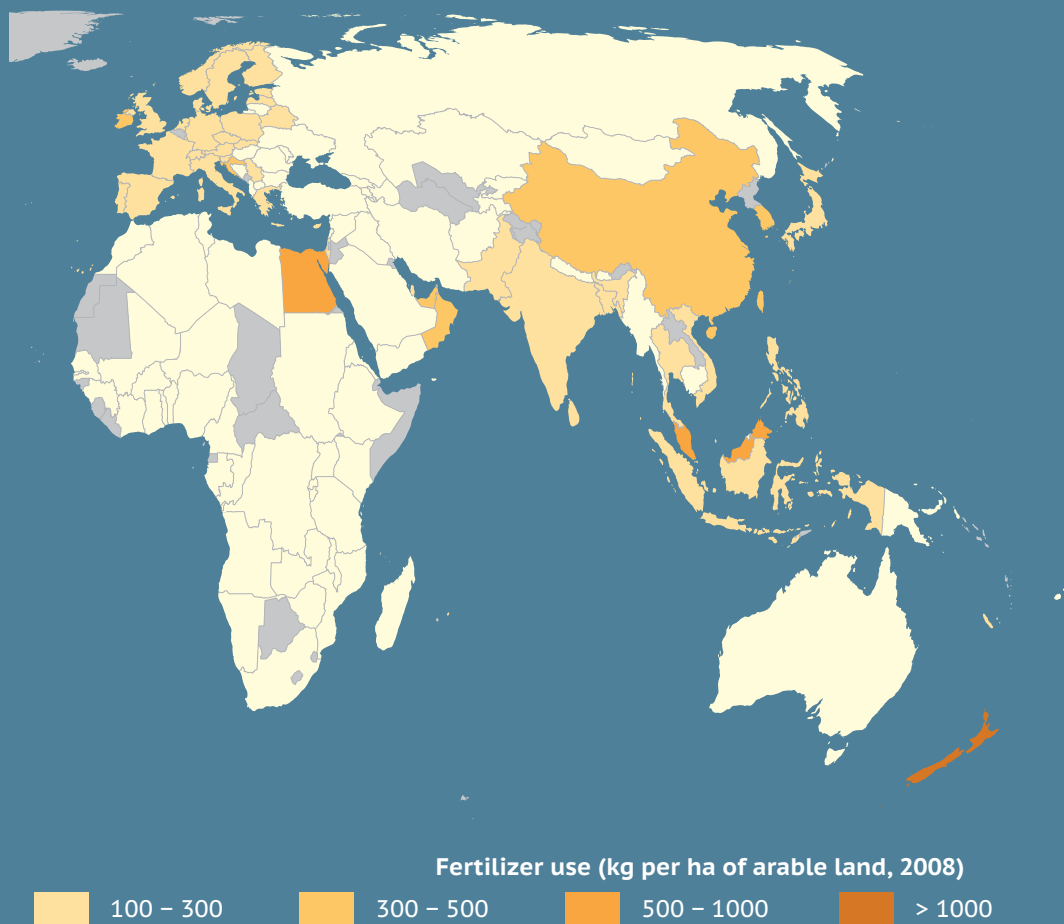
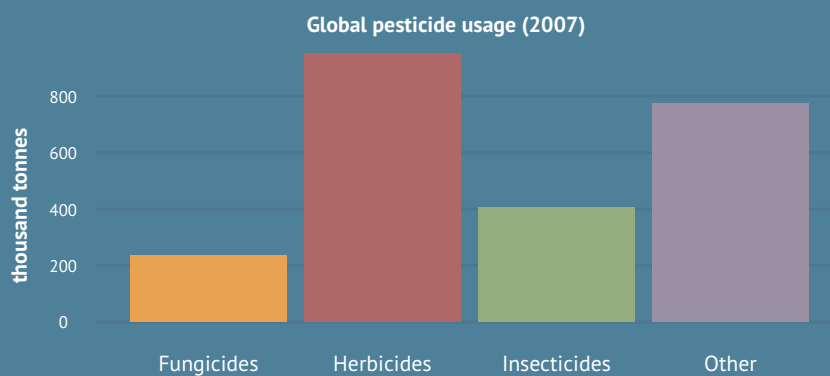


Chart 21: Herbicides - to control unwanted plants - are the most widely used form of pesticide in the world



Source: United States EPA

Metalink: P1.RES.FAO.ESS.PES.TYPE, p. 80

Infrastructure

One of the key factors holding back agricultural development is the absence of adequate rural infrastructure. Improvements to basic rural infrastructure, particularly roads, electrification and storage are a prerequisite for agricultural sectors to thrive.

Considerable synergies can enhance infrastructure. Investments in cold storage, for instance, are only viable with reliable and sufficient rural electrification. Likewise, investments in milling facilities must be planned with adequate dry storage, electrification and feeder roads. Roads, storage and processing facilities together foster the creation of value chains that increase efficiency and minimize losses.

Rural roads and transportation link farmers to markets and reduce transactions costs. By lowering transportation costs to urban areas, farmers will earn higher returns for their produce and consumers benefit through potentially lower prices. Shorter transportation times also help in preserving product quality and in reducing losses. At the same time, better transport infrastructure reduces prices for inputs, such as seeds and fertilizer, and allows farmers to step up production intensity and use their resources more fully and efficiently.

High transaction costs matter enormously in many developing countries. For instance, while it costs only USD 40 to ship a tonne of fertilizer 9 000 km from the United States of America to coastal Mombasa (Kenya), it costs another USD 120 to take it from there to Kampala, a distance of 1 000 km. High shipping costs have the same effect as a high import tariff. High transaction costs make inputs expensive for farmers, and is part of the reason for the very low rates of input usage and ultimately the very low yields in sub-Saharan Africa. On the output side, high transaction costs work like an export tax, squeezing profit margins for farmers and lowering their competitiveness relative to overseas farmers.

In developing countries, there has been little investment in rural infrastructure that leads to improvements in roads, electricity and post-harvest technologies. Those who have invested, however, have reaped considerable rewards. This holds for several countries in East Asia, where China, for instance, increased expenditures on roads by almost fourfold at the beginning of the last decade, with the result that by 2006, 62 percent of villages were connected to their towns by paved roads.

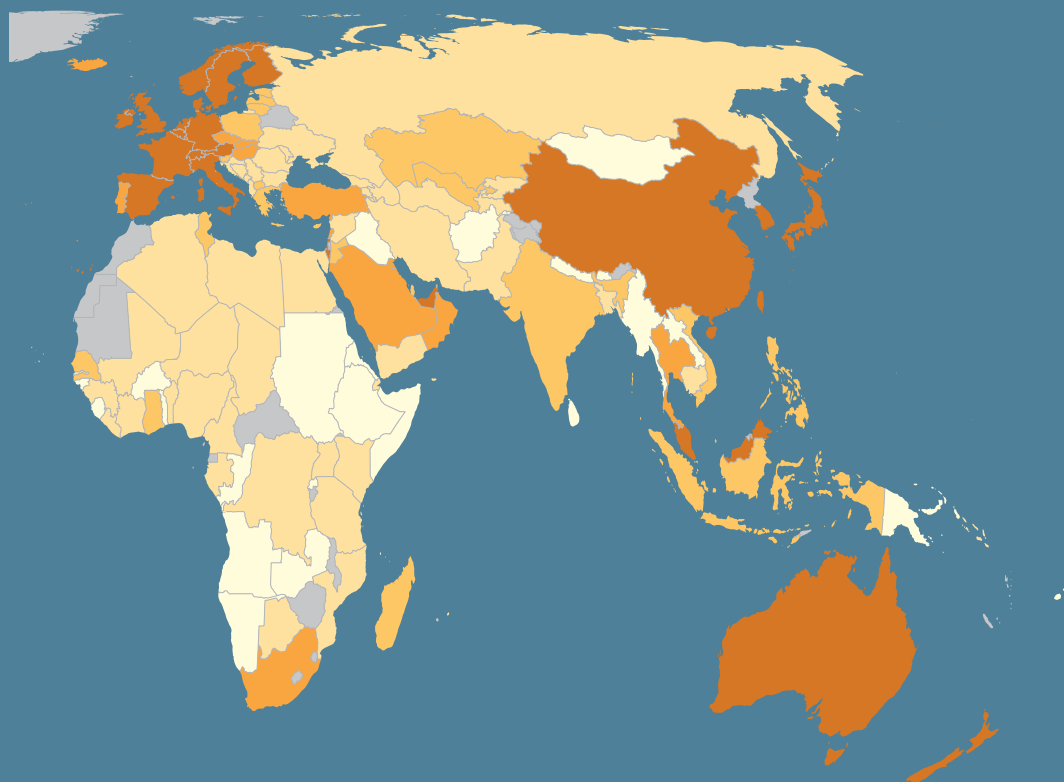
Map 11:



Source: World Bank

Metalink: [P1.RES.WBK.WDI.INF.IX](#), p. 77 

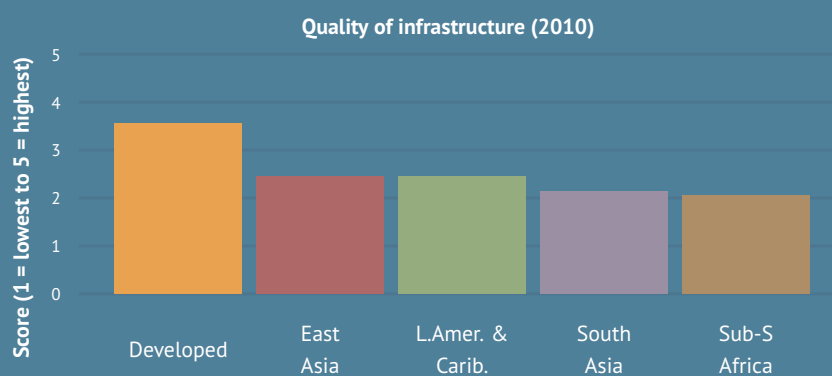
- Poor infrastructure hampers economic development
- Roads and electrification are of special importance
- Much of Africa lags behind other regions in terms of quality of infrastructure



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



Chart 22: Among developing regions quality of infrastructure highest in East Asia and in Latin America



Source: World Bank

Metalink: [P1.RES.WBK.WDI.INF.IX](#), p. 77



Not only rural roads but also **rural electricity** grids are unavailable and unreliable in many poor developing countries. For example, only 5 percent of Africa's rural population has access to electricity, while in South Asia electricity consumption per person is the lowest of all regions.

In developing countries, post-harvest losses alone account for an estimated 25-40 percent of total agricultural production. Losses can even be higher when bumper harvests overwhelm limited storage capacities.

Reducing losses ultimately means reducing pressure to raise output, and leads to less input usage and reduced pressure on scarce natural resources. Better storage also buffers against production shortfalls and thus helps reduce price swings. And finally, when marketing is subject to delay, adequate storage improves the quality of farm produce and allows farmers to fetch a higher price.

Although improved **export capacity** in delivering surpluses to deficit countries has been a positive development, it is particularly important to improve productivity and resilience of production systems in countries with limited **import capacity** and poor physical market integration.

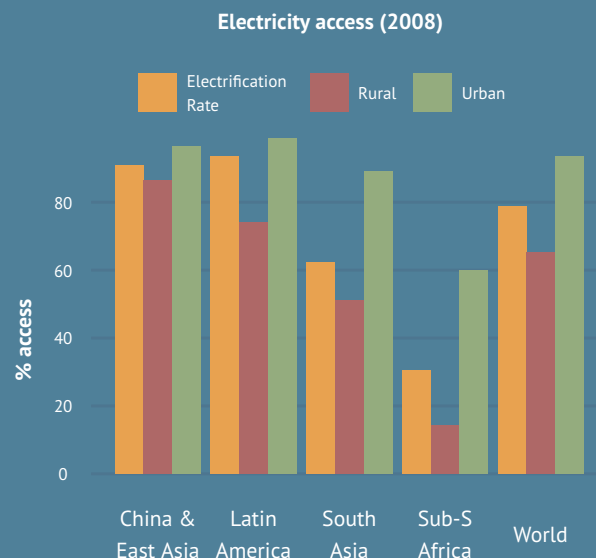
In addition to investment in physical infrastructure, efforts are needed to design and build new rural institutions, enhance rural markets for inputs, outputs and capital, equip small-scale farmers with appropriate technologies and facilitate non-agricultural enterprises in rural areas.

The returns to society from rural investments are high, but because of the public good nature of most of the investments needed, funding is likely required from the public sector, including governments of poor countries themselves, regional development banks and international development institutions.

Further reading

- Schmidhuber & Bruinsma (2011)
- FAO Rural Infrastructure and Agro-industries Division (www.fao.org/ag/ags/rural-infrastructure/en/)

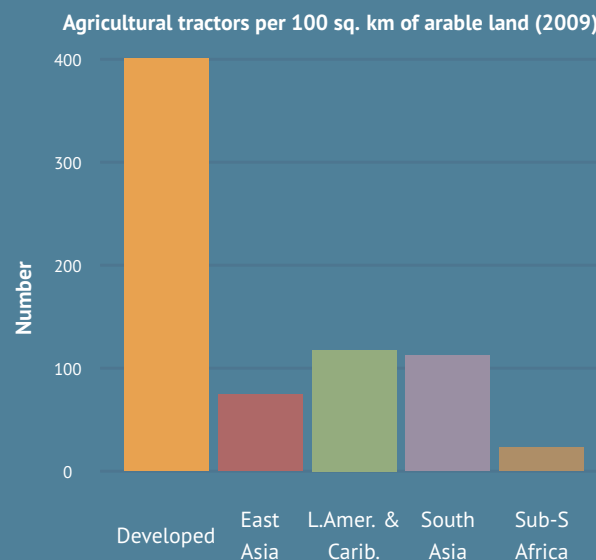
Chart 23: Access to electricity considerably lagging behind in poorer regions



Source: WEO

Metalink: P1.RES.IEA.WEO.ELEC.AC, p. 76

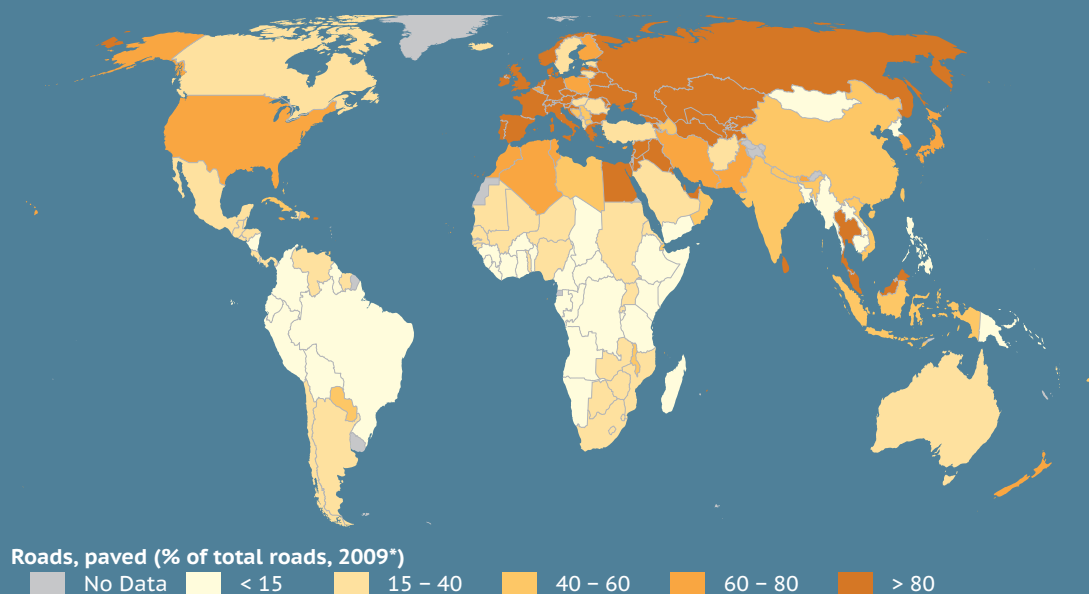
Chart 24: Large agricultural labour force and small holdings negate the need for mechanized agriculture in poorer regions



Source: FAO, Statistics Division

Metalink: P1.RES.WBK.WDI.TRA.SKMr, p. 80

Map 12: A lack of paved roads reduces supply chain efficiency



Source: World Bank

Metalink: P1.RES.WBK.WDI.RD.PV, p. 80 

Chart 25: More than twice the number of days needed to trade in sub-Saharan Africa than in developed countries



Source: World Bank

Metalink: P1.RES.WBK.WDI.EXP.DAY, p. 77 

Macroeconomy

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

Around four years have elapsed since the onset of the fastest and deepest slowdown in global economic activity since the Great Depression of the 1930s. The seeds of turmoil were sown when the seemingly containable sub-prime mortgage-linked banking crisis in the United States of America escalated into a full-scale global economic crisis. Sharp contractions in output, employment, investment and trade prompted governments and central banks around the world to respond swiftly with an unprecedented array of monetary and fiscal stimulus measures.

Such depth of intervention was required that **budget deficits** and **government debt levels** in the economies of many developed countries (particularly in the Euro area), which were already high before the crisis, are now regarded as unsustainable. With rising sovereign risks, the price of ensuring against sovereign debt default has increased alarmingly, and these economies are facing pressures from financial markets to quickly enact far-reaching fiscal austerity measures. As a result, these economies face the prospect of prolonged downgraded growth, while deterioration in market confidence in the Euro could impair funding conditions for banks and corporations and thus thwart capital flows to developing economies. Moreover, the scale of budget deficits in many important donor countries may negatively impact future aid flows.

After expanding by just over 5 percent in 2010, **global GDP growth** in real terms is expected to slow to around 4 percent in 2011. With real growth in developed economies foreseen to rise by 1.6 percent in that year, global prospects are underpinned by an expected 6 percent rise in the economies of developing countries. The recovery is mostly complete in all developing regions, with the pace of growth increasingly dictated by rapidly improving global trade, robust domestic demand and increasingly binding capacity constraints.

Map 13:



Source: World Bank

Metalink: [P1.MAC.WBK.WDI.AGV.GDP](#), p. 74 

- Agriculture merely contributes 3 percent to global GDP
- This is one third of the contribution a few decades ago
- However, more than 25 percent of GDP is derived from agriculture in many least developed countries

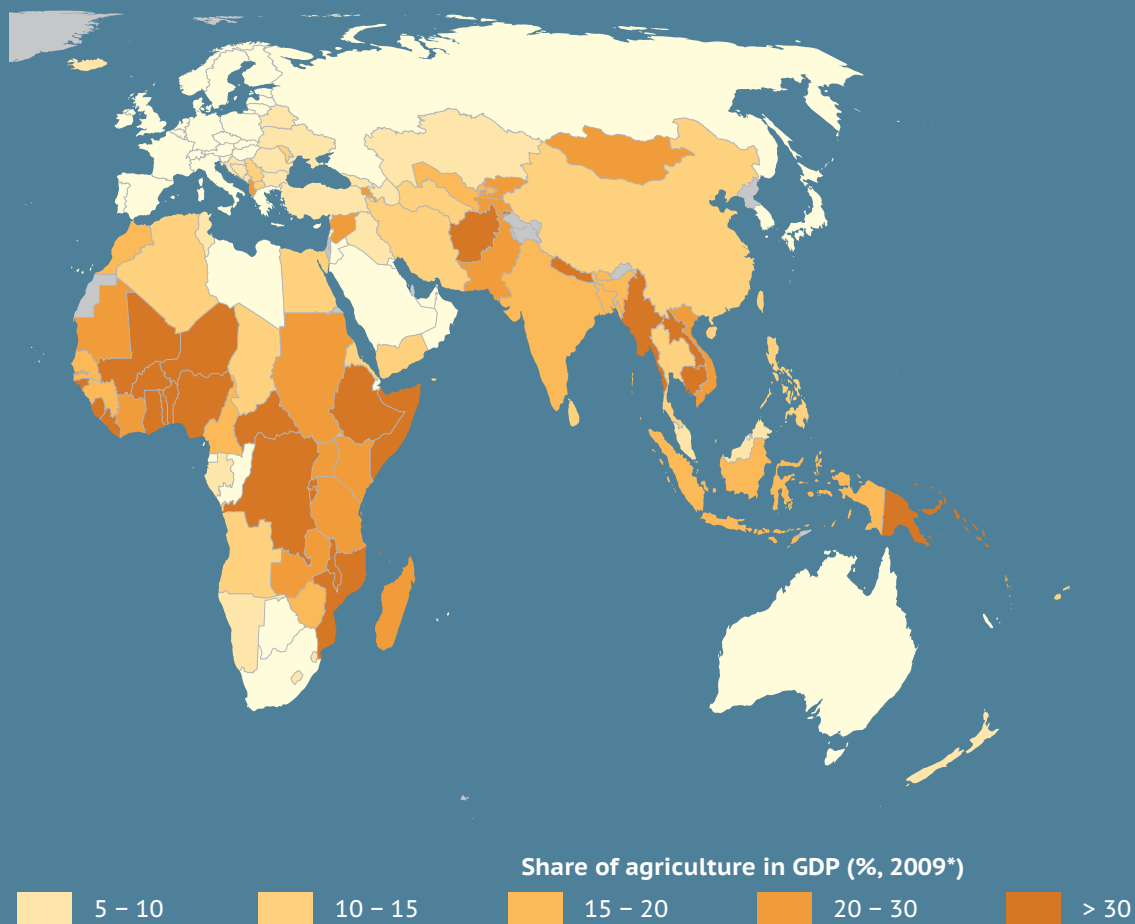
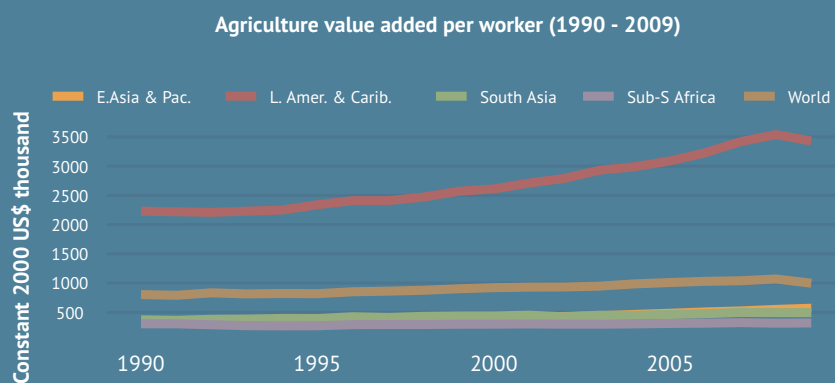


Chart 26: Farmers in Latin America generate more agriculture value added than in other developing regions



Source: World Bank

Metalink: P1.MAC.WBK.WDI.AGV.PWK, p. 74

The agriculture sector, buoyed by very high commodity prices, has demonstrated astonishing resilience during the global economic turmoil. In 2009, the most recent year for which data are available, **agricultural value added** at the world level rose by 4 percent, which can be contrasted to a 5 percent fall in global sector-wide GDP. In developing countries, the increase in agricultural GDP over this period was far more pronounced at 8 percent.

The economic recovery in developing countries has also been facilitated by a large influx of capital flows from developed economies. Growth prospects have diverged in the two regions, as higher relative returns can be found in developing countries, especially in emerging economies. At the same time, many developed economies have experienced downward pressure on their **exchange rates** vis-à-vis developing countries, particularly the United States Dollar, thus reinforcing the trend of capital flight.

Rising commodity prices, especially for food and fuel, combined with the rapid closing of output gaps and strong capital inflows have contributed to an acceleration of **inflation** in many developing countries. Although the extent of increase and its underlying factors differ across countries, headline inflation approached 7 percent on average in 2011, representing a year-on-year increase of round 1 percentage point. By contrast in developed countries, inflation rose to almost 3 percent in 2011, allaying the fears of deflation that had begun to surface during the peak of the crisis. However, monetary authorities in many developing countries are responding to inflation pressures and the narrowing of output gaps by tightening monetary policy through increasing **interest rates**.

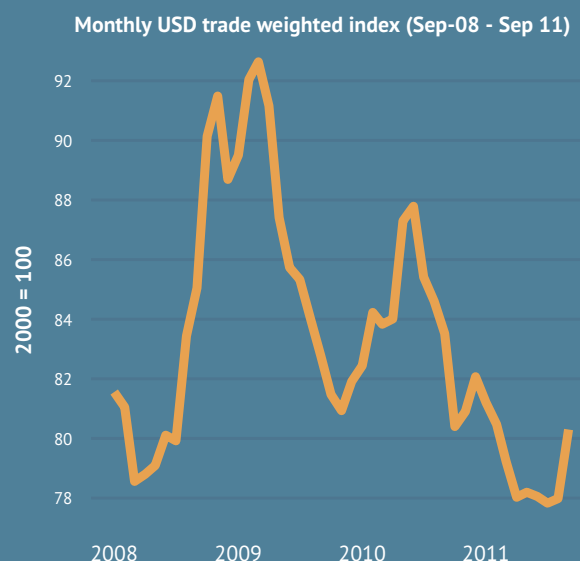
After strongly rebounding in 2010, **world merchandise trade** grew at a more modest pace in 2011. International purchases by developing countries are expected to account for over half of the increase in the volume of world imports, with developed countries as the main beneficiaries of an expanding global marketplace. Exporters in developing countries have also recorded an overall strong performance, as exemplified by Asia's ability to meet regional demand.

Depending on trade profile and exposure, commodity price upswings have differential **terms-of-trade** impacts on economies. Sustained rises in food and fuel prices have profoundly changed the terms-of-trade of many developing countries. Wide gains have been registered among oil exporters – often exceeding 8 percent of GDP – and losses of resource- and food-insecure oil-importing countries as much as 6 percent of GDP.

Further reading

- World Bank: Global Economic Prospects (www.worldbank.org/prospects/)
- International Monetary Fund: World Economic Outlook (www.imf.org/external/pubs/ft/weo/)

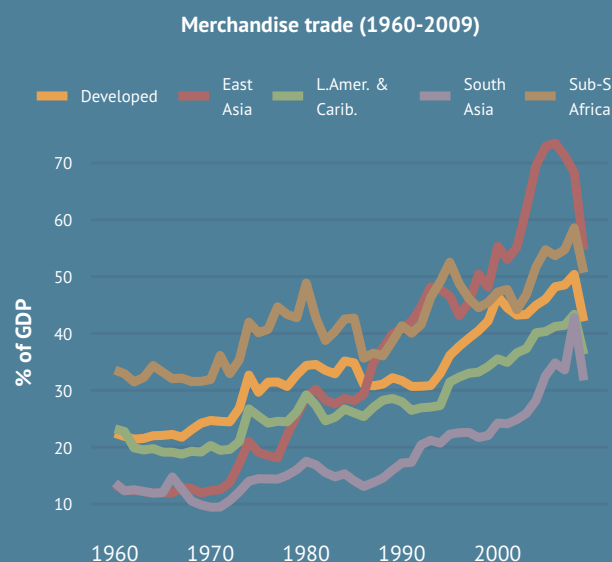
Chart 27: US Dollar exchange rate volatility has brought uncertainty to international commodity markets



Source: US Federal Reserve

Metalink: P1.MAC.USA.FR.EXR.MAJ, p. 74

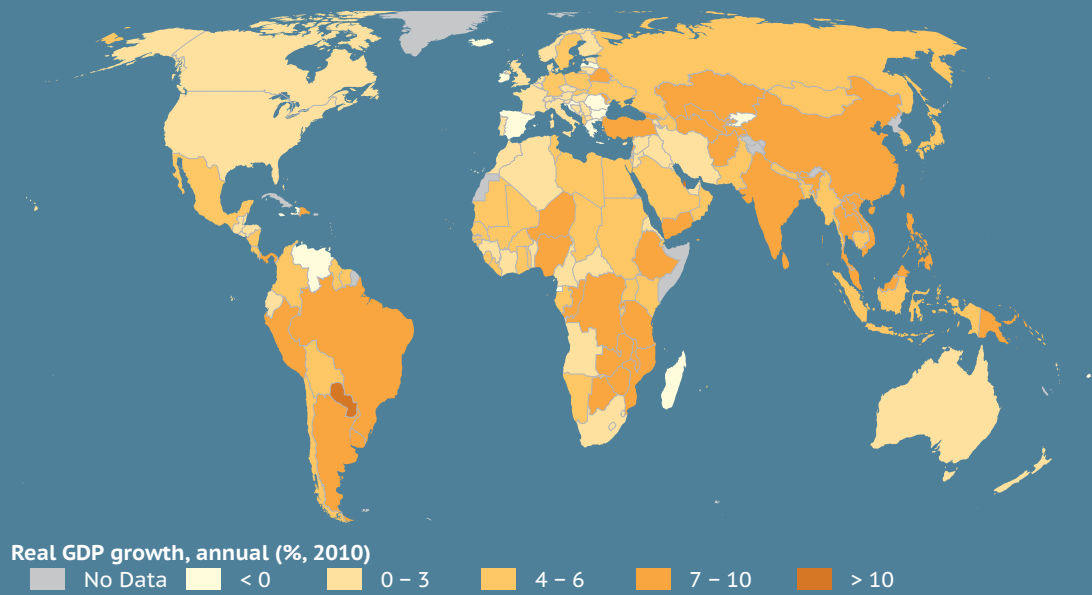
Chart 28: Trade plays an increasingly important role in most economies, particularly in East Asia, but has taken a downturn in 2009



Source: World Bank

Metalink: P1.MAC.WBK.WDI.MCH.GDP, p. 74

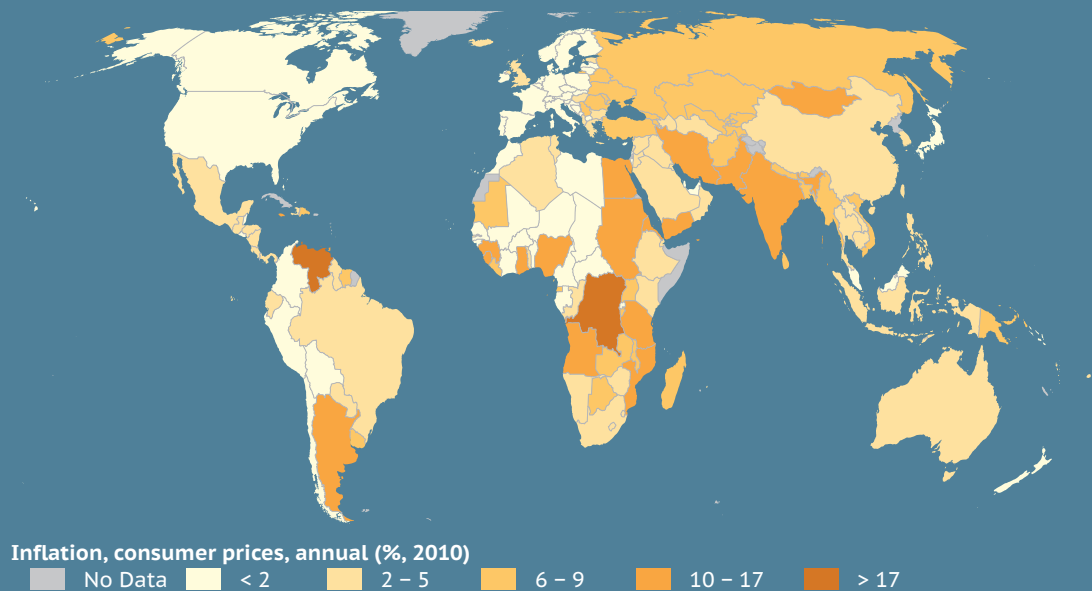
Map 14: Economic growth in many developing countries outperforming growth in developed countries



Source: World Bank

Metalink: P1.MAC.IMF.WEO.GDP.RGR, p. 73 

Map 15: ... but often accompanied by high inflation



Source: World Bank

Metalink: P1.MAC.IMF.WEO.INF.PER, p. 74 

TABLE 1: Population and structure


	Population				Age composition		Median age	Agricultural population		
	total		growth		between		years 2010	total	share	growth
	millions 2000	millions 2010	% p.a. 1990-99	% p.a. 2000-10	0-14 % 2010	65 + % 2010		millions 2010	% 2010	% p.a. 1990-2000
WORLD	6 121.8	6 894.8	1.5	1.2	26.5	12.3	29.4	2 619.0	32.3	0.5
DEVELOPING REGIONS	4 927.0	5 651.5	1.7	1.4	28.8	9.5	26.9	2 565.7	40.5	0.6
AFRICA	811.1	1 022.2	2.5	2.3	40.1	5.9	19.2	513.4	50.2	2.1
North Africa	142.0	165.9	1.7	1.6	29.1	8.5	25.0	40.8	24.6	−0.4
Algeria	30.5	35.5	1.9	1.5	26.9	7.5	26.1	7.4	20.9	0.5
Egypt	67.6	81.1	1.8	1.8	31.3	8.6	23.6	22.7	27.9	−0.4
Libya	5.2	6.4	1.9	2.0	30.2	7.1	25.8	0.2	3.0	−4.1
Morocco	28.8	32.0	1.5	1.0	27.8	8.9	26.2	8.3	25.9	−1.1
Tunisia	9.5	10.5	1.5	1.0	23.2	11.0	28.4	2.2	20.6	−0.1
Sub-Saharan Africa	669.1	856.3	2.7	2.5	42.2	5.4	18.1	472.6	55.2	2.4
Angola	13.9	19.1	3.0	3.2	46.5	4.2	16.3	13.2	69.2	2.7
Benin	6.5	8.8	3.2	3.1	43.5	5.0	17.4	3.9	44.3	1.3
Botswana	1.8	2.0	2.5	1.3	32.4	6.6	22.4	0.8	42.1	1.6
Burkina Faso	12.3	16.5	2.8	3.0	45.3	3.9	16.7	15.2	92.1	2.9
Burundi	6.4	8.4	1.3	2.8	37.7	4.9	20.2	7.5	89.2	1.9
Cameroon	15.7	19.6	2.6	2.3	40.4	5.8	18.5	8.0	40.9	0.1
Cape Verde	0.4	0.5	2.4	1.3	31.5	8.2	22.4	0.1	16.9	−1.2
Central African Republic	3.7	4.4	2.4	1.7	40.2	6.4	18.7	2.8	63.2	0.9
Chad	8.2	11.2	3.2	3.2	45.3	4.8	16.8	7.4	65.7	2.0
Comoros	0.6	0.7	2.5	2.7	42.5	4.6	18.2	0.5	69.4	2.1
Congo	3.1	4.0	2.8	2.6	40.4	6.0	18.8	1.3	31.9	0.6
Côte d'Ivoire	16.6	19.7	2.9	1.8	40.8	6.3	18.4	7.5	37.9	0.0
Congo, Dem. Rep.	49.6	66.0	3.2	2.9	46.2	4.5	16.4	37.7	57.2	2.2
Djibouti	0.7	0.9	2.7	2.0	35.7	5.8	21.2	0.7	74.0	1.8
Equatorial Guinea	0.5	0.7	3.4	3.0	39.1	4.8	20.3	0.5	64.3	2.5
Eritrea	3.7	5.3	1.3	3.7	41.5	4.3	18.3	3.9	73.8	
Ethiopia	65.6	83.0	3.1	2.4	41.3	5.6	18.0	64.2	77.3	
Gabon	1.2	1.5	3.0	2.0	35.2	7.2	21.5	0.4	25.7	−1.1
Gambia	1.3	1.7	3.0	2.9	43.9	3.6	17.2	1.3	76.0	2.6
Ghana	19.2	24.4	2.6	2.4	38.4	6.4	20.5	13.1	53.8	2.1
Guinea	8.3	10.0	4.0	1.8	42.7	5.4	17.7	8.0	79.8	2.3
Guinea-Bissau	1.2	1.5	2.0	2.0	41.1	5.6	18.3	1.2	79.3	1.6
Kenya	31.3	40.5	3.0	2.6	42.3	4.5	17.9	28.6	70.6	2.2
Lesotho	2.0	2.2	1.9	1.0	37.1	7.0	20.3	0.8	38.9	0.8
Liberia	2.8	4.0	2.7	3.4	43.4	4.6	17.6	2.5	62.0	2.4
Madagascar	15.4	20.7	3.1	3.0	42.9	5.1	17.6	14.5	70.1	2.5
Malawi	11.2	14.9	1.7	2.9	45.7	5.3	16.5	10.9	72.9	1.7
Mali	11.3	15.4	2.6	3.1	47.1	3.7	16.1	11.5	74.9	2.3
Mauritania	2.6	3.5	2.8	2.7	39.8	4.6	18.8	1.7	50.3	2.3
Mauritius	1.2	1.3	1.2	0.8	21.6	12.2	32.2	0.1	8.0	−2.5
Mozambique	18.2	23.4	3.0	2.5	43.9	5.5	17.3	17.8	76.0	2.5
Namibia	1.9	2.3	3.0	1.9	36.2	6.2	21.1	0.9	41.0	0.7
Niger	10.9	15.5	3.4	3.6	48.9	4.0	15.4	12.9	82.9	3.2
Nigeria	123.7	158.4	2.4	2.5	42.7	5.6	17.9	39.4	24.9	−0.3
Rwanda	8.1	10.6	0.7	2.8	42.5	4.7	18.0	9.5	89.4	1.9
Senegal	9.5	12.4	2.8	2.7	43.6	4.1	17.3	8.7	70.2	2.3
Seychelles	0.1	0.1	1.1	1.0				0.1	73.6	0.4
Sierra Leone	4.1	5.9	0.1	3.5	43.0	3.6	17.7	3.5	60.0	1.1
Somalia	7.4	9.3	1.0	2.3	44.8	4.6	17.1	6.1	65.6	1.1
Sudan	34.2	43.6	2.6	2.5	39.9	6.0	18.8	22.4	51.5	1.0
South Africa	44.8	50.1	2.0	1.1	30.0	7.9	25.0	4.9	9.8	−1.8
Swaziland	1.1	1.2	2.2	1.1	38.2	5.5	18.6	0.3	28.8	−0.4
Tanzania, Utd. Rep.	34.0	44.8	3.0	2.8	44.5	5.2	17.1	32.9	73.3	2.3
Togo	4.8	6.0	2.7	2.3	39.5	5.6	18.8	3.2	53.4	1.5
Uganda	24.2	33.4	3.2	3.3	48.3	4.2	15.6	24.6	73.5	2.6
Zambia	10.2	13.1	2.6	2.5	46.2	5.0	16.4	8.3	63.2	1.8
Zimbabwe	12.5	12.6	1.9	0.0	38.6	6.6	18.6	7.1	56.3	−0.1

TABLE 1: Population and structure (continued)

	Population				Age composition		Median age	Agricultural population		
	total		growth		between			total	share	growth
	millions 2000	millions 2010	% p.a. 1990-99	% p.a. 2000-10	0-14 %	65 + %				
					2010	2010	years 2010	millions 2010	% 2010	% p.a. 1990-2000
ASIA	3 586.4	4 029.2	1.6	1.2	26.1	10.1	28.8	1 953.1	42.1	0.3
Central Asia	55.4	60.7	1.0	0.9	28.7	7.9	24.5	12.9	21.2	
Kazakhstan	15.0	16.0	−1.0	0.7	24.2	11.0	28.5	2.5	15.6	
Kyrgyzstan	5.0	5.3	1.2	0.7	29.8	7.2	23.2	1.1	20.8	
Tajikistan	6.2	6.9	1.6	1.1	36.7	5.5	20.4	1.9	27.4	
Turkmenistan	4.5	5.0	2.2	1.1	29.0	6.8	23.7	1.5	29.7	
Uzbekistan	24.8	27.4	2.0	1.0	29.1	7.0	23.5	5.9	21.4	
East Asia	1 893.4	2 040.8	1.2	0.8	21.4	12.4	32.8	1 098.0	39.4	−0.0
Brunei Darussalam	0.3	0.4	2.7	2.0	25.9	6.7	28.4	0.0	0.3	−7.7
Cambodia	12.4	14.1	2.8	1.3	31.8	6.6	22.4	9.3	65.9	1.4
China	1 298.3	1 372.1	1.1	0.6	19.1	13.6	35.1	834.5		−0.0
Indonesia	213.4	239.9	1.5	1.2	26.8	8.8	27.4	89.6	37.3	−0.2
Korea, DPR	22.9	24.3	1.3	0.6	22.6	14.7	32.7	5.7	23.3	−1.5
Korea, Republic of	46.0	48.2	0.7	0.5	16.1	17.4	37.8	2.2	4.6	−5.6
Lao, PDR	5.3	6.2	2.5	1.5	34.3	6.4	21.3	4.6	74.9	1.8
Malaysia	23.4	28.4	2.6	1.9	30.2	8.2	26.0	3.4	12.0	−1.6
Mongolia	2.4	2.8	1.0	1.3	27.4	6.5	25.5	0.5	17.9	−1.7
Myanmar	45.0	48.0	1.4	0.6	25.4	8.6	27.8	32.2	67.1	0.6
Philippines	77.3	93.3	2.3	1.9	35.3	6.1	21.8	31.3	33.5	0.5
Singapore	3.9	5.1	2.7	2.6	17.1	15.5	37.6	0.0	0.1	−6.3
Thailand	63.2	69.1	1.0	0.9	20.2	14.3	33.7	28.4	41.1	−0.7
Viet Nam	78.8	87.8	1.7	1.1	23.3	9.5	27.8	55.5	63.2	0.7
South Asia	1 460.2	1 704.1	2.0	1.6	30.9	7.9	24.6	806.2	47.3	0.8
Afghanistan	22.9	31.4	6.1	3.2	46.4	3.9	16.3	18.8	59.7	3.8
Bangladesh	129.6	148.7	2.1	1.4	31.1	7.3	23.5	67.4	45.4	−0.1
Bhutan	0.6	0.7	−0.1	2.4	29.4	7.5	23.7	0.7	92.8	1.3
India	1 053.9	1 224.6	1.9	1.5	30.4	8.2	25.3	592.3	48.4	0.8
Iran (Islamic Rep.)	65.3	74.0	1.8	1.2	22.7	8.4	26.9	15.9	21.5	−0.5
Maldives	0.3	0.3	2.3	1.5	26.5	6.9	23.6	0.1	18.4	−2.0
Nepal	24.4	30.0	2.5	2.1	36.0	6.7	21.2	27.8	93.0	2.3
Pakistan	144.5	173.6	2.6	1.8	35.2	7.0	21.5	74.2	42.7	1.2
Sri Lanka	18.7	20.9	0.8	1.1	24.5	13.6	30.9	9.0	43.3	0.3
West Asia	177.4	223.5	2.2	2.3	31.6	7.3	24.4	36.0	16.1	−0.2
Armenia	3.1	3.1	−1.5	0.1	19.7	16.8	32.4	0.3	9.4	
Azerbaijan	8.1	9.2	1.2	1.3	20.7	9.8	28.9	2.1	22.8	
Bahrain	0.6	1.3	2.7	7.1	20.0	3.7	30.2	0.0	0.6	−1.1
Cyprus	0.9	1.1	2.1	1.6	17.4	18.3	33.9	0.1	5.3	−2.8
Georgia	4.7	4.4	−1.4	−0.9	16.1	21.6	37.8	0.7	15.1	
Iraq	23.9	31.7	3.2	2.9	43.0	5.1	17.7	1.7	5.5	−2.1
Jordan	4.8	6.2	3.7	2.5	37.3	6.3	20.7	0.4	6.3	−0.9
Kuwait	1.9	2.7	−1.3	3.5	26.6	4.4	27.6	0.0	1.0	0.8
Lebanon	3.7	4.2	2.5	1.2	24.5	11.4	28.6	0.1	1.8	−4.9
Occupied Palestinian Territory	3.2	4.0	4.5	2.4	42.4	4.7	17.5	0.3	8.0	−0.9
Saudi Arabia	20.0	27.4	2.2	3.2	30.2	5.0	25.9	1.4	5.1	−3.9
Syrian Arab Republic	16.0	20.4	2.6	2.5	36.7	6.5	21.0	4.1	20.0	0.4
Turkey	63.6	72.8	1.6	1.3	26.1	9.8	27.8	14.5	19.9	−1.4
United Arab Emirates	3.0	7.5	5.4	9.5	17.0	1.1	30.1	0.2	3.1	2.5
Yemen	17.7	24.1	4.1	3.1	44.1	4.4	17.0	9.3	38.8	1.6
LATIN AMERICA & THE CARIBBEAN	521.4	590.1	1.7	1.2	27.5	11.2	27.4	93.2	15.8	−1.1
Argentina	36.9	40.4	1.3	0.9	24.3	16.7	30.9	3.1	7.7	−1.4
Bahamas	0.3	0.3	1.5	1.4	22.5	11.2	30.9	0.0	2.3	−2.4
Barbados	0.3	0.3	0.3	0.2	17.0	18.8	37.7	0.0	2.6	−4.3
Belize	0.3	0.3	2.8	2.2	35.0	6.4	21.5	0.1	23.7	0.8
Bolivia (Plur. State)	8.3	9.9	2.3	1.8	35.8	7.7	21.5	4.0	39.9	1.3
Brazil	174.4	194.9	1.6	1.1	25.1	11.6	28.6	21.1	10.8	−2.5
Chile	15.4	17.1	1.6	1.0	21.7	14.9	32.3	2.3	13.3	−0.4
Colombia	39.8	46.3	1.8	1.5	28.4	9.6	26.7	7.0	15.1	−1.2
Costa Rica	3.9	4.7	2.5	1.7	24.6	10.8	28.1	0.7	15.8	−0.5

TABLE 1: Population and structure (continued)


	Population				Age composition		Median age	Agricultural population		
	total		growth		between			total	share	growth
	millions 2000	millions 2010	% p.a. 1990-99	% p.a. 2000-10	0-14 %	65 + %	years 2010	millions 2010	% 2010	% p.a. 1990-2000
Cuba	11.1	11.3	0.5	0.1	16.8	19.2	38.4	1.5	12.9	−2.2
Dominica	0.1	0.1	−0.2	−0.3				0.0	20.6	−1.8
Dominican Republic	8.6	9.9	1.8	1.5	30.6	10.2	25.4	1.1	11.2	−2.7
Ecuador	12.3	14.5	1.9	1.6	29.9	10.1	25.7	2.9	19.8	−1.0
El Salvador	5.9	6.2	1.1	0.4	31.5	11.0	22.9	1.6	26.2	−0.9
French Guiana	0.2	0.2	3.5	3.4	33.2	7.3	23.6	0.0	13.0	0.7
Grenada	0.1	0.1	0.6	0.2	27.6	10.5	25.2	0.0	20.2	−1.2
Guatemala	11.2	14.4	2.3	2.5	41.2	7.1	18.2	6.1	42.1	1.0
Guyana	0.7	0.8	0.1	0.3	33.4	7.0	23.2	0.1	14.6	−1.8
Haiti	8.6	10.0	2.0	1.5	35.8	7.0	21.3	5.9	58.8	0.9
Honduras	6.2	7.6	2.5	2.0	36.5	7.0	20.9	2.0	26.5	−0.3
Jamaica	2.6	2.7	0.9	0.6	28.5	12.3	27.2	0.5	17.5	−1.0
Mexico	100.0	113.4	1.7	1.3	28.7	10.2	26.6	20.3	17.9	−1.1
Netherlands Antilles	0.2	0.2	−0.6	1.1	20.6	17.2	37.5	0.0	0.5	0.0
Nicaragua	5.1	5.8	2.2	1.3	34.2	7.1	21.8	0.9	15.4	−1.5
Panama	3.0	3.5	2.0	1.8	28.6	10.8	27.2	0.6	17.8	−0.7
Paraguay	5.3	6.5	2.4	1.9	33.2	8.5	22.7	1.9	29.9	0.6
Peru	25.9	29.1	1.8	1.2	29.6	9.8	25.7	7.0	24.0	−0.2
St. Kitts & Nevis	0.0	0.1	1.0	1.2				0.0	21.2	−0.4
St. Lucia	0.2	0.2	1.3	1.0	25.4	11.3	27.4	0.0	20.1	−0.4
St. Vincent & Grenadines	0.1	0.1	0.1	0.1	25.9	10.2	27.2	0.0	20.2	−1.5
Suriname	0.5	0.5	1.4	1.2	28.1	10.5	27.4	0.1	16.8	0.2
Trinidad & Tobago	1.3	1.3	0.6	0.4	20.3	11.7	30.9	0.1	6.6	−2.1
Uruguay	3.3	3.4	0.7	0.1	21.7	21.1	34.0	0.3	9.9	−0.7
Venezuela (Boliv. Rep. of)	24.3	29.0	2.2	1.8	29.2	9.5	26.1	1.8	6.2	−2.3
OCEANIA	8.1	10.0	2.3	2.1	37.0	5.9	21.5	6.1	61.4	1.6
Fiji	0.8	0.9	1.2	0.6	28.9	8.3	26.2	0.3	35.9	−0.3
French Polynesia	0.2	0.3	2.0	1.3	25.1	10.5	28.5	0.1	26.9	−0.6
New Caledonia	0.2	0.3	2.3	1.7	25.1	12.9	30.5	0.1	30.3	0.2
Papua New Guinea	5.4	6.9	2.6	2.5	38.9	4.9	20.4	5.0	72.7	1.9
Samoa	0.2	0.2	0.9	0.3	37.3	8.1	21.0	0.1	27.3	−1.6
Solomon Islands	0.4	0.5	2.8	2.8	39.6	5.4	19.0	0.4	67.7	2.2
Tonga	0.1	0.1	0.2	0.6	37.1	8.6	21.2	0.0	26.9	−1.9
Vanuatu	0.2	0.2	2.3	2.6	38.1	5.9	20.6	0.1	30.4	0.7
DEVELOPED REGIONS	1 194.8	1 243.3	0.4	0.4	15.9	24.9	40.6	53.3	4.3	−0.8
NORTH AMERICA	313.3	344.5	1.1	1.0	19.0	21.6	38.0	5.8	1.7	−2.0
Bermuda	0.1	0.1	0.5	0.3				0.0	1.5	−3.4
Canada	30.7	34.0	1.0	1.0	15.8	23.0	41.0	0.6	1.9	−2.3
United States of America	282.5	310.4	1.1	0.9	19.3	21.4	37.6	5.1	1.7	−1.9
ASIA & OCEANIA	154.8	160.6	0.5	0.4	14.2	31.7	44.5	4.0	2.5	−4.5
Australia	19.2	22.3	1.1	1.5	18.3	21.9	37.6	0.9	3.9	−0.4
Israel	6.0	7.4	3.0	2.1	26.5	17.2	30.9	0.1	1.7	−1.8
Japan	125.7	126.5	0.3	0.1	12.6	34.6	46.7	2.7	2.1	−5.6
New Zealand	3.9	4.4	1.3	1.2	19.8	21.0	37.3	0.3	7.7	−0.1
EUROPE	726.8	738.2	0.1	0.2	14.8	24.9	40.9	43.5	5.9	−0.1
Albania	3.1	3.2	−0.8	0.4	22.3	14.6	30.5	1.3	41.8	−1.5
Belarus	10.1	9.6	−0.2	−0.5	14.5	20.9	38.5	0.9	8.9	
Bosnia & Herzegovina	3.7	3.8	−2.0	0.2	14.7	21.3	40.2	0.1	2.4	
Croatia	4.5	4.4	0.1	−0.2	14.4	26.1	42.3	0.2	4.4	
European Union	481.6	500.6	0.2	0.4	14.8	26.7	42.0	21.7	4.3	−3.2
Iceland	0.3	0.3	1.0	1.3	20.3	19.7	35.7	0.0	6.2	−1.7
Macedonia, FYR	2.0	2.1	0.5	0.3	17.3	18.4	36.3	0.2	7.5	
Montenegro	0.6	0.6	0.5	−0.0	18.8	19.6	36.4	0.1	12.8	
Norway	4.5	4.9	0.6	0.8	17.9	24.6	40.2	0.2	3.7	−2.4
Republic of Moldova	4.1	3.6	−0.5	−1.4	16.3	17.7	35.8	0.5	14.9	
Russian Federation	146.8	143.0	−0.1	−0.3	14.6	20.1	38.1	11.5	8.1	
Serbia	10.1	9.9	0.7	−0.3	17.1	22.1	37.9	1.3	12.8	
Switzerland	7.2	7.7	0.7	0.7	14.5	26.3	42.3	0.4	5.0	−1.9
Ukraine	48.9	45.4	−0.5	−0.7	13.7	23.3	40.4	5.2	11.5	

TABLE 2: Demographic change and indicators


	Population					Mortality and fertility					Net migration
	rural		urban		density	life expectancy	mortality	infant mortality	fertility	contraceptive use	thousands
	share %	growth % p.a.	share %	growth % p.a.	per km ²	years	per 1000 people	per 1000 live births	births per woman	women %	
	2010	2000-10	2010	2000-10	2010	2010	2010	2010	2009	2009*	
WORLD	49.6	0.4	50.4	2.1	199.8	68.9	8	35	2.5	61.1	−79
DEVELOPING REGIONS	55.0	0.5	45.0	2.7	217.2	67.0	8	42	2.8		−13 658
AFRICA	60.0	1.7	40.0	3.4	78.9	56.2	12	73	4.7		−2 706
North Africa	45.9	1.0	54.1	2.2	60.8	72.3	5	27	2.6		−905
Algeria	33.5	−0.3	66.5	2.6	14.9	72.3	5	25	2.3	61.4	−140
Egypt	56.6	1.8	43.4	2.0	81.0	72.3	5	26	2.8	60.3	−340
Libya	22.1	1.4	77.9	2.2	3.6	74.0	4	15	2.6	45.2	20
Morocco	41.8	0.1	58.2	2.1	71.6	71.2	6	34	2.3	63.0	−425
Tunisia	32.7	−0.2	67.3	1.5	64.1	73.9	6	21	2.0	60.2	−20
Sub-Saharan Africa	62.7	1.8	37.3	3.8	82.4	53.1	13	82	5.1		−1 801
Angola	41.5	0.8	58.5	4.7	15.3	49.6	15	104	5.6	6.2	80
Benin	58.0	2.7	42.0	4.3	78.6	54.6	12	85	5.4	17.0	50
Botswana	38.9	−0.5	61.1	2.8	3.5	53.3	13	41	2.8	52.8	15
Burkina Faso	74.3	2.4	25.7	7.2	60.1	53.9	13	79	5.8	17.4	−65
Burundi	89.0	2.5	11.0	5.7	301.2	48.8	15	101	4.5	9.1	323
Cameroon	41.6	0.4	58.4	4.0	41.2	50.0	15	94	4.5	29.2	−19
Cape Verde	38.9	−0.2	61.1	2.9	123.0	73.5	5	21	2.7	61.3	−12
Central African Republic	61.1	1.6	38.9	2.2	7.1	45.9	18	105	4.7	19.0	5
Chad	72.4	2.6	27.6	4.9	8.7	48.5	17	131	6.1	2.8	−75
Comoros	71.8	2.3	28.2	2.3	394.8	59.6	9	72	3.9	25.7	−10
Congo	37.9	1.2	62.1	2.8	11.8	56.0	12	72	4.3	44.3	−50
Côte d'Ivoire	49.4	0.9	50.6	3.8	61.2	53.0	13	77	4.5	12.9	−145
Congo, Dem. Rep.	64.8	2.1	35.2	4.6	28.1	47.4	17	116	5.9	20.6	−100
Djibouti	23.8	1.8	76.2	1.9	38.3	56.6	10	82	3.8	22.5	0
Equatorial Guinea	60.3	2.6	39.7	3.0	25.0	50.1	15	102	5.3		10
Eritrea	78.4	3.1	21.6	5.7	44.7	60.0	8	54	4.5	8.0	55
Ethiopia	83.3	2.4	16.7	3.8	75.1	57.2	10	72	5.2	14.7	−300
Gabon	14.0	−1.5	86.0	2.7	5.6	61.3	9	51	3.2	32.7	5
Gambia	41.9	1.0	58.1	4.8	153.0	57.3	10	74	5.0	17.5	15
Ghana	48.5	0.8	51.5	3.8	102.3	62.7	8	50	3.9	23.5	−51
Guinea	64.6	1.4	35.4	3.4	40.6	52.4	14	93	5.3	9.1	−300
Guinea-Bissau	70.0	2.3	30.0	2.5	41.9	46.8	17	119	5.7	10.3	−12
Kenya	77.8	2.3	22.2	3.9	69.8	55.0	11	65	4.9	45.5	−189
Lesotho	73.1	0.1	26.9	4.0	71.5	46.0	17	77	3.3	47.0	−36
Liberia	52.2	3.1	47.8	4.6	35.9	54.4	12	89	5.8	11.4	248
Madagascar	69.8	2.4	30.2	3.9	35.3	65.8	7	45	4.6	39.9	−5
Malawi	80.2	2.3	19.8	5.6	125.8	51.5	14	95	5.5	41.0	−20
Mali	64.1	1.3	35.9	4.8	12.4	50.0	15	101	6.5	8.2	−202
Mauritania	58.6	2.3	41.4	3.0	3.4	57.5	10	77	4.4	9.3	10
Mauritius	58.2	1.0	41.8	0.6	636.8	72.8	7	13	1.5	75.9	0
Mozambique	61.6	1.3	38.4	4.9	29.2	48.8	15	88	5.0	16.2	−20
Namibia	62.0	1.1	38.0	3.6	2.8	61.1	9	38	3.3	55.1	−1
Niger	82.9	3.6	17.1	4.3	12.2	53.1	14	96	7.1	11.2	−28
Nigeria	50.2	1.0	49.8	4.0	171.5	50.3	15	96	5.6	14.6	−300
Rwanda	81.1	2.0	18.9	5.9	403.4	53.9	12	100	5.3	36.4	15
Senegal	57.6	2.3	42.4	3.2	63.2	58.2	10	55	4.7	11.8	−100
Seychelles	44.7	−0.5	55.3	1.4	190.1				2.3		
Sierra Leone	61.6	2.8	38.4	4.1	81.8	46.3	17	114	5.2	8.2	60
Somalia	62.5	1.7	37.5	3.6	14.6	50.2	15	107	6.3	14.6	−250
Sudan	59.9	1.1	40.1	4.0	17.4	60.3	9	64	4.1	7.6	135
South Africa	38.3	−0.0	61.7	2.0	41.1	51.2	15	55	2.5	59.9	700
Swaziland	78.6	1.2	21.4	0.5	68.3	47.4	15	76	3.5	50.6	−6
Tanzania, Utd. Rep.	73.6	2.3	26.4	4.6	47.4	55.4	11	64	5.5	26.4	−300
Togo	56.6	1.4	43.4	4.4	106.2	55.7	11	74	4.2	16.8	−5
Uganda	86.7	3.2	13.3	4.3	138.7	52.2	13	79	6.2	23.7	−135
Zambia	64.3	2.2	35.7	2.7	17.4	46.9	17	95	5.7	40.8	−85
Zimbabwe	61.7	−0.6	38.3	1.4	32.2	46.6	15	59	3.4	64.9	−700

TABLE 2: Demographic change and indicators (continued)


	Population					Mortality and fertility					Net migration
	rural		urban		density	life expectancy	mortality	infant mortality	fertility	contraceptive use	thousands
	share %	growth % p.a.	share %	growth % p.a.	per km ²	years	per 1000 people	per 1000 live births	births per woman	women %	
	2010	2000-10	2010	2000-10	2010	2010	2010	2010	2009	2009*	
ASIA	58.8	0.3	41.2	2.7	276.7	68.8	7	37	2.3		-5 642
Central Asia	58.1	1.0	41.9	1.0	37.9	66.6	8	43	2.7		-800
Kazakhstan	41.5	-0.0	58.5	0.9	5.9	65.8	11	27	2.6	50.7	-100
Kyrgyzstan	65.4	1.2	34.6	1.0	26.7	66.7	8	36	2.8	47.8	-75
Tajikistan	73.7	1.4	26.3	1.3	48.1	66.4	6	56	3.4	37.1	-200
Turkmenistan	50.5	0.7	49.5	2.2	10.3	64.7	8	50	2.4	48.0	-25
Uzbekistan	63.8	1.3	36.2	0.8	61.3	67.4	7	49	2.6	64.9	-400
East Asia	53.6	-0.7	46.4	2.9	207.8	71.9	7	23	1.9		-3 084
Brunei Darussalam	24.3	0.3	75.7	2.7	69.2	77.5	3	5	2.0		4
Cambodia	79.9	1.3	20.1	3.4	78.1	61.5	8	62	2.9	40.0	-5
China	53.0	-1.2	47.0	3.4	188.8	72.9	7	22	1.8		-1 567
Indonesia	55.7	0.8	44.3	1.8	125.9	67.9	7	29	2.1	56.6	-730
Korea, DPR	39.8	0.3	60.2	0.6	202.0	68.4	10	27	1.9	68.6	0
Korea, Republic of	17.0	-1.3	83.0	0.9	484.1	80.0	5	4	1.3	79.6	-30
Lao, PDR	66.8	0.2	33.2	6.1	26.2	66.1	7	44	3.4	38.4	-75
Malaysia	27.8	-1.3	72.2	3.4	86.1	73.4	5	8	2.5	54.5	130
Mongolia	38.0	-0.0	62.0	2.1	1.8	67.3	7	36	2.0	55.2	-10
Myanmar	66.4	-0.0	33.6	2.7	70.9	63.5	9	55	2.3	41.0	-500
Philippines	51.1	1.7	48.9	2.1	310.9	67.8	6	23	3.0	50.7	-900
Singapore				1.9	7 447.2	80.6	5	2	1.2	62.0	500
Thailand	66.0	0.5	34.0	1.8	134.7	73.6	7	12	1.8	76.7	300
Viet Nam	69.6	0.4	30.4	3.5	264.9	74.3	5	20	2.0	79.5	-200
South Asia	68.3	1.2	31.7	2.5	390.5	64.8	8	54	2.8		-2 880
Afghanistan	77.4	3.2	22.6	4.7	48.2	47.3	17	136	6.5	15.0	1 000
Bangladesh	71.9	1.0	28.1	3.3	1 032.6	67.8	6	49	2.3	52.6	-570
Bhutan	65.3	1.0	34.7	5.6	15.4	65.8	7	44	2.6	35.4	10
India	70.0	1.2	30.0	2.4	372.5	64.2	8	53	2.7	54.0	-1 000
Iran (Islamic Rep.)	29.2	-0.9	70.8	2.1	44.9	72.1	5	27	1.8	78.9	-500
Maldives	59.9	-0.5	40.1	5.3	1 060.0	75.5	4	10	2.0	34.7	0
Nepal	81.4	1.4	18.6	5.4	203.6	67.4	6	39	2.8	48.0	-100
Pakistan	64.1	1.8	35.9	3.1	218.1	64.6	8	71	3.9	29.6	-1 420
Sri Lanka	85.7	1.0	14.3	-0.2	317.9	74.2	7	12	2.3	68.4	-300
West Asia	33.9	1.2	66.1	2.5	102.3	71.4	5	27	2.9		1 121
Armenia	35.8	0.2	64.2	-0.0	103.8	73.7	9	26	1.8	53.1	-75
Azerbaijan	48.1	0.8	51.9	1.1	106.1	70.1	7	41	2.3	51.1	-50
Bahrain	11.4	1.9	88.6	2.2	1 818.2	74.6	3	7	2.2	61.8	20
Cyprus	29.7	0.6	70.3	1.4	119.3	78.9	7	5	1.5		25
Georgia	47.3	-1.2	52.7	-1.2	62.4	73.0	11	29	1.6	47.3	-250
Iraq	33.8	3.0	66.2	2.2	72.3	67.3	6	35	3.9	49.8	-577
Jordan	21.5	2.8	78.5	3.0	69.3	72.9	4	21	3.4	59.3	250
Kuwait	1.6	2.1	98.4	3.2	153.6	74.2	3	8	2.1	50.2	120
Lebanon	12.8	0.3	87.2	1.4	406.5	72.0	7	23	1.8	58.0	-12
Occupied Palestinian Territory	25.9	2.6	74.1	3.7	671.0	72.2	4	22			
Saudi Arabia	17.9	1.2	82.1	2.6	12.8	73.1	4	19	3.0	23.8	150
Syrian Arab Republic	44.3	2.3	55.7	3.9	110.2	75.3	4	15	3.1	58.3	800
Turkey	30.4	-0.2	69.6	2.1	92.8	73.0	5	24	2.1	73.0	-44
United Arab Emirates	16.0	1.6	84.0	4.3	89.9	75.9	1	7	1.9	27.5	343
Yemen	68.2	2.1	31.8	4.9	45.6	63.9	7	53	5.1	27.7	-135
LATIN AMERICA & THE CARIBBEAN	20.4	-0.6	79.6	1.8	53.8	73.5	6	21	2.2		-5 246
Argentina	7.6	-1.6	92.4	1.2	14.5	75.3	8	13	2.2	78.3	30
Bahamas	15.9	0.0	84.1	1.5	24.7	74.8	5	16	2.0	44.6	2
Barbados	55.5	-0.9	44.5	1.6	635.7	76.2	9	14	1.5	55.0	-1
Belize	47.6	1.3	52.4	3.2	13.6	75.3	4	17	2.8	34.3	-1
Bolivia (Plur. State)	33.5	0.6	66.5	2.6	9.0	65.6	7	46	3.4	60.6	-100
Brazil	13.5	-2.2	86.5	1.8	22.9	72.2	6	23	1.8	80.6	-229
Chile	11.0	-1.4	89.0	1.4	22.6	78.7	5	7	1.9	58.4	30
Colombia	24.9	0.4	75.1	1.9	40.6	72.9	5	19	2.4	78.2	-120
Costa Rica	35.6	0.3	64.4	2.6	91.2	78.9	4	10	1.9	80.0	30

TABLE 2: Demographic change and indicators (continued)

	Population					Mortality and fertility					Net migration
	rural		urban		density	life expectancy	mortality	infant mortality	fertility	contraceptive use	thousands
	share %	growth % p.a.	share %	growth % p.a.	per km ²	years	per 1000 people	per 1000 live births	births per woman	women %	
	2010	2000-10	2010	2000-10	2010	2010	2010	2010	2009	2009*	
Cuba	24.8	0.3	75.2	0.1	101.6	78.5	7	5	1.5	77.8	-194
Dominica	32.8	0.0	67.2	-0.2	90.2					50.0	
Dominican Republic	30.8	-0.7	69.2	2.6	204.6	72.5	6	30	2.6	72.9	-140
Ecuador	33.1	-0.7	66.9	2.2	51.0	75.0	5	21	2.5	72.7	-350
El Salvador	35.7	-1.0	64.3	1.3	294.3	71.4	7	22	2.3	72.5	-280
French Guiana	23.7	3.0	76.3	3.6	2.6	75.9	4	14			
Grenada	60.6	-0.3	39.4	1.0	303.7	75.3	6	15	2.3	54.0	-5
Guatemala	50.5	1.7	49.5	3.4	132.1	70.3	6	30	4.0	54.1	-200
Guyana	71.4	0.1	28.6	0.0	3.5	68.7	6	42	2.3	42.5	-40
Haiti	47.9	-1.3	52.1	5.6	360.1	61.0	9	63	3.4	32.0	-140
Honduras	48.4	0.8	51.6	3.3	67.8	72.1	5	28	3.2	65.0	-100
Jamaica	48.0	0.6	52.0	0.7	249.4	72.2	7	24	2.4	69.1	-100
Mexico	22.2	-0.3	77.8	1.5	57.9	76.2	5	17	2.1	72.9	-2 430
Netherlands Antilles	7.0	-2.5	93.0	1.4	250.9	76.1	7	13	2.0		8
Nicaragua	42.7	0.7	57.3	1.8	44.5	73.0	5	21	2.7	72.4	-200
Panama	25.2	-1.3	74.8	3.1	46.6	75.5	5	18	2.5	58.2	11
Paraguay	38.5	0.4	61.5	3.0	15.9	71.7	6	32	3.0	79.4	-40
Peru	23.1	-0.3	76.9	1.8	22.6	73.2	5	21	2.5	73.2	-625
St. Kitts & Nevis	67.3	1.2	32.7	1.3	200.8					54.0	
St. Lucia	71.8	1.0	28.2	1.1	323.3	73.9	6	13	2.0	47.0	-1
St. Vincent & Grenadines	50.5	-0.7	49.5	1.0	281.8	71.6	7	24	2.1	48.0	-5
Suriname	30.7	-0.2	69.3	1.9	3.2	69.7	7	22	2.4	45.6	-5
Trinidad & Tobago	86.2	0.0	13.8	2.9	261.5	69.4	8	27	1.6	42.5	-20
Uruguay	7.5	-1.2	92.5	0.3	19.2	76.4	9	13	2.0	78.0	-50
Venezuela (Boliv. Rep. of)	6.6	-2.4	93.4	2.1	31.8	73.7	5	17	2.5	76.8	40
OCEANIA	77.4	2.2	22.6	1.8	35.9	64.0	7	42	3.7		-64
Fiji	48.1	-0.2	51.9	1.4	47.1	68.8	7	18	2.7	43.1	-35
French Polynesia	48.5	1.7	51.5	1.2	67.7	74.5	5	8	2.2		0
New Caledonia	42.5	2.1	57.5	1.4	13.5	75.3	6	5	2.2		6
Papua New Guinea	87.5	2.6	12.5	2.0	14.8	61.5	8	50	4.0	32.4	0
Samoa	79.9	0.4	20.1	-0.8	64.7	71.5	5	22	3.9	42.6	-16
Solomon Islands	81.5	2.2	18.5	4.3	18.6	66.4	6	43	3.8	27.0	0
Tonga	76.9	0.5	23.1	0.4	160.1	71.8	6	22	3.9	23.9	-9
Vanuatu	74.4	2.1	25.6	4.4	19.7	70.0	5	29	3.9	38.4	0
DEVELOPED REGIONS	24.8	-0.6	75.2	0.7	120.5	77.4	10	6	1.7		13 579
NORTH AMERICA	17.9	-0.6	82.1	1.4	29.6	78.2	8	7	2.0		6 100
Bermuda				0.3	1 225.3				1.8		
Canada	19.4	0.4	80.6	1.1	3.4	80.5	7	5	1.6	74.0	1 050
United States of America	17.7	-0.7	82.3	1.4	32.2	78.0	8	7	2.0	72.9	5 050
ASIA & OCEANIA	28.4	-0.4	71.6	0.6	280.2	82.4	9	3	1.5		785
Australia	10.9	-0.5	89.1	1.4	2.9	81.4	7	5	1.9	70.8	500
Israel	8.2	1.3	91.8	1.9	335.0	80.7	6	4	3.0	68.0	85
Japan	33.2	-0.5	66.8	0.3	334.9	82.7	9	3	1.4	54.3	150
New Zealand	13.8	0.7	86.2	1.1	16.1	80.1	7	5	2.1	74.9	50
EUROPE	27.2	-0.6	72.8	0.4	128.2	75.9	11	7	1.6		6 694
Albania	48.1	-1.6	51.9	2.5	111.5	76.4	6	18	1.9	69.3	-75
Belarus	25.3	-2.2	74.7	0.2	46.2	69.4	14	7	1.5	72.6	0
Bosnia & Herzegovina	51.4	-0.8	48.6	1.4	73.4	75.1	9	13	1.2	35.7	-10
Croatia	42.3	-0.7	57.7	0.2	77.9	76.0	12	6	1.5	69.0	10
European Union	26.1	-0.6	73.9	0.7	168.8	79.1	10	5	1.6		6 560
Iceland	6.7	0.5	93.3	1.7	3.1	81.3	6	2	2.2		20
Macedonia, FYR	40.7	0.2	59.3	0.1	80.1	74.2	9	15	1.4	13.5	-10
Montenegro	38.6	-1.3	61.4	-0.1	45.7	74.0	10	9	1.6	39.4	-5
Norway	20.6	-0.7	79.4	1.2	12.7	80.5	9	3	2.0	88.4	135
Republic of Moldova	53.0	-1.8	47.0	-0.8	105.5	68.2	13	16	1.5	67.8	-172
Russian Federation	26.8	-0.4	73.2	-0.5	8.4	67.7	14	11	1.6	79.5	250
Serbia	43.9	-1.0	56.1	0.3	111.5	74.0	12	12	1.4	41.2	0
Switzerland	26.4	0.4	73.6	0.6	185.6	81.8	8	4	1.5	82.0	100
Ukraine	31.2	-1.2	68.8	-0.5	75.3	67.5	17	13	1.5	66.7	-80

TABLE 3: Land availability


	Total land area	Share of land area				Arable land per person	
		agricultural	permanent crops	arable	pasture		
	thousand ha	%	%	%	%	ha	growth % p.a.
	2009	2009	2009	2009	2009	2009	1970-2009
WORLD	13 003 468	37.6	1.2	10.6	25.8	0.2	-1.5
DEVELOPING REGIONS	8 096 847	43.5	1.6	10.4	31.5	0.2	-1.3
AFRICA	2 964 679	39.2	1.0	7.6	30.6	0.2	-1.8
North Africa	600 439	17.6	0.9	3.8	12.9	0.1	-1.9
Algeria	238 174	17.4	0.4	3.1	13.8	0.2	-1.9
Egypt	99 545	3.7	0.8	2.9		0.0	-1.9
Libya	175 954	8.8	0.2	1.0	7.7	0.3	-2.9
Morocco	44 630	67.3	2.2	18.0	47.1	0.3	-1.5
Tunisia	15 536	63.0	14.3	17.4	31.2	0.3	-2.2
Sub-Saharan Africa	2 364 240	44.7	1.0	8.5	35.1	0.2	-1.6
Angola	124 670	46.8	0.2	3.2	43.3	0.2	-2.1
Benin	11 062	29.8	2.7	22.1	5.0	0.3	-1.0
Botswana	56 673	45.6	0.0	0.4	45.2	0.1	-3.8
Burkina Faso	27 360	43.7	0.2	21.6	21.9	0.4	-0.1
Burundi	2 568	83.7	13.6	35.0	35.0	0.1	-2.3
Cameroon	47 271	19.8	3.0	12.6	4.2	0.3	-2.4
Cape Verde	403	21.8	0.7	14.9	6.2	0.1	-0.3
Central African Republic	62 298	8.4	0.1	3.1	5.1	0.5	-1.9
Chad	125 920	39.2	0.0	3.4	35.7	0.4	-1.8
Comoros	186	83.3	32.2	43.0	8.1	0.1	-2.6
Congo	34 150	30.9	0.2	1.5	29.3	0.1	-2.8
Côte d'Ivoire	31 800	63.8	13.5	8.8	41.5	0.1	-2.0
Congo, Dem. Rep.	226 705	9.9	0.3	3.0	6.6	0.1	-2.8
Djibouti	2 318	73.4		0.1	73.3	0.0	-2.5
Equatorial Guinea	2 805	10.9	2.5	4.7	3.7	0.2	-2.0
Eritrea	10 100	75.2	0.0	6.8	68.3	0.1	
Ethiopia	100 000	35.0	1.0	13.9	20.0	0.2	
Gabon	25 767	19.9	0.6	1.3	18.1	0.2	-1.1
Gambia	1 000	66.5	0.5	40.0	26.0	0.2	-0.4
Ghana	22 754	68.1	12.3	19.3	36.5	0.2	-0.1
Guinea	24 572	58.0	2.8	11.6	43.5	0.3	-2.6
Guinea-Bissau	2 812	58.0	8.9	10.7	38.4	0.2	-1.8
Kenya	56 914	48.1	1.1	9.5	37.4	0.1	-2.1
Lesotho	3 036	77.0	0.1	11.0	65.9	0.2	-2.1
Liberia	9 632	27.1	2.2	4.2	20.8	0.1	-2.3
Madagascar	58 154	70.2	1.0	5.1	64.1	0.1	-1.9
Malawi	9 428	59.1	1.3	38.2	19.6	0.2	-1.2
Mali	122 019	33.7	0.1	5.2	28.4	0.4	1.0
Mauritania	103 070	38.5	0.0	0.4	38.1	0.1	-1.9
Mauritius	203	48.3	2.0	42.9	3.4	0.1	-1.5
Mozambique	78 638	62.7	0.3	6.4	56.0	0.2	-0.7
Namibia	82 329	47.1	0.0	1.0	46.2	0.4	-2.2
Niger	126 670	34.6	0.0	11.8	22.7	1.0	-2.4
Nigeria	91 077	81.8	3.3	37.3	41.2	0.2	-2.0
Rwanda	2 467	81.1	11.3	52.7	17.0	0.1	-0.3
Senegal	19 253	49.4	0.3	20.0	29.1	0.3	-2.2
Seychelles	46	6.5	4.3	2.2		0.0	-1.3
Sierra Leone	7 162	47.7	1.8	15.1	30.7	0.2	0.5
Somalia	62 734	70.2	0.0	1.6	68.5	0.1	-2.2
Sudan	237 600	57.5	0.1	8.5	49.0	0.5	-1.3
South Africa	121 447	81.7	0.8	11.8	69.1	0.3	-1.6
Swaziland	1 720	71.0	0.9	10.2	60.0	0.1	-2.0
Tanzania, Utd. Rep.	88 580	40.1	1.7	11.3	27.1	0.2	-2.0
Togo	5 439	62.1	3.3	40.4	18.4	0.4	-2.1
Uganda	19 981	69.9	11.3	33.0	25.6	0.2	-1.7
Zambia	74 339	31.5	0.0	4.5	26.9	0.3	-2.4
Zimbabwe	38 685	42.4	0.3	10.8	31.3	0.3	-0.7

TABLE 3: Land availability (continued)

	Total land area	Share of land area				Arable land per person	
		agricultural	permanent crops	arable	pasture		
	thousand ha	%	%	%	%	ha	growth % p.a.
	2009	2009	2009	2009	2009	2009	1970-2009
ASIA	3 054 019	53.5	2.5	15.3	35.7	0.1	−1.4
Central Asia	392 679	72.1	0.2	8.0	63.9	0.5	
Kazakhstan	269 970	77.2	0.0	8.7	68.5	1.5	
Kyrgyzstan	19 180	55.4	0.4	6.7	48.3	0.2	
Tajikistan	13 996	33.9	1.0	5.3	27.7	0.1	
Turkmenistan	46 993	69.4	0.1	3.9	65.3	0.4	
Uzbekistan	42 540	62.6	0.8	10.1	51.7	0.2	
East Asia	1 543 949	49.8	3.4	11.9	34.5	0.1	−1.1
Brunei Darussalam	527	2.2	0.9	0.6	0.6	0.0	−4.6
Cambodia	17 652	31.5	0.9	22.1	8.5	0.3	−0.8
China	932 749	56.2	1.5	11.8	42.9	0.1	−1.0
Indonesia	181 157	29.6	10.5	13.0	6.1	0.1	−1.1
Korea, DPR	12 041	24.1	1.7	22.0	0.4	0.1	−0.8
Korea, Republic of	9 710	19.1	2.1	16.4	0.6	0.0	−1.8
Lao, PDR	23 080	10.2	0.5	5.9	3.8	0.2	−0.3
Malaysia	32 855	24.0	17.6	5.5	0.9	0.1	−0.7
Mongolia	155 356	74.5	0.0	0.6	73.9	0.4	−1.3
Myanmar	65 352	19.0	1.7	16.9	0.5	0.2	−1.3
Philippines	29 817	40.1	16.9	18.1	5.0	0.1	−2.0
Singapore	70	1.0	0.3	0.7		0.0	−7.3
Thailand	51 089	38.7	7.2	29.9	1.6	0.2	−1.0
Viet Nam	31 007	33.1	10.8	20.3	2.1	0.1	−1.4
South Asia	639 977	48.3	2.6	33.5	12.2	0.1	−2.1
Afghanistan	65 223	58.1	0.2	11.9	46.0	0.3	−2.4
Bangladesh	13 017	70.3	7.5	58.1	4.6	0.1	−2.4
Bhutan	3 839	13.2	0.7	2.0	10.6	0.1	−3.1
India	297 319	60.5	3.9	53.1	3.5	0.1	−2.0
Iran (Islamic Rep.)	162 855	29.8	1.1	10.6	18.1	0.2	−2.1
Maldives	30	26.7	10.0	13.3	3.3	0.0	−0.8
Nepal	14 335	29.6	0.8	16.7	12.1	0.1	−1.8
Pakistan	77 088	34.1	1.1	26.5	6.5	0.1	−2.5
Sri Lanka	6 271	41.6	15.5	19.1	7.0	0.1	−0.3
West Asia	477 413	57.0	1.2	8.0	47.8	0.2	−2.5
Armenia	2 848	61.6	1.9	16.1	43.6	0.1	
Azerbaijan	8 262	57.6	2.7	22.7	32.1	0.2	
Bahrain	76	10.3	3.3	1.7	5.3	0.0	−3.6
Cyprus	924	13.5	3.7	9.4	0.5	0.1	−1.8
Georgia	6 949	36.1	1.7	6.4	27.9	0.1	
Iraq	43 432	20.1	0.6	10.4	9.2	0.1	−3.0
Jordan	8 878	11.5	0.9	2.3	8.4	0.0	−4.1
Kuwait	1 782	8.5	0.2	0.6	7.6	0.0	3.0
Lebanon	1 023	67.3	14.0	14.2	39.1	0.0	−2.6
Occupied Palestinian Territory	602	61.0	19.4	16.6	24.9	0.0	−3.2
Saudi Arabia	214 969	80.7	0.1	1.5	79.1	0.1	−1.7
Syrian Arab Republic	18 363	75.7	5.4	25.4	44.9	0.2	−3.4
Turkey	76 963	50.6	3.8	27.7	19.0	0.3	−2.2
United Arab Emirates	8 360	6.8	2.4	0.8	3.6	0.0	−3.0
Yemen	52 797	44.4	0.5	2.2	41.7	0.1	−3.7
LATIN AMERICA & THE CARIBBEAN	2 024 065	35.7	1.0	7.4	27.3	0.3	−1.0
Argentina	273 669	51.3	0.4	11.3	39.6	0.8	−0.9
Bahamas	1 001	1.4	0.4	0.8	0.2	0.0	−1.4
Barbados	43	44.2	2.3	37.2	4.7	0.1	−0.3
Belize	2 281	6.7	1.4	3.1	2.2	0.2	−0.8
Bolivia (Plur. State)	108 330	34.1	0.2	3.4	30.5	0.4	0.1
Brazil	845 942	31.3	0.9	7.2	23.2	0.3	−0.4
Chile	74 353	21.2	0.6	1.7	18.8	0.1	−4.2
Colombia	110 950	38.3	1.4	1.6	35.3	0.0	−3.7
Costa Rica	5 106	35.3	5.9	3.9	25.5	0.0	−3.2

TABLE 3: Land availability (continued)

	Total land area		Share of land area			Arable land per person	
	thousand ha	agricultural %	permanent crops %	arable %	pasture %	ha	growth % p.a.
	2009	2009	2009	2009	2009	2009	1970-2009
Cuba	10 644	62.5	3.5	34.3	24.7	0.3	0.5
Dominica	75	32.7	22.0	8.0	2.7	0.1	-0.3
Dominican Republic	4 832	51.1	9.7	16.6	24.8	0.1	-2.0
Ecuador	24 836	30.3	5.4	4.8	20.1	0.1	-3.1
El Salvador	2 072	74.5	11.1	32.7	30.7	0.1	-0.2
French Guiana	8 220	0.3	0.0	0.1	0.1	0.1	2.4
Grenada	34	36.8	26.5	7.4	2.9	0.0	-2.0
Guatemala	10 716	41.0	8.8	14.0	18.2	0.1	-1.6
Guyana	19 685	8.5	0.1	2.1	6.2	0.6	0.3
Haiti	2 756	66.8	10.9	38.1	17.8	0.1	-1.5
Honduras	11 189	28.5	3.7	9.1	15.7	0.1	-3.2
Jamaica	1 083	41.5	9.2	11.1	21.1	0.0	-1.4
Mexico	194 395	52.9	1.4	12.9	38.6	0.2	-1.6
Netherlands Antilles	80	10.0		10.0		0.0	-0.6
Nicaragua	12 034	42.8	1.9	15.8	25.1	0.3	-0.7
Panama	7 434	30.0	2.0	7.4	20.6	0.2	-1.5
Paraguay	39 730	52.6	0.3	9.6	42.8	0.6	1.6
Peru	128 000	16.8	0.6	2.9	13.3	0.1	-1.1
St. Kitts & Nevis	26	21.2	0.8	15.4	5.0	0.1	-2.1
St. Lucia	61	18.0	11.5	4.9	1.6	0.0	-2.6
St. Vincent & Grenadines	39	25.6	7.7	12.8	5.1	0.0	-1.0
Suriname	15 600	0.5	0.0	0.4	0.1	0.1	0.8
Trinidad & Tobago	513	10.5	4.3	4.9	1.4	0.0	-2.9
Uruguay	17 502	84.6	0.2	10.7	73.7	0.6	0.3
Venezuela (Boliv. Rep. of)	88 205	24.3	0.7	3.1	20.4	0.1	-2.6
OCEANIA	54 085	4.3	2.1	1.0	1.3	0.1	-0.5
Fiji	1 827	22.9	4.5	8.8	9.6	0.2	1.0
French Polynesia	366	12.2	6.0	0.7	5.5	0.0	-1.7
New Caledonia	1 828	13.7	0.3	0.4	13.1	0.0	-2.2
Papua New Guinea	45 286	2.5	1.5	0.6	0.4	0.0	-0.2
Samoa	283	23.7	13.8	8.8	1.1	0.1	-0.7
Solomon Islands	2 799	3.0	2.1	0.6	0.3	0.0	-1.8
Tonga	72	43.1	15.3	22.2	5.6	0.2	-0.7
Vanuatu	1 219	15.3	10.3	1.6	3.4	0.1	-1.8
DEVELOPED REGIONS	4 905 673	27.9	0.5	11.0	16.4	0.4	0.2
NORTH AMERICA	1 865 166	25.3	0.5	11.1	13.6	0.6	-1.3
Bermuda	5	14.8		14.8		0.0	-1.3
Canada	909 351	7.4	0.8	5.0	1.7	1.3	-1.0
United States of America	914 742	44.1	0.3	17.8	26.0	0.5	-1.4
ASIA & OCEANIA	833 175	51.1	0.1	6.3	44.7	0.3	-0.6
Australia	768 230	53.2	0.0	6.1	47.1	2.2	-1.1
Israel	2 164	24.1	3.6	14.1	6.5	0.0	-2.5
Japan	36 450	12.6	0.9	11.8		0.0	-1.0
New Zealand	26 331	43.6	0.3	1.8	41.6	0.1	-5.6
EUROPE	2 207 347	21.4	0.7	12.6	8.1	0.4	-1.0
Albania	2 740	44.0	3.2	22.3	18.4	0.2	-0.6
Belarus	20 282	44.0	0.6	27.3	16.1	0.6	
Bosnia & Herzegovina	5 100	41.7	2.0	19.5	20.2	0.3	
Croatia	5 596	23.2	1.6	15.5	6.1	0.2	
European Union	418 174	45.1	2.9	26.0	16.2	0.2	-0.5
Iceland	10 025	22.8		0.1	22.7	0.0	-1.1
Macedonia, FYR	2 522	40.2	1.4	16.7	22.1	0.2	
Montenegro	1 345	38.2	1.2	12.9	24.2	0.3	
Norway	30 547	3.3	0.0	2.7	0.6	0.2	-0.5
Republic of Moldova	3 289	75.2	9.2	55.2	10.8	0.5	
Russian Federation	1 637 687	13.2	0.1	7.4	5.6	0.9	
Serbia	8 746	57.8	3.4	37.7	16.7	0.3	
Switzerland	4 000	38.1	0.6	10.2	27.4	0.1	-0.3
Ukraine	57 932	71.2	1.6	56.1	13.6	0.7	

TABLE 4: Water resources and irrigation

	Water resources		Irrigation			
			irrigation potential	total area equipped for irrigation	% of equip. area irrigated by groundwater	% of equip. area actually irrigated
			thousand ha	thousand ha	%	%
	per capita m ³ /yr 1992	per capita m ³ /yr 2009	2008*	2008*	2008*	2008*
WORLD	7 878	6 242		304 398	38	
DEVELOPING REGIONS						
AFRICA						
North Africa						
Algeria	439	334	510	569	64	80
Egypt	971	719	4 420	3 422	10	100
Libya	133	96	40	470	99	67
Morocco	1 129	917	1 664	1 485	46	98
Tunisia	539	443	560	394	59	100
Sub-Saharan Africa						
Angola	13 451	7 976	3 700	80	20	29
Benin	5 166	3 068	322	12	18	10
Botswana	8 355	6 176	13	1	46	100
Burkina Faso	1 270	782	165	25	12	100
Burundi	2 149	1 535	215	21	0	
Cameroon	22 161	14 889	290	26	4	
Cape Verde	822	610	3	3	14	66
Central African Republic	46 807	33 441	1 900	0	0	51
Chad	6 731	3 932	335	30	20	87
Comoros	2 609	1 676	0	0	4	65
Congo	330 159	211 114	340	2	0	11
Côte d'Ivoire	6 063	4 193	475	73	0	92
Congo, Dem. Rep.	32 527	19 983	7 000	11	0	76
Djibouti	505	344	2	1	100	38
Equatorial Guinea	65 000	38 179	30			
Eritrea		1 236	188	22	24	62
Ethiopia		1 503	2 700	290	1	
Gabon	165 489	110 961	440	4	0	
Gambia	7 737	4 756	80	2	1	65
Ghana	3 398	2 233	1 900	31	20	90
Guinea	34 952	23 153	520	95	0	100
Guinea-Bissau	29 273	20 889	281	23	22	100
Kenya	1 226	778	539	103	1	94
Lesotho	1 779	1 406	13	3	2	3
Liberia	112 950	60 480	600	2	1	
Madagascar	28 142	16 746	1 517	1 086	0	100
Malawi	1 785	1 197	162	56	0	96
Mali	11 018	6 707	566	236	0	75
Mauritania	5 408	3 375	250	45	11	51
Mauritius	2 526	2 129	33	21	25	98
Mozambique	15 163	9 497	3 072	118	1	34
Namibia	11 712	7 904	47	8	22	100
Niger	4 054	2 248	270	74	2	89
Nigeria	2 794	1 853	2 331	293	23	75
Rwanda	1 472	921	165	9	1	
Senegal	5 047	3 205	409	120	9	97
Seychelles			1	0	0	77
Sierra Leone	40 201	27 879	807	29	1	
Somalia	2 247	1 612	240	200	5	
Sudan	2 315	1 518	2 784	1 863	4	43
South Africa	1 294	1 005	1 500	1 498	9	100
Swaziland	4 967	3 861	93	50	2	90
Tanzania, Utd. Rep.	3 535	2 212	2 132	184	9	
Togo	3 845	2 491	180	7	1	86
Uganda	3 485	2 039	90	9	1	64
Zambia	12 718	8 268	523	156	4	100
Zimbabwe	1 817	1 603	366	174	12	71

TABLE 4: Water resources and irrigation (continued)

	Water resources		Irrigation			
			irrigation potential	total area equipped for irrigation	% of equip. area irrigated by groundwater	% of equip. area actually irrigated
			thousand ha	thousand ha	%	%
	per capita m ³ /yr 1992	per capita m ³ /yr 2009	2008*	2008*	2008*	2008*
ASIA						
Central Asia						
Kazakhstan	6 670	6 919	3 768	3 556	5	65
Kyrgyzstan	5 156	4 379	2 247	1 077	1	100
Tajikistan	2 895	2 356	755	719	9	100
Turkmenistan	6 368	4 964	2 353	1 744	3	100
Uzbekistan	2 345	1 858	4 915	4 223	6	100
East Asia						
Brunei Darussalam	31 835	21 684		1	0	100
Cambodia	46 649	34 061		354	0	90
China	2 362	2 080	70 000	62 938	30	86
Indonesia	10 598	8 504	10 886	6 722	1	
Korea, DPR	3 708	3 183		1 460	14	
Korea, Republic of	1 594	1 453	1 782	880	6	
Lao, PDR	75 197	54 565	600	310	0	87
Malaysia	30 202	20 752	414	363	8	100
Mongolia	15 453	12 832	518	84	43	75
Myanmar	28 893	24 537	10 500	2 110	5	100
Philippines	7 408	5 223	3 126	1 879	14	95
Singapore	188	121				
Thailand	7 533	6 384	12 245	6 415	9	79
Viet Nam	12 632	10 174	9 400	4 585	1	100
South Asia						
Afghanistan	4 201	2 126		3 199	18	
Bangladesh	11 132	8 345	6 933	5 050	74	88
Bhutan	173 993	133 053		28	0	100
India	2 100	1 582	139 500	66 334	64	94
Iran (Islamic Rep.)	2 409	1 880	15 000	8 132	62	100
Maldives	129	96		0	0	0
Nepal	10 487	7 142	2 178	1 168	20	
Pakistan	2 091	1 448	21 300	19 990	31	
Sri Lanka	2 976	2 555	570	570	1	84
West Asia						
Armenia	2 252	2 518	666	274	19	64
Azerbaijan	4 658	3 825	3 200	1 426	7	
Bahrain	223	99	4	4	90	100
Cyprus	974	716	37	46	58	68
Georgia	11 846	14 479	725	433	0	63
Iraq	4 105	2 461	5 554	3 525	6	55
Jordan	246	155	85	79	53	
Kuwait	10	8	25	9	61	82
Lebanon	1 438	1 073	178	90	52	
Occupied Palestinian Territory	370	213	80	20	100	
Saudi Arabia	140	90		1 731	97	69
Syrian Arab Republic	1 286	838		1 439	68	
Turkey	3 813	2 973	8 500	4 983	33	87
United Arab Emirates	74	22		227	100	82
Yemen	159	90		680	64	
LATIN AMERICA & THE CARIBBEAN						
Argentina	24 270	20 319	6 128	1 550	22	
Bahamas	75	59				
Barbados	307	293	4	5	90	
Belize	91 832	60 820		3	22	
Bolivia (Plur. State)	89 260	63 696	2 000	128	7	100
Brazil	53 260	42 604	29 350	2 878	19	100
Chile	67 408	54 376	2 500	1 900	3	
Colombia	61 802	46 699	6 589	900	5	
Costa Rica	34 853	24 483	430	103	17	100

TABLE 4: Water resources and irrigation (continued)

	Water resources		Irrigation			
			irrigation potential	total area equipped for irrigation	% of equip. area irrigated by groundwater	% of equip. area actually irrigated
			thousand ha	thousand ha	%	%
	per capita m ³ /yr 1992	per capita m ³ /yr 2009	2008*	2008*	2008*	2008*
Cuba	3 554	3 385	2 700	870	45	85
Dominica						
Dominican Republic	2 805	2 144	710	270	22	100
Ecuador	39 571	29 757	3 136	863	12	71
El Salvador	4 589	4 096	200	45	7	
French Guiana	1 063 492	595 556		6	5	
Grenada				0	0	0
Guatemala	11 910	7 931	2 620	130	22	100
Guyana	332 873	320 053		150	0	
Haiti	1 890	1 422	143	92	15	72
Honduras	18 573	12 877	500	73	8	75
Jamaica	3 922	3 443	188	25	90	100
Mexico	5 224	4 081	9 766	6 320	39	88
Netherlands Antilles						
Nicaragua	45 478	34 431	700	61	70	83
Panama	58 800	42 750	187	35	4	81
Paraguay	75 252	52 980		67	10	
Peru	84 822	66 504	6 411	1 196	28	
St. Kitts & Nevis	585	462		0	50	
St. Lucia				3	0	
St. Vincent & Grenadines				1		
Suriname	291 169	234 615		51	0	100
Trinidad & Tobago	3 112	2 874	30	4	10	85
Uruguay	44 071	41 406	1 760	181	8	100
Venezuela (Boliv. Rep. of)	59 753	43 233	1 700	570	2	54
OCEANIA						
Fiji	38 374	33 509		3	10	
French Polynesia						
New Caledonia						
Papua New Guinea	183 337	119 499	36	0		
Samoa						
Solomon Islands	136 280	85 305				
Tonga						
Vanuatu						
DEVELOPED REGIONS						
NORTH AMERICA						
Bermuda						
Canada	102 233	86 177		784	7	
United States of America	11 883	9 974		24 722	59	87
ASIA & OCEANIA						
Australia	28 068	22 464		2 545	23	
Israel	370	245		225	49	
Japan	3 491	3 398		3 128	9	100
New Zealand	93 349	75 642		285	32	
EUROPE						
Albania	12 764	13 060		340	1	
Belarus	5 632	6 019		131	15	
Bosnia & Herzegovina	9 540	9 952		3	30	
Croatia	22 995	23 917		3	37	
European Union						
Iceland	653 846	537 975				
Macedonia, FYR	3 309	3 111		128	4	
Montenegro					100	
Norway	89 127	79 024		115	6	38
Republic of Moldova	2 660	3 233	1 500	312	0	
Russian Federation	30 276	31 510	29 000	4 346	20	79
Serbia					10	
Switzerland	7 850	7 020		25	22	
Ukraine	2 703	3 054	5 500	731	0	

TABLE 5: Labour force structure

	Labour force	Employ- ment in	Share of employment in			Agricultural employment by gender			
			agriculture	services	industry	female	male	female	male
	millions	millions	%	%	%	%	%	%	%
	2010*	2010*	2010*	2010*	2010*	2000*	2000*	2010*	2010*
WORLD	3 176.4								
DEVELOPING REGIONS									
AFRICA									
North Africa									
Algeria	14.8	1.6	20.7	26.0	53.1			22.3	20.4
Egypt	26.5	7.1	31.6	23.0	45.3	39.4	27.4	43.3	28.3
Libya	2.3	0.2	19.7	30.0	50.2				
Morocco	11.8	4.2	40.9	21.7	37.2	34.2	41.4	60.2	34.8
Tunisia	3.8	0.5	25.8	33.6	39.1				
Sub-Saharan Africa									
Angola	8.0	0.0	5.1	20.6	66.6				
Benin	3.5	1.1	42.7	9.5	46.2				
Botswana	1.0	0.2	29.9	15.2	54.9	17.0	21.9	24.3	35.1
Burkina Faso	7.4		84.8	3.1	12.2				
Burundi	4.5	2.4	92.2	2.2	5.6				
Cameroon	7.6	3.2	61.3	9.1	22.6			68.4	53.1
Cape Verde	0.2								
Central African Republic	2.0								
Chad	4.2	1.8	83.0	2.1	14.5	85.9	80.3		
Comoros	0.3								
Congo	1.7	0.4	35.4	20.6	42.2				
Côte d'Ivoire	7.6								
Congo, Dem. Rep.									
Djibouti	0.4								
Equatorial Guinea	0.3	0.1	76.3	4.8	17.6				
Eritrea	2.2								
Ethiopia	40.1	25.2	79.3	6.6	13.0			10.3	8.7
Gabon	0.7	0.1	24.2	11.8	64.0	60.8	25.6		
Gambia	0.7	0.3	64.7	6.1	27.8	76.5	53.7		
Ghana	10.9		57.2	13.6	29.1	50.3	59.8		
Guinea	4.7	2.6	76.0	5.9	18.1	78.8	72.9		
Guinea-Bissau	0.6								
Kenya	18.7	7.7	61.1	6.7	32.2				
Lesotho	1.0	0.4	72.3	9.3	18.3	64.9	78.2		
Liberia	1.5	0.5	48.9	9.2	41.9				
Madagascar	9.8	6.9	80.4	3.7	15.8			82.5	81.5
Malawi	6.0								
Mali	4.1	3.0	66.0	5.6	28.3			29.9	49.8
Mauritania	1.4								
Mauritius	0.6	0.0	8.7	28.2	63.1	10.6	12.9	7.6	9.9
Mozambique	10.9	6.4	80.5	3.4	16.1				
Namibia	0.8					29.1	32.8	8.2	22.7
Niger	4.8	1.9	56.9	11.1	31.1				
Nigeria	49.6	18.3	44.6	11.5	41.7				
Rwanda	5.1	3.4	78.8	3.8	16.6				
Senegal	5.2	1.1	33.7	14.8	36.1			33.0	34.1
Seychelles									
Sierra Leone	2.2	1.3	68.5	6.5	25.0			71.1	66.0
Somalia	3.5								
Sudan	13.2								
South Africa	18.9	0.7	5.1	25.0	69.8	16.1	15.3	3.4	5.4
Swaziland	0.5								
Tanzania, Utd. Rep.	21.3	12.7	76.5	4.3	19.2			78.0	71.2
Togo	2.6	1.3	54.1	6.8	37.5				
Uganda	14.1	7.2	65.6	6.0	28.4			75.7	61.8
Zambia	4.7	3.0	72.2	7.1	20.6	78.6	65.2	78.6	65.2
Zimbabwe	5.1	3.3	64.8	9.3	15.3	69.5	50.9		

TABLE 5: Labour force structure (continued)

	Labour force	Employ- ment in	Share of employment in			Agricultural employment by gender			
			agriculture	services	industry	female	male	female	male
	millions	millions	%	%	%	%	%	%	%
	2010*	2010*	2010*	2010*	2010*	2000*	2000*	2010*	2010*
ASIA									
Central Asia									
Kazakhstan	8.5	2.3	29.4	18.9	51.7	17.6	33.3	32.0	34.9
Kyrgyzstan	2.5	0.7	34.0	20.6	45.3	54.8	51.7	35.4	36.9
Tajikistan	2.8	1.4	55.5	17.9	26.2			75.1	41.8
Turkmenistan	2.4								
Uzbekistan	12.6	3.4	38.5	19.4	35.2				
East Asia									
Brunei Darussalam	0.2	0.0	1.4	21.4	77.2	1.6	2.2	0.3	2.1
Cambodia	7.5	5.0	72.2	8.6	19.2	74.9	72.4	69.7	70.8
China	786.4	306.5	39.6	27.2	33.2				
Indonesia	118.8	41.5	38.3	19.3	42.3	46.7	44.4	41.4	41.1
Korea, DPR	12.3								
Korea, Republic of	24.7	1.6	6.6	17.0	76.4	12.2	9.5	8.3	6.7
Lao, PDR	3.1	1.8	85.4	3.5	11.1	89.3	81.2		
Malaysia	12.0	1.5	13.5	27.0	59.5	14.0	20.7	10.0	17.5
Mongolia	1.4	0.4	40.0	14.9	45.0	46.5	50.6	34.8	40.6
Myanmar	26.0	11.5	62.7	12.0	25.1				
Philippines	37.6	12.3	35.2	14.6	50.3	24.5	45.3	22.5	41.9
Singapore	2.6	0.0	1.1	21.8	77.1	0.4	1.2	0.5	1.6
Thailand	39.6	15.9	41.5	19.5	38.9	47.3	49.5	40.0	43.3
Viet Nam	46.9	24.4	51.7	20.2	28.2	66.3	64.2	60.0	55.9
South Asia									
Afghanistan	10.6								
Bangladesh	70.8	22.8	48.1	14.5	37.4	76.9	53.3	68.1	41.8
Bhutan	0.3	0.2	65.4	6.4	28.2			63.0	32.6
India	459.4	191.2	51.1	22.4	26.5				
Iran (Islamic Rep.)	29.6	4.3	21.2	32.2	46.5	16.7	23.9	33.1	20.5
Maldives	0.2	0.0	11.5	24.3	60.0	5.4	17.9	7.1	14.0
Nepal	13.3	6.5	65.7	13.4	20.7	85.2	67.1	72.8	60.2
Pakistan	59.4	21.9	44.7	20.1	35.2	72.9	44.4	72.4	36.4
Sri Lanka	8.4	2.5	32.6	25.1	39.6	48.8	37.7	36.8	28.4
West Asia									
Armenia	1.6	0.5	44.2	16.8	39.0			46.1	46.3
Azerbaijan	4.4	1.6	38.6	12.9	48.5	46.1	36.4	38.0	39.5
Bahrain	0.6	0.0	0.8	15.0	84.2	0.0	2.9	0.2	1.9
Cyprus	0.6	0.0	3.8	20.8	75.3	4.8	5.6	2.8	5.6
Georgia	2.3	0.9	53.4	10.4	36.2	57.5	47.0	56.6	50.5
Iraq	7.3	1.8	23.4	18.2	58.3			32.6	14.0
Jordan	1.8		2.0	18.7	79.2	3.6	5.1	2.0	3.8
Kuwait	1.3	0.0	2.7	20.6	76.0				
Lebanon	1.4								
Occupied Palestinian Territory									
Saudi Arabia	10.1	0.3	4.1	20.4	75.5	2.0	6.7	0.2	4.7
Syrian Arab Republic	6.3	0.8	14.9	32.2	52.8	61.7	26.2	49.1	22.6
Turkey	24.6	5.4	23.7	26.2	50.1	60.5	27.0	41.7	18.2
United Arab Emirates	4.5	0.1	4.2	24.3	71.2	0.1	9.0	0.1	5.6
Yemen	6.1	2.0	54.1	11.1	34.7	87.8	43.1		
LATIN AMERICA & THE CARIBBEAN									
Argentina	19.5	0.1	1.2	23.1	75.2	0.2	1.0	0.3	1.2
Bahamas	0.2	0.0	2.9	16.0	80.8	0.9	6.7	0.2	4.2
Barbados	0.2	0.0	3.3	17.3	69.7	3.3	4.1	2.5	4.2
Belize	0.1	0.0	19.5	17.9	61.9	6.4	36.9	3.3	28.0
Bolivia (Plur. State)	4.5	1.7	36.1	19.7	44.2	35.3	37.9	36.2	42.3
Brazil	101.2	15.7	17.0	22.1	60.7	10.6	23.2	15.0	22.5
Chile	7.5	0.7	11.2	23.2	65.6	4.6	19.3	5.6	16.1
Colombia	19.0	3.1	17.9	20.0	62.0			6.4	26.7
Costa Rica	2.1	0.2	12.3	21.6	62.2	5.4	27.3	5.1	17.9

TABLE 5: Labour force structure (continued)


		Labour force	Employment in	Share of employment in			Agricultural employment by gender			
			agriculture	agriculture	services	industry	female	male	female	male
		millions 2010*	millions 2010*	% 2010*	% 2010*	% 2010*	% 2000*	% 2000*	% 2010*	% 2010*
Cuba		5.0	0.9	18.6	18.1	63.3	14.2	34.3	8.6	25.0
Dominica			0.0	21.0	19.8	58.8	16.1	34.3	8.3	29.4
Dominican Republic		4.4	0.5	14.5	21.9	59.8	2.6	22.7	2.1	21.0
Ecuador		6.2	1.8	28.7	18.8	52.5	4.4	11.1	4.3	11.0
El Salvador		2.5	0.5	20.9	20.7	58.4	3.8	33.9	4.8	29.3
French Guiana										
Grenada			0.0	13.8	23.9	58.6	9.7	16.5		
Guatemala		5.5	1.8	33.2	22.8	44.0	15.3	48.1	16.0	43.8
Guyana		0.3	0.1	21.4	24.5	50.5	16.3	33.5	7.2	27.2
Haiti		4.4	1.4	50.5	10.8	38.7	37.3	62.5		
Honduras		2.8	1.0	34.6	22.2	43.2	8.9	49.8	13.1	51.3
Jamaica		1.2	0.2	20.2	16.6	63.2	9.2	28.8	8.3	25.6
Mexico		48.5	5.8	13.1	25.5	60.6	6.9	23.2	4.4	18.9
Netherlands Antilles			0.0	1.1	17.6	81.3	0.2	2.0	0.2	2.0
Nicaragua		2.3	0.6	29.5	20.2	49.8			8.4	41.7
Panama		1.6	0.3	17.9	19.1	63.0	1.7	24.7	3.4	21.3
Paraguay		3.0	0.7	26.5	18.9	54.5	19.8	37.7	23.5	33.3
Peru		13.4	0.0	0.8	24.4	74.8	3.9	8.9	5.7	12.3
St. Kitts & Nevis			0.0	0.2	48.9	42.1				
St. Lucia		0.1	0.0	14.8	16.1	59.4	14.3	26.1	9.8	18.8
St. Vincent & Grenadines		0.1	0.0	15.4	19.6	60.6	13.9	30.6	7.6	20.2
Suriname		0.2	0.0	8.0	23.0	64.3	1.8	8.4	4.5	9.9
Trinidad & Tobago		0.7	0.0	3.8	32.2	63.8	2.9	9.8	1.7	6.1
Uruguay		1.7	0.2	11.0	21.7	67.2			4.8	15.6
Venezuela (Boliv. Rep. of)		13.2	1.0	8.5	23.0	68.3	1.5	15.1	1.8	13.1
OCEANIA										
Fiji		0.4								
French Polynesia		0.1	0.0	9.4	17.9	72.7			5.3	12.0
New Caledonia		0.1	0.0	2.7	22.4	43.0	4.1	9.2		
Papua New Guinea		3.0	1.7	72.3	3.6	22.7				
Samoa		0.1	0.0	39.9	19.7	38.7				
Solomon Islands		0.1								
Tonga		0.0	0.0	31.8	30.6	37.5			4.6	50.6
Vanuatu		0.1	0.1	60.5	7.0	31.1				
DEVELOPED REGIONS										
NORTH AMERICA										
Bermuda			0.0	1.7	12.1	86.2	0.2	2.4	0.2	2.4
Canada		19.1	0.4	2.4	21.5	76.5	1.9	4.5	1.5	3.4
United States of America		159.4	2.2	1.6	16.7	81.2	1.4	3.5	0.7	2.0
ASIA & OCEANIA										
Australia		11.6	0.4	3.3	21.1	75.5	3.5	6.1	2.4	4.3
Israel		3.1	0.0	1.7	20.4	77.1	0.9	3.2	0.6	2.5
Japan		65.7	2.3	3.7	25.3	69.7	5.5	4.7	4.3	4.2
New Zealand		2.3	0.1	6.6	20.9	72.5	5.8	11.0	5.0	9.0
EUROPE										
Albania		1.5		44.1	19.9	36.0				
Belarus		4.9	1.0	21.2	34.9	40.0			8.6	15.3
Bosnia & Herzegovina		2.0								
Croatia		2.0	0.2	14.9	27.3	57.6	15.3	13.9	15.1	12.9
European Union		242.0					7.3	8.2	3.9	5.3
Iceland		0.2	0.0	5.5	17.9	75.2	4.4	11.7	2.5	8.8
Macedonia, FYR		0.9	0.1	19.7	31.3	49.1			17.3	18.9
Montenegro			0.0	8.6	19.2	72.1			1.0	2.0
Norway		2.6	0.1	2.5	19.7	77.6	2.3	6.0	1.3	4.1
Republic of Moldova		1.5	0.4	31.1	19.7	49.3	49.8	52.0	30.1	35.5
Russian Federation		75.8	6.5	9.7	27.9	62.3	11.7	17.1	6.9	11.0
Serbia			0.6	24.0	25.1	50.9			19.5	21.7
Switzerland		4.4	0.1	3.3	21.1	70.9	3.7	5.2	2.8	4.8
Ukraine		23.0	3.3	15.8	23.4	60.7				

TABLE 6: Employment

	Employment to population ratio			Labour participation rate		Children	Unemployment	
	age 15+ female	age 15+ male	age 15+ total	age 15+ population	age 15+	economically active	female	total
				female	male	age 7-14		
	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*
WORLD	48.6	72.5	60.4	51.8				6.6
DEVELOPING REGIONS								
AFRICA								
North Africa								
Algeria	32.1	66.6	49.4	37.2	79.6		10.1	11.3
Egypt	19.3	67.2	43.2	22.4	75.3	7.9	22.9	9.4
Libya	23.5	71.9	48.6	24.7	78.9			
Morocco	22.0	71.9	46.1	26.2	80.1	13.2	10.5	10.0
Tunisia	21.2	60.9	41.0	25.6	70.6		17.3	14.2
Sub-Saharan Africa								
Angola	70.3	82.8	76.4	74.5	88.4	30.1		
Benin	58.2	85.0	71.6	67.4	77.9	74.4	0.4	0.7
Botswana	38.5	53.6	46.0	72.3	80.9		19.9	17.6
Burkina Faso	76.7	87.3	81.9	78.2	90.8	42.1	2.6	2.4
Burundi	84.1	84.3	84.2	91.0	87.5	11.7	0.3	0.5
Cameroon	49.4	69.0	59.1	53.5	80.7	43.4	3.3	2.9
Cape Verde	43.9	69.4	55.7	53.5	81.3		22.6	23.0
Central African Republic	63.8	81.9	72.6	71.6	86.7	67.0		
Chad	67.1	72.3	69.7	62.7	78.2	60.4	0.3	0.7
Comoros	60.3	78.5	69.4	73.7	85.4		16.9	20.0
Congo	52.6	76.8	64.6	62.9	82.6	30.1		
Côte d'Ivoire	38.3	81.2	60.4	50.8	82.1	45.7		4.1
Congo, Dem. Rep.	50.8	83.3	66.7	56.5		39.8		
Djibouti				61.5	78.7		68.6	59.5
Equatorial Guinea	40.3	85.8	62.6	39.7	92.0		18.5	24.2
Eritrea	52.2	80.1	65.6	62.5	83.4		6.3	14.5
Ethiopia	73.1	88.3	80.6	80.7	90.3	56.0	29.9	20.5
Gabon	52.1	64.4	58.2	70.0	81.1		16.1	17.8
Gambia	66.5	78.0	72.1	70.6	85.2	43.5		
Ghana	64.2	66.1	65.2	73.8	75.2	48.9	10.7	10.4
Guinea	77.1	85.3	81.2	79.2	89.2	48.3	1.7	3.1
Guinea-Bissau	50.1	84.5	66.9	59.6	83.8	50.5		
Kenya	67.3	78.7	73.0	76.4	88.1	37.7		9.8
Lesotho	47.9	61.6	54.1	70.8	77.7	2.6	33.1	27.3
Liberia	53.0	79.4	65.9	66.6	75.8	37.4	4.2	5.5
Madagascar	79.8	86.9	83.3	84.2	88.7	26.0	3.5	2.6
Malawi	69.3	75.1	72.1	75.0	78.8	40.3	10.0	7.8
Mali	34.9	59.9	47.0	37.6	67.0	23.0	10.9	8.8
Mauritania	42.4	51.9	47.2	59.0	81.0		41.2	33.0
Mauritius	36.1	72.2	53.8	40.8	74.8		12.3	7.3
Mozambique	83.0	72.3	77.9	84.8	86.9	1.8	1.3	2.2
Namibia	37.7	48.5	42.9	51.8		15.4	43.0	37.6
Niger	37.8	82.6	59.8	38.9	87.5	47.1	0.9	1.5
Nigeria	37.4	66.5	51.8	39.2	73.4		4.4	3.9
Rwanda	81.1	79.5	80.3	86.7	85.1	7.5	0.4	0.6
Senegal	56.3	76.1	66.0	64.8	88.6	18.5	13.6	10.0
Seychelles							4.8	5.5
Sierra Leone	65.4	64.2	64.8	65.4	67.5	14.9	2.3	3.4
Somalia	51.2	82.4	66.5	56.5	84.7	43.5		
Sudan	28.1	66.5	47.3	30.8	73.9	19.1		
South Africa	34.6	48.1	41.1	47.0	63.4	27.7	25.9	23.8
Swaziland	46.4	54.8	50.4	53.1	74.9	11.2	26.0	22.5
Tanzania, Utd. Rep.	75.8	80.3	78.0	86.3	90.6	31.1	5.8	4.3
Togo	48.7	81.1	64.6	63.6	85.7	38.7		
Uganda	78.1	87.8	83.0	78.3	90.6	38.2	3.9	3.2
Zambia	53.9	68.7	61.2	59.5	79.2	34.4	11.3	12.9
Zimbabwe	57.4	73.3	64.9	60.0	74.3	14.3	4.1	4.2

TABLE 6: Employment (continued)

	Employment to population ratio			Labour participation rate		Children	Unemployment	
	age 15+ female	age 15+ male	age 15+ total	age 15+ population	age 15+ male	economically active	female	total
				female		age 7-14		
	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*
ASIA								
Central Asia								
Kazakhstan	57.7	70.3	63.5	65.7	76.3	3.6	7.5	6.6
Kyrgyzstan	47.9	69.4	58.3	54.8	79.1	5.2	9.4	8.2
Tajikistan	50.7	60.4	55.4	57.0	77.7	8.9		
Turkmenistan	53.7	63.2	58.3	62.4	74.0			
Uzbekistan	52.5	62.7	57.5	58.4	71.0	5.1		
East Asia								
Brunei Darussalam	55.4	70.7	63.3	59.7	74.8		6.7	4.7
Cambodia	69.1	80.6	74.6	73.6	85.6	48.9	2.0	1.7
China				67.4	79.7			4.3
Indonesia	44.0	80.0	61.8	52.0	86.0	8.9	8.5	7.9
Korea, DPR	55.8	72.6	63.9	55.1	77.5			
Korea, Republic of	47.3	69.5	58.1	50.1	72.0		3.0	3.6
Lao, PDR	77.3	78.2	77.7	77.7	78.9		1.4	1.4
Malaysia	43.2	77.4	60.5	44.4	79.2		3.7	3.7
Mongolia	50.6	52.7	51.6	67.8	78.2	10.1	3.6	3.3
Myanmar	66.5	83.0	74.4	63.1	85.1		8.8	6.0
Philippines	46.0	74.2	60.1	49.2	78.5	13.3	7.4	7.5
Singapore	50.9	72.4	61.6	53.7	75.6		6.5	5.9
Thailand	64.5	78.8	71.5	65.5	80.7	15.1	1.1	1.2
Viet Nam	65.3	73.8	69.4	68.0	76.0	21.3	2.4	2.4
South Asia								
Afghanistan	25.1	83.0	55.2	33.1	84.5		9.4	8.5
Bangladesh	53.9	81.6	67.9	58.7	82.5	16.2	7.0	4.2
Bhutan	42.6	77.0	61.1	53.4	70.6		3.3	3.7
India	32.4	77.4	55.6	32.8	81.1	4.2	5.1	4.4
Iran (Islamic Rep.)	28.0	69.1	48.9	31.9	73.0		16.8	10.5
Maldives	42.9	71.4	57.3	57.1	77.0		23.8	14.4
Nepal	54.7	68.7	61.5	63.3	80.3	47.2	10.7	8.8
Pakistan	19.8	81.3	51.5	21.7	84.9		8.7	5.0
Sri Lanka	39.1	71.2	54.7	34.2	75.1	17.0	8.1	7.6
West Asia								
Armenia	32.1	45.6	38.1	59.6	74.6		35.0	28.6
Azerbaijan	55.9	64.5	60.0	59.5	66.8	5.2	5.0	6.0
Bahrain	31.6	80.8	61.0	32.4	85.0		10.5	5.5
Cyprus	49.7	66.1	57.5	54.3	70.8		5.5	5.2
Georgia	47.2	62.7	54.3	55.1	73.8	31.8	16.1	16.5
Iraq	12.5	61.9	37.1	13.8	68.9	14.7	22.5	17.5
Jordan	13.3	61.2	37.9	23.3	73.9		24.1	12.9
Kuwait	41.8	79.5	65.3	45.4	82.5		1.8	1.9
Lebanon	22.6	70.9	45.9	22.3	71.5		10.1	9.0
Occupied Palestinian Territory								
Saudi Arabia	18.0	75.6	47.2	17.4	79.8		15.9	5.4
Syrian Arab Republic	16.9	72.5	44.8	21.1	79.5	6.6	25.7	8.4
Turkey	21.7	63.0	42.3	24.0	69.6	2.6	14.3	14.0
United Arab Emirates	38.0	91.3	75.9	41.9	92.1		12.0	4.0
Yemen	20.4	57.5	39.0	19.9		18.3	40.9	15.0
LATIN AMERICA & THE CARIBBEAN								
Argentina	43.9	70.3	56.5	52.4	78.4	12.9	9.8	8.7
Bahamas	59.4	71.9	65.4	68.3	78.7		14.0	14.2
Barbados	57.1	72.6	64.4	65.8	78.0		9.4	8.1
Belize	38.8	74.8	56.9	47.4	80.6		13.0	8.2
Bolivia (Plur. State)	62.2	79.5	70.7	62.1	82.0	32.1	6.0	5.2
Brazil	52.8	75.8	63.9	60.1	81.9	5.2	11.0	8.3
Chile	34.9	65.2	49.6	41.8	73.4	4.1	10.7	9.7
Colombia	53.5	71.2	62.0	40.7	77.6	3.9	15.8	12.0
Costa Rica	39.1	74.9	57.2	45.1	79.9	5.7	6.2	4.9

TABLE 6: Employment (continued)


	Employment to population ratio			Labour participation rate		Children	Unemployment	
	age 15+ female	age 15+ male	age 15+ total	age 15+ population	age 15+ male	economically active	female	total
				female	male	age 7-14		
	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*	% 2010*
Cuba	42.7	66.2	54.4	40.9	66.9		2.0	1.6
Dominica							9.5	11.0
Dominican Republic	41.8	64.8	53.3	50.5	79.8	5.8	22.8	14.2
Ecuador	46.7	74.5	60.5	47.1	77.7	14.3	8.4	6.5
El Salvador	42.6	68.4	54.3	45.9	76.7	7.1	3.6	5.9
French Guiana								
Grenada							10.9	10.2
Guatemala	44.1	82.8	62.4	48.1	87.9	18.2	2.4	1.8
Guyana	41.5	73.4	57.8	44.7	81.2		15.3	11.8
Haiti	35.0	77.2	55.4	57.5	82.9	33.4	8.3	7.2
Honduras	34.4	78.8	56.3	40.1	80.2	8.7	2.9	2.9
Jamaica	45.1	68.4	56.2	56.1	74.0	9.8	14.8	11.4
Mexico	39.1	76.2	57.1	43.2	80.6	12.2	4.8	5.2
Netherlands Antilles	45.3	59.3	51.6	57.0			12.5	10.3
Nicaragua	36.0	82.0	58.3	47.1	78.4	10.1	5.1	5.0
Panama	42.6	74.7	58.7	48.4	80.7	8.9	7.9	5.8
Paraguay	65.1	80.5	72.8	57.0	86.6	15.3	7.5	5.6
Peru	60.5	77.1	68.8	58.2	76.0	42.2	8.3	6.8
St. Kitts & Nevis							5.9	5.1
St. Lucia				51.0	75.8		25.0	21.0
St. Vincent & Grenadines				56.0	78.8		21.4	20.2
Suriname	32.4	60.8	46.5	38.5	66.0		13.7	9.5
Trinidad & Tobago	49.3	73.1	60.7	55.1	78.1	3.9	6.2	5.2
Uruguay	45.1	69.3	56.4	53.8	75.5		9.7	7.3
Venezuela (Boliv. Rep. of)	47.2	75.6	61.3	51.7	80.3	5.1	8.1	7.6
OCEANIA								
Fiji	36.6	75.7	56.3	38.7	78.4		12.9	8.6
French Polynesia				48.0	66.1		13.4	11.7
New Caledonia				44.1	69.9		22.2	18.6
Papua New Guinea	68.5	72.0	70.2	71.6	74.2		1.3	7.7
Samoa				37.9	75.4		6.2	5.0
Solomon Islands	50.9	77.3	64.5	24.2	50.0		33.7	31.9
Tonga				54.6	74.7		7.4	1.1
Vanuatu				79.3	88.3			
DEVELOPED REGIONS								
NORTH AMERICA								
Bermuda							2.3	2.7
Canada	56.4	66.4	61.2	62.7	73.0		7.0	8.3
United States of America	52.9	66.0	59.2	58.4	71.9		8.1	9.3
ASIA & OCEANIA								
Australia	52.7	66.5	59.4	58.4	72.2		5.4	5.6
Israel	45.4	55.8	50.4	51.9	62.5		7.7	7.6
Japan	43.2	66.4	54.2	47.9	71.8		4.7	5.0
New Zealand	56.0	69.9	62.7	61.8	75.7		6.1	6.1
EUROPE								
Albania	34.4	59.0	46.2	49.3	70.4	22.0	28.4	12.7
Belarus	47.0	58.8	52.3	54.8	66.5	11.7		
Bosnia & Herzegovina	35.7	48.0	41.5	54.9	68.3	10.6	27.1	23.9
Croatia	38.1	54.8	43.3	46.3	60.3		10.2	9.1
European Union	43.1	58.5	50.4	49.7			8.8	8.9
Iceland	66.5	75.8	71.2	71.7	83.1		5.7	7.2
Macedonia, FYR	26.5	43.3	34.8	42.9	65.2	11.8	33.0	32.2
Montenegro							35.5	30.3
Norway	57.7	67.1	62.3	63.0	71.0		2.6	3.1
Republic of Moldova	43.7	45.8	44.7	46.5	53.1	33.5	4.9	6.4
Russian Federation	51.3	63.5	56.7	57.5	69.2		7.9	8.2
Serbia			44.4			6.9	18.4	16.6
Switzerland	53.6	69.4	61.2	60.6	73.7		4.5	4.1
Ukraine	48.3	60.0	53.5	52.0	65.4	17.3	6.1	8.8

TABLE 7: Capital and investment in agriculture: total

	Agricultural capital stock						
					change	growth	
	Constant 2005 US\$ million 1980	Constant 2005 US\$ million 1990	Constant 2005 US\$ million 2000	Constant 2005 US\$ million 2007	% of GDP 2006 - 2007	% p.a. 1990-09	% p.a. 2000-07
WORLD	3 740 211	4 166 338	4 889 201	5 077 178	0.0	1.7	0.5
DEVELOPING REGIONS	1 995 041	2 347 083	2 814 936	3 061 589	0.2	1.9	1.2
AFRICA	321 495	367 513	461 851	519 668	0.7	2.5	1.7
North Africa	69 452	80 046	91 659	97 509	0.1	1.3	0.9
Algeria	9 154	11 782	12 997	14 080	0.1	1.1	1.1
Egypt	22 483	25 714	32 377	35 991	0.3	2.6	1.5
Libya	4 612	7 005	6 944	7 308	0.1	0.1	0.7
Morocco	22 984	23 654	25 436	25 486	-0.1	0.1	0.0
Tunisia	6 813	7 932	9 429	9 962	0.3	1.8	0.8
Sub-Saharan Africa	252 043	287 467	370 192	422 159	1.0	2.8	1.9
Angola	4 171	4 290	5 055	5 351	0.1	1.5	0.8
Benin	2 838	3 001	3 295	3 629	0.8	1.1	1.4
Botswana	1 972	2 259	2 405	2 230	0.3	0.5	-1.1
Burkina Faso	3 294	5 103	7 451	9 931	6.0	3.8	4.2
Burundi	1 123	1 132	1 000	1 421	10.1	-1.5	5.1
Cameroon	4 600	5 570	6 260	6 413	0.0	0.7	0.3
Cape Verde	1 435	1 794	1 815	1 888	0.8	0.2	0.6
Central African Republic	1 220	1 639	2 108	2 409	1.8	2.6	1.9
Chad	4 261	4 299	5 585	6 912	5.0	2.7	3.1
Comoros	164	201	275	301	0.0	3.4	1.3
Congo	1 882	2 270	1 742	1 728	0.0	-2.9	-0.1
Côte d'Ivoire	1 546	1 983	2 323	2 261	-1.1	1.6	-0.4
Congo, Dem. Rep.	3 604	4 316	4 095	4 072	0.1	-0.5	-0.1
Djibouti	4 176	6 299	6 891	7 589	0.1	1.0	1.4
Equatorial Guinea	129	132	135	136	0.0	0.2	0.1
Eritrea			3 449	3 285	1.4		-0.7
Ethiopia			31 594	47 083	14.2		5.9
Gabon	2 420	2 430	2 724	3 131	2.0	1.3	2.0
Gambia	359	385	421	497	1.1	0.9	2.4
Ghana	2 266	2 950	3 687	4 323	0.9	2.3	2.3
Guinea	2 699	2 645	4 526	6 411	6.6	5.4	5.1
Guinea-Bissau	2 497	2 766	3 253	3 484	5.2	1.7	1.0
Kenya	11 819	16 468	15 134	17 304	1.7	-0.2	1.9
Lesotho	1 948	2 098	2 428	2 534	5.0	1.7	0.6
Liberia	278	294	313	345	1.8	0.6	1.4
Madagascar	9 993	10 104	10 095	9 807	0.5	0.1	-0.4
Malawi	5 484	7 785	8 663	9 243	7.2	1.0	0.9
Mali	6 650	6 114	8 045	10 650	8.2	2.7	4.1
Mauritania	2 693	3 156	5 190	5 576	1.1	4.9	1.0
Mauritius	436	455	432	431	0.1	-0.6	-0.0
Mozambique	2 342	2 865	3 630	4 056	3.3	2.6	1.6
Namibia	3 588	3 584	3 862	3 945	0.8	0.2	0.3
Niger	8 342	7 142	10 154	12 606	9.4	3.6	3.1
Nigeria	25 591	33 091	42 132	50 899	0.5	2.4	2.7
Rwanda	1 090	1 153	1 248	1 813	0.8	0.9	5.5
Senegal	6 697	7 994	9 296	9 963	0.9	1.4	1.0
Seychelles	564	858	978	1 108	0.2	0.9	1.8
Sierra Leone	651	852	971	1 725	0.1	1.4	8.6
Somalia	10 525	11 701	11 363	11 413		-0.5	0.1
Sudan	16 975	19 516	34 773	38 968	0.4	6.3	1.6
South Africa	42 867	42 810	43 349	42 667	0.1	0.2	-0.2
Swaziland	8 900	9 450	9 713	9 801	-0.2	0.3	0.1
Tanzania, Utd. Rep.	12 571	14 019	16 720	17 905	0.5	2.1	1.0
Togo	2 382	3 021	3 358	3 778	2.7	0.8	1.7
Uganda	3 597	4 664	5 704	7 010	1.6	2.0	3.0
Zambia	3 577	4 669	4 518	4 997	0.4	0.4	1.4
Zimbabwe	7 689	9 529	9 037	8 789	0.5	-0.1	-0.4

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

	Agricultural capital stock						
					change	growth	
	Constant 2005 US\$ million 1980	Constant 2005 US\$ million 1990	Constant 2005 US\$ million 2000	Constant 2005 US\$ million 2007	% of GDP 2006 - 2007	% p.a. 1990-09	% p.a. 2000-07
ASIA	1 051 243	1 299 492	1 634 679	1 777 559	0.2	2.4	1.2
Central Asia			95 066	103 149	0.1		1.2
Kazakhstan			43 093	46 002	0.3		0.9
Kyrgyzstan			6 260	6 216	1.1		-0.1
Tajikistan			5 700	6 295	2.5		1.4
Turkmenistan			16 496	18 639	-0.8		1.8
Uzbekistan			23 517	25 997	0.3		1.4
East Asia	470 423	587 118	699 660	761 139	0.1	1.7	1.2
Brunei Darussalam	19	16	37	55	0.0	8.0	5.8
Cambodia	1 610	3 595	4 150	4 600	-0.4	1.4	1.5
China	244 926	296 964	350 665	366 322	-0.0	1.5	0.6
Indonesia	83 923	98 265	112 546	128 256	0.5	1.5	1.9
Korea, DPR	28 025	40 331	44 071	50 181		0.9	1.9
Korea, Republic of	4 892	7 973	12 936	15 043	0.0	5.5	2.2
Lao, PDR	7 675	8 662	10 520	12 681	2.6	1.6	2.7
Malaysia	3 320	4 489	5 029	5 475	0.1	1.2	1.2
Mongolia	15 165	18 385	22 337	22 683	30.3	2.1	0.2
Myanmar	11 395	12 279	14 588	17 097	2.8	1.5	2.3
Philippines	10 338	10 879	12 784	14 941	0.4	1.7	2.3
Singapore							
Thailand	25 254	27 415	26 173	28 224	0.2	-0.1	1.1
Viet Nam	23 788	34 322	49 400	54 915	0.8	3.9	1.5
South Asia	440 534	528 054	613 677	674 902	0.7	1.4	1.4
Afghanistan	26 818	27 213	30 437	30 398	-2.7	1.5	-0.0
Bangladesh	42 025	48 478	52 044	58 888	1.6	0.7	1.8
Bhutan	3 116	4 237	5 447	7 197	20.7	2.7	4.1
India	174 930	198 450	216 355	238 479	0.5	0.8	1.4
Iran (Islamic Rep.)	46 136	67 143	74 309	82 642	0.4	1.0	1.5
Maldives	16 145	20 257	28 024	34 024	75.3	3.6	2.8
Nepal	7 275	9 579	12 529	14 586	2.9	2.7	2.2
Pakistan	40 970	51 886	62 547	75 581	1.2	1.9	2.7
Sri Lanka	83 119	100 811	131 985	133 107	1.4	2.2	0.1
West Asia	140 286	184 320	226 276	238 369	0.1	2.1	0.7
Armenia			2 656	2 879	0.5		1.2
Azerbaijan			12 418	12 984	1.4		0.6
Bahrain	24	40	57	57	0.0	4.4	0.0
Cyprus	814	954	1 091	1 141	-0.0	1.3	0.6
Georgia			6 056	5 410	0.5		-1.6
Iraq	18 143	30 847	30 642	31 127	0.5	-0.1	0.2
Jordan	793	1 155	1 387	1 491	-0.1	1.6	1.0
Kuwait	130	129	235	307	-0.0	6.2	3.9
Lebanon	2 487	2 600	2 748	2 774	-0.0	0.4	0.1
Occupied Palestinian Territory	363	421	640	675		4.2	0.8
Saudi Arabia	9 053	21 277	23 126	23 239	-0.0	0.9	0.1
Syrian Arab Republic	10 919	14 167	21 163	25 030	0.5	4.4	2.4
Turkey	94 817	108 747	117 001	123 247	0.1	0.5	0.7
United Arab Emirates	769	1 031	3 309	3 670	-0.0	13.6	1.5
Yemen	2 060	2 854	3 365	3 980	0.5	1.6	2.4
LATIN AMERICA & THE CARIBBEAN	583 788	637 968	669 899	712 608	0.1	0.5	0.9
Argentina	70 660	71 492	69 746	73 735	0.2	-0.2	0.8
Bahamas	29	23	27	29	0.0	1.8	1.0
Barbados	93	125	107	84	0.0	-1.1	-3.4
Belize	1 591	1 150	1 460	1 702	2.8	2.5	2.2
Bolivia (Plur. State)	8 207	8 732	8 909	10 446	1.5	0.0	2.3
Brazil	137 989	163 965	182 098	203 683	-0.1	1.0	1.6
Chile	17 883	18 619	21 986	21 946	-0.2	1.9	-0.0
Colombia	88 645	93 703	96 805	101 641	1.2	0.3	0.7
Costa Rica	2 088	2 825	2 548	2 608	0.2	-1.5	0.3

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

	Agricultural capital stock						
					change	growth	
	Constant 2005 US\$ million 1980	Constant 2005 US\$ million 1990	Constant 2005 US\$ million 2000	Constant 2005 US\$ million 2007	% of GDP 2006 - 2007	% p.a. 1990-09	% p.a. 2000-07
Cuba	27 790	26 991	24 344	23 251		-0.6	-0.7
Dominica	51	69	73	81	0.0	0.3	1.5
Dominican Republic	7 401	8 780	9 036	10 266	1.9	0.5	1.8
Ecuador	14 057	18 501	19 139	18 362	-1.3	0.8	-0.6
El Salvador	2 517	2 586	2 575	2 768	0.2	-0.0	1.0
French Guiana	20	43	42	40		-0.8	-0.7
Grenada	40	33	32	36	0.0	-0.3	1.7
Guatemala	5 258	5 638	6 706	9 165	2.2	1.6	4.6
Guyana	973	1 001	1 027	1 023	0.6	0.4	-0.1
Haiti	3 918	3 666	4 786	4 860	1.6	2.3	0.2
Honduras	3 600	4 157	3 661	4 265	0.2	-0.8	2.2
Jamaica	1 736	2 044	2 144	2 241	-0.1	0.5	0.6
Mexico	98 776	110 154	116 094	117 184	0.1	0.5	0.1
Netherlands Antilles	13	10	10	10		-1.2	0.0
Nicaragua	4 231	4 206	5 738	5 994	-0.4	3.2	0.6
Panama	2 966	3 075	3 206	3 525	-0.1	0.5	1.4
Paraguay	4 676	6 599	7 536	8 318	1.8	1.4	1.4
Peru	19 148	19 548	22 070	23 349	0.2	1.2	0.8
St. Kitts & Nevis	42	25	21	16	0.0	-1.4	-3.8
St. Lucia	53	64	66	55	-0.2	0.5	-2.6
St. Vincent & Grenadines	32	34	28	27	0.0	-1.4	-0.5
Suriname	566	711	749	661	0.2	0.6	-1.8
Trinidad & Tobago	427	358	294	310	0.0	-1.9	0.8
Uruguay	24 426	21 435	22 124	24 971	-1.3	0.5	1.7
Venezuela (Boliv. Rep. of)	20 829	25 564	27 528	28 954	0.0	0.7	0.7
OCEANIA	38 515	42 110	48 507	51 754	6.0	1.5	0.9
Fiji	32 274	34 707	39 940	42 988	19.4	1.5	1.1
French Polynesia	799	886	966	960		0.9	-0.1
New Caledonia	536	595	595	624		0.0	0.7
Papua New Guinea	609	661	907	1 043	0.0	3.6	2.0
Samoa	2 742	3 094	3 475	3 386	0.2	1.1	-0.4
Solomon Islands	183	124	127	138	0.2	0.3	1.2
Tonga	240	265	282	301	1.2	0.7	0.9
Vanuatu	126	141	141	161	2.1	1.1	1.9
DEVELOPED REGIONS	1 745 170	1 819 255	2 074 265	2 015 589	-0.0	1.6	-0.4
NORTH AMERICA	671 068	649 751	660 355	673 244	0.0	0.2	0.3
Bermuda							
Canada	88 391	91 793	91 089	94 170	-0.0	-0.0	0.5
United States of America	582 672	557 953	569 261	579 069	0.0	0.2	0.2
ASIA & OCEANIA	411 261	477 868	446 450	435 964	-0.1	-0.5	-0.3
Australia	112 505	111 469	115 218	111 963	-0.4	0.0	-0.4
Israel	2 297	2 355	2 357	2 377	0.0	-0.1	0.1
Japan	236 526	307 544	274 751	265 379	-0.0	-0.8	-0.5
New Zealand	59 933	56 500	54 124	56 245	0.4	-0.4	0.6
EUROPE	662 841	691 636	967 460	906 381	-0.0	3.9	-0.9
Albania	5 072	5 743	5 018	5 033	-0.6	-1.5	0.0
Belarus			16 773	14 322	-0.3		-2.2
Bosnia & Herzegovina			1 891	1 931	-0.4		0.3
Croatia			1 713	2 015	-0.1		2.3
European Union	640 569	667 926	660 631	642 666	-0.0	-0.2	-0.4
Iceland	1 006	954	809	935	0.1	-1.6	2.1
Macedonia, FYR			1 297	1 447	-0.4		1.6
Montenegro							
Norway	8 226	9 076	8 467	8 269	-0.0	-0.6	-0.3
Republic of Moldova			5 392	4 705	-0.4		-1.9
Russian Federation			185 688	161 586	-0.0		-2.0
Serbia							
Switzerland	8 769	8 877	8 112	7 982	0.0	-0.9	-0.2
Ukraine			64 497	56 618	-0.3		-1.8

TABLE 8: Capital and investment in agriculture: components

	Share of components in capital stock					
	land		livestock			machinery & equipment
	development	plantation	fixed assets	inventories	structure	
	%	%	%	%	%	%
	2007	2007	2007	2007	2007	2007
WORLD	31.7	4.0	36.3	6.4	5.5	19.3
DEVELOPING REGIONS	35.5	3.8	40.2	7.1	5.4	14.7
AFRICA	31.4	3.2	45.9	8.1	6.0	4.4
North Africa	59.1	5.6	20.3	3.6	1.7	6.4
Algeria	42.5	6.8	29.7	5.2	1.4	14.3
Egypt	73.8	2.2	15.4	2.7	2.3	3.6
Libya	65.3	5.5	15.9	2.8	0.5	10.0
Morocco	63.2	4.8	23.4	4.1	1.2	3.3
Tunisia	41.0	25.2	19.8	3.5	0.9	9.5
Sub-Saharan Africa	25.0	2.8	50.8	9.0	6.8	4.0
Angola	26.3	0.0	52.9	9.3	7.1	4.3
Benin	43.7	9.2	34.8	6.1	4.7	1.4
Botswana	5.5	15.7	55.1	9.7	10.1	3.8
Burkina Faso	10.0	0.0	67.1	11.8	8.6	2.4
Burundi	19.8	3.1	55.4	9.8	3.8	8.0
Cameroon	26.7	6.3	47.9	8.5	8.7	1.9
Cape Verde	11.7	79.6	7.0	1.2	0.2	0.1
Central African Republic	16.4	0.1	57.9	10.2	13.7	1.6
Chad	17.1	1.2	59.1	10.4	10.7	1.3
Comoros	72.4	11.3	9.6	1.7	1.7	2.3
Congo	16.0	64.1	14.7	2.5	0.7	1.8
Côte d'Ivoire	37.2	2.6	39.5	6.9	5.4	8.2
Congo, Dem. Rep.	44.8	1.4	33.9	6.0	2.4	11.4
Djibouti	8.4	86.7	3.7	0.6	0.4	0.1
Equatorial Guinea	83.8	0.0	8.8	1.5	0.0	4.4
Eritrea	10.7	5.0	65.5	11.5	5.7	1.6
Ethiopia	4.3	0.0	71.8	12.7	9.2	2.0
Gabon	59.2	35.9	3.2	0.5	0.1	0.9
Gambia	17.9	24.5	38.6	6.6	8.0	3.6
Ghana	23.5	0.1	57.3	10.1	3.7	5.3
Guinea	7.0	26.4	50.0	8.8	5.8	1.9
Guinea-Bissau	35.8	40.4	18.6	3.3	1.5	0.4
Kenya	12.5	2.1	63.2	11.1	7.4	3.6
Lesotho	35.8	27.3	27.6	4.9	2.9	1.5
Liberia	42.9	1.4	38.0	6.7	1.4	9.0
Madagascar	9.3	2.6	65.5	11.6	8.5	2.6
Malawi	73.5	6.4	14.5	2.6	1.1	2.0
Mali	17.9	1.2	61.1	10.8	7.7	1.4
Mauritania	27.3	2.5	55.1	9.7	4.9	0.5
Mauritius	74.0	2.8	15.5	2.6	0.5	3.9
Mozambique	30.8	0.1	47.4	8.4	3.9	9.3
Namibia	33.8	9.7	41.3	7.3	6.0	1.8
Niger	25.6	0.1	56.2	9.9	7.3	1.0
Nigeria	41.9	0.2	43.8	7.7	3.7	2.8
Rwanda	12.9	0.1	63.6	11.2	5.5	6.6
Senegal	7.0	0.4	74.6	13.2	3.6	1.3
Seychelles	92.2	7.2	0.3	0.0	0.0	0.1
Sierra Leone	40.9	0.2	44.5	7.8	4.1	2.3
Somalia	7.6	2.4	68.9	12.2	8.1	0.8
Sudan	14.0	0.1	62.8	11.1	10.6	1.4
South Africa	34.0	8.1	29.2	5.1	17.9	5.7
Swaziland	92.1	2.9	3.7	0.7	0.5	0.1
Tanzania, Utd. Rep.	26.1	0.1	52.1	9.2	9.2	3.1
Togo	41.8	32.0	20.3	3.6	1.1	1.2
Uganda	15.5	1.8	57.1	10.1	9.8	5.6
Zambia	19.0	0.0	60.7	10.7	5.2	4.3
Zimbabwe	7.4	0.1	69.8	12.3	5.6	4.7

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

	Share of components in capital stock					
	land		livestock			machinery & equipment
	development	plantation	fixed assets	inventories	structure	
	%	%	%	%	%	%
	2007	2007	2007	2007	2007	2007
ASIA	39.7	3.3	38.1	6.7	5.2	18.4
Central Asia	60.3	2.5	22.5	4.0	2.0	13.2
Kazakhstan	74.0	1.0	14.8	2.6	1.4	6.3
Kyrgyzstan	63.5	3.2	18.7	3.3	2.1	9.2
Tajikistan	55.9	6.2	26.8	4.7	2.2	4.1
Turkmenistan	48.5	1.3	20.0	3.5	1.0	25.7
Uzbekistan	44.9	2.6	27.2	4.8	2.5	18.0
East Asia	25.0	5.9	41.4	7.3	2.8	19.4
Brunei Darussalam	3.6	0.0	80.0	12.7	0.0	0.0
Cambodia	36.2	0.3	43.0	7.6	7.8	5.0
China	15.3	0.1	49.5	8.7	3.0	23.4
Indonesia	76.6	0.2	12.6	2.2	1.0	7.4
Korea, DPR	2.4	91.0	3.0	0.5	0.2	2.9
Korea, Republic of	5.3	4.5	36.9	6.5	1.5	45.2
Lao, PDR	75.1	4.4	15.4	2.7	1.7	0.6
Malaysia	49.4	4.6	29.8	5.3	1.5	9.4
Mongolia	3.6	49.5	37.5	6.6	2.5	0.3
Myanmar	29.4	0.0	46.4	8.2	8.0	8.0
Philippines	15.5	23.3	44.6	7.9	3.8	4.9
Singapore						
Thailand	20.7	43.2	23.2	4.1	2.5	6.3
Viet Nam	11.1	43.1	20.9	3.7	1.6	19.6
South Asia	44.7	0.2	37.2	6.6	8.8	18.3
Afghanistan	80.3	0.4	15.1	2.7	1.5	0.0
Bangladesh	7.5	0.0	73.1	12.9	4.6	1.9
Bhutan	65.2	32.3	1.6	0.3	0.5	0.1
India	28.1	0.0	31.9	5.6	10.4	24.0
Iran (Islamic Rep.)	64.1	1.7	18.5	3.3	1.1	11.3
Maldives	0.0	100.0	0.0	0.0	0.0	0.0
Nepal	62.0	0.1	23.8	4.2	7.2	2.7
Pakistan	14.1	0.5	62.8	11.1	7.4	4.0
Sri Lanka	96.7	2.2	0.7	0.1	0.1	0.1
West Asia	63.7	3.8	19.4	3.4	1.3	11.7
Armenia	60.0	8.0	20.6	3.6	1.9	5.8
Azerbaijan	50.3	5.6	22.2	3.9	1.7	16.3
Bahrain	61.4	5.3	22.8	3.5	1.8	0.0
Cyprus	48.3	5.1	18.7	3.2	0.6	23.8
Georgia	41.0	7.8	26.7	4.7	1.8	17.9
Iraq	83.5	0.8	9.0	1.6	0.5	4.6
Jordan	51.4	7.2	27.8	4.9	0.8	7.8
Kuwait	26.1	1.3	58.6	10.1	1.3	2.0
Lebanon	73.5	16.5	6.6	1.2	0.4	1.8
Occupied Palestinian Territory	22.5	17.9	21.8	3.7	0.7	32.7
Saudi Arabia	87.5	1.6	8.1	1.4	0.3	1.1
Syrian Arab Republic	74.5	4.2	11.5	2.0	0.5	7.4
Turkey	56.3	4.0	13.0	2.3	0.8	23.6
United Arab Emirates	75.6	9.7	11.3	2.0	1.0	0.3
Yemen	13.1	0.0	64.3	11.4	5.5	5.6
LATIN AMERICA & THE CARIBBEAN	24.3	8.1	44.4	7.8	5.3	7.4
Argentina	16.0	1.5	52.2	9.2	6.4	14.7
Bahamas	27.6	27.6	27.6	3.4	0.0	6.9
Barbados	17.9	1.2	47.6	8.3	1.2	22.6
Belize	2.4	3.1	79.3	14.0	0.4	0.6
Bolivia (Plur. State)	17.8	3.3	59.4	10.5	7.0	1.9
Brazil	21.6	6.8	43.0	7.6	8.8	12.3
Chile	44.9	4.9	31.4	5.5	1.6	11.6
Colombia	7.7	5.2	71.1	12.5	2.5	1.0
Costa Rica	19.6	21.8	39.3	6.9	4.3	7.9

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

	Share of components in capital stock					
	land		livestock			machinery & equipment
	development	plantation	fixed assets	inventories	structure	
	%	%	%	%	%	%
	2007	2007	2007	2007	2007	2007
Cuba	21.9	3.5	55.8	9.8	1.6	7.4
Dominica	2.5	40.7	43.2	7.4	1.2	2.5
Dominican Republic	23.8	15.6	48.9	8.6	2.5	0.5
Ecuador	37.1	21.9	31.0	5.5	2.4	2.1
El Salvador	26.8	24.9	32.0	5.6	4.6	6.1
French Guiana	30.0	17.5	35.0	5.0	0.0	5.0
Grenada	13.9	58.3	19.4	2.8	0.0	0.0
Guatemala	25.2	30.0	32.8	5.8	3.2	3.0
Guyana	71.2	4.3	14.1	2.4	1.0	6.7
Haiti	17.2	11.4	56.2	9.9	3.8	1.4
Honduras	25.7	25.4	31.7	5.6	5.6	5.9
Jamaica	9.6	13.0	60.5	10.7	1.8	4.4
Mexico	48.1	7.0	32.3	5.7	2.9	4.0
Netherlands Antilles	30.0	0.0	50.0	10.0	0.0	0.0
Nicaragua	41.9	16.5	29.4	5.2	5.5	1.4
Panama	12.8	8.6	57.1	10.1	4.2	7.2
Paraguay	20.6	1.8	52.1	9.2	11.2	5.1
Peru	34.0	7.9	45.9	8.1	2.3	1.8
St. Kitts & Nevis	12.5	0.0	68.8	6.2	0.0	0.0
St. Lucia	23.6	23.6	41.8	7.3	1.8	0.0
St. Vincent & Grenadines	22.2	18.5	40.7	7.4	0.0	3.7
Suriname	80.0	4.8	9.7	1.7	0.6	3.0
Trinidad & Tobago	14.5	15.8	45.5	7.7	1.0	14.5
Uruguay	5.9	0.2	74.2	13.1	4.4	2.2
Venezuela (Boliv. Rep. of)	20.1	7.7	51.7	9.1	5.2	6.3
OCEANIA	86.6	11.8	53.1	9.3	0.8	7.2
Fiji	98.6	0.0	0.9	0.2	0.1	0.1
French Polynesia	76.6	19.4	2.7	0.4	0.0	0.5
New Caledonia	0.3	6.1	73.4	12.8	1.6	5.3
Papua New Guinea	7.7	0.4	69.1	12.2	0.8	9.7
Samoa	1.5	95.3	2.6	0.4	0.1	0.0
Solomon Islands	3.6	66.7	21.0	3.6	0.7	2.9
Tonga	2.7	74.4	18.6	3.0	0.7	0.3
Vanuatu	6.8	30.4	44.1	7.5	8.1	1.2
DEVELOPED REGIONS	26.0	4.6	18.1	3.2	6.2	40.4
NORTH AMERICA	29.2	3.6	15.1	2.7	9.4	39.8
Bermuda						
Canada	24.5	22.9	9.4	1.7	8.0	33.5
United States of America	30.0	1.5	15.7	2.8	9.5	40.5
ASIA & OCEANIA	10.5	0.9	24.5	4.3	3.2	57.9
Australia	27.4	1.0	40.3	7.1	13.2	11.0
Israel	42.2	9.9	17.1	3.0	8.8	18.9
Japan	4.2	0.4	20.7	3.6	0.9	70.3
New Zealand	5.4	0.5	67.5	11.9	8.9	5.8
EUROPE	31.1	6.0	18.2	3.2	5.4	36.8
Albania	67.6	15.2	11.9	2.1	1.2	2.0
Belarus	22.0	2.8	38.2	6.7	2.5	27.8
Bosnia & Herzegovina	22.4	14.1	27.7	4.9	2.3	28.5
Croatia	31.2	16.0	37.8	6.7	2.1	6.2
European Union	23.5	6.2	17.2	3.0	7.1	44.7
Iceland	0.3	0.0	22.0	3.9	8.1	65.5
Macedonia, FYR	48.1	7.9	14.1	2.5	1.7	25.6
Montenegro						
Norway	12.3	0.2	14.5	2.6	5.9	64.6
Republic of Moldova	45.7	25.5	11.5	2.0	0.7	14.6
Russian Federation	55.2	4.3	19.6	3.5	1.2	16.1
Serbia						
Switzerland	3.5	0.9	32.1	5.7	10.5	47.3
Ukraine	52.1	6.4	15.7	2.8	1.0	22.0

TABLE 9: Additional investment indicators

	Gross capital formation		Foreign direct investment		Research and development		Net ODA received	
	share of GDP		net inflows		expenditure	number of persons	share of GNI	current per capita
	%	%	current US\$ million	current US\$ million				
	2000	2009	2000	2009	2009*	2008*	2009*	2009*
WORLD	22.3	19.0	1 610 000.0	1 160 000.0	2.1	1 280.0	0.2	18.8
DEVELOPING REGIONS			229 226.1	390 017.9				15.3
AFRICA			9 613.4	45 667.8				42.0
North Africa			2 792.0	14 840.0				16.0
Algeria	25.0	41.2	438.0	2 850.0	0.1	170.0	0.2	9.2
Egypt	19.6	19.3	1 240.0	6 710.0	0.2	617.0	0.5	11.1
Libya	13.4		141.0	1 710.0			0.1	6.1
Morocco	25.5	36.0	221.0	1 970.0	0.6	647.0	1.0	28.5
Tunisia	27.3	26.8	752.0	1 600.0	1.0	1 590.0	1.3	45.4
Sub-Saharan Africa			6 821.4	30 827.8				47.1
Angola	15.1	14.8	879.0	2 210.0			0.4	12.9
Benin	18.9	25.0	59.7	92.5			10.3	76.4
Botswana	31.8	24.0	57.2	252.0	0.5		2.5	143.0
Burkina Faso	16.8		23.1	171.0	0.1		13.5	68.8
Burundi	6.1		11.7	0.3			41.2	66.1
Cameroon	16.7		159.0	340.0			2.9	33.3
Cape Verde	19.7	53.8	33.4	120.0		132.0	13.1	388.0
Central African Republic	9.5	10.6	0.8	42.3			11.9	53.6
Chad	23.3	33.9	115.0	462.0			9.2	50.1
Comoros	10.1	12.4	0.1	9.1			9.5	76.8
Congo	22.6	24.6	166.0	2 080.0		33.5	4.1	76.8
Côte d'Ivoire	10.8	11.2	235.0	381.0		65.9	10.6	112.0
Congo, Dem. Rep.	3.5	29.8	72.0	951.0	0.5		23.9	35.6
Djibouti	8.8		3.3	96.9			14.5	188.0
Equatorial Guinea	61.3	39.7	154.0	1 640.0			0.5	46.7
Eritrea	23.8		27.9	0.0			7.8	28.5
Ethiopia	20.3	22.4	135.0	221.0	0.2	20.5	13.4	46.1
Gabon	21.9	28.4	-42.6	32.8			0.8	52.6
Gambia	17.4	25.9		39.4			18.5	75.1
Ghana	24.0	19.6	166.0	1 680.0			6.1	66.4
Guinea	19.7	21.6	9.9	49.8			5.8	21.3
Guinea-Bissau	11.3		0.7	14.0			17.6	90.3
Kenya	17.4	20.9	111.0	141.0			6.1	44.7
Lesotho	44.2	31.4	118.0	62.9	0.1	10.1	6.4	59.5
Liberia			20.8	218.0			78.3	128.0
Madagascar	15.0	32.6	83.0	543.0	0.1	50.4	5.2	22.7
Malawi	13.6	24.9	26.0	60.4			16.6	50.6
Mali	24.6		82.4	109.0		42.3	11.0	75.7
Mauritania	19.4	25.2	40.1	-38.3			9.4	87.1
Mauritius	26.1	21.4	266.0	257.0	0.4		1.8	122.0
Mozambique	31.0	21.0	139.0	881.0	0.5	15.8	20.8	87.9
Namibia	17.1	27.1	119.0	490.0			3.6	150.0
Niger	11.4		8.4	739.0		7.7	8.9	30.7
Nigeria			1 140.0	5 790.0			1.0	10.7
Rwanda	18.3	21.8	8.3	119.0			18.0	93.5
Senegal	20.5	27.9	62.9	208.0	0.1	276.0	8.0	81.2
Seychelles	25.2	24.2	24.3	249.0	0.3	157.0	3.5	264.0
Sierra Leone	6.9	15.1	39.0	74.3			23.0	76.8
Somalia			0.3	108.0			58.9	72.4
Sudan	18.3	25.2	392.0	2 680.0	0.3		4.7	54.1
South Africa	15.9	19.4	969.0	5 350.0	0.9	393.0	0.4	21.8
Swaziland	17.4	16.9	90.7	65.7			2.0	48.9
Tanzania, Utd. Rep.	16.8	29.8	463.0	415.0			13.7	67.1
Togo	17.8		41.9	50.1		34.3	17.5	75.4
Uganda	19.5	23.8	161.0	604.0	0.4		11.4	54.6
Zambia	17.4	22.1	122.0	699.0	0.0	52.5	11.1	98.1
Zimbabwe	13.6	2.2	23.2	60.0			14.1	58.8

TABLE 9: Additional investment indicators (continued)

	Gross capital formation		Foreign direct investment		Research and development		Net ODA received	
	share of GDP		net inflows		expenditure	number of persons	share of	current
	%	%	current	current			GNI	per capita
	2000	2009	US\$ million	US\$ million	% of GDP	per million people	% of GNI	US\$
	2000	2009	2000	2009	2009*	2008*	2009*	2009*
ASIA				264 065.4				8.3
Central Asia			1 506.8	15 914.8				20.5
Kazakhstan	18.5	30.4	1 280.0	13 600.0	0.2		0.3	18.7
Kyrgyzstan	20.0	22.1	–2.4	189.0	0.2		7.1	59.1
Tajikistan	9.4	21.7	23.5	15.8	0.1		8.3	58.8
Turkmenistan	34.7	11.4	131.0	1 360.0			0.2	7.8
Uzbekistan	16.3	26.1	74.7	750.0			0.6	6.8
East Asia				173 462.0				4.2
Brunei Darussalam	13.1			326.0	0.0	281.0	0.1	
Cambodia	17.5	21.3	149.0	530.0	0.0	16.9	7.3	48.8
China	35.1	47.7	100 299.2	132 230.0	1.4	1 070.0		0.8
Indonesia	22.2	31.0	–4 550.0	4 880.0	0.0	205.0	0.2	4.6
Korea, DPR								2.8
Korea, Republic of	30.6	25.9	9 280.0	1 510.0	3.2	4 630.0	–0.0	
Lao, PDR	28.3		33.9	319.0	0.0	15.5	7.2	66.5
Malaysia	26.9	14.5	3 790.0	1 390.0	0.6	372.0	0.1	5.2
Mongolia	29.0	50.2	53.7	624.0	0.2		9.4	139.0
Myanmar	12.4		258.0	323.0	0.2	17.7		7.1
Philippines	21.2	14.6	2 240.0	1 950.0	0.1	80.7	0.2	3.4
Singapore	33.3		16 500.0	16 800.0	2.5	6 090.0	0.0	
Thailand	22.8	21.8	3 370.0	4 980.0	0.2	311.0	–0.0	–1.1
Viet Nam	29.6	38.1	1 300.0	7 600.0	0.2	115.0	4.1	42.9
South Asia			4 392.7	41 459.6				8.7
Afghanistan			0.2	185.0			45.7	204.0
Bangladesh	23.0	24.4	280.0	674.0			1.3	7.6
Bhutan	48.2	53.9		36.4			9.5	180.0
India	24.2	36.5	3 580.0	34 600.0	0.8	137.0	0.2	2.1
Iran (Islamic Rep.)	33.0		39.0	3 020.0	0.7	706.0	0.0	1.3
Maldives	26.3		13.0	112.0			2.4	107.0
Nepal	24.3	29.7	–0.5	38.2		58.7	6.7	29.1
Pakistan	17.2	19.0	308.0	2 390.0	0.7	152.0	1.7	16.4
Sri Lanka	28.0	24.5	173.0	404.0	0.2	93.0	1.7	34.7
West Asia								46.0
Armenia	18.6	31.3	104.0	777.0	0.2		5.9	171.0
Azerbaijan	20.7	21.9	130.0	473.0	0.2		0.6	26.5
Bahrain	10.3		364.0	257.0			0.5	
Cyprus	18.3		855.0	5 910.0	0.5	1 030.0	0.2	
Georgia	26.6	12.1	131.0	658.0	0.2		8.6	213.0
Iraq			–3.1	1 070.0			4.5	88.6
Jordan	22.4	14.8	913.0	2 380.0	0.3	1 950.0	3.0	128.0
Kuwait	10.7		16.3	145.0	0.1	166.0	0.0	
Lebanon	20.4	30.2		4 800.0			1.8	152.0
Occupied Palestinian Territory								
Saudi Arabia	18.7	26.1	–1 880.0	10 500.0	0.0		–0.0	
Syrian Arab Republic	17.3	16.3	270.0	1 430.0			0.5	11.6
Turkey	20.8	14.9	982.0	8 400.0	0.7	680.0	0.2	18.2
United Arab Emirates	23.2						0.0	
Yemen	19.5		6.4	129.0			2.0	21.2
LATIN AMERICA & THE CARIBBEAN			79 763.8	78 473.1				13.0
Argentina	16.2	20.9	10 400.0	3 900.0	0.5	980.0	0.0	3.2
Bahamas	35.5		250.0	655.0			0.1	
Barbados	18.5	22.4	19.4	298.0			–0.1	47.7
Belize	28.7		23.3	95.4			2.0	83.6
Bolivia (Plur. State)	18.1	17.0	736.0	423.0	0.3	120.0	4.4	73.6
Brazil	18.3	16.5	32 800.0	25 900.0	1.1	694.0	0.0	1.8
Chile	21.9	19.0	4 860.0	12 700.0	0.7	833.0	0.1	4.7
Colombia	15.0	22.5	2 440.0	7 210.0	0.2	126.0	0.5	23.2
Costa Rica	16.9	19.7	409.0	1 350.0	0.3	122.0	0.4	23.9

TABLE 9: Additional investment indicators (continued)

	Gross capital formation		Foreign direct investment		Research and development		Net ODA received	
	share of GDP		net inflows		expenditure	number of persons	share of GNI	current per capita
	%	%	current US\$ million	current US\$ million				
	2000	2009	2000	2009	% of GDP	per million people	% of GNI	US\$
					2009*	2008*	2009*	2009*
Cuba	12.5				0.5		0.2	10.4
Dominica	28.1	29.5	17.6	50.3			10.1	492.0
Dominican Republic	23.3	14.8	953.0	2 070.0			0.3	11.9
Ecuador	20.1	32.2	-23.4	316.0	0.1	69.3	0.4	15.3
El Salvador	16.9	13.1	173.0	431.0	0.1	49.3	1.4	44.9
French Guiana								
Grenada	41.8	23.2	37.4	90.9			8.3	463.0
Guatemala	17.8	13.1	230.0	600.0	0.1	29.1	1.0	26.8
Guyana	23.8	26.6	67.1	144.0			8.5	228.0
Haiti	27.3	27.4	13.3	38.0				112.0
Honduras	28.3	19.6	382.0	500.0	0.0		3.3	61.2
Jamaica		21.3	468.0	541.0	0.1		1.3	55.4
Mexico	23.9	22.4	18 100.0	14 500.0	0.4	353.0	0.0	1.7
Netherlands Antilles			-0.6	117.0			5.8	
Nicaragua	30.2	23.5	267.0	434.0	0.0	70.1	13.1	135.0
Panama	24.1	24.8	624.0	1 770.0	0.2	144.0	0.3	19.0
Paraguay	18.9	15.5	104.0	205.0	0.1	71.0	1.1	23.4
Peru	20.2	22.5	810.0	4 760.0	0.1		0.4	15.2
St. Kitts & Nevis	50.1	39.6	96.2	134.0			1.1	111.0
St. Lucia	25.7	23.7	53.7	156.0	0.4		4.7	239.0
St. Vincent & Grenadines	27.0	34.8	37.7	110.0	0.1		5.5	285.0
Suriname	12.4		-148.0	-93.4			3.7	302.0
Trinidad & Tobago	20.0		680.0	709.0	0.1		0.0	5.2
Uruguay	14.5	17.9	269.0	1 260.0	0.6	346.0	0.2	15.1
Venezuela (Boliv. Rep. of)	24.2	24.8	4 700.0	-3 110.0		187.0	0.0	2.4
OCEANIA			110.1	1 811.6				128.2
Fiji	17.3		0.6	56.0			2.5	83.7
French Polynesia				10.2			9.3	
New Caledonia			-40.6	1 150.0			10.3	
Papua New Guinea	21.9	19.9	95.9	423.0			5.3	61.4
Samoa			-1.5	3.0			16.1	433.0
Solomon Islands	6.6		13.0	118.0			42.9	394.0
Tonga	21.7	26.1	4.8	14.6			12.4	380.0
Vanuatu	19.3		20.3	34.6			16.5	431.0
DEVELOPED REGIONS			1 375 918.9	765 239.0				36.8
NORTH AMERICA								
Bermuda					0.1		-0.1	
Canada	20.2	21.0	66 100.0	19 900.0	1.8	4 260.0		
United States of America	20.6	14.2	321 000.0	135 000.0	2.8	4 660.0		
ASIA & OCEANIA								
Australia	24.4		13 600.0	22 600.0	2.1	4 220.0		
Israel	21.0	16.4	8 050.0	3 890.0	4.9		2.3	
Japan	25.4	20.4	8 230.0	11 800.0	3.4	5 570.0		
New Zealand	21.3	18.1	1 480.0	-1 260.0	1.2	4 360.0		
EUROPE			957 458.9	573 309.0				36.8
Albania	24.7	29.0	143.0	978.0			3.0	113.0
Belarus	25.4	38.3	119.0	1 880.0	1.0		0.2	10.1
Bosnia & Herzegovina	20.6	22.1	146.0	235.0	0.0	197.0	2.4	110.0
Croatia	19.1	26.7	1 110.0	2 950.0	0.9	1 510.0	0.3	38.2
European Union	21.3	17.9	926 000.0	489 000.0	1.8	2 880.0		
Iceland	23.2	13.8	155.0	60.8	2.7	7 320.0		
Macedonia, FYR	22.3	24.3	215.0	248.0	0.2	521.0	2.1	94.7
Montenegro	22.4	27.1		1 320.0	1.1		1.8	121.0
Norway	20.4	20.0	6 960.0	11 300.0	1.6	5 470.0		
Republic of Moldova	23.9	27.1	128.0	128.0	0.5	726.0	4.3	68.0
Russian Federation	18.7	18.7	2 710.0	36 800.0	1.0	3 190.0		
Serbia	8.8	23.9	51.9	1 920.0	0.4	1 200.0	1.4	83.1
Switzerland	23.2	19.7	19 800.0	27 600.0	2.9	3 440.0		
Ukraine	19.6	17.1	595.0	4 820.0	0.9	1 460.0	0.6	14.5

TABLE 10: Inputs and infrastructure


	Fertilizer consumption		Pesticide consumption		Quality of infrastructure Score 1 = lowest to 5 = highest 2010	Agricultural machinery		Lead time to trade		Roads paved % of all roads
	per ha of arable land		per ha of arable land			tractors per 100 km² of arable land		export	import	
	kg	kg	kg	kg		number	number	days	days	
	2002	2008	2000	2009		1990	2008	2009*	2009*	
WORLD	106.0	119.0	3.1					3.8	4.6	49.0
DEVELOPING REGIONS			3.6							
AFRICA										
North Africa										
Algeria	9.6	6.8			2.1	129.1	139.6	4.6	7.1	73.5
Egypt	433.0	724.0			2.2	249.6	372.1	1.3	3.1	86.9
Libya	66.3	27.3			2.2	184.3		3.2	10.0	57.2
Morocco	65.6	53.8				45.0		2.0	3.2	67.8
Tunisia	25.2	32.1		0.4	2.6	82.4	142.6	1.7	7.0	75.2
Sub-Saharan Africa			0.3							
Angola	1.7	8.3			1.7			6.0	8.0	10.4
Benin	16.4	0.0			2.5	1.0		3.0	7.0	9.5
Botswana					2.1	140.5	134.8			32.6
Burkina Faso	0.4	3.9		0.2	1.9	2.4		4.0	14.0	4.2
Burundi	1.3	2.2	0.2			1.8				10.4
Cameroon	5.9	8.6	0.2	0.8	2.1	0.9		3.4	8.9	8.4
Cape Verde			0.3			7.1				69.0
Central African Republic										2.7
Chad					2.0			74.0	35.0	0.8
Comoros					1.8					76.5
Congo	0.0	1.1			1.6					7.1
Côte d'Ivoire	31.0	18.9			2.4	19.9		1.0	1.0	7.9
Congo, Dem. Rep.	0.0	0.9			2.3			2.0	3.0	1.8
Djibouti					2.3	80.0				45.0
Equatorial Guinea										
Eritrea	6.2	0.0			1.4			3.0	3.0	21.8
Ethiopia	16.9	7.7	0.1		1.8			5.0	6.0	13.7
Gabon	5.6	14.1			2.1			4.3	13.0	10.2
Gambia	0.0	2.6	1.0		2.2			4.6	3.5	19.3
Ghana	3.8	6.4	0.0	2.0	2.5	7.1		2.9	6.8	14.9
Guinea	1.6	1.5		0.3	2.1	45.0		3.5	3.9	9.8
Guinea-Bissau					1.6	0.8				27.9
Kenya	27.1	33.3	0.7		2.1	20.0		3.0	5.9	14.1
Lesotho						57.7				18.3
Liberia					2.0			4.0	5.0	6.2
Madagascar	2.1	4.3	0.1		2.6	4.9				11.6
Malawi	29.7	1.7	0.4					4.2	3.7	45.0
Mali	0.0	9.0			2.0	10.2		5.0	4.0	19.0
Mauritania						8.4		2.0	3.0	26.8
Mauritius	298.0	210.0	15.7	26.8	2.3			3.0	2.4	98.0
Mozambique	6.0	0.0			2.0					20.8
Namibia	3.9	0.3			1.7			3.0	3.0	12.8
Niger	0.6	0.4	0.0	0.0	2.3	0.2				20.7
Nigeria	5.2	13.3			2.4	4.7		2.5	4.1	15.0
Rwanda	0.0	8.3	0.3		1.6	1.0				19.0
Senegal	11.6	2.4	0.3		2.6	1.6		1.4	2.6	29.3
Seychelles	0.0	29.0								96.5
Sierra Leone					1.6	4.1		2.0	32.0	8.0
Somalia					1.5	15.9				11.8
Sudan	3.5	3.6	0.0		1.8	7.2	12.4	39.0	5.0	36.3
South Africa	56.8	49.7	3.4		3.4	107.9		2.3	3.2	17.3
Swaziland						228.9				30.0
Tanzania, Utd. Rep.	3.5	6.0			2.0	8.2		3.2	7.1	7.4
Togo	4.9	4.9			1.8	0.5	0.5			21.0
Uganda	1.5	3.4			2.4			5.5	14.0	23.0
Zambia	33.8	50.1			1.8			9.2	4.0	22.0
Zimbabwe	39.7	27.9				60.1		25.0	18.0	19.0

TABLE 10: Inputs and infrastructure (continued)


	Fertilizer consumption		Pesticide consumption		Quality of infrastructure Score 1 = lowest to 5 = highest 2010	Agricultural machinery		Lead time to trade		Roads paved % of all roads
	per ha of arable land		per ha of arable land			tractors per 100 km² of arable land		export	import	
	kg	kg	kg	kg		number	number	days	days	
	2002	2008	2000	2009		1990	2008	2009*	2009*	
ASIA			5.2							
Central Asia			0.2							
Kazakhstan	5.4	3.1	0.2		2.7			2.8	11.5	89.9
Kyrgyzstan	7.0	19.0	0.5	0.2	2.1		191.1	2.0		91.1
Tajikistan	0.0	0.0			2.0		216.1	7.0		82.7
Turkmenistan					2.2			3.0		81.2
Uzbekistan					2.5			1.4	2.0	87.3
East Asia			11.4							
Brunei Darussalam	0.0	98.3								77.2
Cambodia	15.4	22.7			2.1	3.2	11.8	1.3	4.0	6.3
China	371.0	468.0	19.4	27.6	3.5	66.6	277.1	2.8	2.6	53.5
Indonesia	124.0	189.0			2.5	2.2		2.1	5.3	59.1
Korea, DPR										2.8
Korea, Republic of	412.0	480.0	13.4		3.6	211.0	1 632.5	1.6	2.0	78.5
Lao, PDR			0.0	0.0	1.9					13.5
Malaysia	661.0	930.0			3.5	152.9		2.6	2.8	82.8
Mongolia	4.9	8.2			1.9	80.3	38.0	14.0	12.0	3.5
Myanmar	1.6	3.3		0.5	1.9	13.6	10.9	4.6	8.4	11.9
Philippines	146.0	131.0			2.6	65.2		1.8	5.0	9.9
Singapore					4.2			2.2	1.8	100.0
Thailand	111.0	131.0	2.1		3.2	33.0		1.6	2.6	98.5
Viet Nam	305.0	287.0	2.0		2.6	47.0		1.4	1.7	47.6
South Asia			0.4							
Afghanistan	3.8	3.2			1.9	0.2	1.2	2.0	4.0	29.3
Bangladesh	195.0	165.0	0.7	9.8	2.5	2.4		1.4	1.4	9.5
Bhutan	8.7	9.1	0.1		1.8	3.8	10.6			62.0
India	101.0	153.0			2.9	60.7		2.3	5.3	49.3
Iran (Islamic Rep.)	78.7	90.9	2.0		2.4	141.5		2.6	28.3	73.3
Maldives	4.2	5.2			2.2			2.0	2.0	100.0
Nepal	23.6	7.7			1.8	21.9	122.9	1.8	6.3	55.9
Pakistan	141.0	163.0	2.5		2.1	129.7		2.3	1.6	65.4
Sri Lanka	305.0	284.0			1.9			1.3	2.5	81.0
West Asia			1.7							
Armenia	34.5	18.1			2.3		327.8			90.5
Azerbaijan	10.4	20.9		0.6	2.2		116.1	7.0	3.0	50.6
Bahrain			3.3		3.4	45.0		1.0	2.0	81.5
Cyprus	200.0	116.0	20.0	18.7	2.9	1 377.4		1.0	2.0	64.6
Georgia	33.0	37.1			2.2					94.1
Iraq	0.0	43.8	0.2		1.7	65.8				84.3
Jordan			4.0	4.5	2.7	340.4	366.8	3.2	4.6	100.0
Kuwait					3.3	220.0	95.6	2.0	3.0	85.0
Lebanon	358.0	56.2			3.0	174.9		3.4	2.1	84.9
Occupied Palestinian Territory										
Saudi Arabia	56.5	75.2			3.3	19.2		2.3	6.3	21.5
Syrian Arab Republic	68.4	88.0	1.2		2.5	128.1	233.9	2.5	3.2	91.0
Turkey	70.5	88.7	2.5		3.1	279.8	488.5	2.2	3.8	34.0
United Arab Emirates	672.0	336.0			3.8	51.4		2.5	2.0	100.0
Yemen	8.2	14.2	1.5	0.6	2.4	39.0		3.1	3.6	8.7
LATIN AMERICA & THE CARIBBEAN			2.9							
Argentina	29.9	38.8			2.8	100.2		3.7	3.8	30.0
Bahamas			111.6		2.4	141.2				57.4
Barbados	40.1	110.0								100.0
Belize	60.0	49.8	13.1							17.0
Bolivia (Plur. State)	4.3	5.5	0.0		2.2	24.8		15.0	28.3	7.0
Brazil	126.0	166.0	1.9		3.1	143.8		2.8	3.9	5.5
Chile	308.0	589.0		20.0	2.9	127.6		3.5	3.0	20.2
Colombia	309.0	492.0	33.4	15.3	2.6	96.8		7.0	7.0	14.4
Costa Rica	537.0	707.0	105.6		2.6			2.0	2.0	25.3

TABLE 10: Inputs and infrastructure (continued)


	Fertilizer consumption		Pesticide consumption		Quality of infrastructure Score 1 = lowest to 5 = highest 2010	Agricultural machinery		Lead time to trade		Roads paved % of all roads
	per ha of arable land		per ha of arable land			tractors per 100 km² of arable land		export	import	
	kg	kg	kg	kg		number	number	days	days	
	2002	2008	2000	2009		1990	2008	2009*	2009*	
Cuba	38.1	39.7			1.9	226.2				49.0
Dominica	86.6	44.4								50.4
Dominican Republic			7.7		2.3	25.9		2.2	3.5	49.4
Ecuador	168.0	214.0	12.0	7.6	2.4	54.2		2.1	3.4	14.8
El Salvador	74.9	118.0		7.2	2.4			2.0	2.0	19.8
French Guiana										
Grenada	0.0	0.0				80.0				61.0
Guatemala	99.8	92.0			2.4			2.6	3.4	34.5
Guyana	33.1	56.8			2.0					7.4
Haiti			0.0		2.2	2.6		4.2	5.3	24.3
Honduras	0.6	108.0	3.6		2.3	30.9		2.4	3.2	20.4
Jamaica	94.7	51.3			2.1			10.0	10.0	73.3
Mexico	60.3	44.7	2.3	4.5	3.0	123.5		2.1	2.5	35.3
Netherlands Antilles										
Nicaragua	28.4	32.3	3.8	8.8	2.2	20.0		3.2	3.2	12.0
Panama	40.4	35.3	2.8		2.6	102.0		1.4	1.4	38.1
Paraguay	47.7	66.8	2.3		2.4	71.6	61.5	1.0	4.0	50.8
Peru	84.0	81.6	1.2	2.8	2.7	36.3		2.0	3.8	13.9
St. Kitts & Nevis	0.0	13.3	2.9	7.2		131.2	55.0			42.5
St. Lucia						240.0				
St. Vincent & Grenadines						222.5				70.0
Suriname	92.2	526.0	5.3	30.4		194.2	206.7			26.3
Trinidad & Tobago	797.0	2 340.0				1 238.9				51.1
Uruguay	64.8	118.0	5.2		2.6	260.3	222.3	3.0	3.0	
Venezuela (Boliv. Rep. of)	144.0	233.0			2.4			9.4	12.1	33.6
OCEANIA										
Fiji	71.5	46.6			2.0	418.8	351.9			49.2
French Polynesia	334.0	307.0		3.7		975.0				
New Caledonia	354.0	169.0		2.7		1 477.8				
Papua New Guinea	159.0	78.6			1.9	59.4				3.5
Samoa	0.4	1.8	0.2			25.3				14.2
Solomon Islands					2.2	7.3		9.0	11.0	2.4
Tonga	12.9	67.4				81.2				27.0
Vanuatu										23.9
DEVELOPED REGIONS			2.3	1.0						
NORTH AMERICA			2.3							
Bermuda						470.0				
Canada	57.6	56.9			4.0	164.8		2.8	3.7	39.9
United States of America	111.0	103.0	3.0		4.2	238.4		2.8	4.0	67.4
ASIA & OCEANIA			3.1							
Australia	47.4	33.9			3.8			2.6	2.8	38.7
Israel	252.0	253.0			3.6	798.8	705.3	2.0	2.0	100.0
Japan	334.0	278.0	33.1	26.5	4.2	4 492.9		1.0	1.0	79.6
New Zealand	1 840.0	1 720.0	4.7		3.5			1.3	1.6	65.9
EUROPE			2.2	1.4						
Albania	85.3	38.4			2.1	212.4	121.9	1.7	2.0	39.0
Belarus	150.0	237.0					89.8			88.6
Bosnia & Herzegovina	32.7	11.9			2.2			2.0	2.0	52.3
Croatia	257.0	388.0			2.4			1.0	1.0	86.9
European Union	165.0	143.0	5.2	3.2		791.9		2.1	2.9	89.1
Iceland			0.9		3.3					36.6
Macedonia, FYR	30.9	56.2	0.5	0.2	2.5					56.5
Montenegro				0.0	2.5					
Norway	206.0	219.0	0.8	1.3	4.2	1 779.1		1.0	2.0	80.5
Republic of Moldova	8.1	12.5	1.3	1.1	2.0		197.5			85.8
Russian Federation	13.6	15.9			2.4		30.0	4.0	2.9	80.1
Serbia		115.0			2.3		17.7	2.0	3.0	47.7
Switzerland	196.0	226.0	7.2	10.1	4.2	2 783.1		2.6	2.6	100.0
Ukraine	15.9	32.8		0.8	2.4		103.3	1.7	7.0	97.8

TABLE 11: Macroeconomic environment

	Gross domestic product				Agriculture value added			
	total	per capita	real growth		share of GDP	annual change	constant US\$ per worker	
	current billion US\$ 2010	current US\$ 2010	% 2008-09	% 2009-10	% 2009*	% 2008-2009	US\$ 2008	US\$ 2009
WORLD	62 859.1	9 237.9			2.9		1 070.0	998.0
DEVELOPING REGIONS	20 566.3	3 721.6						
AFRICA	1 730.1	1 720.8						
North Africa	600.7	3 647.9						
Algeria	160.3	4 435.4	2.4	3.3	11.7	69.1	2 160.0	2 180.0
Egypt	218.5	2 788.8	4.7	5.1	13.7	3.8	2 930.0	3 020.0
Libya	74.2	11 314.1	-2.3	4.2	1.9			
Morocco	103.5	3 248.9	4.9	3.1	16.4	12.3	2 520.0	3 310.0
Tunisia	44.3	4 200.5	3.1	3.7	7.8	-20.4	3 500.0	3 600.0
Sub-Saharan Africa	1 129.3	1 344.0						
Angola	85.3	4 477.6	2.4	1.6	10.2	53.6	249.0	313.0
Benin	6.6	689.5	2.7	2.5	32.2			
Botswana	14.0	7 627.5	-3.7	8.6	3.1	66.7	467.0	597.0
Burkina Faso	8.8	597.5	3.2	5.8	33.3			
Burundi	1.5	180.1	3.5	3.9	34.8			
Cameroon	22.5	1 100.6	1.9	3.0	19.5			
Cape Verde	1.7	3 156.6	3.6	5.4	9.2	0.5	2 130.0	2 220.0
Central African Republic	2.0	436.0	1.7	3.3	55.5	4.9		
Chad	7.8	767.7	0.3	5.1	13.6			
Comoros	0.5	802.5	1.8	2.1	46.3	1.1	443.0	453.0
Congo	11.5	2 983.5	7.5	9.1	4.5	21.9		
Côte d'Ivoire	22.8	1 036.2	3.8	2.6	24.4	-2.4	892.0	926.0
Congo, Dem. Rep.	13.1	186.3	2.8	7.2	42.9	6.7	166.0	168.0
Djibouti	1.1	1 383.0	5.0	4.5	3.9			
Equatorial Guinea	14.5	11 033.3	5.7	-0.8	3.5	73.9	993.0	1 000.0
Eritrea	2.1	397.7	3.9	2.2	14.4	0.0	65.4	66.1
Ethiopia	29.7	350.4	10.0	8.0	50.7	15.8	208.0	215.0
Gabon	13.1	8 724.2	-1.4	5.7	5.1	24.6	1 860.0	1 870.0
Gambia	1.1	616.6	6.7	5.7	27.5	-3.5	271.0	275.0
Ghana	31.1	1 311.6	4.7	5.7	31.7	2.3		
Guinea	4.6	448.5	-0.3	1.9	17.2	-30.9	321.0	225.0
Guinea-Bissau	0.8	508.7	3.0	3.5	57.3			
Kenya	32.2	809.3	2.6	5.0	22.6	7.6	349.0	334.0
Lesotho	2.1	836.9	3.0	2.4	8.4	7.3	199.0	207.0
Liberia	1.0	226.0	4.6	5.1	61.3			
Madagascar	8.3	391.8	-3.7	-2.0	29.1	17.3	183.0	192.0
Malawi	5.1	321.9	7.6	6.6	30.5	1.3	145.0	162.0
Mali	9.3	691.6	4.5	4.5	36.5			
Mauritania	3.8	1 194.8	-1.2	4.7	20.6	9.0	411.0	408.0
Mauritius	9.7	7 593.3	3.0	4.0	4.3	-3.4	4 920.0	5 560.0
Mozambique	9.9	458.3	6.3	7.0	31.5	3.3	202.0	220.0
Namibia	11.9	5 651.7	-0.8	4.4	9.3	0.2	1 700.0	1 640.0
Niger	5.6	381.2	-0.9	7.5	39.6			
Nigeria	216.8	1 389.3	7.0	8.4	32.7			
Rwanda	5.6	562.3	4.1	6.5	34.2	5.2		
Senegal	12.9	980.9	2.2	4.2	16.6	7.1	235.0	245.0
Seychelles	0.9	10 681.9	0.7	6.2	2.0	-4.3	691.0	725.0
Sierra Leone	1.9	325.8	3.2	5.0	51.4	2.4		
Somalia					65.5			
Sudan	68.4	1 705.3	6.0	5.1	29.7	13.4	891.0	922.0
South Africa	357.3	7 157.8	-1.7	2.8	3.0	-5.0	3 660.0	3 640.0
Swaziland	3.6	3 061.1	1.2	2.0	7.3	0.0	1 150.0	1 180.0
Tanzania, Utd. Rep.	22.7	548.3	6.7	6.5	28.8	-3.0	281.0	283.0
Togo	3.2	458.8	3.2	3.4	43.7			
Uganda	17.0	500.6	7.2	5.2	24.7	8.8	202.0	203.0
Zambia	16.2	1 221.4	6.4	7.6	21.6	14.3	220.0	216.0
Zimbabwe	7.5	594.3	6.0	9.0	17.9	-11.4	116.0	141.0

TABLE 11: Macroeconomic environment (continued)

	Gross domestic product				Agriculture value added			
	total	per capita	real growth		share of GDP	annual change	constant US\$ per worker	
	current billion US\$ 2010	current US\$ 2010	% 2008-09	% 2009-10	% 2009*	% 2008-2009	US\$ 2008	US\$ 2009
ASIA	13 988.7	3 545.5						
Central Asia	187.7	3 454.9						
Kazakhstan	138.4	8 883.0	1.2	7.0	6.4	12.6	1 770.0	2 030.0
Kyrgyzstan	4.6	863.7	2.9	-1.4	29.2		1 040.0	
Tajikistan	5.6	740.5	3.9	6.5	22.4	-9.3	525.0	542.0
Turkmenistan		3 939.2	6.1	9.2	12.3	0.0	2 680.0	2 930.0
Uzbekistan	39.0	1 380.2	8.1	8.5	19.5	-8.9	2 440.0	2 580.0
East Asia	9 400.2	4 667.3						
Brunei Darussalam	13.0	31 238.6	-1.8	4.1	0.7			
Cambodia	11.6	813.8	-2.0	6.0	35.3	1.1	388.0	401.0
China	6 533.8	4 760.3	9.2	10.3	10.3		504.0	525.0
Indonesia	706.7	3 015.4	4.6	6.1	15.8	7.5	706.0	734.0
Korea, DPR								
Korea, Republic of	1 007.1	20 591.0	0.2	6.1	2.6	-3.0	17 700.0	19 100.0
Lao, PDR	6.3	984.2	7.6	7.7	34.7		516.0	
Malaysia	238.0	8 423.2	-1.7	7.2	9.5	-6.7	6 400.0	6 530.0
Mongolia	6.1	2 227.0	-1.3	6.1	23.5	11.4	1 820.0	1 890.0
Myanmar	43.0	702.0	5.1	5.3	48.4			
Philippines	188.7	2 007.4	1.1	7.3	14.8	-0.7	1 210.0	1 200.0
Singapore	222.7	43 116.7	-0.8	14.5			49 900.0	
Thailand	318.9	4 991.5	-2.3	7.8	11.6	0.0	705.0	708.0
Viet Nam	103.6	1 173.5	5.3	6.8	20.9	-5.9	354.0	356.0
South Asia	2 259.4	1 328.5						
Afghanistan	15.6	517.2	20.9	8.2	32.5	14.0		
Bangladesh	104.9	637.9	5.8	6.0	18.7	-1.6	418.0	435.0
Bhutan	1.4	1 978.3	8.7	6.7	17.6	-5.9	495.0	486.0
India	1 538.0	1 264.8	6.8	10.4	17.8	1.1	471.0	468.0
Iran (Islamic Rep.)	357.2	4 740.9	0.1	1.0	10.2			
Maldives	1.9	5 841.3	-4.8	8.0	5.0	-15.0	2 710.0	2 230.0
Nepal	15.8	561.9	4.9	4.6	33.8	0.3	240.0	238.0
Pakistan	174.9	1 049.8	3.4	4.8	21.6	6.4	892.0	903.0
Sri Lanka	49.7	2 435.1	3.8	9.1	12.6	-6.0	903.0	926.0
West Asia	2 141.5	10 479.8						
Armenia	9.4	2 845.8	-14.2	2.6	20.7	16.3	5 000.0	5 050.0
Azerbaijan	54.4	6 008.2	9.3	5.0	8.2	30.8	1 270.0	1 340.0
Bahrain	22.7	20 474.8	3.1	4.1	0.9			
Cyprus	23.2	28 237.0	-1.7	1.0	2.1		10 100.0	
Georgia	11.7	2 658.0	-3.8	6.4	9.6	2.2	1 920.0	1 870.0
Iraq	82.2	2 563.5	4.2	0.8	8.6			
Jordan	27.5	4 499.8	2.3	3.1	2.9	12.0	2 560.0	3 030.0
Kuwait	131.3	36 412.0	-5.2	2.0	0.5			
Lebanon	39.2	10 044.2	8.5	7.5	5.3	-21.5	37 200.0	41 000.0
Occupied Palestinian Territory								
Saudi Arabia	443.7	16 995.8	0.6	3.7	2.9	27.8	19 400.0	20 400.0
Syrian Arab Republic	59.3	2 877.3	6.0	3.2	21.0	5.0	4 540.0	4 720.0
Turkey	741.9	10 398.7	-4.7	8.2	9.3	8.5	3 330.0	3 490.0
United Arab Emirates	301.9	59 716.8	-3.1	3.2	1.8			
Yemen	31.3	1 281.8	3.9	8.0	14.3			
LATIN AMERICA & THE CARIBBEAN	4 832.3	8 521.0						
Argentina	370.3	9 138.2	0.8	9.2	7.5	-23.8	11 800.0	9 990.0
Bahamas	7.5	21 878.6	-4.3	0.5	1.6			
Barbados	4.0	14 326.5	-4.7	-0.5	3.8			
Belize	1.4	4 158.7	-0.0	2.0	12.2		4 730.0	4 480.0
Bolivia (Plur. State)	19.4	1 858.1	3.4	4.2	13.8	2.2	723.0	733.0
Brazil	2 090.3	10 816.5	-0.6	7.5	6.1	3.1	3 840.0	3 760.0
Chile	203.3	11 828.0	-1.7	5.3	3.3	-5.7	6 570.0	6 620.0
Colombia	285.5	6 273.4	1.5	4.3	7.5	-2.9	2 860.0	2 860.0
Costa Rica	35.8	7 842.9	-1.3	4.2	7.1	-2.9	5 460.0	5 230.0

TABLE 11: Macroeconomic environment (continued)

	Gross domestic product				Agriculture value added			
	total	per capita	real growth		share of GDP	annual change	constant US\$ per worker	
	current billion US\$ 2010	current US\$ 2010	% 2008-09	% 2009-10	% 2009*	% 2008-2009	US\$ 2008	US\$ 2009
Cuba					5.0		3 650.0	
Dominica	0.4	5 167.4	-0.3	1.0	19.5	7.1	6 850.0	7 240.0
Dominican Republic	51.6	5 228.2	3.5	7.8	6.2	-1.6	3 990.0	4 580.0
Ecuador	58.9	3 983.8	0.4	3.2	6.2	-6.7	2 090.0	1 770.0
El Salvador	21.7	3 700.8	-3.5	0.7	12.5	-0.8	2 810.0	2 780.0
French Guiana								
Grenada	0.7	6 542.6	-7.6	-1.4	6.5	18.2	2 710.0	2 990.0
Guatemala	41.5	2 887.6	0.5	2.6	12.4	3.3	2 780.0	2 780.0
Guyana	2.2	2 868.1	3.3	3.6	20.6	-8.0	3 430.0	3 540.0
Haiti	6.6	672.9	2.9	-5.1				
Honduras	15.3	2 015.6	-2.1	2.8	12.5	-7.4	1 980.0	1 960.0
Jamaica	13.7	5 039.4	-3.0	-1.1	6.2	14.7	2 370.0	2 720.0
Mexico	1 039.1	9 566.0	-6.1	5.5	4.3	16.7	3 250.0	3 360.0
Netherlands Antilles								
Nicaragua	6.6	1 126.5	-1.5	4.5	19.0	-10.8	2 460.0	2 500.0
Panama	26.8	7 592.5	3.2	7.5	5.8	-9.2	4 460.0	4 190.0
Paraguay	18.5	2 885.8	-3.8	15.3	19.3	-18.2	2 500.0	1 340.0
Peru	152.8	5 171.6	0.9	8.8	7.3	1.2	1 530.0	1 550.0
St. Kitts & Nevis	0.5	9 636.0	-9.6	-1.5	2.8	0.4	1 860.0	1 730.0
St. Lucia	1.0	5 668.0	-3.6	0.8	4.9	1.5	1 640.0	1 500.0
St. Vincent & Grenadines	0.6	5 228.6	-1.1	-2.3	7.5	1.6	2 780.0	2 820.0
Suriname	3.7	6 975.4	3.1	4.4	4.7		3 180.0	
Trinidad & Tobago	20.6		-3.5	0.0	0.4	18.6	1 550.0	1 500.0
Uruguay	40.3	11 997.9	2.6	8.5	9.8	-11.8	8 840.0	9 060.0
Venezuela (Boliv. Rep. of)	290.7	9 960.5	-3.3	-1.9	4.0		8 040.0	7 940.0
OCEANIA	15.3	1 742.8						
Fiji	3.1	3 517.8	-3.0	0.1	13.2	-9.6	2 110.0	1 860.0
French Polynesia					4.7			
New Caledonia					3.7			
Papua New Guinea	9.7	1 488.0	5.5	7.0	35.9	6.8	663.0	672.0
Samoa	0.6		-5.1	-0.0	11.9	1.7	2 120.0	1 940.0
Solomon Islands	0.7	1 340.4	-1.3	5.6	38.9	-5.6	1 980.0	1 780.0
Tonga	0.4	3 518.3	-0.3	0.3	19.6	1.6	3 560.0	3 510.0
Vanuatu	0.7	2 896.3	3.5	2.2	21.6		1 930.0	
DEVELOPED REGIONS	42 292.8	34 075.2						
NORTH AMERICA	16 231.9	47 178.1						
Bermuda					0.8	0.2	36 600.0	33 600.0
Canada	1 574.0	46 214.9	-2.5	3.1	1.6		48 700.0	44 800.0
United States of America	14 657.8	47 283.6	-2.6	2.8	1.2		46 100.0	49 500.0
ASIA & OCEANIA	7 048.0	43 647.7						
Australia	1 235.5	55 589.6	1.3	2.7	2.5		29 300.0	
Israel	213.1	28 685.6	0.8	4.6				
Japan	5 458.9	42 820.4	-6.3	3.9	1.5		52 100.0	
New Zealand	140.4	32 145.2	-2.1	1.5	5.6		25 400.0	
EUROPE	19 012.9	25 867.1						
Albania	11.8	3 676.9	3.3	3.5	20.8	2.5		
Belarus	54.7	5 800.4	0.2	7.6	9.6	-1.9	4 910.0	5 180.0
Bosnia & Herzegovina	16.8	4 318.7	-3.1	0.8	8.0	-12.0	13 300.0	14 300.0
Croatia	60.6	13 720.2	-5.8	-1.4	6.7	4.5	13 900.0	15 100.0
European Union	16 282.2	32 606.4			1.5	-9.3	16 200.0	17 900.0
Iceland	12.6	39 025.7	-6.9	-3.5	6.4		55 400.0	
Macedonia, FYR	9.1	4 431.1	-0.9	0.7	11.3	3.7	5 170.0	5 810.0
Montenegro	4.0		-5.7	1.1	10.0	7.2	2 500.0	2 660.0
Norway	414.5	84 443.6	-1.4	0.4	1.2	0.8	41 900.0	40 700.0
Republic of Moldova	5.8	1 630.4	-6.0	6.9	10.0	-6.5	1 630.0	1 530.0
Russian Federation	1 465.1	10 437.5	-7.8	4.0	4.7	6.8	2 950.0	3 030.0
Serbia	38.7	5 233.2	-3.1	1.8	12.9	-0.8		
Switzerland	523.8	67 246.0	-1.9	2.6	1.2	-7.1	25 600.0	26 700.0
Ukraine	136.4	2 999.6	-14.8	4.2	8.2	-1.3	2 390.0	2 460.0

TABLE 12: Prices, trade and debt

	Inflation	USD Exchange rate	Real exchange rate change	Real interest rate	Government debt	Merchan- dise trade	Trade performance		
							exports	imports	terms of trade
	%	per LCU	%	%	% of GDP	% of GDP	%	%	%
	2010	2010	2009 - 2010	2009*	2010	2010	2008 - 2009	2008 - 2009	2008 - 2009
WORLD						42.8			3.9
DEVELOPING REGIONS									-1.3
AFRICA									-11.9
North Africa									-16.2
Algeria	4.3	74.4	2.5	19.2		60.1	-43.1	-0.5	-32.1
Egypt	11.7	5.6	1.3	1.1	73.8	36.1	-12.1	-7.7	-11.7
Libya	2.4	1.3	1.6	57.8	0.0	73.4	-47.6	7.0	-31.0
Morocco	1.0	8.4	4.5		49.9	51.2	-26.1	-19.3	3.0
Tunisia	4.4	1.4	5.9		40.4	84.8	-25.2	-22.3	-0.8
Sub-Saharan Africa									-9.6
Angola	14.5	91.9	15.9	22.8	31.4	75.6	-43.2	-24.9	-32.1
Benin	2.1	495.3	4.9		30.6	45.7	-12.6	1.9	-3.6
Botswana	7.0	6.8	-5.2	20.6	13.2	69.2	-29.1	-9.6	-12.1
Burkina Faso	0.4	495.3	4.9		27.7	36.0	7.7	0.3	-2.4
Burundi	6.4	1 230.7	0.0	0.4	47.5	35.2	20.4	0.0	3.8
Cameroon	1.3	495.3	4.9		12.9	32.7	-17.3	-2.4	-12.2
Cape Verde	2.1	83.3	4.9	6.9	80.3	48.1	4.5	-14.2	23.6
Central African Republic	1.5	495.3	4.9		32.8	20.9	-21.4	-13.6	4.1
Chad	1.0	495.3	4.9		36.1	69.5	-38.8	16.0	-23.2
Comoros	2.7	371.5	4.8	5.7	51.9	30.4	27.8	-11.5	9.0
Congo	5.0	495.3	4.9		17.4	88.7	-22.0	-5.0	-31.0
Côte d'Ivoire	1.4	495.3	4.9		67.2	64.2	-12.5	-10.4	1.4
Congo, Dem. Rep.	23.5			27.0	29.5	63.4	-19.0	-19.6	-22.8
Djibouti	4.0	177.7	0.0		58.3	46.2	8.7	-28.5	-9.4
Equatorial Guinea	7.5	495.3	4.9		7.5	137.0	-40.7	38.4	-33.2
Eritrea	12.7	15.4	0.0		144.8	29.6	0.0	-6.0	-4.3
Ethiopia	2.8	14.4	11.0		36.7	33.5	0.9	-8.1	8.0
Gabon	0.6	495.3	4.9		21.3	66.0	-37.4	-20.5	-30.2
Gambia	5.0	28.0	2.3	24.1	57.4	43.5	7.8	-7.4	2.5
Ghana	10.7	1.4	1.4		41.2	52.1	3.3	-22.6	7.9
Guinea	15.5	0.0			88.7	58.7	-29.2	-29.5	-16.4
Guinea-Bissau	1.1	495.3	4.9		47.7	41.2	-7.5	3.3	0.2
Kenya	3.9	79.2	2.3	7.6	50.5	49.8	-10.5	-7.8	13.8
Lesotho	3.8	7.3	-13.6	9.2	37.7	171.0	-27.7	-6.4	10.1
Liberia	7.3	71.5	4.7	6.3	118.7	80.1	-38.9	-30.7	-7.5
Madagascar	9.0	2 089.9	6.6	33.8	35.0	51.1	-34.2	-17.9	6.0
Malawi	6.9	150.5	6.4	15.6	42.9	55.4	3.9	8.8	23.6
Mali	1.2	495.3	4.9		28.3	52.7	-5.7	-8.2	17.9
Mauritania	6.1	275.9	0.4		85.6	92.6	-21.9	-17.1	1.3
Mauritius	2.9	30.8	-3.8	17.5	50.5	66.0	-19.5	-20.4	6.7
Mozambique	12.7	34.0	23.6	12.0	32.0	60.4	-19.1	-6.1	-9.9
Namibia	4.5	7.3	-13.6	4.4	18.5	93.6	9.6	15.1	-5.8
Niger	0.9	495.3	4.9		17.6	44.6	0.9	4.5	-5.6
Nigeria	13.7	150.3	0.0	19.1	16.4	52.9	-38.0	-20.0	-31.0
Rwanda	2.3	583.1	2.5		23.9	27.2	-25.2	2.4	-6.1
Senegal	1.2	495.3	4.9		38.0	53.8	0.5	-27.6	5.5
Seychelles	-2.4	12.1	-11.0	-10.3	83.0	163.0	-13.0	-27.5	14.7
Sierra Leone	17.8	3 978.1	15.0		57.3	38.7	-4.8	-5.3	21.7
Somalia		0.0					-3.8	-17.9	-1.0
Sudan	13.0	2.3	-3.0		68.0	32.1	-36.5	-11.1	-33.0
South Africa	4.3	7.3	-13.6	4.1	35.7	47.6	-23.0	-22.3	3.8
Swaziland	4.5	7.3	-13.6	5.5	18.5	103.0	-18.9	-12.0	13.5
Tanzania, Utd. Rep.	10.5	1 409.3	6.8	7.1	43.8	44.2	-13.8	-11.2	12.0
Togo	3.2	495.3	4.9		28.2	80.6	-4.4	1.8	-5.9
Uganda	9.4	2 177.6	0.0	3.8	25.4	42.3	-0.2	-4.8	13.2
Zambia	8.5	4 797.1	-5.0	8.3	26.9	63.3	-15.4	-25.1	-8.8
Zimbabwe	3.0	0.0			56.3	91.9	34.1	24.3	8.1

TABLE 12: Prices, trade and debt (continued)

	Inflation	USD Exchange rate	Real exchange rate change	Real interest rate	Government debt	Merchan- dise trade	Trade performance		
	%	per LCU	%	%	% of GDP	% of GDP	exports	imports	terms of trade
	2010	2010	2009 - 2010	2009*	2010	2010	2008 - 2009	2008 - 2009	2008 - 2009
ASIA									1.3
Central Asia									
Kazakhstan	7.4	147.4	0.0		11.4	62.1			
Kyrgyzstan	7.8	46.0	7.2	20.5	63.0	97.8			
Tajikistan	6.5	4.4	5.8	8.5	36.7	71.9			
Turkmenistan	4.4	0.0			7.4	66.9			
Uzbekistan	9.4	0.0			10.0	61.5			
East Asia									6.2
Brunei Darussalam	0.5	1.4	-6.2		0.0	81.2	-33.7	-24.8	-31.3
Cambodia	4.0	4 184.9	1.4		30.3	99.5	-12.4	-17.6	5.3
China	3.3			6.0	17.7	44.3	-15.9	-11.3	7.6
Indonesia	5.1	9 090.4	-12.5	5.6	26.9	39.1	-19.0	-28.3	-2.8
Korea, DPR							-24.7	-42.5	9.7
Korea, Republic of	3.0	1 156.1	-9.4	2.2	30.9	82.5	-14.3	-25.8	10.1
Lao, PDR	5.4	8 258.8	-1.8		60.5	37.0	-4.9	-5.3	-6.3
Malaysia	1.7	3.2	-8.5	12.6	54.2	146.0	-24.9	-24.9	-4.1
Mongolia	10.2	1 357.1	-5.6	21.3		96.0	-25.1	-41.0	-7.1
Myanmar	7.3	5.6	1.3		43.0		-3.1	2.2	-2.5
Philippines	3.8	45.1	-5.5	5.9	47.3	52.3	-22.3	-23.9	6.4
Singapore	2.8	1.4	-6.2	7.4	97.2	283.0	-20.0	-23.1	-0.6
Thailand	3.3	31.7	-7.6	3.9	44.1	109.0	-12.0	-24.6	3.0
Viet Nam	9.2	18 612.9	8.2	3.8	52.8	131.0	-10.9	-16.3	3.0
South Asia									-3.5
Afghanistan	8.0	46.5	-7.2	36.1		31.3	-25.2	10.5	-7.7
Bangladesh	8.2	69.6	0.9	7.6		41.3	-2.1	-8.2	8.4
Bhutan	7.1	45.7	-5.6			80.3	-4.6	-1.9	-8.4
India	13.2	45.7	-5.6	4.3	69.2	29.9	-16.3	-22.3	-0.6
Iran (Islamic Rep.)	12.5	10 254.2	4.5	11.3	12.0	38.8	-29.9	-16.6	-29.0
Maldives	5.0	12.8	0.0	-6.2	65.3	77.1	-50.8	-30.3	31.7
Nepal	9.3	73.2	-5.5	-3.6	35.5	41.5	-5.9	5.1	5.8
Pakistan	11.7	85.2	4.3	-4.6	56.8	30.5	-13.8	-25.4	10.1
Sri Lanka	5.9	113.1	-1.7	9.5		41.8	-13.5	-30.2	13.6
West Asia									-15.8
Armenia	8.2	373.7	3.0	17.1	39.4	45.9			
Azerbaijan	5.7	0.8	-0.1	44.2	10.8	64.2			
Bahrain	2.0	0.4	0.0		32.0	93.1	-31.4	-32.6	-14.9
Cyprus	2.6	0.0			61.7	36.1			
Georgia	7.1	1.8	6.6	28.1	39.1	51.3			
Iraq	5.1	1 170.0	0.0	61.5	112.3	116.0	-30.4	-4.1	-30.5
Jordan	5.0	0.7	0.0	1.1	60.5	81.5	-16.1	-13.4	1.7
Kuwait	4.1	0.3	-0.3		10.5	75.9	-42.2	-27.9	-33.0
Lebanon	4.5	1 507.5	0.0	3.5	136.7	60.1	-5.9	-1.1	7.9
Occupied Palestinian Territory									
Saudi Arabia	5.4	3.8	0.0		10.8	76.6	-44.0	-24.1	-34.1
Syrian Arab Republic	4.4	11.2	0.0	19.0	27.5	51.2	-17.2	-14.4	2.1
Turkey	8.6	1.5	-3.2		41.7	39.5	-22.5	-30.2	4.2
United Arab Emirates	0.9	3.7	0.0		21.0	137.0	-26.9	-18.0	-22.9
Yemen	12.1	219.6	8.9	23.1	40.6	53.5	-34.5	-27.8	-24.0
LATIN AMERICA & THE CARIBBEAN									-4.2
Argentina	10.5	3.9	5.1	5.2	47.8	30.7	-20.5	-32.0	-5.3
Bahamas	1.7	1.0	0.0		47.1	52.0	-30.1	-20.1	-1.0
Barbados	5.1	2.0	0.0		113.7	50.8	-16.3	-22.1	5.2
Belize	0.5	2.0	0.0	14.5	81.7	67.8	-14.6	-20.6	4.7
Bolivia (Plur. State)	2.5	7.0	0.0	15.1	37.4	53.4	-25.2	-12.1	-4.9
Brazil	5.0	1.8	-12.0	36.8	66.1	18.0	-22.6	-26.7	-1.8
Chile	1.5	510.2	-9.1	2.9	8.8	58.8	-22.0	-32.9	1.2
Colombia	2.3	1 898.6	-12.4	7.7	36.5	28.1	-14.3	-16.4	-17.4
Costa Rica	5.7	525.8	-7.9	9.9	39.4	69.0	-9.1	-25.7	6.7

TABLE 12: Prices, trade and debt (continued)

	Inflation	USD Exchange rate	Real exchange rate change	Real interest rate	Government debt	Merchan- dise trade	Trade performance		
							exports	imports	terms of trade
	%	per LCU	%	%	% of GDP	% of GDP	%	%	%
	2010	2010	2009 - 2010	2009*	2010	2010	2008 - 2009	2008 - 2009	2008 - 2009
Cuba						30.9	-21.5	-37.4	
Dominica	2.9	2.7	0.0	8.2	85.5	66.0	-14.5	-5.4	6.6
Dominican Republic	6.3	36.9	2.5	14.7	29.0	37.9	-21.3	-23.1	3.4
Ecuador	3.5	0.0			20.4	50.5	-25.5	-19.1	-11.3
El Salvador	1.2	8.8	0.0		50.8	52.4	-16.8	-25.4	7.8
French Guiana									
Grenada	5.0	2.7	0.0	12.0	114.6	49.6	-5.5	-22.4	6.5
Guatemala	3.9	8.1	-1.2	11.2	24.0	50.2	-6.3	-20.6	6.8
Guyana	3.7	203.6	0.0	13.1	61.3	95.0	-3.8	-11.5	18.1
Haiti	4.1	39.8	-3.6	13.3	15.7	40.5	20.7	-8.1	13.7
Honduras	4.7	18.9	0.0	14.4	26.3	90.7	-37.8	-45.5	6.8
Jamaica	12.6	87.2	-0.7	9.3	139.7	52.9	-45.7	-40.2	-8.2
Mexico	4.2	12.6	-6.7	2.7	42.7	53.9	-21.1	-24.2	-1.9
Netherlands Antilles		1.8	0.0			336.0	-25.6	-15.0	-6.4
Nicaragua	5.5	21.4	5.4	-2.0	82.3	79.3	-6.5	-20.8	11.6
Panama	3.5	1.0	0.0	4.0	40.9	35.4	-24.1	-13.8	7.6
Paraguay	4.7	4 735.5	-4.4	28.4	15.0	71.0	-29.0	-23.2	-1.9
Peru	1.5	2.8	-6.0	17.5	24.3	37.3	-14.7	-30.0	-5.8
St. Kitts & Nevis	2.5	2.7	0.0	4.6	200.4	58.7	9.7	6.2	3.5
St. Lucia	1.8	2.7	0.0	10.9	77.2	73.1	-0.8	-17.8	-6.5
St. Vincent & Grenadines	1.5	2.7	0.0	6.0	82.2	65.7	-5.8	-10.8	0.0
Suriname	6.9	2.7	0.0		21.6	100.0	-16.9	-10.9	-1.9
Trinidad & Tobago	10.7	6.4	0.6	32.8	39.8	75.8	-50.9	-27.6	-16.6
Uruguay	6.7	20.1	-11.1	8.9	55.3	39.0	-15.7	-30.6	4.7
Venezuela (Boliv. Rep. of)	28.2	2.6	20.5	10.6	38.7	30.1	-39.4	-22.2	-24.9
OCEANIA									3.0
Fiji	5.4	1.9	-2.0	7.5	55.9	75.0	-32.0	-36.4	22.0
French Polynesia		0.0				34.6	-24.4	-21.1	8.3
New Caledonia		0.0				57.0	-31.1	-21.6	3.2
Papua New Guinea	6.6	2.7	-1.4	14.2		95.4	-31.8	-1.9	-4.7
Samoa	-0.2	2.5	-8.8	10.3		43.5	-36.2	-19.7	10.3
Solomon Islands	1.0	8.1	0.0	6.6	25.8	66.0	-22.3	-27.4	-1.0
Tonga	4.0	1.9	-5.9	13.8		51.1	4.9	5.1	19.0
Vanuatu	2.8	96.9	-7.5	1.4		54.3	2.3	-6.9	14.3
DEVELOPED REGIONS									6.6
NORTH AMERICA									6.2
Bermuda		0.0				19.0			
Canada	1.8	1.0	-9.6	4.6	84.0	48.4	-29.9	-22.4	-9.4
United States of America	1.6	1.0	0.0	2.3	91.6	18.8	-18.7	-26.2	7.8
ASIA & OCEANIA									14.5
Australia	2.8	1.1	-14.8	1.0	22.3	34.6	-23.4	-17.0	-6.9
Israel	2.7	3.7	-4.8	-1.4	77.9	49.8	-19.4	-27.3	10.9
Japan	-0.7	87.8	-6.2	2.7	220.3	22.3	-27.5	-29.4	20.0
New Zealand	2.3	1.4	-13.1	8.6	31.6	39.8	-18.4	-25.7	-8.3
EUROPE									3.2
Albania	3.6	103.9	9.5	10.1	59.7	46.9			
Belarus	7.7	2 978.5	6.8	7.5	22.4	102.0	-34.7	-27.5	-11.0
Bosnia & Herzegovina	2.1	1.5	5.0	8.0	36.9	74.5			
Croatia	1.0	5.5	4.2	8.0	40.0	50.3			
European Union						56.3			3.7
Iceland	5.4	122.2	-1.6	9.6	96.6	62.8	-22.1	-38.5	-11.1
Macedonia, FYR	1.5	46.5	5.4	7.1	24.8	83.9			
Montenegro	0.5		4.9	6.8	44.1	59.3			
Norway	2.4	6.0	-4.0	8.7	54.3	49.8	-29.6	-21.6	-17.8
Republic of Moldova	7.4	12.4	11.7	18.1	29.8	84.5			
Russian Federation	6.9	30.4	-4.1	12.5	9.9	40.2			
Serbia	6.2		14.9	1.6	44.0	55.7			
Switzerland	0.7	1.0	-4.6	2.5	55.0	66.8	-12.3	-13.8	7.6
Ukraine	9.4	7.9	1.9	6.6	40.5	75.0			

Definitions and sources

Agricultural population

P1.DEM.FAO.POP.AGR 

Page: table 1 (p. 38).

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: Statistics Division (FAOSTAT)

Owner: FAO

Contraceptive prevalence (% of women ages 15-49)

P1.DEM.UN.WPP.FER.CON 

Page: table 2 (p. 41).

Contraceptive prevalence rate is the percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception. It is usually measured for married women ages 15-49 only.

Source: World Bank (WDI)

Owner: UNICEF

Fertility rate

P1.DEM.UN.WPP.FER.TOT 

Page: table 2 (p. 41), chart 1 (p. 9).

Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

Source: World Bank (WDI)

Owner: UNPD World Population Prospects 2010

Net migration

P1.DEM.UN.WPP.MIG.NET 

Page: table 2 (p. 41).

Net migration is the net total of migrants during the period, that is, the total number of immigrants less the annual number of emigrants, including both citizens and noncitizens. Data are five-year estimates. To derive estimates of net migration, the United Nations Population Division takes into account the past migration history of a country or area, the migration policy of a country, and the influx of refugees in recent periods. The data to calculate these official estimates come from a variety of sources, including border statistics, administrative records, surveys, and censuses. When no official estimates can be made because of insufficient data, net migration is derived through the balance equation, which is the difference between overall population growth and the natural increase during the 1990-2000 intercensal period.

Source: World Bank (WDI)

Owner: UNPD World Population Prospects 2010

Death rate, crude (per 1000 people)

P1.DEM.UN.WPP.MOR.CDR 

Page: table 2 (p. 41).

Crude death rate indicates the number of deaths occurring during the year, per 1000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.

Source: World Bank (WDI)

Owner: UNPD World Population Prospects 2010

Life expectancy at birth, total (years)

P1.DEM.UN.WPP.MOR.EXP 

Page: table 2 (p. 41).

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

Infant mortality rate

P1.DEM.UN.WPP.MOR.IMR 

Page: table 2 (p. 41).

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

Population age structure

P1.DEM.UN.WPP.POP.AGE 

Page: table 1 (p. 38), chart 5 (p. 11).

Population is based on the de facto definition of population. Young population refers to people between 0 and 14, while old population refers to people 65 and above.

Source: World Bank (WDI)

Owner: World Bank

Population density

P1.DEM.UN.WPP.POP.DEN 

Page: table 2 (p. 41), map 2 (p. 11).

Population density is midyear population divided by land area in square kilometres. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Land area is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

Source: World Bank (WDI)

Owner: FAO and World Bank

Population, totalP1.DEM.UN.WPP.POP.TOT *Page:* table 1 (p. 38), chart 2 (p. 10), map 1 (p. 8).

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: World Bank (WDI)*Owner:* UNPD World Population Prospects 2010**Population of Urban Agglomerations with 750 000 or more Inhabitants**

P1.DEM.UN.WUP.POP.750

Page: chart 96 (p. 215).

Population in urban agglomerations of more than one million is the country's population living in metropolitan areas that in 2009 had a population of more than one million people.

Source: World Bank (WDI)*Owner:* UNPD World Urbanization Prospects 2009**Rural population**P1.DEM.UN.WUP.POP.RUR *Page:* table 2 (p. 41), chart 4 (p. 11).

Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.

Source: World Bank (WDI)*Owner:* UNPD World Population Prospects 2010**Urban population**P1.DEM.UN.WUP.POP.URB *Page:* table 2 (p. 41), chart 3, 4 (p. 10, 11), map 52 (p. 214).

Urban population refers to people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from the United Nations World Urbanization Prospects.

Source: World Bank (WDI)*Owner:* UNPD World Population Prospects 2010**US\$ Exchange rate**P1.MAC.IMF.IFS.EXR.AVE *Page:* table 12 (p. 71).

Official exchange rate refers to the exchange rate determined by national authorities or to the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on monthly averages (local currency units relative to the US dollar).

Source: International Financial Statistics*Owner:* IMF**Real effective exchange rate index**P1.MAC.IMF.IFS.EXR.REEXR *Page:* table 12 (p. 71).

Real effective exchange rate is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs.

Source: International Financial Statistics*Owner:* IMF**GDP (current US\$)**P1.MAC.IMF.WEO.GDP.NOM *Page:* table 11 (p. 68).

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

Source: World Bank (WDI)*Owner:* IMF, World Bank and OECD**GDP per capita (current US\$)**P1.MAC.IMF.WEO.GDP.NPC *Page:* table 11 (p. 68).

GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current US dollars.

Source: World Bank (WDI)*Owner:* IMF, World Bank and OECD**Real growth rate in GDP**P1.MAC.IMF.WEO.GDP.RGR *Page:* table 11 (p. 68), map 14 (p. 35).

Annual percentages of constant price GDP are year-on-year changes; the base year is country-specific. Expenditure-based GDP is total final expenditures at purchasers' prices (including the f.o.b. value of exports of goods and services), less the f.o.b. value of imports of goods and services.

Source: World Economic Outlook*Owner:* IMF

Central government debt, total (% of GDP)P1.MAC.IMF.WEO.GOV.DBT 

Page: table 12 (p. 71).

Debt is the entire stock of direct government fixed-term contractual obligations to others outstanding on a particular date. It includes domestic and foreign liabilities such as currency and money deposits, securities other than shares, and loans. It is the gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government. Because debt is a stock rather than a flow, it is measured as of a given date, usually the last day of the fiscal year.

Source: World Bank (WDI)

Owner: IMF, World Bank and OECD

Inflation, consumer prices (annual %)P1.MAC.IMF.WEO.INF.PER 

Page: table 12 (p. 71), map 15 (p. 35).

Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

Source: World Bank (WDI)

Owner: IMF

Price-adjusted major currencies US Dollar Index

P1.MAC.USA.FR.EXR.MAJ

Page: chart 27 (p. 34).

The major currencies index is a trade-weighted average of the foreign exchange values of the US dollar against currencies that circulate widely outside the country of issue. These are the euro, Canadian dollar, Japanese yen, British pound, Swiss franc, Australian dollar, and Swedish kroner. The base year for the index is 2003.

Source: United States Federal Reserve

Owner: Board of Governors of the Federal Reserve System

Agriculture, value added (% of GDP)P1.MAC.WBK.WDI.AGV.GDP 

Page: table 11 (p. 68), map 13 (p. 32).

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 and OECD

Agriculture value added per worker (constant 2000 US\$)P1.MAC.WBK.WDI.AGV.PWK 

Page: table 11 (p. 68), chart 26 (p. 33).

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

Source: World Bank (WDI)

Owner: World Bank and FAO

Real interest rate (%)P1.MAC.WBK.WDI.INT.RL 

Page: table 12 (p. 71).

Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.

Source: World Bank (WDI)

Owner: IMF and World Bank

Merchandise trade (% of GDP)P1.MAC.WBK.WDI.MCH.GDP 

Page: table 12 (p. 71), chart 28 (p. 34).

Merchandise trade as a share of GDP is the sum of merchandise exports and imports divided by the value of GDP, all in current US dollars.

Source: World Bank (WDI)

Owner: WTO and World Bank

Import value index (2000 = 100)P1.MAC.WBK.WDI.MVAL.IX 

Page: table 12 (p. 71).

Import value indexes are the current value of imports (c.i.f.) converted to US dollars and expressed as a percentage of the average for the base period (2000). UNCTAD's import value indexes are reported for most economies. For selected economies for which UNCTAD does not publish data, the import value indexes are derived from import volume indexes (line 73) and corresponding unit value indexes of imports (line 75) in the IMF's International Financial Statistics.

Source: World Bank (WDI)

Owner: UNCTAD and IMF

Net barter terms of trade index (2000 = 100)P1.MAC.WBK.WDI.TOT.IX 

Page: table 12 (p. 71).

Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year 2000. Unit value indexes are based on data reported by countries that demonstrate consistency under UNCTAD quality controls, supplemented by UNCTAD's estimates using the previous year's trade values at the Standard International Trade Classification three-digit level as weights. To improve data coverage, especially for the

latest periods, UNCTAD constructs a set of average prices indexes at the three-digit product classification of the Standard International Trade Classification revision 3 using UNCTAD's Commodity Price Statistics, international and national sources, and UNCTAD secretariat estimates and calculates unit value indexes at the country level using the current year's trade values as weights.

Source: World Bank (WDI)

Owner: UNCTAD and IMF

Export value index (2000 = 100)

P1.RES.WBK.WDI.XVAL.IX 

Page: table 12 (p. 71).

Export values are the current value of exports (f.o.b.) converted to US dollars and expressed as a percentage of the average for the base period (2000). UNCTAD's export value indexes are reported for most economies. For selected economies for which UNCTAD does not publish data, the export value indexes are derived from export volume indexes (line 72) and corresponding unit value indexes of exports (line 74) in the IMF's International Financial Statistics.

Source: World Bank (WDI)

Owner: UNCTAD and IMF

Share of components in capital stock

P1.RES.FAO.ESS.CAP.STK 

Page: table 7, 8 (p. 56, 59), chart 17, 20 (p. 23, 25), map 8 (p. 22).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Arable land

P1.RES.FAO.ESS.LDAQ.ARL 

Page: table 3 (p. 44), chart 7 (p. 15), map 4 (p. 14).

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. Data are expressed in 1000 hectares.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Arable and permanent cropland

P1.RES.FAO.ESS.LDAQ.ARPCL 

Page: chart 8 (p. 16).

See arable land and cropland definitions.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Total land area

P1.RES.FAO.ESS.LDAQ.LAND 

Page: table 3 (p. 44).

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 1000 hectares.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Agricultural area

P1.RES.FAO.ESS.LDAQ.LDAG 

Page: table 3 (p. 44).

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: Statistics Division (FAOSTAT)

Owner: FAO

Permanent cropland

P1.RES.FAO.ESS.LDAQ.PCL 

Page: table 3 (p. 44).

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. Data are expressed in 1000 hectares.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Pasture landP1.RES.FAO.ESS.LDAQ.PSTL *Page:* table 3 (p. 44), chart 8 (p. 16).

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: Statistics Division (FAOSTAT)*Owner:* FAO**Pesticide consumption**P1.RES.FAO.ESS.PES.TON *Page:* table 10 (p. 65).

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.

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Arable land potential**

P1.RES.FAO.LAN.ALP

Page: chart 9 (p. 16).

Calculations based on Bruinsma (2011).

Source: Agricultural Development Economics Division*Owner:* FAO**Area equipped for irrigation, actually irrigated**P1.RES.FAO.NRL.EAAI *Page:* table 4 (p. 47).

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**Area equipped for irrigation, actually irrigated**P1.RES.FAO.NRL.EAIG *Page:* table 4 (p. 47).

Area equipped to provide water (via irrigation) to crops that is irrigated from wells (shallow wells and deep tube wells) or springs.

Source: Land and Water Division (AQUASTAT)*Owner:* FAO**Irrigation potential**P1.RES.FAO.NRL.IP *Page:* table 4 (p. 47).

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**Total area equipped for irrigation**P1.RES.FAO.NRL.TAEI *Page:* table 4 (p. 47), chart 11 (p. 17).

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**Water resources, renewable per capita**P1.RES.FAO.NRL.WTRpc *Page:* table 4 (p. 47), chart 10 (p. 17), map 5 (p. 17).

Total annual internal renewable water resources per inhabitant.

Source: Land and Water Division (AQUASTAT)*Owner:* FAO**Electricity access**

P1.RES.IEA.WEO.ELEC.AC

Page: chart 23 (p. 30).

There is no single internationally-accepted definition for electricity access. The definition used covers electricity access at the household level, that is, the number of people who have electricity in their home. It comprises electricity sold commercially, both on-grid and off-grid. It also includes self-generated electricity for those countries where access to electricity has been assessed through surveys by government or government agencies. The data does not capture unauthorised connections. The national, urban and rural electrification rates shown indicate the number of people with electricity access as a percentage of the total population.

Source: World Energy Outlook 2010*Owner:* IEA

Share of male and female agricultural holders in developing regions

P1.RES.ILO.GEND.HLD

Page: chart 6 (p. 13).

Number of women land holders in relation to the total number of holdings.

Source: Gender and Land Rights Database

Owner: FAO

Female share of the agricultural labour forceP1.RES.ILO.LAB.GEND 

Page: map 3 (p. 12).

The female share of the agricultural labour force is calculated as the total number of women economically active in agriculture divided by the total population economically active in agriculture. Regional averages are weighted by population.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Lead time to export, median case (days)P1.RES.WBK.WDI.EXP.DAY 

Page: table 10 (p. 65), chart 25 (p. 31).

Lead time to export is the median time (the value for 50 percent of shipments) from shipment point to port of loading. Data are from the Logistics Performance Index survey. Respondents provided separate values for the best case (10 percent of shipments) and the median case (50 percent of shipments). The data are exponentiated averages of the logarithm of single value responses and of midpoint values of range responses for the median case.

Source: World Bank (WDI)

Owner: World Bank

Foreign direct investment, net inflows (BoP, current US\$)P1.RES.WBK.WDI.FDI.INF 

Page: table 9 (p. 62), chart 19 (p. 24).

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

Source: World Bank (WDI)

Owner: IMF and UNCTAD

Fertilizer consumption (kilograms per hectare of arable land)P1.RES.WBK.WDI.FER.HA 

Page: table 10 (p. 65), map 10 (p. 26).

Fertilizer consumption (100 grams per hectare of arable land) measures the quantity of plant nutrients used

per unit of arable land. Fertilizer products cover nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). Traditional nutrients—animal and plant manures—are not included. For the purpose of data dissemination, FAO has adopted the concept of a calendar year (January to December). Some countries compile fertilizer data on a calendar year basis, while others are on a split-year basis. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Gross capital formation (% of GDP)P1.RES.WBK.WDI.GCF.GDP 

Page: table 9 (p. 62), chart 18 (p. 24).

Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 1993 UN System of National Accounts (SNA), net acquisitions of valuables are also considered capital formation.

Source: World Bank (WDI)

Owner: World Bank and OECD

Lead time to import, median case (days)P1.RES.WBK.WDI.IMP.DAY 

Page: table 10 (p. 65), chart 25 (p. 31).

Lead time to import is the median time (the value for 50 percent of shipments) from port of discharge to arrival at the consignee. Data are from the Logistics Performance Index survey. Respondents provided separate values for the best case (10 percent of shipments) and the median case (50 percent of shipments). The data are exponentiated averages of the logarithm of single value responses and of midpoint values of range responses for the median case.

Source: World Bank (WDI)

Owner: World Bank

Quality of infrastructure scoreP1.RES.WBK.WDI.INF.IX 

Page: table 10 (p. 65), chart 22 (p. 29), map 11 (p. 28).

Quality of infrastructure refers to the World Bank's Logistics Performance Index. The overall score reflects perceptions of a country's logistics based on efficiency of customs clearance process, quality of trade- and

transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. The index ranges from 1 to 5, with a higher score representing better performance. Data are from Logistics .

Source: World Bank (WDI)

Owner: World Bank

Employees, agriculture, female (% of female employment)

P1 . RES . WBK . WDI . LAB . AGRF 

Page: table 5 (p. 50).

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.

Source: World Bank (WDI)

Owner: ILO

Employees, agriculture, male (% of male employment)

P1 . RES . WBK . WDI . LAB . AGRM 

Page: table 5 (p. 50).

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.

Source: World Bank (WDI)

Owner: ILO

Economically active children, total (% of children ages 7-14)

P1 . RES . WBK . WDI . LAB . CHLD 

Page: table 6 (p. 53).

Economically active children refer to children involved in economic activity for at least one hour in the reference week of the survey. A child is defined as any person under 18 years of age. Child labour is defined based on a child's age, hours and conditions of work, activities performed and the hazards involved. Child labour is work that interferes with compulsory schooling and damages health and personal development.

Source: World Bank (WDI)

Owner: ILO, UNICEF and World Bank

Employment in agriculture (% of total employment)

P1 . RES . WBK . WDI . LAB . EAT 

Page: map 6 (p. 18).

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation

categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.

Source: World Bank (WDI)

Owner: ILO

Employment in agriculture (% of total employment)

P1 . RES . WBK . WDI . LAB . EATx

Page: chart 12, 15 (p. 19, 21).

Regional employment in agriculture. Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture corresponds to division 1 (ISIC revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.

Source: Key Indicators of the Labour Market (KILM) 7th edition

Owner: ILO

Employment in industry (% of total employment)

P1 . RES . WBK . WDI . LAB . EITx

Page: chart 15 (p. 21).

Regional employment in industry. Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Industry corresponds to divisions 2-5 (ISIC revision 2) or tabulation categories C-F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water).

Source: World Bank (WDI)

Owner: ILO

Share of employment in industry

P1 . RES . WBK . WDI . LAB . EMP 

Page: table 5 (p. 50).

Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Industry corresponds to divisions 2-5 (ISIC revision 2) or tabulation categories C-F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water).

Source: Key Indicators of the Labour Market (KILM) 7th edition

Owner: ILO

Employment to population ratio, 15+, female (%)

P1 . RES . WBK . WDI . LAB . EPRF 

Page: table 6 (p. 53), chart 14 (p. 20).

Employment to population ratio is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population.

Source: World Bank (WDI)

Owner: ILO

Employment to population ratio, 15+, male (%)P1.RES.WBK.WDI.LAB.EPRM 

Page: table 6 (p. 53), chart 14 (p. 20).

Employment to population ratio is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population.

Source: World Bank (WDI)

Owner: ILO

Employment to population ratio, 15+, total (%)P1.RES.WBK.WDI.LAB.EPRT 

Page: table 6 (p. 53).

Employment to population ratio is the proportion of a country's population that is employed. Ages 15 and older are generally considered the working-age population.

Source: World Bank (WDI)

Owner: ILO

Employment in services (% of total employment)

P1.RES.WBK.WDI.LAB.EXTx

Page: chart 15 (p. 21).

Regional employment in services. Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Services correspond to divisions 6-9 (ISIC revision 2) or tabulation categories G-P (ISIC revision 3) and include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.

Source: Key Indicators of the Labour Market (KILM) 7th edition

Owner: ILO

Employees, agriculture, gender (% of gender employment)

P1.RES.WBK.WDI.LAB.GENDAG

Page: chart 13 (p. 20).

Share of agriculture employment in total employment by gender.

Source: Key Indicators of the Labour Market (KILM) 7th edition

Owner: ILO

Labour participation rate, female (% of female population ages 15+)P1.RES.WBK.WDI.LAB.PTRF 

Page: table 6 (p. 53), chart 16 (p. 21).

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

Source: World Bank (WDI)

Owner: ILO

Labour participation rate (% of population ages 15+)P1.RES.WBK.WDI.LAB.PTRM 

Page: table 6 (p. 53), chart 16 (p. 21).

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

Source: World Bank (WDI)

Owner: ILO

Labour force, totalP1.RES.WBK.WDI.LAB.TOT 

Page: table 5 (p. 50).

Total labour force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population: all people who supply labour for the production of goods and services during a specified period. It includes both the employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labour force includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

Source: World Bank (WDI)

Owner: ILO

Unemployment, female (% of female labour force)P1.RES.WBK.WDI.LAB.UNF 

Page: table 6 (p. 53).

Unemployment refers to the share of the labour force that is without work but available for and seeking employment. Definitions of labour force and unemployment differ by country.

Source: World Bank (WDI)

Owner: ILO

Unemployment, total (% of total labour force)P1.RES.WBK.WDI.LAB.UNFT 

Page: table 6 (p. 53), map 7 (p. 21).

Unemployment refers to the share of the labour force that is without work but available for and seeking employment. Definitions of labour force and unemployment differ by country.

Source: World Bank (WDI)

Owner: ILO

Net ODA received (% of GNI)P1.RES.WBK.WDI.ODA.GNI 

Page: table 9 (p. 62).

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).

Source: World Bank (WDI)

Owner: OECD

Net ODA received per capita (current US\$)

P1.RES.WBK.WDI.ODA.PCP 

Page: table 9 (p. 62), map 9 (p. 25).

Net official development assistance (ODA) per capita consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients; and is calculated by dividing net ODA received by the midyear population estimate. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).

Source: World Bank (WDI)

Owner: OECD

Research and development expenditure (% of GDP)

P1.RES.WBK.WDI.RD.GDP 

Page: table 9 (p. 62).

Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

Source: World Bank (WDI)

Owner: UNESCO

Researchers in R&D (per million people)

P1.RES.WBK.WDI.RD.NUM 


Page: table 9 (p. 62).

Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included.

Source: World Bank (WDI)

Owner: UNESCO

Roads, paved (% of total roads)

P1.RES.WBK.WDI.RD.PV 

Page: table 10 (p. 65), map 12 (p. 31).

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.

Source: World Bank (WDI)

Owner: International Road Federation

Agricultural machinery, tractors per 100 sq. km of arable land

P1.RES.WBK.WDI.TRA.SKM 

Page: table 10 (p. 65).

Agricultural machinery refers to the number of wheel and crawler tractors (excluding garden tractors) in use in agriculture at the end of the calendar year specified or during the first quarter of the following year. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Agricultural machinery, tractors per 100 sq. km of arable land (regional)

P1.RES.WBK.WDI.TRA.SKMr

Page: chart 24 (p. 30).

Agricultural machinery refers to the number of wheel and crawler tractors (excluding garden tractors) in use in agriculture at the end of the calendar year specified or during the first quarter of the following year. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Source: Statistics Division (FAOSTAT)

Owner: FAO

World pesticide usage

P1.RES.FAO.ESS.PES.TYPE

Page: chart 21 (p. 27).

Global utilization of pesticides by category

Source: United States Environmental Protection Agency

Owner: Pesticides Industry Sales and Usage

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.

SOFI 2011 focuses on the costs of food price volatility, as well as the dangers and opportunities presented by high food prices.

2010: How does international price volatility affect domestic economies and food security?

2011: Addressing food insecurity in protracted crises

Publication cycle: Annual

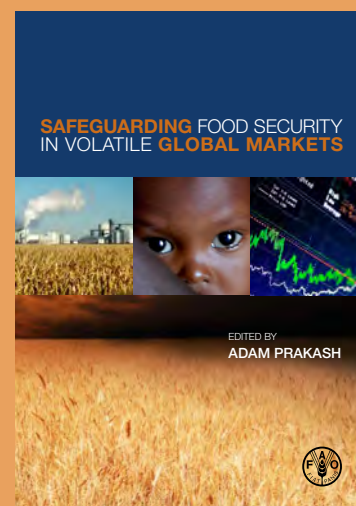
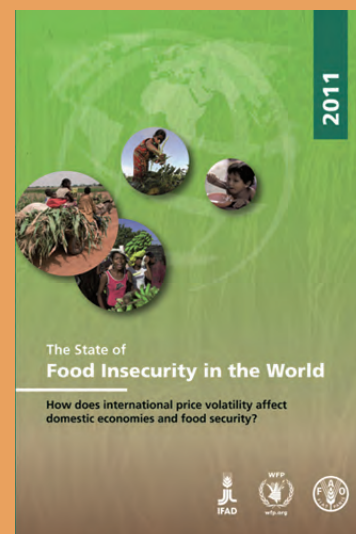
Webpage:

<http://www.fao.org/publications/sofi/en/>

Safeguarding Food Security in Volatile Global Markets

Safeguarding Food Security in Volatile Global Markets is a four-part volume that gathers together the latest thinking on the issues and controversies surrounding price volatility in global food markets. Drawing from theory, empiricism and heuristic evidence, the book contributes to the debate on the causes, consequences, and challenges of food price volatility. Food security and vulnerability are placed at centre stage, especially in their demands on shaping innovative policy design.

Webpage: <http://www.fao.org/economic/est/volatility/vgm/en/>



Risks, hazards and shocks

Armed conflict and natural disasters pose a significant risk to a population's food security, especially when combined with poverty, poor governance, scarce resources, unsustainable livelihood systems and the breakdown of local institutions. Under these circumstances, a perceived transitory shock or short-lived crisis can turn into a self-perpetuating vicious cycle, from which countries cannot easily return to a path of longer-term development. Severe events can have an irreversible impact on human capital and societal systems. Armed conflict and natural disasters therefore represent ongoing and fundamental threats to both lives and livelihoods, from which recovery is progressively more difficult over time.

As of 2010, FAO identified 22 countries as being in a state of **protracted crisis**, defined as “those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time”. The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or to provide adequate levels of protection. Food insecurity is the most common manifestation of protracted crises. Seventeen of the 22 countries are located in sub-Saharan Africa. All 22 have suffered some kind of human-induced emergency such as conflict or political crisis. Sixteen have also experienced some kind of natural disaster at some point – either as a stand-alone crisis or combined with a human-induced emergency – while 15 have experienced at least one occurrence of combined natural and human-induced emergency. Some protracted crisis situations are limited to a particular geographic area of a country and may not affect the entire population. In the 22 countries, a total of around 166 million people are undernourished, representing nearly 40 percent of their combined population and nearly 20 percent of all undernourished people in the world.

Around 43.7 million people were **forcibly displaced** worldwide in 2010: 15.4 million refugees, 27.5 million internally displaced persons (IDP) as a result of conflict, and nearly 850 000 asylum-seekers. Four-fifths of the world's refugees are being hosted by developing countries, including some of the poorest countries, adding a strain both in refugee numbers and in relation to the size of their economies.

Pakistan bears the largest burden in terms of economic impact, hosting 710 refugees for each US dollar of its per capita GDP (Gross Domestic Product), followed by the Democratic Republic of the Congo and Kenya with 475 and 247 refugees respectively. By comparison, Germany, the industrialized country with the largest refugee population (594 000 people), has 17 refugees for each dollar of per capita GDP.

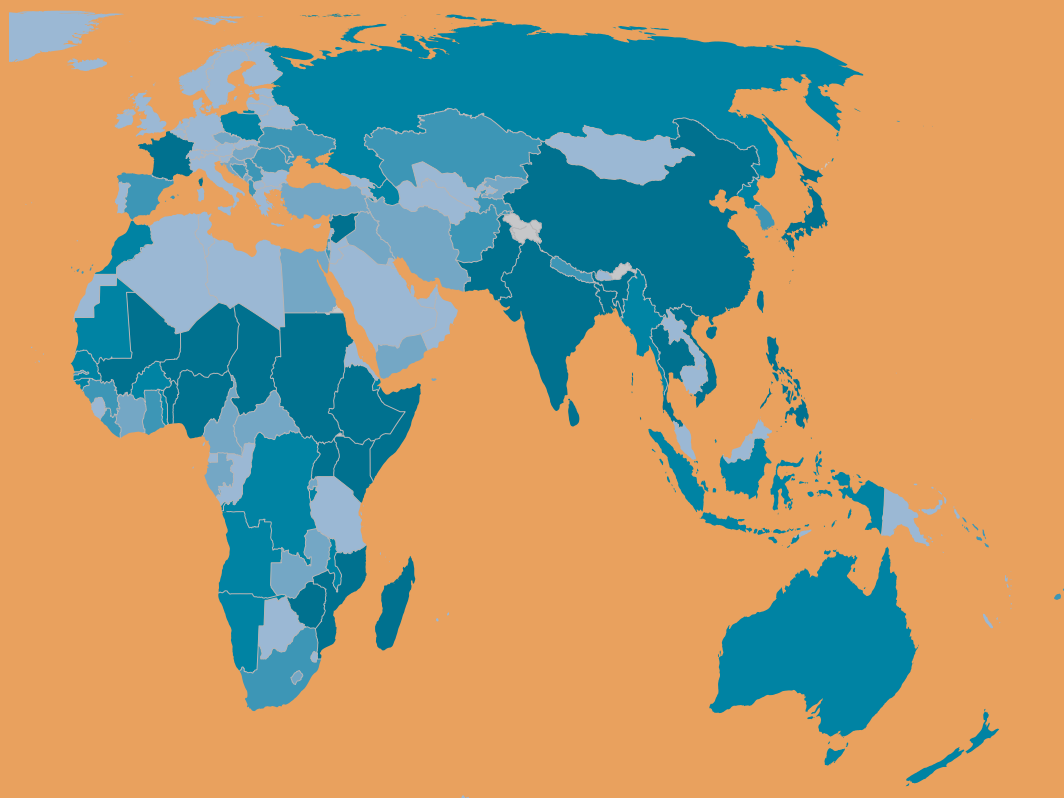
Map 16:



Source: OFDA-CRED

Metalink: [P2.HUN.ODFA.EMDAT.RHS.PPND](https://p2.hun.odfa.emdat.rhs.ppn.org/p2/hun/odfa/emdat/rhs/ppnd), p. 166 

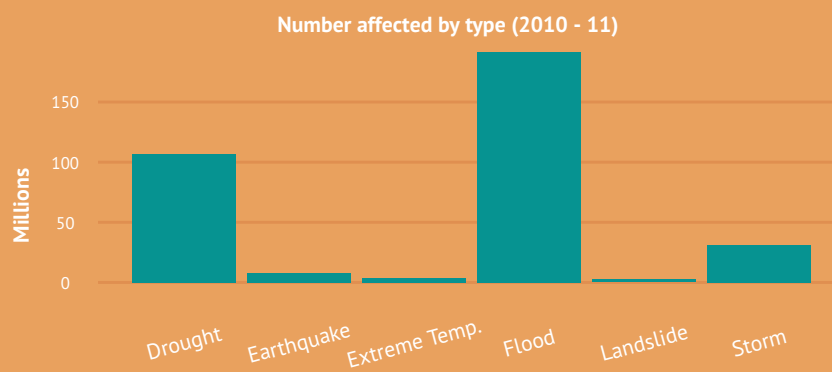
- Around 350 million people were affected by drought and other natural disasters between 2010-2011
- Parts of sub-Saharan Africa and Asia were hardest hit
- Many of those affected already suffer from acute food-insecurity



Number affected by droughts and other natural disasters (thousands, 2010 – 11)



Chart 29: Floods and droughts impact by far the largest number of people



Source: OFDA-CRED

Metalink: [P2.HUN.ODFA.EMDAT.RHS.PPND](#), p. 166



According to the Centre for Research on the Epidemiology of Disasters (CRED), the world endured some 373 **natural disasters** in 2010, which killed approximately 297 000 people – the highest level of fatality in the past two decades – and disrupted the lives of nearly 208 million others. Disaster statistics are often altered by single extreme events that cause excessive human impact. For instance, the 12 January 2010 earthquake in Haiti killed over 222 500 people, and the heat wave that hit the Russian Federation in mid-2010 resulted in around 56 000 fatalities. In the last four decades, the mortality figures of 2010 were only surpassed by the 1970 rates, when a tropical cyclone killed 300 000 people in Bangladesh, and in 1983-84, when famines affected the African continent and caused 450 000 deaths.

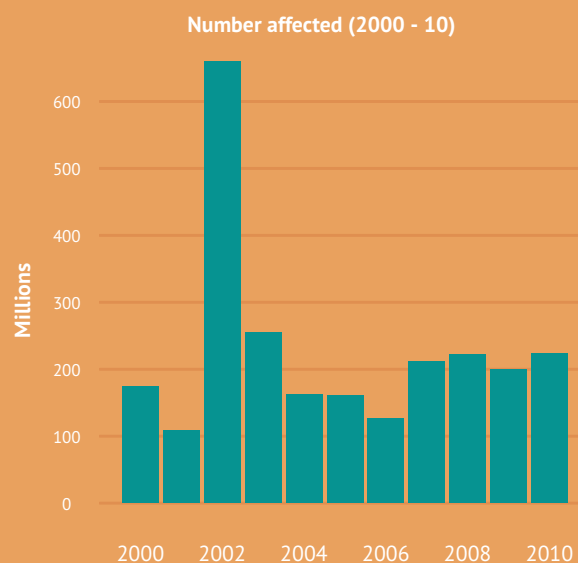
As for major events in 2011, the 2010–2011 drought in the north of China was the worst drought to afflict the country in 60 years. The drought enveloped 7.7 million hectares of winter wheat, and by the end of the episode in June, some 35 million people had been affected. Losses to China's wheat harvest were a prominent factor in the increase of worldwide wheat prices in early 2011. The March earthquake and tsunami in Japan, which had no long-lasting impact on food security, nevertheless left well over 20 000 people either dead or missing.

By the end of 2011, the food crisis in the Horn of Africa, a result of the driest spell in the region since 1950-51, had affected some 13 million people in Djibouti, Ethiopia, Kenya and Uganda with parts of southern Somalia enduring famine. The situation has been exacerbated by high local cereal prices, excessive livestock mortality, conflict and restricted humanitarian access. In August 2011, the UN refugee agency (UNHCR) reported a ten per day rate of malnutrition-related child mortality at a camp in eastern Ethiopia for Somali refugees who had fled drought, famine and fighting within their own borders.

Further reading

- FAO The State of Food Insecurity in the World 2010: Addressing food insecurity in protracted crises (www.fao.org/publications/sofi-2010/en/)
- Centre for Research on the Epidemiology of Disasters (<http://www.cred.be/>)
- United Nations High Commissioner for Refugees (<http://www.unhcr.org>)
- Internal Displacement Monitoring Centre (www.internal-displacement.org/)

Chart 30: Natural disasters have affected more than 2.5 billion people over the past ten years



Source: OFDA-CRED

Metalink: P2.HUN.ODFA.EMDAT.RHS.PPNDT, p. 166

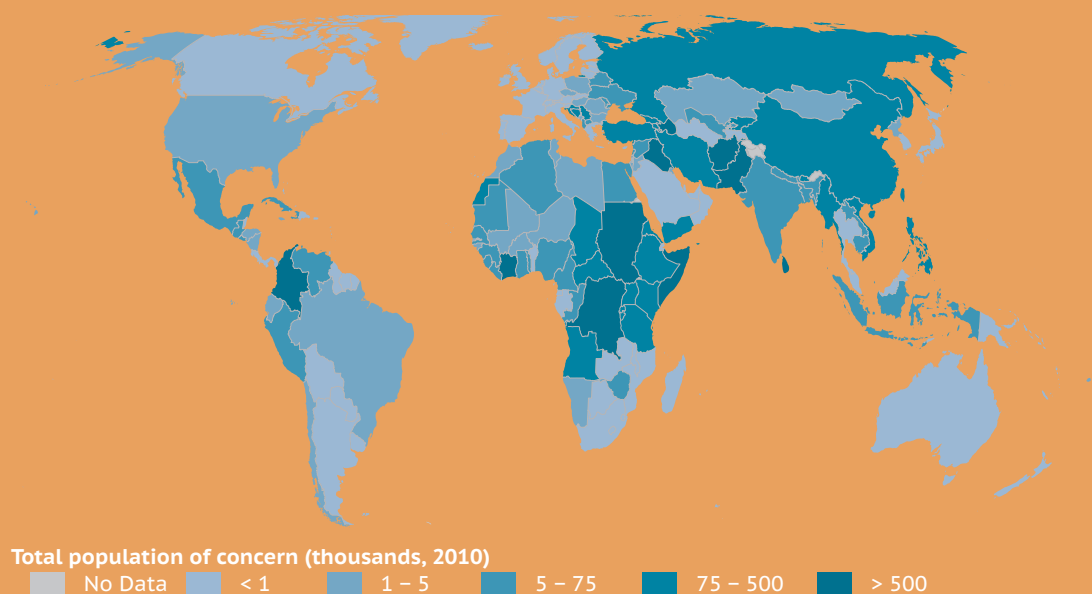
Chart 31: Most countries in protracted crises are in Africa

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

Source: FAO, Trade and Markets Division

Metalink: P2.HUN.FAO.ESA.RHS.NPC, p. 163

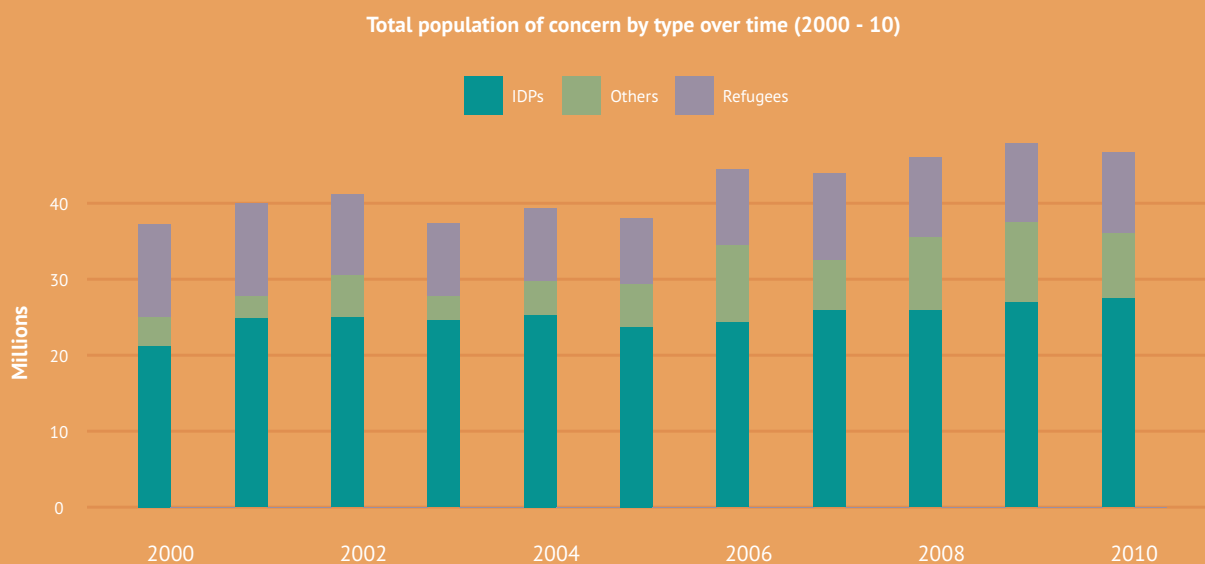
Map 17: Natural disasters and armed conflict result in large numbers of displaced people



Source: UNHCR

Metalink: P2.HUN.UNHCR.GT.RHS.TPC, p. 166 

Chart 32: A slight decline in 2010 does not mask an upward trend in the global number of displaced



Source: UNHCR

Metalink: P2.HUN.UNHCR.GT.RHS.TPCT, p. 167

Undernourishment

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and preferences for an active and healthy life. Undernourishment or hunger exists when caloric intake is below the minimum dietary energy requirement (MDER). The MDER is the amount of energy needed to perform light activity and to maintain a minimum acceptable weight for attained height. It is derived by aggregating the estimated sex-age-specific minimum dietary energy requirements using the population's relative proportion in corresponding sex-age and weight groups.

The fight against hunger is one of the central objectives for development. Indeed, the first Millennium Development Goal (MDG1) seeks to halve the proportion of people who suffer from hunger between 1990 and 2015.

Habitual food consumption, in terms of **calories per person per day** (kcal/person/day), is the key metric used for measuring and evaluating the evolution of chronic hunger worldwide. There has been significant progress in raising food intake per person at the global level. In the past two decades, this rate increased from an average of 2610 kcal/person/day to less than 2800 kcal/person/day. The gains in the world average predominantly reflect those of the developing countries, given that developed countries previously had fairly high levels of per capita food consumption.

Changes in food consumption levels closely correlate to changes in rates of undernourishment. Based on the latest available data, the total **number of undernourished** people in the world is estimated to have reached 850 million in 2006-08, and according to preliminary forecasts, this figure could reach around 925 million people in 2010-2011. But because the world's population is still increasing (albeit more slowly than in recent decades), a given number of hungry people represents a declining prevalence of people who are hungry.

Not surprisingly, developing countries account for 98 percent of the world's hungry and demonstrate, on average, a **prevalence of undernourishment** of 15 percent. Two-thirds of the hungry live in just seven countries (Bangladesh, China, the Democratic Republic of the Congo, Ethiopia, India, Indonesia and Pakistan) and over 40 percent live in China and India alone. Developing countries' overall progress has been decisively influenced by the significant gains made by the two most populous among them. But for the most vulnerable, the total number of undernourished in the least developed countries rose to 264 million in 2006-08, around 25 percent higher than the level at the beginning of the decade and considerably above the 1 percent increase observed in the developing country group.

Map 18:



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.ESS.UNMNT.PREV](https://www.fao.org/ess/unmnt/prev), p. 164 

- 850 million people suffered from undernourishment during the period 2006-08, representing 13 percent of the world's population
- Despite longer term inroads, the goal of halving hunger by 2015 will likely not be achieved
- Recently, economic turmoil and high food prices combined to stall progress in reducing the number of hungry

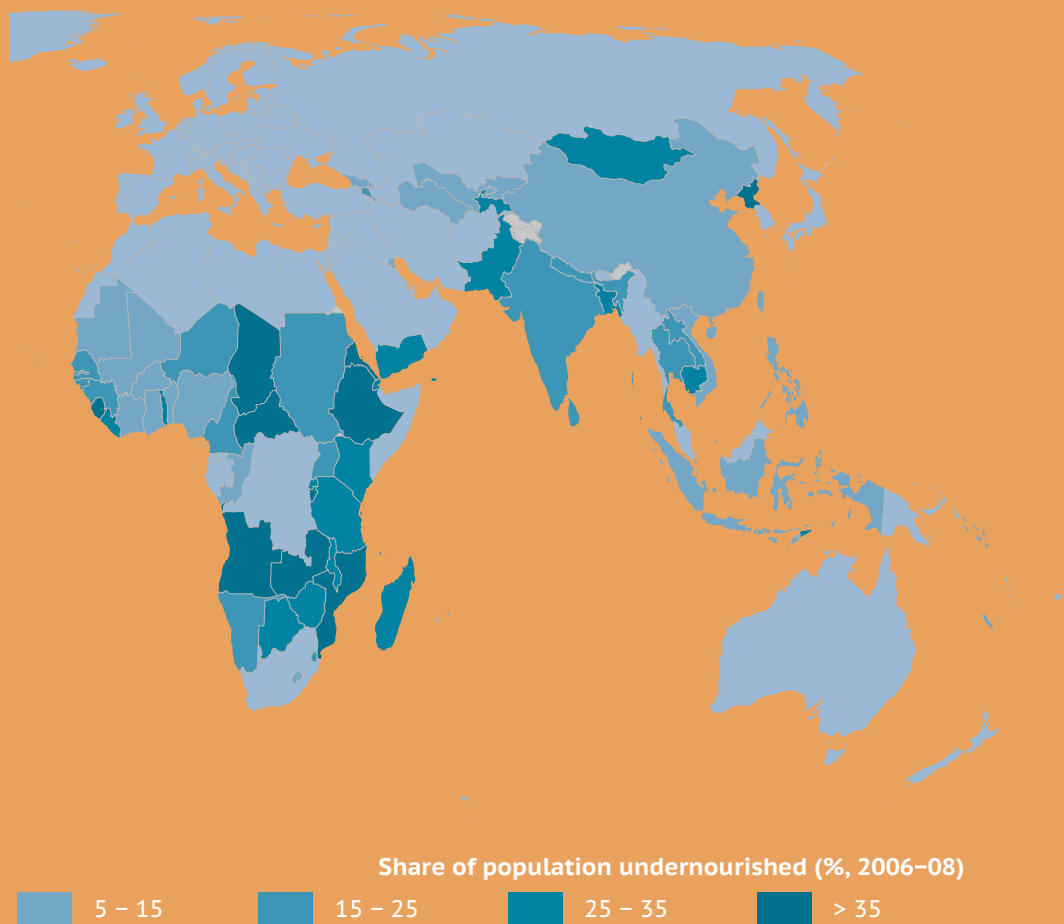
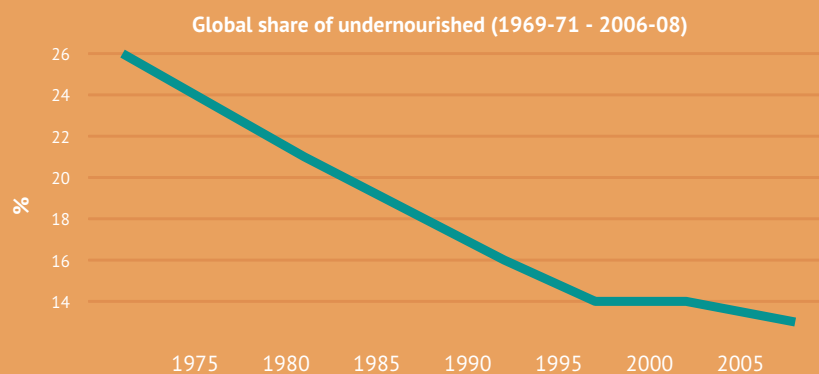


Chart 33: Progress in reducing the global prevalence of undernourishment has slowed in recent years



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.ESS.UNMNT.PNW](#), p. 163

The proportion of undernourished people remains highest in sub-Saharan Africa, at 30 percent according to the most recent estimates, but there is wide variation at the country level. The Congo, Ghana, Mali and Nigeria have already achieved MDG1, while Ethiopia and others are close to achieving it. In the Democratic Republic of the Congo, however, the proportion of undernourishment had risen to 69 percent (from 26 percent in 1990–92). A significant number of countries in the region failed to participate in this general thrust towards increasing average food consumption levels, and out of the current 26 developing countries where food consumption is 2200 kcal/person/day or under, 14 are situated in sub-Saharan Africa.

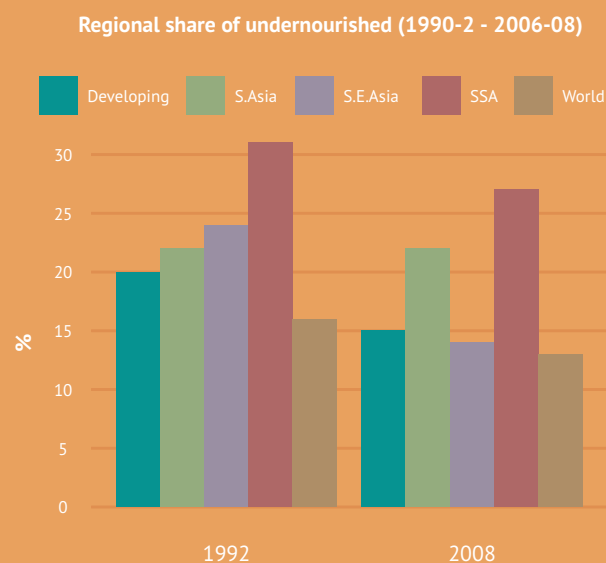
Periods of high food prices during the past five years have affected countries and regions in different ways. While Africa saw a further deterioration of its hunger situation, Asia remained fairly resilient to shocks. Countries in this continent managed to restrict exports, or had sufficient means to aggressively purchase food on international markets, and thus managed to keep their domestic supply and price situation relatively stable. Others had sufficient domestic reserves to buffer against reduced imports; they took shelter from international markets by drawing on these supplies. This left those without safety nets, reserves, exports to restrict or the means to procure food at high prices fully exposed to international price swings.

Recent events and their implications on food security highlight the need to broaden and deepen the set of indicators used to monitor it. FAO has engaged in a series of initiatives aimed at improving the quality and timeliness of information on food security. One important area of activity includes efforts to improve the underlying methodology of the FAO indicator that gauges the prevalence of undernourishment and to add to it related indicators such as **depth of hunger** (i.e. how much a population falls short of minimum food needs in terms of dietary energy). Another area of improvement aims at identifying a suite of indicators that would capture the multidimensionality of food insecurity.

Further reading

- FAO State of Food Insecurity 2011 (<http://www.fao.org/publications/sofi/en/>)
- FAO Hunger Portal (www.fao.org/hunger)

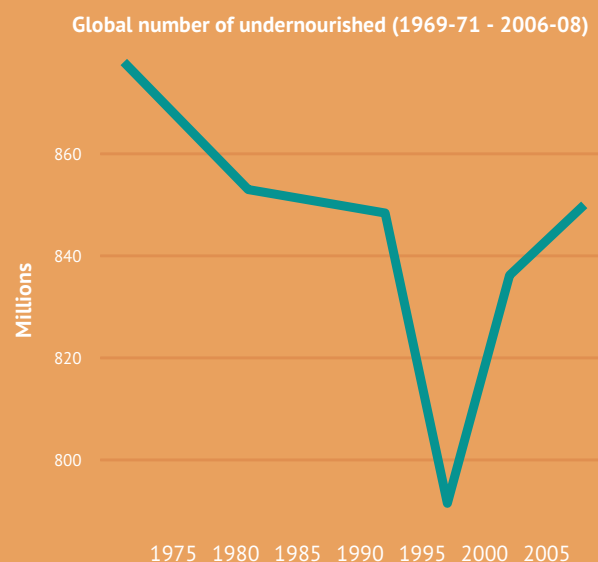
Chart 34: Despite falling prevalence of undernourishment, it nevertheless remains unacceptably high



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.ESS.UNMNT.PREVR, p. 164

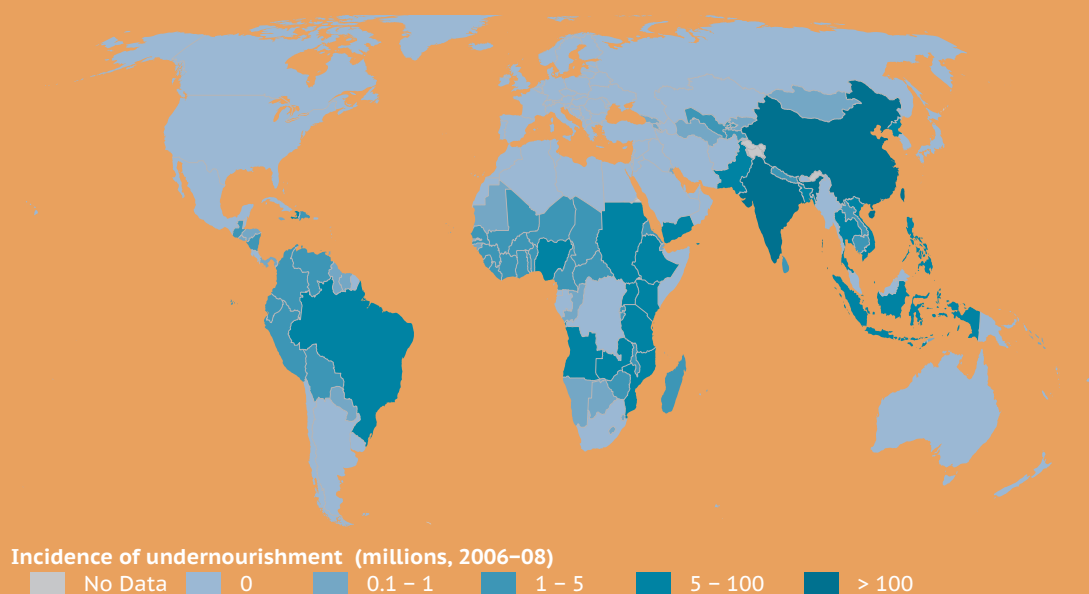
Chart 35: The global number of undernourished has increased in the past decade, reversing the considerable gains of the 1990s



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.ESS.UNMNT.PNW, p. 163

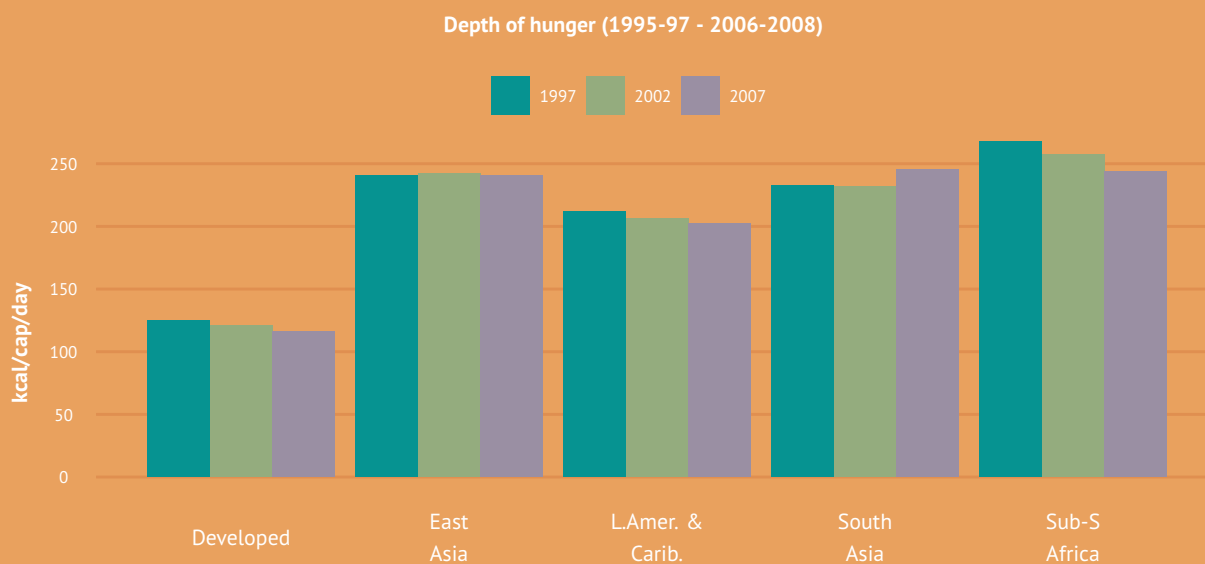
Map 19: Two thirds of the hungry live in just seven countries



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.ESS.UNMNT.NUM](#), p. 163 

Chart 36: Large food deficits prevail where undernourishment is high



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.ESS.UNMNT.DEP](#), p. 163 

Diets

Worldwide, any progress in raising food consumption per person has invariably been accompanied by significant structural change in **dietary patterns**. Food consumption is now more centred on caloric-yielding foodstuffs and less on starchy staples such as roots and tubers, at least in the countries that recorded such growth. The combination of urbanization, rising incomes and opportunities for trade has fuelled trends in dietary convergence and dietary adaptation.

Dietary convergence refers to the increasing similarity in global diets, characterized by a greater reliance on a narrow base of staple grains (wheat and rice), increased consumption of meat, dairy, edible oils, salt and sugar, and lower intake of fibre – much in the form of highly processed foodstuffs. On the other hand, dietary adaptation – or the consumption of more convenience foods – reflects the rapid pace and time pressure of urban lifestyles.

Cereals continue to be by far the most important source of dietary energy, providing 50 percent of all global calories. However, global per capita food use of cereals has been in gradual decline since the early 1990s. This is largely a reflection of changing diets in Asia, where the major countries (particularly those in the East Asia region) are moving away from predominantly rice-based diets.

In contrast, for agro-ecological reasons, wheat constitutes the fastest of all growing cereals in countries that are non-producers or minor producers. Coarse grain consumption is also on a downward path but continues to be important mainly in sub-Saharan Africa, where it accounts for as much as 70 percent of all cereal consumption.

Livestock products contribute around 13 percent of global calories and 28 percent of protein directly through provision of meat, milk, eggs and offal. In spite of recent growth in consumption, especially in Asia and Latin America, many people are still deficient in the nutrients that can be provided by animal source foods. Even quite small amounts are important for improving the nutritional status of low-income households.

Meat, milk and eggs provide proteins with a wide range of amino acids that match human needs as well as bio-available micro-nutrients such as iron, zinc, vitamin A, vitamin B12 and calcium in which many malnourished people are deficient. Energy and protein consumption are closely correlated, and insufficient calorie consumption tends to go in tandem with insufficient protein consumption. But in the absence of cultural grounds, poverty for the most part is major determinant, as the consumption of livestock products is dictated by income, which explains the low observed intake in poorer regions.

Map 20:



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.ESS.DIET.DES](https://www.fao.org/ess/indicators/en/indicators.do?lang=en&code=P2.HUN.FAO.ESS.DIET.DES), p. 163 

- 2790 calories per person per day represents the average available food supply at the world level
- In the poorest countries the average falls to just 2120 but rises to 3430 calories per person per day in developed countries
- There is enough food available to feed the world, but large disparities in the distribution of food obstruct the fight against hunger

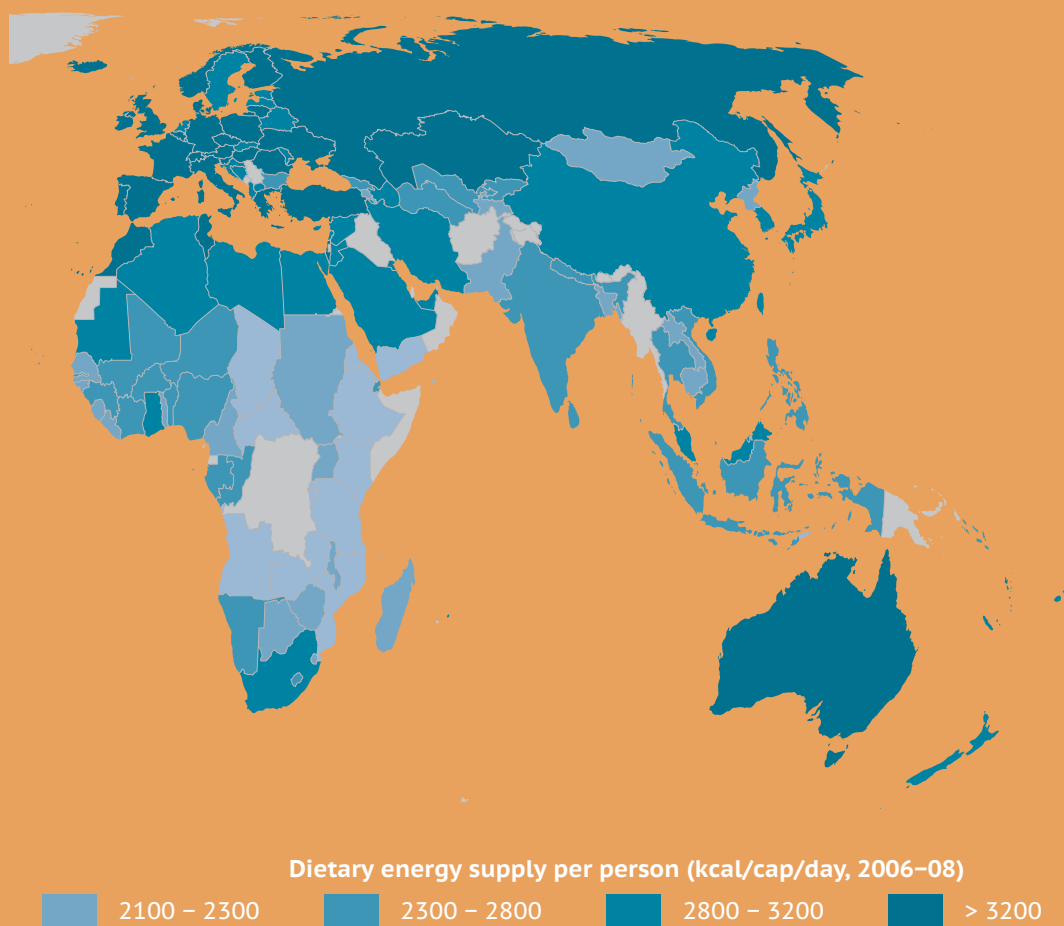
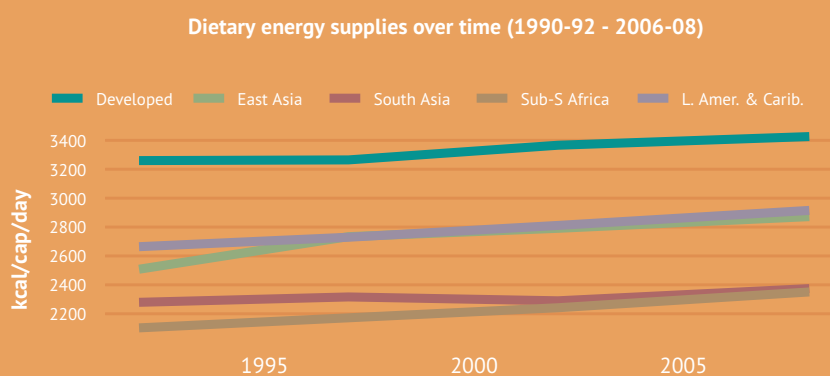


Chart 37: Dietary energy supplies are on the rise, but not sufficient to make inroads in reducing undernourishment



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.ESS.DIET.DES, p. 163

The rapid growth in consumption of vegetable oils, in combination with their high calorie content, has been instrumental in bringing about the increases in food consumption of those developing countries that characterize progress towards food security. One out of every four calories added to the consumption of the developing countries originated in this group of products. Sugar shares many of the characteristics of vegetable oils as a fast-rising consumption item. The scope for consumption growth is still considerable and momentum in food use is likely to be sustained.

Consumption of pulses has stagnated overall and registered drastic declines in Asia and sub-Saharan Africa. These trends reflect not just changing consumer preferences, but cultivation shifts towards self-sufficiency in cereals. Roots, tubers and plantains are the mainstay of sustenance in many countries with low and middle levels of overall food consumption, predominantly in sub-Saharan Africa and in Latin America and the Caribbean. Nineteen countries in Africa, which represent 60 percent of the continent's overall population, depend on these products for over 20 percent of food consumption in terms of calories. Data show that in many of the countries with high dietary dependence on roots and tubers, production of these crops is an important determinant of changes in national average food consumption.

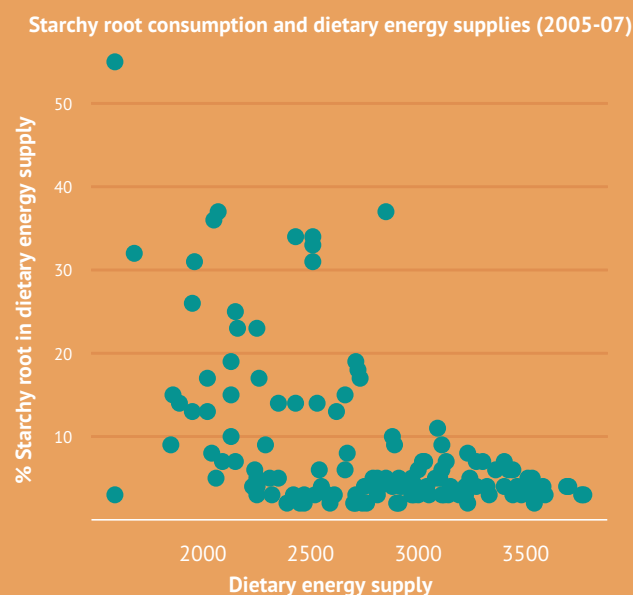
Vulnerability to unstable food prices is high when food intake is concentrated on one staple commodity, especially when that staple is traded in large volumes on international markets. By implication, when **dietary concentration** on one staple is high, that staple accounts for a high share of expenditure.

The countries that tend to concentrate most on one staple are the rice economies in South and Southeast Asia. The dominance of preferences towards rice in that region and the reluctance to shift to other staples restricts the potential for using trade in other staples to moderate variability in rice prices. In some countries, such as Pakistan, Morocco, Yemen, and Chile, there is also a high dependence on wheat, while Mexico and in much of southern Africa rely on maize. Countries in which cassava is a major staple, such as in West and Central Africa, generally have the most diverse food consumption baskets.

Further reading

- FAO Statistics Division - food security www.fao.org/economic/ess/ess-fs/
- FAO World Livestock 2011: livestock in food security www.fao.org/docrep/014/i2373e/i2373e.pdf

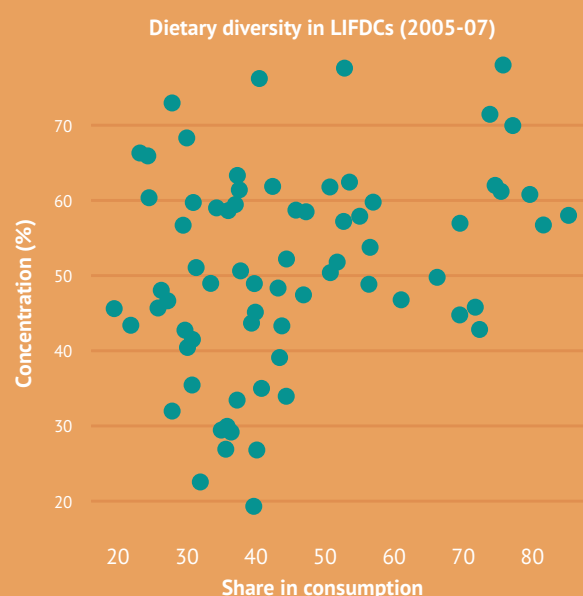
Chart 38: High dependence on root crops in food-insecure countries



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.FV.DIET.RTDES](https://p2.hun.fao.org/fv/diet/rtDES), p. 165

Chart 39: Diets of many vulnerable countries characterized by high consumption of one or two staples



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.FV.DIET.DIV](https://p2.hun.fao.org/fv/diet/div), p. 165

The spectrum of malnutrition

Adequate nutrition is essential for economic growth, good health and physical and cognitive development. It requires a diverse diet including staple foods, vegetables, fruits, animal-source foods and where needed, fortified foods. Levels of nutrition are affected not only by food availability and access but also by sanitation – such as access to safe drinking water – and disease. In addition, education can play a key role in improving nutritional intake and balance.

Chronically food-insecure populations are characterized by high or very high levels of undernutrition and recurrent high levels of acute malnutrition (wasting, low weight-for-height). These factors limit the development of individuals and societies. Undernutrition accounts for approximately 12 percent of deaths worldwide, and in developing countries, 60 percent of deaths in the under-five age group are linked with the low weight (i.e. one third of the 8.8 million annual child deaths). The malnourished are exposed to a high risk of diarrhoeal disease from contaminated water and food, and in turn diarrhoea worsens the effects of malnutrition, as it compromises the human body's capability to utilize nutrients.

Underweight children whose growth is **stunted** (when a children's height is low for their age – a telling indicator of chronic undernutrition) and **wasting** (when children's weight is low for their height – a measure of acute undernutrition) are highly unlikely to reach their full educational and productive potential, especially if these conditions are present under the age of two. This affects both the individuals and their countries' long-term prospects for economic growth and development. South Asia has the highest levels of stunting and wasting in the world, with 46 percent of its children stunted and 15 percent wasted. Sub-Saharan Africa has the next highest proportion of stunted children, with a prevalence as high as 41 percent in Eastern/Southern Africa, and 28 percent of its children underweight.

According to the United Nations Children's Fund (UNICEF), more than 20 million infants are born each year weighing less than 2.5 kg. This represents 17 percent of the total number of births in developing countries. Infants with **low birth weight** are at high risk of mortality during their early months. Those who survive are often afflicted with an impaired immune system and are prone to suffer chronic illnesses in later life. Over 96 percent of cases of low birth weight occur in developing countries, where there is a high likelihood of being born in poor socio-economic conditions, and where women often undertake physically demanding work during pregnancy and are prone to infection and poor diets. The high prevalence is also symptomatic of intergenerational transmission of poor nutritional status, the consequences of which are passed to children by mothers who are themselves in poor health or undernourished.

Map 21:



Source: WHO-WHS

Metalink: [P2.HUN.WHO.GHO.CHLD.UW](https://p2.hun.who.gho.chld.uw), p. 170 

- Children living in rural areas of developing regions are two times more likely to be underweight than are urban children
- Insufficient nutritional achievement by age two condemns a child to being less academically capable, receiving lower incomes as an adult, and in the case of girls, being at greater risk of difficult childbirth and maternal mortality

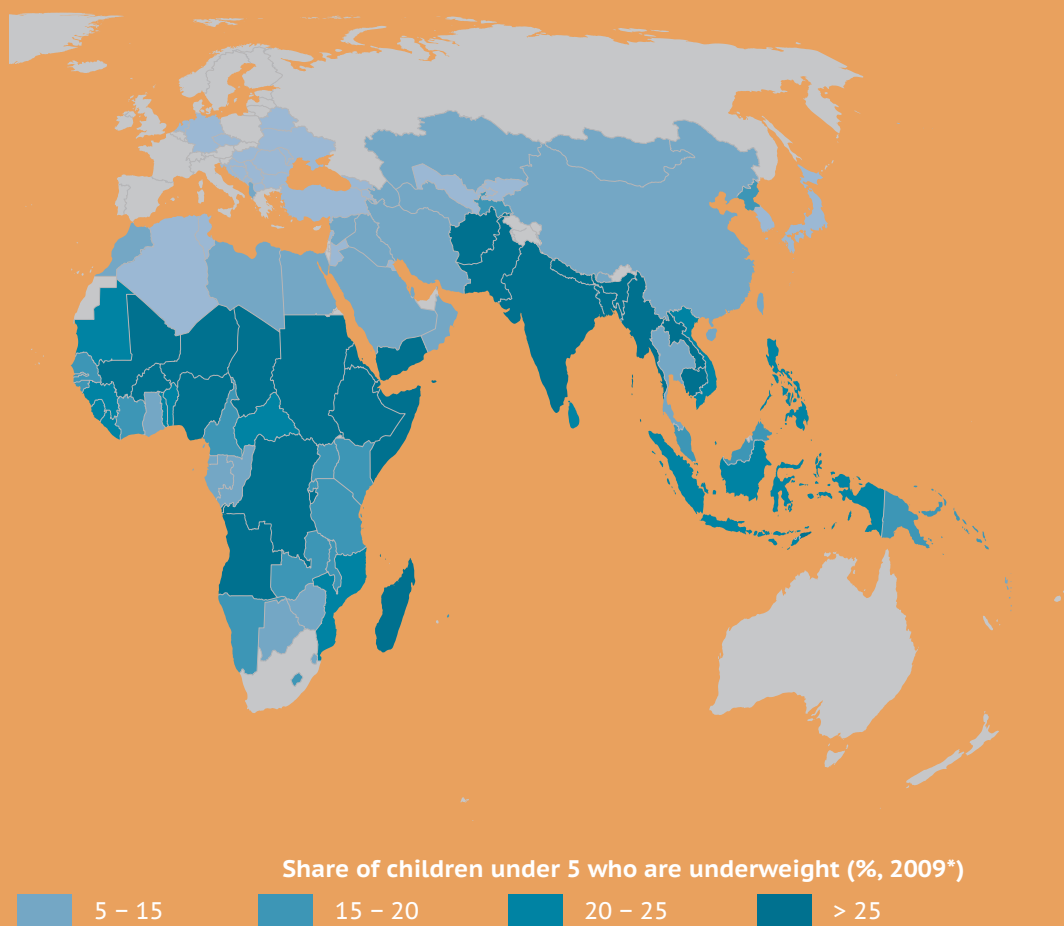
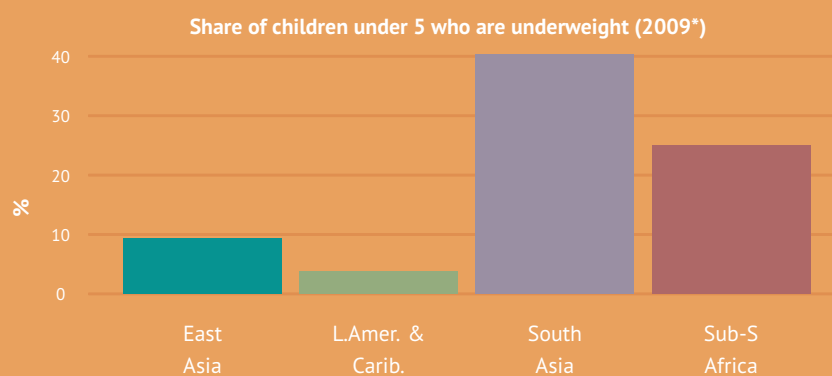


Chart 42: South Asia has the highest prevalence of underweight children in the world



Source: WHO-WHS

Metalink: [P2.HUN.WHO.GHO.CHLD.UW](#), p. 170 

Early childhood nutrition plays a key role in cognitive achievement, learning capacity and ultimately household welfare. Available studies have shown that low birth weight, protein energy malnutrition in childhood, childhood **iron-deficiency anaemia** and iodine deficiency (e.g. being born to a mother with goitre) are all linked to cognitive deficiencies and the effects are more or less irreversible by the time a child is ready to go to school.

The UN Standing Committee on Nutrition (SCN) has estimated that the economic costs of anaemia in Bangladesh alone, for example, amount to 7.9 percent of the country's Gross Domestic Product (GDP). More widely, when a significant proportion of the population is undernourished, potential rates of GDP growth can be curtailed. For example in South Asia, adult productivity losses arising from the combined effect of stunting, iodine deficiency and iron deficiency are equivalent to a loss of 2 to 4 percent of GDP every year.

In adults, a commonly used measure to detect malnutrition is the **body mass index** (BMI), defined as the ratio of bodyweight in kilograms to the square of height in metres. BMI can clearly vary over a person's lifetime, but physical stature is determined by the time an individual reaches adulthood. Low stature and low BMI are associated with lower labour force participation – not only do people with lower stature or BMIs earn less, but they are less likely to be in a position to earn wages at all.

At the other end of the malnutrition spectrum is the problem of **overnourishment**, which leads to overweight and obesity. Already a well-known phenomenon in developed countries, obesity is also increasing in the developing world, especially among urban dwellers. The issue of obesity has not been given much attention in developing countries because of the more compelling problems at the other end of the scale. Overnutrition is a result of diets that are characterized by energy-dense, nutrient poor foods that are high in fat, sugar and salt. It is a major contributor to heart disease, stroke, diabetes and cancer, and is compounded by low levels of physical activity and by tobacco consumption. Worldwide obesity has more than doubled since 1980. At 1.5 billion adults aged 20 and over, there are more overweight adults in the world today than there are undernourished. Of them, over 200 million men and nearly 300 million women are obese.

Further reading

- FAO Nutrition and Consumer Protection Division (www.fao.org/food/)
- UNICEF Nutrition (www.unicef.org/nutrition/)
- WHO Nutrition and disorders (www.who.int/topics/nutrition_disorders/)

Chart 43: One in nine children under five are low weight-for-height in developing countries. Stunting and wasting are caused by long-term insufficient nutrient intake

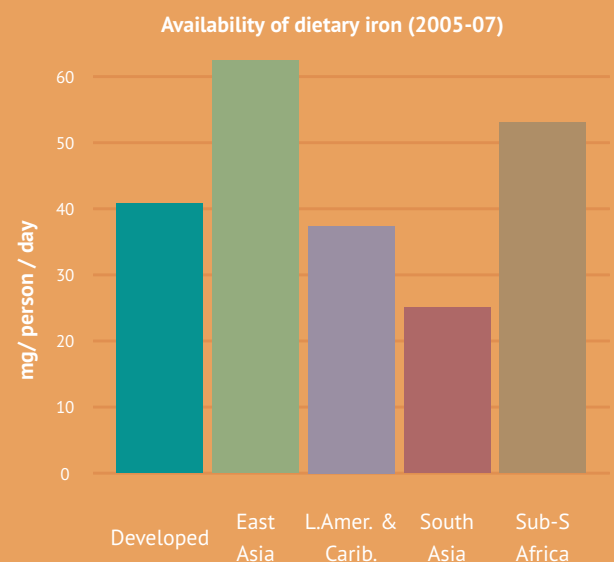
Share of children under 5 that are stunted and wasted (2009*)



Source: WHO-WHS

Metalink: [P2.HUN.WHO.GHO.CHLD.STNT](#), p. 170

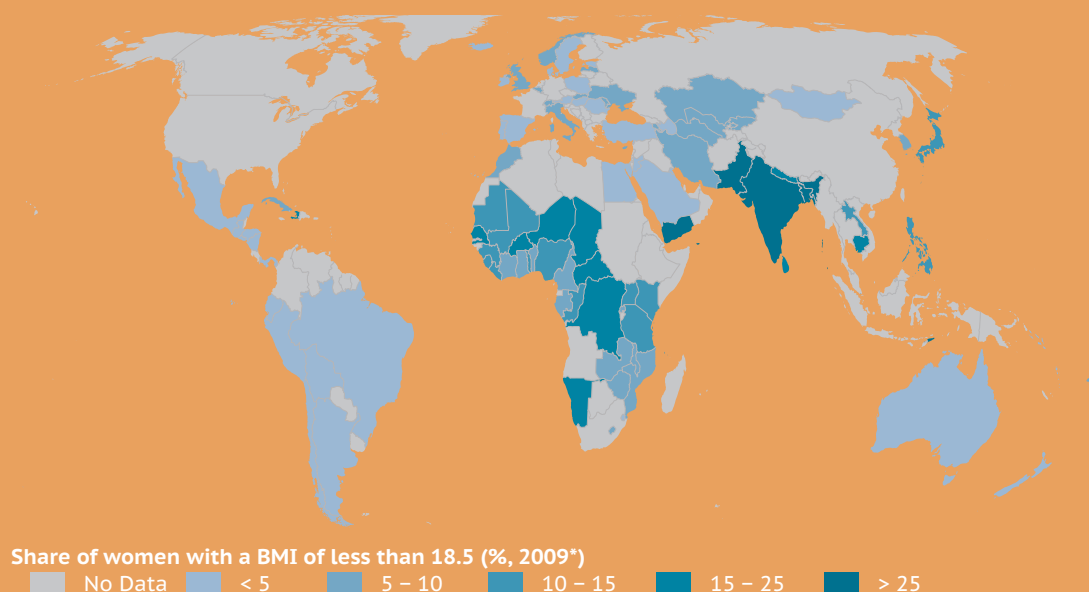
Chart 44: Insufficient iron in diets is a primary cause of anaemia, and is common in vegetal-based diets



Source: WHO-WHS

Metalink: [P2.HUN.FAO.MCN.IRON](#), p. 165

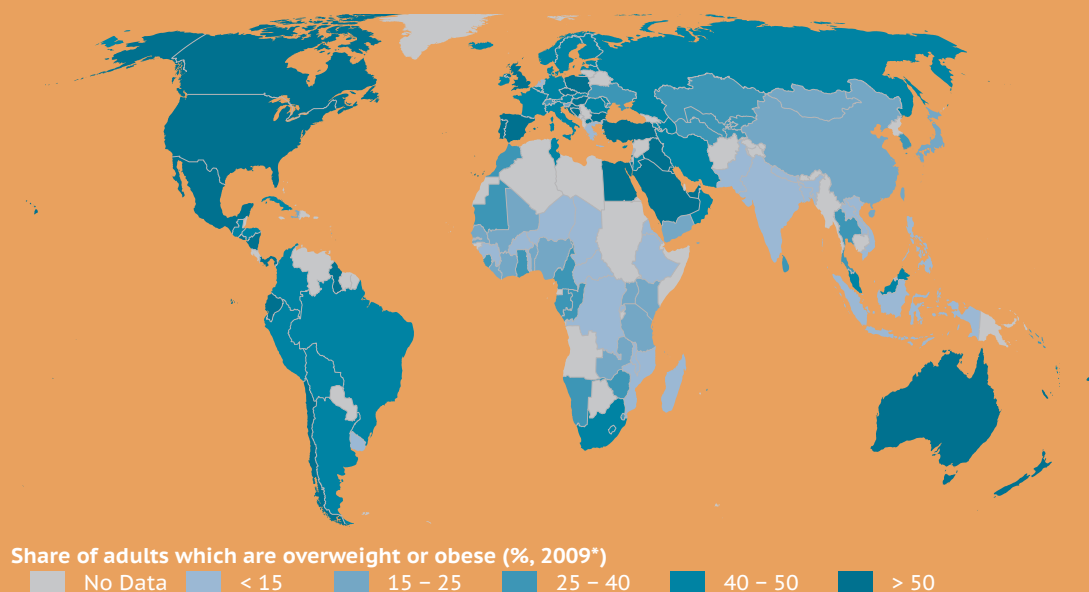
Map 22: Undernourished women are more likely to raise children who are undernourished, reinforcing the intergenerational cycle of malnutrition



Source: WHO-WHS

Metalink: [P2.HUN.WHO.GHO.ADLT.LBMIF](#), p. 170 

Map 23: Obesity is an entrenched problem in many developed countries, but under- and over-nutrition co-exist in many countries, leading to a double burden of malnutrition



Source: WHO-WHS

Metalink: [P2.HUN.WHO.GHO.ADLT.OBSx](#), p. 170 

Trade, food stability and food security

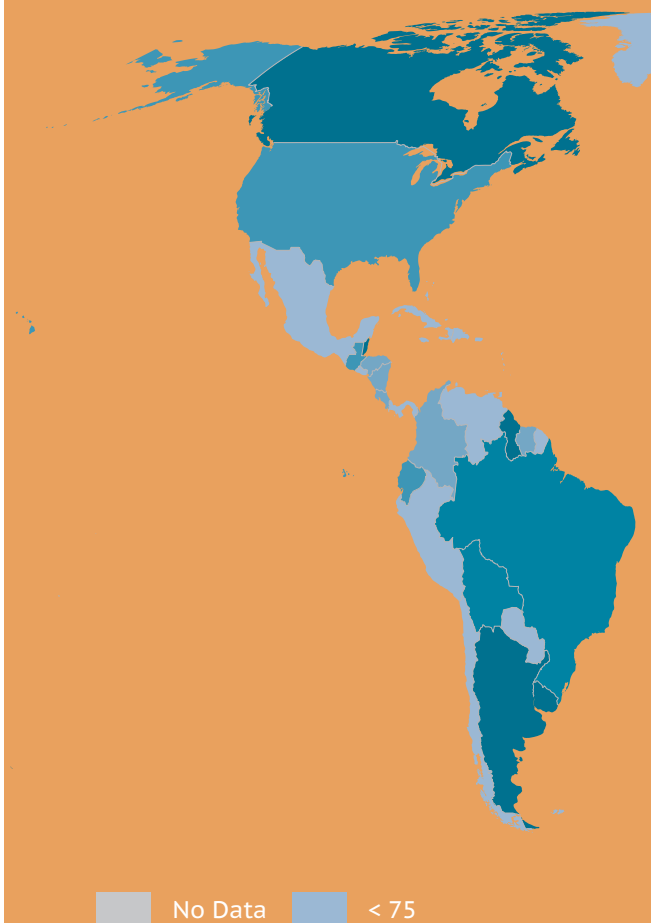
Against the backdrop of deepening international markets, convertible domestic currencies, improved international transportation networks and diminishing public stock regimes, trade plays an increasingly important role in stabilizing food availability in almost all countries. When agricultural-based countries experience declining per capita production of staple foods, the role of trade becomes pivotal in their food security.

Equally, trade assists food security in staple food production systems undergoing wide fluctuations caused by variable climates, especially in those systems that are rain-fed. High coefficients in the variation of staple food production – 10 percent and above – are common in much of sub-Saharan Africa. This means that a short-fall of at least 10 percent of average staple production occurs every six years.

Instability in food production can also lead to problems in global markets. While a handful of countries continues to dominate supply in the international arena, there is an increasing number of countries at the margin that participate in exports. Those that have emerged recently as regular international suppliers instil a great degree of uncertainty in the global marketplace owing to the high year-to-year variability of their production. This is particularly true for several rain-fed grain producing countries in the Black Sea region, which triggered turmoil in markets midway in 2010 when weather problems lowered export availabilities. This feature can also shift the net-trade status of large producing and consuming countries from one year to the next, bringing uncertainty to markets (as in the case of rice).

Beyond production instability, trade deficits in many of the most food-insecure countries have become structural over the past two decades. Expensive inputs, high shipment costs and high losses from farms to markets have lowered the competitiveness of the agriculture sector in many developing countries. At the same time, large global suppliers have benefited from subsidies in export markets and the transformation of the retail sector in importing countries, resulting in a growing prevalence of higher foreign standards. These factors contributed to the growing trade deficit of many developing countries, which shifted their trade status from a position of net exporters to that of net importers. The most economically vulnerable group, including least developed countries (LDCs), has been hardest hit; their net food and agriculture **import bills** have soared over the past 20 years to a level of nearly USD 27 billion by 2010.

Map 24:



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.TFS.SSCAL](#), p. 165 

- Underperforming productive sectors and/or a lack of resource endowments are behind low rates of food self sufficiency, requiring imports to fill food deficits
- Many countries in sub-Saharan Africa and Latin America and the Caribbean do not produce enough food to cover domestic food needs
- However, food security should not be confounded with food self sufficiency

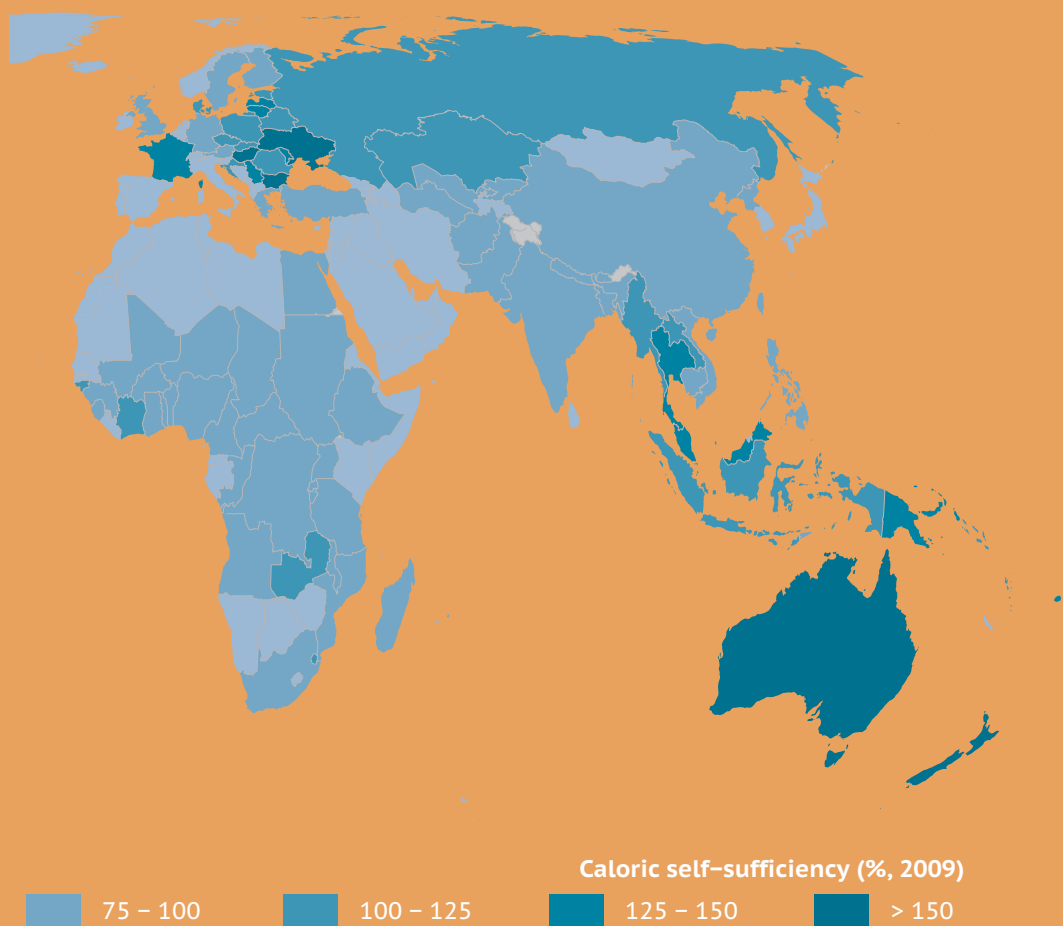
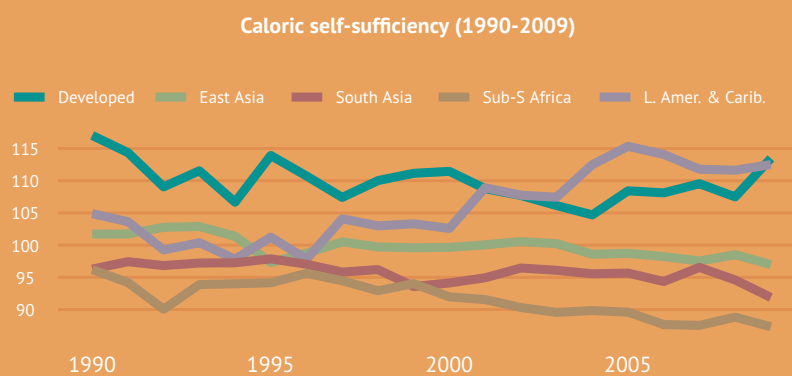


Chart 45: Much of Latin America more than self-sufficient in food but the converse in Africa



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.TFS.SSCAL](https://p2.hun.fao.org/tfs/sscal/), p. 165



With the global cost of purchasing food on the international marketplace surpassing USD 1 trillion in 2010 (as it did in 2008), food import bills for LDCs have climbed the most. At 17 percent, their increase far exceeded that of the global level. The sheer encumbrance facing some of the world's poorest countries in importing food can be contrasted to that of developed nations, whose food import bills rose by only 8 percent in 2010. Seen in a broader perspective, expenditures on imported food-stuffs for vulnerable countries account for roughly 18 percent of all their expenditures on imports, compared to a world average of around 7 percent.

Rising import bills could lead to increased stress if there is insufficient income growth or export earnings to accommodate the higher pace of food import costs. Higher food import bills can place a severe burden on the balance of payments, depriving disadvantaged countries of limited foreign exchange reserves that could be used for importing other essential goods and services, such as **fuel** and inputs. Sovereign credit ceilings also constrain the ability to finance imports and to meet unforeseen higher procurement costs.

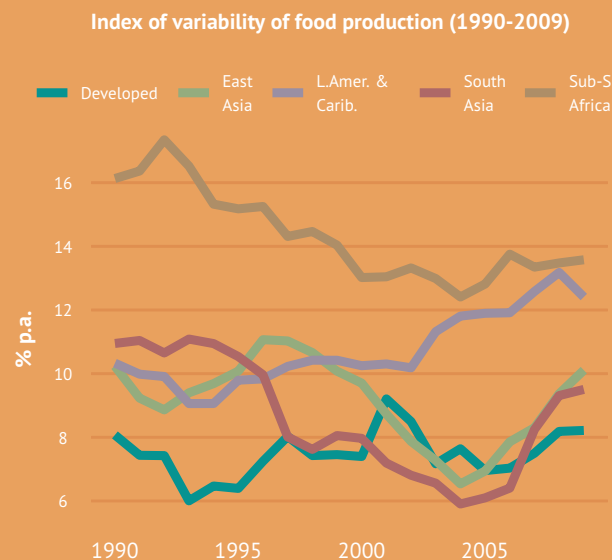
The on-going instability in international food markets has prompted rising mistrust in many food-importing countries about the reliability of international markets as suppliers of affordable food. Several countries have explored the possibility of becoming less reliant on food imports in the context of safeguarding their own food security. The notion of food security often becomes conflated with ideas about food **self-sufficiency**.

Food security and food self-sufficiency, however, are different concepts, and are often at odds with one another. Self-sufficiency policies that distort market signals using protectionist strategies, such as import bans, have high social costs given their distributional effects. They place food self-sufficiency at variance with the goals of food security and poverty reduction. But, by improving agricultural productivity and domestic competitiveness, imports are likely to be deterred, and consequently, higher levels of self-sufficiency will be compatible with food security and poverty reduction.

Further reading

- FAO World Food Situation (www.fao.org/worldfoodsituation/en/)
- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)
- Prakash (2011b)

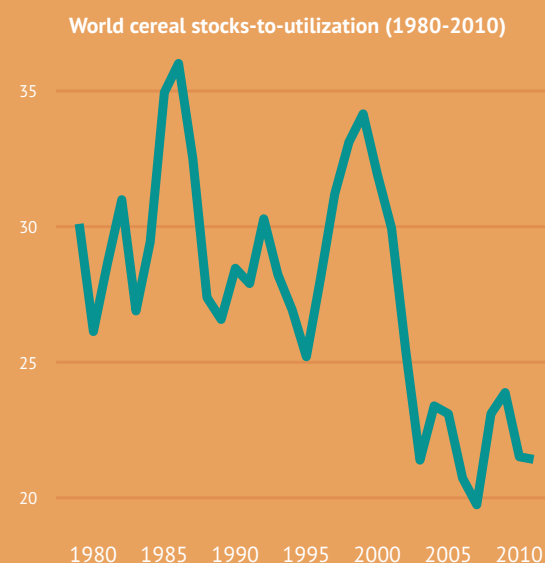
Chart 46: Production variability remains high in many food-insecure regions



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.TFS.QPVAR, p. 165

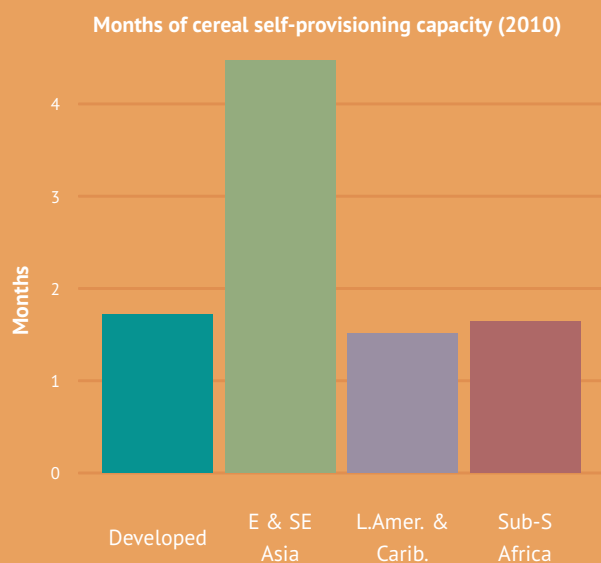
Chart 47: Global cereal stocks on the decline owing to policy shifts and greater dependence on trade



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.TFS.STU, p. 165

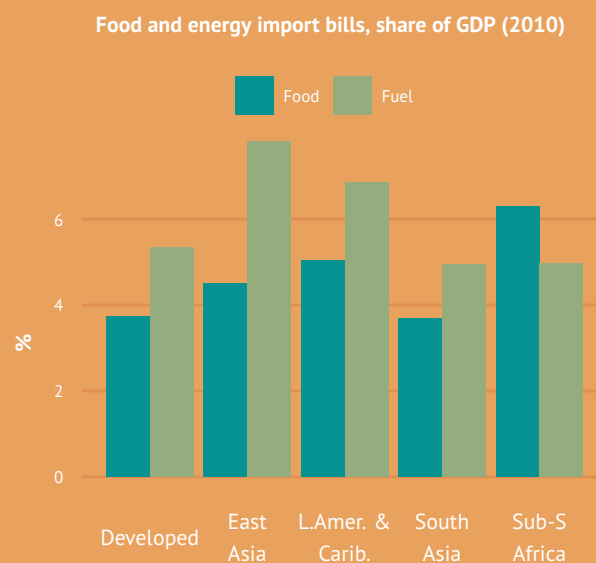
Chart 48: Barring Asia, cereal stocks are sufficient to meet less than two months of consumption



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.TFS.STU, p. 165

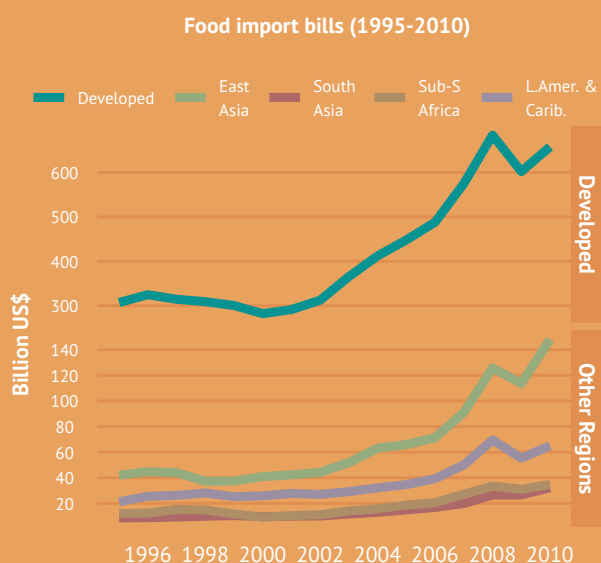
Chart 50: The burden of food and energy import bills is high when measured against GDP



Source: FAO-IMF

Metalink: P2.HUN.FAO.TFS.FIB, p. 165 

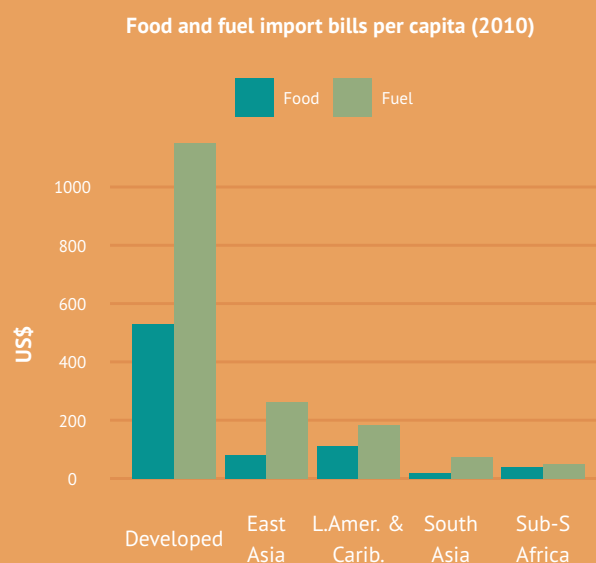
Chart 49: Food import bills have risen markedly in the past few years, driven by a combination of higher international prices and greater trade



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.TFS.FIB, p. 165 

Chart 51: ... and also on a per capita basis



Source: FAO-UNSD

Metalink: P2.HUN.FAO.TFS.FIB, p. 165 

Food prices and food price volatility

High food prices pose a major threat to food security. By reducing real incomes, rising prices can worsen the prevalence of hunger and malnutrition because they reduce the quantity and quality of food consumed. The impact of high prices falls heaviest on the poor, especially female-headed households and the landless, which may spend as much as 80 percent of their income on food. The lack of dietary diversification aggravates the problem, as price increases in one staple cannot easily be compensated by a switch to other foods. The lack of adequate social and income safety nets, such as savings, compounds price increases.

Vulnerable households often deal with soaring prices by selling assets, which are very difficult to rebuild, and by cutting down on health and education expenditures. These short-term coping mechanisms have long-term negative, sometimes irreversible, effects on livelihoods.

Soaring food prices have triggered worldwide concern about threats to global food security, and have shaken the unjustified complacency caused by many years of low commodity prices. Up until 2006, the cost of the global food basket had fallen by almost a half over the previous thirty years or so when adjusted for inflation. Declining real prices as a result of technological advances put farmers under considerable strain, except mainly in developed countries, where governments were able to provide support to agricultural producers through subsidies and price guarantees. Elsewhere, public and private sectors saw limited need or incentive to invest in agricultural production and infrastructure. These factors rendered production in many developing countries unprofitable and entrenched the role of a handful of countries in regularly supplying the world with food. Changes in the market and policy setting were also instrumental in reducing stock levels and have led to far more planned dependence on imports as an efficient way of achieving food security.

Taken together, these developments have imposed a heavy responsibility on major exporting countries to supply international markets when called upon. It is thus unsurprising that when production shortages occur in such countries, global supplies are stretched and the ensuing market tightness manifests both higher prices and higher volatility. This was precisely the case in the run-up to the high-price episodes that the world has witnessed in recent years. Other contributory factors included dependence on new exporting zones, where rain-fed crop outcomes are much more prone to weather vagaries, growing demand for food from other sectors (e.g., energy), faster transmission of macroeconomic factors onto commodity markets, and lack of trade policy discipline, especially in the context of export restraints.

Map 25:



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.FPV.FCPI](#), p. 164 

- Food purchases can account for as much as 80 percent of household expenditure in developing countries
- Rising prices of food are particularly harmful in these circumstances
- Affected households often respond by selling productive assets, which are difficult to rebuild, and by cutting down on health and education expenditures, leading to longer-term problems

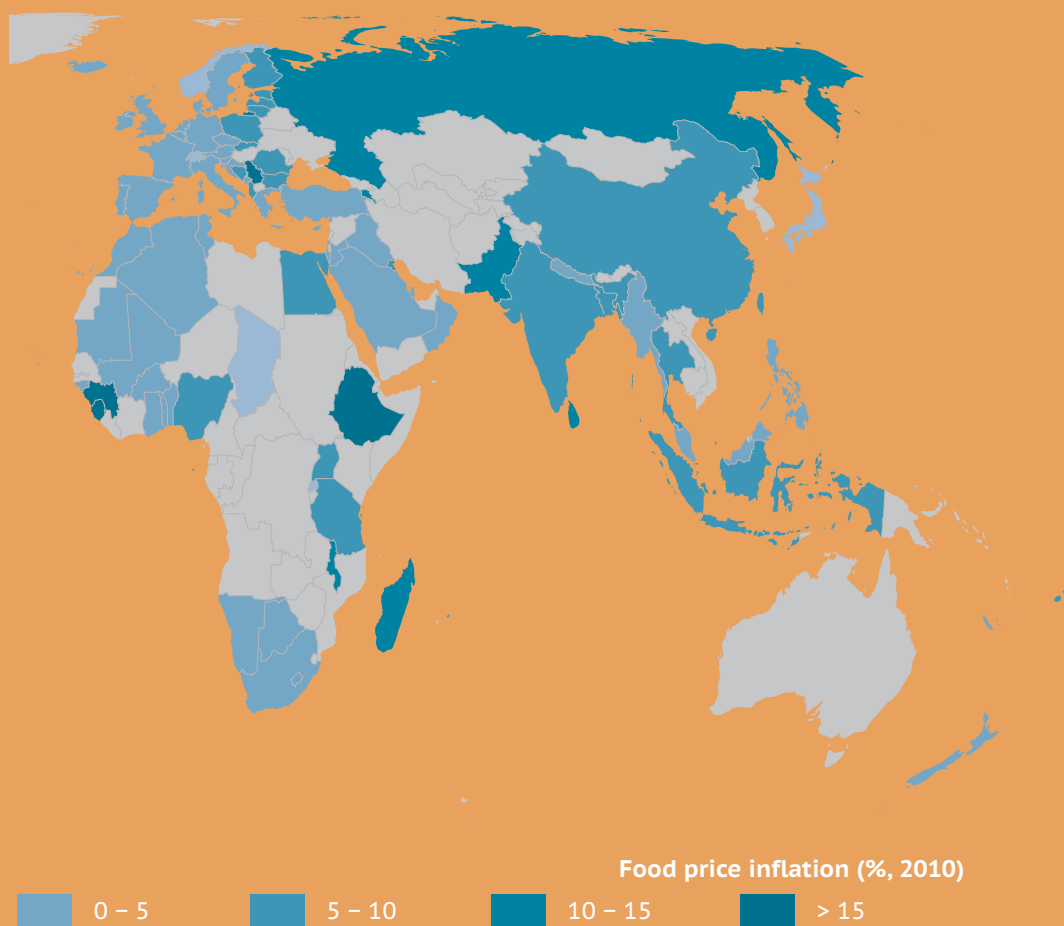
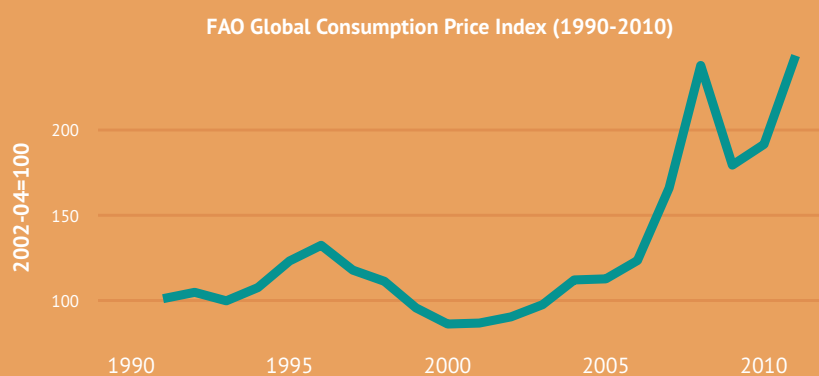


Chart 52: The international price of the global food basket has soared in recent years



Source: FAO, Statistics Division
 Metalink: P2.HUN.FAO.FPV.GCI, p. 164

In 2011, international prices rose to levels not seen in decades. The export-weighted FAO food price climbed to a record 238 points in February and remained stubbornly high throughout much of the year. Escalating world prices for cereals, vegetable oils and sugar (40, 35 and 25 percent, respectively over the past year) have fuelled much of the increase. The FAO global food consumption index, which uses global average calorie shares as weights, also rose to a record level, climbing 26 percent from 2010.

Movements of prices in global markets may seem less important than price movements within domestic markets, as international trade accounts for a low percentage of global transactions. The issue is how global price movements affect domestic prices and markets for agricultural products inside countries (and, potentially, vice versa) and how international prices are transmitted differentially to producers and to consumers.

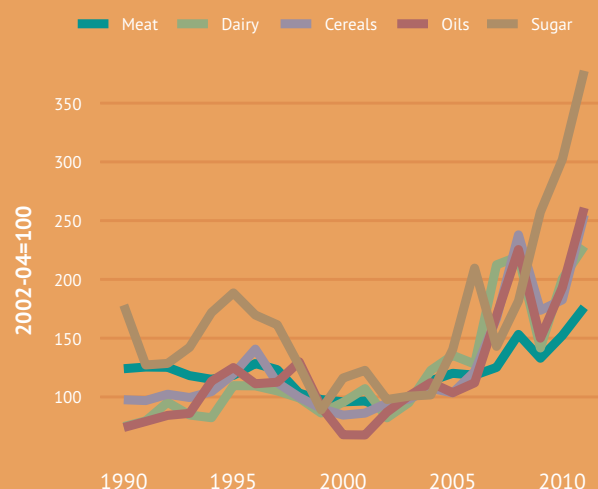
Measuring price transmission is often plagued with difficulties, but as markets are increasingly integrated in the world economy, price changes in the international arena can potentially transpire and spread to domestic markets much more quickly than before.

There is emerging consensus that the global food system is becoming more vulnerable to episodes of high prices and **volatility**. Price volatility is by no means a new phenomenon in developing countries, where significant seasonal or annual price fluctuations remain features of rural life. With poor infrastructure, local prices may be subject to substantial variation. While price volatility is in part a function of the interplay between global and domestic factors, it is also a structural problem.

Bouts of high price volatility come at a cost, as market participants have difficulty planning ahead and adjusting to fluctuating market signals. As unpredictable changes, or “shocks”, surpass a certain critical size and persist at those levels, traditional policy prescriptions and coping mechanisms are likely to fail. For instance, high price volatility can result in large income fluctuations for farmers, who have little or no recourse to savings and insurance. The delay between production decisions and actual production creates additional risks, as farmers base their investment and planning on expected prices.

Chart 53: Internationally traded food prices reached record highs in 2010

FAO International price indices - traded staples (1990-2010)

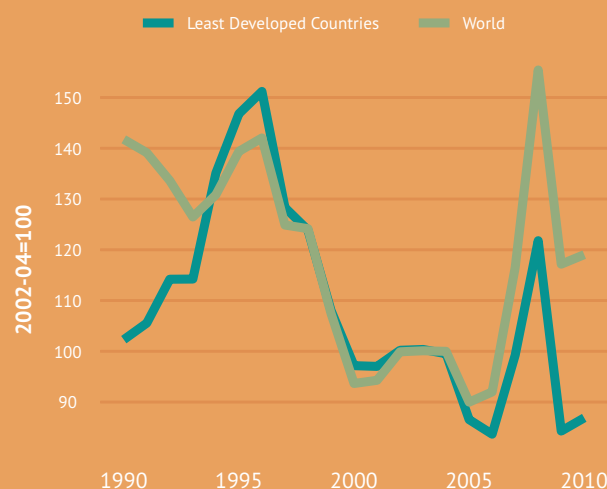


Source: FAO, Trade and Markets Division

Metalink: P2.HUN.FAO.FPV.FPI, p. 164

Chart 54: Food prices have risen faster than income

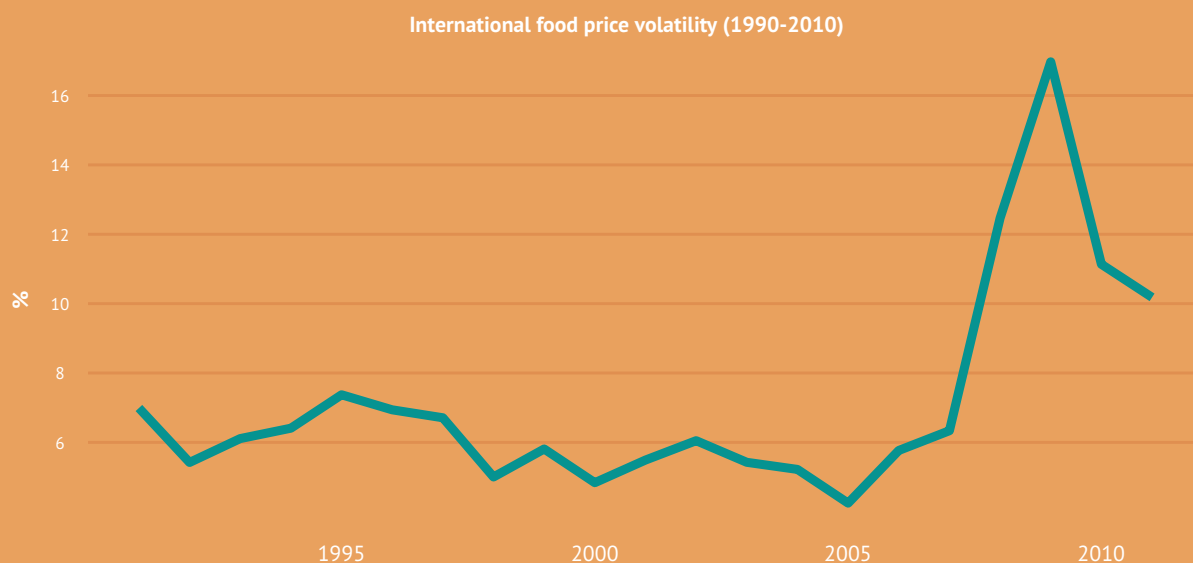
Global affordability of food (1990-2010)



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.FPV.AFD, p. 164

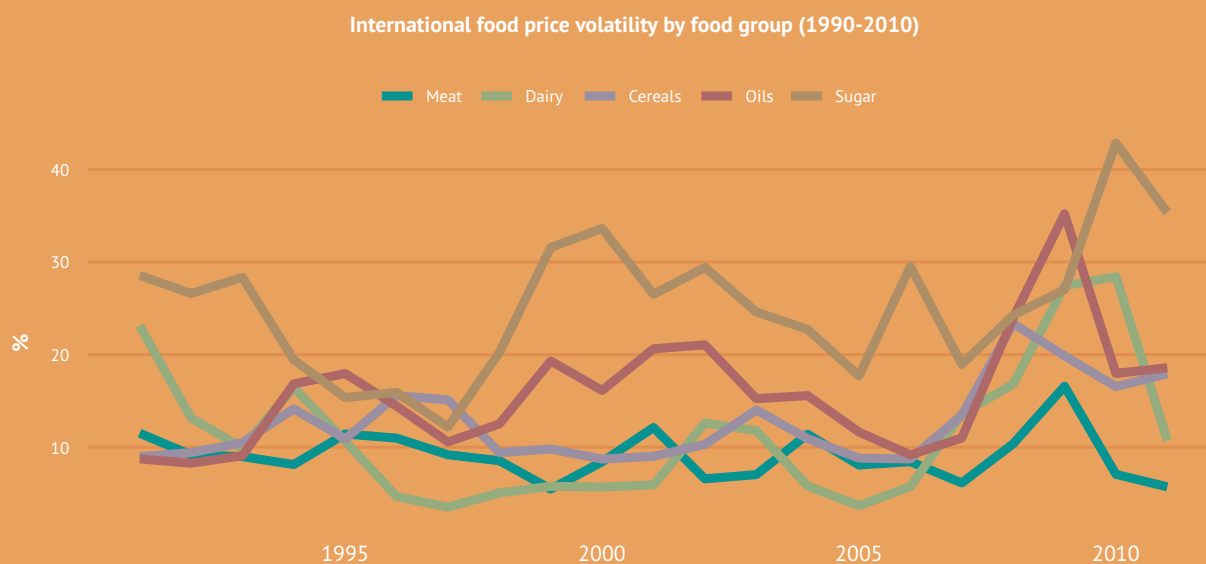
Chart 55: Historical volatility of world reference food prices also reached new heights in 2010



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.FPV.FPV, p. 164

Chart 56: Of all the prices of major food commodities, global sugar quotations have been most volatile



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.FPV.FPV, p. 164

According to an IFAD survey of farmers in the Middle East and North Africa conducted in the aftermath of the 2006-08 high price episode, it was found that more than 60 percent of farmers would have expected to increase the area under cereals if prices had remained at the high levels of early 2008. However, the sharp reduction in prices created uncertainty and complicated farmers' decision-making.

With global markets yet again experiencing turmoil over 2010-2011, developing countries must enact measures to protect the most vulnerable, not by fighting volatility, but by managing its risks and mitigating its consequences by providing the poor with access to food. In the long run, vulnerability can be lowered by raising agricultural productivity for a diverse set of both competitive and sustainable crops, as well as by promoting dietary diversification.

Reducing market uncertainty may not be among the fastest remedies for lowering the number of hungry. Yet, letting international markets continue in their present state, volatile and unpredictable, will only aggravate an already grim outlook for world food security. This is the reason why world leaders have been dwelling at length on the issue of price volatility since the start of the year. Such discussions gained momentum in recent months as attention turned towards finding ways to improve the accuracy of supply and demand forecasts for major food crops as an important first step in promoting stable and transparent food markets.

In June 2011, the Group of 20 (G-20) established a global information system under the banner of Agricultural Market Information System (AMIS). This initiative, proposed by a number of international organizations, has been endorsed by all G-20 Members and, subsequently, by the Committee on World Food Security (CFS).

Further reading

- FAO Global Food Price Monitor (www.fao.org/giews/english/gfpm/)
- FAO World Food Situation (www.fao.org/worldfoodsituation/en/)
- Prakash (2011a)
- IFAD Rural Poverty Report. New realities, new challenges, new opportunities for tomorrow's generation (www.ifad.org/rpr2011/)

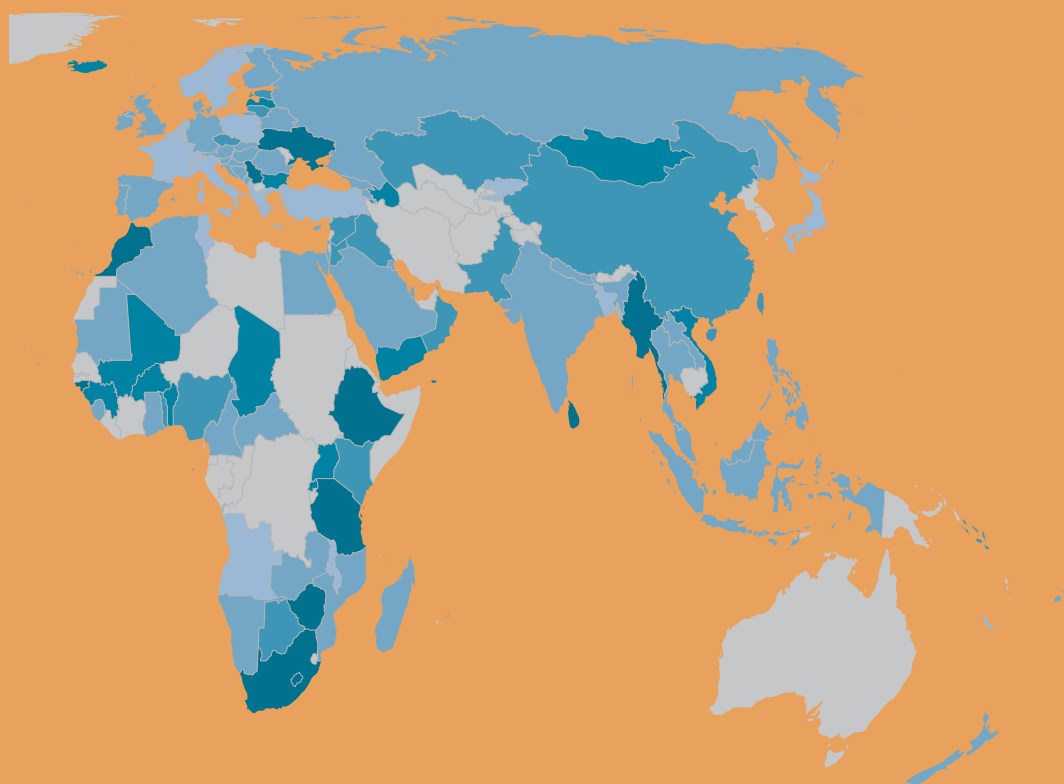
Map 26:



Source: FAO, Statistics Division

Metalink: [P2.HUN.FAO.FPV.FPVv](https://p2.hun.fao.org/fpv/fpvv/), p. 164 

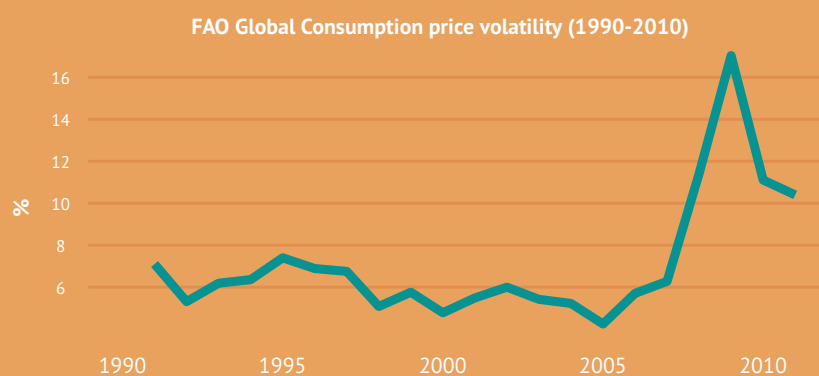
- Food price volatility, measured over the past five years, is highest in many of the most food-insecure countries
- Bouts of high price volatility come at a cost, as market participants have difficulty planning ahead and adjusting to fluctuating market signals
- Food markets are expected to be more volatile in the future compared to previous decades



Food price volatility – annualized historical volatility (% , 2010)



Chart 57: Historical volatility of a typical food basket on the rise



Source: FAO, Statistics Division

Metalink: P2.HUN.FAO.FPV.GCI, p. 164

Poverty and inequality

Among the many determinants of hunger, poverty is one of the most important. But like hunger, poverty too is multifaceted. Not simply a lack of income or consumption, poverty includes deprivation in health, education, nutrition, security, empowerment and dignity. Vulnerability constitutes a further dimension of poverty. Without effective coping mechanisms, excessive exposure to shocks – such as drought and sudden price swings – creates the risk of future poverty. All of these dimensions interact with and reinforce one another. However, to facilitate international comparison, poverty indicators are usually confined to measuring the proportion of a population whose **income is below a particular threshold**.

Whereas poverty metrics tend to be absolute, **inequality**, on the other hand, looks at the distribution of the metric (e.g. income) in a population. For example, a high-inequality country might need twice as much economic growth as low-inequality countries to meet a poverty target.

Furthermore, a major reason that people may not have access to food even when enough is produced is that there is no guarantee that a market economy will generate a distribution of income that provides enough for all to purchase the food needed. Fighting hunger also helps reduce poverty, as undernourishment reduces labour productivity, increases susceptibility to illness, worsens school performance, reduces the willingness to undertake risky but more profitable investments and transmits itself from one generation to the next.

Although in the past three decades, tremendous progress has been achieved in reducing **income poverty** in certain parts of the world – notably in China and other parts of East Asia where poverty incidence dropped from 78 to 17 percent – there remains an estimated 1.44 billion people who still live on less than **US\$1.25** a day (the present internationally accepted poverty line). Progress in poverty reduction has been very uneven. Sub-Saharan Africa, for example, has registered only a marginal decline. From a headcount perspective, the number of poor people living in the region nearly doubled and its share of the world's poor increased from 11 to 27 percent during this thirty year period.

The monetary poor are particularly vulnerable to rising prices of food, with some groups spending over 80 percent of their income to meet sustenance needs. From a broader perspective, roughly 1.75 billion people in the 104 countries covered by the United Nations Development Programme's (UNDP) MPI (Multidimensional Poverty index), representing one-third of their population, live in **multidimensional poverty**, which is indicated by acute deprivation in health, education and the standard of living.

Map 27:



Source: World Bank

Metalink: [P2.HUN.WBK.WDI.POV.P125](https://data.worldbank.org/indicator/P2.HUN.WBK.WDI.POV.P125), p. 169 

- Around 1.4 billion people have less than USD 1.25 per day
- Despite being high, the proportion of the world's poor has fallen by half in recent decades
- Progress is particularly driven by China

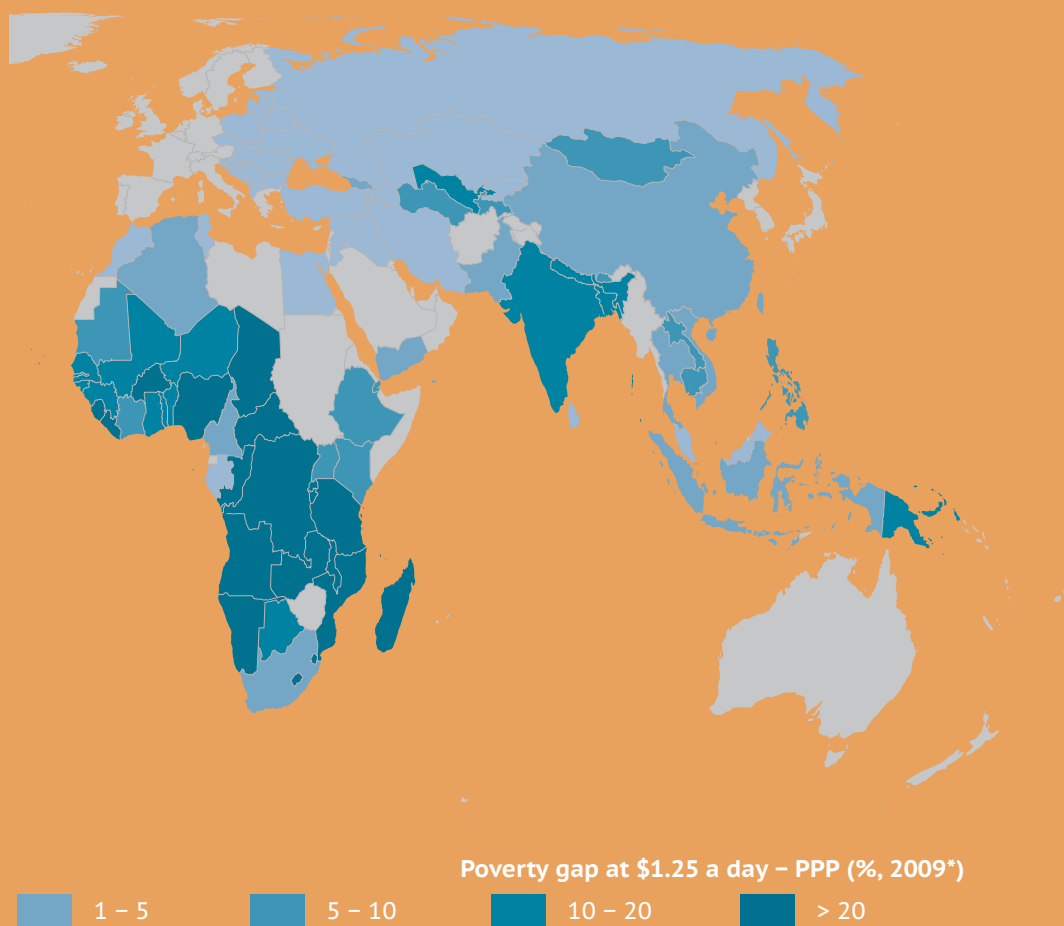
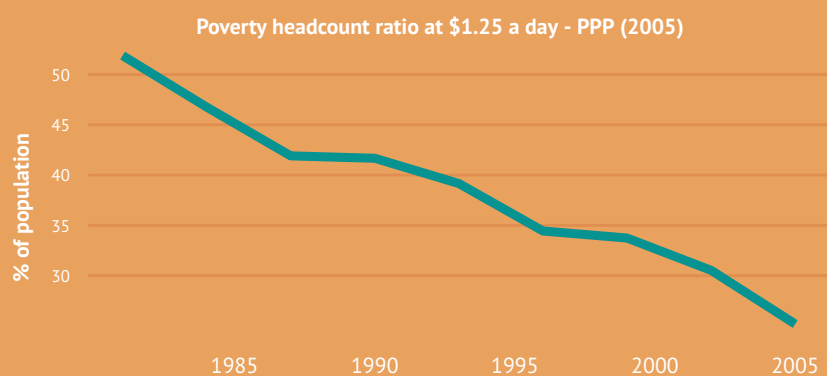


Chart 58: As a share of world population, poverty is decreasing



Source: World Bank

Metalink: P2.HUN.WBK.WDI.POV.AGG, p. 168

According to the agency, over half the world's multidimensionally poor live in South Asia (844 million people), and more than a quarter live in Africa (458 million), which also has the highest incidence of multidimensional poverty.

In many societies there are groups, especially rural women, youth, indigenous peoples and ethnic minorities that face deeply rooted **inequalities**. Gender inequalities are very pronounced in sub-Saharan Africa, South Asia and the Near East and North Africa. The agricultural sector is a case in point. **Women** in agriculture and rural areas have one thing in common across regions: they have less access than men to productive resources and opportunities. The gender gap is found in the case of many assets, inputs and services – land, livestock, labour, education, extension and financial services, and technology – and it imposes costs on the sector, the broader economy and society, as well as on the women themselves.

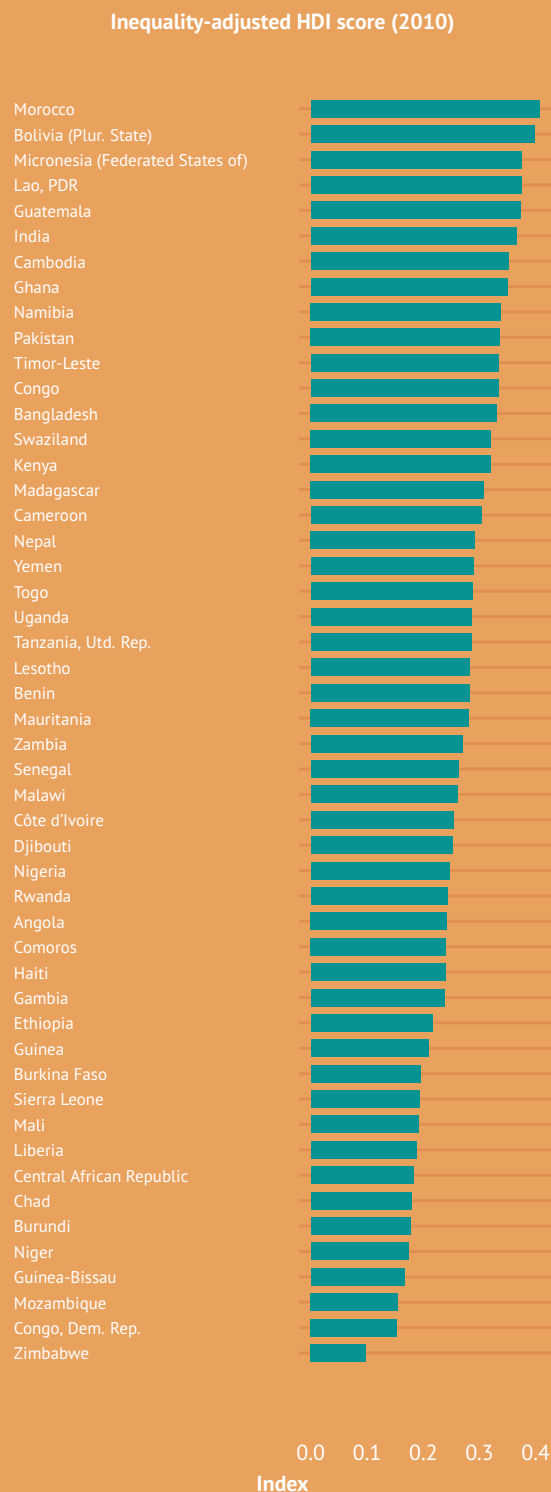
Around the world, rising income inequality is the norm: more countries have a higher **Gini coefficient** now than in the 1980s. For each country where inequality has fallen in the last 20 to 30 years, it has worsened in more than two others. The majority of countries in East Asia have rising income inequality. To an extent, this can be explained by widening disparities between rural and urban populations, owing to rapid industrialization and increasing returns to higher levels of schooling. In sub-Saharan Africa, inequality has substantially improved, coinciding with the period of economic growth that began more than a decade ago.

Latin America and the Caribbean, traditionally a region of high inequality related to unequal land distribution, regressive public spending and uneven access to education, has made rapid progress in recent decades. This is especially true of Brazil, Ecuador and Paraguay. Greater equality is associated with structural economic changes that have brought women into employment and to affirmative measures designed to equalize access to education. The challenge is to create conditions that allow the poor to escape poverty and, in doing so, ensure that opportunities are inclusive.

Further reading

- UNDP - Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development (hdr.undp.org/en/reports/global/hdr2010/)
- IFAD Rural Poverty Report. New realities, new challenges, new opportunities for tomorrow's generation (www.ifad.org/rpr2011/)
- World Bank Poverty Reduction and Equity Group (www.worldbank.org/poverty)

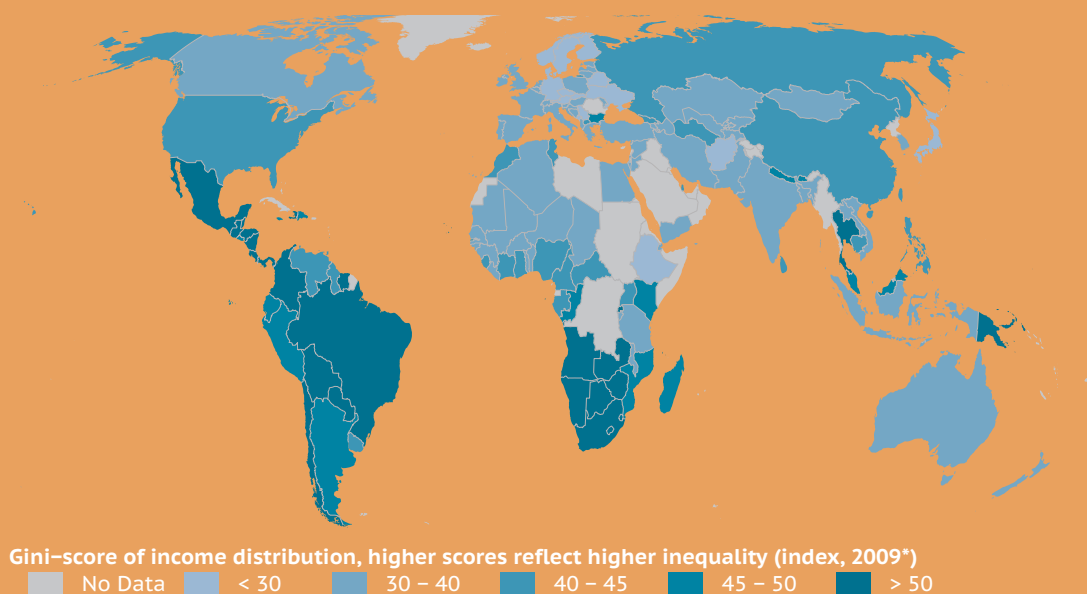
Chart 59: Countries in sub-Saharan Africa have the lowest human development index adjusted for inequality



Source: UNDP-HDR

Metalink: P2.HUN.UNDP.HDR.POV.HDIi, p. 166 

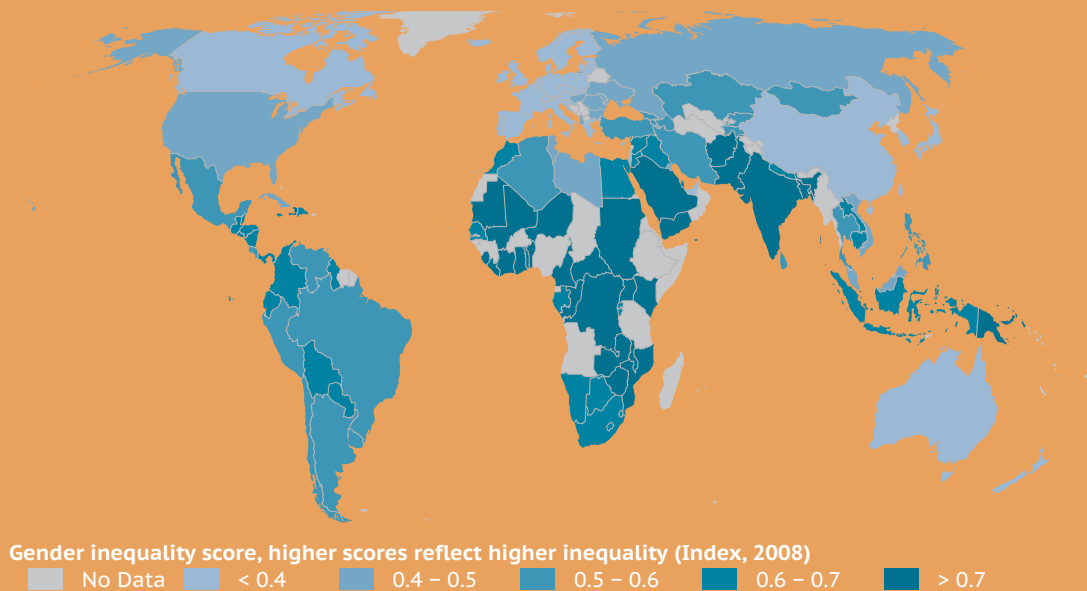
Map 28: Income inequality prevalent throughout the world



Source: World Bank

Metalink: P2.HUN.WBK.WDI.POV.GINI, p. 168 

Map 29: ... and so is gender inequality



Source: World Bank

Metalink: P2.HUN.UNDP.HDR.POV.GEI, p. 166 

Good governance

Former UN Secretary General Kofi Annan once said “good governance is perhaps the single most important factor in eradicating poverty and promoting development”. Efforts to promote agricultural development and food security in countries where they are most needed are often hindered by a lack of good governance.

Simply put, “governance” means the process of decision-making and how decisions are implemented (or not implemented). According to the World Bank, the concept of good governance consists of many dimensions including political stability, rule of law, voice and accountability, government effectiveness, regulatory quality and control of corruption. All of these dimensions matter for agriculture. Political stability, the absence of violence and the rule of law are essential preconditions for agricultural development. Violent conflicts are often linked to unequal access to land and other natural resources. In political systems that lack voice and accountability, the rural poor face acute difficulties when attempting to influence the political agenda, resulting in low political attention in using agriculture for development.

Although **governance** is difficult to measure, the evidence from cross-country analysis is unambiguous: governance is instrumental for affecting progress towards development. For instance, better governance is positively associated with higher investment and growth rates. Government effectiveness, an efficient bureaucracy and an equitable rule of law are associated with increased economic performance, adult literacy and lower infant mortality. High levels of corruption, on the other hand, are linked with poor development prospects.

In developing countries, where agriculture plays an important role in the economy, there is a tendency toward poor governance. This is of particular concern when the public sector is most needed to provide guidance in realizing rural development. Moreover, many large donors concerned with aid effectiveness employ good governance indicators when they select countries that qualify for Official Development Assistance (ODA). This presents a dilemma for agricultural-based countries, as they are often less eligible for assistance because of poor performance in terms of good governance.

With the world increasingly turning its attention to issues of governance, there are grounds for optimism towards change. However, success cannot be taken for granted given the often complex and sizeable challenge of improving governance.

Further reading

- World Bank - The Worldwide Governance Indicators (WGI) project (info.worldbank.org/governance/wgi/)

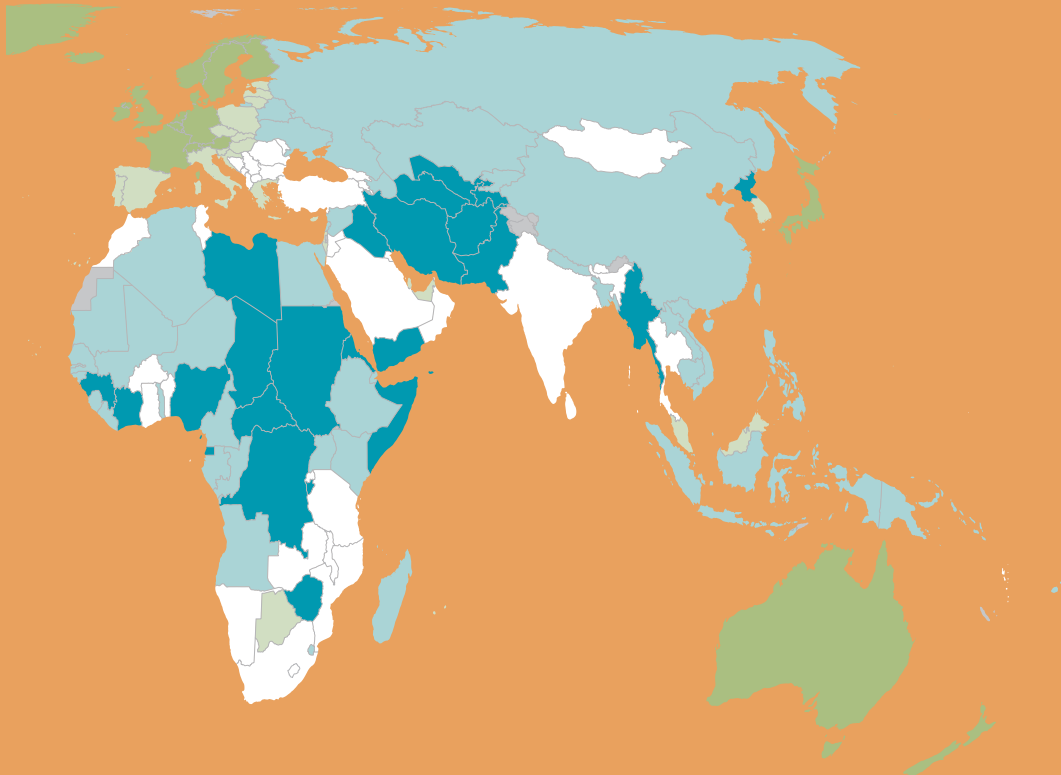
Map 30:



Source: World Bank

Metalink: [P2.HUN.WBK.POV.GOV](https://p2.hun.wbk.pov.gov), p. 167

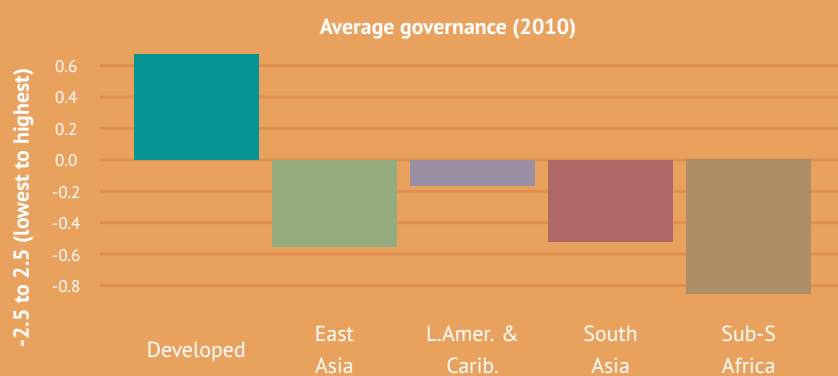
- Efforts to combat poverty and food security are often hindered by a lack of effective governance
- The lack of effective governance is rife in developing countries, and is especially acute in Central Asia and Central Africa



Average governance (-2.5 to 2.5. lowest to highest, 2010)



Chart 60: Governance, including the degree of voice and accountability, political stability and absence of violence and terrorism, government effectiveness, regulatory quality, rule of law and control of corruption, is poor in food-insecure regions



Source: World Bank

Metalink: [P2.HUN.WBK.POV.GOV](https://p2.hun.wbk.pov.gov), p. 167



Education, health and sanitation

The two greatest potential resources in most poor, food-insecure countries are the people and the productivity of the land and water. To defeat chronic hunger and poverty, investments must be made in both people and productivity. Investing in people must come in the form of education, clean water and sanitation, health and social services and, in some cases, direct food and nutrition support. In rural areas, such expenditures are essential if the corresponding investments in agriculture and its productive subsectors are to pay off.

Education, particularly women's education, is one of most important instruments for combating child malnutrition and infant mortality. There is ample evidence to show that **literacy in women** is associated with sustainable fertility rates, increased birth spacing and lower maternal death. Literate mothers are more likely to immunize their children and improve their nutritional status. Acquiring knowledge on improved child feeding practices, food preservation and better sanitation is key to breaking the cycle of malnutrition. For every year of a girl's education, the likelihood of her prospective child dying before the age of five is reduced by 10 percent. Education is sometimes referred to as the "social vaccine" against **HIV/AIDS**. Those who complete primary education are more likely to know about preventive measures.

People around the world today have much higher levels of education than ever before. In the space of almost two decades, global literacy rates have risen from 73 to 84 percent, with school enrolments increasing faster for girls than for boys, and school completion rates rising by 29 points to 87 percent. Yet, wide disparities remain in both access to and equality of educational attainment of girls and boys both among and within countries, particularly in those dominated by large rural poor populations. In parts of Latin America and the Caribbean, 35 percent of rural girls and 71 percent of urban boys are enrolled in school, while in sub-Saharan Africa, the rates range from 37 percent and 84 percent. There are also strong intergenerational effects associated with illiteracy. For example, 75 percent of children not in school have mothers with no formal education.

Map 31:



Source: UNESCO

Metalink: [P2.HUN.WBK.WDI.EDU.FILT](https://data.worldbank.org/indicators/P2.HUN.WBK.WDI.EDU.FILT), p. 167 

- Education is key for development
- Improving women's education, in particular, is one of the most important instruments to combat child malnutrition
- However, literacy rates of women are frequently below 30 percent in many developing countries

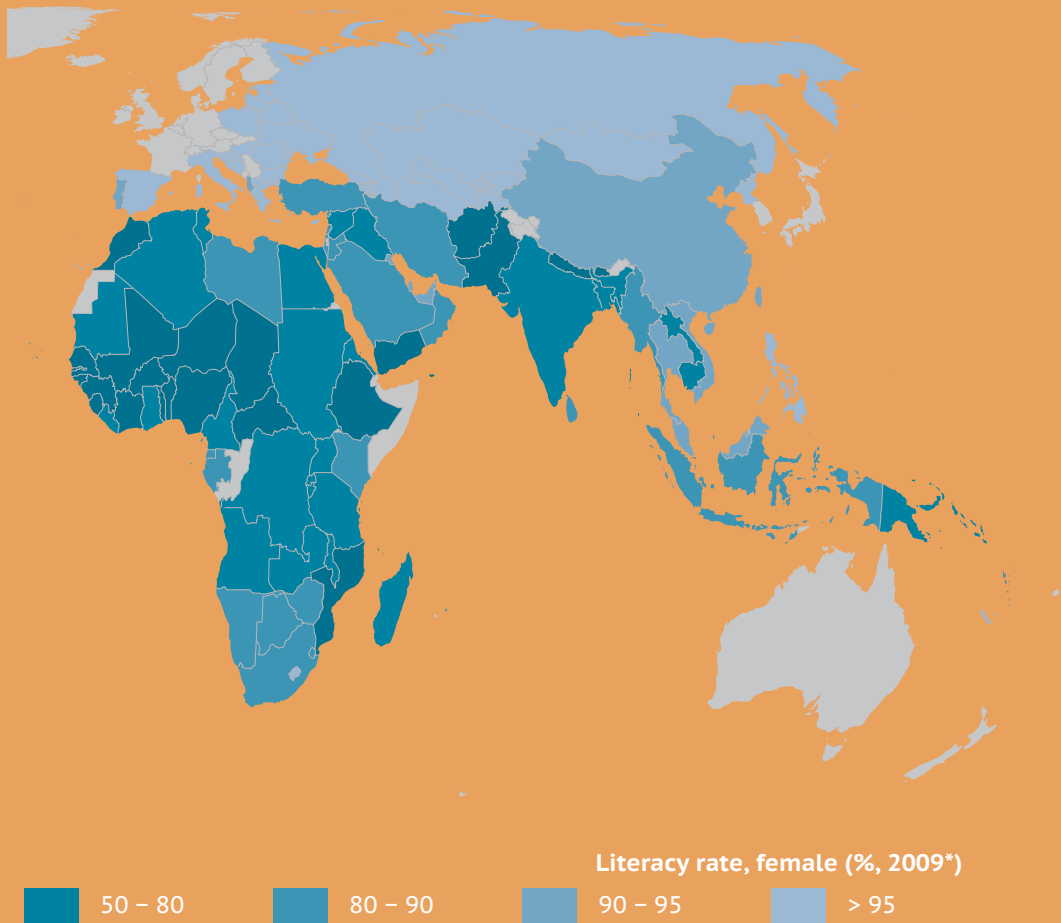
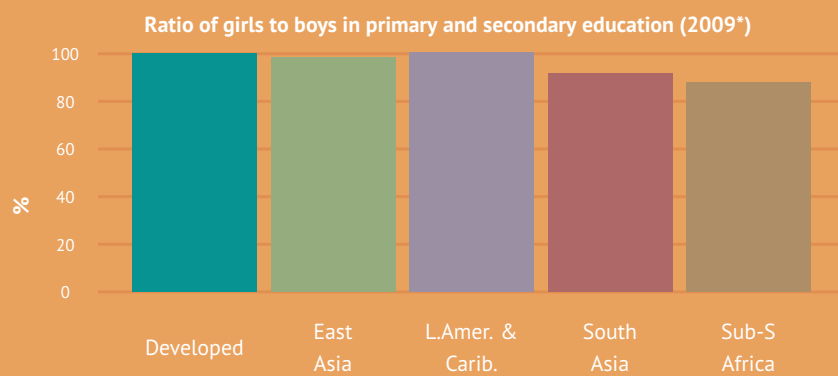


Chart 61: Unequal opportunity afforded to girls in basic education where it matters most



Source: UNESCO

Metalink: [P2.HUN.WBK.WDI.EDU.GEN](#), p. 167



Investment in **health** is also important for human welfare and sustained economic and social development. Timely access to health services – that is, to a mix of promotion, prevention, treatment and rehabilitation – is critical. This cannot be achieved for the majority of the population without a well-functioning health financing system.

The most recent estimates of money needed to ensure access to essential healthcare suggests that, on average, low-income countries must spend around US\$ 60 per capita, which is almost double the amount they are currently spending. Public financing is usually a mix of government money, loans, grants and aid from international organizations and non-governmental organizations. Apart from insufficient overall funds, the per capita distribution of public expenditure on healthcare across countries is vastly uneven. It is unrealistic to expect most low-income countries to achieve universal coverage. Access is often dictated by the ability to pay, and fees are a major hindrance for poor people soliciting treatment.

There are other factors beside income that determine access to health care. For instance, migrants, ethnic minorities and indigenous people use services less than other population groups, even though their needs may be higher. Also, when people do require healthcare, they often incur high, sometimes catastrophic costs in paying for access. According to the World Health Organization (WHO), about 150 million people globally suffer financial catastrophe annually, while 100 million are pushed below the poverty line each year.

Often, lost income causes strenuous financial penalties on the ill and those who care for them. The International Labour Organization (ILO) finds that only one in five people in the world has broad-based social security protection that also includes cover for lost wages in the event of illness, and more than half the world's population lacks any type of formal social protection.

Map 32:



Source: WHO

Metalink: [P2.HUN.WBK.WDI.HAE.HE.PCP](#), p. 168 

- USD 860 spent annually on health per person at the global level
- This number masks huge differences between regions
- An average of just USD 32 is spent on a per capita basis in low-income countries

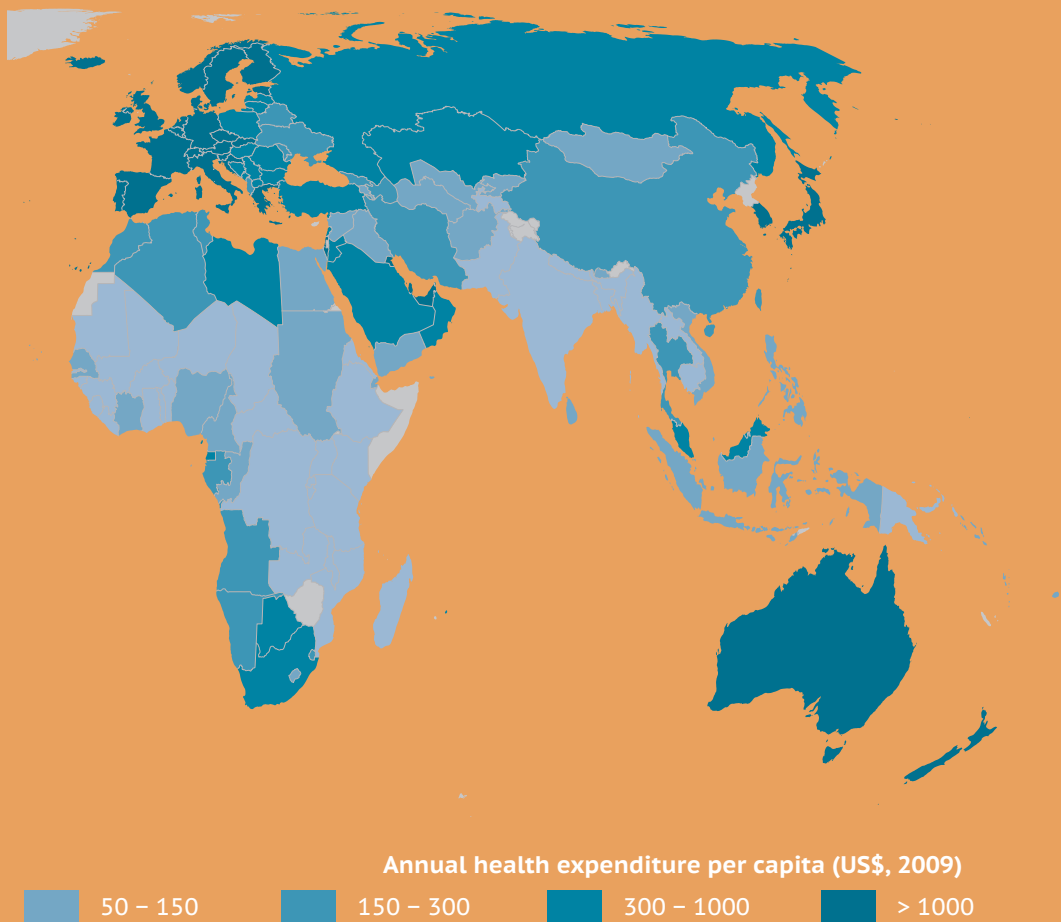
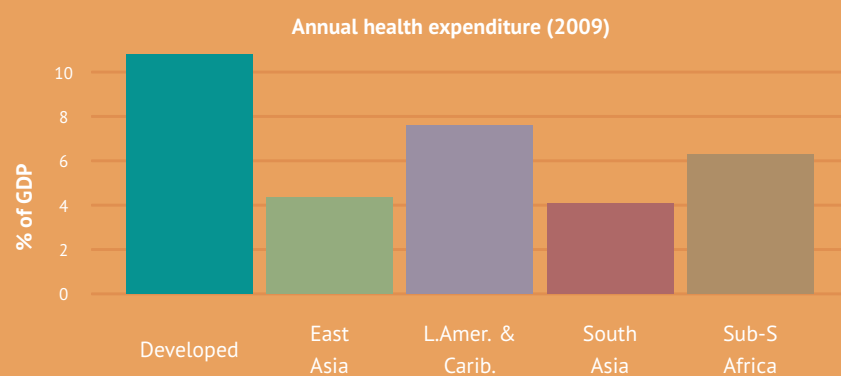


Chart 62: Budgetary constraints preclude adequate public health spending in many developing regions



Source: WHO

Metalink: [P2.HUN.WBK.WDI.HAE.HE.TOT](#), p. 168



Improving access to **safe water** and **sanitation** can greatly reduce the burden on health systems and promote wider development. According to the United Nations Children's Fund (UNICEF), 2.5 billion people in developing countries – around 50 percent of their population – lack improved sanitation facilities, and over 884 million still use unsafe drinking water sources.

Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day, and leads to impoverishment and diminished opportunities for thousands more. Estimates point to some 2 million people dying every year as a result of diarrhoea and diseases caused by ingesting contaminated water.

Poor water and sanitation have many other serious repercussions as well. Children, especially girls, are denied their right to education because schools lack private and decent sanitation facilities. Women and girls are forced to spend large parts of their day searching for and fetching water, denying them participation in education and income-generating employment.

Inadequate water and sanitation means that poor farmers and wage earners are less productive due to illness, health systems are overwhelmed and national economies underperform.

Further reading

- UNESCO education (www.unesco.org/new/en/education/)
- UNICEF Water, Sanitation and Hygiene (www.unicef.org/wash/)
- WHO The world health report - Health systems financing: the path to universal coverage (www.who.int/whr/2010/en/index.html)
- UNDP, Human Development Report 2010 (hdr.undp.org/en/reports/global/hdr2010/)
- O'Donovan (2008)

Map 33:



Source: WHO

Metalink: [P2.HUN.WBK.WDI.HAE.WAT.IMPRU](#), p. 168 

- 78 percent of the world's rural population now have access to clean water
- Progress has been slow - just 15 percent more than two decades ago
- Yet, in many developing countries, more than half of all households struggle with inadequate access to safe water and sanitation services

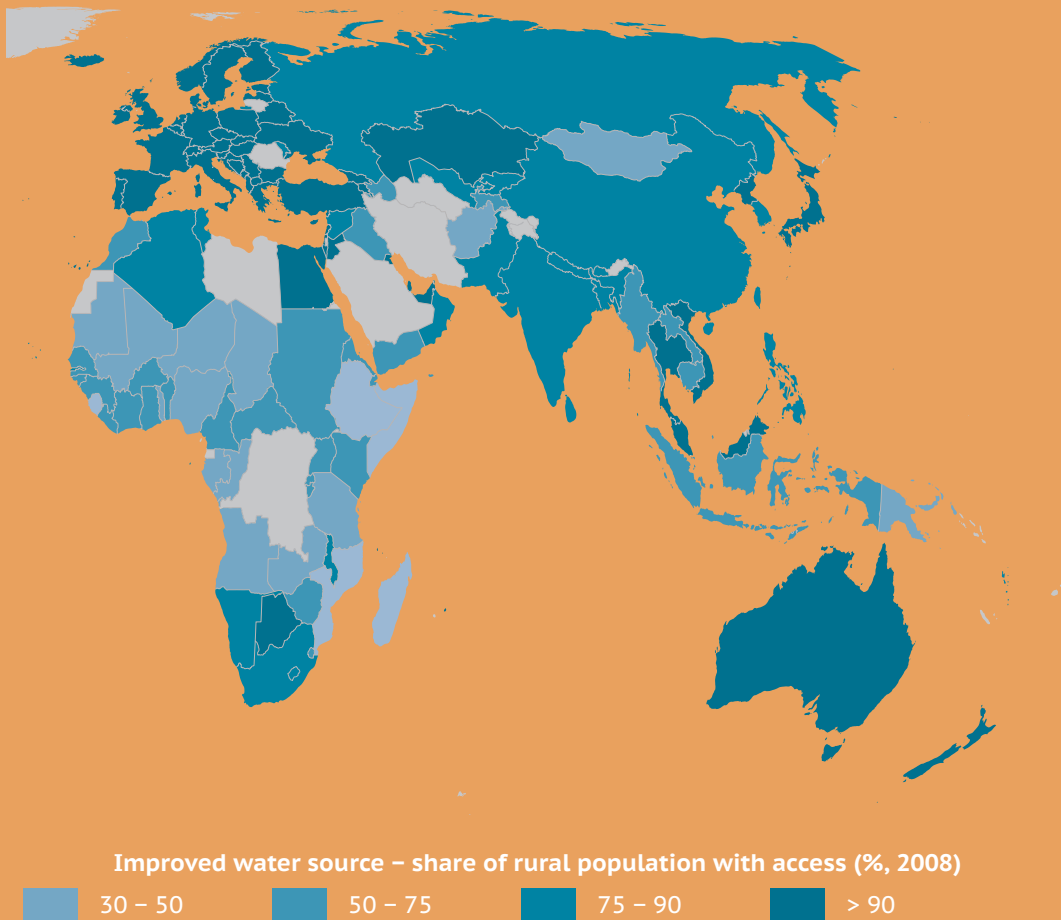
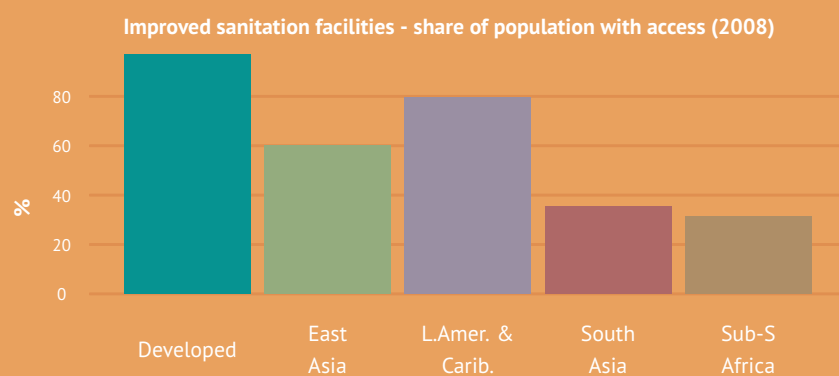


Chart 63: There are still many who do not have access to adequate sanitation



Source: WHO

Metalink: [P2.HUN.WBK.WDI.HAE.SAN.IMPS](#), p. 168



Food aid

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

Several formal agreements govern food-related assistance at the international level. Among these, the Food Aid Convention (FAC) is the only legal instrument to ensure a minimum amount of food aid. The components of the FAC have remained largely unchanged since its creation in 1967, and many believe that it no longer applies to today's food-related assistance needs. Current food aid patterns do not reflect longer-term requirements. In 2009, around 80 percent of total assistance was channelled to emergency relief measures, while the remainder was used for promoting agricultural and broader economic development. More troubling is the perceived high negative correlation of international food prices with the level of food aid.

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

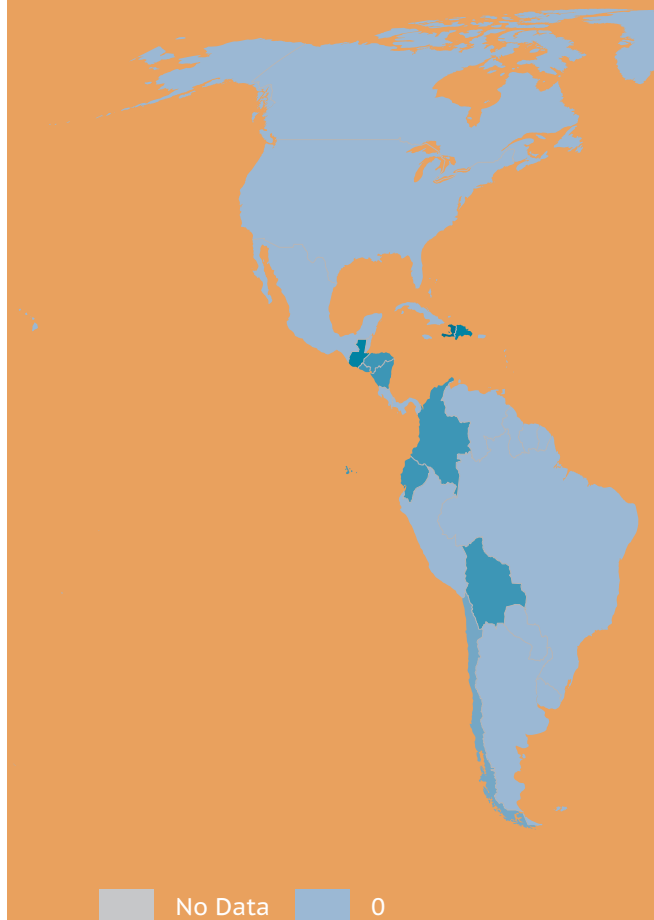
Donors are addressing shortcomings of traditional food assistance. A growing number now rely on procurement mechanisms in the target countries themselves. Local purchases not only minimize market distortions (supplies are neither increased nor effective demand lowered), they are also generally cheaper than in-kind aid and can generate development benefits to local markets and farmers. Some donors also strive for better integration of emergency interventions and longer-term development operations. The European Union, for example, envisages a rapid handover to structural food security mechanisms during emergency response. Such measures help rebuild the livelihoods of affected populations and strengthen their resilience to future crises.

These examples illustrate a fundamental departure from the ad hoc and partial approaches to food security interventions followed in the past. They also point to donors' general agreement on the principles that should guide food aid interventions.

Further reading

- FAO Making the Food Aid Convention meet the realities of the 21st century (www.fao.org/docrep/013/al935e/al935e00.pdf)
- World Food Programme (www.wfp.org)

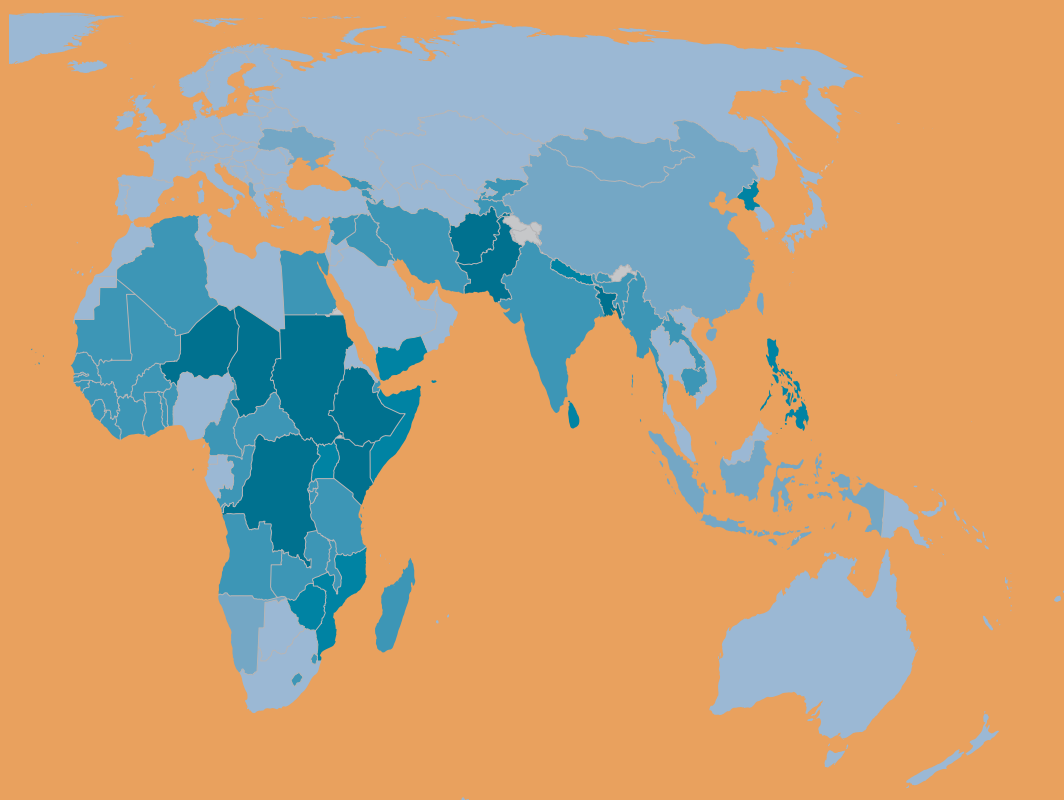
Map 34:



Source: WFP

Metalink: [P2.HUN.WFP:FAIS.FDAID](https://p2.hun.wfp.org/faids/fdaids), p. 169 

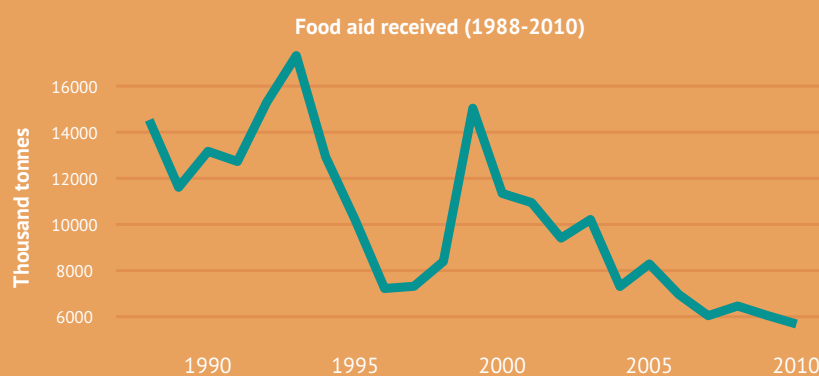
- 5.7 million tonnes of food aid were received in 2010
- Despite no let-up in the number of emergencies, food aid fell to a historical low
- Many donors now rely on locally purchased food in order to strengthen domestic markets in crisis-hit countries



Food aid received, grain equivalent (thousand tonnes, 2010)



Chart 64: Food aid flows are in long-term decline and have fallen further at a time when food prices have spiked



Source: WFP

Metalink: [P2.HUN.WFP.FAIS.FDAID](https://p2.hun.wfp.org/FAIS/FDAID), p. 169



TABLE 13: Population at risk: UNHCR population of concern


	UNHCR population of concern							
	total	total refugees	internally displaced persons	others and stateless persons	total	total refugees	internally displaced persons	others and stateless persons
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2009	2009	2009	2009	2010	2010	2010	2010
WORLD	29 233	10 174	15 628	3 431	29 986	10 350	14 456	5 180
DEVELOPING REGIONS	28 139	9 642	15 207	3 290	28 931	9 845	14 058	5 027
AFRICA	10 636	2 805	6 469	1 362	10 587	2 947	6 154	1 486
North Africa	143	138	0	5	142	137	0	5
Algeria	10	8	0	2	8	7	0	2
Egypt	9	7	0	2	9	7	0	2
Libya	3	2	0	1	3	2	0	1
Morocco	3	2	0	1	3	2	0	1
Tunisia	3	2	0	1	3	2	0	1
Sub-Saharan Africa	10 493	2 667	6 469	1 357	10 445	2 810	6 154	1 481
Angola	159	141	0	18	136	135	0	1
Benin	1	0	0	0	1	0	0	0
Botswana	0	0	0	0	0	0	0	0
Burkina Faso	1	1	0	0	2	1	0	1
Burundi	231	94	100	37	254	84	157	12
Cameroon	17	15	0	2	17	15	0	2
Cape Verde	0	0	0	0	0	0	0	0
Central African Republic	357	160	197	1	359	165	193	2
Chad	250	55	171	25	237	54	131	53
Comoros	0	0	0	0	0	0	0	0
Congo	24	21	0	3	24	21	0	3
Côte d'Ivoire	714	23	519	172	585	42	515	29
Congo, Dem. Rep.	2 663	456	2 053	154	2 719	477	1 721	520
Djibouti	1	1	0	0	1	1	0	0
Equatorial Guinea	0	0	0	0	0	0	0	0
Eritrea	224	209	0	14	236	222	0	14
Ethiopia	112	63	0	49	118	69	0	49
Gabon	0	0	0	0	0	0	0	0
Gambia	5	2	0	3	3	2	0	1
Ghana	16	15	0	1	22	20	0	2
Guinea	14	11	0	3	15	12	0	3
Guinea-Bissau	1	1	0	0	1	1	0	0
Kenya	417	10	399	8	311	9	300	2
Lesotho	0	0	0	0	0	0	0	0
Liberia	78	72	0	6	73	70	0	3
Madagascar	0	0	0	0	0	0	0	0
Malawi	0	0	0	0	0	0	0	0
Mali	4	3	0	1	4	4	0	0
Mauritania	52	39	0	13	40	38	0	2
Mauritius	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0
Namibia	1	1	0	0	1	1	0	0
Niger	1	1	0	0	1	1	0	0
Nigeria	25	16	0	10	28	16	0	12
Rwanda	155	129	0	25	136	115	0	21
Senegal	17	16	0	1	18	16	0	2
Seychelles	0	0	0	0	0	0	0	0
Sierra Leone	19	15	0	3	15	11	0	3
Somalia	2 249	678	1 550	21	2 257	770	1 464	23
Sudan	1 619	368	1 034	217	2 185	387	1 548	250
South Africa	1	0	0	0	1	0	0	0
Swaziland	0	0	0	0	0	0	0	0
Tanzania, Utd. Rep.	156	1	0	155	164	1	0	162
Togo	20	18	0	1	19	18	0	1
Uganda	863	8	446	409	436	6	126	304
Zambia	0	0	0	0	0	0	0	0
Zimbabwe	24	22	0	1	25	24	0	1

TABLE 13: Population at risk: UNHCR population of concern (continued)


	UNHCR population of concern							
	total	total refugees	internally displaced persons	others and stateless persons	total	total refugees	internally displaced persons	others and stateless persons
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2009	2009	2009	2009	2010	2010	2010	2010
ASIA	13 602	6 372	5 435	1 796	14 103	6 425	4 232	3 446
Central Asia	17	14	0	3	301	17	60	224
Kazakhstan	4	4	0	1	4	4	0	1
Kyrgyzstan	3	3	0	0	284	3	60	222
Tajikistan	1	1	0	0	1	1	0	0
Turkmenistan	1	1	0	0	1	1	0	0
Uzbekistan	8	7	0	2	10	9	0	2
East Asia	1 153	975	67	110	1 303	986	202	115
Brunei Darussalam	0	0	0	0	0	0	0	0
Cambodia	17	17	0	0	16	16	0	0
China	199	181	0	18	192	185	0	8
Indonesia	21	18	0	2	17	17	0	0
Korea, DPR	1	1	0	0	1	1	0	0
Korea, Republic of	1	1	0	0	1	1	0	0
Lao, PDR	9	8	0	0	8	8	0	0
Malaysia	62	1	0	61	1	1	0	0
Mongolia	4	1	0	2	4	2	0	2
Myanmar	497	407	67	23	500	416	62	22
Philippines	2	1	0	1	221	1	140	81
Singapore	0	0	0	0	0	0	0	0
Thailand	1	1	0	0	1	0	0	0
Viet Nam	341	339	0	1	340	339	0	1
South Asia	7 225	3 265	2 627	1 334	7 400	3 413	1 578	2 409
Afghanistan	3 279	2 887	297	95	4 404	3 055	352	998
Bangladesh	12	10	0	2	17	10	0	7
Bhutan	90	89	0	1	76	75	0	1
India	24	20	0	5	22	18	0	4
Iran (Islamic Rep.)	87	73	0	14	85	69	0	16
Maldives	0	0	0	0	0	0	0	0
Nepal	7	5	0	2	7	6	0	1
Pakistan	3 041	35	1 895	1 111	2 199	40	952	1 207
Sri Lanka	684	146	435	104	590	141	274	175
West Asia	5 206	2 117	2 741	349	5 100	2 010	2 393	698
Armenia	104	18	0	86	103	18	0	85
Azerbaijan	606	17	586	3	612	17	593	2
Bahrain	0	0	0	0	0	0	0	0
Cyprus	0	0	0	0	0	0	0	0
Georgia	378	15	353	10	378	11	236	131
Iraq	3 565	1 785	1 552	228	3 387	1 684	1 344	360
Jordan	3	2	0	1	3	2	0	1
Kuwait	1	1	0	0	1	1	0	0
Lebanon	18	16	0	2	17	16	0	2
Occupied Palestinian Territory	98	95	0	3	97	93	0	3
Saudi Arabia	1	1	0	0	1	1	0	0
Syrian Arab Republic	23	18	0	6	28	18	0	10
Turkey	156	146	0	10	155	147	0	8
United Arab Emirates	0	0	0	0	0	0	0	0
Yemen	253	2	250	1	318	2	221	95
LATIN AMERICA & THE CARIBBEAN	3 898	463	3 304	132	4 238	471	3 672	95
Argentina	1	1	0	0	1	1	0	0
Bahamas	0	0	0	0	0	0	0	0
Barbados	0	0	0	0	0	0	0	0
Belize	0	0	0	0	0	0	0	0
Bolivia (Plur. State)	1	1	0	0	1	1	0	0
Brazil	1	1	0	0	1	1	0	0
Chile	1	1	0	0	1	1	0	0
Colombia	3 758	390	3 304	64	4 128	396	3 672	60
Costa Rica	0	0	0	0	0	0	0	0

TABLE 13: Population at risk: UNHCR population of concern (continued)


	UNHCR population of concern							
	total	total refugees	internally displaced persons	others and stateless persons	total	total refugees	internally displaced persons	others and stateless persons
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2009	2009	2009	2009	2010	2010	2010	2010
Cuba	10	8	0	2	12	7	0	4
Dominica	0	0	0	0	0	0	0	0
Dominican Republic	1	0	0	0	1	0	0	0
Ecuador	1	1	0	0	1	1	0	0
El Salvador	15	5	0	10	7	5	0	2
French Guiana	0	0	0	0	0	0	0	0
Grenada	0	0	0	0	0	0	0	0
Guatemala	15	6	0	9	7	6	0	1
Guyana	1	1	0	0	1	1	0	0
Haiti	36	24	0	12	33	26	0	7
Honduras	2	1	0	1	2	1	0	1
Jamaica	1	1	0	1	2	1	0	1
Mexico	27	6	0	20	17	7	0	10
Netherlands Antilles								
Nicaragua	2	1	0	0	2	1	0	0
Panama	0	0	0	0	0	0	0	0
Paraguay	0	0	0	0	0	0	0	0
Peru	12	6	0	6	11	6	0	5
St. Kitts & Nevis	0	0	0	0	0	0	0	0
St. Lucia	1	0	0	1	1	0	0	1
St. Vincent & Grenadines	2	1	0	1	2	1	0	1
Suriname	0	0	0	0	0	0	0	0
Trinidad & Tobago	1	0	0	0	0	0	0	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela (Boliv. Rep. of)	8	6	0	2	7	7	0	1
OCEANIA	2	2	0	0	2	2	0	0
Fiji	2	2	0	0	2	2	0	0
French Polynesia					0	0	0	0
New Caledonia	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0
Samoa	0	0	0	0	0	0	0	0
Solomon Islands	0	0	0	0	0	0	0	0
Tonga	0	0	0	0	0	0	0	0
Vanuatu	0	0	0	0	0	0	0	0
DEVELOPED REGIONS	1 094	532	421	141	1 055	505	397	153
NORTH AMERICA	4	2	0	1	4	3	0	1
Bermuda	0	0	0	0	0	0	0	0
Canada	0	0	0	0	0	0	0	0
United States of America	4	2	0	1	4	3	0	1
ASIA & OCEANIA	3	1	0	1	2	2	0	1
Australia	0	0	0	0	0	0	0	0
Israel	2	1	0	1	2	1	0	1
Japan	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0
EUROPE	1 088	528	421	139	1 048	500	397	151
Albania	17	16	0	2	16	15	0	1
Belarus	7	6	0	1	6	6	0	1
Bosnia & Herzegovina	237	70	114	53	232	63	113	55
Croatia	103	76	2	25	89	66	2	21
European Union	39	14	0	24	20	13	0	7
Iceland	0	0	0	0	0	0	0	0
Macedonia, FYR	9	8	0	1	11	8	0	3
Montenegro	3	3	0	0	3	3	0	0
Norway	0	0	0	0	0	0	0	0
Republic of Moldova	7	6	0	1	7	6	0	1
Russian Federation	204	109	80	14	199	112	53	34
Serbia	437	196	225	16	439	183	228	27
Switzerland	0	0	0	0	0	0	0	0
Ukraine	26	25	0	2	26	25	0	1

TABLE 14: Population at risk: persons affected by natural disasters


	Persons affected by natural disasters							
	total	drought	earthquake	extreme temperature	flood	landslide	storm	volcanoes, wildfires and epidemics
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2010	2010	2010	2010	2010	2010	2010	2010
WORLD	344 655	106 870	7 485	3 986	191 861	2 464	30 954	1 034
DEVELOPING REGIONS	342 717	106 870	6 650	3 971	191 352	2 464	30 403	1 007
AFRICA	43 854	38 810	0	0	4 657	20	317	50
North Africa	81	0	0	0	81	0	0	0
Algeria	0	0	0	0	0	0	0	0
Egypt	4	0	0	0	4	0	0	0
Libya								
Morocco	77	0	0	0	77	0	0	0
Tunisia								
Sub-Saharan Africa	43 773	38 810	0	0	4 577	20	317	50
Angola	255	0	0	0	255	0	0	0
Benin	832	0	0	0	831	0	0	1
Botswana	0	0	0	0	0	0	0	0
Burkina Faso	139	0	0	0	133	0	0	6
Burundi	184	180	0	0	3	0	2	0
Cameroon	6	0	0	0	3	0	0	3
Cape Verde								
Central African Republic	2	0	0	0	2	0	0	0
Chad	2 552	2 400	0	0	145	0	0	7
Comoros								
Congo	1	0	0	0	0	0	0	1
Côte d'Ivoire	6	0	0	0	6	0	0	0
Congo, Dem. Rep.	85	0	0	0	70	1	0	14
Djibouti	120	120	0	0	0	0	0	0
Equatorial Guinea								
Eritrea								
Ethiopia	9 482	9 400	0	0	81	0	0	1
Gabon	2	0	0	0	0	0	2	1
Gambia	39	0	0	0	39	0	0	0
Ghana	17	0	0	0	17	0	0	0
Guinea	48	0	0	0	48	0	0	0
Guinea-Bissau	57	0	0	0	57	0	0	0
Kenya	7 514	7 300	0	0	211	0	0	3
Lesotho	5	0	0	0	5	0	0	0
Liberia	15	0	0	0	15	0	0	0
Madagascar	1 027	720	0	0	0	0	307	0
Malawi	79	0	0	0	79	0	0	0
Mali	619	600	0	0	19	0	0	0
Mauritania	309	300	0	0	9	0	0	0
Mauritius								
Mozambique	544	460	0	0	81	0	0	4
Namibia	338	0	0	0	338	0	0	0
Niger	8 134	7 900	0	0	233	0	0	1
Nigeria	1 509	0	0	0	1 500	0	0	8
Rwanda	10	0	0	0	4	6	0	0
Senegal	103	0	0	0	103	0	0	0
Seychelles								
Sierra Leone	0	0	0	0	0	0	0	0
Somalia	2 866	2 850	0	0	16	0	0	0
Sudan	4 438	4 300	0	0	138	0	0	0
South Africa	26	0	0	0	20	0	6	0
Swaziland								
Tanzania, Utd. Rep.								
Togo	112	0	0	0	112	0	0	0
Uganda	613	600	0	0	0	13	0	0
Zambia	3	0	0	0	3	0	0	0
Zimbabwe	1 681	1 680	0	0	1	0	0	0

TABLE 14: Population at risk: persons affected by natural disasters (continued)


	Persons affected by natural disasters							
	total	drought	earthquake	extreme temperature	flood	landslide	storm	volcanoes, wildfires and epidemics
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2010	2010	2010	2010	2010	2010	2010	2010
ASIA	285 231	67 783	252	3 900	181 630	2 388	28 948	330
Central Asia	64	0	8	0	47	8	0	1
Kazakhstan	38	0	0	0	38	0	0	0
Kyrgyzstan	8	0	0	0	0	8	0	0
Tajikistan	17	0	8	0	9	0	0	0
Turkmenistan								
Uzbekistan								
East Asia	256 254	66 483	234	3 800	154 940	2 294	28 180	324
Brunei Darussalam								
Cambodia	0	0	0	0	0	0	0	0
China	231 535	60 000	196	3 800	140 254	2 148	25 137	0
Indonesia	238	0	17	0	69	0	0	152
Korea, DPR	96	0	0	0	56	0	40	0
Korea, Republic of	42	0	0	0	0	0	42	0
Lao, PDR								
Malaysia	0	0	0	0	0	0	0	0
Mongolia								
Myanmar	426	0	21	0	0	145	260	0
Philippines	6 738	0	0	0	3 901	1	2 666	171
Singapore								
Thailand	15 654	6 483	0	0	9 171	0	0	1
Viet Nam	1 524	0	0	0	1 490	0	35	0
South Asia	27 536	0	7	100	26 570	86	768	5
Afghanistan	49	0	1	0	48	0	0	0
Bangladesh	987	0	0	100	575	55	257	0
Bhutan								
India	4 790	0	0	0	4 283	0	507	0
Iran (Islamic Rep.)	5	0	5	0	0	0	0	0
Maldives								
Nepal	13	0	0	0	8	0	0	5
Pakistan	20 399	0	1	0	20 363	30	4	0
Sri Lanka	1 292	0	0	0	1 292	0	0	0
West Asia	1 377	1 300	4	0	74	0	0	0
Armenia								
Azerbaijan	70	0	0	0	70	0	0	0
Bahrain								
Cyprus								
Georgia								
Iraq	2	0	0	0	2	0	0	0
Jordan								
Kuwait								
Lebanon								
Occupied Palestinian Territory	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0	0
Syrian Arab Republic	1 300	1 300	0	0	0	0	0	0
Turkey	4	0	4	0	0	0	0	0
United Arab Emirates								
Yemen	1	0	0	0	1	0	0	0
LATIN AMERICA & THE CARIBBEAN	13 570	277	6 397	71	5 049	56	1 093	628
Argentina	0	0	0	0	0	0	0	0
Bahamas								
Barbados	2	0	0	0	0	0	2	0
Belize	0	0	0	0	0	0	0	0
Bolivia (Plur. State)	428	62	0	0	358	4	0	3
Brazil	357	62	0	0	295	0	0	0
Chile	2 676	0	2 672	0	0	0	0	4
Colombia	3 005	0	0	0	3 005	0	0	0
Costa Rica	3	0	0	0	3	0	0	0

TABLE 14: Population at risk: persons affected by natural disasters (continued)

	Persons affected by natural disasters							
	total	drought	earthquake	extreme temperature	flood	landslide	storm	volcanoes, wildfires and epidemics
	thousands	thousands	thousands	thousands	thousands	thousands	thousands	thousands
	2010	2010	2010	2010	2010	2010	2010	2010
Cuba								
Dominica								
Dominican Republic	52	0	0	0	39	0	12	0
Ecuador	121	108	0	0	11	0	0	2
El Salvador	12	0	0	0	0	0	12	0
French Guiana								
Grenada	0	0	0	0	0	0	0	0
Guatemala	456	0	0	0	3	51	400	2
Guyana	0	0	0	0	0	0	0	0
Haiti	4 310	0	3 700	0	24	0	78	507
Honduras	102	45	0	0	5	0	25	27
Jamaica	3	0	0	0	0	0	3	0
Mexico	1 600	0	25	0	1 020	0	555	0
Netherlands Antilles								
Nicaragua	76	0	0	0	76	0	0	0
Panama	33	0	0	0	33	0	0	0
Paraguay	16	0	0	0	0	0	0	16
Peru	154	0	0	71	80	1	0	2
St. Kitts & Nevis								
St. Lucia	3	0	0	0	2	0	1	0
St. Vincent & Grenadines								
Suriname								
Trinidad & Tobago	0	0	0	0	0	0	0	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela (Boliv. Rep. of)	95	0	0	0	95	0	0	0
OCEANIA	62	0	1	0	16	0	45	0
Fiji	39	0	0	0	0	0	39	0
French Polynesia	3	0	0	0	0	0	3	0
New Caledonia								
Papua New Guinea	0	0	0	0	0	0	0	0
Samoa								
Solomon Islands	18	0	1	0	16	0	1	0
Tonga	0	0	0	0	0	0	0	0
Vanuatu	0	0	0	0	0	0	0	0
DEVELOPED REGIONS	1 922	0	835	15	509	0	536	27
NORTH AMERICA	36	0	1	0	7	0	29	0
Bermuda								
Canada	0	0	0	0	0	0	0	0
United States of America	36	0	1	0	7	0	29	0
ASIA & OCEANIA	1 046	0	792	15	211	0	7	20
Australia	219	0	0	0	211	0	7	0
Israel	20	0	0	0	0	0	0	20
Japan	507	0	492	15	0	0	0	0
New Zealand	300	0	300	0	0	0	0	0
EUROPE	840	0	42	0	291	0	500	7
Albania	14	0	0	0	14	0	0	0
Belarus								
Bosnia & Herzegovina	35	0	0	0	35	0	0	0
Croatia	1	0	0	0	1	0	0	0
European Union	634	0	15	0	119	0	500	0
Iceland	0	0	0	0	0	0	0	0
Macedonia, FYR								
Montenegro	6	0	0	0	6	0	0	0
Norway								
Republic of Moldova	12	0	0	0	12	0	0	0
Russian Federation	66	0	0	0	58	0	0	7
Serbia	32	0	27	0	5	0	0	0
Switzerland	0	0	0	0	0	0	0	0
Ukraine	40	0	0	0	40	0	0	0

TABLE 15: Undernourishment


	Share of population undernourished			Incidence of undernourishment			Depth of hunger		
	%	%	% p.a.	millions	millions	% p.a.	kcal/cap/day	kcal/cap/day	% p.a.
	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08
WORLD	18	16	-2.3	701.2	739.2	0.5	214	212	-0.3
DEVELOPING REGIONS	18	16	-2.3	701.1	739.2	0.5	234	234	-0.3
AFRICA	29	23	-2.4	162.2	160.3	-0.1	253	234	-0.5
North Africa	5			3.1			185	188	0.1
Algeria	5			1.5			180	180	0.0
Egypt							190	200	0.3
Libya							130	130	0.5
Morocco	6			1.6			210	200	-0.3
Tunisia							120	120	0.0
Sub-Saharan Africa	31	23	-2.3	159.1	160.3	0.1	268	243	-0.5
Angola	61	41	-3.5	7.8	7.2	-0.7	390	320	-1.7
Benin	18	12	-3.6	1.0	1.0	0.0	230	210	-0.8
Botswana	23	25	0.8	0.4	0.5	2.0	230	240	0.8
Burkina Faso	12	8	-3.6	1.2	1.2	0.0	210	200	-0.6
Burundi	56	62	0.9	3.5	4.9	3.1	350	390	1.4
Cameroon	34	22	-3.9	5.0	4.2	-1.6	260	230	-0.8
Cape Verde	14	11	-2.2	0.1	0.1	0.0	190	190	0.0
Central African Republic	47	40	-1.5	1.6	1.7	0.6	320	300	-0.2
Chad	53	39	-2.7	3.9	4.1	0.5	370	320	-1.2
Comoros	47	47	0.0	0.3	0.4	2.6	300	300	0.7
Congo	41	13	-9.9	1.2	0.5	-7.6	310	230	-1.8
Côte d'Ivoire	17	14	-1.7	2.6	2.9	1.0	240	230	0.0
Congo, Dem. Rep.									
Djibouti	50	26	-5.8	0.3	0.2	-3.6	350	280	-2.0
Equatorial Guinea									
Eritrea	64	65	0.1	2.1	3.1	3.6	340	350	-0.2
Ethiopia	62	41	-3.7	36.2	32.6	-0.9	390	320	-1.7
Gabon							140	140	-0.4
Gambia	23	19	-1.7	0.3	0.3	0.0	250	240	0.5
Ghana	13	5	-8.3	2.3	1.1	-6.5	210	180	-2.3
Guinea	19	16	-1.5	1.5	1.6	0.6	270	260	-0.2
Guinea-Bissau	26	22	-1.5	0.3	0.3	0.0	260	250	0.0
Kenya	32	33	0.3	9.0	12.4	3.0	250	260	0.2
Lesotho	16	14	-1.2	0.3	0.3	0.0	220	220	0.0
Liberia	32	32	0.0	0.7	1.1	4.2	330	330	0.2
Madagascar	26	25	-0.4	3.5	4.7	2.7	250	250	0.5
Malawi	36	27	-2.6	3.8	3.9	0.2	310	280	-0.8
Mali	25	12	-6.5	2.5	1.5	-4.5	260	220	-1.3
Mauritania	9	8	-1.1	0.2	0.2	0.0	210	210	-0.3
Mauritius	7	5	-3.0	0.1	0.1	0.0	190	180	-0.3
Mozambique	47	38	-1.9	7.8	8.3	0.6	360	330	-1.2
Namibia	30	18	-4.5	0.5	0.4	-2.0	250	220	-0.8
Niger	37	16	-7.3	3.5	2.3	-3.7	300	240	-1.4
Nigeria	10	6	-4.5	10.9	9.4	-1.3	200	180	-1.2
Rwanda	53	32	-4.5	3.0	3.0	0.0	360	300	-0.6
Senegal	26	19	-2.8	2.3	2.3	0.0	240	220	-0.3
Seychelles	10	8	-2.0	0.0	0.0		160	150	-0.4
Sierra Leone	39	35	-1.0	1.6	1.9	1.6	360	340	-0.7
Somalia									
Sudan	29	22	-2.5	9.3	8.8	-0.5	260	240	-1.2
South Africa							160	150	0.0
Swaziland	21	19	-0.9	0.2	0.2	0.0	220	220	0.9
Tanzania, Utd. Rep.	42	34	-1.9	12.8	13.9	0.8	300	280	0.5
Togo	36	30	-1.6	1.7	1.9	1.0	290	280	-0.6
Uganda	23	22	-0.4	4.9	6.7	2.9	240	240	0.0
Zambia	38	44	1.3	3.6	5.4	3.8	300	320	0.6
Zimbabwe	44	30	-3.4	5.3	3.7	-3.2	340	300	-0.6

TABLE 15: Undernourishment (continued)

	Share of population undernourished			Incidence of undernourishment			Depth of hunger		
	%	%	% p.a.	millions	millions	% p.a.	kcal/cap/day	kcal/cap/day	% p.a.
	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08
ASIA	16	15	-2.1	490.9	537.2	0.8	233	238	-0.2
Central Asia	12	13	-2.0	4.6	5.5	1.6	171	172	-0.1
Kazakhstan							130	120	0.0
Kyrgyzstan	13	11	-1.5	0.6	0.6	0.0	210	210	-0.3
Tajikistan	42	26	-4.3	2.4	1.8	-2.6	270	230	-0.5
Turkmenistan	9	7	-2.3	0.4	0.3	-2.6	180	180	0.0
Uzbekistan	5	11	7.4	1.2	2.8	8.0	160	180	0.7
East Asia	13	11	-1.8	219.4	205.8	-0.6	241	241	-0.4
Brunei Darussalam							140	130	-0.5
Cambodia	40	25	-4.2	4.7	3.6	-2.4	280	250	-0.5
China	12	10	-1.6	141.7	129.6	-0.8	250	250	-0.5
Indonesia	11	13	1.5	22.0	29.7	2.8	210	220	0.0
Korea, DPR	30	35	1.4	6.6	8.4	2.2	250	270	1.0
Korea, Republic of							120	130	0.0
Lao, PDR	29	22	-2.5	1.4	1.4	0.0	270	260	-0.5
Malaysia							120	130	-0.5
Mongolia	33	27	-1.8	0.8	0.7	-1.2	260	260	0.2
Myanmar									
Philippines	20	13	-3.8	14.1	11.8	-1.6	250	240	-0.7
Singapore									
Thailand	18	16	-1.1	11.1	10.7	-0.3	240	240	-0.7
Viet Nam	22	11	-6.1	16.7	9.6	-4.9	270	240	-1.2
South Asia	20	20	-1.1	257.0	317.4	1.9	232	246	0.0
Afghanistan									
Bangladesh	41	26	-4.1	54.2	41.4	-2.4	330	290	-0.4
Bhutan									
India	17	19	1.0	167.1	224.6	2.7	220	240	0.0
Iran (Islamic Rep.)							170	180	0.7
Maldives	9	10	1.0	0.0	0.0		180	190	0.7
Nepal	20	17	-1.5	4.4	4.7	0.6	230	220	-0.3
Pakistan	20	25	2.0	26.8	42.8	4.3	260	280	0.0
Sri Lanka	25	20	-2.0	4.5	3.9	-1.3	260	250	-0.2
West Asia	24	24	-4.2	9.9	8.5	-1.4	173	169	-0.2
Armenia	36	21	-4.8	1.1	0.6	-5.4	230	200	-1.4
Azerbaijan	27			2.2			220	140	-2.8
Bahrain									
Cyprus							120	120	0.0
Georgia	19	6	-9.9	1.0	0.3	-10.4	200	160	-3.9
Iraq									
Jordan	5			0.2			170	150	0.0
Kuwait	5	5	0.0	0.1	0.1	0.0	180	190	-1.2
Lebanon							160	170	0.4
Occupied Palestinian Territory	10	21	7.0	0.3	0.8	9.3	160	190	
Saudi Arabia							130	130	-0.5
Syrian Arab Republic							160	170	0.4
Turkey							160	160	0.4
United Arab Emirates							130	140	0.5
Yemen	31	30	-0.3	5.0	6.7	2.7	260	260	0.2
LATIN AMERICA & THE CARIBBEAN	14	11	-1.9	48.0	41.6	-1.3	212	203	-0.3
Argentina							120	130	0.0
Bahamas	8	6	-2.6	0.0	0.0		160	160	0.0
Barbados							140	140	0.5
Belize	8	5	-4.2	0.0	0.0		180	170	0.0
Bolivia (Plur. State)	24	27	1.1	1.9	2.5	2.5	230	240	0.0
Brazil	10	6	-4.5	16.6	11.7	-3.1	240	220	-0.5
Chile							150	140	-0.8
Colombia	11	9	-1.8	4.0	4.1	0.2	210	210	-0.3
Costa Rica							150	150	0.4

TABLE 15: Undernourishment (continued)

	Share of population undernourished			Incidence of undernourishment			Depth of hunger		
	%	%	% p.a.	millions	millions	% p.a.	kcal/cap/day	kcal/cap/day	% p.a.
	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08	1995-97	2006-08	growth: 1995-97 - 2006-08
Cuba	14			1.5			190	120	-1.8
Dominica							150	150	0.0
Dominican Republic	26	24	-0.7	2.1	2.3	0.8	240	230	-0.3
Ecuador	16	15	-0.6	1.8	2.0	1.0	190	190	-0.3
El Salvador	12	9	-2.6	0.7	0.6	-1.4	200	190	-0.3
French Guiana									
Grenada	18	21	1.4	0.0	0.0		240	250	0.8
Guatemala	20	22	0.9	2.1	2.9	3.0	220	230	0.6
Guyana	11	8	-2.9	0.1	0.1	0.0	200	190	-1.2
Haiti	60	57	-0.5	4.8	5.5	1.2	430	420	-0.3
Honduras	16	12	-2.6	0.9	0.9	0.0	240	230	-0.5
Jamaica	6	5	-1.6	0.2	0.1	-6.1	170	170	-0.7
Mexico							190	190	0.0
Netherlands Antilles							150	150	-1.1
Nicaragua	38	19	-6.1	1.8	1.1	-4.4	310	260	-1.8
Panama	20	15	-2.6	0.6	0.5	-1.6	230	220	-0.3
Paraguay	10	10	0.0	0.5	0.6	1.7	200	210	-0.3
Peru	21	16	-2.4	5.0	4.5	-1.0	230	220	-0.8
St. Kitts & Nevis	16	16	0.0	0.0	0.0		220	220	0.6
St. Lucia	7	8	1.2	0.0	0.0		180	190	0.0
St. Vincent & Grenadines	16	5	-10.0	0.0	0.0		210	170	-1.0
Suriname	13	15	1.3	0.1	0.1	0.0	200	200	0.0
Trinidad & Tobago	14	11	-2.2	0.2	0.2	0.0	220	220	0.3
Uruguay							140	140	-0.4
Venezuela (Boliv. Rep. of)	14	7	-6.1	3.1	1.9	-4.4	190	170	-0.4
OCEANIA	8	9		0.0	0.1		182	173	-0.6
Fiji	5			0.0			170	160	-0.7
French Polynesia	5			0.0			160	150	-1.1
New Caledonia	9	8	-1.1	0.0	0.0		210	210	0.3
Papua New Guinea									
Samoa	10			0.0			180	150	-1.1
Solomon Islands	13	11	-1.5	0.0	0.1		190	190	-0.6
Tonga									
Vanuatu	9			0.0			200	180	-0.7
DEVELOPED REGIONS	5			0.1			125	116	0.1
NORTH AMERICA							111	101	-0.2
Bermuda							180	200	0.7
Canada							120	110	-1.0
United States of America							110	100	-0.6
ASIA & OCEANIA							128	126	0.0
Australia							130	120	0.0
Israel							90	90	0.0
Japan							130	130	0.0
New Zealand							120	120	0.0
EUROPE	5			0.1			131	121	0.1
Albania							160	160	-0.7
Belarus							120	130	0.5
Bosnia & Herzegovina							150	140	-1.2
Croatia							180	150	-1.8
European Union	5			0.1			120	115	-0.2
Iceland							130	120	-0.5
Macedonia, FYR							180	150	-1.1
Montenegro								170	
Norway							120	110	-0.5
Republic of Moldova							190	190	0.7
Russian Federation							160	130	-0.9
Serbia								170	
Switzerland							120	120	0.0
Ukraine							150	130	-0.5

TABLE 16: Dietary energy supplies and changes in dietary composition

	Dietary energy supply per person		Contribution in diets by type			Contribution in diets by commodity					
			carbo- hydrates	proteins	fats	cereals		starchy roots		pulses	
	kcal/cap/day 1990-92	kcal/cap/day 2006-08	% 2005-07	% 2005-07	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07
WORLD	2 583	2 805	65	11	24	53	48	8	7	5	5
DEVELOPING REGIONS	2 430	2 664	67	11	22	58	53	9	8	5	5
AFRICA	2 266	2 495	72	10	18	49	49	22	20	5	5
North Africa	3 035	3 175	71	11	17	62	60	2	3	2	2
Algeria	2 890	3 090	70	11	19	57	56	2	3		
Egypt	3 090	3 160	73	12	15	66	64			2	2
Libya	3 180	3 150	63	10	27	47	47	2	3		
Morocco	3 000	3 260	72	11	17	62	60	2	2		
Tunisia	3 120	3 330	64	11	24	55	50			2	2
Sub-Saharan Africa	2 102	2 351	72	10	19	47	47	24	22	5	6
Angola	1 580	1 960	70	9	21	29	36	30	26	3	3
Benin	2 250	2 510	72	9	19	41	40	34	31	4	5
Botswana	2 260	2 230	67	11	22	43	43	6	6	5	6
Burkina Faso	2 460	2 690	68	12	20	75	73			5	5
Burundi	1 860	1 680	82	11	7	17	19	29	32	27	19
Cameroon	2 020	2 240	72	10	18	39	42	20	17	2	6
Cape Verde	2 370	2 530	63	11	26	50	45	4	4	4	3
Central African Republic	1 880	1 960	61	9	29	20	25	37	31		
Chad	1 700	2 010	64	12	24	52	57	13	8	2	4
Comoros	1 900	1 840	69	9	22	41	38	17	15	6	9
Congo	1 970	2 570	69	8	23	19	26	41	34		
Côte d'Ivoire	2 470	2 500	74	8	18	35	33	31	33		
Congo, Dem. Rep.			80	6	14	16	23	57	55		
Djibouti	1 720	2 300	63	10	27	52	52			2	3
Equatorial Guinea											
Eritrea	1 530	1 590	73	12	15	72	74	5	3	8	5
Ethiopia	1 550	1 950	79	11	10	67	66	15	13	6	7
Gabon	2 520	2 710	69	12	19	25	33	21	17		
Gambia	2 470	2 330	64	9	27	55	56				
Ghana	2 120	2 900	77	8	15	32	29	39	37		
Guinea	2 420	2 550	70	9	22	50	47	14	14		
Guinea-Bissau	2 290	2 270	71	8	21	61	59	8	9		
Kenya	1 970	2 030	68	11	21	47	49	8	5	6	7
Lesotho	2 370	2 460	77	11	12	76	78	2	3		
Liberia	2 220	2 200	70	7	24	45	43	22	23		
Madagascar	2 200	2 130	78	9	13	52	59	22	19		
Malawi	1 870	2 150	77	10	13	69	59	4	15	7	6
Mali	2 180	2 590	70	11	19	69	67	1	3		
Mauritania	2 580	2 810	63	12	25	55	51			4	4
Mauritius	2 760	2 930	62	11	26	48	46			3	3
Mozambique	1 750	2 070	76	7	17	34	40	41	37		
Namibia	2 060	2 360	68	11	21	48	46	14	14	4	3
Niger	1 970	2 390	68	13	19	74	60			6	14
Nigeria	2 310	2 710	69	9	22	47	45	20	19	3	3
Rwanda	1 830	2 090	82	10	9	18	18	30	36	15	12
Senegal	2 190	2 280	65	10	25	64	60	1	3		
Seychelles	2 280	2 400	60	14	26	46	41				
Sierra Leone	1 950	2 120	67	10	24	55	50	5	10	4	5
Somalia											
Sudan	1 960	2 280	61	13	26	57	50			2	3
South Africa	2 820	3 000	65	11	24	53	54				
Swaziland	2 380	2 290	68	11	21	52	50	5	5		
Tanzania, Utd. Rep.	2 080	2 020	75	10	15	47	46	24	17	5	7
Togo	1 890	2 150	71	9	20	48	49	28	25	2	4
Uganda	2 280	2 220	74	9	17	19	23	25	23	9	8
Zambia	2 010	1 880	73	10	17	65	61	13	14		
Zimbabwe	1 980	2 210	66	10	24	62	56			2	2

TABLE 16: Dietary energy supplies and changes in dietary composition (continued)


	Dietary energy supply per person		Contribution in diets by type			Contribution in diets by commodity					
			carbo- hydrates	proteins	fats	cereals		starchy roots		pulses	
	%	%				%	%	%	%	%	%
		kcal/cap/day 1990-92	kcal/cap/day 2006-08	2005-07	2005-07	2005-07	1990-92	2005-07	1990-92	2005-07	1990-92
ASIA	2 434	2 667	67	11	22	63	56	6	5	5	5
Central Asia	2 715	2 793	64	12	25	59	54	4	6		
Kazakhstan	3 280	3 510	61	12	27	57	43	4	6		
Kyrgyzstan	2 400	2 660	68	12	20	57	48	5	8		
Tajikistan	2 020	2 190	64	10	26	63	63				
Turkmenistan	2 550	2 740	65	13	23	57	61				
Uzbekistan	2 650	2 560	64	12	25	59	57				
East Asia	2 508	2 872	64	11	24	63	53	7	5	3	6
Brunei Darussalam	2 730	2 980	64	12	25	48	45				
Cambodia	1 870	2 180	75	10	14	82	72	2	4		
China	2 580	2 990	61	12	27	63	50	7	5		
Indonesia	2 390	2 550	73	9	18	66	63	7	6		
Korea, DPR	2 340	2 110	74	11	15	60	62	3	7	6	5
Korea, Republic of	2 970	3 040	63	11	25	54	44				
Lao, PDR	2 010	2 240	76	11	13	78	70	6	4		
Malaysia	2 720	2 890	63	11	26	42	47	3	2		
Mongolia	2 080	2 240	56	13	32	42	46	2	4		
Myanmar			67	11	22	73	59			2	6
Philippines	2 230	2 580	73	9	18	53	57	4	3		
Singapore											
Thailand	2 250	2 540	71	9	20	57	49				
Viet Nam	2 090	2 780	70	10	19	76	66				
South Asia	2 279	2 374	71	10	19	65	60	2	3	5	5
Afghanistan											
Bangladesh	1 960	2 270	80	9	12	84	78	1	3		
Bhutan											
India	2 290	2 360	71	10	19	64	60			5	5
Iran (Islamic Rep.)	2 970	3 050	69	11	20	60	53	3	4		
Maldives	2 400	2 550	60	16	23	46	35				
Nepal	2 190	2 340	74	10	15	74	69	3	5	3	3
Pakistan	2 210	2 280	63	10	27	55	47			3	3
Sri Lanka	2 170	2 370	73	9	18	56	56	4	2	3	3
West Asia	2 963	3 067	64	11	25	51	49	3	3	4	3
Armenia	1 920	2 260	64	12	24	59	44	8	5		
Azerbaijan	2 160	3 020	73	11	16	66	60	2	6		
Bahrain											
Cyprus	3 120	3 190	48	12	41	28	21	3	3		
Georgia	1 850	2 730	67	11	22	57	50	5	3		
Iraq											
Jordan	2 840	3 000	63	10	27	50	46			3	2
Kuwait	2 350	3 030	58	12	30	39	42			2	2
Lebanon	3 010	3 090	58	11	32	34	34	3	6	4	3
Occupied Palestinian Territory		2 080	66	11	23	0	51				
Saudi Arabia	2 850	3 120	64	11	25	48	48				
Syrian Arab Republic	2 830	3 040	59	10	30	50	45				
Turkey	3 590	3 500	62	11	27	51	48	3	3	4	3
United Arab Emirates	3 160	3 170	63	13	24	33	43			3	4
Yemen	1 980	2 050	69	11	20	66	61			3	3
LATIN AMERICA & THE CARIBBEAN	2 664	2 915	62	11	27	39	37	6	6	5	5
Argentina	3 010	3 030	55	13	32	32	31	3	3		
Bahamas	2 610	2 710	57	12	30	27	27	2	2		
Barbados	3 040	3 020	59	12	29	30	27	3	3		
Belize	2 510	2 710	67	11	23	37	39			4	4
Bolivia (Plur. State)	2 030	2 100	71	11	18	43	47	9	7		
Brazil	2 760	3 120	59	11	30	33	32	5	5	5	5
Chile	2 600	2 960	61	12	27	43	40	4	4		
Colombia	2 410	2 690	66	10	24	33	34	8	6		
Costa Rica	2 820	2 820	62	11	27	32	31			3	4

TABLE 16: Dietary energy supplies and changes in dietary composition (continued)


	Dietary energy supply per person		Contribution in diets by type			Contribution in diets by commodity					
			carbo- hydrates	proteins	fats	cereals		starchy roots		pulses	
	kcal/cap/day	kcal/cap/day	%	%	%	%	%	%	%	%	%
	1990-92	2006-08	2005-07	2005-07	2005-07	1990-92	2005-07	1990-92	2005-07	1990-92	2005-07
Cuba	2 720	3 420	73	10	17	34	40	5	7	4	7
Dominica	3 000	3 090	64	12	24	26	25	7	9		
Dominican Republic	2 160	2 270	61	9	30	30	29			5	4
Ecuador	2 110	2 300	55	10	35	35	34				
El Salvador	2 400	2 580	67	11	22	56	44	1	2	4	6
French Guiana											
Grenada	2 470	2 400	54	12	34	28	22	2	3	3	3
Guatemala	2 290	2 150	67	11	23	58	51			6	4
Guyana	2 300	2 740	68	11	21	53	46	4	4	3	2
Haiti	1 730	1 850	74	9	17	44	46	11	9	8	5
Honduras	2 300	2 610	66	10	24	51	44			4	5
Jamaica	2 510	2 840	61	11	28	34	32	9	5		
Mexico	3 090	3 260	62	11	26	47	44			4	4
Netherlands Antilles	3 280	3 260	64	11	24	36	36	4	3		
Nicaragua	1 770	2 420	68	10	22	47	50			8	7
Panama	2 320	2 450	65	12	24	39	43			2	2
Paraguay	2 390	2 660	58	11	32	27	29	18	13	4	5
Peru	2 110	2 410	74	11	15	49	44	8	14	2	3
St. Kitts & Nevis	2 580	2 460	59	12	29	32	26	3	2	2	2
St. Lucia	2 580	2 710	58	14	28	30	28	6	2		
St. Vincent & Grenadines	2 360	2 860	64	11	25	30	33	7	5	2	2
Suriname	2 440	2 460	68	9	23	50	42	2	2		
Trinidad & Tobago	2 610	2 700	65	10	25	39	34	2	2	4	3
Uruguay	2 660	2 840	64	11	25	35	43	4	4		
Venezuela (Boliv. Rep. of)	2 460	2 650	64	11	26	36	37	3	3		
OCEANIA	2 549	2 850	60	10	30	32	34	15	14	3	2
Fiji	2 640	3 000	60	10	29	43	41	4	7	3	2
French Polynesia	2 480	2 880	48	14	39	25	31	5	4		
New Caledonia	3 210	3 150	52	12	35	35	32	6	5		
Papua New Guinea											
Samoa	2 550	2 890	46	11	43	23	18	10	10		
Solomon Islands	2 120	2 400	73	9	18	25	34	40	34	3	3
Tonga											
Vanuatu	2 530	2 950	60	9	31	22	31	22	18		
DEVELOPED REGIONS	3 260	3 426	53	12	35	29	28	5	5		
NORTH AMERICA	3 464	3 728	49	12	38	23	22	3	3		
Bermuda	2 870	2 650	48	12	40	19	24				
Canada	3 050	3 530	51	12	37	21	25	4	4		
United States of America	3 510	3 750	49	12	38	23	22	3	3		
ASIA & OCEANIA	2 969	2 892	56	13	31	36	35	3	3		
Australia	3 130	3 220	46	13	40	22	22	3	3		
Israel	3 410	3 530	49	14	37	35	33	2	2		
Japan	2 920	2 800	58	13	29	39	38				
New Zealand	2 810	2 810	54	12	34	23	24	3	4		
EUROPE	3 228	3 401	54	12	34	30	30	6	5		
Albania	2 560	2 890	58	14	29	57	40	1	2		
Belarus	3 180	3 150	56	12	32	37	30	10	11		
Bosnia & Herzegovina	2 670	3 080	67	11	21	61	45	5	5		
Croatia	2 420	2 990	57	11	32	30	31	7	4		
European Union	3 341	3 453	51	12	37	26	28	5	4		
Iceland	3 090	3 260	45	16	39	23	20	3	3		
Macedonia, FYR	2 550	3 060	55	10	34	44	34	3	3		
Montenegro											
Norway	3 230	3 450	51	12	36	27	28	5	4		
Republic of Moldova	2 880	2 850	70	11	20	55	48	5	5		
Russian Federation	2 960	3 320	63	12	25	40	36	8	7		
Serbia											
Switzerland	3 370	3 450	49	11	41	22	21				
Ukraine	3 040	3 290	63	11	26	43	36	8	8		

TABLE 17: Changes in dietary composition

	Contribution in diets by commodity											
	meat and fish		dairy and eggs		fruit and vegetables		sugar		vegetable oils		other	
	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07
WORLD	8	11	5	5	4	5	8	8	8	9	11	13
DEVELOPING REGIONS	7	10	4	4	4	5	7	7	7	8	10	12
AFRICA	4	4	5	6	6	6	6	6	9	9	11	11
North Africa	3	3	3	3	6	7	10	9	9	7	7	9
Algeria	3	3	6	6	3	5	9	9	14	10	6	8
Egypt	2	3	2	2	7	9	10	8	6	4	5	8
Libya	5	4	5	5	8	7	12	10	14	16	7	8
Morocco	3	3			4	6	10	11	8	8	11	10
Tunisia	3	3	4	5	6	6	9	10	15	14	6	10
Sub-Saharan Africa	4	4	7	7	6	6	5	5	9	9	12	12
Angola	5	5					7	8	14	12	12	10
Benin	2	2							6	8	13	14
Botswana	6	4	9	7			11	13	6	9	14	12
Burkina Faso	3	3							4	5	13	14
Burundi					10	15					17	15
Cameroon	3	3			10	8	3	4	8	8	15	12
Cape Verde	6	9	5	8	2	2	7	9	10	8	12	12
Central African Republic	7	8			4	4	3	4	14	14	15	14
Chad							4	4	5	5	24	22
Comoros					8	7	4	6	8	11	16	14
Congo	4	3			5	4	4	6	12	15	15	12
Côte d'Ivoire					8	7	4	4	10	11	12	12
Congo, Dem. Rep.					7	3			7	7	13	12
Djibouti	5	6	5	5			19	11	10	16	7	7
Equatorial Guinea												
Eritrea							1	4	4	6	10	8
Ethiopia	3	2					2	3			7	9
Gabon	8	8			16	12	6	6	5	6	19	18
Gambia	2	2					17	12	13	17	13	13
Ghana					7	11	3	4	7	7	12	12
Guinea					13	10	4	5	11	14	8	10
Guinea-Bissau	4	4			4	3	1	6	13	12	9	7
Kenya			8	7	4	5	10	9	8	8	9	10
Lesotho	4	4					7	6			11	9
Liberia					4	4	2	3	16	19	11	8
Madagascar	6	4			3	3	3	3	3	4	11	8
Malawi					4	5	7	5			9	10
Mali	3	3	5	5			4	5	9	7	9	10
Mauritania	5	5	11	10			10	12	9	12	6	6
Mauritius	4	6	6	6	2	4	14	12	14	15	9	8
Mozambique							1	4	13	9	11	10
Namibia	6	6	4	5			16	10	2	7	6	9
Niger	4	5	3	3			2	3	3	5	8	10
Nigeria					3	3	2	3	13	13	12	14
Rwanda					21	18			2	4	14	12
Senegal	3	3	2	2			7	6	13	15	10	11
Seychelles	10	11	6	4	5	7	14	10	7	8	12	19
Sierra Leone							3	3	20	15	13	17
Somalia												
Sudan	4	5	12	17			8	10	7	5	10	10
South Africa	8	9	3	3			12	10	8	12	16	12
Swaziland	5	6	4	5	3	3	15	13	7	6	9	12
Tanzania, Utd. Rep.					3	6	3	5	5	7	13	12
Togo									9	10	13	12
Uganda					20	17	1	4	3	7	23	18
Zambia	3	3					8	6	4	6	7	10
Zimbabwe	3	4					11	12	8	10	14	16

TABLE 17: Changes in dietary composition (continued)

	Contribution in diets by commodity											
	meat and fish		dairy and eggs		fruit and vegetables		sugar		vegetable oils		other	
	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07
ASIA	8	12	3	4	3	4	6	6	7	8	9	12
Central Asia	7	7	9	10	2	4	5	6	9	9	8	9
Kazakhstan	10	9	8	13	1	3	6	9	5	8	9	9
Kyrgyzstan	11	7	12	12	2	4	6	9	4	5	3	7
Tajikistan	3	4	6	5			6	7	11	11	11	10
Turkmenistan	7	10	8	9	2	3	6	4	11	6	9	7
Uzbekistan	6	6	9	9	3	4	4	3	12	11	7	10
East Asia	9	14	1	2	3	5	4	4	6	7	9	13
Brunei Darussalam	9	8	7	9	5	5	12	13	7	8	12	12
Cambodia	5	5					1	4	2	3	8	12
China	9	15	1	2	3	6	3	2	6	7	8	13
Indonesia					2	3	6	6	7	8	12	14
Korea, DPR	5	5			8	7			5	6	13	8
Korea, Republic of	7	11			7	8	10	11	8	12	14	14
Lao, PDR	4	5			2	5	1	2			9	14
Malaysia	12	11	4	3	3	3	13	12	14	12	9	10
Mongolia	30	17	8	11			8	6	1	6	9	10
Myanmar	2	6			2	2	3	6	10	9	8	12
Philippines	10	12			6	6	12	9	6	4	9	9
Singapore												
Thailand	8	9			5	4	8	14	5	6	17	18
Viet Nam	6	12			4	5	3	4	2	3	9	10
South Asia	2	4	4	5	2	3	9	8	7	9	9	11
Afghanistan												
Bangladesh							3	4	4	7	8	8
Bhutan												
India			4	4	2	2	9	8	7	9	9	12
Iran (Islamic Rep.)	3	5	3	3	8	12	9	9	9	7	5	7
Maldives	10	17	3	7	4	9	17	13	7	7	13	12
Nepal			3	4	1	2			6	7	10	10
Pakistan	2	3	9	12			12	12	10	11	9	12
Sri Lanka			3	3	3	2	11	11	3	4	17	19
West Asia	5	6	6	6	9	7	9	10	10	12	9	10
Armenia	6	8	7	10	8	13	4	8	2	5	6	7
Azerbaijan	5	4	7	6	5	3	6	6	1	4	8	11
Bahrain												
Cyprus	12	13	10	10	8	7	12	13	13	15	14	18
Georgia	7	5	7	10			7	14	2	7	15	11
Iraq												
Jordan	5	5	5	5	3	2	15	15	11	15	8	10
Kuwait	11	11	8	5	7	7	12	11	11	12	10	10
Lebanon	5	7	4	5	15	9	11	11	14	14	10	11
Occupied Palestinian Territory	0	5	0	5	100	8	0	12	0	10	0	9
Saudi Arabia	7	7	5	5	10	10	10	10	13	12	7	8
Syrian Arab Republic	4	4	6	7	4	3	12	13	12	12	12	16
Turkey			6	6	8	8	8	8	11	14	9	10
United Arab Emirates	11	10	9	5	12	9	11	12	9	6	12	11
Yemen	3	4			2	3	10	12	9	10	7	7
LATIN AMERICA & THE CARIBBEAN	7	10	6	6	5	5	16	14	10	11	11	11
Argentina	17	17	8	9			14	16	11	11	15	13
Bahamas	18	17	7	6	9	9	16	15	3	6	18	18
Barbados	16	15	7	7	3	7	16	19	10	9	15	13
Belize	8	8	7	6	8	8	15	15	3	4	18	16
Bolivia (Plur. State)	9	10	2	2	7	6	14	13	4	3	12	12
Brazil	8	12	6	7	4	4	17	13	13	13	9	9
Chile	9	14	6	5	3	3	15	14	9	8	11	12
Colombia	7	7	7	8	7	7	19	17	9	11	10	10
Costa Rica	5	5	8	10	6	5	21	19	12	12	13	14

TABLE 17: Changes in dietary composition (continued)

	Contribution in diets by commodity											
	meat and fish		dairy and eggs		fruit and vegetables		sugar		vegetable oils		other	
	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07	% 1990-92	% 2005-07
Cuba	6	5	6	3	4	6	21	15	9	6	11	11
Dominica	10	11	9	9	11	12	15	14	8	5	14	15
Dominican Republic	6	9	5	4	13	9	15	16	15	16	11	13
Ecuador	6	10	7	7	11	10	9	8	18	17	14	14
El Salvador	2	4	5	7	4	4	15	15	5	6	8	12
French Guiana												
Grenada	10	15	10	9	8	7	17	16	9	11	13	14
Guatemala	2	4	3	3	2	3	17	15	6	9	6	11
Guyana	3	6	3	6	1	3	14	13	4	7	15	13
Haiti	3	4			8	6	10	12	5	7	11	11
Honduras	3	6	5	7	5	6	16	17	9	9	7	6
Jamaica	7	8	4	6	5	7	20	16	10	12	11	14
Mexico	6	9	5	5	3	4	16	15	8	8	11	11
Netherlands Antilles	15	13	8	6			10	18	7	6	20	18
Nicaragua	3	4	4	5			14	15	9	9	15	10
Panama	6	8	7	7	5	4	14	12	11	8	16	16
Paraguay	12	9	4	4	4	3	9	9	8	12	14	16
Peru	3	4	3	4	4	6	12	9	5	5	14	11
St. Kitts & Nevis	11	13	8	8	2	3	15	17	13	11	14	18
St. Lucia	16	20	8	8	8	7	14	13	3	5	15	17
St. Vincent & Grenadines	11	12	5	5	4	6	18	17	9	8	14	12
Suriname	7	8			7	6	15	18	7	12	12	12
Trinidad & Tobago	5	7	6	7	3	3	19	21	11	10	11	13
Uruguay	20	10	10	7	2	3	11	13	6	8	12	12
Venezuela (Boliv. Rep. of)	6	9	6	4	7	4	15	16	15	14	12	13
OCEANIA	11	10	6	7	4	4	7	8	8	8	22	21
Fiji	12	11					7	10	12	10	19	19
French Polynesia	18	19	6	6	2	2	11	7	9	11	24	20
New Caledonia	11	10	7	8	2	3	11	8	12	13	16	21
Papua New Guinea												
Samoa	19	17			5	8	9	9	2	7	32	31
Solomon Islands	4	3					4	4	2	4	22	18
Tonga												
Vanuatu	10	8			6	5	4	6	6	5	30	27
DEVELOPED REGIONS	11	11	9	9	4	4	13	13	12	14	19	18
NORTH AMERICA	12	12	11	10	3	3	17	17	16	18	16	15
Bermuda	19	17	6	6	11	6	11	14	10	12	24	21
Canada	11	10	8	6	7	6	14	14	14	16	21	19
United States of America	12	12	11	10	3	3	17	17	16	18	15	15
ASIA & OCEANIA	12	12	8	7	3	4	12	10	11	14	18	17
Australia	15	15	12	10	3	4	15	13	13	16	17	17
Israel	8	12	7	6	9	9	12	7	14	19	13	12
Japan	12	12	7	7	3	3	11	10	10	13	18	17
New Zealand	13	15	9	4	7	8	16	17	7	7	22	21
EUROPE	11	10	9	9	5	5	11	12	10	12	20	19
Albania	4	8	12	18	5	10	6	7	8	6	7	9
Belarus	11	11	11	7	1	3	10	11	4	11	16	16
Bosnia & Herzegovina	4	4	6	10	5	8	4	6	2	6	13	16
Croatia	6	7	10	11	4	4	17	13	8	13	18	17
European Union	12	11	9	9	5	5	11	11	12	14	22	19
Iceland	17	21	14	16	3	4	18	13	5	6	17	17
Macedonia, FYR	9	7	5	6	8	7	12	12	5	14	14	17
Montenegro												
Norway	14	14	11	9	3	4	13	12	10	11	17	18
Republic of Moldova	5	4	8	11	2	2	9	12	5	6	11	12
Russian Federation	10	8	8	8			12	13	5	9	17	19
Serbia												
Switzerland	16	14	12	11	4	3	13	17	11	13	22	21
Ukraine	7	6	8	9			13	15	7	10	14	16

TABLE 18: Health effects of malnutrition


	Share of children under 5			share of low weight newborns	Share of adults				Dietary iron supply
	underweight	stunted	wasted		total with low BMI	women with low BMI	overweight or obese		per person
							male %	female %	
2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*	mg / day 2005-07
WORLD	18	28	9	13			9.1	12.9	14.5
DEVELOPING REGIONS	20	30	10	14			6.4	10.7	14.4
AFRICA	22	39	10			11.1	6.5	13.5	15.2
North Africa	7	24	7	10			17.2	36.1	16.3
Algeria	4	16	4	6			10.7	24.3	13.6
Egypt	7	31	8	13		1.6	22.5	46.3	17.7
Libya	6	21	7				21.5	41.3	14.0
Morocco	10	23	11		5.3	7.3	11.1	23.1	16.3
Tunisia	3	9	3	5			13.9	33.4	15.7
Sub-Saharan Africa	25	42	11			12.6	4.4	9.2	15.0
Angola	28	51	8				3.8	10.2	9.8
Benin	20	45	8	15		9.2	3.5	9.5	15.4
Botswana	11	29	6	13			3.0	22.8	14.7
Burkina Faso	26	35	11	16		20.8	1.7	3.0	24.2
Burundi	39	63	8	11			2.8	3.7	13.5
Cameroon	17	36	7	11		6.7	7.0	15.1	15.8
Cape Verde				6			6.3	15.3	12.1
Central African Republic	22	45	11	13		15.3	2.0	5.3	12.3
Chad	37	45	16	22		20.3	2.4	3.8	18.0
Comoros	25	7	13	25		10.5	3.5	5.3	9.2
Congo	12	31	8	13		13.2	2.8	7.5	12.0
Côte d'Ivoire	17	40	9	17		8.2	3.9	9.7	11.1
Congo, Dem. Rep.	28	46	14			18.5	0.7	3.0	8.4
Djibouti	30	33	26	10			6.7	13.8	10.2
Equatorial Guinea	11	35	3				7.9	14.8	
Eritrea	35	44	15	14			1.3	2.3	13.2
Ethiopia	35	51	12	20			0.9	1.6	15.4
Gabon	9	26	4			6.6	8.4	21.5	15.5
Gambia	16	28	7	20			2.3	14.4	11.3
Ghana	14	29	9	13	16.4	8.6	4.4	11.7	14.0
Guinea	23	39	11			13.2	4.3	5.1	10.7
Guinea-Bissau	17	48	9				2.6	8.1	9.1
Kenya	16	35	7	8		12.3	2.5	6.8	13.4
Lesotho	17	45	6			5.7	3.1	26.6	16.4
Liberia	20	39	8	14		10.0	3.1	7.7	11.7
Madagascar	37	53	15	16	19.2		1.8	1.5	11.3
Malawi	16	53	4	14		9.2	2.6	6.2	16.2
Mali	28	39	15			13.5	2.4	6.8	18.7
Mauritania	23	29	13			13.0	4.3	23.3	13.3
Mauritius	15	10	14	14			12.9	23.0	13.2
Mozambique	21	47	5	15		8.6	2.6	7.8	8.8
Namibia	18	30	8	16		15.9	4.3	16.8	14.0
Niger	40	55	12			19.2	1.5	3.7	23.5
Nigeria	27	41	14	12		12.2	5.1	9.0	19.6
Rwanda	18	52	5	6		9.8	4.9	4.0	17.4
Senegal	15	20	9	19		18.2	3.2	12.5	11.3
Seychelles	6	5	2				15.1	33.7	15.3
Sierra Leone	21	37	11	14		11.2	3.6	10.1	11.4
Somalia	33	42	13				3.4	7.1	
Sudan	32	38	21				4.1	8.9	15.7
South Africa					8.6		23.2	42.8	14.3
Swaziland	6	30	3	9		3.2	6.1	37.1	13.8
Tanzania, Utd. Rep.	17	44	4			10.4	4.0	6.8	14.7
Togo	22	28	16			10.9	3.0	6.1	13.1
Uganda	16	39	6	14		12.1	4.3	4.9	14.5
Zambia	15	46	6	11		9.6	1.2	7.0	11.3
Zimbabwe	14	36	7		9.9	9.2	2.8	13.8	14.3

TABLE 18: Health effects of malnutrition (continued)


 Health effects of malnutrition (continued)	Share of children under 5			share of low weight newborns	Share of adults				Dietary iron supply
	underweight	stunted	wasted		total with low BMI	women with low BMI	overweight or obese		per person
							male %	female %	mg / day
	% 2009*	% 2009*	% 2009*	% 2009*	% 2009*	% 2009*	2009*	2009*	2005-07
ASIA	22	30	11	15			4.5	7.5	14.3
Central Asia	7	21	5	6		6.8	15.0	20.6	11.3
Kazakhstan	7	18	4	6		7.4	20.2	27.4	13.3
Kyrgyzstan	3	18	3	5	3.7	6.9	11.7	21.6	12.0
Tajikistan	15	33	9	10			8.0	11.6	12.7
Turkmenistan	12	22	6	4		9.9	13.9	14.5	9.8
Uzbekistan	4	20	5	5		5.9	14.5	19.8	9.9
East Asia	9	19	5	4			4.3	6.7	17.4
Brunei Darussalam							8.5	7.2	17.4
Cambodia	29	40	9	9		16.1	1.6	2.8	10.4
China	5	14	3	3	8.0		4.6	6.5	20.0
Indonesia	20	40	15				2.5	6.9	10.2
Korea, DPR	18	45	9				3.7	3.9	15.6
Korea, Republic of	1	3	1		4.7	6.5	6.9	7.7	21.8
Lao, PDR	32	48	7	11	13.5	14.5	1.7	4.1	12.1
Malaysia	17	21	15	11	9.6		10.4	17.9	15.8
Mongolia	5	28	3	5	4.9	3.9	11.9	20.7	11.1
Myanmar	30	41	11				2.0	6.1	12.4
Philippines	21	32	7	21	12.3	14.2	4.5	8.3	9.9
Singapore	3	4	4	8	9.2	14.6	6.6	6.2	
Thailand	7	16	5		19.2		4.9	11.8	11.7
Viet Nam	20	1	10	5	26.5		1.2	2.0	13.0
South Asia	40	46	18	27		32.9	2.1	4.2	10.6
Afghanistan	33	59	9				1.5	3.3	
Bangladesh	41	43	18			29.7	1.0	1.3	8.1
Bhutan	12	38	5	9			4.7	6.6	
India	44	48	20	28	32.9	35.6	1.3	2.5	10.8
Iran (Islamic Rep.)	10	20	6	7	5.7	5.4	13.6	29.5	13.5
Maldives	18	20	10				6.5	26.1	17.7
Nepal	39	49	13	21		24.4	1.4	1.6	15.2
Pakistan	31	42	14	32	31.2	31.6	3.5	8.4	8.9
Sri Lanka	22	19	12	17		16.2	2.6	7.3	11.8
West Asia	10	23	6				22.4	35.6	14.4
Armenia	4	18	5	7		5.2	14.4	30.2	11.8
Azerbaijan	8	27	7	10		4.8	15.8	32.1	12.0
Bahrain	8	14	7				28.9	38.2	
Cyprus					4.3	6.9	24.8	21.9	18.8
Georgia	2	15	3	5			15.9	25.7	10.5
Iraq	7	28	6	15			22.3	36.2	
Jordan	2	8	2	13	3.0	3.9	27.3	41.7	11.2
Kuwait	2	4	2	7	2.5	0.7	37.2	52.4	17.2
Lebanon	4	17	7				26.4	29.7	16.1
Occupied Palestinian Territory	2	12	2						10.2
Saudi Arabia	5	9	12		7.0	4.9	29.5	43.5	15.9
Syrian Arab Republic	10	28	12	9			23.8	39.0	13.3
Turkey	4	16	1	11	3.5	1.6	22.8	35.6	15.8
United Arab Emirates							30.2	43.0	19.6
Yemen	43	58	15			25.2	10.5	22.7	10.3
LATIN AMERICA & THE CARIBBEAN	4	14	2	8		3.0	19.0	27.9	14.0
Argentina	2	8	1	7		3.4	27.4	31.0	12.2
Bahamas				11			26.7	42.6	17.4
Barbados	5	10	4	14	3.2	3.3	21.6	44.2	19.2
Belize	5	22	2	14			24.4	45.4	16.7
Bolivia (Plur. State)	5	27	1	6		2.0	10.0	27.1	10.2
Brazil	2	7	2	8	4.0	3.5	16.5	22.1	13.7
Chile	1	2	0		0.8	1.1	24.5	33.6	13.8
Colombia	3	13	1	6	3.9		11.9	23.7	11.2
Costa Rica	1	6	1	7			20.9	28.3	14.0

TABLE 18: Health effects of malnutrition (continued)

	Share of children under 5			share of low weight newborns	Share of adults				Dietary iron supply
	underweight	stunted	wasted		total with low BMI	women with low BMI	overweight or obese		
							male %	female %	
							%	%	%
2009*	2009*	2009*	2009*	2009*	2009*	2009*	2005-07		
Cuba				5	7.3	6.2	13.3	27.5	18.6
Dominica				10			10.1	39.1	17.7
Dominican Republic	3	10	2	11			14.4	29.3	10.0
Ecuador	6	29	2	10		1.9	15.7	28.2	8.1
El Salvador	7	21	2			2.9	20.2	32.9	15.7
French Guiana									
Grenada				9			14.9	32.1	13.7
Guatemala	13	48	1			2.0	13.8	26.7	13.1
Guyana	11	18	8				8.3	27.1	12.7
Haiti	19	30	10			15.5	8.4	8.4	9.9
Honduras	9	30	1	10		4.0	12.9	26.3	14.0
Jamaica	3	5	5				10.0	38.2	15.0
Mexico	4	15	2	8		1.4	26.7	38.4	17.8
Netherlands Antilles									12.8
Nicaragua	6	23	2			3.7	16.8	31.3	13.6
Panama	6	22	1		1.0	3.6	19.4	32.1	11.7
Paraguay	3	18	1				16.2	22.3	13.9
Peru	5	28	1			1.9	11.1	21.7	15.8
St. Kitts & Nevis				11			32.0	49.4	15.3
St. Lucia	12	15	8	11			11.9	31.9	15.8
St. Vincent & Grenadines				8			16.4	33.5	13.0
Suriname	8	11	5	11			16.5	34.6	9.8
Trinidad & Tobago	4	5	5	19			21.6	38.0	13.4
Uruguay	6	14	3	8			20.7	26.0	11.3
Venezuela (Boliv. Rep. of)	4	16	5	8			26.6	34.8	11.4
OCEANIA	17	42	4	11			15.8	26.5	
Fiji				10	6.1	5.6	21.3	42.2	17.9
French Polynesia									19.5
New Caledonia									18.3
Papua New Guinea	18	44	4	11			11.8	20.1	
Samoa	2	4	1				45.3	66.7	17.5
Solomon Islands	16	34	7	13		1.9	25.3	39.2	13.7
Tonga				3			49.1	70.3	
Vanuatu	12	26	6	10	1.9	2.9	22.9	36.8	16.7
DEVELOPED REGIONS							21.6	23.0	14.9
NORTH AMERICA	1	4	1				29.6	32.3	14.2
Bermuda									14.8
Canada					2.6		24.6	23.9	16.5
United States of America	1	4	1		2.4		30.2	33.2	13.9
ASIA & OCEANIA	3	8	1			9.4	9.6	8.2	19.1
Australia				7	1.0	2.8	25.2	24.9	14.9
Israel				8			23.2	27.6	19.7
Japan	3	8	1		11.5	10.8	5.5	3.5	19.9
New Zealand				6	1.3	1.6	26.2	27.7	15.2
EUROPE							20.5	21.9	14.4
Albania	6	23	9				21.7	20.5	12.8
Belarus	1	5	2	4			19.7	26.4	14.8
Bosnia & Herzegovina	2	12	4	5			22.7	25.3	20.2
Croatia	0	1	2	5	0.2		22.8	19.4	11.6
European Union							21.5	19.6	14.8
Iceland				4	2.3	3.0	23.4	20.3	20.8
Macedonia, FYR	2	12	3	6			21.6	18.9	13.0
Montenegro	2	8	4				22.8	20.7	
Norway				5	5.0	7.0	21.6	17.9	15.8
Republic of Moldova	3	11	5	6		5.9	10.0	28.8	14.2
Russian Federation				6			18.4	29.8	13.4
Serbia	2	8	5	6			25.5	20.3	
Switzerland					3.5	5.9	18.3	11.6	12.6
Ukraine	4	23	8	4		5.4	15.5	23.6	12.7

TABLE 19: Trade and food security - caloric self-sufficiency


	Caloric self-sufficiency					
	% 1970	% 1980	% 1990	% 2000	% 2009	% p.a. growth: 1970-2009
WORLD	100.2	100.2	100.2	100.2	100.6	0.0
DEVELOPING REGIONS	99.7	96.8	98.3	96.4	94.8	-0.4
AFRICA	102.1	88.3	86.6	82.1	82.2	-0.6
North Africa	90.1	63.8	66.0	66.8	76.1	-1.3
Algeria	86.0					
Egypt	93.0	60.2	60.5	66.8	82.7	-0.3
Libya						
Morocco	93.9	72.1	81.3		64.3	-1.0
Tunisia	70.3	66.9	61.2		60.8	-0.4
Sub-Saharan Africa	104.4	95.7	96.2	92.0	87.3	-0.6
Angola	113.7	69.7	65.2	73.1	77.9	-1.0
Benin	110.7	102.2	89.8	99.2	90.9	-0.5
Botswana						
Burkina Faso	100.4	96.7	94.1	91.1	92.2	-0.2
Burundi	98.5	96.8	98.1	97.1	89.1	-0.3
Cameroon	103.7	99.7	97.7	92.6	88.8	-0.4
Cape Verde						
Central African Republic	96.4	98.1	93.7	95.1	92.4	-0.1
Chad	96.8	98.4	95.2	97.0	93.0	-0.1
Comoros	90.1	82.5	70.1	78.3	69.2	-0.7
Congo	127.2	79.9	88.0	60.7	90.8	-0.9
Côte d'Ivoire	104.4	107.4	120.5	120.3	109.2	0.1
Congo, Dem. Rep.	102.5	96.2	96.1	95.3	87.9	-0.4
Djibouti						
Equatorial Guinea	148.3	104.9	87.9	83.5	69.4	-1.9
Eritrea					67.8	
Ethiopia				89.9	90.8	
Gabon	85.1	80.2	76.3	63.0	58.8	-0.9
Gambia	146.2	124.1	70.3	63.8	53.5	-2.5
Ghana	104.1	99.0	97.7	98.6	93.9	-0.3
Guinea	97.7	91.4	86.3	87.9	87.9	-0.3
Guinea-Bissau	105.5	95.0	88.1	87.1	104.8	-0.0
Kenya	100.4	90.1	89.9	74.2	61.0	-1.3
Lesotho	71.2	53.5	53.6			
Liberia	87.8	82.3	85.5	65.4	70.7	-0.6
Madagascar	104.7	97.5	98.1	90.0	91.8	-0.3
Malawi	97.0	107.7	94.4	99.4	98.9	0.0
Mali	97.1	97.0	96.9	93.9	94.0	-0.1
Mauritania	68.2					
Mauritius				105.7	81.5	
Mozambique	114.8	92.8	81.1	86.6	82.4	-0.8
Namibia	69.1	65.0	55.5		56.4	-0.5
Niger	119.9	99.1	94.1	88.2	94.5	-0.6
Nigeria	104.9	87.1	98.2	94.0	90.0	-0.4
Rwanda	98.2	97.7	95.1	92.7	89.0	-0.3
Senegal	109.5	83.9	86.6	81.7	68.6	-1.2
Seychelles	105.5	54.7				
Sierra Leone	94.6	88.8	84.0	75.1	89.8	-0.1
Somalia	92.1	76.5	85.1	69.3	52.4	-1.4
Sudan	99.8	102.7	93.5	92.3	79.5	-0.6
South Africa	117.3	132.5	110.7	98.0	94.0	-0.6
Swaziland	281.4				120.1	-2.2
Tanzania, Utd. Rep.	102.7	94.7	100.1	90.2	91.4	-0.3
Togo	106.6	96.6	91.0	94.0	84.0	-0.6
Uganda	101.0	97.9	99.9	96.5	93.3	-0.2
Zambia	79.7	71.1	90.1	97.6	100.5	0.6
Zimbabwe	124.2	103.9	130.7	109.4	53.8	-2.1

TABLE 19: Trade and food security - caloric self-sufficiency (continued)


	Caloric self-sufficiency					
	% 1970	% 1980	% 1990	% 2000	% 2009	% p.a. growth: 1970-2009
ASIA	98.0	97.0	98.7	96.9	94.3	0.3
Central Asia				113.8	100.2	
Kazakhstan				162.8	123.5	
Kyrgyzstan				91.8	80.8	
Tajikistan				62.5	57.4	
Turkmenistan				93.9	89.5	
Uzbekistan				83.3	84.1	
East Asia	99.5	98.2	101.7	99.7	97.0	-0.1
Brunei Darussalam						
Cambodia	107.5	88.3	99.0	93.9	95.1	-0.3
China	98.2	95.3	96.3	97.0	89.5	-0.2
Indonesia	100.2	96.4	103.6	103.9	124.7	0.6
Korea, DPR	92.0	94.3	90.6	63.5	90.3	-0.0
Korea, Republic of	75.5	53.3				
Lao, PDR	90.4	98.2	98.7	97.6	102.7	0.3
Malaysia	92.5	133.6	154.0	134.0	145.5	1.2
Mongolia	79.1	84.5	92.9	58.6	62.7	-0.6
Myanmar	109.4	105.4	100.9	101.9	100.3	-0.2
Philippines	124.5	120.4	101.2	92.2	89.3	-0.8
Singapore						
Thailand	129.6	155.2	178.4	139.0	142.1	0.2
Viet Nam	79.7	93.2	109.4	107.4	96.1	0.5
South Asia	96.9	95.5	95.7	93.4	90.6	-0.2
Afghanistan	96.8	98.4	88.1	68.0	81.2	-0.4
Bangladesh	90.1	89.4	90.6	84.8	80.0	-0.3
Bhutan	83.4	93.6	77.6	70.7	95.2	0.3
India	97.9	98.3	100.0	98.6	95.7	-0.1
Iran (Islamic Rep.)	95.8	71.4	69.0	60.6	65.0	-1.0
Maldives						
Nepal	109.2	99.1	98.2	94.3	92.0	-0.4
Pakistan	99.1	98.2	90.0	92.6	90.9	-0.2
Sri Lanka	71.7	79.2	77.8	68.2	72.1	0.0
West Asia	86.8	89.0	82.4	87.6	83.2	
Armenia					53.9	
Azerbaijan				69.3	73.4	
Bahrain						
Cyprus	63.1					
Georgia						
Iraq	85.8					
Jordan						
Kuwait						
Lebanon						
Occupied Palestinian Territory						
Saudi Arabia			69.2			
Syrian Arab Republic	72.4	84.1	65.7	67.9	56.0	-0.7
Turkey	96.6	101.8	92.1	95.5	93.3	-0.1
United Arab Emirates						
Yemen	70.9	54.3				
LATIN AMERICA & THE CARIBBEAN	107.8	104.0	104.9	102.6	112.5	-0.6
Argentina	170.8	189.5	209.5	245.4	273.6	1.2
Bahamas						
Barbados		175.4	59.7	51.4		
Belize				246.0	153.9	
Bolivia (Plur. State)	82.7	87.0	102.4	120.1	142.1	1.4
Brazil	105.8	107.1	112.3	112.4	140.6	0.7
Chile	84.3	67.7	96.4	68.0	69.7	-0.5
Colombia	98.2	92.5	96.5	83.9	78.3	-0.6
Costa Rica	117.0	108.6	100.7	94.9	91.0	-0.6

TABLE 19: Trade and food security - caloric self-sufficiency (continued)

	Caloric self-sufficiency					
	% 1970	% 1980	% 1990	% 2000	% 2009	% p.a. growth: 1970-2009
Cuba		238.2	221.3	148.6	59.4	
Dominica	94.1	55.5		52.7	51.7	-1.5
Dominican Republic	237.5	125.9	81.5	50.8	53.8	-3.7
Ecuador	108.0	98.2	98.9	101.5	100.8	-0.2
El Salvador	97.4	88.0	80.4	66.4	70.1	-0.8
French Guiana						
Grenada	77.6	65.3	50.1			
Guatemala	100.0	109.9	105.4	126.7	119.9	0.5
Guyana	295.7	204.6	133.7	267.4	169.5	-1.4
Haiti	95.8	81.8	65.2	52.8	51.0	-1.6
Honduras	112.4	109.6	101.0	86.8	88.0	-0.6
Jamaica	112.4	55.9	56.5			
Mexico	99.7	77.1	74.4	66.9	69.6	-0.9
Netherlands Antilles						
Nicaragua	119.5	86.7	91.3	93.7	95.1	-0.6
Panama	110.3	110.5	92.2	63.7	54.4	-1.8
Paraguay	103.5	113.2	158.0	166.3		
Peru	95.2	63.6	66.8	68.4	66.1	-0.9
St. Kitts & Nevis			153.7	101.9	52.4	
St. Lucia	101.2	89.2	91.9			
St. Vincent & Grenadines	82.7	51.7	82.6			
Suriname	83.4	116.3	88.6	79.3	79.2	-0.1
Trinidad & Tobago	105.8					
Uruguay	110.6	121.0	166.3	135.0	232.4	1.9
Venezuela (Boliv. Rep. of)	72.4		61.6	58.4	61.9	-0.4
OCEANIA	117.7	116.9	134.2	138.8	136.9	-0.4
Fiji			261.0	194.3	132.2	
French Polynesia	91.5	86.0	60.0			
New Caledonia						
Papua New Guinea	116.2	112.7	119.2	135.4	143.1	0.5
Samoa	117.2	134.0	93.1	83.6	72.9	-1.2
Solomon Islands	133.1	174.5	190.3	134.0	122.2	-0.2
Tonga	121.6	116.0	81.0	79.3	75.9	-1.2
Vanuatu	155.5	132.9	139.2	132.3	107.8	-0.9
DEVELOPED REGIONS	106.4	119.0	118.1	112.2	114.0	1.8
NORTH AMERICA	126.0	161.2	135.3	132.1	129.0	0.1
Bermuda						
Canada	158.5	171.7	153.8	160.7	183.2	0.4
United States of America	122.6	159.9	132.8	128.6	123.8	0.0
ASIA & OCEANIA	232.1	178.7	266.7	272.0	204.0	-0.2
Australia	241.6		290.7	293.1	207.5	-0.4
Israel						
Japan						
New Zealand	183.3	178.7	144.3	164.6	185.9	0.0
EUROPE	91.3	87.3	93.5	96.7	101.2	0.3
Albania	87.5	97.3	79.2	60.1	61.5	-0.9
Belarus				77.5	103.6	
Bosnia & Herzegovina				54.8	62.5	
Croatia				101.6	108.6	
European Union	85.1	87.7	98.2	98.7	92.5	0.2
Iceland						
Macedonia, FYR				72.7	68.1	
Montenegro						
Norway	58.8	62.1	71.4	64.3	50.1	-0.4
Republic of Moldova				107.4	133.3	
Russian Federation				88.4	113.1	
Serbia					126.2	
Switzerland		55.1	71.6	66.2	62.7	
Ukraine				108.1	193.3	

TABLE 20: Trade and food security - import bills

	Food import bills						Food + energy import bills, share of GDP		
	total			per capita					
	million US\$	million US\$	% p.a.	US\$	US\$	% p.a.	%	%	% p.a.
	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010
WORLD	398 055.7	1 029 638.0	10.0	65.1	149.5	8.7	3.3	5.8	5.8
DEVELOPING REGIONS	116 263.1	373 180.5	12.4	23.6	66.0	10.8	4.4	7.3	5.2
AFRICA	17 999.1	59 779.4	12.8	22.2	58.5	10.2	5.7	8.2	3.8
North Africa	8 797.3	25 001.9	11.0	62.0	150.7	9.3	5.3	8.6	5.0
Algeria	2 541.3	7 863.3	12.0	83.2	221.7	10.3	4.9	6.0	2.0
Egypt	3 278.4	9 715.5	11.5	48.5	119.8	9.5	4.4	8.9	7.4
Libya	794.1	1 531.5	6.8	151.8	241.0	4.7	2.8	4.2	4.1
Morocco	1 515.4	4 087.7	10.4	52.6	127.9	9.3	9.6	14.2	4.0
Tunisia	654.6	1 803.9	10.7	69.2	172.1	9.5	7.2	9.6	2.9
Sub-Saharan Africa	9 201.8	34 777.5	14.2	13.8	40.6	11.4	6.0	8.0	3.0
Angola	638.4	2 292.5	13.6	45.8	120.1	10.1	9.2	3.3	−9.7
Benin	112.0	647.5	19.2	17.2	73.2	15.6	9.2	16.6	6.1
Botswana	256.1	577.8	8.5	145.7	287.9	7.0	6.3	12.0	6.6
Burkina Faso	93.1	258.6	10.7	7.6	15.7	7.6	8.9	7.9	−1.2
Burundi	27.0	101.1	14.1	4.2	12.1	11.0	6.9	10.9	4.7
Cameroon	254.2	1 184.3	16.6	16.2	60.4	14.1	6.0	8.9	4.1
Cape Verde	59.3	176.8	11.5	135.7	356.6	10.1	13.7	16.6	2.0
Central African Republic	24.2	71.9	11.5	6.5	16.3	9.6	3.2	6.2	7.0
Chad	41.5	294.0	21.6	5.1	26.2	17.9	3.7	6.7	6.1
Comoros	11.9	60.5	17.7	21.1	82.3	14.6	8.0	12.8	4.8
Congo	99.5	721.2	21.9	31.7	178.4	18.8	3.4	8.3	9.4
Côte d'Ivoire	388.4	1 549.3	14.8	23.4	78.5	12.9	11.7	15.0	2.5
Congo, Dem. Rep.	205.5	711.6	13.2	4.1	10.8	10.1	6.8	8.4	2.1
Djibouti	37.4	108.0	11.2	51.1	121.5	9.0	7.3	11.8	4.9
Equatorial Guinea	33.2	202.5	19.8	63.9	289.3	16.3	6.5	18.9	11.2
Eritrea	174.1	224.4	2.6	47.5	42.7	−1.0	25.7	14.3	−5.7
Ethiopia	81.8	1 033.6	28.9	1.2	12.5	25.9	4.1	8.8	7.9
Gabon	138.0	416.0	11.7	111.7	276.4	9.5	3.3	4.7	3.8
Gambia	61.3	95.8	4.6	47.3	55.5	1.6	13.8	14.7	0.7
Ghana	334.8	1 609.2	17.0	17.5	66.0	14.2	13.3	11.8	−1.2
Guinea	104.7	245.5	8.9	12.5	24.6	7.0	7.2	12.2	5.5
Guinea-Bissau	9.7	67.0	21.3	7.8	44.2	18.9	3.5	12.5	13.5
Kenya	384.6	1 490.8	14.5	12.3	36.8	11.6	8.3	14.0	5.3
Lesotho	122.6	262.8	7.9	62.4	121.0	6.8	34.3	15.5	−7.7
Liberia	8.6	14.4	5.2	3.0	3.6	1.7	4.9	5.8	1.7
Madagascar	120.7	398.8	12.7	7.9	19.3	9.4	8.7	9.2	0.6
Malawi	51.8	166.4	12.4	4.6	11.2	9.2	6.0	8.2	3.3
Mali	114.4	407.3	13.5	10.1	26.5	10.1	11.4	10.6	−0.7
Mauritania	107.1	548.3	17.7	40.5	158.5	14.6	14.1	27.2	6.8
Mauritius	282.2	886.1	12.1	236.0	682.1	11.2	11.1	18.1	5.0
Mozambique	193.1	506.6	10.1	10.6	21.7	7.4	7.5	11.2	4.0
Namibia	212.6	394.0	6.4	112.1	172.6	4.4	6.4	6.3	−0.1
Niger	55.8	472.0	23.8	5.1	30.4	19.5	8.0	17.0	7.8
Nigeria	1 470.3	5 762.6	14.6	11.9	36.4	11.8	4.1	4.7	1.2
Rwanda	42.5	245.9	19.2	5.2	23.1	16.0	4.0	6.0	4.1
Senegal	334.9	1 025.6	11.8	35.2	82.5	8.9	14.6	19.2	2.8
Seychelles	30.4	186.7	19.9	385.0	2 145.8	18.7	17.0	52.1	11.8
Sierra Leone	41.3	169.4	15.2	10.0	28.9	11.2	13.1	26.4	7.3
Somalia	141.1	604.8	15.7	19.1	64.8	13.0			
Sudan	359.4	1 475.1	15.2	10.5	33.9	12.4	3.7	2.9	−2.5
South Africa	1 107.5	4 075.0	13.9	24.7	81.3	12.6	3.7	7.0	6.5
Swaziland	179.2	401.3	8.4	168.4	338.4	7.2	20.7	14.0	−3.8
Tanzania, Utd. Rep.	220.8	758.5	13.1	6.5	16.9	10.1	5.4	14.2	10.1
Togo	71.4	205.1	11.1	14.9	34.0	8.6	13.1	20.8	4.8
Uganda	176.6	530.6	11.6	7.3	15.9	8.1	6.6	8.0	2.0
Zambia	69.4	233.4	12.9	6.8	17.8	10.1	5.5	6.6	2.0
Zimbabwe	75.9	784.5	26.3	6.1	62.4	26.3		22.6	

TABLE 20: Trade and food security - import bills (continued)

	Food import bills						Food + energy import bills, share of GDP		
	total			per capita					
	million US\$	million US\$	% p.a.	US\$	US\$	% p.a.	%	%	% p.a.
	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010
ASIA	71 479.3	245 986.8	13.2	19.9	61.1	11.8	5.1	8.2	5.0
Central Asia	954.7	3 924.0	15.2	17.2	64.6	14.1	5.4	5.6	0.4
Kazakhstan	372.6	1 704.1	16.4	24.9	106.3	15.6	5.0	3.8	-2.7
Kyrgyzstan	63.5	457.3	21.8	12.8	85.7	20.9	14.0	28.0	7.1
Tajikistan	65.2	458.2	21.5	10.6	66.6	20.2	30.9	20.4	-4.1
Turkmenistan	180.3	429.1	9.1	40.0	85.1	7.8	4.0		
Uzbekistan	273.2	875.4	12.4	11.0	31.9	11.2	3.7	5.1	3.2
East Asia	40 908.4	148 033.3	13.7	21.6	72.5	12.9	5.7	8.8	4.4
Brunei Darussalam	172.7	450.2	10.1	528.2	1 128.3	7.9	2.9	4.6	4.7
Cambodia	93.8	567.8	19.7	7.5	40.2	18.2	11.7	16.7	3.7
China	20 742.6	83 746.0	15.0	16.0	61.0	14.3	3.5	6.1	5.7
Indonesia							5.3	7.3	3.3
Korea, DPR	231.5	217.1	-0.6	10.1	8.9	-1.2			
Korea, Republic of	7 192.3	21 599.9	11.6	156.4	448.3	11.1	8.5	15.6	6.3
Lao, PDR	48.1	163.2	13.0	9.1	26.3	11.3	6.7	9.2	3.2
Malaysia	3 340.6	12 052.5	13.7	142.7	424.4	11.5	7.8	14.7	6.6
Mongolia	77.8	368.4	16.8	32.3	133.7	15.3	17.9	20.7	1.5
Myanmar	218.4	495.0	8.5	4.9	10.3	7.8	6.5	4.0	-4.8
Philippines	2 405.6	5 885.2	9.4	31.1	63.1	7.3	8.6	9.0	0.5
Singapore	3 223.1	8 044.0	9.6	822.4	1 581.6	6.8	20.6	44.8	8.1
Thailand	2 450.2	8 227.5	12.9	38.8	119.0	11.9	8.1	15.1	6.4
Viet Nam	711.5	6 007.8	23.8	9.0	68.4	22.4	9.1	15.9	5.8
South Asia	9 577.6	32 241.3	12.9	6.6	18.9	11.2	3.4	8.3	9.4
Afghanistan	417.4	665.9	4.8	18.3	21.2	1.5		9.6	
Bangladesh	1 108.7	5 350.9	17.0	8.6	36.0	15.4	3.7	7.6	7.4
Bhutan	22.0	110.0	17.5	38.5	151.5	14.7	8.5	15.9	6.5
India	3 157.1	12 431.7	14.7	3.0	10.2	13.0	2.6	9.3	13.6
Iran (Islamic Rep.)	2 280.3	6 235.6	10.6	34.9	84.3	9.2	2.8	3.5	2.3
Maldives	77.4	162.4	7.7	283.4	513.8	6.1	15.5	20.8	3.0
Nepal	175.2	575.4	12.6	7.2	19.2	10.3	7.2	10.7	4.1
Pakistan	1 520.0	4 870.9	12.4	10.5	28.1	10.3	6.9	10.0	3.8
Sri Lanka	819.5	1 838.6	8.4	43.7	88.1	7.3	8.3	9.3	1.1
West Asia	20 038.7	61 788.1	11.9	113.0	276.5	9.4	4.4	6.0	3.3
Armenia	175.3	593.4	13.0	57.0	191.9	12.9	16.1	13.2	-2.0
Azerbaijan	199.6	958.1	17.0	24.6	104.3	15.5	4.9	2.4	-6.8
Bahrain	749.1	1 254.7	5.3	1 174.2	994.2	-1.6	10.4	7.3	-3.5
Cyprus	336.9	977.3	11.2	357.2	885.2	9.5	8.9	11.5	2.6
Georgia	143.4	822.3	19.1	30.2	188.9	20.1	9.2	15.7	5.5
Iraq	3 333.8	8 345.0	9.6	139.7	263.5	6.5		15.3	
Jordan	804.5	2 334.7	11.2	166.7	377.4	8.5	11.8	22.7	6.8
Kuwait	923.1	3 422.6	14.0	475.6	1 250.5	10.2	2.6	3.2	2.4
Lebanon	957.6	2 710.3	11.0	255.9	641.0	9.6	11.5	15.9	3.3
Occupied Palestinian Territory	454.1	644.8	3.6	142.0	159.6	1.2			
Saudi Arabia	4 986.3	14 813.3	11.5	248.8	539.7	8.1	2.7	4.0	4.1
Syrian Arab Republic	683.1	2 465.6	13.7	42.7	120.8	11.0	4.3	11.0	9.9
Turkey	1 763.3	6 962.9	14.7	27.7	95.7	13.2	3.5	5.5	4.6
United Arab Emirates	3 129.5	9 892.2	12.2	1 031.8	1 316.8	2.5	3.6	5.0	3.2
Yemen	790.1	2 983.1	14.2	44.6	124.0	10.8	11.0	19.1	5.7
LATIN AMERICA & THE CARIBBEAN	25 874.7	65 010.7	9.7	49.6	110.2	8.3	2.7	4.3	4.7
Argentina	1 190.5	2 038.4	5.5	32.2	50.4	4.6	0.7	1.4	6.6
Bahamas	282.6	463.0	5.1	948.3	1 349.8	3.6	8.9	14.7	5.1
Barbados	108.0	317.0	11.4	402.8	1 161.0	11.2	7.5	12.9	5.5
Belize	59.1	85.0	3.7	235.3	272.4	1.5	18.2	15.5	-1.6
Bolivia (Plur. State)	239.4	379.8	4.7	28.8	38.3	2.9	3.9	5.9	4.2
Brazil	3 510.1	7 863.9	8.4	20.1	40.3	7.2	1.8	2.4	2.5
Chile	1 181.8	4 424.2	14.1	76.6	258.5	12.9	5.6	11.3	7.3
Colombia	1 325.6	3 806.5	11.1	33.3	82.2	9.4	1.6	2.5	4.9
Costa Rica	405.9	1 141.5	10.9	103.6	245.0	9.0	5.9	9.6	5.1

TABLE 20: Trade and food security - import bills (continued)

	Food import bills						Food + energy import bills, share of GDP		
	total			per capita					
	million US\$	million US\$	% p.a.	US\$	US\$	% p.a.	%	%	% p.a.
	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010	2000	2010	growth: 2000-2010
Cuba	750.9	1 893.5	9.7	67.6	168.2	9.5			
Dominica	27.3	46.0	5.4	389.6	675.9	5.7	15.3	22.2	3.8
Dominican Republic	765.3	1 871.0	9.4	89.1	188.5	7.8	9.7	10.8	1.1
Ecuador	299.7	1 795.7	19.6	24.3	124.1	17.7	3.6	8.3	8.9
El Salvador	687.1	1 353.3	7.0	115.7	218.5	6.6	9.8	12.8	2.7
French Guiana									
Grenada	39.1	57.0	3.8	383.6	548.1	3.6	14.0	16.1	1.4
Guatemala	561.2	1 748.7	12.0	49.9	121.5	9.3	6.9	11.3	5.1
Guyana	107.4	168.0	4.6	146.6	222.9	4.3	18.6	25.3	3.1
Haiti	330.1	1 463.3	16.1	38.2	146.4	14.4	10.0	24.6	9.4
Honduras	538.8	1 159.5	8.0	86.6	152.6	5.8	12.7	18.8	4.0
Jamaica	467.7	748.5	4.8	181.1	273.1	4.2	11.7	20.9	6.0
Mexico	8 245.7	18 610.9	8.5	82.5	164.1	7.1	2.0	4.8	9.1
Netherlands Antilles	112.4	146.6	2.7	624.3	729.2	1.6			
Nicaragua	256.2	710.5	10.7	50.5	122.8	9.3	14.1	27.8	7.0
Panama	369.0	977.0	10.2	124.8	277.8	8.3	8.6	5.1	-5.1
Paraguay	158.5	419.9	10.2	29.7	65.1	8.2	7.2	11.4	4.6
Peru	830.4	2 997.5	13.7	32.1	103.1	12.4	3.7	5.7	4.4
St. Kitts & Nevis	31.4	48.7	4.5	682.8	937.3	3.2	14.1	13.1	-0.7
St. Lucia	57.1	27.4	-7.1	363.9	157.2	-8.0	18.4	49.2	10.3
St. Vincent & Grenadines	39.8	70.8	5.9	368.3	649.4	5.8	16.3	27.1	5.2
Suriname	58.2	203.3	13.3	124.7	387.3	12.0	9.9	10.7	0.8
Trinidad & Tobago	256.1	708.8	10.7	198.3	528.6	10.3	16.2	13.0	-2.2
Uruguay	345.5	878.5	9.8	104.1	260.8	9.6	3.8	10.2	10.3
Venezuela (Boliv. Rep. of)	1 754.8	6 073.8	13.2	72.1	209.6	11.3	2.0	2.2	1.3
OCEANIA	909.9	2 403.5	10.2	112.2	241.4	8.0	33.6	34.6	0.3
Fiji	102.3	260.4	9.8	125.9	302.5	9.2	9.0	25.7	11.1
French Polynesia	188.6	368.2	6.9	792.4	1 358.5	5.5			
New Caledonia	124.2	305.0	9.4	585.9	1 215.1	7.6			
Papua New Guinea	178.9	605.7	13.0	33.3	88.3	10.3	11.6	14.1	2.0
Samoa	25.0	72.2	11.2	141.1	394.8	10.8	17.8	22.7	2.5
Solomon Islands	10.1	86.2	24.0	24.6	160.2	20.6	8.7	27.1	12.0
Tonga	13.1	49.0	14.1	134.1	471.0	13.4	12.6	28.2	8.4
Vanuatu	12.4	50.7	15.1	67.2	211.1	12.1	7.5	16.9	8.5
DEVELOPED REGIONS	281 792.6	656 457.5	8.8	236.1	528.8	8.4	3.0	5.1	5.6
NORTH AMERICA	52 368.7	104 268.6	7.1	167.2	302.6	6.1	1.9	3.3	5.5
Bermuda	31.3	134.9	15.7	496.4	2 075.1	15.4			
Canada	10 782.7	24 104.6	8.4	351.6	708.6	7.3	3.2	4.7	4.0
United States of America	41 489.3	79 872.5	6.8	146.9	257.3	5.8	1.8	3.1	5.6
ASIA & OCEANIA			4.1	316.3	456.5	3.7	2.6	4.8	6.3
Australia	2 579.9	8 291.5	12.4	134.6	372.4	10.7	2.0	3.5	5.6
Israel	1 763.7	4 646.2	10.2	293.2	626.3	7.9	4.3	3.4	-2.2
Japan	43 689.2	57 564.0	2.8	347.5	454.9	2.7	2.6	5.1	7.0
New Zealand	914.4	2 815.1	11.9	237.0	644.5	10.5	4.4	6.3	3.5
EUROPE	180 476.6	478 872.1	10.3	248.8	650.0	10.1	4.4	6.8	4.4
Albania	197.8	637.5	12.4	64.4	199.0	11.9	8.1	10.5	2.6
Belarus	901.0	2 443.2	10.5	89.6	254.6	11.0	33.5	29.4	-1.3
Bosnia & Herzegovina	670.4	1 459.7	8.1	181.5	388.2	7.9	16.6	15.7	-0.5
Croatia	584.5	1 900.2	12.5	129.7	431.6	12.8	8.1	9.0	1.0
European Union	163 010.3	412 722.5	9.7	338.5	824.5	9.3	4.4	7.0	4.7
Iceland	205.4	380.3	6.4	731.0	1 188.6	5.0	5.1	7.4	3.7
Macedonia, FYR	229.9	663.1	11.2	114.4	321.7	10.9	14.5	15.6	0.8
Montenegro		443.8			703.3			17.3	
Norway	1 969.8	5 340.2	10.5	438.6	1 093.6	9.6	1.9	2.7	3.8
Republic of Moldova	51.8	451.6	24.2	12.6	126.4	25.9	18.9	18.1	-0.4
Russian Federation	8 302.8	39 149.6	16.8	56.6	273.9	17.1	4.0	3.6	-1.1
Serbia		866.8			87.9			9.2	
Switzerland	3 485.7	8 266.5	9.0	486.3	1 078.6	8.3	2.9	4.3	4.1
Ukraine	699.9	4 845.4	21.3	14.3	106.6	22.2	21.4	20.8	-0.3

TABLE 21: Dimensions of poverty

	Poverty gap at				Poverty headcount ratio				Multi-dimensional
	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	poverty (MPI)
	%	%	%	%	%	%	%	%	0 to 1
	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*
WORLD									
DEVELOPING REGIONS									
AFRICA									
North Africa									
Algeria	1.4	6.5	3.2	4.5	6.8	23.6	22.6	30.3	
Egypt	0.4	3.5	3.6		2.0	18.5	22.0	30.0	0.0
Libya									
Morocco	0.5	3.1			2.5	14.0	9.0	14.5	0.0
Tunisia	0.5	3.0			2.5	12.8	3.8		0.0
Sub-Saharan Africa									
Angola	29.9	42.4			54.3	70.2			0.5
Benin	15.7	33.5	12.0	14.0	47.3	75.3	39.0	46.0	0.4
Botswana	11.0	22.3	11.7	18.4	31.2	49.4	30.6	44.8	
Burkina Faso	20.3	39.3	15.3	17.6	56.5	81.2	46.4	52.4	0.5
Burundi	36.4	56.1	23.4	24.2	81.3	93.5	66.9	68.9	0.5
Cameroon	1.2	8.2	12.3	17.5	9.6	30.4	39.9	55.0	0.3
Cape Verde	6.0	15.2	8.1	14.3	21.0	40.9	26.6	44.3	
Central African Republic	31.3	46.8	33.1	35.0	62.8	80.1	62.0	69.4	0.5
Chad	25.6	43.9	21.6	23.3	61.9	83.3	55.0	58.6	0.3
Comoros	20.8	34.2	16.3	17.8	46.1	65.0	44.8	48.7	0.4
Congo	22.8	38.8	18.9	20.6	54.1	74.4	50.1	57.7	0.2
Côte d'Ivoire	7.5	17.8	15.3	20.3	23.8	46.3	42.7	54.2	0.4
Congo, Dem. Rep.	25.3	42.4	32.2	34.9	59.2	79.6	71.3	75.7	0.4
Djibouti	5.3	14.6			18.8	41.2			0.1
Equatorial Guinea									
Eritrea							69.0		
Ethiopia	9.6	28.9	8.3	8.5	39.0	77.6	38.9	39.3	0.6
Gabon	0.9	5.0	10.0	16.0	4.8	19.6	32.7	44.6	0.2
Gambia	12.1	24.9	25.1	30.5	34.3	56.7	58.0	67.8	0.3
Ghana	10.5	22.3	9.6	13.5	30.0	53.6	28.5	39.2	0.1
Guinea	15.0	31.0	17.6	22.0	43.3	69.6	53.0	63.0	0.5
Guinea-Bissau	16.5	34.8	25.0	27.8	48.8	77.9	64.7	69.1	
Kenya	6.1	15.1	16.3	17.5	19.7	39.9	45.9	49.1	0.2
Lesotho	20.8	33.1	37.9	26.5	43.4	62.3	56.6	60.5	0.2
Liberia	40.8	59.5	24.4	26.3	83.7	94.8	63.8	67.7	0.5
Madagascar	26.5	46.9	26.8	28.9	67.8	89.6	68.7	73.5	0.4
Malawi	32.3	51.8	8.0	8.6	73.9	90.5	52.4	55.9	0.4
Mali	18.8	36.5	16.7		51.4	77.1	47.4	57.6	0.6
Mauritania	5.7	15.9	17.0	24.1	21.2	44.1	46.3	61.2	0.4
Mauritius									
Mozambique	25.2	42.9	21.2	22.2	60.0	81.6	54.7	56.9	0.5
Namibia	24.6	36.5	13.0	16.0	49.1	62.2	38.0	49.0	0.2
Niger	11.9	30.6	19.6	21.2	43.1	75.9	59.5	63.9	0.6
Nigeria	29.6	46.9	22.8	26.6	64.4	83.9	54.7	63.8	0.3
Rwanda	40.9	57.2	24.0	26.0	76.8	89.6	58.5	64.2	0.4
Senegal	10.8	24.7	16.4	21.5	33.5	60.4	50.8	61.9	0.4
Seychelles	0.1	0.3			0.2	1.8			
Sierra Leone	20.3	37.5	27.5	34.6	53.4	76.1	66.4	78.5	0.4
Somalia									0.5
Sudan									
South Africa	3.3	12.3	7.0		17.4	35.7	23.0		0.1
Swaziland	29.4	45.8	32.9	37.0	62.9	81.0	69.2	75.0	0.2
Tanzania, Utd. Rep.	28.1	47.5	9.9	11.0	67.9	87.9	33.4	37.4	0.4
Togo	11.4	27.9	22.9	29.3	38.7	69.3	61.7	74.3	0.3
Uganda	8.3	21.3	6.8	7.6	28.7	55.3	24.5	27.2	0.4
Zambia	32.8	48.3	28.5	38.8	64.3	81.5	59.3	76.8	0.3
Zimbabwe			16.0				72.0	44.0	0.2

TABLE 21: Dimensions of poverty (continued)

	Poverty gap at				Poverty headcount ratio				Multi-dimensional
	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	poverty (MPI)
	%	%	%	%	%	%	%	%	0 to 1
	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*
ASIA									
Central Asia									
Kazakhstan	0.1	0.3	3.1	4.5	0.2	1.5	15.4	21.7	0.0
Kyrgyzstan	0.1	5.5	10.0	12.0	1.9	29.4	43.1	50.8	0.0
Tajikistan	5.1	16.8	12.4	12.4	21.5	50.9	47.2	49.2	0.1
Turkmenistan	7.0	18.4			24.8	49.7			
Uzbekistan	15.0	33.2			46.3	76.7			0.0
East Asia									
Brunei Darussalam									
Cambodia	6.1	20.2	7.2	8.3	28.3	56.5	30.1	34.5	0.3
China	4.0	12.2			15.9	36.3	2.8	2.5	
Indonesia	3.6	15.5	2.5	3.1	18.7	50.6	14.2	17.4	0.1
Korea, DPR									
Korea, Republic of									
Lao, PDR	8.9	24.8			33.9	66.0	27.6	31.7	0.3
Malaysia	0.0	0.2	0.8	1.8	0.0	2.3	3.8	8.2	
Mongolia	6.2	17.2	10.1	13.4	22.4	49.1	35.2	46.6	0.1
Myanmar									0.2
Philippines	5.5	16.4	2.7	15.2	22.6	45.0	26.5	50.7	0.1
Singapore									
Thailand	1.9	8.3	3.0		10.8	26.5	8.1	10.4	0.0
Viet Nam	2.3	10.9	3.5	4.6	13.1	38.5	14.5	18.7	0.1
South Asia									
Afghanistan			7.9	8.3			36.0	37.5	
Bangladesh	13.1	33.8	9.0	9.8	49.6	81.3	40.0	43.8	0.3
Bhutan	7.0	18.8	6.1	8.1	26.2	49.5	23.2	30.9	0.1
India	10.5	29.5			41.6	75.6	27.5	28.3	0.3
Iran (Islamic Rep.)	0.3	1.8			1.4	8.0			
Maldives	0.1	2.5			1.5	12.2			0.0
Nepal	19.7	37.8	7.5	8.5	55.1	77.6	30.9	34.6	0.3
Pakistan	4.3	18.7			22.6	60.3	22.3	27.0	0.3
Sri Lanka	1.0	7.4	3.1	3.2	7.0	29.1	15.2	15.7	0.0
West Asia									
Armenia	0.2	2.3	4.9	12.1	1.3	12.4	26.5	25.5	0.0
Azerbaijan	0.2	1.5	2.0		1.0	7.8	15.8	18.5	0.0
Bahrain									
Cyprus									
Georgia	4.6	11.8	7.2	9.2	14.7	32.6	23.6	29.7	0.0
Iraq	0.6	5.5	4.5	9.0	4.0	25.3	22.9	39.3	0.1
Jordan	0.1	0.6	2.6		0.4	3.5	13.3	19.0	0.0
Kuwait									
Lebanon									
Occupied Palestinian Territory									
Saudi Arabia									
Syrian Arab Republic	0.2	3.3			1.7	16.9			0.0
Turkey	0.9	2.6			2.7	9.1	18.1	38.7	0.0
United Arab Emirates									0.0
Yemen	4.2	14.8	8.9	10.6	17.5	46.6	34.8	40.1	0.3
LATIN AMERICA & THE CARIBBEAN									
Argentina	0.4	0.8			0.9	2.4			0.0
Bahamas									
Barbados									
Belize	4.7	9.7			12.1	24.0	33.5	44.2	0.0
Bolivia (Plur. State)	5.8	10.9			14.0	24.7	60.1	77.3	0.1
Brazil	1.1	3.2			3.8	9.9	21.4		0.0
Chile	0.4	0.8			0.8	2.4	15.1	12.9	
Colombia	5.7	11.9			16.0	27.9	45.5	64.3	0.0
Costa Rica	0.1	1.1			0.7	5.4	21.7	23.0	

TABLE 21: Dimensions of poverty (continued)

	Poverty gap at				Poverty headcount ratio				Multi-dimensional
	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	\$1.25 a day (ppp)	\$2 a day (ppp)	national poverty line	rural poverty line	poverty (MPI)
	%	%	%	%	%	%	%	%	0 to 1
	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*	2009*
Cuba									
Dominica									
Dominican Republic	0.9	3.9			4.3	13.6	50.5	57.1	0.0
Ecuador	1.6	4.4			5.1	13.4	36.0	57.5	0.0
El Salvador	1.1	4.5			5.1	15.2	37.8	46.5	
French Guiana									
Grenada									
Guatemala	6.5	12.9			16.9	29.8	51.0	70.5	0.1
Guyana	3.9	6.9			7.7	16.8			0.1
Haiti	28.2	41.8			54.9	72.2	77.0	88.0	0.3
Honduras	11.9	18.2			23.3	35.4	58.8	64.4	0.2
Jamaica	0.0	0.9			0.2	5.8	9.9	25.1	
Mexico	1.7	3.2			3.4	8.1	47.4	60.8	0.0
Netherlands Antilles									
Nicaragua	5.2	12.3			15.8	31.9	46.2	67.9	0.1
Panama	3.1	7.1			9.5	17.9	32.7	59.8	
Paraguay	1.5	4.3			5.1	13.2	35.1	49.8	0.1
Peru	1.4	4.7			5.9	14.7	34.8	60.3	0.1
St. Kitts & Nevis									
St. Lucia	7.2	15.5			20.9	40.6			
St. Vincent & Grenadines									
Suriname	5.9	11.7			15.5	27.2			0.0
Trinidad & Tobago	1.1	3.9			4.2	13.5			0.0
Uruguay	0.0	0.0			0.0	0.2	20.5	22.2	0.0
Venezuela (Boliv. Rep. of)	1.1	3.2			3.5	10.1	29.0		
OCEANIA									
Fiji			10.1	14.8			31.0	43.3	
French Polynesia									
New Caledonia									
Papua New Guinea	12.3	25.5	12.4	13.8	35.8	57.4	37.5	41.3	
Samoa									
Solomon Islands									
Tonga									
Vanuatu									0.1
DEVELOPED REGIONS									
NORTH AMERICA									
Bermuda									
Canada									
United States of America									
ASIA & OCEANIA									
Australia									
Israel									
Japan									
New Zealand									
EUROPE									
Albania	0.2	0.8	2.3	2.6	0.6	4.2	12.4	14.6	0.0
Belarus	0.0	0.0			0.0	0.0	5.4		
Bosnia & Herzegovina	0.0	0.1	4.6	4.9	0.0	0.2	14.0	17.8	0.0
Croatia	0.0	0.0	2.6		0.0	0.0	11.1		0.0
European Union									
Iceland									
Macedonia, FYR	0.0	0.7	7.2	7.7	0.3	4.3	19.0	21.3	0.0
Montenegro	0.0	0.0	0.9	1.4	0.0	0.0	4.9	8.9	0.0
Norway									
Republic of Moldova	0.3	2.6			1.9	12.5	29.0		0.0
Russian Federation	0.0	0.0	2.7	5.5	0.0	0.1	11.1	21.2	0.0
Serbia	0.1	0.2	1.3	2.0	0.1	0.7	6.6	9.8	0.0
Switzerland									
Ukraine	0.0	0.1	1.5	2.3	0.1	0.5	7.9	11.3	0.0

TABLE 22: Dimensions of inequality


	Human Development Index		Gender inequality Index	Gini-index	Income share held by	
		inequality adjusted		income distribution	highest 20%	lowest 20%
	index	index	index	index	%	%
	2010	2010	2008	2009*	2009*	2009*
WORLD						
DEVELOPING REGIONS						
AFRICA						
North Africa						
Algeria	0.7		0.6	35.3		
Egypt	0.6	0.4	0.7	32.1	41.5	9.0
Libya	0.7		0.5			
Morocco	0.6	0.4	0.7	40.9	47.9	6.5
Tunisia	0.7	0.5	0.5	40.8	47.3	6.0
Sub-Saharan Africa						
Angola	0.4	0.2		58.6	61.9	2.0
Benin	0.4	0.3	0.7	38.6	46.1	7.0
Botswana	0.6		0.6	61.0		
Burkina Faso	0.3	0.2		39.6	47.1	7.0
Burundi	0.3	0.2	0.6	33.3	42.8	9.0
Cameroon	0.5	0.3	0.7	44.6	46.2	6.7
Cape Verde	0.5			50.4	55.9	4.5
Central African Republic	0.3	0.2	0.8	43.6	60.6	3.4
Chad	0.3	0.2		39.8	46.6	6.3
Comoros	0.4	0.2		64.3	68.0	2.5
Congo	0.5	0.3	0.7	47.3	53.1	5.0
Côte d'Ivoire	0.4	0.3	0.7	41.5	47.6	5.6
Congo, Dem. Rep.	0.2	0.2	0.8			
Djibouti	0.4	0.3		39.9	46.5	6.0
Equatorial Guinea	0.5					
Eritrea						
Ethiopia	0.3	0.2		29.8	39.4	9.3
Gabon	0.6	0.5	0.6	41.5	48.2	6.2
Gambia	0.4	0.2	0.7	47.3	52.8	4.8
Ghana	0.5	0.3	0.7	42.8	48.5	5.2
Guinea	0.3	0.2		39.4	46.2	6.3
Guinea-Bissau	0.3	0.2		35.5	43.2	7.3
Kenya	0.5	0.3	0.7	47.7	53.2	4.8
Lesotho	0.4	0.3	0.7	52.5	56.4	3.0
Liberia	0.3	0.2	0.8	38.2	45.0	6.4
Madagascar	0.4	0.3		47.2	53.5	6.2
Malawi	0.4	0.3	0.7	39.0	46.5	7.0
Mali	0.3	0.2	0.8	39.0	46.0	6.5
Mauritania	0.4	0.3	0.7	39.0	45.7	6.2
Mauritius	0.7					
Mozambique	0.3	0.2	0.7	45.6	51.5	5.2
Namibia	0.6	0.3	0.6	74.3		
Niger	0.3	0.2	0.8	34.0	42.8	8.3
Nigeria	0.4	0.2		42.9	48.6	5.1
Rwanda	0.4	0.2	0.6	53.1	58.2	4.2
Senegal	0.4	0.3	0.7	39.2	45.9	6.2
Seychelles				65.8	69.6	3.7
Sierra Leone	0.3	0.2	0.8	42.5	49.3	6.1
Somalia						
Sudan	0.4		0.7			
South Africa	0.6	0.4	0.6	57.8	72.2	2.5
Swaziland	0.5	0.3	0.7	50.7	55.9	4.5
Tanzania, Utd. Rep.	0.4	0.3		37.6	44.8	6.8
Togo	0.4	0.3	0.7	34.4	42.4	7.6
Uganda	0.4	0.3	0.7	44.3	49.3	6.1
Zambia	0.4	0.3	0.7	50.7	55.2	3.6
Zimbabwe	0.1	0.1	0.7	50.1		

TABLE 22: Dimensions of inequality (continued)

	Human Development Index		Gender inequality Index	Gini-index	Income share held by	
		inequality adjusted		income distribution	highest 20%	lowest 20%
	index	index	index	index	%	%
	2010	2010	2008	2009*	2009*	2009*
ASIA						
Central Asia						
Kazakhstan	0.7	0.6	0.5	30.9	39.9	8.7
Kyrgyzstan	0.6	0.5	0.5	33.4	42.8	8.8
Tajikistan	0.6	0.5	0.5	33.6	41.7	7.8
Turkmenistan	0.7	0.5		40.8		
Uzbekistan	0.6	0.5		36.7	44.2	7.1
East Asia						
Brunei Darussalam	0.8					
Cambodia	0.5	0.4	0.6	44.4	51.7	6.6
China		0.5	0.4	41.5	47.8	5.7
Indonesia	0.6	0.5	0.7	36.8	45.5	7.4
Korea, DPR						
Korea, Republic of	0.9	0.7	0.3	31.6		
Lao, PDR	0.5	0.4	0.6	36.7	44.8	7.6
Malaysia	0.7		0.4	46.2	44.8	6.5
Mongolia	0.6	0.5	0.5	36.5	40.5	7.2
Myanmar	0.4					
Philippines	0.6	0.5	0.6	44.0	50.4	5.6
Singapore	0.8		0.2	42.5		
Thailand	0.6	0.5	0.5	53.6	49.3	6.2
Viet Nam	0.6	0.5	0.5	37.6	45.4	7.3
South Asia						
Afghanistan	0.3		0.8	29.4	38.7	9.0
Bangladesh	0.5	0.3	0.7	31.0	40.8	9.4
Bhutan				46.7	53.0	5.4
India	0.5	0.4	0.7	36.8	45.3	8.1
Iran (Islamic Rep.)	0.7		0.6	38.3	45.2	6.4
Maldives	0.6	0.5	0.5	37.4	44.2	6.5
Nepal	0.4	0.3	0.7	47.3	54.0	5.9
Pakistan	0.5	0.3	0.7	32.7	42.1	9.0
Sri Lanka	0.7	0.5	0.6	40.3	47.8	6.9
West Asia						
Armenia	0.7	0.6	0.5	30.9	39.8	8.8
Azerbaijan	0.7	0.6	0.5	33.7	42.1	8.0
Bahrain	0.8		0.5			
Cyprus	0.8	0.7	0.3			
Georgia	0.7	0.6	0.6	41.3	47.1	5.3
Iraq			0.7		39.9	8.7
Jordan	0.7	0.6	0.6	37.7	45.5	7.3
Kuwait	0.8		0.5			
Lebanon						
Occupied Palestinian Territory						
Saudi Arabia	0.7		0.8			
Syrian Arab Republic	0.6	0.5	0.6	35.8	43.9	7.7
Turkey	0.7	0.5	0.6	39.7	48.9	5.2
United Arab Emirates	0.8		0.4			
Yemen	0.4	0.3	0.8	37.7		
LATIN AMERICA & THE CARIBBEAN						
Argentina	0.8	0.6	0.5	45.8	53.1	3.6
Bahamas	0.8	0.7				
Barbados	0.8		0.5			
Belize	0.7	0.5	0.6	54.4		
Bolivia (Plur. State)	0.6	0.4	0.6	57.3	61.0	2.8
Brazil	0.7	0.5	0.6	53.9	58.5	3.2
Chile	0.8	0.6	0.5	52.1	57.2	4.3
Colombia	0.7	0.5	0.6	58.5	62.1	2.5
Costa Rica	0.7	0.6	0.5	50.3	52.3	4.4

TABLE 22: Dimensions of inequality (continued)

	Human Development Index		Gender inequality Index	Gini-index	Income share held by	
	inequality adjusted		index	income distribution	highest 20%	lowest 20%
	index	index		index	%	%
	2010	2010	2008	2009*	2009*	2009*
Cuba			0.5			
Dominica						
Dominican Republic	0.7	0.5	0.6	48.4	53.6	4.4
Ecuador	0.7	0.6	0.6	49.0	58.9	3.6
El Salvador	0.7	0.5	0.6	46.9	51.9	4.7
French Guiana						
Grenada						
Guatemala	0.6	0.4	0.7	53.7	58.0	3.5
Guyana	0.6	0.5	0.6	43.2		
Haiti	0.4	0.2	0.7	59.5	63.0	2.5
Honduras	0.6	0.4	0.6	57.7	60.7	2.0
Jamaica	0.7	0.6	0.6	45.5	51.6	5.3
Mexico	0.7	0.6	0.6	51.7	56.2	3.8
Netherlands Antilles						
Nicaragua	0.6	0.4	0.6	52.3	56.9	3.8
Panama	0.8	0.5	0.6	52.3	58.6	2.7
Paraguay	0.6	0.5	0.6	52.0	56.5	3.8
Peru	0.7	0.5	0.6	48.0	54.3	4.0
St. Kitts & Nevis						
St. Lucia				42.6		
St. Vincent & Grenadines						
Suriname	0.6	0.5		52.8		
Trinidad & Tobago	0.7	0.6	0.5	40.3		
Uruguay	0.8	0.6	0.5	42.4	51.5	4.6
Venezuela (Boliv. Rep. of)	0.7	0.5	0.6	43.5	49.0	4.9
OCEANIA						
Fiji	0.7					
French Polynesia						
New Caledonia						
Papua New Guinea	0.4		0.8	50.9		
Samoa						
Solomon Islands	0.5					
Tonga	0.7					
Vanuatu						
DEVELOPED REGIONS						
NORTH AMERICA						
Bermuda						
Canada	0.9	0.8	0.3	32.6	39.9	7.2
United States of America	0.9	0.8	0.5	40.8	45.8	5.4
ASIA & OCEANIA						
Australia	0.9	0.9	0.3	35.2		
Israel	0.9	0.8	0.3	39.2	44.9	5.7
Japan	0.9		0.3	24.9		
New Zealand	0.9		0.3	36.2		
EUROPE						
Albania	0.7	0.6	0.5	34.5	43.0	8.1
Belarus	0.7	0.7		27.2	36.4	9.2
Bosnia & Herzegovina	0.7	0.6		36.2	43.2	6.7
Croatia	0.8	0.7	0.4	33.6	42.0	8.1
European Union						
Iceland	0.9	0.8	0.3			
Macedonia, FYR	0.7	0.6		44.2	50.3	5.4
Montenegro		0.7		30.0	38.8	8.5
Norway	0.9	0.9	0.2	25.8	37.2	9.6
Republic of Moldova	0.6	0.5	0.5	38.0	45.3	6.8
Russian Federation	0.7	0.6	0.5	42.3	48.9	6.0
Serbia		0.7		28.2		
Switzerland	0.9	0.8	0.2	33.7	41.3	7.5
Ukraine	0.7	0.7	0.5	27.5	37.1	9.4

TABLE 23: Governance


	Voice & accountability	Political stability, absence of violence & terrorism	Government effectiveness	Regulatory quality	Rule of law	Control of corruption	Average governance
	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010
WORLD							
DEVELOPING REGIONS							
AFRICA							
North Africa							
Algeria	-1.0	-1.3	-0.6	-1.1	-0.8	-0.5	-0.9
Egypt	-1.2	-0.9	-0.4	-0.2	-0.1	-0.6	-0.6
Libya	-1.9	-0.1	-1.2	-1.2	-1.0	-1.3	-1.1
Morocco	-0.8	-0.5	-0.2	-0.1	-0.2	-0.2	-0.3
Tunisia	-1.3	0.1	0.2	-0.0	0.1	-0.1	-0.2
Sub-Saharan Africa							
Angola	-1.1	-0.2	-1.1	-1.0	-1.2	-1.3	-1.0
Benin	0.3	0.3	-0.5	-0.3	-0.7	-0.8	-0.3
Botswana	0.4	0.9	0.5	0.5	0.7	1.0	0.7
Burkina Faso	-0.2	-0.1	-0.6	-0.1	-0.2	-0.4	-0.3
Burundi	-0.9	-1.5	-1.1	-1.1	-1.2	-1.1	-1.2
Cameroon	-1.1	-0.6	-0.9	-0.7	-1.0	-1.0	-0.9
Cape Verde	0.9	0.8	-0.1	-0.1	0.4	0.8	0.5
Central African Republic	-1.1	-2.1	-1.4	-1.1	-1.3	-0.8	-1.3
Chad	-1.4	-1.5	-1.5	-1.1	-1.5	-1.3	-1.4
Comoros	-0.4	-0.4	-1.7	-1.5	-1.1	-0.7	-1.0
Congo	-1.0	-0.2	-1.2	-1.3	-1.1	-1.1	-1.0
Côte d'Ivoire	-1.1	-1.6	-1.3	-0.9	-1.2	-1.1	-1.2
Congo, Dem. Rep.	-1.4	-2.2	-1.7	-1.6	-1.6	-1.4	-1.7
Djibouti	-1.1	0.3	-1.0	-0.7	-0.7	-0.3	-0.6
Equatorial Guinea	-1.9	0.2	-1.7	-1.4	-1.3	-1.5	-1.2
Eritrea	-2.2	-0.9	-1.4	-2.2	-1.3	-0.5	-1.4
Ethiopia	-1.3	-1.7	-0.3	-0.9	-0.8	-0.7	-1.0
Gabon	-0.9	0.2	-0.9	-0.6	-0.5	-0.8	-0.6
Gambia	-1.1	0.1	-0.7	-0.4	-0.5	-0.6	-0.5
Ghana	0.5	0.0	-0.0	0.1	-0.1	0.1	0.1
Guinea	-0.9	-1.8	-1.1	-1.1	-1.5	-1.2	-1.3
Guinea-Bissau	-0.9	-0.8	-1.0	-1.1	-1.4	-1.1	-1.0
Kenya	-0.2	-1.2	-0.5	-0.1	-1.0	-0.9	-0.7
Lesotho	-0.2	0.5	-0.4	-0.6	-0.3	0.2	-0.1
Liberia	-0.2	-0.5	-1.2	-1.1	-1.0	-0.5	-0.7
Madagascar	-0.8	-1.1	-0.8	-0.6	-0.8	-0.3	-0.7
Malawi	-0.2	0.1	-0.4	-0.6	-0.1	-0.4	-0.3
Mali	0.2	-0.3	-0.9	-0.5	-0.5	-0.7	-0.4
Mauritania	-0.9	-1.3	-0.9	-0.8	-0.9	-0.7	-0.9
Mauritius	0.7	0.5	0.8	0.8	0.8	0.7	0.7
Mozambique	-0.1	0.3	-0.5	-0.4	-0.5	-0.4	-0.3
Namibia	0.3	0.8	0.1	0.1	0.2	0.3	0.3
Niger	-0.6	-1.1	-0.7	-0.5	-0.6	-0.7	-0.7
Nigeria	-0.8	-2.0	-1.2	-0.8	-1.2	-1.0	-1.2
Rwanda	-1.3	-0.1	-0.1	-0.2	-0.3	0.5	-0.2
Senegal	-0.3	-0.4	-0.5	-0.3	-0.4	-0.7	-0.4
Seychelles	0.1	0.8	0.2	-0.6	0.0	0.3	0.1
Sierra Leone	-0.2	-0.2	-1.2	-0.7	-0.9	-0.8	-0.7
Somalia	-2.0	-3.1	-2.2	-2.4	-2.4	-1.7	-2.3
Sudan	-1.7	-2.7	-1.4	-1.4	-1.3	-1.3	-1.6
South Africa	0.5	-0.0	0.3	0.4	0.1	0.1	0.2
Swaziland	-1.3	-0.1	-0.5	-0.6	-0.5	-0.2	-0.5
Tanzania, Utd. Rep.	-0.1	-0.0	-0.5	-0.4	-0.5	-0.5	-0.3
Togo	-1.0	-0.2	-1.4	-0.9	-0.9	-1.0	-0.9
Uganda	-0.5	-1.1	-0.6	-0.1	-0.4	-0.9	-0.6
Zambia	-0.3	0.5	-0.8	-0.5	-0.5	-0.6	-0.4
Zimbabwe	-1.5	-1.2	-1.6	-2.0	-1.8	-1.4	-1.6

TABLE 23: Governance (continued)


	Voice & accountability	Political stability, absence of violence & terrorism	Government effectiveness	Regulatory quality	Rule of law	Control of corruption	Average governance
	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010	-2.5 to 2.5 (lowest to highest) 2010
ASIA							
Central Asia							
Kazakhstan	-1.1	0.5	-0.3	-0.3	-0.6	-1.0	-0.5
Kyrgyzstan	-1.0	-1.0	-0.6	-0.2	-1.3	-1.1	-0.9
Tajikistan	-1.4	-0.9	-0.9	-1.1	-1.2	-1.2	-1.1
Turkmenistan	-2.0	0.2	-1.6	-2.1	-1.5	-1.4	-1.4
Uzbekistan	-2.0	-0.8	-0.8	-1.6	-1.4	-1.3	-1.3
East Asia							
Brunei Darussalam	-0.7	1.2	0.9	1.1	0.8	0.9	0.7
Cambodia	-0.9	-0.6	-0.8	-0.5	-1.1	-1.2	-0.8
China	-1.6	-0.8	0.1	-0.2	-0.3	-0.6	-0.6
Indonesia	-0.1	-0.9	-0.2	-0.4	-0.6	-0.7	-0.5
Korea, DPR	-2.2	-0.5	-1.9	-2.4	-1.3	-1.3	-1.6
Korea, Republic of	0.7	0.1	1.2	0.9	1.0	0.4	0.7
Lao, PDR	-1.6	-0.2	-0.9	-1.0	-0.9	-1.1	-1.0
Malaysia	-0.5	0.1	1.1	0.6	0.5	0.1	0.3
Mongolia	0.0	0.5	-0.6	-0.3	-0.4	-0.7	-0.3
Myanmar	-2.1	-1.3	-1.7	-2.2	-1.5	-1.7	-1.7
Philippines	-0.1	-1.6	-0.1	-0.3	-0.5	-0.8	-0.6
Singapore	-0.3	1.1	2.2	1.8	1.7	2.2	1.5
Thailand	-0.6	-1.2	0.1	0.2	-0.2	-0.3	-0.3
Viet Nam	-1.4	0.1	-0.3	-0.6	-0.5	-0.6	-0.5
South Asia							
Afghanistan	-1.5	-2.6	-1.5	-1.6	-1.9	-1.6	-1.8
Bangladesh	-0.3	-1.4	-0.8	-0.9	-0.8	-1.0	-0.9
Bhutan	-0.5	0.7	0.6	-1.1	0.1	0.8	0.1
India	0.4	-1.3	-0.0	-0.4	-0.1	-0.5	-0.3
Iran (Islamic Rep.)	-1.6	-1.6	-0.5	-1.6	-0.9	-0.9	-1.2
Maldives	-0.1	-0.0	-0.2	-0.4	-0.3	-0.6	-0.3
Nepal	-0.5	-1.7	-0.8	-0.7	-1.0	-0.7	-0.9
Pakistan	-0.8	-2.7	-0.8	-0.6	-0.8	-1.1	-1.1
Sri Lanka	-0.5	-0.8	-0.2	-0.2	-0.1	-0.4	-0.4
West Asia							
Armenia	-0.9	0.0	-0.2	0.3	-0.5	-0.7	-0.3
Azerbaijan	-1.3	-0.3	-0.8	-0.4	-0.9	-1.2	-0.8
Bahrain	-0.9	-0.3	0.6	0.8	0.4	0.2	0.1
Cyprus	1.1	0.4	1.5	1.4	1.2	1.1	1.1
Georgia	-0.2	-0.7	0.3	0.6	-0.2	-0.2	-0.1
Iraq	-1.1	-2.3	-1.2	-1.1	-1.6	-1.3	-1.4
Jordan	-0.8	-0.3	0.1	0.2	0.2	0.0	-0.1
Kuwait	-0.5	0.4	0.1	0.2	0.5	0.3	0.2
Lebanon	-0.3	-1.5	-0.3	0.0	-0.7	-0.8	-0.6
Occupied Palestinian Territory							
Saudi Arabia	-1.8	-0.2	-0.1	0.1	0.2	0.1	-0.3
Syrian Arab Republic	-1.7	-0.8	-0.6	-0.9	-0.5	-1.1	-0.9
Turkey	-0.2	-1.0	0.4	0.4	0.1	0.0	-0.1
United Arab Emirates	-0.9	0.8	0.8	0.4	0.4	1.0	0.4
Yemen	-1.3	-2.2	-1.0	-0.6	-1.1	-1.1	-1.2
LATIN AMERICA & THE CARIBBEAN							
Argentina	0.3	-0.0	-0.2	-0.7	-0.6	-0.4	-0.3
Bahamas	1.0	1.0	1.0	0.5	0.7	1.4	0.9
Barbados	1.2	1.1	1.4	0.5	1.0	1.4	1.1
Belize	0.7	-0.0	-0.4	-0.5	-0.4	-0.1	-0.1
Bolivia (Plur. State)	-0.1	-0.4	-0.5	-0.8	-1.1	-0.5	-0.6
Brazil	0.5	0.0	0.1	0.2	0.0	0.1	0.1
Chile	1.0	0.6	1.2	1.4	1.3	1.5	1.2
Colombia	-0.2	-1.5	0.1	0.3	-0.3	-0.4	-0.3
Costa Rica	1.0	0.6	0.3	0.5	0.5	0.7	0.6

TABLE 23: Governance (continued)


	Voice & accountability	Political stability, absence of violence & terrorism	Government effectiveness	Regulatory quality	Rule of law	Control of corruption	Average governance
	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)	-2.5 to 2.5 (lowest to highest)
	2010	2010	2010	2010	2010	2010	2010
Cuba	-1.6	0.3	-0.2	-1.6	-0.6	0.5	-0.5
Dominica	1.0	1.0	0.7	0.4	0.7	0.7	0.8
Dominican Republic	0.1	0.0	-0.6	-0.2	-0.8	-0.8	-0.4
Ecuador	-0.3	-0.6	-0.7	-1.1	-1.2	-0.9	-0.8
El Salvador	0.0	0.1	0.0	0.4	-0.9	-0.2	-0.1
French Guiana	1.1	0.2	1.2	1.2	1.2	1.1	1.0
Grenada	0.8	0.6	0.2	0.4	0.1	0.4	0.4
Guatemala	-0.4	-0.8	-0.7	-0.2	-1.0	-0.5	-0.6
Guyana	0.0	-0.5	-0.1	-0.5	-0.5	-0.6	-0.4
Haiti	-0.7	-0.9	-1.6	-1.1	-1.4	-1.3	-1.2
Honduras	-0.5	-0.5	-0.7	-0.2	-0.9	-0.9	-0.6
Jamaica	0.4	-0.4	0.2	0.3	-0.5	-0.4	-0.1
Mexico	0.1	-0.8	0.2	0.3	-0.6	-0.4	-0.2
Netherlands Antilles	0.4	1.1	0.7	0.9	0.9	0.9	0.8
Nicaragua	-0.5	-0.6	-1.0	-0.4	-0.8	-0.8	-0.7
Panama	0.5	0.0	0.1	0.4	-0.1	-0.4	0.1
Paraguay	-0.1	-0.9	-0.9	-0.4	-0.9	-0.8	-0.7
Peru	0.0	-0.9	-0.2	0.5	-0.6	-0.2	-0.2
St. Kitts & Nevis	1.1	1.1	0.7	0.4	0.7	1.0	0.9
St. Lucia	1.2	0.8	0.8	0.4	0.8	1.2	0.9
St. Vincent & Grenadines	1.2	0.9	0.7	0.4	0.9	1.0	0.9
Suriname	0.4	0.1	-0.1	-0.7	-0.1	-0.4	-0.1
Trinidad & Tobago	0.5	-0.0	0.3	0.5	-0.2	-0.4	0.1
Uruguay	1.1	0.9	0.7	0.4	0.7	1.3	0.8
Venezuela (Boliv. Rep. of)	-0.9	-1.4	-1.0	-1.6	-1.6	-1.2	-1.3
OCEANIA							
Fiji	-1.0	-0.1	-0.7	-0.7	-0.9	-0.9	-0.7
French Polynesia							
New Caledonia		-0.2					
Papua New Guinea	0.1	-0.8	-0.8	-0.5	-0.9	-1.1	-0.7
Samoa							
Solomon Islands	0.1	0.4	-0.9	-1.2	-0.7	-0.5	-0.5
Tonga	0.3	0.8	-0.3	-0.5	0.1	-0.3	-0.0
Vanuatu	0.5	1.4	-0.3	-0.8	0.3	0.4	0.2
DEVELOPED REGIONS							
NORTH AMERICA							
Bermuda	1.0	0.9	1.0	1.4	1.2	1.3	1.1
Canada	1.4	0.9	1.9	1.7	1.8	2.1	1.6
United States of America	1.2	0.3	1.4	1.4	1.6	1.2	1.2
ASIA & OCEANIA							
Australia	1.4	0.8	1.8	1.7	1.8	2.1	1.6
Israel	0.6	-1.5	1.2	1.2	0.9	0.6	0.5
Japan	1.0	0.9	1.4	1.0	1.3	1.5	1.2
New Zealand	1.5	1.2	1.9	1.8	1.9	2.4	1.8
EUROPE							
Albania	0.1	-0.2	-0.3	0.2	-0.4	-0.4	-0.2
Belarus	-1.6	-0.1	-1.1	-1.2	-1.0	-0.8	-1.0
Bosnia & Herzegovina	-0.1	-0.7	-0.7	-0.1	-0.4	-0.3	-0.4
Croatia	0.4	0.6	0.6	0.6	0.2	0.0	0.4
European Union							
Iceland	1.4	1.0	1.6	0.9	1.7	1.9	1.4
Macedonia, FYR	0.1	-0.5	-0.2	0.3	-0.3	-0.1	-0.1
Montenegro	0.2	0.5	0.1	-0.1	-0.0	-0.3	0.1
Norway	1.6	1.3	1.8	1.5	1.9	2.1	1.7
Republic of Moldova	-0.1	-0.4	-0.6	-0.1	-0.4	-0.7	-0.4
Russian Federation	-0.9	-0.9	-0.4	-0.4	-0.8	-1.1	-0.7
Serbia	0.3	-0.4	-0.1	-0.0	-0.4	-0.2	-0.1
Switzerland	1.6	1.2	1.9	1.7	1.8	2.1	1.7
Ukraine	-0.1	-0.1	-0.8	-0.6	-0.8	-1.0	-0.6

TABLE 24: Education, health and sanitation


		Literacy rate, female		Ratio of girls-to-boys		Expenditure per student	Public exp. on education	Health expenditure		Prevalence of HIV	Access to improved	
		%	2009*	out of primary school	in prim. and sec. education	share of GDP per capita	share of GDP	current per capita	share of GDP	ages 15-49	sanitation facilities	water source
				ratio	%	%	%	US\$	%	%	%	rur. %
				2009*	2009*	2009*	2009*	2009	2009	2009	2008	2008
WORLD		79.2			96.3		4.4	860.0	10.1	0.8	61	78
DEVELOPING REGIONS												
AFRICA												
North Africa												
Algeria		63.9		0.7	99.3	28.5	4.3	268.0	5.8	0.1	95	79
Egypt		57.8		0.5	95.1		3.8	113.0	5.0	0.1	94	98
Libya		82.0		0.0	105.0	23.9	2.7	417.0	3.9		97	
Morocco		43.9		0.8	88.1	87.2	5.6	156.0	5.5	0.1	69	60
Tunisia		71.0		0.9	103.0	50.7	7.1	240.0	6.2	0.1	85	84
Sub-Saharan Africa												
Angola		57.6		0.8	82.0	126.9	2.6	204.0	4.6	2.0	57	38
Benin		29.1		0.1	73.5	13.4	3.5	31.9	4.2	1.2	12	69
Botswana		84.4		1.2	100.0	301.4	8.9	612.0	10.3	24.8	60	90
Burkina Faso		21.6		0.8	85.6	366.3	4.6	38.1	6.4	1.2	11	72
Burundi		60.9		9.0	92.7	600.9	8.3	19.8	13.1	3.3	46	71
Cameroon		63.0		0.2	85.6	72.8	3.7	61.1	5.6	5.3	47	51
Cape Verde		80.2		0.9	103.0	82.8	5.9	146.0	3.9		54	82
Central African Republic		42.1		0.5	68.7	144.8	1.3	19.3	4.3	4.7	34	51
Chad		23.1		0.6	63.6	248.8	3.2	41.8	7.0	3.4	9	44
Comoros		68.7		0.6	84.2	27.2	7.6	27.8	3.4	0.1	36	97
Congo				0.9	91.9	2.9	1.8	70.1	3.0	3.4	30	34
Côte d'Ivoire		45.3		0.8	68.6	119.1	4.6	55.3	5.1	3.4	23	68
Congo, Dem. Rep.		54.9			76.8			15.6	9.5		23	
Djibouti				0.9	82.0	57.3	8.4	84.5	7.0	2.5	56	52
Equatorial Guinea		89.8		1.0	82.5	4.0	0.6	709.0	3.9	5.0		
Eritrea		56.0		0.9	77.3	1135.6	2.0	10.1	2.1	0.8	14	57
Ethiopia		18.0		0.7	87.9	664.2	5.5	14.7	4.3		12	26
Gabon		84.1		1.0	95.9		3.8	266.0	3.5	5.2	33	41
Gambia		35.8		1.1	102.0	32.2	2.0	25.6	6.0	2.0	67	86
Ghana		60.4		1.1	95.4	28.8	5.4	45.1	6.9	1.8	13	74
Guinea		28.1		0.7	77.2	116.4	2.4	18.8	5.7	1.3	19	61
Guinea-Bissau		38.0		0.7	65.5		5.2	18.4	6.1	2.5	21	51
Kenya		83.5		1.1	95.4	43.6	7.0	33.2	4.3	6.3	31	52
Lesotho		95.3		1.2	107.0	77.8	12.4	70.0	8.2	23.6	29	81
Liberia		54.5		0.4	71.9	14.1	2.8	29.4	13.2	1.5	17	51
Madagascar		61.6		5.3	96.9	158.1	3.0	18.0	4.1	0.2	11	29
Malawi		67.0		1.8	100.0	32.1	4.2	19.1	6.2	11.0	56	77
Mali		18.2		0.5	78.4	163.3	4.4	38.4	5.6	1.0	36	44
Mauritania		50.3		1.3	103.0	73.6	2.9	21.9	2.5	0.7	26	47
Mauritius		85.3		1.3	101.0	24.5	3.2	383.0	5.7	1.0	91	99
Mozambique		41.5		0.5	88.3	99.8	5.0	24.7	5.7	11.5	17	29
Namibia		88.1		1.6	104.0	31.5	6.4	258.0	6.0	13.1	33	88
Niger		15.1		0.8	75.3	514.3	4.5	20.9	6.1	0.8	9	39
Nigeria		49.8		0.9	85.1		0.8	69.3	5.8	3.6	32	42
Rwanda		66.8		1.8	100.0	252.1	4.1	48.2	9.0	2.9	54	62
Senegal		38.7		1.1	95.5	216.9	5.8	58.9	5.7	0.9	51	52
Seychelles		92.3		1.5	103.0	34.0	5.0	366.0	4.0			
Sierra Leone		30.1		0.6	84.0	25.1	4.3	43.9	13.1	1.6	13	26
Somalia				0.9	53.5		0.4			0.7	23	9
Sudan		60.8		0.9	89.4		12.1	94.6	7.3	1.1	34	52
South Africa		87.0		1.2	99.4	32.8	5.4	485.0	8.5	17.8	77	78
Swaziland		86.2		1.1	92.1	49.1	7.8	156.0	6.3	25.9	55	61
Tanzania, Utd. Rep.		66.9		1.5	96.1	40.9	6.8	25.3	5.1	5.6	24	45
Togo		44.4		0.4	75.3	13.0	4.6	28.9	5.9	3.2	12	41
Uganda		58.9		1.5	98.7	133.9	3.2	42.5	8.2	6.5	48	64
Zambia		61.3		1.4	95.8	1.0	1.3	47.1	4.8	13.5	49	46
Zimbabwe		89.4			97.1	214.3	5.2			14.3	44	72

TABLE 24: Education, health and sanitation (continued)


	Literacy rate, female	Ratio of girls-to-boys		Expendi- ture per student	Public exp. on education	Health expenditure		Prevalence of HIV	Access to improved		
		out of primary school	in prim. and sec. education	share of GDP per capita	share of GDP	current per capita	share of GDP	ages 15-49	sanitation facilities	water source	
	%	ratio	%	%	%	US\$	%	%	%	rur. %	urb. %
	2009*	2009*	2009*	2009*	2009*	2009	2009	2009	2008	2008	2008
ASIA											
Central Asia											
Kazakhstan	99.6	2.6	98.6	7.9	2.8	330.0	4.5	0.1	97	90	99
Kyrgyzstan	99.0	1.1	101.0	17.3	5.9	57.1	6.8	0.3	93	85	99
Tajikistan	99.6	0.1	90.6	21.8	3.5	38.0	5.3	0.2	94	61	94
Turkmenistan	99.4				4.3	77.1	2.3		98		97
Uzbekistan	99.1	0.8	98.7		7.4	62.2	5.2	0.1	100	81	98
East Asia											
Brunei Darussalam	93.7	1.8	101.0		3.7	791.0	3.0				
Cambodia	70.9	0.8	89.7	5.4	2.1	42.1	5.9	0.5	29	56	81
China	90.9	1.2	105.0	101.5	1.9	177.0	4.6	0.1	55	82	98
Indonesia	89.1	0.4	97.7	39.7	2.8	55.4	2.4	0.2	52	71	89
Korea, DPR	100.0									100	100
Korea, Republic of		0.0	97.2	52.8	4.2	1 110.0	6.5	0.1	100	88	100
Lao, PDR	63.2	0.9	87.2	10.0	2.3	35.8	4.1	0.2	53	51	72
Malaysia	90.3	1.0	103.0	60.4	4.1	336.0	4.8	0.5	96	99	100
Mongolia	97.9	1.5	103.0	16.2	5.6	74.2	4.7	0.1	50	49	97
Myanmar	89.5	0.8	99.7	5.4	1.3	12.5	2.0	0.6	81	69	75
Philippines	95.8	1.4	102.0	27.6	2.8	66.9	3.8	0.1	76	87	93
Singapore	92.0			11.6	3.0	1 500.0	3.9	0.1	100		100
Thailand	91.5	0.9	103.0	55.4	4.1	168.0	4.3	1.3	96	98	99
Viet Nam	90.5	0.4	93.2	98.2	5.3	79.7	7.2	0.4	75	92	99
South Asia											
Afghanistan	5.0	0.7	62.3		1.9	50.9	7.4		37	39	78
Bangladesh	51.0	2.1	108.0	25.6	2.4	18.4	3.4	0.1	53	78	85
Bhutan	38.7	1.3	100.0	38.7	4.8	98.0	5.5	0.2	65	88	99
India	50.8	0.5	92.2	77.7	3.1	44.8	4.2	0.3	31	84	96
Iran (Islamic Rep.)	80.7	0.7	96.5	58.3	4.7	269.0	5.5	0.2			98
Maldives	98.4	0.6	98.2	0.0	11.2	331.0	8.0	0.1	98	86	99
Nepal	46.9	0.6	82.5	73.1	4.7	25.3	5.8	0.4	31	87	93
Pakistan	40.1	0.7	81.9		2.7	22.6	2.6	0.1	45	87	95
Sri Lanka	89.1	1.2	104.0		3.0	83.6	4.0	0.1	91	88	98
West Asia											
Armenia	99.4	1.7	103.0	53.3	3.0	129.0	4.7	0.1	90	93	98
Azerbaijan	99.2	1.0	102.0	15.6	2.8	285.0	5.8	0.1	45	71	88
Bahrain	90.2	0.3	101.0	32.6	2.9	1 110.0	4.5				100
Cyprus	96.9	0.5	100.0	135.2	4.1		6.0		100	100	100
Georgia	99.7	0.6	96.5	41.0	3.2	256.0	10.1	0.1	95	96	100
Iraq	69.9	0.4	81.3		5.1	98.5	3.9		73	55	91
Jordan	88.9	1.4	102.0	27.7	4.9	336.0	9.3		98	91	98
Kuwait	91.8	0.8	101.0	25.7	3.8	1 420.0	3.3		100	99	99
Lebanon	86.0	0.9	104.0	10.2	1.8	663.0	8.1	0.1		100	100
Occupied Palestinian Territory											
Saudi Arabia	81.1	0.8	91.3	36.7	5.6	714.0	5.0				97
Syrian Arab Republic	78.0	0.1	97.3	33.8	4.8	72.0	2.9		96	84	94
Turkey	85.3	0.7	92.9	54.7	3.1	571.0	6.7	0.1	90	96	100
United Arab Emirates	91.5	0.6	99.8	27.0	1.2	1 520.0	2.8		97	100	100
Yemen	44.7	0.6	65.7		5.2	64.0	5.6		52	57	72
LATIN AMERICA & THE CARIBBEAN											
Argentina	97.7	2.2	105.0	56.5	4.9	730.0	9.5	0.5	90	80	98
Bahamas		1.4	101.0		3.3	1 560.0	7.2	3.1	100		98
Barbados				60.3	-6.7	1 040.0	6.8	1.4	100	100	100
Belize	70.3	4.4	101.0	39.5	5.8	217.0	4.9	2.3	90	100	99
Bolivia (Plur. State)	86.8	1.2	98.8	28.2	6.3	84.8	4.8	0.2	25	67	96
Brazil	90.2	0.7	103.0	65.0	5.1	734.0	9.1		80	84	99
Chile	98.7	0.9	98.5	42.8	4.0	787.0	8.2	0.4	96	75	99
Colombia	93.4	1.0	105.0	58.0	4.8	323.0	6.4	0.5	74	73	99
Costa Rica	96.3	1.2	102.0	29.0	6.3	668.0	10.5	0.3	95	91	100

TABLE 24: Education, health and sanitation (continued)


	Literacy rate, female	Ratio of girls-to-boys		Expenditure per student	Public exp. on education	Health expenditure		Prevalence of HIV	Access to improved		
		out of primary school	in prim. and sec. education	share of GDP per capita	share of GDP	current per capita	share of GDP	ages 15-49	sanitation facilities	water source	
	%	ratio	%	%	%	US\$	%	%	%	rur. %	urb. %
	2009*	2009*	2009*	2009*	2009*	2009	2009	2009	2008	2008	2008
Cuba	99.8	0.8	98.8	155.3	13.6	707.0	11.8	0.1	91	89	96
Dominica		1.5	102.0	40.7	4.7	361.0	6.4				
Dominican Republic	88.3	1.1	96.5	14.7	2.3	271.0	5.9	0.9	83	84	87
Ecuador	81.5	2.8	103.0	9.2	1.0	255.0	6.1	0.4	92	88	97
El Salvador	81.8	1.6	98.3	17.6	3.6	229.0	6.3	0.8	87	76	94
French Guiana											
Grenada	96.0	2.2	97.0	22.7	4.8	447.0	7.4		97		97
Guatemala	69.5	0.4	93.8	16.6	3.2	186.0	7.1	0.8	81	90	98
Guyana		0.6	99.7	44.7	6.1	133.0	8.1	1.2	81	93	98
Haiti	44.6	1.0	94.6		1.5	39.6	6.1	1.9	17	55	71
Honduras	83.5	2.3	107.0		3.6	117.0	6.0	0.8	71	77	95
Jamaica	91.1	0.9	100.0	85.0	5.8	231.0	5.1	1.7	83	89	98
Mexico	92.1	1.7	102.0	63.7	4.8	515.0	6.5	0.3	85	87	96
Netherlands Antilles	96.4		102.0								
Nicaragua	77.9	1.2	102.0	14.4	3.1	105.0	9.6	0.2	52	68	98
Panama	93.0	0.8	101.0	39.0	3.8	591.0	8.3	0.9	69	83	97
Paraguay	93.5	1.0	99.5	53.0	4.0	159.0	7.1	0.3	70	66	99
Peru	84.6	1.2	99.4	18.0	2.7	201.0	4.6	0.4	68	61	90
St. Kitts & Nevis		1.5	104.0	7.9	9.7	634.0	6.0		96	99	99
St. Lucia		1.0	99.4	36.8	4.5	443.0	8.1			98	98
St. Vincent & Grenadines		0.1	97.7	45.5	6.6	301.0	5.7				
Suriname	93.8	0.9	107.0		9.0	429.0	7.6	1.0	84	81	97
Trinidad & Tobago	98.3	0.5	101.0	18.9	4.2	1 070.0	5.7	1.5	92	93	98
Uruguay	98.6	0.8	104.0	37.4	2.9	698.0	7.5	0.5	100	100	100
Venezuela (Boliv. Rep. of)	94.9	1.1	102.0	17.3	3.7	686.0	6.0				
OCEANIA											
Fiji		1.0	103.0	96.7	6.2	130.0	3.4	0.1			
French Polynesia		1.5	109.0						98	100	100
New Caledonia	96.0										
Papua New Guinea	56.5	0.8	83.5		6.5	36.7	3.1	0.9	45	33	87
Samoa	98.5	1.7	105.0	12.0	5.8	205.0	7.0		100		
Solomon Islands	69.0	1.0	94.0		2.2	71.9	5.4				
Tonga	99.1	0.6	99.9	144.9	3.9	161.0	6.2		96	100	100
Vanuatu	80.3	0.5	99.5	35.3	4.8	106.0	4.0		52	79	96
DEVELOPED REGIONS											
NORTH AMERICA											
Bermuda			97.9	15.7	2.6						
Canada		2.3	98.7	44.0	4.9	4 380.0	10.9	0.2	100	99	100
United States of America		1.4	100.0	68.2	5.5	7 410.0	16.2	0.6	100	94	100
ASIA & OCEANIA											
Australia		1.4	97.3	50.9	4.5	3 870.0	8.5	0.1	100	100	100
Israel	88.7	1.5	101.0	61.1	5.9	1 970.0	7.6	0.2	100	100	100
Japan		1.1	100.0	64.7	3.5	3 320.0	8.3	0.1	100	100	100
New Zealand		3.1	103.0	67.5	6.1	2 630.0	9.7	0.1		100	100
EUROPE											
Albania	94.7	0.9	99.5	44.4	2.9	265.0	6.9		98	98	96
Belarus	99.7	1.7	101.0	15.0	4.5	295.0	5.8	0.3	93	99	100
Bosnia & Herzegovina	96.4	1.3	102.0			495.0	10.9		95	98	100
Croatia	98.1	1.2	102.0	73.2	4.6	1 120.0	7.8	0.1	99	97	100
European Union			101.0	76.4	4.9	3 370.0	10.3	0.2	98	100	100
Iceland		1.3	102.0	77.1	7.4	3 130.0	8.2	0.3	100	100	100
Macedonia, FYR	95.6	1.3	98.3	23.8	3.5	314.0	6.9		89	99	100
Montenegro						617.0	9.3		92	96	100
Norway		1.3	99.0	89.5	6.8	7 660.0	9.7	0.1	100	100	100
Republic of Moldova	98.0	1.0	101.0	128.6	9.6	181.0	11.9	0.4	79	85	96
Russian Federation	99.4	1.2	98.0	14.2	3.9	475.0	5.4	1.0	87	89	98
Serbia		0.9	101.0	110.5	4.8	419.0	9.9	0.1	92	98	99
Switzerland		5.7	97.3	95.6	5.2	7 140.0	11.3	0.4	100	100	100
Ukraine	99.6	1.1	98.8	25.1	5.3	180.0	7.0	1.1	95	97	98

TABLE 25: Food aid received

	Food aid received				
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes
	1990	1995	2000	2005	2010
WORLD	13 172	10 201	11 345	8 288	5 682
DEVELOPING REGIONS	10 922	9 143	9 462	8 245	5 682
AFRICA	5 255	3 562	4 320	4 656	3 491
North Africa	2 268	263	318	56	27
Algeria	10	27	33	42	24
Egypt	1 606	207	41	14	3
Libya	0	0	0	0	0
Morocco	271	2	241	0	0
Tunisia	383	27	4	0	0
Sub-Saharan Africa	2 986	3 299	4 002	4 601	3 464
Angola	124	220	296	57	4
Benin	15	21	12	15	19
Botswana	15	10	0	0	0
Burkina Faso	34	41	33	39	45
Burundi	3	103	11	73	34
Cameroon	3	7	4	14	14
Cape Verde	59	73	53	29	16
Central African Republic	3	1	3	5	10
Chad	26	21	23	74	111
Comoros	4	6	0	0	0
Congo	8	13	18	9	7
Côte d'Ivoire	66	24	17	34	21
Congo, Dem. Rep.	98	109	74	103	193
Djibouti	9	20	12	21	10
Equatorial Guinea	5	4	2	0	0
Eritrea	0	104	257	232	0
Ethiopia	864	636	1 527	1 122	1 415
Gabon	0	0	1	0	0
Gambia	4	4	8	11	23
Ghana	66	97	101	66	7
Guinea	11	8	5	41	4
Guinea-Bissau	5	3	27	11	7
Kenya	90	80	291	155	258
Lesotho	42	34	6	44	7
Liberia	35	161	116	102	30
Madagascar	54	38	44	47	26
Malawi	219	236	36	153	38
Mali	39	20	12	41	25
Mauritania	45	45	17	92	39
Mauritius	11	1	0	0	0
Mozambique	423	386	185	117	80
Namibia	12	3	2	2	1
Niger	40	25	20	139	159
Nigeria	0	0	1	20	0
Rwanda	9	274	232	42	7
Senegal	63	21	54	30	41
Seychelles	1	0	0	0	0
Sierra Leone	11	34	28	39	24
Somalia	98	53	61	40	72
Sudan	230	82	182	931	476
South Africa	7	0	3	0	0
Swaziland	10	7	0	12	17
Tanzania, Utd. Rep.	35	145	63	116	38
Togo	12	6	4	1	2
Uganda	47	77	87	293	80
Zambia	11	26	49	146	7
Zimbabwe	14	13	16	80	92

TABLE 25: Food aid received (continued)

	Food aid received				
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes
	1990	1995	2000	2005	2010
ASIA	3 357	4 641	4 314	2 958	1 775
Central Asia	0	432	195	239	75
Kazakhstan	0	1	0	0	0
Kyrgyzstan	0	150	60	166	50
Tajikistan	0	226	60	73	25
Turkmenistan	0	53	7	0	0
Uzbekistan	0	1	68	0	0
East Asia	530	952	2 239	1 663	232
Brunei Darussalam	0	0	0	0	0
Cambodia	25	91	62	24	17
China	78	128	90	49	0
Indonesia	56	19	429	197	0
Korea, DPR	0	544	1 264	1 180	80
Korea, Republic of	0	0	0	0	0
Lao, PDR	0	27	5	19	20
Malaysia	0	0	0	0	0
Mongolia	0	12	46	55	0
Myanmar	0	4	10	16	31
Philippines	160	55	218	121	82
Singapore	0	0	0	0	0
Thailand	148	2	1	1	0
Viet Nam	62	70	82	0	0
South Asia	2 288	1 445	937	838	1 247
Afghanistan	43	133	210	208	140
Bangladesh	1 050	586	269	293	194
Bhutan	5	6	4	2	3
India	382	398	321	102	16
Iran (Islamic Rep.)	26	13	3	2	5
Maldives	2	3	3	11	12
Nepal	8	38	53	54	53
Pakistan	462	119	20	30	763
Sri Lanka	310	148	55	136	60
West Asia	539	1 812	943	218	222
Armenia	0	476	96	22	7
Azerbaijan	0	391	28	12	0
Bahrain	0	0	0	0	0
Cyprus	0	0	0	0	0
Georgia	0	598	71	20	1
Iraq	0	102	18	36	7
Jordan	261	122	401	3	0
Kuwait	0	0	0	0	0
Lebanon	43	11	42	12	0
Occupied Palestinian Territory	26	48	57	83	90
Saudi Arabia	0	0	0	0	0
Syrian Arab Republic	38	45	35	10	35
Turkey	14	1	0	0	0
United Arab Emirates	0	0	0	0	0
Yemen	157	18	195	21	83
LATIN AMERICA & THE CARIBBEAN	2 306	939	828	632	416
Argentina	0	0	0	0	0
Bahamas	0	0	0	0	0
Barbados	0	0	0	0	0
Belize	0	0	0	0	0
Bolivia (Plur. State)	262	86	80	65	8
Brazil	29	1	0	0	0
Chile	8	0	0	0	0
Colombia	5	15	12	14	12
Costa Rica	7	3	0	0	0

TABLE 25: Food aid received (continued)

	Food aid received				
	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes	thousand tonnes
	1990	1995	2000	2005	2010
Cuba	3	6	24	7	0
Dominica	0	7	0	0	0
Dominican Republic	40	6	2	0	50
Ecuador	77	19	42	43	3
El Salvador	203	25	3	67	3
French Guiana	0	0	0	0	0
Grenada	0	0	0	0	0
Guatemala	185	70	137	69	70
Guyana	46	33	26	0	0
Haiti	108	168	164	137	266
Honduras	146	53	68	98	3
Jamaica	293	56	46	11	0
Mexico	280	46	2	0	0
Netherlands Antilles	0	0	0	0	0
Nicaragua	232	63	62	43	2
Panama	1	2	0	0	0
Paraguay	4	1	0	0	0
Peru	359	254	149	78	0
St. Kitts & Nevis	0	0	0	0	0
St. Lucia	0	3	0	0	0
St. Vincent & Grenadines	0	0	0	0	0
Suriname	0	20	0	0	0
Trinidad & Tobago	0	0	0	0	0
Uruguay	20	0	0	0	0
Venezuela (Boliv. Rep. of)	0	0	11	0	0
OCEANIA	3	0	0	0	0
Fiji	0	0	0	0	0
French Polynesia	0	0	0	0	0
New Caledonia	0	0	0	0	0
Papua New Guinea	0	0	0	0	0
Samoa	0	0	0	0	0
Solomon Islands	0	0	0	0	0
Tonga	0	0	0	0	0
Vanuatu	0	0	0	0	0
DEVELOPED REGIONS	2 250	1 058	1 883	43	0
NORTH AMERICA	0	0	0	0	0
Bermuda	0	0	0	0	0
Canada	0	0	0	0	0
United States of America	0	0	0	0	0
ASIA & OCEANIA	1	0	0	0	0
Australia	0	0	0	0	0
Israel	1	0	0	0	0
Japan	0	0	0	0	0
New Zealand	0	0	0	0	0
EUROPE	2 249	1 058	1 883	43	0
Albania	0	10	18	6	0
Belarus	0	98	0	0	0
Bosnia & Herzegovina	0	23	84	0	0
Croatia	0	14	0	0	0
European Union	2 249	40	1	0	0
Iceland	0	0	0	0	0
Macedonia, FYR	0	0	63	0	0
Montenegro	0	0	0	0	0
Norway	0	0	0	0	0
Republic of Moldova	0	244	14	10	0
Russian Federation	0	125	1 403	26	0
Serbia	0	0	0	0	0
Switzerland	0	0	0	0	0
Ukraine	0	120	0	0	0

Definitions and sources

Countries in protracted crises

P2.HUN.FAO.ESA.RHS.NPC

Page: table 31 (p. 86).

Protracted crises are those environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. The governance of these environments is usually very weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection.

Source: Trade and Markets Division

Owner: FAO

Contribution in diets by type

P2.HUN.FAO.ESS.DIET.CPF 

Page: table 16 (p. 135).

Dietary contribution refers to the amount of carbohydrates/proteins/fats expressed in kilocalories (kcal) per day, available for each individual in the total population during the reference period. Caloric content is derived by applying the appropriate food composition factors to the quantities of the commodities. Per person supplies are derived from the total amount of food available for human consumption by dividing total calories by total population actually partaking of the food supplies during the reference period. However, per person figures represent only the average supply available for the population as a whole and do not necessarily indicate what is actually consumed by individuals. The actual food consumption may be lower than the quantity shown as food availability depending on the magnitude of wastage and losses of food in the household, e.g. during storage, in preparation and cooking, as plate-waste or quantities fed to domestic animals and pets, thrown or given away.

Source: Statistics Division

Owner: FAO

Dietary Energy Supply per person

P2.HUN.FAO.ESS.DIET.DES

Page: table 16 (p. 135), chart 37 (p. 93), map 20 (p. 92).

Dietary energy supply per person refers to the amount of food, expressed in kilocalories (kcal) per day, available for each individual in the total population during the reference period. Caloric content is derived by applying the appropriate food composition factors to the quantities of the commodities. Per person supplies are derived from the total amount of food available for human consumption by dividing total calories by total population actually partaking of the food supplies during the reference period. However, per person figures represent only the average supply available for the population as a whole and do not necessarily indicate what is actually consumed by individuals. The actual food consumption may be lower than the quantity shown as food availability depending on the magnitude of wastage and losses

of food in the household, e.g. during storage, in preparation and cooking, as plate-waste or quantities fed to domestic animals and pets, thrown or given away.

Source: Statistics Division

Owner: FAO

Contribution in diets by commodity

P2.HUN.FAO.ESS.DIET.FDS 

Page: table 40, 41 (p. 95, 95).

Contribution of a food Group to total dietary energy supply.

Source: Statistics Division

Owner: FAO

Contribution in diets by commodity

P2.HUN.FAO.ESS.DIET.FDSx


Page: table 16, 17 (p. 135, 138).

Percentage contribution of a food group to total dietary energy supply.

Source: Statistics Division

Owner: FAO

Depth of hunger

P2.HUN.FAO.ESS.UNMNT.DEP 

Page: table 15 (p. 132), chart 36 (p. 91).

The depth of food deprivation indicates how much food-deprived people fall short of minimum food needs in terms of dietary energy. It is measured as the difference between the minimum dietary energy and the average dietary energy intake of the undernourished population (food-deprived). The depth of food deprivation is low when it is less than 200 kilocalories per person per day and high when it is higher than 300 kilocalories per person per day. The greater the deficit, the greater the susceptibility for health risks related to undernutrition.

Source: Statistics Division

Owner: FAO

Incidence of undernourishment

P2.HUN.FAO.ESS.UNMNT.NUM 

Page: table 15 (p. 132), map 19 (p. 91).

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity. The incidence of undernourishment is the number of people referring to those in this condition.

Source: Statistics Division

Owner: FAO

Global number of undernourished

P2.HUN.FAO.ESS.UNMNT.PNW

Page: chart 33, 35 (p. 89, 90).

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical

activity. The global incidence of undernourishment is the total number of people in the world referring to those in this condition.

Source: Statistics Division

Owner: FAO

Percentage of population undernourished

P2.HUN.FAO.ESS.UNMNT.PREV 

Page: table 15 (p. 132), map 18 (p. 88).

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity. The percentage of population undernourished is the total number of people in each country referring to those in this condition divided by the population of that country.

Source: Statistics Division

Owner: FAO

Regional percentage of undernourished

P2.HUN.FAO.ESS.UNMNT.PREVR

Page: chart 34 (p. 90).

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity. The regional percentage of population undernourished is the total number of people in each region referring to those in this condition divided by the population of that region.

Source: Statistics Division

Owner: FAO

Global affordability of food

P2.HUN.FAO.FPV.AFD


Page: chart 54 (p. 106).

FAO Food Price Index relative to GDP, showing how much food prices have risen relative to income from the base period 2002-04. Higher (lower) index scores show greater (less) affordability.

Source: Statistics Division

Owner: FAO

Food price inflation

P2.HUN.FAO.FPV.FCPI 

Page: map 25 (p. 104).

Annual change in the ILO food price indices. The price data for the different items included in the computation of the index are normally weighted in order to take into account the relative importance of each item with respect to total consumption expenditure. In most countries, the indices are computed in a derived form such as weighted arithmetic averages of price relatives for a selected number of representative items between the period under consideration and the base period, using

one or other forms of Laspeyres' formula. The number of items and the weights used to compute the index are given according to expenditure group. The term "item" is used here to mean the smallest grouping of goods and services for which a specific weight is given. The source(s) and the reference period of the weights used for the index, e.g. a household expenditure survey, national accounts, etc. If the reference period for the weights differs from the base period of the index, the adjustments made to the weights to take account of the price changes between the two periods are described. See <http://laborsta.ilo.org> for more information.

Source: LABORSTA

Owner: ILO

International food price volatility by food group

P2.HUN.FAO.FPV.FPI

Page: chart 53 (p. 106).

The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices (representing 55 quotations), weighted with the average export shares of each of the groups for 2002-2004. See <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/> for more information on sub-index construction.

Source: Statistics Division

Owner: FAO

International food price volatility by food group

P2.HUN.FAO.FPV.FPV

Page: chart 55, 56 (p. 107, 107).

Annualized historical volatility of the FAO Food Price Index.

Source: Statistics Division

Owner: FAO

Food price volatility (annualized historical volatility)

P2.HUN.FAO.FPV.FPVn 

Page: map 26 (p. 108).

Annualized historical volatility of the ILO food price indices.

Source: Statistics Division

Owner: FAO

FAO Global Consumption price volatility

P2.HUN.FAO.FPV.GCI

Page: chart 52, 57 (p. 105, 109).

The FAO Global Food Consumption Price Index tracks changes in the cost of the global food basket as portrayed by the latest FAO world food balance sheet. Representative international prices for each of the commodities or commodity groups appearing in the balance sheet are weighted by their contribution to total caloric intake.

Source: Statistics Division

Owner: FAO

Dietary diversity in selected LIFDCsP2.HUN.FAO.FV.DIET.DIV *Page:* chart 39 (p. 94).


The Herfindahl index, H is calculated as $H = \sum_{i=1}^N S_i^2$, where S_i is the consumption share of the starchy staple i in diets and N is the number of staples consumed. For a single staple consumed, the index would equate to one and declines as the staple base becomes more diversified.

Source: Statistics Division*Owner:* FAO**Starchy root consumption and DES**P2.HUN.FAO.FV.DIET.RTDES *Page:* chart 38 (p. 94).


Caloric equivalent of starchy roots available for consumption as a ratio of total dietary energy supply.

Source: Statistics Division*Owner:* FAO**Availability of dietary iron**P2.HUN.FAO.MCN.IRON *Page:* table 18 (p. 141), chart 44 (p. 98).

The dietary availability of iron is calculated by converting the amount of food available for human consumption as estimated by the FAO Food Balance Sheets in equivalent of iron derived from animal and vegetal products. However the actual food consumption may be lower than the quantity shown as food availability depending on the magnitude of wastage and losses of food in the household, e.g. during storage, in preparation and cooking, as plate-waste or quantities fed to domestic animals and pets, thrown or given away.

Source: Statistics Division*Owner:* FAO**Food + energy import bills (% GDP)**P2.HUN.FAO.TFS.FDFL *Page:* table 20 (p. 147).

The annual value of food imported under SITC sections 0 + 22+ 4 plus fuels under SITC section 3, expressed as a ratio of GDP.

Source: Statistics Division (FAOSTAT) and UNCTADSTAT*Owner:* FAO, UNCTAD**Food import bills**P2.HUN.FAO.TFS.FIB *Page:* table 20 (p. 147), chart 49, 50, 51 (p. 103, 103, 103).

The annual value of food imported under SITC sections 0 + 22+ 4 expressed in current US\$.

Source: Statistics Division (FAOSTAT) and UNCTADSTAT*Owner:* FAO, UNCTAD**Food + energy import bills per capita**P2.HUN.FAO.TFS.FUEL *Page:* chart 50, 51 (p. 103, 103).

The annual value of food imported under SITC sections 0 + 22+ 4 plus fuels under SITC section 3, expressed as a ratio of population.

Source: Statistics Division (FAOSTAT) and UNCTADSTAT*Owner:* FAO, UNCTAD**Index of variability of food production**P2.HUN.FAO.TFS.QPVAR *Page:* chart 46 (p. 102).

Rolling ten-year window of the coefficient of variation of per capita production index.

Source: Statistics Division*Owner:* FAO**Food self-sufficiency (calories)**P2.HUN.FAO.TFS.SSCAL *Page:* table 19 (p. 144), chart 45 (p. 101), map 24 (p. 100).

The self-sufficiency ratio (SSR) is defined as: $SSR = \text{production} \times 100 / (\text{production} + \text{imports} - \text{exports})$. The SSR can be calculated for individual commodities, groups of commodities of similar nutritional values and, after appropriate conversion of the commodity equations, also for the aggregate of all commodities. In the context of food security, the SSR is often taken to indicate the extent to which a country relies on its own production resources, i.e. the higher the ratio the greater the self-sufficiency. While the SSR can be the appropriate tool when assessing the supply situation for individual commodities, a certain degree of caution should be observed when looking at the overall food situation. In the case, however, where a large part of a country's production of one commodity, e.g. other cereals, is exported, the SSR may be very high but the country may still have to rely heavily on imports of food commodities to feed the population. The self-sufficiency rate (as defined above) cannot be the complement to 100 of the import dependency rate, or vice-versa.

Source: Statistics Division*Owner:* FAO**Months of cereal self-provisioning capacity**

P2.HUN.FAO.TFS.STU

Page: chart 47, 48 (p. 102, 103).

Stocks-to-utilization ratios for cereals (wheat, rice and coarse grains), where stocks refer to the carry-over of the preceding national crop season. The ratio is then multiplied by 12 to calculate the number of months of self-provisioning capacity in a given year.

Source: Trade and Markets Division*Owner:* FAO

Persons affected by natural disastersP2.HUN.ODFA.EMDAT.RHS.PPND *Page:* table 14 (p. 129), chart 29 (p. 85), map 16 (p. 84).

People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance. Appearance of a significant number of cases of an infectious disease introduced in a region or a population that is usually free from that disease. See www.emdat.net (Université catholique de Louvain, Brussels, Belgium).

Source: International Disaster Database: EM-DAT*Owner:* OFDA and CRED**Total affected by natural disasters**


P2.HUN.ODFA.EMDAT.RHS.PPNDT

Page: chart 30 (p. 86).

Sum of (i) injured people suffering from physical injuries, trauma or an illness requiring medical treatment as a direct result of a disaster; (ii) homeless people needing immediate assistance for shelter; and (iii) affected people requiring immediate assistance during a period of emergency; it can also include displaced or evacuated people. See www.emdat.net (Université catholique de Louvain, Brussels, Belgium).

Source: International Disaster Database: EM-DAT*Owner:* OFDA and CRED**Multidimensional Poverty Index**P2.HUN.UNDP.HDR.MPI *Page:* table 21 (p. 150).

An international measure of poverty for 109 developing countries, the MPI complements income-based poverty measures by reflecting the multiple deprivations that people face at the same time. The MPI identifies deprivations across health, education and living standards, and shows the number of people who are multidimensionally poor and the deprivations that they face at the household level.

Source: Alkire, S. Roche, JM. Santos, ME. and Seth, S (November 2011) ophi.qeh.ox.ac.uk*Owner:* OPHI**Gender Inequality Index**P2.HUN.UNDP.HDR.POV.GEI *Page:* table 22 (p. 153), map 29 (p. 113).

The Gender Inequality Index is a composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment and the labour market. It varies between zero (when women and men fare equally) and one (when men or women fare poorly compared to the other in all dimensions). The health dimension is measured by two indicators: maternal mortality ratio and the adolescent fertility rate. The empowerment dimension is also measured by two indicators: the share of parliamentary seats held by each sex and by secondary and higher education attainment levels. The labour dimension is measured by


women's participation in the work force. The Gender Inequality Index is designed to reveal the extent to which national human development achievements are eroded by gender inequality, and to provide empirical foundations for policy analysis and advocacy efforts.

Source: Human Development Report 2010*Owner:* UNDP**Human Development Index**P2.HUN.UNDP.HDR.POV.HDI *Page:* table 22 (p. 153).

The HDI represents a national average of human development achievements in the three basic dimensions making up the HDI: health, education and income. Like all averages, it conceals disparities in human development across the population within the same country. Two countries with different distributions of achievements can have the same average HDI value. The IHDI takes into account not only the average achievements of a country on health, education and income, but also how those achievements are distributed among its citizens by "discounting" each dimension's average value according to its level of inequality.

Source: Human Development Report 2010*Owner:* UNDP**Human Development Index (inequality adjusted)**P2.HUN.UNDP.HDR.POV.HDIi *Page:* table 22 (p. 153), chart 59 (p. 112).

The Human Development Index (HDI) is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. The Inequality-adjusted Human Development Index (IHDI) adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. The IHDI accounts for inequalities in HDI dimensions by "discounting" each dimension's average value according to its level of inequality. The IHDI equals the HDI when there is no inequality across people but is less than the HDI as inequality rises. In this sense, the IHDI is the actual level of human development (accounting for this inequality), while the HDI can be viewed as an index of "potential" human development (or the maximum level of HDI) that could be achieved if there was no inequality. The "loss" in potential human development due to inequality is given by the difference between the HDI and the IHDI and can be expressed as a percentage.

Source: Human Development Report 2010*Owner:* UNDP**Population of concern**P2.HUN.UNHCR.GT.RHS.TPC *Page:* table 13 (p. 126), map 17 (p. 87).

Refugees are individuals recognized under the 1951 Convention relating to the Status of Refugees; and also people in a refugee-like situation, such as those 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. 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. Others include Asylum-seekers (persons who have applied for asylum or refugee status, but who have not yet received a final decision on their application), Returned IDPs and refugees, Stateless Persons (individuals not considered as nationals by any State under relevant national laws) and other groups of concern to whom UNHCR has extended its protection and/or assistance services, based on humanitarian or other special grounds. .

Source: Statistical Online Population Database

Owner: UNHCR

Total population of concern

P2.HUN.UNHCR.GT.RHS.TPCT

Page: chart 32 (p. 87).

Total population of concern is the sum of various groups of people including refugees, asylum-seekers, internally displaced persons (IDPs) protected/assisted by UNHCR, stateless persons and returnees (returned refugees and IDPs).

Source: Statistical Online Population Database

Owner: UNHCR

Average governance

P2.HUN.WBK.POV.GOV 

Page: table 23 (p. 156), chart 60 (p. 115), map 30 (p. 114).

The Worldwide Governance Indicators project constructs aggregate indicators of six broad dimensions of governance: (i) Voice and Accountability; (ii) Political Stability and Absence of Violence/Terrorism; (iii) Government Effectiveness; (iv) Regulatory Quality; (v) Rule of Law; (vi) Control of Corruption. The six aggregate indicators are based on 30 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide. Details on the underlying data sources, the aggregation method, and the interpretation of the indicators, can be found in the WGI methodology paper: Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi (2010). "The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues". World Bank Policy Research Working Paper No. 5430 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130. .

Source: World Bank

Owner: Worldwide Governance Indicators (WGI) project

Ratio of girls-to-boys out of primary school

P2.HUN.WBK.WDI.EDU.COSR 

Page: table 24 (p. 159).

Children out of school are the number of primary-school-age children not enrolled in primary or secondary school.

Source: World Bank (WDI)

Owner: UNESCO

Public spending on education, total (% of GDP)

P2.HUN.WBK.WDI.EDU.EXPP 

Page: table 24 (p. 159).

Public expenditure on education consists of current and capital public expenditure on education includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other private entities).

Source: World Bank (WDI)

Owner: UNESCO

Expenditure per student

P2.HUN.WBK.WDI.EDU.EXPS 

Page: table 24 (p. 159).

Public expenditure per student is the public current spending on education divided by the total number of students by level, as a percentage of GDP per capita. Public expenditure (current and capital) includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other private entities).

Source: World Bank (WDI)

Owner: UNESCO

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

P2.HUN.WBK.WDI.EDU.FILT 

Page: table 24 (p. 159), map 31 (p. 116).

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: UNESCO

Ratio of girls to boys in primary and secondary education (%)


P2.HUN.WBK.WDI.EDU.GEN 

Page: table 24 (p. 159), chart 61 (p. 117).

Ratio of girls to boys in primary and secondary education is the ratio of the female to male gross enrolment rates in primary and secondary school.

Source: World Bank (WDI)

Owner: UNESCO


Health expenditure per capita (current US\$)P2.HUN.WBK.WDI.HAE.HE.PCP 

Page: table 24 (p. 159), map 32 (p. 118).

Total health expenditure is the sum of public and private health expenditures as a ratio of total population. 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. Data are in current US dollars.

Source: World Bank (WDI)

Owner: WHO

Health expenditure, total (% of GDP)P2.HUN.WBK.WDI.HAE.HE.TOT 

Page: table 24 (p. 159), chart 62 (p. 119).

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: WHO

Prevalence of HIV, total (% of population ages 15-49)P2.HUN.WBK.WDI.HAE.HIV.PREV 

Page: table 24 (p. 159).

Prevalence of HIV refers to the percentage of people ages 15-49 who are infected with HIV.

Source: World Bank (WDI)

Owner: UNAIDS and WHO

Improved sanitation facilities (% of population with access)P2.HUN.WBK.WDI.HAE.SAN.IMPS 

Page: table 24 (p. 159), chart 63 (p. 121).

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: World Bank (WDI)

Owner: WHO and UNCF

Improved water source, rural (% of rural population with access)P2.HUN.WBK.WDI.HAE.WAT.IMPRU 

Page: table 24 (p. 159), map 33 (p. 120).

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 litres a person a day from a source within one kilometre of the dwelling.

Source: World Bank (WDI)

Owner: WHO and UNCF

Improved water source, urban (% of urban population with access)P2.HUN.WBK.WDI.HAE.WAT.IMPWU 

Page: table 24 (p. 159).

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 litres a person a day from a source within one kilometre of the dwelling.

Source: World Bank (WDI)

Owner: WHO and UNCF

Poverty headcount ratio at \$1.25 a day (PPP) (% of population)

P2.HUN.WBK.WDI.POV.AGG

Page: chart 58 (p. 111).

Data are from PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank. See <http://iresearch.worldbank.org/PovcalNet/povDuplic.html>.

Source: PovcalNet

Owner: World Bank

Gini-index of income distributionP2.HUN.WBK.WDI.POV.GINI 

Page: table 22 (p. 153), map 28 (p. 113).

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

Source: World Bank (WDI)

Owner: World Bank

Poverty headcount ratio at \$1.25 a day (PPP) (% of population)P2.HUN.WBK.WDI.POV.H125 

Page: table 21 (p. 150).

Population below US\$1.25 a day is the percentage of the population living on less than US\$1.25 a day at 2005

international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

Source: World Bank (WDI)

Owner: World Bank

Income share held by highest 20%

P2.HUN.WBK.WDI.POV.H20 

Page: table 22 (p. 153).

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

Poverty headcount ratio at \$2 a day (PPP) (% of population)

P2.HUN.WBK.WDI.POV.H200 

Page: table 21 (p. 150).

Population below US\$2 a day is the percentage of the population living on less than US\$2.00 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

Source: World Bank (WDI)

Owner: World Bank

Poverty headcount ratio at national poverty line (% of population)

P2.HUN.WBK.WDI.POV.HNPL 

Page: table 21 (p. 150).

National poverty rate is the percentage of the population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys.

Source: World Bank (WDI)

Owner: World Bank

Poverty headcount ratio at rural poverty line (% of rural population)

P2.HUN.WBK.WDI.POV.HRPL 

Page: table 21 (p. 150).

Rural poverty rate is the percentage of the rural population living below the national rural poverty line.

Source: World Bank (WDI)

Owner: World Bank

Income share held by lowest 20%

P2.HUN.WBK.WDI.POV.L20 

Page: table 22 (p. 153).

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

Poverty gap at \$1.25 a day (PPP) (%)

P2.HUN.WBK.WDI.POV.P125 


Page: table 21 (p. 150), map 27 (p. 110).

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

Poverty gap at \$2 a day (PPP) (%)

P2.HUN.WBK.WDI.POV.P200 

Page: table 21 (p. 150).

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

Poverty gap at national poverty line (%)

P2.HUN.WBK.WDI.POV.PNPL 


Page: table 21 (p. 150).

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: World Bank

Poverty gap at rural poverty line (%)

P2.HUN.WBK.WDI.POV.PRPL 

Page: table 21 (p. 150).

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: World Bank

Food aid received

P2.HUN.WFP.FAIS.FDAID 

Page: table 25 (p. 162), chart 64 (p. 123), map 34 (p. 122).


Quantity of food aid that reaches the recipient country during a given period. Quantities exported in Grain Equivalent. The latter is a unit of measurement used as alternative to Actual Ton for cereal-derived products. To convert a product into grain equivalent a commodity specific conversion factor is used. For example if the factor to convert wheat flour into wheat is 1.37, a tonne of wheat flour corresponds to 0.730 tons of wheat (1/1.37).

Source: Food Aid Information System

Owner: WFP

Percentage of adults with low body mass index (BMI)P2.HUN.WHO.GHO.ADLT.LBMI *Page:* table 18 (p. 141).

The indicator of weight adequacy in relation to height of older children, adolescents and adults. It is calculated as weight (kilograms) divided by height (metres), squared. The acceptable range for adults is 18.5 to 24.9, and for children it varies with age.

Source: Global Health Observatory*Owner:* WHO**Percentage of female adults with low body mass index (BMI)**P2.HUN.WHO.GHO.ADLT.LBMIF *Page:* table 18 (p. 141), map 22 (p. 99).

The indicator of weight adequacy in relation to height of older female children, adolescents and adults. It is calculated as weight (kilograms) divided by height (metres), squared. The acceptable range for adults is 18.5 to 24.9, and for children it varies with age.

Source: Global Health Observatory*Owner:* WHO**Percentage of adults who are obese**P2.HUN.WHO.GHO.ADLT.OBS *Page:* table 18 (p. 141).

Percentage of male and female defined population with a body mass index (BMI) of 25 kg/m² or higher.

Source: Global Health Observatory*Owner:* WHO**Percentage of adults who are obese**P2.HUN.WHO.GHO.ADLT.OBSx *Page:* map 23 (p. 99).

Percentage of adult defined population with a body mass index (BMI) of 25 kg/m² or higher.

Source: Global Health Observatory*Owner:* WHO**Percentage of children under 5 who are stunted**P2.HUN.WHO.GHO.CHLD.STNT *Page:* table 18 (p. 141), chart 43 (p. 98).

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: Global Health Observatory*Owner:* WHO**Percentage of children under 5 who are underweight**P2.HUN.WHO.GHO.CHLD.UW *Page:* table 18 (p. 141), chart 42 (p. 97), map 21 (p. 96).

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: Global Health Observatory*Owner:* WHO**Percentage of children under 5 who are wasted**P2.HUN.WHO.GHO.CHLD.WSTD *Page:* table 18 (p. 141), chart 43 (p. 98).

Percentage of wasting (weight-for-height less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years.

Source: Global Health Observatory*Owner:* WHO**Percentage of newborns with low birth weight**P2.HUN.WHO.GHO.NEW.LWB *Page:* table 18 (p. 141).

Low-birthweight babies are newborns weighing less than 2,500 grams, with the measurement taken within the first hours of life, before significant postnatal weight loss has occurred.

Source: Global Health Observatory*Owner:* WHO

PART

3

Feeding the world

Introduction

The world's population is set to grow considerably over the coming decades, despite an expected slowdown in the pace of overall growth. Some of the countries and regions where population growth is expected to be higher – many in sub-Saharan Africa – will likely undergo major shifts in dietary composition, involving increased consumption of livestock products, dietary fat and sugar. A similar pattern was observed over the last ten or twenty years in many emerging economies of the Middle East, North Africa, Latin America and East Asia. Per capita consumption in these regions has approached 3000 kcal per person per day. Sub-Saharan Africa and South Asia, by contrast, are still well below the 2500 kcal per person per day threshold. In South Asia, part of the reason may stem from cultural factors that lead to low meat consumption. At the other extreme, Latin America consumes high per capita amounts of meat, following the traditional wide availability of livestock commodities.

The expected evolution of consumption may make malnutrition more prominent than it is today, especially in developing countries. Diets are expected to include a higher intake of fats (especially of saturated fat), sugar and salt. At the same time, urbanization and the reduction of primary activities will likely be associated with more sedentary lifestyles. Underway in several emerging economies already, these two phenomena will likely combine to increase diet-related diseases and their associated social costs.

Yet, food is not available for all. Beyond per capita consumption, little less than a billion people in 2010 were estimated to be food-insecure. The highest number of undernourished was found in Asia, while the highest prevalence is in sub-Saharan Africa, where it was estimated at 28 percent.

Given the expected evolution of consumption, world food production will need to increase considerably over the coming decades. Recent FAO estimates indicate that in order to meet the projected demand of year 2050, global agricultural production must grow 60 percent above the level of 2005-07. But there are signs for optimism. Over the last five decades (between 1961-63 and 2007-09) production has increased by a massive 170 percent.

Most of the growth in world crop production over the past 50 years originated from increases in yield and higher cropping intensity. This pattern is expected to continue, given the limited opportunities for expanding agricultural land. At the global level, the rate of yield growth for most crops has been decelerating in the past few decades, while still increasing in absolute terms.

To a large extent, yield gains originate from improved cropping techniques, fertilization and irrigation. Much can be achieved by narrowing the gap between average farm yields and the yields obtained in experimental fields, and by reducing wastage and post-harvest losses. China's major rice-producing provinces, for instance, have reached a point where the average yield is about 80 percent of that obtained in experimental fields. Evidence suggests that a wide yield gap exists in maize cultivated in sub-Saharan Africa.

The intensification of production on land, however, is likely to carry significant negative externalities. This is seen in the case of the large increase in mineral fertilization. Substantial improvements in efficiency and productivity of land, water and input use in general are required. Technologies are also available to reduce the environmental pressure and carbon emissions from agriculture.

Developing and transferring technology alone will not close yield gaps and reduce wastage and post harvest losses. It requires an enabling and conducive investment environment. Farmers are likely to adopt technologies only if there are sound incentives to do so. In turn, this calls for well-functioning input and output markets, better infrastructure, as well as better finance and risk management tools. The same applies to the reduction of wastage and post-harvest losses, which require better-functioning supply chains.

Key Resources

The State of World Fisheries and Aquaculture (SOFIA)

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.

SOFIA 2010 reveals that the per-capita supply of fish as human food reached a new all-time high in 2008. It also highlights the growing need to focus on a variety of aspects of policy and governance, especially in relation to employment and poverty alleviation.

Publication cycle: Biennial

Webpage: <http://www.fao.org/docrep/013/i1820e/i1820e00.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: <http://www.fao.org/giews/english/fo/index.htm>



Aggregate agriculture

The growth of global agriculture's productive potential has so far been more than sufficient to exceed population growth, resulting in a steady, albeit slow, increase in average per capita food availability. For the world as a whole, per capita food availability has risen from about 2220 kcal/person/day in the early 1960s to 2790 kcal/person/day in 2006-08, while developing countries even recorded a leap from 1850 kcal/person/day to over 2640 kcal/person/day. This growth in food availability in conjunction with improved access to food helped reduce the percentage of chronically undernourished people in developing countries from 34 percent in the mid 1970s to just 15 percent three decades later.

More recently, the progress in the reduction in the prevalence, i.e. the percentage share of undernourished people has come to a halt. High and volatile food prices and a slowdown in global economic growth weighed on the ability of the poor to purchase enough food. Continuous, although slowing, population growth in developing countries and the lack of progress in reducing the prevalence even resulted in an increase in the absolute number of chronically hungry people. From the perspective of aggregate global food demand, this slowdown caused a further increase in the gap between potential and effective market demand. This gap is likely to remain a feature of global food and agriculture for the foreseeable future given the slow-down in global population growth and the growing saturation of food demand in developed and emerging countries. However, while growth in aggregate food demand is expected to slow, demand from other sources is likely to expand. In the last decade, the bio-based economy – in which the growth of biofuels has been prominent – has presented considerable scope for relaxing an environment constrained by the slow-down in food demand.

This additional demand presents new opportunities and new challenges at the same time. It offers considerable growth potential for global agriculture and, importantly, new options to raise farm incomes; but it also lifts prices for the poor and presents an additional burden on the world's natural resource base. Where growing conditions are difficult and the resource base is already limited, any additional demand from the non-food sector can become an outright threat to the resource base in general and local land, water and biodiversity reserves in particular.

Map 35:



Source: FAO, Statistics Division

Metalink: [P3.FEED.FAO.ESS.FD.QP, p. 272](#) 

- The world produced over 13 quadrillion calories in 2010
- ... or 5359 kcal on a per capita daily basis
- Much of Africa lags behind other regions in its present capacity to produce food

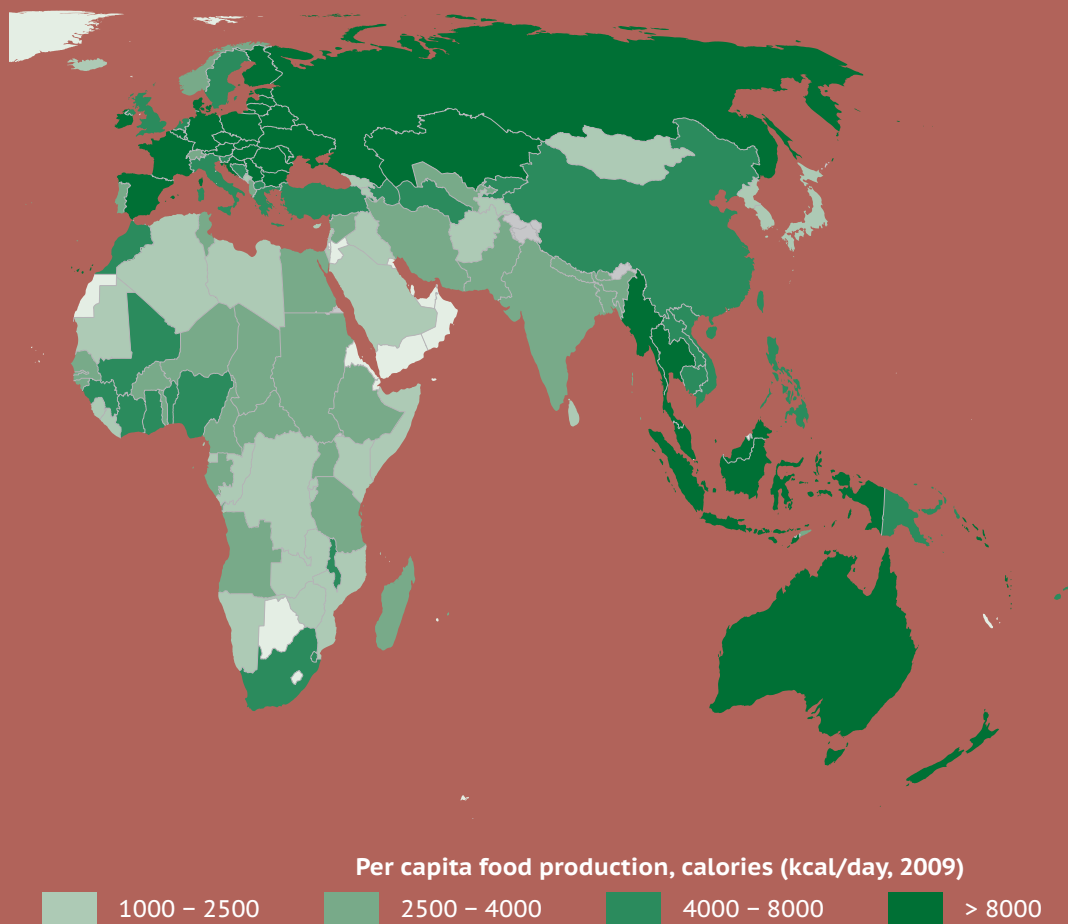
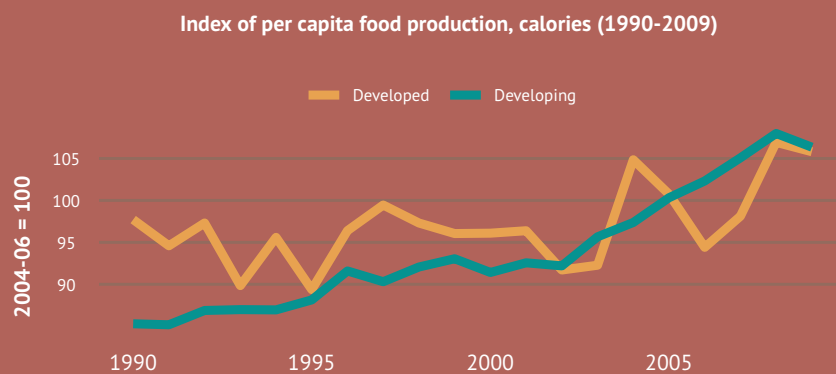


Chart 65: On a calorie basis, food productivity is fast increasing in developing countries



Source: FAO, Statistics Division

Metalink: [P3.FEED.FAO.ESS.FD.QP](#), p. 272



The capacity for further growth in the **productive base** of agricultural is often contested. In drawing comparisons with the past, questions are often raised about whether slower growth will be sufficient to deliver the required additional output. There are indeed concerns. For instance, a large extent of the suitable land not yet in use is concentrated in several countries in Latin America and the Caribbean and sub-Saharan Africa, and not necessarily where it is most needed. Moreover, much of this land is suitable for growing only a few crops, not necessarily those for which there is highest demand. In addition, a great portion of the land not yet in use suffers from constraints (e.g. agro-ecological, climatic unsuitability and a lack of infrastructure) that cannot be overcome easily or economically.

The availability of **freshwater resources** shows a very similar picture to that of land availability. Sufficient resources are unevenly distributed at the global level, and an increasing number of countries or parts of countries are reaching alarming levels of water scarcity, especially in the Near East, North Africa and in South Asia. A mitigating factor could be increasing water use efficiency, such as providing the right incentives to use less water.

Fears that **yields** are reaching a plateau do not seem warranted. The potential to increase crop yields (even with existing technology) is considerable. Provided the appropriate socio-economic incentives are in place, there are still bridgeable yield gaps – the differences between agro-ecologically attainable and actual yields – to be exploited.

The required increases in yield, land and irrigation expansion will not come about spontaneously, such as through market forces, but will require considerable public intervention and investment, particularly in agricultural research and in preventing and mitigating environmental damage.

Further reading

- Bruinsma (2011)
- FAO Global Perspectives Unit (www.fao.org/economic/esa/esag/)

Map 36:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.GPCPIN.FD.PCP](#), p. 272 

- Over the past two decades world food production increased by 18 percent
- Encouragingly, some of the highest growth regions being food-insecure, required such growth
- Yet, many countries increasingly rely on food imports to satisfy their food needs

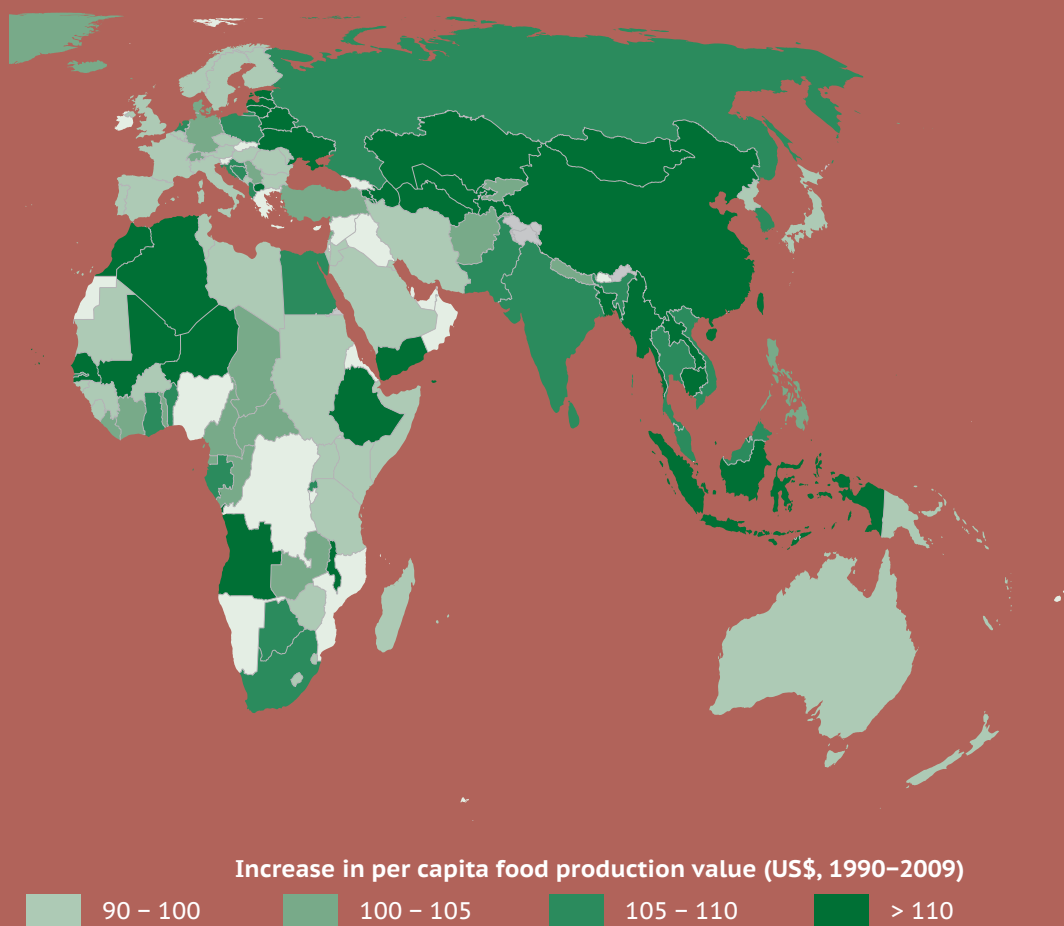
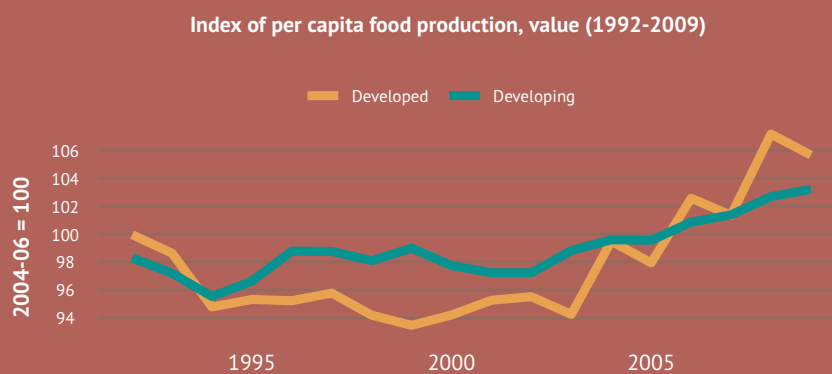


Chart 66: On a value basis, food productivity still on the rise in developing countries



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.GPIN.FD](#), p. 272



Sources of growth in crop production

In the past 50 years or so, global crop production has expanded threefold. Crop production growth goes hand in hand with crop yield increase and/or expansion in the physical area (arable land) allocated to crops, which – together with increases in cropping intensities, such as higher multiple cropping and/or shortening of fallow periods – leads to an expansion in the area harvested.

Over the past five decades, global **arable land** increased by 67 million hectares, which is the result of two opposite trends: an increase of 107 million hectares in developing countries and a decline of 40 million hectares in developed countries. The arable land area in the latter group peaked in the mid-1980s and has been falling ever since at an accelerating rate. Hence, growth in yields and more intensive use of land accounts for all of the growth in crop output in developed countries.

In fact, much of the increase in world crop production over this period is attributable to **yield improvements**, followed by an expansion in arable land, while a small part is due to **cropping intensity**. These trends, however, are not uniform across regions. For instance, yield-led increases contributed to only one-third of the growth in sub-Saharan Africa crop production.

For cereals, which occupy over half of the harvested area in the world, the slowdown in yield growth has been pronounced: it is down from 3 percent per annum in the 1960s to just over half that amount in the 1990s, before rising to 1.8 percent in last decade. For other staples, such as pulses and root crops, growth in global yields has been much smaller – well under 1 percent per annum over the previous five decades. By contrast, yield growth in oil crops has been particularly dynamic, standing at around 3 percent per annum, which is the highest of all crops during that period.

By saving land, rising crop yields thus diminish pressure on the environment, especially deforestation. To take cereals as an example, if yield growth in the preceding 50 years did not materialize, an estimated one billion additional hectares would have been needed to meet current demand.

The major forces shaping longer-term location and extent of crop production include land scarcity, access to technology and the combination of agro-ecological conditions with availability of irrigation that permits commercially viable production. On the one hand, for instance, the bulk of growth in wheat and rice production in developing countries in the land-scarce regions of Asia and the Near East/North Africa is being met by gains in yield. On the other hand, expansion of harvested land is behind production growth of maize in sub-Saharan Africa and in Latin America and the Caribbean.

Map 37:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.GPIN.CRPS](#), p. 272 

- World crop production has grown at average annual rate of 1 percent over the last 20 years
- Sources of growth include yield improvements, increased cropping intensity and an expansion of arable land
- The pace of growth in crop production is diverse, but the Americas and Southeast Asia have experienced higher rates

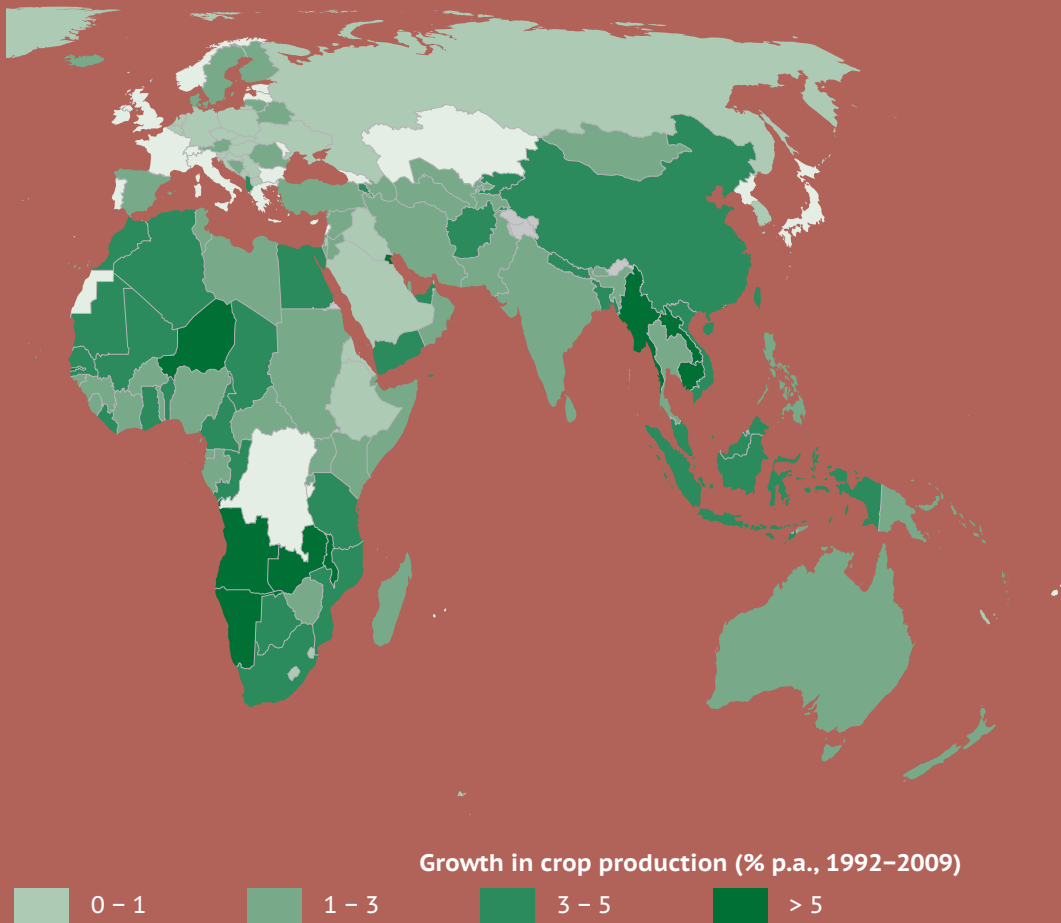
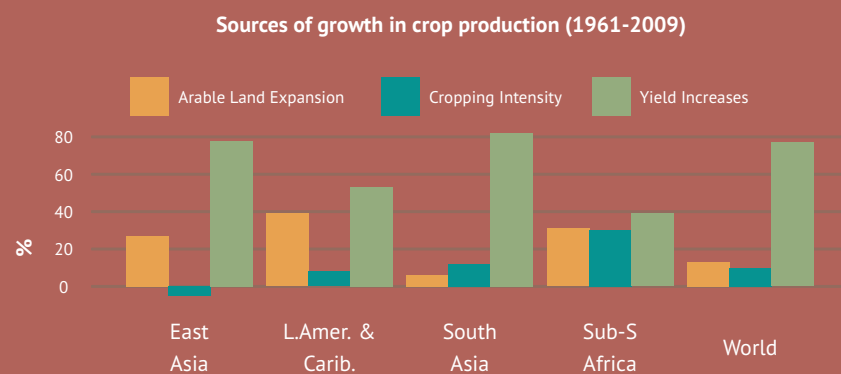


Chart 67: Yield increases have been instrumental in raising crop production



Source: FAO, Statistics Division

Metalink: P3.FEED.FAO.ESS.CRPS.GSRCE, p. 271

Generally, **agricultural land expansion** can be observed in countries that combine growing needs for food and employment with limited access to technology that could increase intensification of cultivation on land already in agricultural use, such as in many parts of sub-Saharan Africa. Land expansion also occurs in countries with both ample land resources and potential for crops facing fast demand growth, particularly for exports and/or for non-food uses, e.g. sugar cane and soybeans in South America and oil-palm in South-East Asia. Indeed, oilcrops have been responsible for a good part of the increases in total cultivated land in the developing countries and the world as a whole, albeit at the expense of forest area.

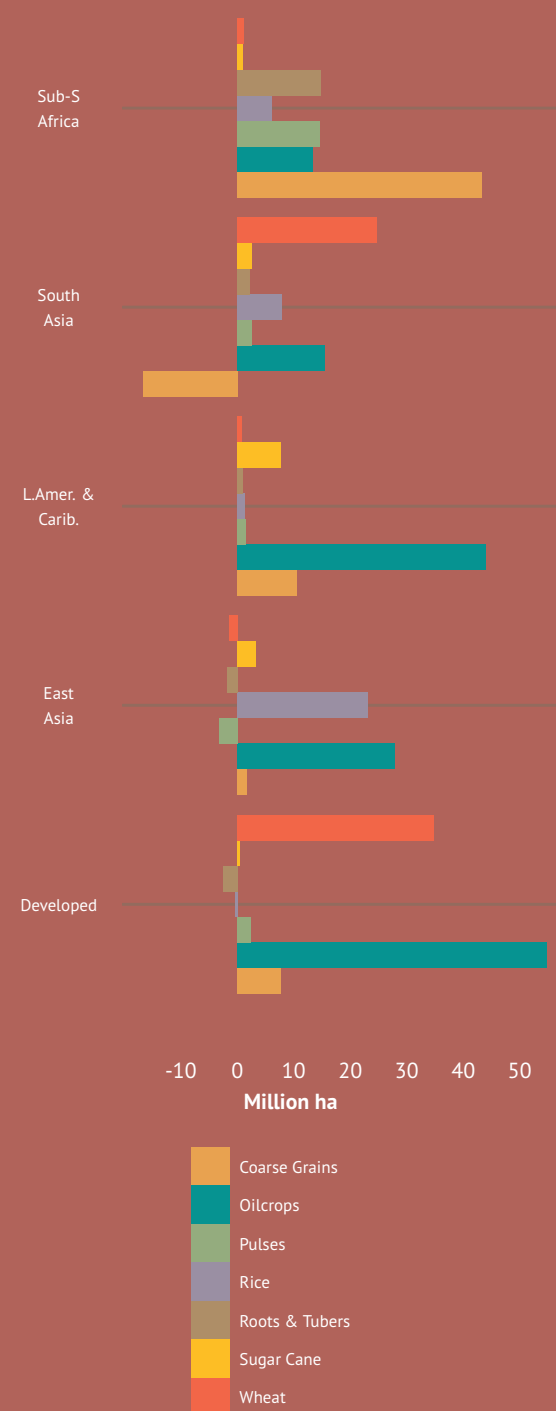
The broad lesson of experience shows that if scarcities develop and prices rise, as has been the case in the past few years, farmers respond quickly by adopting technology and increasing production, as long as they live in an environment of not-too-difficult access to improved technology, transport infrastructure and supportive policies. In countries with land expansion possibilities, the quickest response comes from increasing land under cultivation, including shifting land among crops towards the most profitable ones. However, even if there is sufficient scope in regional agriculture to support further increases in production, this is small consolation to food-insecure people who depend on what they themselves produce for nutrition. Such people often live in semi-arid agricultural environments where the scope for increasing production can be very limited or non-existent. The fact that the world as a whole may have ample potential to produce more food is of little help to them.

Further reading

- FAO World agriculture: towards 2030/2050 Interim report: Prospects for food, nutrition, agriculture and major commodity groups (www.fao.org/fileadmin/user_upload/esag/docs/Interim_report_AT2050web.pdf)
- FAO Food Outlook www.fao.org/giews/english/fo/index.htm)

Chart 68: Cropland in sub-Saharan Africa has undergone significant expansion compensating for low yields

Expansion of area cultivated by crop by region (1961-2010)



Source: FAO, Statistics Division

Metalink: [P3.FEED.FAO.ESS.WT.AH](https://www.fao.org/3/FEED/FAO.ESS.WT.AH.pdf), p. 278



Trends in the crop sector

Cereals are overwhelmingly the major source of food supplies for direct human consumption. Of the 2.4 billion tonnes of cereals currently produced, roughly 1.1 billion tonnes are destined for food use, around 800 million tonnes (35 percent of world consumption) are used as animal feed, and the remaining 500 million tonnes are diverted to industrial usage, seed or are wasted. Thus, events in the cereal sector have critical implications for world food supplies.

The growth rate of world cereal production fell to 1 percent per annum in the 1990s, down from 1.6 percent in the 1980s and almost 3 percent in the 1970s. Over 2000-03, growth had dwindled to a fifth of a percentage point per annum, but since that time the rate of output has dramatically increased to the realm of 2.5 percent.

Transient factors, sometimes taking several years to dissipate, have temporarily altered the underlying trajectory of global growth in the cereal sector. These factors can work either direction. For instance, whereas in the 1960s, growth was being propelled by the Green Revolution, in the 1990s demand fell in the transition economies, where such demand had previously been kept artificially high for decades through subsidies on food consumption. Demand also grew more slowly in the second half of the 1990s, as the East Asian economies that were hit by economic crisis; while weather problems, low prices and an abundance of stocks depressed growth at the beginning of the following decade. In recent years, global demand growth is expected to have slowed owing to economic downturns in many major consuming countries.

Overall, however, a set of longer term influences, are limiting demand growth, especially in the food sector. These include slowing population growth, a lower scope for expanded dietary intake in the populations of wealthy countries and entrenched poverty. Such factors prevent hundreds of millions of people from effectively expressing their food needs.

Map 38:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.RI.QP](#), p. 276 

- 672 million tonnes of rice (paddy) were harvested in 2010
- Rice is the principle staple in Asia, where production is rising in the South but falling in the East
- Rice is also a highly sought after staple in many parts of sub-Saharan Africa

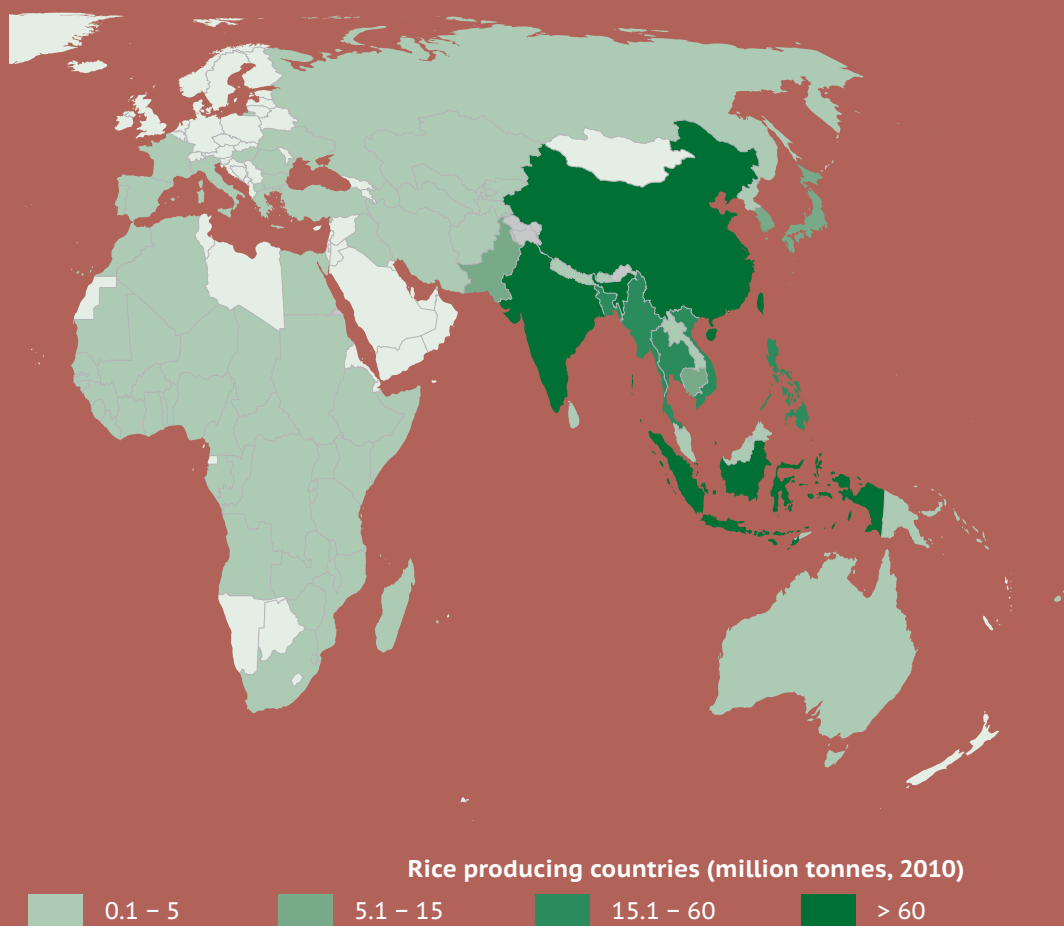
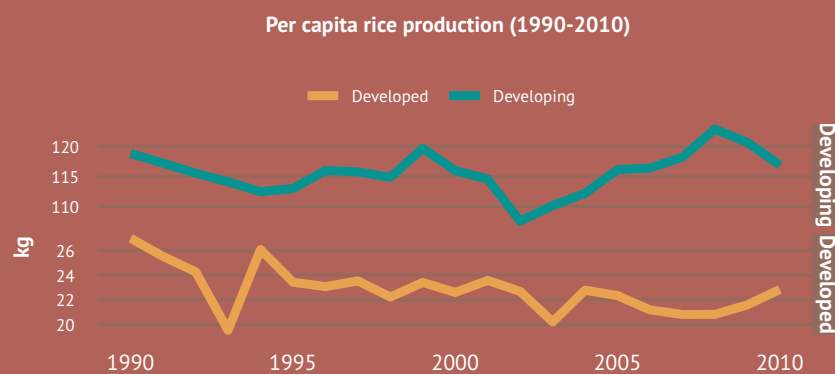


Chart 71: Despite falling per capita consumption in China, rice is still the preferred or only available domestic staple in many countries in Asia, providing support to production



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.RI.QPPC](#), p. 276

In recent times, cereal production has been significantly altered by structural changes in the non-food sector that have given rise to fast growth. These changes include the meeting of feed requirements of rapidly rising and intensifying livestock sectors and demands for cereals as feedstocks in the bio-based economy, especially in the fuel ethanol sector.

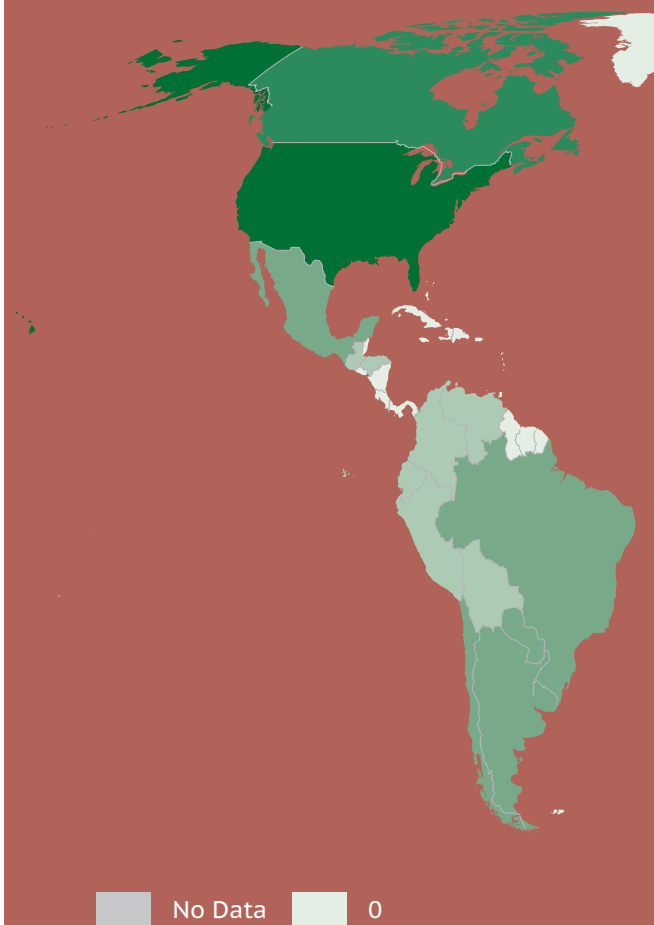
The geographical concentration of major grain supplies against the geographical dispersion of demand suggests that trade will continue to be important in fulfilling grain requirements, particularly for **wheat** and **maize**. With production mainly located in the temperate zones of developed countries, rising requirements in developing countries has meant rising dependence on exports by them.

While **rice** is produced in vast areas of the world, the physical requirements for growing this crop are limited to certain zones. Economically viable cultivation typically requires high average temperatures during the growing season, abundant supplies of water applied in a timely manner combined with smooth land surfaces to facilitate uniform flooding and drainage, and a subsoil stratum that inhibits the percolation of water.

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

At the global level, the growth of demand in rice has been tailing off, as evidenced in several large producing and consuming countries of South and East Asia, as consumption has shifted to other foodstuffs in line with income growth. Given the importance of these regions in world rice consumption, these declines are reflected in the aggregate trends of the world.

Map 39:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.WT.QP, p. 278](#) 

- World output of wheat stands at around 651 million tonnes
- Mainly grown in temperate climates, China is currently the world's largest wheat producing country

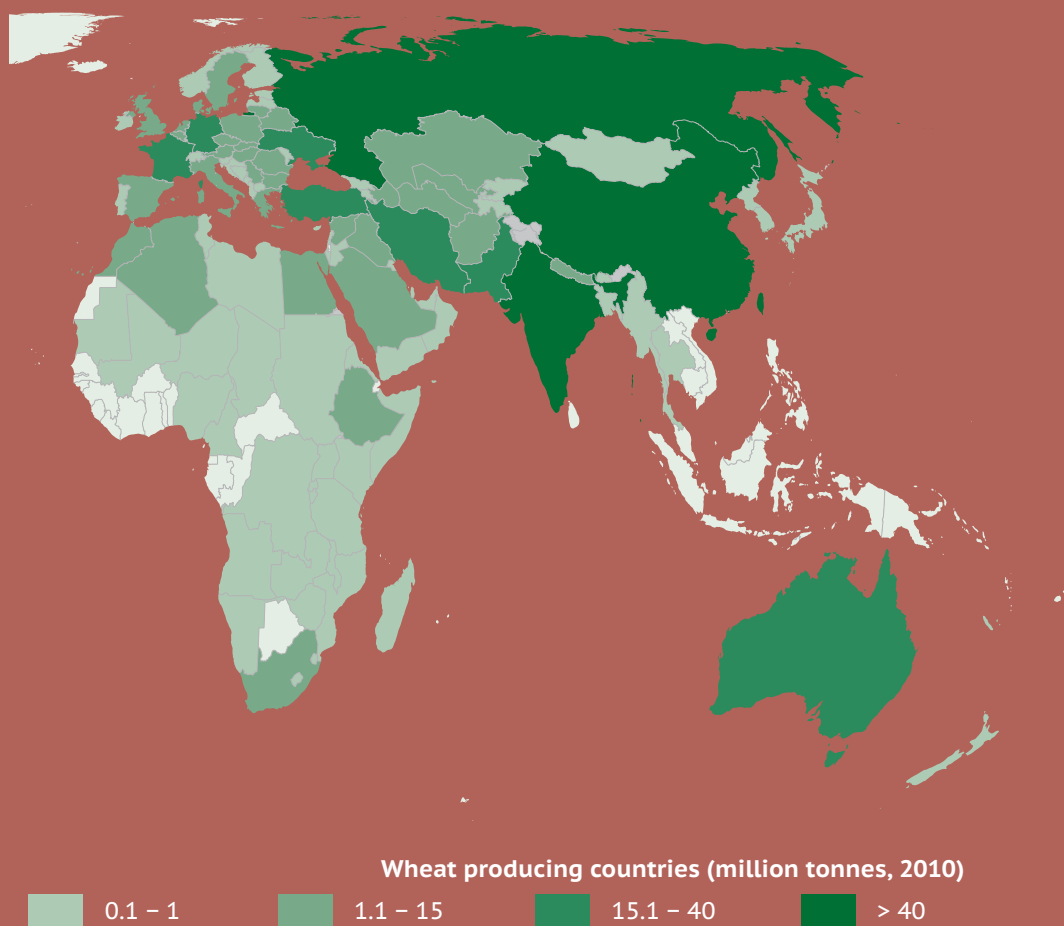
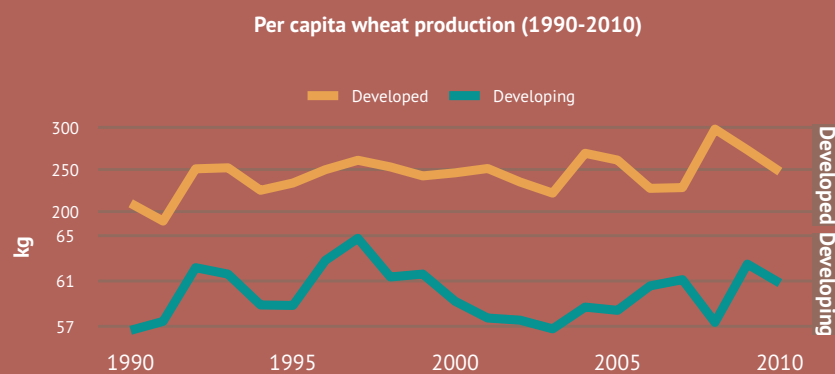


Chart 72: Agroclimatic conditions favour the cultivation of wheat in developed countries, where it constitutes the major staple



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.WT.QPPC](#), p. 278



More of the earth's surface is covered by **wheat** than with any other food crop. Wheat is the third most-produced cereal after maize and rice, but in terms of dietary intake, it is currently second to rice as the main food crop, given the more extensive use of maize as an animal feed.

As a hardy crop, which can grow in a wide range of environmental conditions and that permits large-scale cultivation as well as long-term storage of food, wheat has been key to the emergence of city-based societies for millennia. Currently, around 70 percent of this crop is used for food, 19 percent for animal feed and the remaining 11 percent is used in industrial applications, including biofuels.

Growth in global consumption of wheat has been facilitated by imports, particularly by developing nations. These countries include both the many tropical non-producing countries as well as those that face increasingly binding land and water constraints to increase production, especially in the Near East.

With an ability to grow in diverse climates, **maize** – the world's primary coarse grain – is cultivated in most parts of the world, although the vast quantity of production is concentrated in the Americas, especially the United States of America. In that country, transgenic (genetically modified) maize accounts for 85 percent of plantings.

Overall, the pattern of the world coarse grains economy has undergone drastic change in the location of consumption. The major export markets have shifted increasingly to the developing countries. Pronounced growth in animal feed usage has been a major driving force in developing countries, especially in China.

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

Rising industrial utilization of coarse grains has provided strong support to the sector, led by the growth of maize-based ethanol in the United States of America. At present, almost 40 percent of the crop – 111 million tonnes – is used for biofuel production, which represents an eight-fold increase in the span of just ten years. Though for every tonne of maize processed for ethanol, around a third is returned as a by-product in the form of distillers grains, which can directly displace maize.

Map 40:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.CG.QP, p. 271](#)

- 1.1 billion tonnes of coarse grains were produced in 2010 for the global food, feed, industrial and energy sector
- Maize is the most important coarse grain, accounting for 74 percent of aggregate output

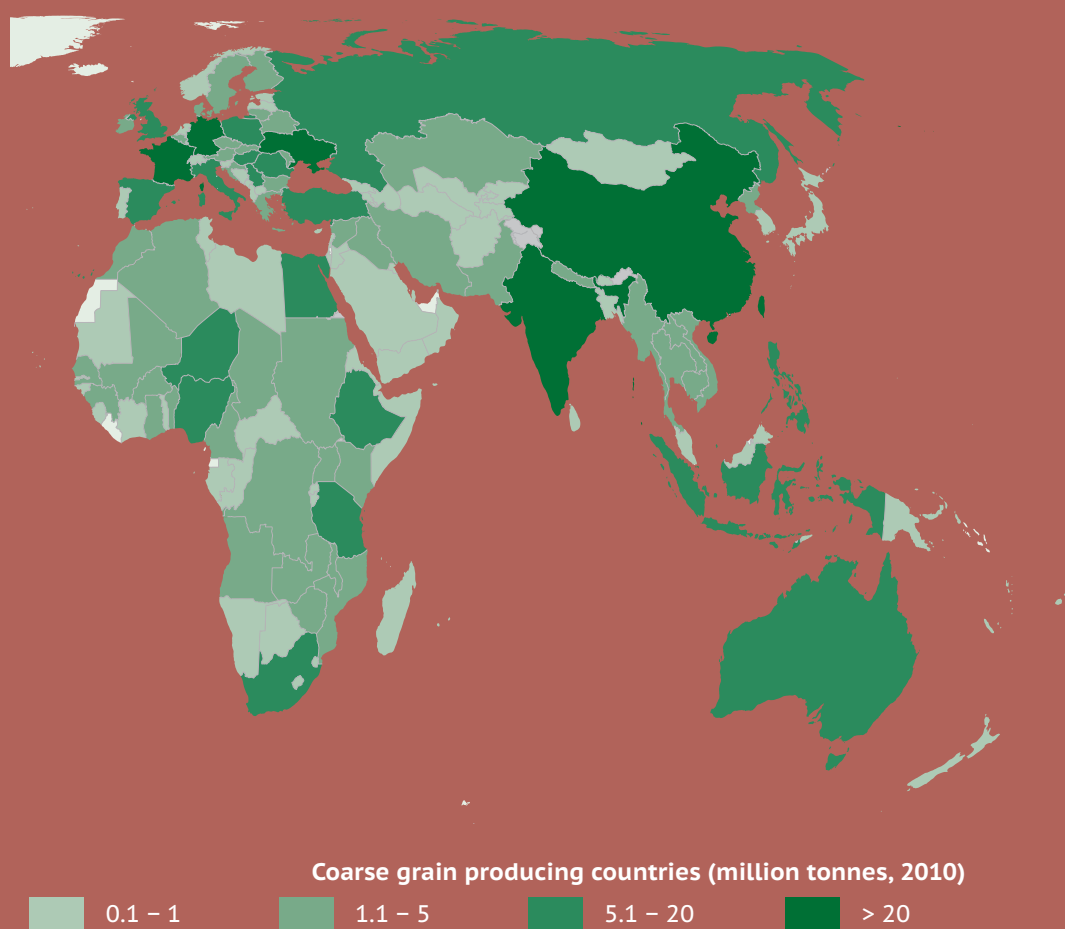
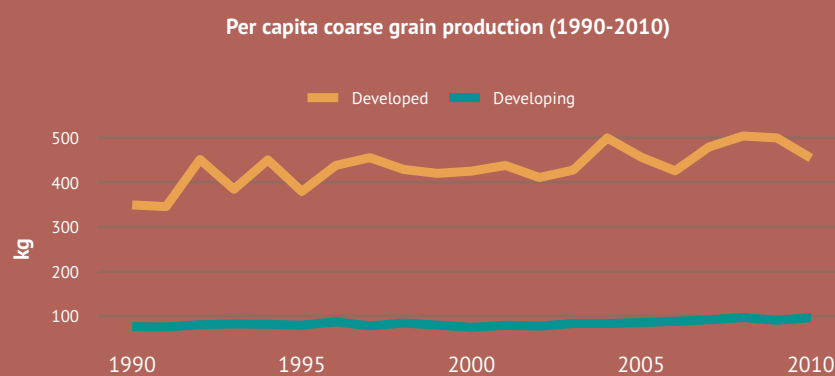


Chart 73: Non-food uses of coarse grain, especially as a feedstock in bioenergy production, has provided support to production in developed countries on a per capita basis



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.CG.QPPC](#), p. 271



In recent decades, the **oilcrops** sector has been one of the most vibrant in world agriculture. Over the past 20 years the sector grew at 4.3 percent per annum compared with an average of 2.3 percent per annum for all agriculture. The major driving force has been the growth of food consumption in developing countries, mostly in the form of vegetable oil but also direct consumption of soybeans, groundnuts, etc., as well as in the form of derived products other than oil.

Food demand in developing countries has accounted for around 40 percent of the increases in world output during the last two decades (with output measured in oil content equivalent). China, India and a few other countries represent the bulk of this increase. In addition, the strong growth in demand for protein products for animal feed has been a major supporting factor in the buoyancy of the oilcrops sector.

The rapid growth of the oilcrops sector illustrates the synergy of the two fastest rising components of food demand: demand for oils favouring all oilcrops with the potential for rapid production expansion (e.g. oil-palm), and that for livestock products favouring oilcrops with high protein oilmeals for feed (e.g. soybeans).

In fact, the demand for protein meals for animal feed has also contributed to changes in the geographical distribution of oilseeds production. The latter has shifted towards countries that could produce and export oilseeds of high protein content, in which oilmeals are not by-products but rather joint products with oil, e.g. soybeans in South America.

In addition, support policies of the European Union (EU) also helped shift world production of oilseeds in favour of rapeseed and sunflowerseed.

Overall, four oilcrops (oil-palm, soybeans, rapeseed and sunflowerseed) now account for 75 percent of world production. For several countries, including some major producers, these fast expanding oilcrops were once hardly cultivated at all, or only in insignificant amounts.

Map 41:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.OS.QP](https://www.fao.org/faostat/en/#data/P3.FEED.FAO.ESS.OS.QP), p. 274 

- 168 million tonnes of oilseeds and oil-bearing crops were gathered in 2010
- This volume represents a significant increase compared to the level two decades ago
- Soybeans, rapeseed and sunflower are the major oilcrops in temperate zones, while palmoil fruit is the major oil-bearing crop in the tropics, increasingly cultivated in Southeast Asia

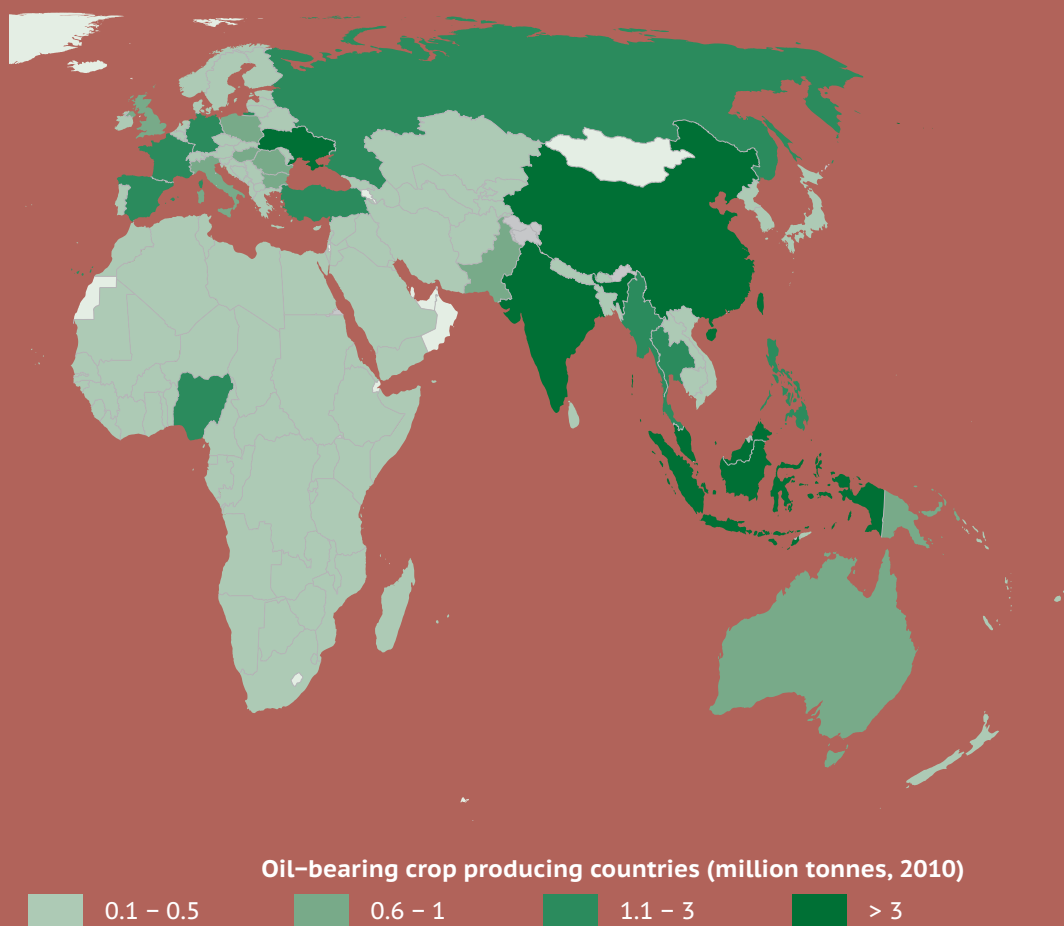
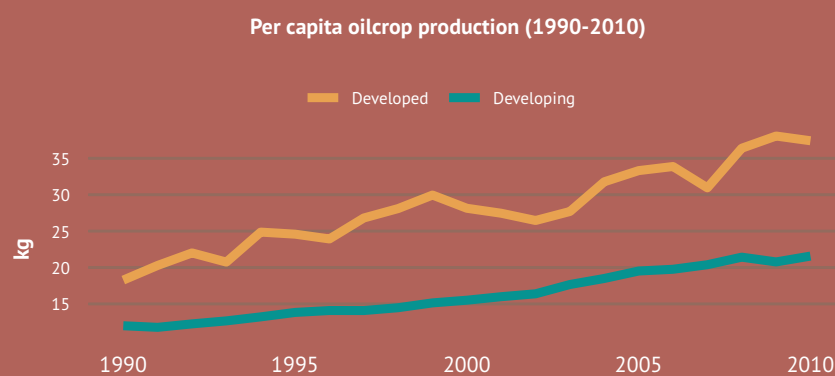


Chart 74: Rising food and industrial usage has resulted in the oilcrop sector being one of the most dynamic among commodity sectors



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.OS.QPPC](#), p. 274 

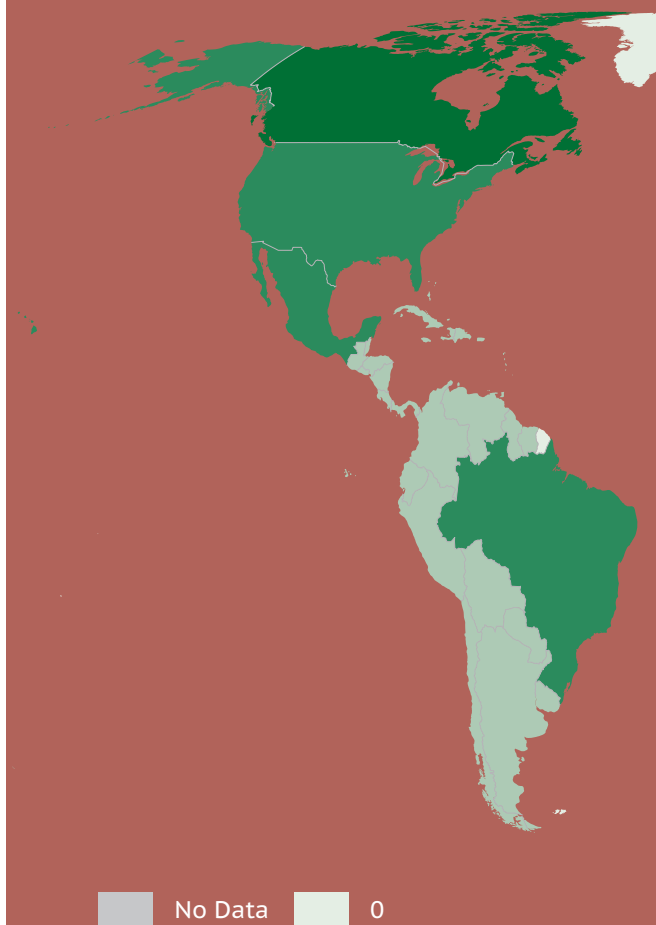
Although the oilcrops sector is increasingly dominated by a small number of crops and countries, the more traditional oilcrops continue to be a major element in the food supply and food security situation in many countries. Examples include groundnuts and sesame seed in the Sudan and Myanmar, coconuts in the Philippines and in Sri Lanka, olive oil in the Mediterranean countries, cottonseed oil in the countries of Central Asia and those in the Sahel.

Another major driving force has been the non-food industrial use of vegetable oils, with China and the EU being major contributors to this growth. In terms of actual oil produced and used, the world currently uses some 40 percent of supply for non-food applications. Two decades ago the share was less than half of this. The main industrial products involved include paints, detergents, lubricants, oleochemicals in general and, increasingly, biodiesel. These are commodities for which world demand can be expected to grow much faster than the demand for food.

Pulses are an important constituent in local food crops in developing countries. They are a key source of protein in the diets of the world's poorest countries. In farming systems, pulses represent an input-saving and resource-conserving technology though biologically fixing nitrogen to reduce the need for chemical fertilizer and reduce soil pathogens. A substantial part of the historical growth in Australia's cereal yields, for example, is attributed to the introduction of legumes in rotation systems.

The nutritional and environmental benefits of pulses are being realized in sub-Saharan Africa, where per capita production has increased by almost 4 kg per annum in the last decade. However, at the global level, changes in consumer preferences, feed rations and the relegation of pulses to secondary crop status in the agricultural policies of other developing regions, notably Asia and Latin America and the Caribbean, has left the global level of production growth markedly stagnant and lagging well behind population growth.

Map 42:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.PS.QP, p. 275](#) 

- Around 68 million tonnes of pulses were produced in 2010
- Production is geographically diverse where the crop plays varying roles in food and animal feed economies
- In India, the commodity forms an important staple as a source of protein in vegetal-based diets

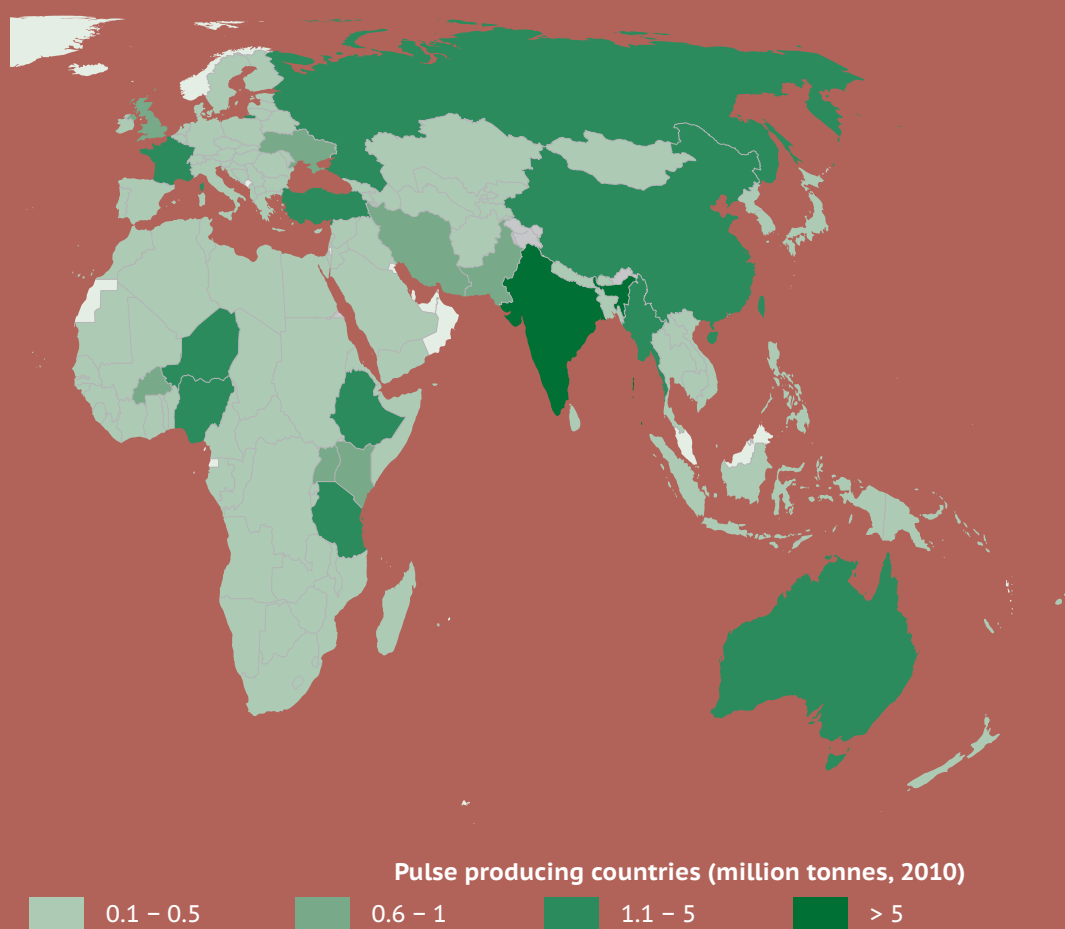
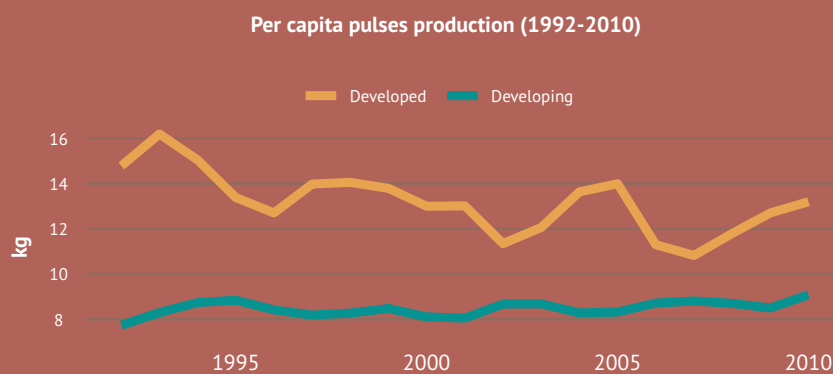


Chart 75: Pulse production in developed countries has not kept pace with population growth, reflecting its diminishing role in diets and as an animal feedstuff



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.PS.QPPC](#), p. 275



Root crops have traditionally been the mainstay of food consumption in several countries with low overall consumption levels, mainly in sub-Saharan Africa and in Latin America and the Caribbean. What happens to the production of these crops is an important determinant of changes in national average food consumption.

Few commodity groups exhibit such divergent trends in production across regions and economic status as do root crops. For instance, in Europe per capita production of potato (a major regional staple) has been in long-term decline, while production growth of the same commodity in Africa and Asia has registered robust growth in the past decade or so, albeit from a much smaller base. By contrast, sweet potato has undergone a precipitous decline: per capita production currently stands at one-third of the level of the late 1970s, a trend that reflects a rapid fall in demand for the commodity in China (especially in animal feeding).

The continued turbulence in global markets for traded food staples constantly reminds many vulnerable countries to look toward indigenous crops, such as cassava, as an alternative to potentially expensive and price-volatile imported cereals. As a “crisis crop”, cassava roots require few inputs and can be left in the ground for well over a year and harvested when food shortages arise or when prices of preferred cereals become prohibitive. In addition, ongoing long-term programmes for cassava’s commercialization have made it among the fastest growing food staples in Africa.

Government food-security initiatives with the support of the international community have also played an important role in cassava production growth in the continent. Support often takes the form of distribution of high-yielding and disease-resistant planting material, extension activities, as well as measures to strengthen the cassava value chain, notably food processing for value-added cassava products. In Asia, the rising use of cassava in biofuel production and industrial applications that employ starch, has resulted in cassava’s rapid growth in the region as well.

Map 43:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.RT.QP](#), p. 276 

- 726 million tonnes of roots and tubers were collected from world soils in 2010
- Given agroclimatic constraints, potato is the main root crop cultivated in temperate zones, while in the tropics, a broad array is cultivated but cassava is the major root crop
- Cassava’s twin role as a food security and industrial crop has fuelled production growth in developing countries

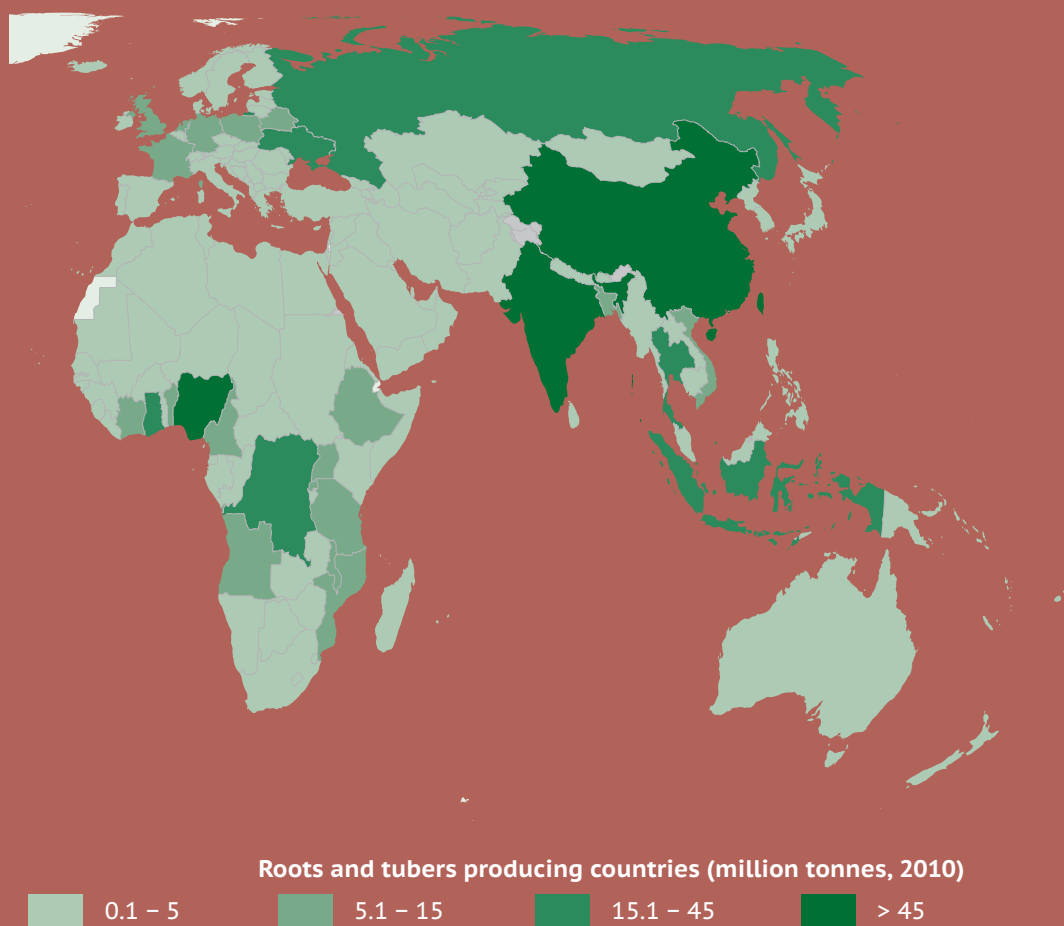
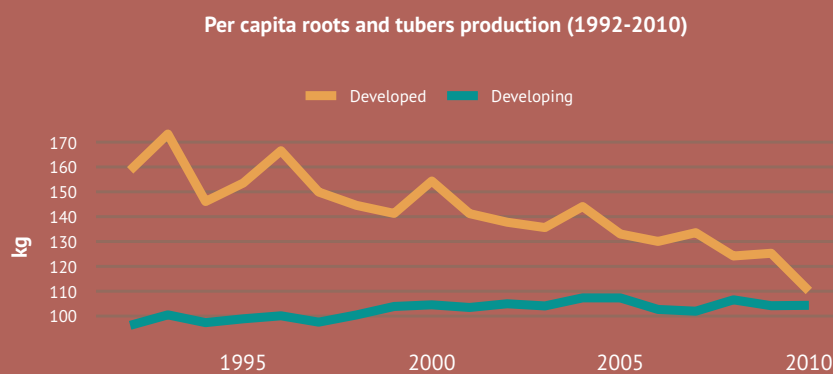


Chart 76: Falling per capita consumption of potato is reflected in declining rates of production in developed countries



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.RT.QPPC](#), p. 276



Global **fruit and vegetable** production has experienced a remarkable increase, growing at annual rates of around 3 percent and 5 percent, respectively, in the past two decades – rates of growth that exceed most other food crops. In 2010, almost 600 million tonnes of fruit and almost 1 billion tonnes of vegetables were gathered throughout the world.

World production has largely been fuelled by an area expansion in Asia, especially in China. With an average annual growth rate of above 8 percent over the previous 20 years, China has emerged as the world's largest fruit and vegetable producer, with global output shares of around 20 percent in the case of fruit, and over 50 percent with regard to vegetables. The familiar tendency of stagnant production growth in developed regions also prevails in the fruit and vegetables sector.

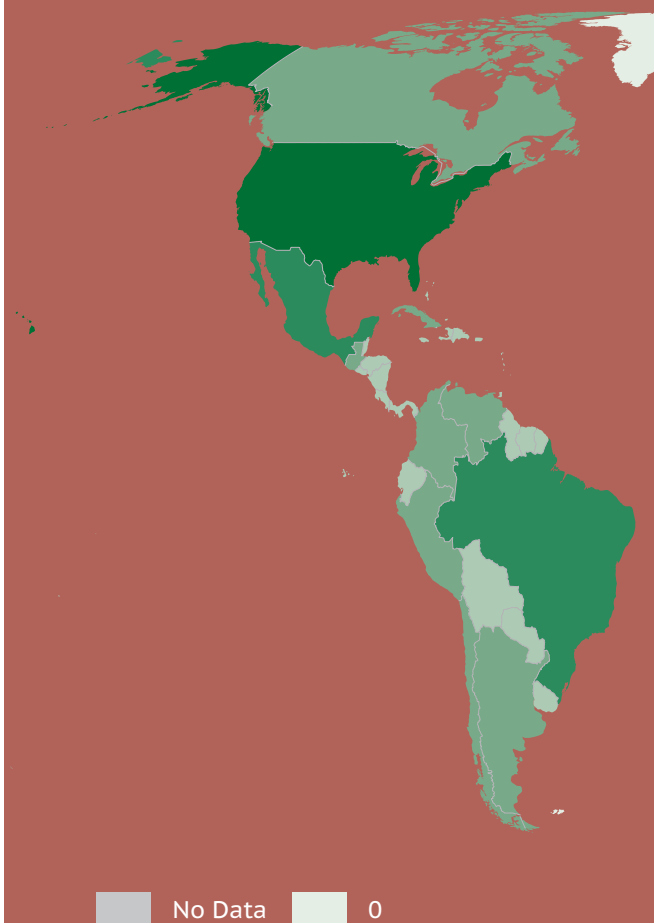
Strong growth rates in fruit and vegetable cultivation have also been recorded in food-insecure and low-income regions, such as in sub-Saharan Africa and in South Asia. This is testament to the fact that horticultural crop production generates high economic returns per unit of land, offering promising income prospects, especially for smallholders and when land is scarce. In addition, being labour intensive, the horticulture sector can contribute to poverty reduction by providing paid employment opportunities.

The high value of fruits and vegetables is limited not only to their monetary value, as they play a highly important role in improving the diets of people around the world. The World Health Organization (WHO) estimates that low fruit and vegetable intake contributes to approximately 16.0 million disability adjusted life years (DALYs, a measure of the potential life lost due to premature mortality and the years of productive life lost due to disability) and 1.7 million of global deaths are attributable to low fruit and vegetable consumption. Moreover, inadequate intake of fruit and vegetables is thought to cause around 14 percent of gastrointestinal cancer deaths, approximately 11 percent of ischaemic heart disease deaths and around 9 percent of stroke fatalities worldwide.

WHO/FAO recommends a minimum of 400g of fruit and vegetables per day (excluding starchy root crops) for the prevention of chronic diseases such as heart disease, cancer, diabetes and obesity, as well as for the prevention and alleviation of several micronutrient deficiencies, especially in less developed countries.

Meeting the rising global demand for fruits and vegetables creates new opportunities for poor farmers in developing countries, but to fully reap the benefits of cultivating these highly perishable crops, improving supply chain efficiency, reducing post-harvest losses and investments in infrastructure are necessary in many of them.

Map 44:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.VG.QP](#), p. 278 

- Worldwide in 2010, over 600 million tonnes of fruit and around 1 billion tonnes of vegetables were gathered
- With annual growth rates in the proximity of 5 percent, horticulture is one of the most dynamic sectors in world agriculture
- The high value of fruits and vegetables is not just limited to their monetary value, as they play a highly important role in improving the diets of people around the world

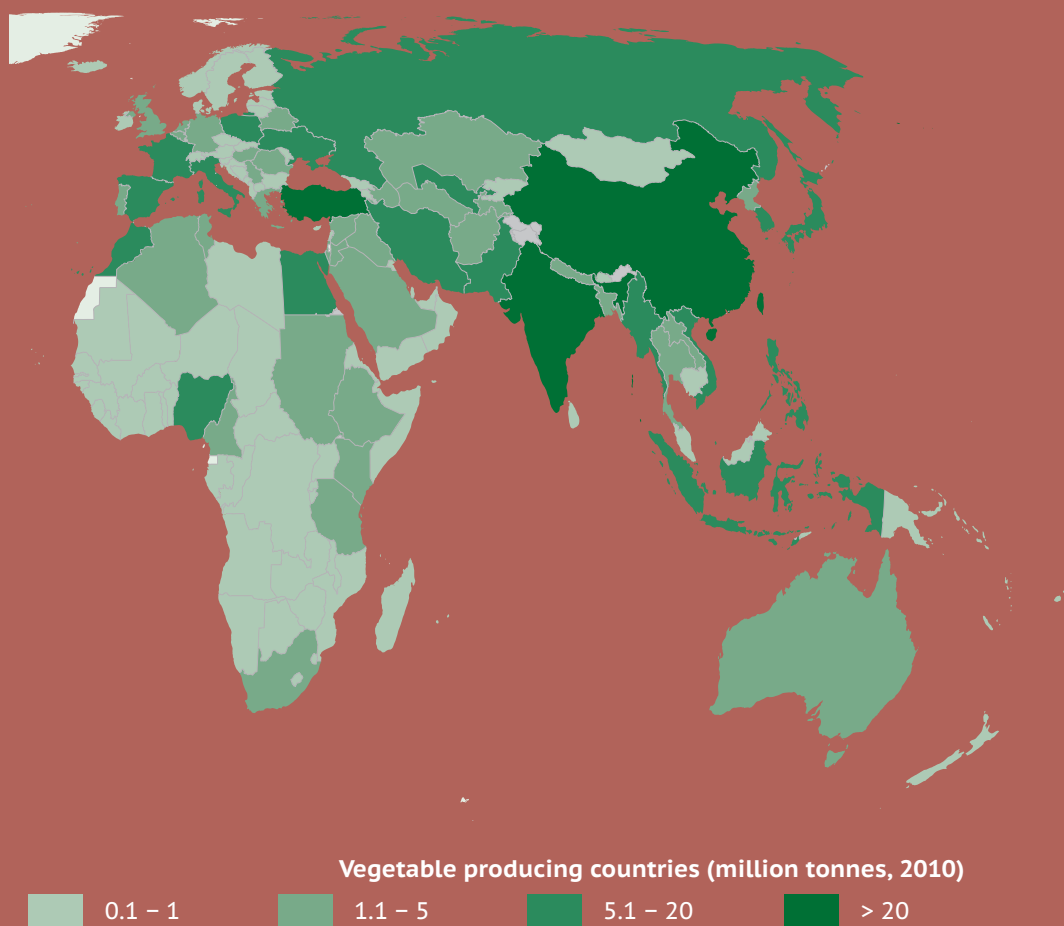
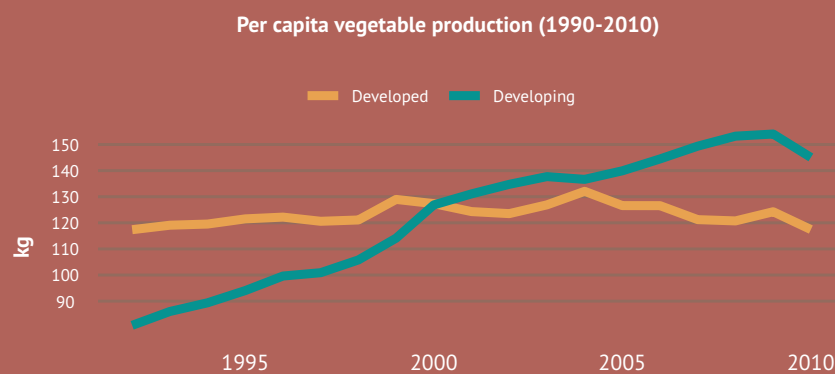


Chart 77: World vegetable production has largely been fuelled by an expansion in China, but high growth rates are being recorded in low-income and food-insecure regions



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.VG.QPPC](#), p. 278 

Currently, 166 million tonnes of **sugar** (raw equivalent) is produced in 120 countries. Over 70 percent of sugar is derived from sugar cane and the remainder from sugar beet.

Sugar beet is a hardy biennial crop that is suited for cultivation in temperate climates, especially in the North. Forty countries or so are engaged in commercial sugar beet cultivation, with France standing currently as the world's largest producer followed by the United States of America. Sugar beet production at the global level is in long-term decline, falling from a peak of 314 million tonnes at the end of the 1980s to around 228 million tonnes in 2010, by and large a reflection of policy reform in the EU.

Sugar cane is a genus of tropical grasses requiring strong sunlight and abundant water for normal growth. In contrast to sugar beet, sugar cane cultivation has undergone strong growth, with total acreage doubling in the past 25 years, leading to a world production level of around 1.7 billion tonnes in 2010.

The global expansion of sugar cane has been in response to rising demand for sugar in food consumption and as a feedstock for ethanol production. Roughly 100 countries produce sugarcane on a commercial basis, with 18 countries devoting more than 10 percent of their cropland to sugar cane production, while in six countries sugar cane covers more than one-third of all cropland.

The bulk of the increase has come from the developing countries, with Brazil fuelling much of this growth. Sugar cane production in Brazil has increased rapidly, doubling alone in the past decade. The worldwide expansion in sugar cane cultivation has resulted in a substantial loss of biodiversity, arguably more than any other single crop. Significant areas of tropical rain forest and tropical seasonal forest have been cleared for sugar cane cultivation as well as low-lying and alluvial areas, which not only results in the direct loss of habitats and species, but creates wider impacts on ecosystem functioning, including changes to hydrology and greater soil erosion.

Further reading

- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)
- FAO World agriculture: towards 2030/2050 Interim report: Prospects for food, nutrition, agriculture and major commodity groups (www.fao.org/economic/esa/esag/en/)
- Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases (www.fao.org/DOCREP/005/AC911E/AC911E00.HTM)

Map 45:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FTW.FAO.SU.QP, p. 277](https://p3.ftw.fao.org/p3/277)

- Over 166 million tonnes of sugar (raw equivalent) were produced throughout the world in 2010
- In Brazil, the world's leading producer, well over half of the crop is used in the production of ethanol
- Higher production volumes in India, on the other hand, reflect the importance of sugar in domestic diets

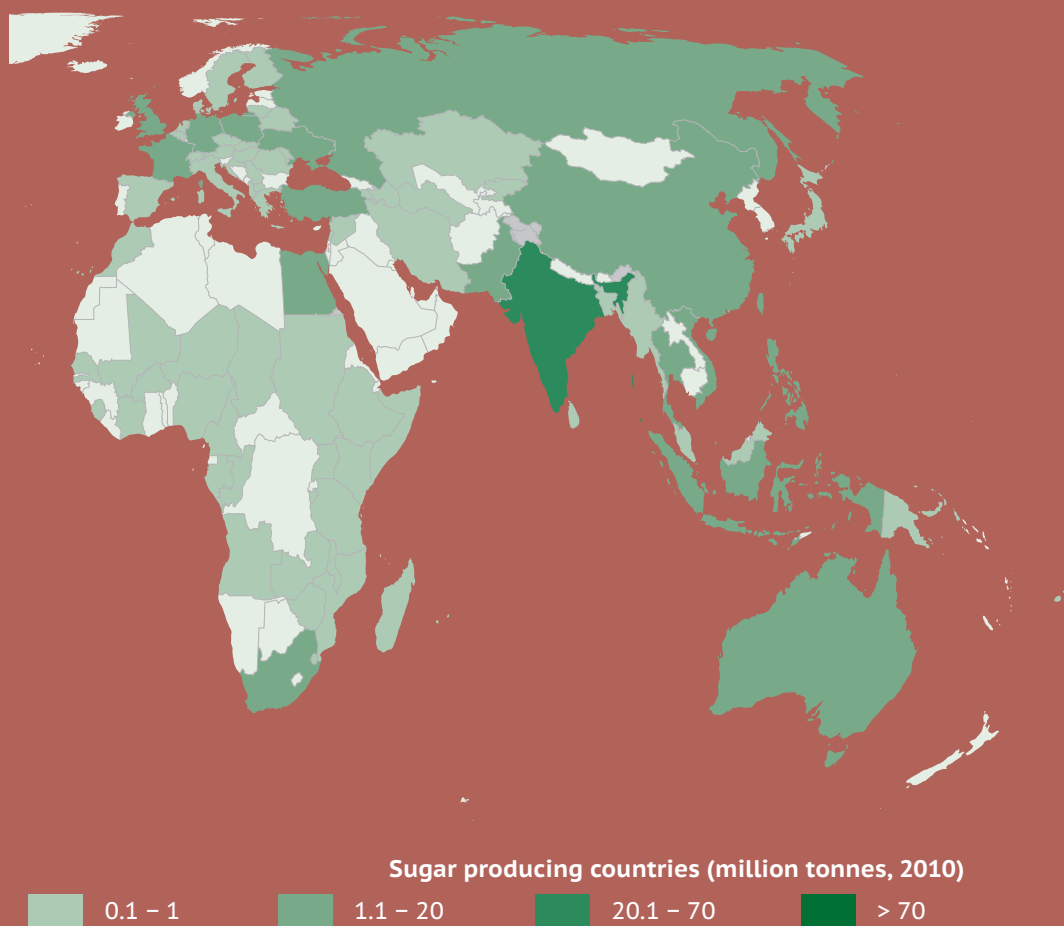
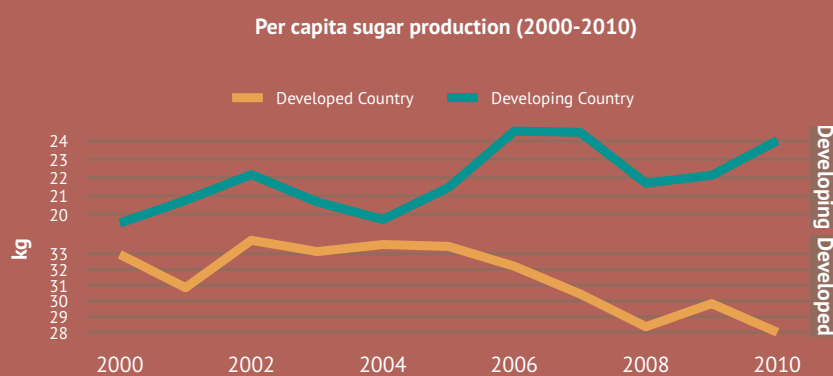


Chart 78: Food, energy and international market needs are driving a considerable expansion in sugar (cane) production in developing countries



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.SU.QPPC](#), p. 277

Trends in the livestock sector

The world food economy is increasingly driven by the shift in diet and food consumption patterns towards livestock products. In the last few decades, in the developing countries of Asia - where the bulk of the world population increase has taken place - consumption of meat has been growing at over 4 percent per annum, and that of milk and dairy products between 2 to 3 percent per annum. Aggregate agricultural output is being affected by these trends, not only through the increase in livestock production *per se*, but also through the linkage of livestock production to the crop sector that supplies feed-stuffs, mainly cereals and oilseeds, as well as the fisheries sector.

Globally, livestock production is the largest user of agricultural land. On the negative side, there are environmental implications associated with the expansion of livestock production. For example, through the expansion of land for livestock development, sector growth has been a prime force in deforestation in Latin America and the Caribbean, and in overgrazing in other regions. Intensive, large-scale livestock operations, mostly in the industrial countries but increasingly also in the developing ones, are a major source of environmental problems through effluent production. In parallel, growth in the ruminant sector contributes to greenhouse gas concentrations in the atmosphere through methane emissions and nitrous oxide from the waste of grazing animals.

The rapid growth in the **meat** sector has been underpinned by rising demand for poultry meat, which has consistently increased at around three times the rate of population growth over each of the past five decades. As for other meat sectors, per capita consumption growth has been stagnant or non-existent, especially in ruminant meat (cattle, sheep and goats) and pork (when China is excluded).

Moreover, in many developing countries, where the need to increase protein consumption is greatest, the productive sector has not participated in the “livestock revolution”. There are, for instance, still about 20 developing countries whose per capita meat consumption is below 10 kg, compared to an average of 80 kg among developed countries. Cultural or religious reasons may explain this feature in some countries, but low productive capacities are, by and large, to blame in many others.

Growth of world **milk** production and consumption has been far less buoyant. Until recently, per capita growth was largely stagnant, unchanged for several decades. Developing countries continue to have per capita consumption well below that of the industrial countries (partly reflecting consumption habits as well as low incomes and poverty), but the gap is gradually closing, especially in East and in South Asia. In East Asia, for example, per capita dairy intake has more than doubled in the past decade.

Map 46:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.MT.QP, p. 273 

- The world produced 293 million tonnes of meat in 2010
- The Americas lead the way as the highest producing region
- But growing industry intensification is boosting output to meet demand in other areas, particularly in Asia

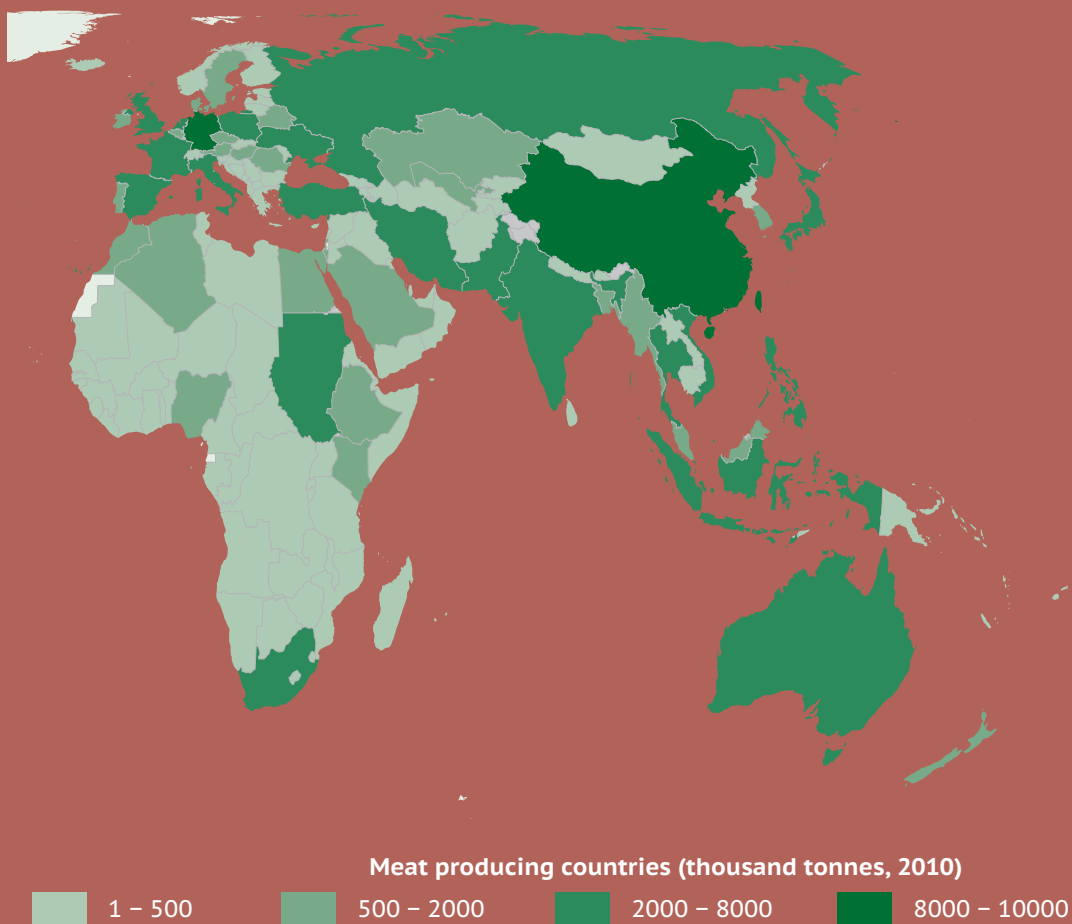
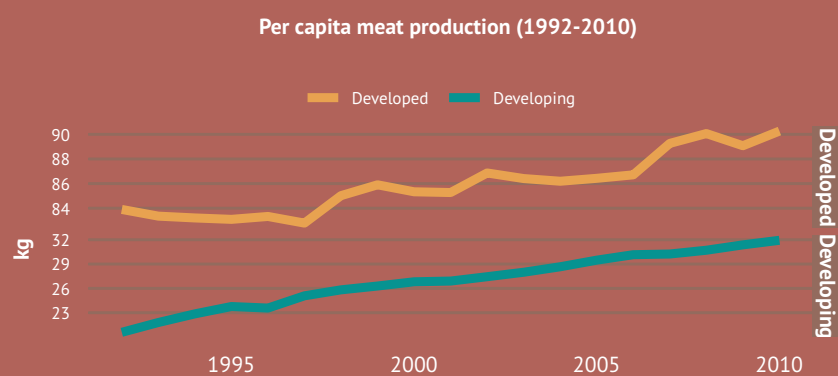


Chart 79: Meat production on the rise in developing countries, while developed countries approach saturation



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.MT.QPPC](#), p. 273 

Feed demand for cereals is often considered a dynamic element that conditions the growth of the cereals sector, especially in developed countries. However, in recent times, particularly in developing regions, this dynamism has been largely absent from the sector, to the extent that growth in livestock production has by far outstripped the growth in compound feed demand. Therefore, the world is now obtaining more meat, milk and eggs per kg of cereal-based feed, which points to productivity gains in livestock production. Some of these gains are linked to changes in the composition of livestock production, as poultry requires much smaller quantities of cereals feed per kg of meat than, for instance, beef.

Other forces have also led to the reduced grain/meat ratios. Among them is the growing use of oilmeals in livestock feeding. World output of soybeans, which are mainly processed into oil and high protein oilmeal, grew at 4 percent per annum in the last decade and 5 percent in the 1990s.

By implication, the production and consumption of soybean meal as feed has also risen at these levels, which would suggest a relative increase in the feed rations of oilmeals at the expense of feed grains. But in fact, a principal factor has been the expansion of livestock production systems in developing countries with lower average grain/meat ratios.

The continued growth of developing countries' share in world livestock output is being associated with the gradual shift of their production from grazing and "back-yard" systems to stall-fed systems using concentrated feedstuffs. Consequently, changes in production systems tend to raise the average grain/meat ratios of these developing countries, compensating for the opposite trends that result from improvements in productivity.

Further reading

- FAO Animal Production and Health Division (www.fao.org/ag/againfo/home/en/)
- FAO World agriculture: towards 2030/2050 Interim report: Prospects for food, nutrition, agriculture and major commodity groups (www.fao.org/fileadmin/user_upload/esag/docs/Interim_report_AT2050web.pdf)
- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)
- FAO The State of Food and Agriculture 2009: Livestock in the balance (www.fao.org/publications/sofa-2009/en/)

Map 47:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.MK.QP](#), p. 273 

- Over 720 million tonnes or around 760 million litres of milk were produced globally in 2010
- Pasture land availability (e.g. the Americas) and cultural reasons (e.g. South Asia) determine the location of dairy industries
- Production is growing rapidly in many developing countries as a response to changing consumer demands, in East Asia for example, per capita dairy intake has more than doubled in the past decade

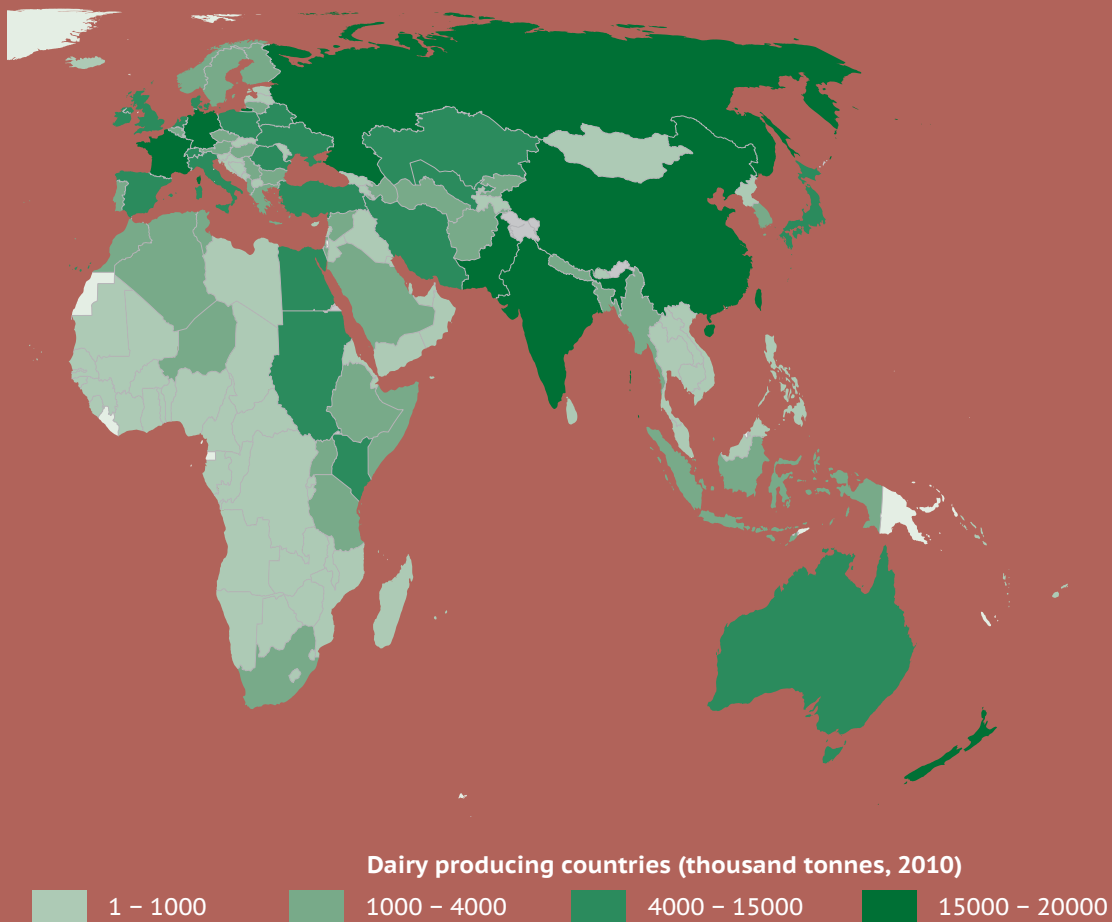
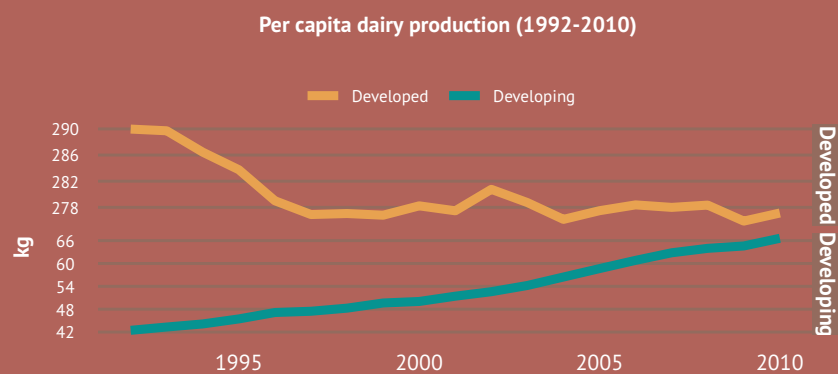


Chart 80: Dairy production growth slowing in developed countries, but rising in developing countries, albeit from a low base



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.MK.QPPC](#), p. 273



Trends in the fisheries sector

In 2009, capture fisheries and aquaculture supplied the world with almost 145 million tonnes of fish. Of this, 122 million tonnes were used as human food, providing an estimated per capita food supply of about 18 kg (live weight equivalent). Globally, fish provides about 2.9 billion people with almost 20 percent of their average per capita intake of animal protein. Fish is also very important in diets in developing countries, where current per capita intake is more than 16 kg per person per annum.

Although capture fisheries dominate world output, aquaculture accounts for a growing percentage of total fish supply, rising from a share of 4 percent in 1970 to 38 percent in 2009. Aquaculture provides close to half of all fish supplies destined directly for human food consumption.

Fish landed not used for direct human consumption is mainly processed in the form of fishmeal and oil, used as animal feed (around 18 million tonnes), mainly for raising carnivorous aquatic species (such as shrimp, salmon, trout, eels, sea bass and sea bream), but also for pigs, chickens, pet food and cattle, etc.

Worldwide, capture fisheries and aquaculture provide a source of income and livelihood for 45 million people through direct employment and provides more than 180 million jobs as a whole in the global fish industry. There are millions of rural dwellers, many of whom are women, particularly in Asia and Africa, involved in seasonal or occasional fishing activities with few alternative sources of income and employment. Employment in aquaculture is increasing at a faster rate than world population growth and now accounts for one-quarter of the total number of workers directly involved in the fisheries sector. Employment in fishing is decreasing in capital-intensive economies, in particular in most European countries, and in North America and Japan. The global fishing fleet is estimated to be around 4.3 million vessels with about 60 percent of all fishing vessels engine-powered.

According to the Big Numbers Project of FAO, the World-Fish Center and the World Bank, estimates indicate that small-scale fisheries produce close to half of the world marine and inland fish catch, while providing employment for more than 90 percent of the world's fishers. About half of the total workforce in the fishing and fish processing sector comprise women.

Map 48:



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

Metalink: [P3.FTW.FAO.FI.CAP.QP](https://www.fao.org/fishery-and-aquaculture-statistics/en), p. 279 

- The global fish catch has remained at around 90 million tonnes per annum over the past 20 years
- Greater controls, scarcity and high costs have combined to lower production in the capture sector of developed countries
- The Pacific Ocean provides more than half of the global catch

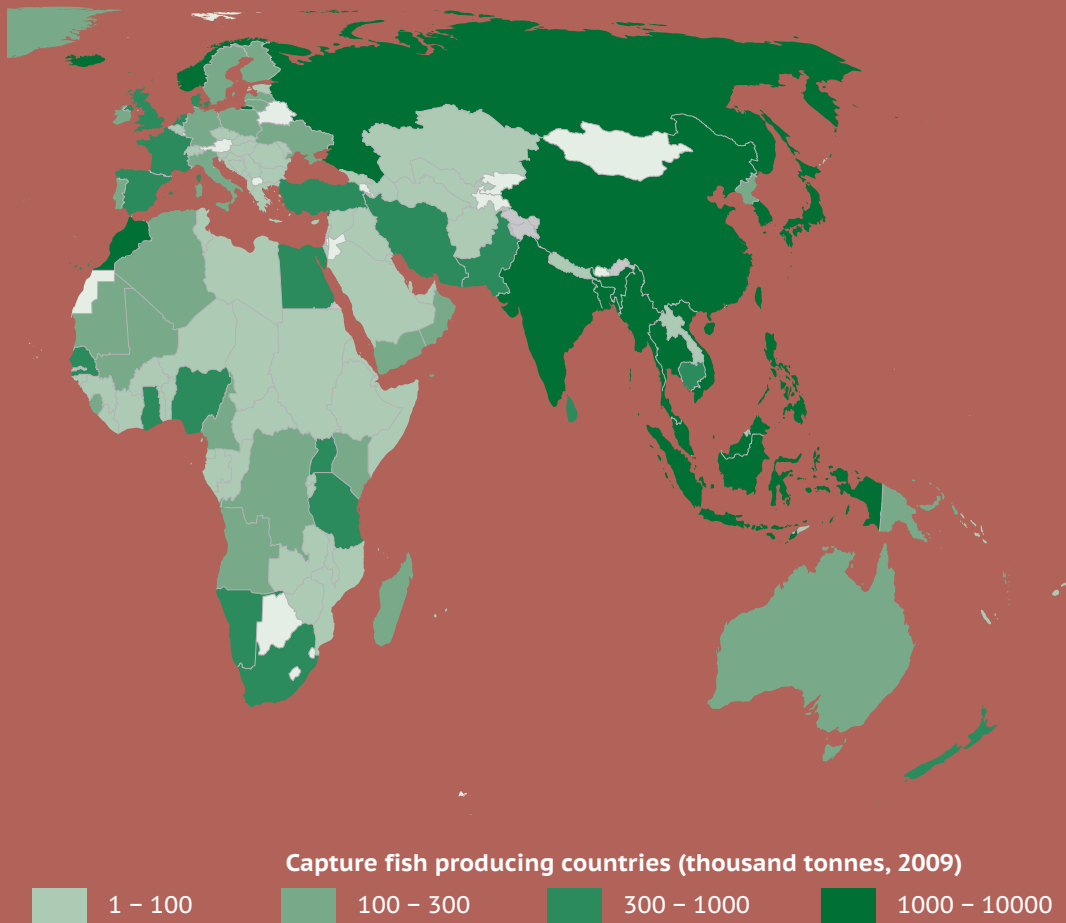
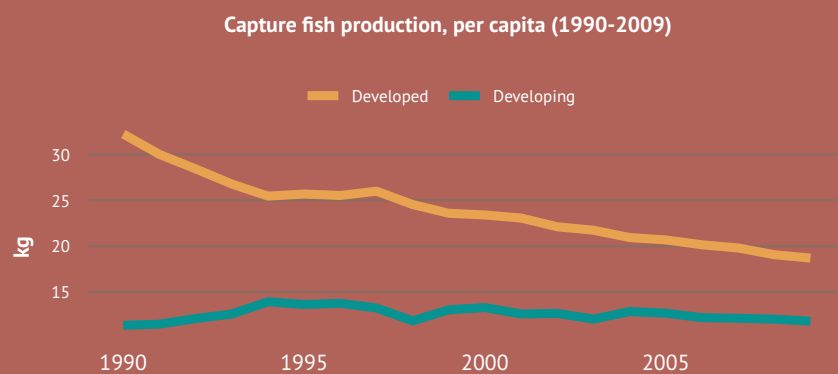


Chart 81: Rising controls, scarcity and costs have combined to lower production in the capture sector of developed countries



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

Metalink: [P3.FTW.FAO.FI.CAP.QP](#), p. 279 

During the last two decades, the production of capture fisheries fluctuated in a range between 85 and 95 million tonnes per annum. More than half of the global catch came from the Pacific Ocean. Global production is typically influenced by variations in catches of anchoveta – a species extremely susceptible to oceanographic conditions determined by the El Niño Southern Oscillation – in the Southeast Pacific. Fluctuations in other species and regions tend to compensate for each other to a large extent.

Regarding the state of major marine stocks, the proportion of stocks estimated to be underexploited or moderately exploited declined from 40 percent in the mid-1970s to 15 percent in 2008. In contrast, the proportion of overexploited, depleted or recovering stocks increased from 10 percent in 1974 to 32 percent in 2008. The proportion of fully exploited stocks has remained relatively stable at about 50 percent since the 1970s. As a whole, this indicates that global marine capture production is less likely to increase, unless effective management plans are put in place to rebuild overfished stocks. While the degree of uncertainty about these estimates may be somewhat high the apparent increasing trend in the percentage of overexploited, depleted and recovering stocks and the decreasing trend in underexploited and moderately exploited stocks do give cause for concern. At the same time, there are encouraging signs of steady progress in some areas in restoring overfished stocks and marine ecosystems through effective management.

Inland fisheries are vital for livelihoods in many parts of the world and also in diets by providing high quality protein, essential nutrients and minerals that are often difficult to obtain from other food sources. In recent years, inland water fishery production expanded to over 10 million tonnes, accounting for over 10 percent of global capture production. However, the state of inland fishery resources and the ecosystems that support them is generally not precisely known and the reliability of data on inland water catches reported by several countries remains questionable. There is, nonetheless, a growing appreciation of the need to improve inland fishery statistics.

Map 49:



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

Metalink: [P3.FTW.FAO.FI.ACQ.QP](#), p. 279 

- 56 million tonnes of fish and fishery products were produced by aquaculture in 2009. Aquaculture represents the fastest-growing animal-based food producing sector
- Aquaculture production now accounts for around half of world supplies of fish and fishery products destined for human consumption
- China has a share of over 60 percent in world aquaculture production, while Asia as a whole accounts for almost 90 percent

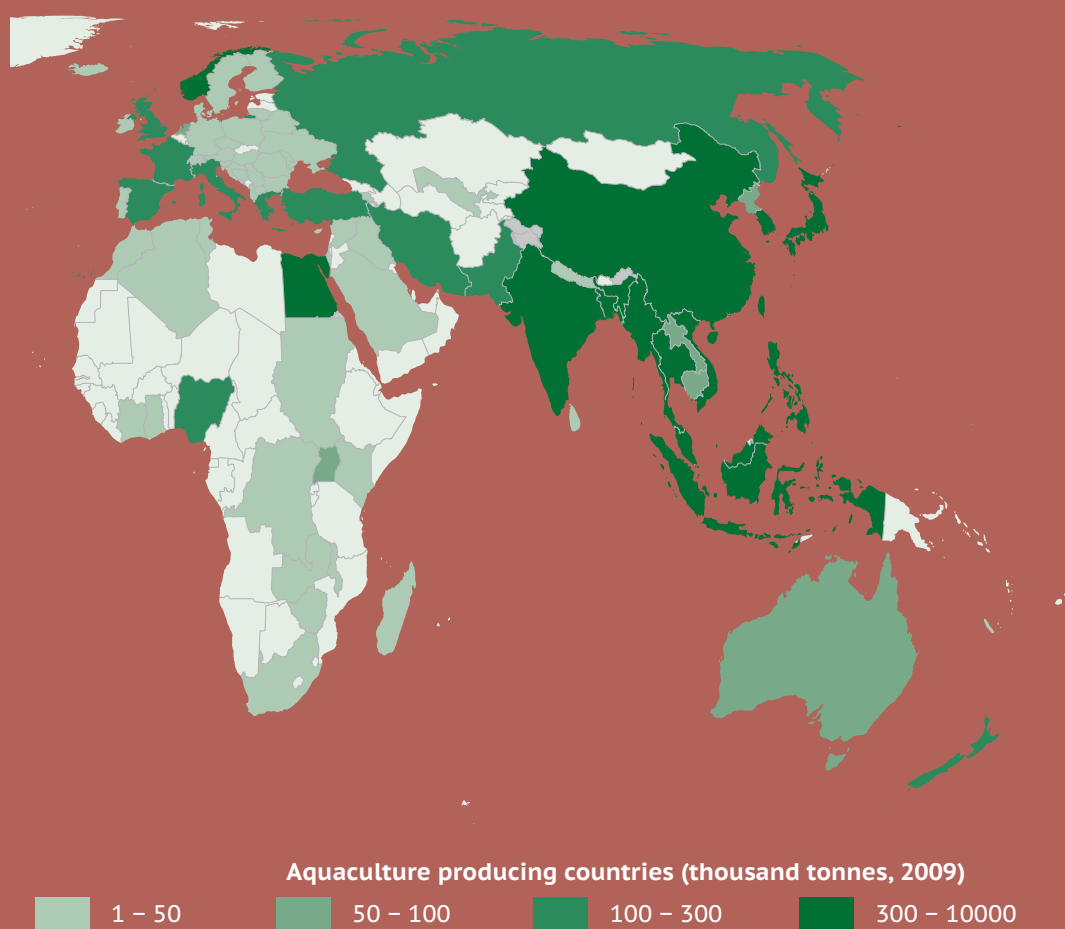
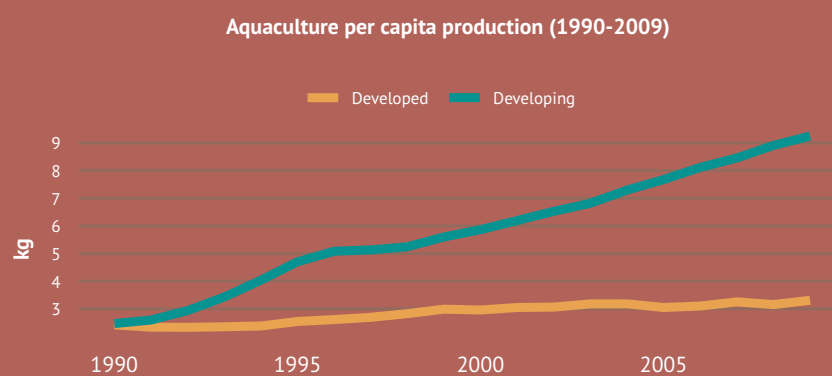


Chart 82: Exceptional growth in aquaculture production in developing countries is sustaining world fish supply



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

Metalink: [P3.FTW.FAO.FI.ACQ.QP](#), p. 279 

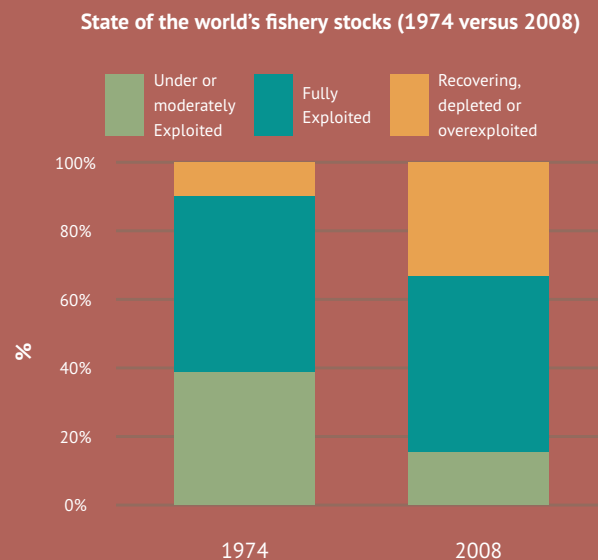
Aquaculture represents the fastest-growing animal-based food producing sector with 56 million tonnes of production in 2009 and continues to outpace population growth. Great strides in breeding technology, system design and feed technology in the latter half of the twentieth century have enabled the expansion of commercially viable aquaculture across species and in volume. China alone produced over 60 percent of global aquaculture production, while Asia as a whole accounted for around 90 percent of worldwide aquaculture output.

Aquaculture production has been dominated in quantity terms by species that feed low on the food chain in their natural habitats, such as carp, characins and tilapias. Carp alone accounted for around 60 percent of world production of cultured finfishes in 2009. Aquaculture also provides a dominant share in the total production of several high-priced species such as salmon, shrimp, prawns, eels, oysters and scallops. The share of aquaculture products in international trade is increasing not only for high-priced products but for a broad range of species.

Further reading

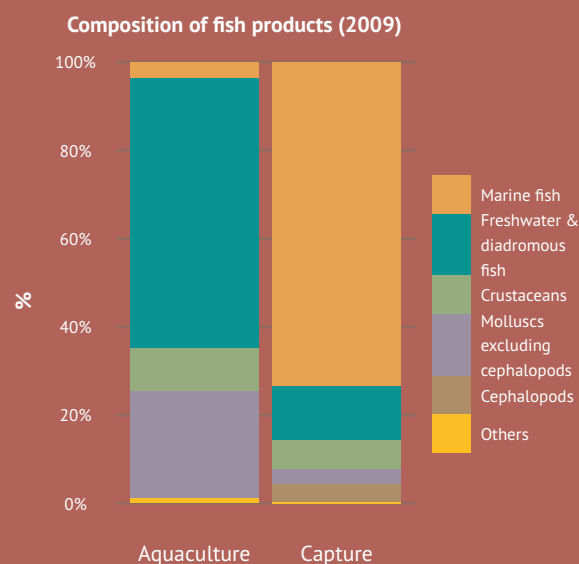
- FAO The State of World Fisheries and Aquaculture (www.fao.org/publications/en/)
- FAO Fisheries and Aquaculture Department (www.fao.org/fishery/en)
- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)

Chart 83: The scope for further increases in capture production is non-existent



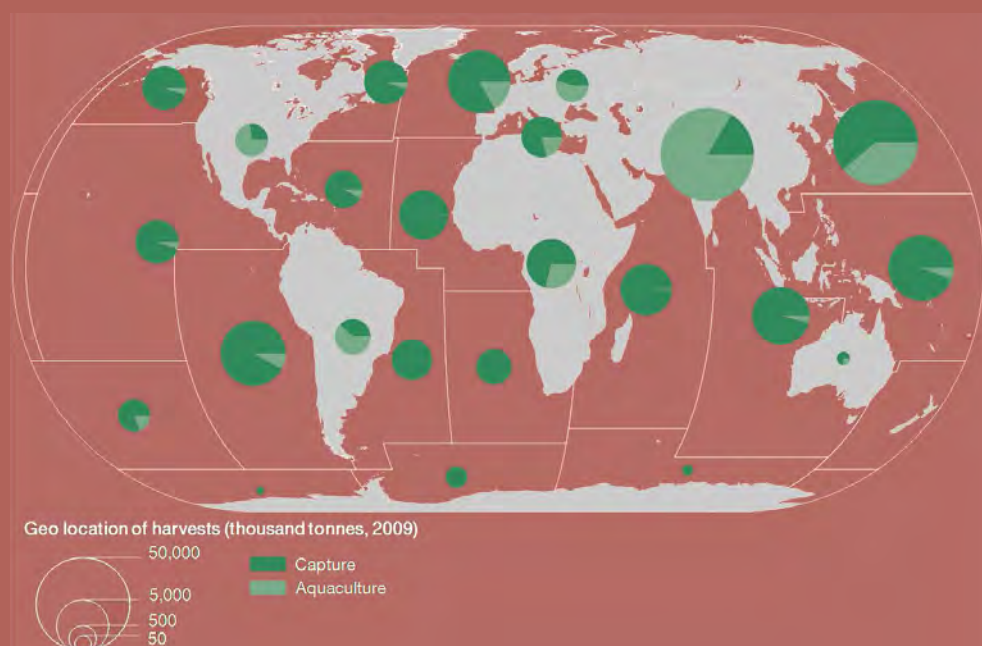
Source: FAO, Fisheries and Aquaculture Department
Metalink: P3.FTW.FAO.FI.STK, p. 279

Chart 84: Capture production is dominated by marine fish, while aquaculture mainly produces freshwater and diadromous fish



Source: FAO, Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)
Metalink: P3.FTW.FAO.FI.CFP, p. 280

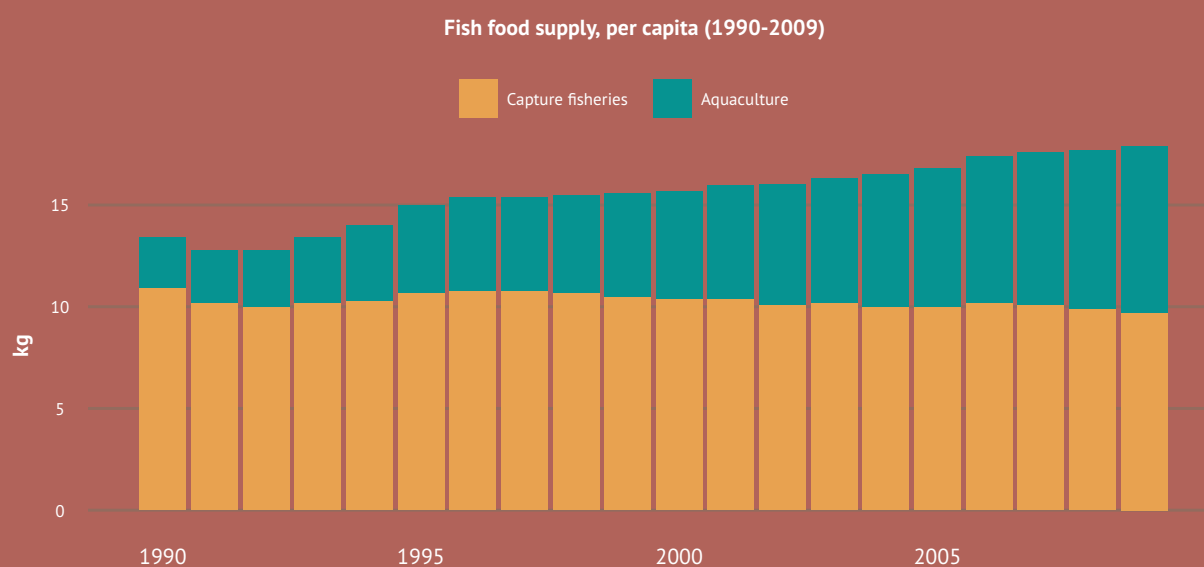
Map 50: Geo-location of harvests by capture and aquaculture



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

Metalink: [P3.FTW.FAO.FI.HARV](#), p. 280

Chart 85: Aquaculture supplies close to half of all fish consumed



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

Metalink: [P3.FTW.FAO.FI.TOT.QP](#), p. 280

Trends in agricultural trade

Although most of the food consumed worldwide is sourced locally, global trade has been instrumental for achieving food security, at least in those countries where it can be afforded. The scale of food and agricultural trade today is unprecedented: in real terms, international flows have increased around fivefold over the past fifty years, but the expansion has been unevenly distributed across regions. For much of this period, it would not be unreasonable to say that the rich world outpaced the poor world in the very area where developing countries are supposed to have a comparative advantage.

The evolution of the overall net agricultural trade balance of developing countries as a whole does not itself denote overall improvement or deterioration from a developmental standpoint. The aggregate of the developing countries is a composite of widely differing country and commodity situations. For some countries, a declining agricultural trade balance (or a growing deficit) is an indicator of progress towards improved welfare. This is the case for countries like the Republic of Korea, in which the growing agricultural deficit has gone hand in hand with high rates of overall economic development and increased food consumption. The declining balance also reflects the rapid growth in markets such as China's increasing importation of oilseeds and vegetable oils (a positive development in general that contributes to improved food consumption and is paid for by growing industrial export earnings).

Needless to say, a declining agricultural trade balance is also a negative developmental outcome in countries that still depend heavily on export earnings from agriculture and/or have to divert scarce foreign exchange resources to pay for growing food imports (eventually building up unsustainable foreign debt). It is an even more negative indicator from the standpoint of human welfare when such food imports are not associated with rising food consumption per capita and improved food security, but are necessary just to sustain minimum levels of food consumption. This is a not an uncommon occurrence.

At the world level, barring changes in stocks, agricultural production equals consumption, but differing growth rates can be observed for individual countries and country groups depending on movements in their **net agricultural trade** positions. In general, production growth rates in most developing regions have been slightly below those of demand, as their agricultural imports have grown faster than their exports, leading to a gradual erosion of their traditional surplus in agricultural trade (excluding fishery and forestry products). By the turn of the 1990s the trend was for the surplus to diminish and become a net deficit.

Map 51:



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FTW.FAO.ESS.IMPDc](#), p. 279 

- The global food economy increasingly relies on trade to meet food needs
- Higher import dependence can be indicative of economic development by way of diversifying out of agriculture into more value-added industries
- However, it can also be a sign of structural food insecurity

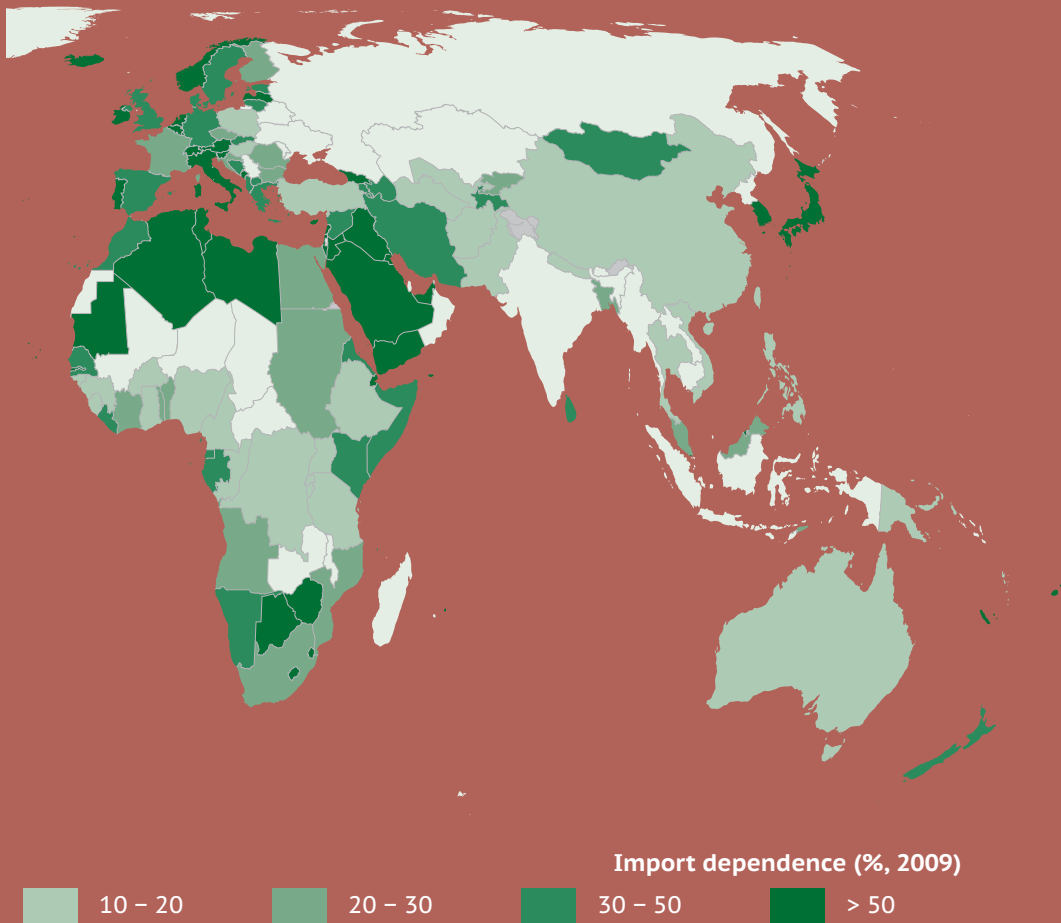
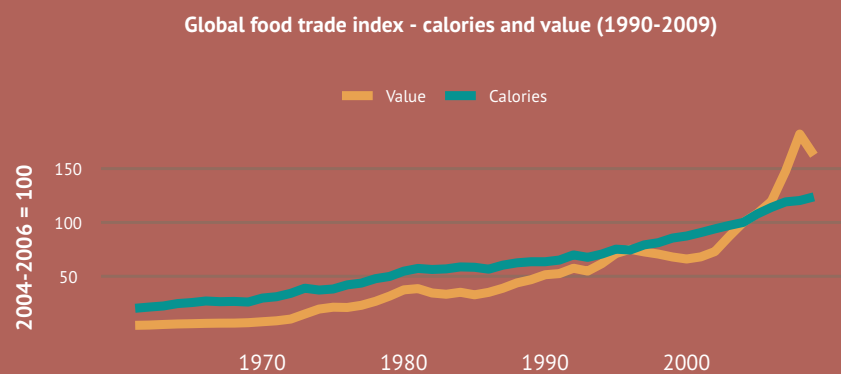


Chart 86: Growing reliance on trade to meet food needs



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.FD.IXc](#), p. 271 

The overall net deficit in food trade of developing countries would have deepened much more were it not for the exceptional performance of several emerging agro-exporters, notably Brazil and its exports mainly of oilseeds and livestock products. But by the same token, China's large-scale imports of agricultural products in the last decade (especially raw materials and primary commodities) also places bias on this trend.

Even excluding Brazil and China, the deterioration of the net balance of the other developing countries as a whole is alarming – a US\$1 billion surplus towards the end of the 1980s became a deficit of US\$34 billion two decades later. In fact, sub-Saharan Africa has seen its share of world food exports drop from 11 percent to under 3 percent in the space of just 20 years. The region's half-a-billion US dollar trade surplus in food in the late 1980s has mushroomed into a 9 billion dollar deficit at present.

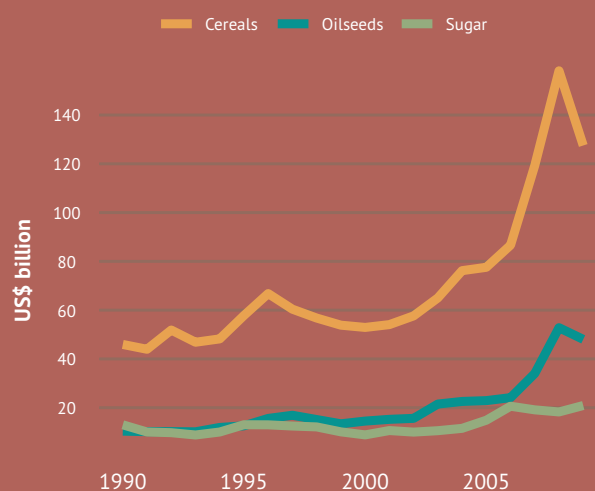
Growing net imports of **cereal** and **livestock** products have been dominant in shaping the growing deficit of agriculture in developing countries. Imports of products in the **oilseed complex** by several major developing countries other than China have also assumed importance, notwithstanding rapidly rising net exports of these products from other developing countries (e.g. Malaysia, Argentina, Indonesia).

Cereals as a group, notably **wheat**, is by far the largest deficit item in the developing country food basket. Over the period 1970 to 2008, over 70 percent of the increment in wheat consumption was met by increments in wheat imports. Moreover, several countries have depended entirely on imports for increasing consumption of wheat.

On the other hand, net exports of **fruit** and **vegetables**, and **tropical beverages** (coffee, tea and cocoa) are virtually the only significant items that have shown consistent improvements in the net trade positions of many developing countries, despite the fact that tropical beverage consumption is slowing in the traditional major markets of developed countries.

Chart 87: Rising dependence on international markets to meet food, feed and industrial needs for traditional "bulk commodities"

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

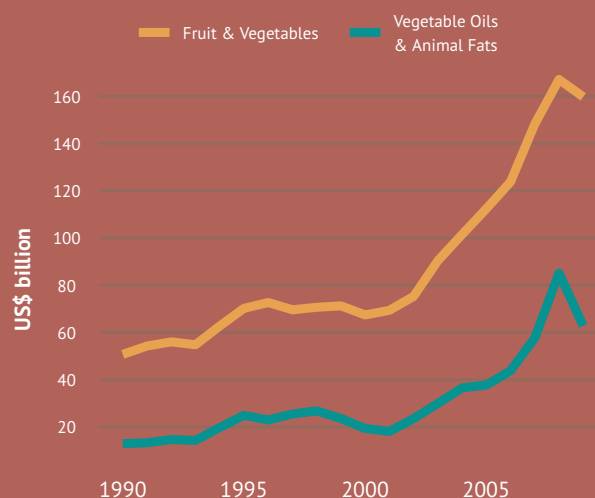


Source: FAO, Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.CE.EXv, p. 270

Chart 88: The world market for vegetable oils on the rise, while improved freight technology and higher demand are boosting global fruit and vegetable flows

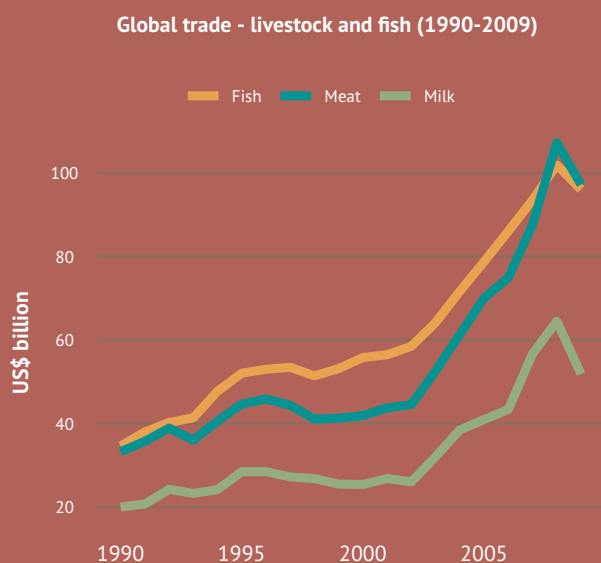
Global trade - vegetable oils and fruit + vegetables (1990-2009)



Source: FAO, Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.VL.EXv, p. 278

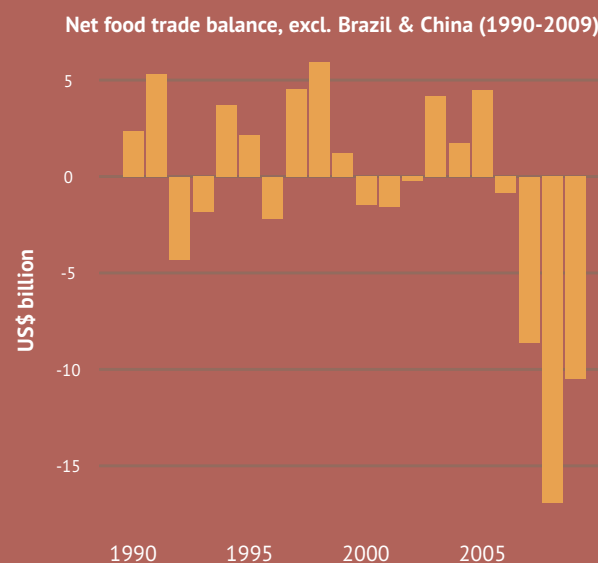
Chart 89: Better transportation technology and rising intensification have met demand in an expanded global market for livestock and fish products



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FTW.FAO.FI.TOT.EXv](#), p. 280

Chart 91: Despite growing export markets for them in some crops, developing countries, excluding Brazil and China, have become net buyers of food



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.FD.NTx](#), p. 272

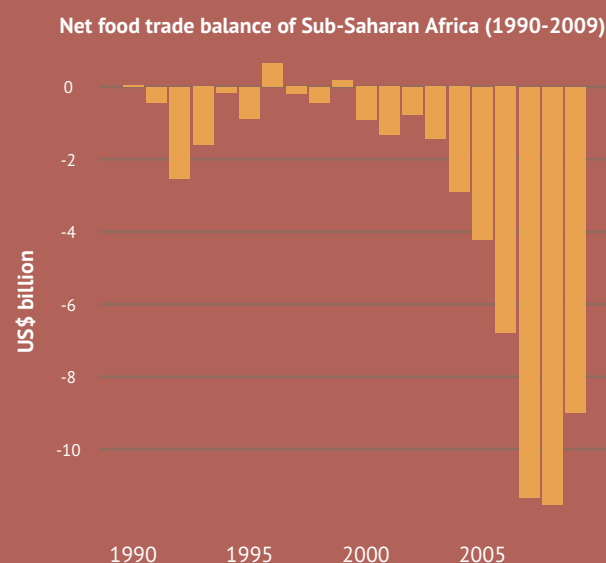
Chart 90: Trade in tropical beverages and spices, the mainstay of many developing country exports, on the rise



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.CF.EXv](#), p. 270

Chart 92: The overall situation for sub-Saharan Africa is even more alarming, with food import costs increasingly outpacing export earnings



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.FD.NTv](#), p. 271

As a whole, developing countries' traditionally large trade surplus of **sugar** diminished quickly after the early 1990s, as several of them became major importers. The shrinkage also reflects the effects of the heavy domestic support and trade protection in major sugar importing countries like the United States of America and Japan, or in formerly net importing countries like the European Union (EU), which lowered its dependence on imports as a result of these policies.

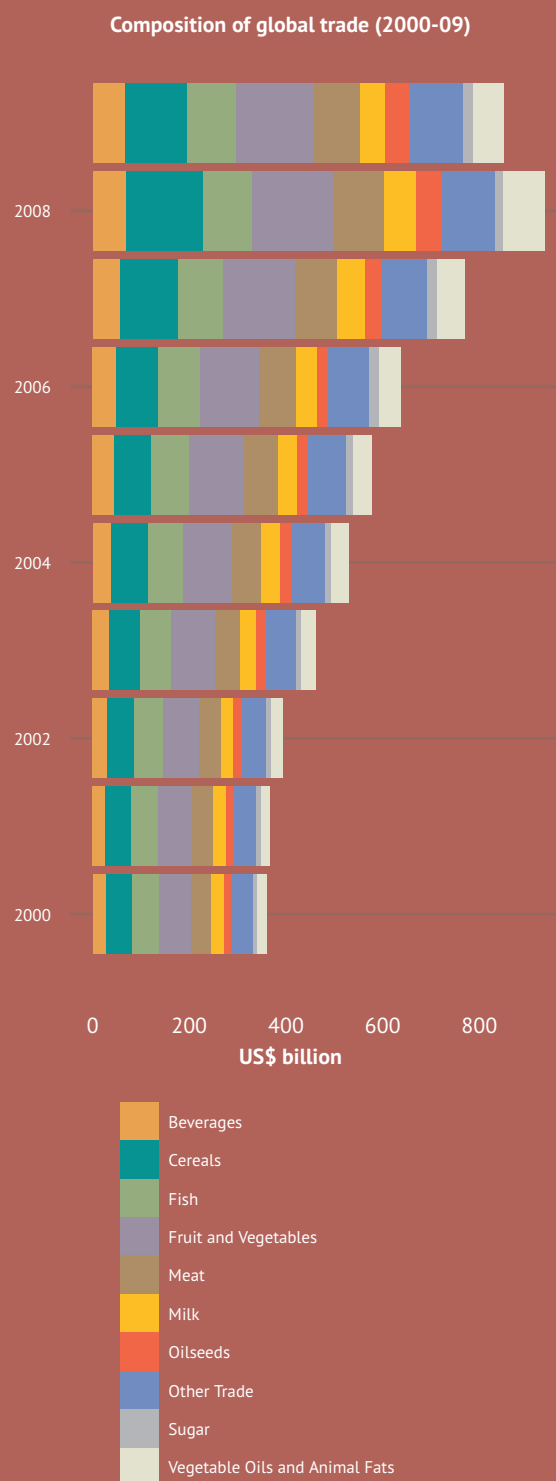
Within the agricultural sector of developing countries there has been a move towards commercialization of the high-value food production sector including **poultry, pork** and **fish**. In the case of poultry and fish, trade expansion has easily outpaced domestic consumption. The aggregate value of net fishery exports of developing countries now often exceeds the combined value of net exports of coffee, tea, cocoa, bananas and sugar – the traditional mainstay of developing country agricultural export earnings.

The potential of some developing countries to emerge as net exporters of certain products (meat, but also palm oil, soybeans and sugar) and to compete with industrial countries in a more globalized trading environment may eventually attenuate the broader trend of developing countries as a whole becoming growing net importers of food and agricultural products.

Further reading

- FAO Food Outlook (www.fao.org/giews/english/fo/index.htm)
- FAO Why has Africa become a net food importer? (www.fao.org/economic/est/publications)
- FAO World agriculture: towards 2030/2050 Interim report: Prospects for food, nutrition, agriculture and major commodity groups (www.fao.org/fileadmin/user_upload/esag/docs/Interim_report_AT2050web.pdf)

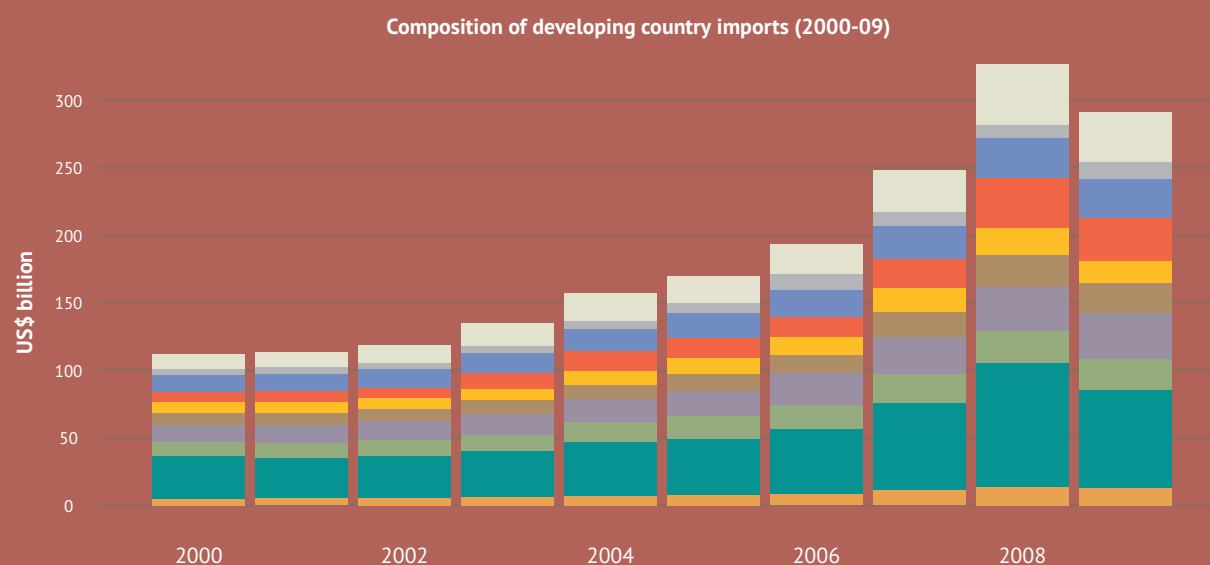
Chart 93: World trade in food is increasingly dominated by higher-value products



Source: FAO, Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.FD.EXv, p. 271

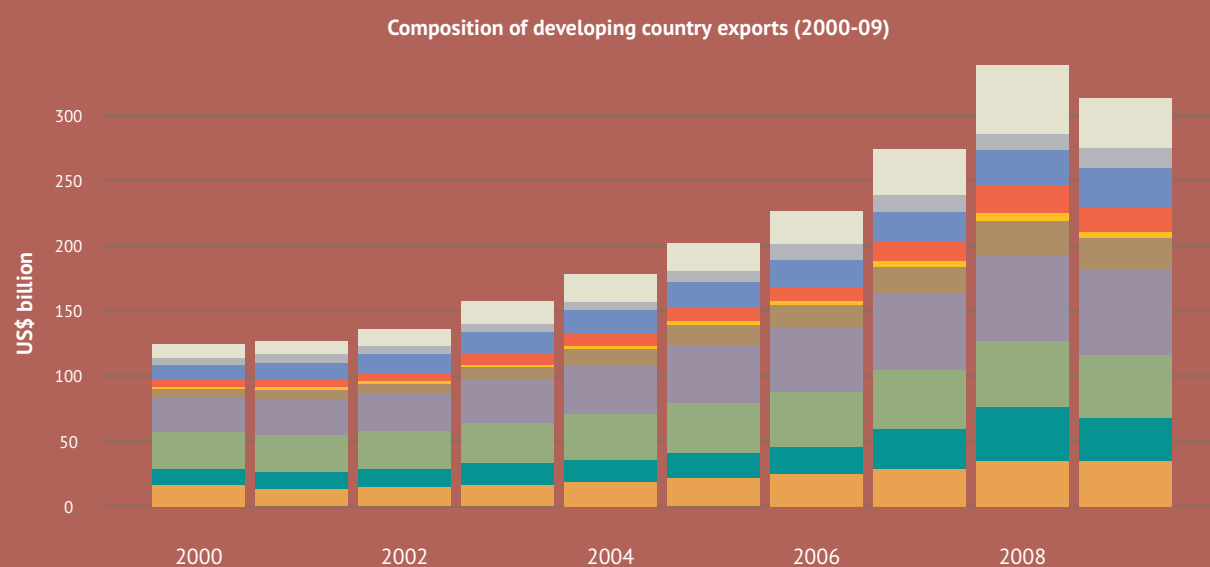
Chart 94: High value products form a growing share of developing country imports



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.FD.IMv](#), p. 271 

Chart 95: Fish, beverages, fruit and vegetables, and vegetable oils are fuelling growth in exports from developing countries



Source: FAO, Statistics Division (FAOSTAT)

Metalink: [P3.FEED.FAO.ESS.FD.EXv](#), p. 271 

Urban and peri-urban agriculture

The ongoing exodus of rural people to urban areas in developing countries has led to the rapid and massive increase in urban populations. Often, rural emigration results in the transfer of poverty, hunger and malnutrition from the countryside to towns and cities, a process known as the “urbanization of poverty”. To meet food needs and supplement incomes, many urban inhabitants – especially new arrivals from the countryside – practice urban and peri-urban agriculture (UPA) on vacant lots, in backyards, along rivers, roads and railways and under power lines.

It has been estimated that some 200 million people are engaged in urban agriculture and related enterprises, contributing to the food supply of 800 million urban dwellers. In Africa, 40 percent of urban dwellers are said to be involved in some form of agricultural activity, and this figure rises to 50 percent in Latin America and the Caribbean.

Much of the prevalence of UPA reflects the vulnerability of urban dwellers to food and income insecurity. Many often have fewer informal safety nets, such as kinship and community networks. As they lack access to natural resources, principally land and water, allowing them to grow food on their own, they depend mainly on purchased food. The urban poor are highly vulnerable to economic crises because they spend a large share of their disposable income on food, and economic downturns can reduce their employment and income opportunities.

UPA can increase the resilience of the urban poor to external shocks by buffering the adverse food security and income effects of crises and economic upheavals. More generally, UPA contributes to food security, nutrition and livelihoods in a combination of ways. For instance, by providing for self-consumption, UPA can contribute to healthy diets while reducing household food expenditures, provide a source of income generation through the sale of surpluses and provide local markets with an immediate supply of fresh and micronutrient-rich food-stuffs at competitive prices.

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

Further reading

- FAO Food for the cities (www.fao.org/fcit/en/)
- FAO Growing greener cities (www.fao.org/ag/agp/greenercities/)

Map 52:



Source: FAO, Agriculture Department

Metalink: [P1.DEM.UN.WUP.POP.URB](#), p. 73 

- Towns and cities are growing rapidly in developing countries, a process often accompanied by high levels of poverty and hunger
- To meet their food needs, some 200 million urban dwellers are estimated to be engaged in agricultural activities
- Urban agriculture needs to be recognized as an important and increasingly central phenomenon of urbanization

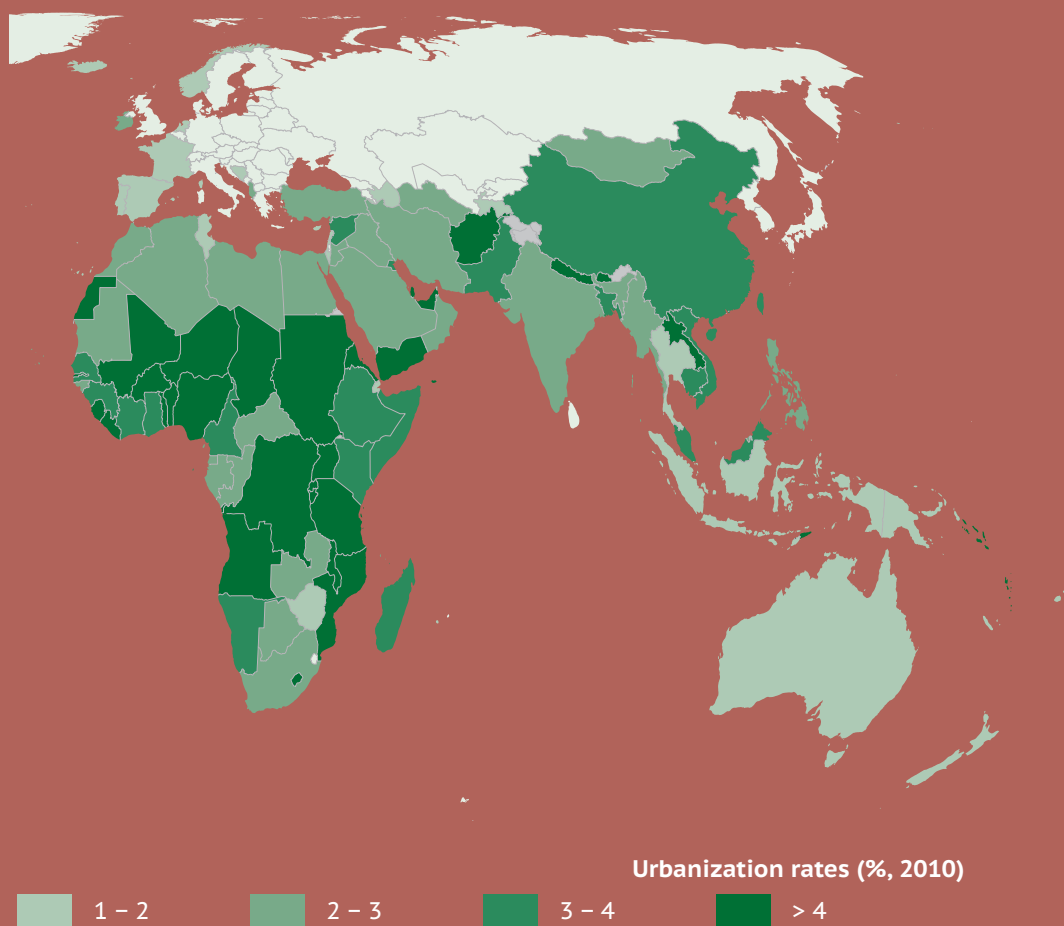
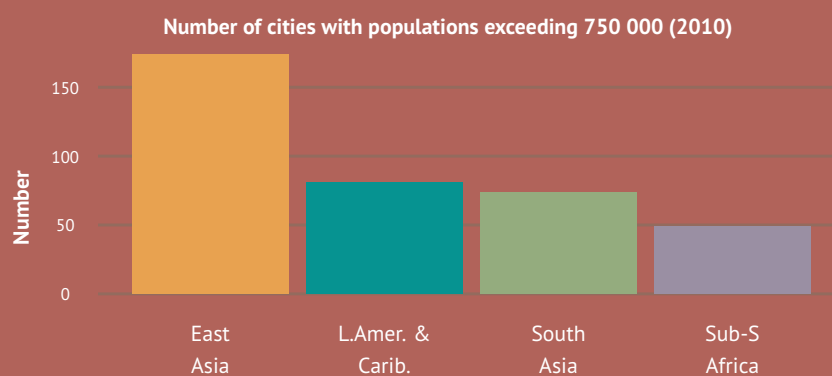


Chart 96: Large cities are prevalent and rising in many food-insecure regions, underscoring the importance of urban agriculture



Source: World Population Prospects - the 2010 Revision (UNESA)

Metalink: P1.DEM.UN.WUP.POP.750, p. 73

Food losses

Food losses represent a significant cost to the world economy and greatly impact our ability to feed the world. Wastage at the consumer level is typical of food systems in developed countries, while losses from production to the retail level characterize those of developing countries.

The issue is highly important in the efforts to combat hunger, raise income and improve food security in the world's poorest countries. Food losses also affect food quality and safety, economic development and the environment.

Loss assessments are generally unreliable, but it is estimated that roughly one-third of the edible food produced for human consumption is lost or wasted, which translates to about 1.3 billion tonnes per year. Per capita waste by consumers is between 95-115 kg a year in Europe and North America, while consumers in sub-Saharan Africa and South and Southeast Asia waste only 6-11 kg a year. In medium- and high-income countries food is to a great extent wasted at the consumer level, meaning that it is disposed of even if still suitable for human consumption. In low-income countries, however, much less is wasted at this level.

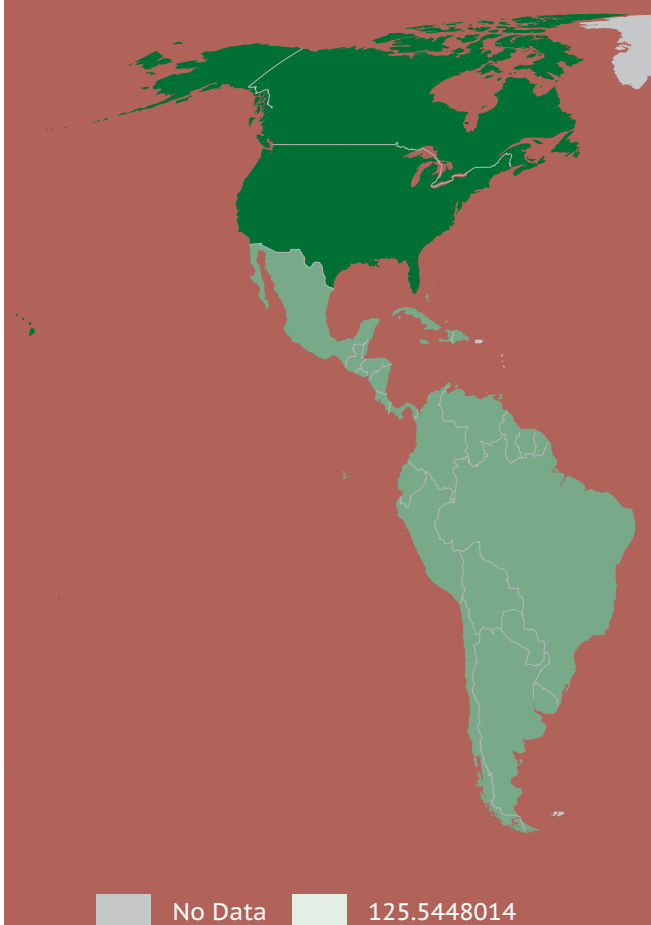
Losses contribute to high food prices because they remove part of the supply from the market. They also impact environmental degradation and climate change, as non-renewable resources are used to produce, process, handle and transport food that no one consumes. The exact causes of food losses vary throughout the world and are very much dependent on the specific conditions and local situation in a given country. In broad terms, food losses will be influenced by crop production choices and patterns, internal infrastructure and capacity, marketing chains and channels for distribution, and consumer purchase and food use practices.

Developing countries can incur significant losses at the time of harvest or when crops are left un-harvested for lack of effective demand. For cereal crops, drying, threshing and milling can cause huge losses, while poor handling, packaging and transport of perishable fruits and vegetables can, on occasions, result in the waste of half the crop. There can also be losses during food processing. All of these instances also waste human labour, land, water, fertilizer and other inputs, as well as fuel for transportation, processing and cold storage.

Further reading

- FAO Global food losses and food waste: Extent, causes and prevention (www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf)
- FAO Food Loss Reduction Strategy (www.fao.org/fileadmin/user_upload/ags/publications/brochure_phl_low.pdf)
- FAO Rural Infrastructure and Agro-Industries Division (www.fao.org/ag/ags/ags-division/en/)

Map 53:



Source: FAO, Agriculture Department

Metalink: [P3.FTW.FAO.AGS.LOSS](https://www.fao.org/ag/ags/ags-division/en/), p. 279 

- One-third of food produced for human consumption is lost or wasted globally
- In developing countries, food is often lost before it reaches markets
- In the developed world, on the other hand, food is wasted by consumers

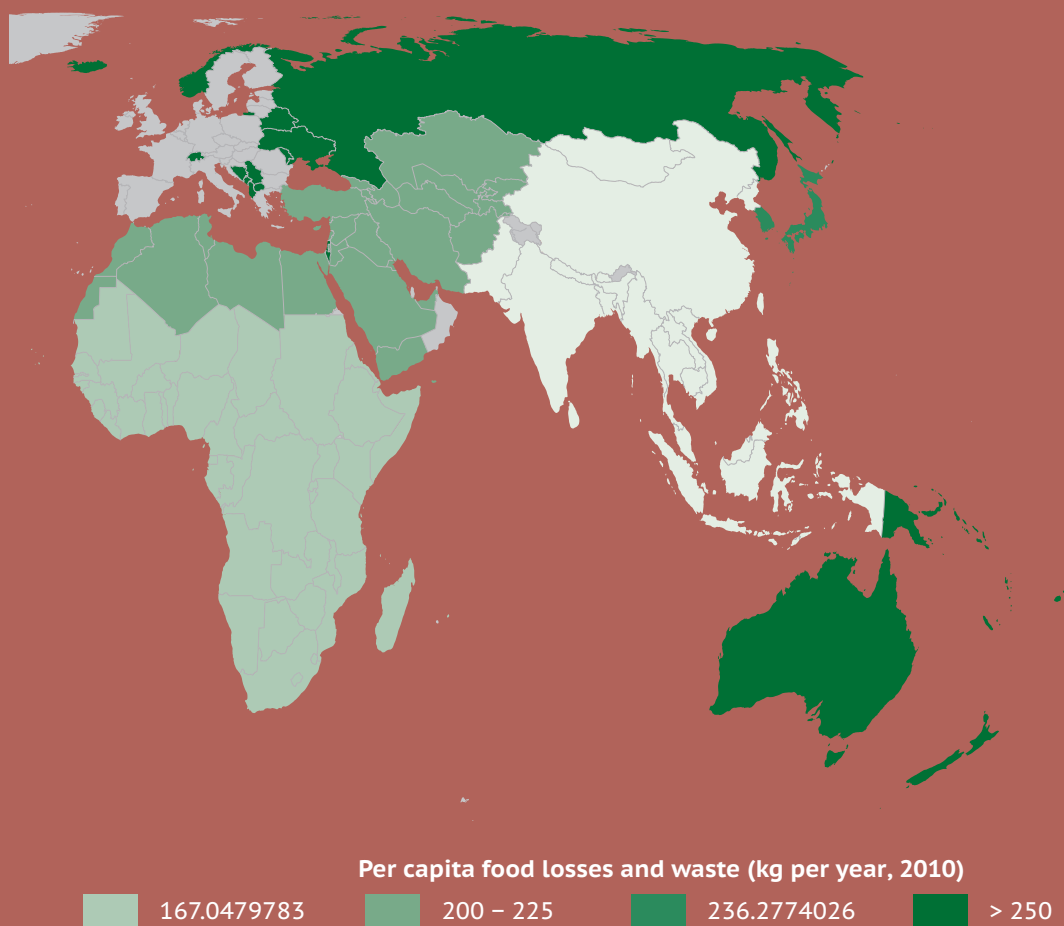
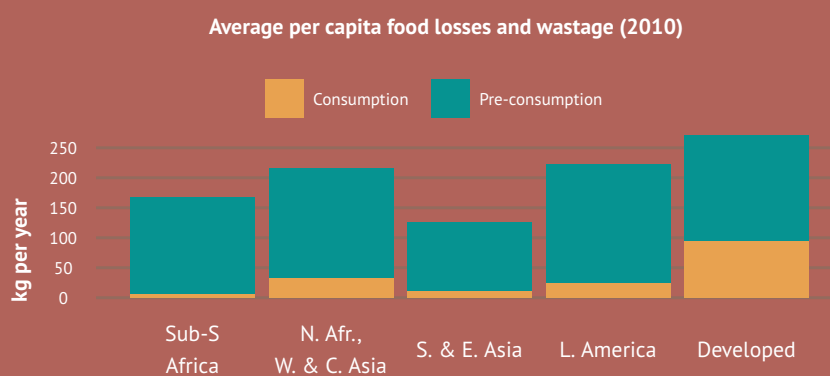


Chart 97: Food losses and wastage are a problem in both developing and developed countries, but at different stages of the value chain



Source: FAO, Agriculture Department
 Metalink: P3.FTW.FAO.AGS.LOSSr, p. 279

TABLE 26: Agriculture-in-aggregate production indicators

	Gross per capita production index number (2004-2006 = 100)							
	crops		livestock		food		non food	
	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09
WORLD	1.0	1.2	1.0	0.9	1.0	1.1	1.0	0.4
DEVELOPING REGIONS								
AFRICA	1.0	0.5	1.0	0.4	1.0	0.6	1.0	-2.8
North Africa								
Algeria	1.4	7.1	1.0	0.7	1.2	4.4	1.0	1.9
Egypt	1.0	1.4	1.0	1.2	1.0	1.5	1.0	-9.7
Libya	1.0	-1.2	1.0	-0.4	1.0	-0.9	1.0	-2.2
Morocco	1.1	5.5	1.0	2.1	1.1	4.4	1.0	1.6
Tunisia	0.9	1.9	1.0	-0.3	0.9	1.3	1.0	-1.3
Sub-Saharan Africa								
Angola	1.2	7.4	1.0	-2.0	1.2	5.0	1.0	-4.5
Benin	1.0	-0.1	1.0	-0.8	1.0	0.7	0.9	-8.4
Botswana	1.0	2.8	1.0	1.5	1.0	1.8	1.1	-4.9
Burkina Faso	0.8	2.2	1.0	0.2	0.9	1.3	0.7	2.9
Burundi	0.6	-6.3	1.1	3.8	0.6	-5.6	1.9	-0.0
Cameroon	1.0	1.1	1.0	-1.2	1.0	1.2	1.2	-5.4
Cape Verde	0.9	-0.7	1.0	3.4	1.0	1.4	1.0	1.1
Central African Republic	1.0	-0.3	1.0	0.8	1.0	0.5	1.2	-9.6
Chad	1.0	1.0	1.0	-0.9	1.0	1.0	0.5	-13.8
Comoros	1.0	-2.2	1.0	-1.7	1.0	-2.1	1.0	-0.5
Congo	1.1	0.4	1.0	3.8	1.1	1.0	0.9	3.4
Côte d'Ivoire	0.9	-1.3	1.0	0.7	0.9	-0.1	1.1	-9.7
Congo, Dem. Rep.	1.0	-3.3	1.0	-2.7	1.0	-3.2	0.9	-7.3
Djibouti	1.1	-0.3	0.7	-0.3	0.8	-0.3		
Equatorial Guinea	1.0	-1.1	1.0	-1.8	1.0	-0.1	0.6	-9.2
Eritrea	1.4	-1.8	1.1	-0.9	1.2	-1.2	1.2	-5.2
Ethiopia	1.1	3.4	1.0	2.2	1.1	3.2	1.0	0.2
Gabon	1.1	-0.0	1.0	-1.9	1.1	-0.5	1.0	0.1
Gambia	1.2	-0.9	1.0	-0.3	1.1	-0.8	1.2	9.2
Ghana	1.0	2.2	1.0	0.5	1.0	2.1	1.1	-1.9
Guinea	0.9	0.7	1.0	3.1	0.9	1.2	0.8	-4.9
Guinea-Bissau	0.9	-1.0	1.0	0.8	0.9	-0.6	1.0	1.6
Kenya	1.0	0.1	1.0	2.5	1.0	1.5	0.9	-1.7
Lesotho	0.9	-4.5	1.0	-0.0	1.0	-1.9	0.9	3.6
Liberia	0.9	-3.5	1.0	-1.1	0.9	-1.2	0.7	-9.3
Madagascar	1.0	0.2	1.0	-1.8	1.0	-0.3	1.0	-3.7
Malawi	1.0	0.3	1.1	3.7	0.9	-0.0	1.2	4.8
Mali	1.1	4.2	1.0	2.5	1.1	4.2	1.2	-6.4
Mauritania	1.1	-1.1	1.0	-0.6	1.0	-0.7		
Mauritius	1.0	-1.6	0.9	3.8	1.0	-0.4	0.9	-2.0
Mozambique	1.0	0.5	1.0	-3.9	1.0	-1.3	0.9	14.5
Namibia	0.9	0.9	1.0	-1.9	1.0	-1.2	0.9	-3.2
Niger	0.8	4.4	1.0	1.6	0.9	3.2	0.9	-12.4
Nigeria	0.8	-1.4	1.0	0.4	0.8	-1.2	1.1	-0.5
Rwanda	1.1	1.5	1.0	3.2	1.1	1.7	1.1	2.3
Senegal	1.0	-0.2	1.0	0.0	1.0	-0.1	0.7	-3.8
Seychelles	1.0	-4.4	0.9	-8.3	1.0	-6.8	0.5	-14.9
Sierra Leone	1.0	4.4	1.0	0.2	1.0	4.2	0.9	-1.6
Somalia	1.1	-0.8	1.0	-1.6	1.0	-1.5	1.0	1.7
Sudan	1.0	-0.4	1.0	-0.0	1.0	-0.2	1.2	-0.5
South Africa	1.0	-0.5	1.0	1.3	1.0	0.4	1.0	-6.1
Swaziland	1.0	0.0	1.0	1.7	1.0	0.6	1.1	-20.9
Tanzania, Utd. Rep.	1.0	3.2	1.0	0.2	1.0	2.4	0.9	3.0
Togo	0.9	-0.7	1.1	1.6	0.9	0.8	0.9	-12.8
Uganda	1.0	-1.8	1.0	-0.8	1.0	-1.7	0.9	-0.5
Zambia	1.1	4.0	1.0	-1.7	1.1	0.9	1.1	13.1
Zimbabwe	1.0	-5.8	1.0	1.0	1.0	-2.2	0.9	-7.2

TABLE 26: Agriculture-in-aggregate production indicators (continued)

	Gross per capita production index number (2004-2006 = 100)							
	crops		livestock		food		non food	
	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09
ASIA								
Central Asia	1.1	4.0	1.0	3.8	1.1	4.4	0.9	0.2
Kazakhstan	1.2	5.3	1.0	3.3	1.1	4.5	0.9	0.6
Kyrgyzstan	1.0	0.8	1.0	0.1	1.0	0.8	0.7	-7.2
Tajikistan	1.1	5.1	1.0	8.3	1.1	7.1	0.8	-0.9
Turkmenistan	0.9	1.8	1.0	6.8	1.0	5.1	0.7	-0.9
Uzbekistan	1.0	3.9	1.1	4.1	1.0	4.8	0.9	0.7
East Asia								
Brunei Darussalam	1.0	-1.4	1.0	3.9	1.0	2.9	0.9	-1.0
Cambodia	1.0	7.0	1.0	-1.1	1.0	5.7	1.1	0.8
China	1.0	2.9	1.0	2.5	1.0	2.8	0.9	2.9
Indonesia	1.0	3.8	1.0	3.7	1.1	3.8	1.0	4.2
Korea, DPR	1.0	1.2	1.0	2.4	1.0	1.4	1.0	2.0
Korea, Republic of	1.0	-0.4	1.0	0.5	1.0	0.0	1.1	5.2
Lao, PDR	1.0	3.0	1.1	2.4	1.0	3.2	0.9	-1.4
Malaysia	1.0	1.8	1.0	1.7	1.0	2.3	0.8	-2.7
Mongolia	1.4	10.1	1.2	-2.0	1.2	-1.1	1.0	-1.7
Myanmar	1.0	5.5	1.0	11.1	1.0	6.4	1.0	-1.3
Philippines	1.0	1.3	1.0	1.4	1.0	1.2	1.0	5.9
Singapore	1.0	11.8	1.0	0.8	1.0	1.8		
Thailand	1.0	1.7	1.0	1.4	1.0	1.6	1.0	1.8
Viet Nam	1.0	2.5	1.1	5.1	1.0	2.9	1.1	5.3
South Asia	1.0	0.8	1.0	1.8	1.0	1.0	1.0	2.4
Afghanistan	1.2	3.6	1.0	-3.5	1.1	0.2	1.0	-4.1
Bangladesh	1.0	1.9	1.0	2.4	1.0	2.0	1.0	0.2
Bhutan	1.0	1.8	1.0	-2.0	1.0	0.9	1.1	-2.6
India	1.0	0.7	1.0	1.8	1.0	0.8	1.0	3.9
Iran (Islamic Rep.)	1.1	1.5	1.0	2.8	1.1	2.1	1.0	-4.4
Maldives	1.0	-1.7	1.0	-2.6	1.0	-1.8		
Nepal	1.0	1.0	1.0	-0.0	1.0	0.7	1.0	3.0
Pakistan	1.0	0.3	1.0	1.7	1.0	1.1	1.0	-0.1
Sri Lanka	1.0	0.6	1.0	1.2	1.0	0.8	0.9	0.0
West Asia								
Armenia	1.0	8.5	1.0	4.4	1.0	6.9	1.2	-9.1
Azerbaijan	1.0	3.6	1.0	3.7	1.0	4.2	0.8	-9.1
Bahrain	1.0	-6.0	1.0	-8.4	1.0	-7.0		
Cyprus	1.0	-6.0	0.9	-2.4	1.0	-3.9	1.0	-6.1
Georgia	1.0	-2.8	0.9	-2.5	0.9	-2.5	1.0	-11.6
Iraq	1.0	-3.3	1.0	-4.0	1.0	-3.5	1.1	-3.2
Jordan	1.1	1.1	0.9	0.7	1.0	1.0	1.0	-2.1
Kuwait	1.0	0.6	1.0	0.5	1.0	0.5	1.0	-2.5
Lebanon	1.0	-1.5	1.0	1.6	1.0	-0.6	1.0	-2.3
Occupied Palestinian Territory	1.0	0.4	0.9	-3.0	1.0	-0.8	1.0	4.0
Saudi Arabia	0.9	-0.4	1.0	-0.6	1.0	-0.5	1.0	-1.1
Syrian Arab Republic	1.1	-1.0	1.0	0.5	1.1	-0.1	1.0	-5.4
Turkey	1.0	-0.5	1.0	0.9	1.0	0.0	0.9	-4.3
United Arab Emirates	0.9	-16.6	1.3	-2.7	1.0	-13.9	0.9	-6.7
Yemen	1.0	0.9	1.0	2.7	1.0	1.7	1.0	1.9
LATIN AMERICA & THE CARIBBEAN								
Argentina	0.7	-0.6	1.0	1.2	0.8	0.2	0.9	0.3
Bahamas	1.0	1.4	1.0	1.6	1.0	1.4		
Barbados	1.1	-3.3	1.0	1.7	1.0	-0.5		
Belize	0.9	-2.5	1.0	2.2	1.0	-1.8	0.8	-11.0
Bolivia (Plur. State)	1.0	0.7	1.0	2.0	1.0	1.3	1.0	0.2
Brazil	1.0	3.5	1.0	3.1	1.0	3.4	0.9	2.3
Chile	1.0	1.2	0.9	1.2	1.0	1.3	1.1	3.1
Colombia	1.0	0.5	1.0	2.2	1.0	1.3	1.2	1.4
Costa Rica	1.1	0.5	1.0	0.9	1.0	1.1	0.8	-7.7

TABLE 26: Agriculture-in-aggregate production indicators (continued)

	Gross per capita production index number (2004-2006 = 100)							
	crops		livestock		food		non food	
	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09	% 2008 - 2009	% p.a. growth: 2000-09
Cuba	1.0	-2.8	1.0	0.9	1.0	-1.9	1.2	-3.3
Dominica	1.1	-0.3	1.0	1.5	1.1	-0.1	1.4	-0.6
Dominican Republic	1.1	1.3	1.0	3.6	1.1	2.6	1.0	-3.4
Ecuador	1.1	0.3	1.0	5.7	1.0	2.6	1.0	-9.2
El Salvador	0.9	0.7	1.0	1.8	1.0	1.8	0.9	-4.6
French Guiana	0.9	-5.3	1.0	-4.7	0.9	-5.2		
Grenada	1.0	-1.8	1.0	2.6	1.0	-1.2	1.0	-0.2
Guatemala	1.0	1.9	1.0	-0.5	1.0	2.0	1.0	-2.6
Guyana	1.0	-0.5	1.0	4.5	1.0	0.2	1.0	5.4
Haiti	1.1	-0.5	1.0	-0.5	1.1	-0.7	1.3	3.4
Honduras	1.0	2.9	0.9	1.5	1.0	3.0	1.1	-1.2
Jamaica	1.1	-0.4	1.0	1.1	1.1	0.3	1.2	0.6
Mexico	0.9	0.0	1.0	0.9	1.0	0.5	0.9	-4.8
Netherlands Antilles			1.0	0.7	1.0	0.7		
Nicaragua	1.1	1.3	1.0	3.4	1.1	2.5	1.2	0.0
Panama	0.8	-2.8	1.0	0.4	0.9	-1.2	1.0	1.2
Paraguay	0.8	1.4	1.1	1.0	0.9	1.7	0.6	-15.5
Peru	1.0	2.2	1.0	3.7	1.0	2.9	0.9	-0.6
St. Kitts & Nevis	1.0	-5.9	1.0	-6.8	1.0	-6.0	2.0	-1.4
St. Lucia	1.0	-4.0	0.9	3.5	1.0	-2.6		
St. Vincent & Grenadines	1.1	2.7	1.0	0.6	1.1	2.4	1.3	3.5
Suriname	1.0	1.2	1.0	1.4	1.0	1.2	1.0	9.4
Trinidad & Tobago	1.1	-2.0	1.0	4.2	1.0	1.2	2.9	2.7
Uruguay	1.1	7.4	1.0	1.2	1.0	3.2	0.9	-2.8
Venezuela (Boliv. Rep. of)	1.0	-0.7	1.0	-0.3	1.0	-0.4	1.0	-3.6
OCEANIA								
Fiji	0.9	-3.8	0.9	0.5	0.9	-2.5	1.3	0.5
French Polynesia	1.0	1.3	1.0	-0.2	1.0	0.9	1.0	-3.7
New Caledonia	0.9	-0.4	1.0	-1.7	0.9	-1.3	0.2	-11.5
Papua New Guinea	1.0	-0.2	0.8	-1.5	0.9	-0.4	0.9	-4.8
Samoa	1.0	1.3	1.0	0.9	1.0	1.2	1.3	-1.3
Solomon Islands	0.9	0.8	1.0	-1.4	0.9	0.6	1.3	-2.3
Tonga	1.0	0.6	1.0	-0.3	1.0	0.5	0.9	0.4
Vanuatu	1.0	-0.6	0.9	-4.2	1.0	-1.5	1.0	-9.8
DEVELOPED REGIONS								
NORTH AMERICA	1.0	0.2	1.0	-0.1	1.0	0.2	0.9	-4.5
Bermuda	1.0	-0.2	1.0	0.5	1.0	0.2		
Canada	0.9	0.2	1.0	-0.2	1.0	-0.0	1.1	0.5
United States of America	1.0	0.2	1.0	-0.1	1.0	0.2	0.9	-4.8
ASIA & OCEANIA								
Australia	1.0	-2.2	1.0	-1.7	1.0	-1.4	1.2	-8.7
Israel	1.0	-0.8	0.9	0.4	1.0	-0.1	0.8	-7.7
Japan	1.0	-1.5	1.0	0.1	1.0	-0.6	0.9	-2.7
New Zealand	1.0	-0.5	1.0	0.0	1.0	0.2	0.9	-2.0
EUROPE	1.0	0.6	1.0	0.1	1.0	0.4	1.0	-2.0
Albania	1.0	3.4	1.0	0.7	1.0	2.1	0.8	-2.7
Belarus	0.9	3.9	1.1	4.7	1.0	4.3	0.7	1.6
Bosnia & Herzegovina	1.0	6.0	1.0	6.1	1.0	6.1	0.9	-0.2
Croatia	1.0	0.6	1.0	3.9	1.0	1.6	1.1	7.2
European Union	1.0	-0.5	1.0	-0.4	1.0	-0.5	1.0	-2.6
Iceland	0.9	0.5	1.0	0.1	1.0	0.2	1.1	-6.3
Macedonia, FYR	1.0	1.0	0.9	2.1	1.0	1.3	1.4	0.1
Montenegro	1.1		1.0		1.0		0.9	
Norway	0.8	-1.8	1.0	-0.5	0.9	-0.7	1.0	-0.7
Republic of Moldova	0.8	1.6	1.1	1.1	0.9	1.8	1.1	-13.1
Russian Federation	1.0	3.1	1.0	1.9	1.0	2.5	1.0	3.3
Serbia	1.0		1.0		1.0		0.9	
Switzerland	1.0	-1.9	1.0	0.2	1.0	-0.4	1.0	16.4
Ukraine	0.9	5.3	1.0	0.6	1.0	3.5	0.8	-2.8

TABLE 27: Top wheat producers and their productivity

	Wheat							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Afghanistan	2 504	2.1	1.8	9.6	5 064	4 532	4.7	11.9
Algeria	1 900	8.7	1.6	5.9	2 953	3 100	7.8	15.1
Argentina	4 373	-3.8	3.4	3.2	8 851	14 914	3.8	-0.8
Australia	13 507	1.1	1.6	-1.0	21 656	22 138	5.7	0.0
Azerbaijan	656	2.9	1.9	-1.8	2 096	1 272		1.0
Bangladesh	376	-7.6	2.4	0.8	849	901	8.8	-6.9
Belarus	603	2.9	2.9	3.1	1 979	1 740		6.1
Brazil	2 177	7.4	2.8	5.9	5 056	6 037	-2.5	13.8
Bulgaria	1 109	1.3	3.6	2.4	3 977	3 995	-7.4	3.7
Canada	8 269	-2.7	2.8	1.4	26 848	23 167	-1.9	-1.3
China	24 256	-0.9	4.7	2.4	115 115	115 180	1.7	1.5
Czech Republic	834	-1.5	5.0	1.7	4 358	4 162		0.2
Denmark	764	2.0	6.6	-1.2	5 940	5 060	1.4	0.8
Egypt	1 288	2.2	5.6	-1.3	8 523	7 177	4.5	0.9
Ethiopia	1 684	4.7	1.8	4.4	3 076	3 000		9.3
European Union	25 998	-0.2	5.3	0.5	138 262	136 507	0.6	0.3
France	5 426	0.3	7.0	-0.1	38 332	38 207	1.2	0.2
Germany	3 298	1.1	7.3	0.0	25 192	24 107	2.8	1.1
Greece	510	-5.1	3.1	1.5	1 830	1 600	0.2	-3.7
Hungary	1 011	-0.1	3.7	0.3	4 419	3 764	-9.1	0.2
India	28 520	0.4	2.8	0.2	80 680	80 710	4.1	0.6
Iran (Islamic Rep.)	7 035	3.3	2.1	3.0	13 484	15 029	0.9	6.4
Iraq	1 383	1.4	2.0	20.0	1 700	2 749	-4.4	21.8
Italy	1 865	-2.2	3.7	1.4	6 341	6 900	-0.5	-0.8
Kazakhstan	13 138	2.7	0.7	-2.1	17 052	9 638		0.6
Kyrgyzstan	375	-1.7	2.2	-0.8	1 057	813		-2.4
Lithuania	526	3.6	3.3	-0.3	2 100	1 708		3.3
Mexico	679	-0.4	5.4	0.9	4 116	3 677	-2.9	0.5
Morocco	2 852	-0.2	1.7	13.6	6 371	4 876	-5.6	13.4
Nepal	731	1.0	2.1	1.7	1 344	1 557	2.7	2.8
Pakistan	9 132	0.8	2.6	0.2	24 033	23 311	2.5	1.0
Paraguay	561	13.4	2.5	6.1	1 067	1 402	-3.5	20.3
Poland	2 406	-0.9	3.9	2.0	9 790	9 488	0.0	1.1
Republic of Moldova	328	-1.3	2.3	1.5	737	744		0.2
Romania	2 153	1.1	2.7	1.6	5 203	5 812	-4.8	2.7
Russian Federation	21 640	0.1	1.9	1.7	61 740	41 508		1.9
Slovakia	350	-1.4	3.5	1.3	1 538	1 228		-0.2
South Africa	558	-5.0	2.6	0.1	1 958	1 465	0.2	-4.9
Spain	1 907	-2.1	2.9	-0.5	4 724	5 611	0.7	-2.6
Sweden	404	0.1	5.4	-0.9	2 284	2 184	-3.3	-0.8
Syrian Arab Republic	1 400	-1.8	2.6	3.3	3 702	3 600	3.0	1.5
Tajikistan	343	-0.0	2.5	7.8	938	858		7.8
Tunisia	434	-4.9	1.9	4.9	1 654	822	2.4	-0.2
Turkey	8 054	-1.5	2.4	0.9	20 600	19 660	-1.2	-0.7
Turkmenistan	850	2.0	3.5	3.9	2 958	3 000		5.9
Ukraine	6 284	2.0	2.7	3.1	20 886	16 851		5.2
United Kingdom	1 937	-0.7	7.7	-0.4	14 076	14 878	0.6	-1.2
United States of America	19 278	-1.1	3.1	1.0	60 366	60 103	-1.9	-0.1
Uruguay	404	12.2	3.2	2.4	1 844	1 301	-0.9	14.9
Uzbekistan	1 420	0.5	4.7	6.2	6 638	6 730		6.7
WORLD	216 775	0.1	3.0	1.0	686 957	651 398	-0.1	1.1
DEVELOPING REGIONS	119 518	0.4	2.9	1.3	348 579	343 698	2.7	1.7
AFRICA	9 502	1.6	2.3	2.8	26 083	22 017	1.3	4.4
ASIA	101 180	0.3	2.9	1.1	299 904	292 260	2.9	1.4
LATIN AMERICA & THE CARIBBEAN	8 837	-0.5	3.3	2.7	22 591	29 421	1.2	2.2
DEVELOPED REGIONS	97 250	-0.3	3.2	0.7	338 363	307 685	2.0	0.5
NORTH AMERICA	27 547	-1.6	3.0	1.1	87 213	83 269	-1.9	-0.5
EUROPE	55 870	0.1	3.6	0.8	228 283	201 149	-3.2	0.9

TABLE 28: Top rice producers and their productivity

	Rice							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Afghanistan	200	4.4	3.4	5.3	645	672	-1.9	10.0
Argentina	215	1.3	5.8	1.9	1 334	1 241	16.2	3.2
Bangladesh	11 800	0.9	4.2	1.8	47 724	49 355	2.8	2.8
Bolivia (Plur. State)	172	1.0	2.1	1.0	396	363	2.2	1.9
Brazil	2 710	-2.9	4.2	3.2	12 651	11 309	5.2	0.2
Burkina Faso	132	12.7	1.8	-3.7	214	233	7.8	8.5
Cambodia	2 777	3.8	3.0	3.4	7 586	8 245	5.5	7.4
Cameroon	140	21.3	1.2	-8.4	115	175	2.3	11.1
China	30 117	-0.1	6.5	0.4	196 681	197 221	0.5	0.4
Colombia	465	-0.1	5.2	-1.0	2 985	2 412	0.4	-1.1
Congo, Dem. Rep.	420	-0.6	0.8	-0.0	317	317	-1.3	-0.6
Côte d'Ivoire	385	1.2	1.7	-0.8	688	650	-1.3	0.4
Cuba	176	-1.3	2.6	-0.7	564	454	1.9	-1.9
Dominican Republic	199	5.2	4.6	-0.5	848	917	3.2	4.7
Ecuador	393	1.5	4.3	1.7	1 579	1 706	4.9	3.2
Egypt	460	-3.5	9.4	0.3	5 520	4 330	7.0	-3.2
European Union	483	1.7	6.6	0.9	3 032	3 209	1.6	2.6
Ghana	181	4.6	2.7	2.3	391	492	11.2	7.1
Guinea	864	2.6	1.9	0.9	1 499	1 615	4.4	3.5
Guyana	205	5.9	2.5	-4.4	554	507	15.3	1.2
India	36 950	-1.9	3.3	1.4	133 700	120 620	2.1	-0.6
Indonesia	13 244	1.2	5.0	1.3	64 399	66 412	1.3	2.5
Iran (Islamic Rep.)	564	0.5	4.1	1.0	2 253	2 288	1.9	1.5
Italy	248	1.2	6.6	1.7	1 500	1 638	1.1	2.9
Japan	1 628	-0.8	6.5	-0.3	10 590	10 600	-1.5	-1.1
Korea, DPR	570	0.6	4.3	3.0	2 336	2 426	3.0	3.7
Korea, Republic of	892	-1.8	6.5	-0.3	7 023	5 804	-1.0	-2.1
Lao, PDR	870	1.9	3.5	1.2	3 145	3 006	3.9	3.2
Liberia	251	5.8	1.2	-0.8	293	296	1.0	4.9
Madagascar	1 350	1.1	3.5	5.5	4 540	4 738	0.7	6.7
Malaysia	674	-0.4	3.8	2.1	2 460	2 548	0.9	1.8
Mali	686	6.9	3.4	4.8	1 951	2 308	11.1	12.0
Mozambique	185	0.0	1.0	-0.1	179	180	7.6	-0.0
Myanmar	8 052	2.5	4.1	2.0	32 682	33 204	4.1	4.5
Nepal	1 481	-0.5	2.7	0.1	4 524	4 024	1.0	-0.5
Nigeria	1 788	-2.0	1.8	1.8	3 403	3 219	3.1	-0.2
Pakistan	2 365	-0.0	3.1	0.1	10 324	7 235	5.2	0.0
Peru	389	3.1	7.3	1.0	2 991	2 831	8.1	4.1
Philippines	4 354	0.8	3.6	1.7	16 266	15 772	2.0	2.4
Russian Federation	201	1.8	5.3	4.2	913	1 061		6.1
Senegal	147	5.5	4.1	5.8	502	604	3.2	11.6
Sierra Leone	545	11.5	1.7	4.4	785	909	-7.6	16.4
Sri Lanka	1 060	2.5	4.1	1.7	3 652	4 301	1.3	4.2
Tanzania, Utd. Rep.	720	5.6	1.5	-2.0	1 334	1 105	-0.2	3.5
Thailand	10 990	1.1	2.9	1.0	32 116	31 597	3.9	2.0
Uganda	140	6.9	1.6	0.3	206	218	6.5	7.2
United States of America	1 463	1.8	7.5	0.7	9 972	11 027	3.1	2.4
Uruguay	162	-1.6	7.1	1.1	1 287	1 149	16.1	-0.5
Venezuela (Boliv. Rep. of)	239	5.6	5.1	0.4	1 330	1 219	4.3	6.1
Viet Nam	7 514	-0.2	5.3	2.3	38 950	39 989	5.6	2.1
WORLD	153 651	-0.0	4.4	1.2	684 780	672 021	1.8	1.2
DEVELOPING REGIONS	149 823	-0.0	4.3	1.2	660 047	645 745	1.9	1.2
AFRICA	9 050	1.8	2.5	0.9	23 278	22 852	3.5	2.7
ASIA	134 923	-0.1	4.4	1.2	608 294	596 737	1.8	1.1
LATIN AMERICA & THE CARIBBEAN	5 846	-0.9	4.5	2.0	28 459	26 143	5.2	1.1
DEVELOPED REGIONS	3 828	0.2	6.9	0.3	24 733	26 276		0.6
NORTH AMERICA	1 463	1.8	7.5	0.7	9 972	11 027	3.1	2.4
EUROPE	718	1.7	6.2	1.7	4 105	4 443	-3.7	3.4

TABLE 29: Top coarse grain producers and their productivity

	Coarse grains							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Angola	1 644	6.4	0.6	0.8	1 011	1 010	9.0	7.3
Argentina	4 770	0.5	6.3	2.8	16 197	30 049	8.4	3.3
Australia	5 950	1.2	1.9	-1.2	12 779	11 171	3.0	-0.1
Belarus	1 778	-0.6	2.8	3.9	6 175	4 989		3.3
Brazil	13 788	1.0	4.2	4.8	53 207	58 385	4.7	5.8
Burkina Faso	4 158	4.7	1.0	2.2	3 413	4 290	6.6	7.0
Cameroon	1 499	7.9	1.8	0.2	2 415	2 630	4.4	8.0
Canada	4 745	-4.3	4.7	3.5	22 562	22 245	1.0	-1.0
Chad	2 352	3.5	0.8	4.2	2 051	1 773	8.3	7.8
China	35 759	2.2	5.2	2.3	171 471	185 178	2.3	4.6
Congo, Dem. Rep.	1 553	0.1	0.8	-0.3	1 201	1 202	1.4	-0.2
Egypt	1 220	1.3	6.5	-0.9	8 663	7 901	2.9	0.5
Ethiopia	7 644	2.3	1.7	4.1	12 401	12 613		6.4
European Union	30 452	-1.2	4.7	1.1	156 220	141 919	1.2	-0.1
France	3 809	0.0	7.2	-0.3	31 564	27 350	2.6	-0.3
Germany	3 315	-2.0	6.1	0.5	24 616	20 306	1.2	-1.5
Ghana	1 421	1.8	1.7	3.3	2 216	2 415	7.6	5.1
Guinea	1 164	8.0	1.1	-1.3	1 160	1 244	6.4	6.5
Hungary	1 573	-1.0	5.4	4.0	9 159	8 532	3.7	3.0
India	27 140	-1.1	1.2	1.9	34 430	33 580	-0.7	0.8
Indonesia	4 143	1.7	4.4	4.8	17 630	18 364	3.5	6.6
Iran (Islamic Rep.)	1 842	2.9	2.7	2.9	5 097	4 955	-1.7	5.8
Italy	1 382	-1.4	7.6	0.1	9 551	10 458	4.5	-1.3
Kazakhstan	1 836	-1.4	1.1	0.8	3 405	2 104		-0.7
Kenya	2 362	3.1	1.5	1.0	2 637	3 508	0.2	4.2
Malawi	1 771	1.5	2.2	2.7	3 669	3 892	7.1	4.3
Mali	3 279	5.4	1.2	4.5	4 369	4 086	4.2	10.1
Mexico	9 254	-0.1	3.4	2.6	26 903	31 029	1.4	2.5
Morocco	2 200	-1.4	1.3	19.0	4 022	2 908	-5.1	17.3
Mozambique	2 303	3.4	1.0	1.7	2 365	2 323	11.0	5.2
Nepal	1 171	0.5	1.9	1.9	2 247	2 182	1.3	2.4
Niger	10 604	3.8	0.5	5.4	3 423	5 056	3.4	9.4
Nigeria	11 983	-2.8	1.4	1.9	17 543	16 259	2.6	-1.0
Pakistan	1 792	-0.1	2.2	6.1	3 790	3 897	2.4	6.0
Philippines	2 499	-0.0	2.6	3.6	7 034	6 377	-0.6	3.5
Poland	6 018	-0.3	2.9	2.7	20 037	17 633	-1.4	2.5
Romania	2 852	-2.6	3.8	8.9	9 599	10 837	2.6	6.0
Russian Federation	10 490	-6.1	1.6	0.9	32 963	17 056		-5.3
Senegal	1 330	2.1	0.9	1.4	1 367	1 164	1.3	3.5
South Africa	2 981	-3.7	4.4	4.8	12 616	13 265	-1.8	0.9
Spain	3 954	-0.9	3.2	-1.6	12 131	12 798	-1.2	-2.5
Sudan	7 655	1.9	0.4	-1.5	4 888	3 136	9.3	0.3
Syrian Arab Republic	1 221	-1.2	0.9	11.7	1 037	1 089	-5.7	10.3
Tanzania, Utd. Rep.	4 274	7.7	1.3	-0.7	4 267	5 520	0.3	7.0
Thailand	1 348	0.1	3.5	-0.1	4 822	4 661	1.4	-0.1
Turkey	3 852	-1.5	3.2	2.7	12 220	12 221	0.6	1.2
Uganda	1 690	2.7	1.6	0.5	2 610	2 723	3.5	3.2
Ukraine	7 871	1.2	2.8	3.6	24 377	21 679		4.8
United States of America	36 747	0.3	9.0	1.7	349 043	330 575	1.5	1.9
Zimbabwe	1 886	0.7	0.7	-5.6	879	1 387	-3.1	-4.9
WORLD	311 470	0.3	3.6	2.1	1 123 706	1 109 400	0.6	2.4
DEVELOPING REGIONS	210 232	1.1	2.6	2.9	504 701	544 360	2.3	4.0
AFRICA	85 484	1.7	1.3	1.6	110 093	111 243	2.1	3.4
ASIA	89 422	0.7	3.3	3.4	279 878	292 692	1.5	4.1
LATIN AMERICA & THE CARIBBEAN	35 320	0.8	4.0	3.6	114 711	140 407	3.6	4.4
DEVELOPED REGIONS	101 209	-1.2	5.6	2.3	618 965	564 997	2.5	1.1
NORTH AMERICA	41 492	-0.4	8.5	2.1	371 605	352 820	1.4	1.7
EUROPE	53 564	-2.0	3.7	2.2	233 537	200 132	-2.7	0.1

TABLE 30: Top oilcrop producers and their productivity

	Oilcrops							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Argentina	20 455	4.8	0.5	0.6	6 893	10 722	6.3	5.4
Australia	2 050	−0.6	0.5	0.9	866	971	24.3	0.2
Bolivia (Plur. State)	1 363	4.9	0.3	−1.5	369	372	17.5	3.3
Brazil	24 845	5.1	0.5	2.1	11 512	13 437	4.7	7.2
Bulgaria	939	5.3	0.9	10.7	638	867	4.7	16.6
Burkina Faso	1 054	7.6	0.2	0.9	186	197	5.3	8.6
Canada	8 588	2.4	0.6	2.0	5 794	5 536	9.5	4.4
Chad	742	−1.8	0.2	1.7	151	145	10.6	−0.1
China	27 985	−0.4	0.6	1.3	16 649	16 484	3.8	0.9
Congo, Dem. Rep.	860	−0.1	0.4	0.6	342	345	−1.7	0.5
Ethiopia	877	6.5	0.3	8.9	257	293		16.0
European Union	16 138	1.5	0.9	2.6	14 431	13 903	4.3	4.1
France	2 338	1.1	1.1	0.7	2 874	2 557	3.7	1.8
Germany	1 506	2.2	1.5	2.2	2 426	2 191	8.4	4.4
Ghana	819	5.0	0.4	−1.2	347	355	3.6	3.7
Greece	1 116	−0.9	0.4	−3.0	579	459	9.3	−3.9
Hungary	830	6.1	0.7	2.0	756	621	3.6	8.2
India	37 446	0.8	0.3	2.1	10 086	10 289	1.0	2.9
Indonesia	9 531	4.2	2.8	5.7	26 198	26 977	7.2	10.2
Italy	1 474	−1.2	0.6	0.3	961	923	5.9	−1.0
Kazakhstan	1 690	12.3	0.2	0.3	283	299		12.6
Malaysia	4 252	2.3	4.5	2.0	19 736	19 087	6.1	4.4
Mali	699	2.9	0.3	1.5	176	181	4.6	4.5
Mexico	674	1.3	0.5	−0.2	320	355	−0.9	1.2
Morocco	824	3.2	0.4	9.5	224	367	−2.3	12.9
Mozambique	1 093	4.7	0.1	−4.5	121	124	3.3	−0.0
Myanmar	3 920	4.7	0.3	3.7	1 240	1 037	3.3	8.6
Niger	982	7.7	0.2	6.4	110	161	21.8	14.6
Nigeria	7 647	0.8	0.4	0.6	3 322	2 765	5.4	1.4
Pakistan	3 307	−0.8	0.3	1.3	1 021	891	3.0	0.6
Paraguay	3 045	7.2	0.5	2.0	852	1 535	4.4	9.4
Philippines	3 551	1.1	0.6	0.8	2 151	2 136	1.0	1.9
Poland	809	6.0	1.0	2.0	958	800	−0.8	8.1
Romania	1 392	2.7	0.7	7.5	687	907	9.5	10.4
Russian Federation	7 540	4.0	0.4	0.5	3 115	2 745		4.5
Senegal	1 259	1.1	0.3	1.1	329	408	4.0	2.2
South Africa	815	2.4	0.4	−1.3	475	350	6.2	1.1
Spain	2 887	−1.3	0.7	5.0	2 128	2 151	−2.2	3.6
Sudan	2 898	−2.5	0.2	2.8	559	447	16.2	0.2
Syrian Arab Republic	1 007	2.7	0.3	−2.8	272	312	2.3	−0.2
Tanzania, Utd. Rep.	1 874	5.9	0.2	2.4	307	282	−0.5	8.5
Thailand	1 079	0.3	1.6	4.7	1 824	1 706	4.6	5.0
Tunisia	1 663	1.7	0.1	2.7	170	197	3.6	4.4
Turkey	2 127	1.1	0.5	0.1	989	1 094	−0.9	1.1
Uganda	1 080	2.2	0.3	3.9	279	280	3.0	6.2
Ukraine	6 603	7.8	0.6	1.5	3 566	3 680		9.5
United Kingdom	697	3.9	1.3	2.7	745	873	4.8	6.7
United States of America	37 350	0.1	0.5	1.6	18 500	18 853	3.6	1.6
Uruguay	899	30.2	0.4	3.9	221	348	14.9	35.2
Uzbekistan	1 383	−0.8	0.2	1.2	307	322		0.3
WORLD	266 430	1.8	0.6	2.5	162 968	168 411	4.2	4.3
DEVELOPING REGIONS	186 675	2.0	0.7	2.7	115 838	121 901	4.4	4.8
AFRICA	31 621	1.6	0.3	1.2	9 821	9 313	3.9	2.8
ASIA	101 776	0.9	0.8	3.6	82 351	82 337	4.2	4.5
LATIN AMERICA & THE CARIBBEAN	52 581	5.0	0.6	1.2	22 746	29 300	5.1	6.3
DEVELOPED REGIONS	79 745	1.4	0.6	1.9	47 127	46 506	6.1	3.3
NORTH AMERICA	45 938	0.5	0.5	1.7	24 294	24 388	4.7	2.2
EUROPE	31 569	3.2	0.7	1.8	21 897	21 070	2.2	5.0

TABLE 31: Top pulses producers and their productivity

	Pulses							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Angola	722	14.0	0.3	-1.1	247	250	8.3	12.8
Argentina	324	0.9	1.3	1.3	382	413	4.9	2.2
Australia	1 746	-2.4	1.1	1.1	1 804	1 901	9.2	-1.3
Bangladesh	241	-6.9	0.9	1.9	205	225	-3.1	-5.2
Benin	222	4.8	0.9	2.2	154	205	5.5	7.1
Brazil	3 502	-2.2	0.9	2.8	3 514	3 228	2.5	0.5
Burkina Faso	838	10.1	0.6	1.2	386	513	7.0	11.4
Burundi	222	-1.6	1.1	2.3	242	235	-3.7	0.7
Cameroon	376	2.5	1.2	3.2	434	449	14.5	5.8
Canada	2 862	2.0	1.8	-0.4	5 189	5 192	21.8	1.6
Chad	168	0.6	0.7	2.0	125	122	4.8	2.6
China	2 786	-1.9	1.6	1.4	4 331	4 472	-2.9	-0.5
Colombia	157	0.8	1.3	1.5	217	211	-1.4	2.3
Congo, Dem. Rep.	407	1.4	0.5	-0.8	201	204	-0.5	0.6
Ethiopia	1 483	2.8	1.2	3.3	1 840	1 806		6.1
European Union	1 603	-1.7	2.5	-0.1	3 443	4 022	-2.6	-1.8
France	423	-1.1	3.9	-1.3	1 022	1 630	-3.5	-2.4
Ghana	222	3.3	0.1	1.0	22	23	0.5	4.4
Guatemala	246	5.0	0.9	0.8	231	222	-1.8	5.8
India	26 166	3.0	0.7	-0.7	14 160	17 110	1.8	2.2
Indonesia	260	-2.7	1.1	2.8	316	293	-10.2	0.1
Iran (Islamic Rep.)	790	-2.5	0.7	2.6	508	566	3.3	0.1
Kenya	1 077	-0.7	0.5	2.6	584	578	-3.2	1.9
Korea, DPR	243	-3.3	0.9	0.8	216	224	-1.0	-2.5
Malawi	680	3.9	0.7	2.5	483	472	-0.7	6.5
Mali	290	0.2	0.5	1.3	131	136	19.9	1.5
Mexico	1 758	0.4	0.8	0.7	1 291	1 412	-1.7	1.1
Morocco	398	0.9	0.7	9.9	276	282	-8.4	10.9
Mozambique	315	4.6	0.5	0.0	155	158	0.3	4.7
Myanmar	3 780	4.9	1.2	5.1	4 406	4 390	15.3	10.2
Nepal	296	0.1	0.8	0.4	230	236	2.9	0.5
Nicaragua	216	-0.3	0.6	-1.9	213	138	7.3	-2.2
Niger	5 707	8.4	0.3	11.1	847	1 831	8.2	20.4
Nigeria	2 625	-3.5	0.9	3.8	2 412	2 289	5.1	0.2
Pakistan	1 473	-0.6	0.6	-0.8	1 103	816	0.2	-1.4
Peru	226	1.6	1.2	1.2	265	265	7.0	2.9
Russian Federation	1 000	2.3	1.4	-0.5	1 579	1 399		1.7
Rwanda	367	0.1	1.0	4.6	360	365	-3.6	4.7
Spain	379	-1.8	0.9	1.0	293	356	0.2	-0.9
Sudan	390	9.4	0.8	-6.5	238	318	8.4	2.3
Syrian Arab Republic	239	-1.2	1.1	5.9	229	273	-6.1	4.7
Tanzania, Utd. Rep.	1 773	4.3	0.7	1.3	1 260	1 272	6.4	5.7
Thailand	184	-5.8	0.9	0.8	147	168	-1.9	-5.0
Togo	218	3.7	0.4	2.0	80	83	10.1	5.7
Turkey	896	-5.3	1.5	5.8	1 237	1 343	-5.1	0.2
Uganda	1 137	2.6	0.6	-1.4	648	659	1.3	1.2
Ukraine	391	0.5	1.5	-1.5	624	592		-1.0
United Kingdom	188	-1.0	3.9	0.2	839	727	-0.8	-0.8
United States of America	1 419	5.2	1.9	0.2	2 345	2 634	1.3	5.4
Viet Nam	394	1.4	1.0	3.0	337	376	3.5	4.4
WORLD	76 003	1.6	0.9	0.4	63 111	67 713	-0.3	2.0
DEVELOPING REGIONS	66 649	1.8	0.8	0.8	47 379	51 302	1.0	2.5
AFRICA	20 966	2.9	0.6	1.6	12 446	13 473	2.2	4.5
ASIA	38 300	1.8	0.8	0.4	28 080	31 207	0.3	2.2
LATIN AMERICA & THE CARIBBEAN	7 370	-0.7	0.9	1.7	6 845	6 614	0.9	1.0
DEVELOPED REGIONS	9 352	0.4	1.8	0.1	15 730	16 410	4.2	0.6
NORTH AMERICA	4 281	2.9	1.8	-0.2	7 534	7 825	10.0	2.7
EUROPE	3 259	-0.6	2.0	-0.3	6 268	6 536	-8.0	-0.9

TABLE 32: Top roots and tubers producers and their productivity

	Roots and tubers							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Angola	1 275	7.7	11.5	4.1	14 633	14 690	7.1	12.1
Bangladesh	466	5.1	17.7	4.3	5 573	8 237	8.0	9.5
Belarus	367	-5.7	21.4	4.9	7 125	7 831		-1.1
Benin	438	1.2	15.1	3.5	6 434	6 602	7.4	4.7
Bolivia (Plur. State)	197	0.8	6.0	-0.4	1 185	1 190	0.1	0.4
Brazil	1 983	0.2	14.5	0.5	28 556	28 661	-1.3	0.7
Burundi	166	-2.6	3.2	-7.4	780	522	0.5	-9.8
Cambodia	217	24.2	20.1	9.5	3 616	4 370	11.7	36.0
Cameroon	503	2.5	10.6	1.6	5 215	5 336	3.1	4.2
Central African Republic	334	1.8	3.7	-0.2	1 174	1 233	2.3	1.7
China	9 134	-1.7	17.8	0.2	156 271	162 418	3.2	-1.5
Colombia	388	2.0	12.9	1.5	4 870	4 981	0.7	3.5
Congo, Dem. Rep.	1 974	-0.5	7.9	-0.1	15 618	15 643	-1.5	-0.5
Côte d'Ivoire	1 241	4.0	6.7	-1.7	7 702	8 284	3.8	2.2
Cuba	244	3.7	6.2	-1.5	1 566	1 515	6.2	2.1
Egypt	158	6.2	26.2	1.0	4 135	4 138	1.5	7.2
Ethiopia	675	1.2	10.5	2.9	7 311	7 097		4.2
European Union	2 022	-4.7	28.1	1.0	62 647	56 932	-1.4	-3.8
France	166	0.2	39.8	0.0	7 175	6 582	3.8	0.2
Germany	255	-1.7	40.0	-1.2	11 618	10 202	-2.0	-2.9
Ghana	1 539	2.2	13.6	2.5	19 635	20 950	12.7	4.7
Guinea	185	0.2	6.8	0.9	1 246	1 258	3.6	1.1
Haiti	328	5.5	3.9	-0.2	1 098	1 265	-0.3	5.3
India	2 186	2.7	20.9	0.9	45 134	45 732	3.8	3.6
Indonesia	1 497	-0.8	18.3	4.4	25 638	27 410	0.4	3.6
Kazakhstan	179	1.2	14.3	3.0	2 756	2 555		4.2
Kenya	260	1.1	4.6	-4.3	2 178	1 186	3.9	-3.2
Korea, DPR	164	-2.5	13.0	2.4	1 950	2 135	7.1	-0.1
Madagascar	568	0.8	7.8	1.7	4 395	4 423	1.0	2.5
Malawi	391	0.9	20.8	4.4	7 251	8 127	21.0	5.3
Mozambique	1 089	0.9	6.2	0.4	6 691	6 739	2.8	1.4
Nepal	218	4.2	12.2	3.1	2 559	2 658	4.5	7.3
Nigeria	7 528	-0.1	9.7	1.2	72 542	72 850	7.7	1.1
Pakistan	165	1.9	21.6	2.5	3 383	3 570	8.0	4.5
Papua New Guinea	223	2.1	7.4	0.0	1 506	1 653	0.7	2.1
Paraguay	183	-1.5	14.6	1.1	2 656	2 668	0.4	-0.4
Peru	463	0.4	12.2	1.4	5 503	5 634	9.2	1.8
Philippines	366	-0.1	8.0	1.6	2 878	2 934	-0.3	1.5
Poland	491	-8.9	17.9	-0.8	9 703	8 766	-6.5	-9.7
Romania	247	-1.3	13.3	0.8	4 004	3 284	2.4	-0.5
Russian Federation	2 109	-4.2	10.0	-0.5	31 134	21 140		-4.6
Rwanda	489	1.4	10.6	4.6	4 261	5 208	0.0	6.0
Tanzania, Utd. Rep.	1 426	1.2	4.6	-0.1	8 036	6 554	-3.3	1.0
Thailand	1 201	0.4	18.7	1.1	30 541	22 442	-2.4	1.5
Togo	237	1.7	6.9	0.7	1 624	1 645	3.8	2.4
Uganda	1 137	1.1	7.8	0.1	8 634	8 815	4.1	1.2
Ukraine	1 408	-1.5	13.3	0.9	19 666	18 705		-0.6
United States of America	454	-2.5	42.1	0.3	20 449	19 100	1.9	-2.2
Viet Nam	684	2.8	15.0	7.2	10 207	10 285	-1.8	10.1
Zambia	214	2.4	6.7	2.6	1 383	1 428	4.4	5.0
WORLD	52 138	-0.2	13.9	0.6	736 175	726 397	1.8	0.4
DEVELOPING REGIONS	45 207	0.5	13.0	0.9	581 039	589 510	3.2	1.4
AFRICA	23 052	1.1	9.4	1.5	214 264	217 185	4.4	2.6
ASIA	17 546	-0.4	18.0	1.0	310 863	315 425	2.8	0.7
LATIN AMERICA & THE CARIBBEAN	4 328	0.7	12.7	0.3	53 957	54 777	0.7	1.0
DEVELOPED REGIONS	6 926	-3.7	19.8	0.8	155 024	136 802	3.7	-2.9
NORTH AMERICA	594	-2.2	39.6	0.3	25 031	23 522	2.2	-1.9
EUROPE	6 110	-3.9	17.6	0.7	123 731	107 563	-1.9	-3.2

TABLE 33: Top sugarcane producers and their productivity

	Sugarcane							
	area		yield		production			
	thousand ha	% p.a.	tonnes per ha	% p.a.	thousand tonnes	thousand tonnes	% p.a.	% p.a.
	2010	growth: 2000-10	2010	growth: 2000-10	2009	2010	growth: 1990-99	growth: 2000-10
Argentina	355	2.4	81.7	2.2	29 000	29 000	0.7	4.7
Australia	405	-0.3	77.7	-1.6	30 284	31 457	5.6	-1.9
Bangladesh	121	-3.4	43.8	0.8	5 233	5 304	-0.7	-2.6
Belize	24	0.5	37.8	-2.3	918	918	0.9	-1.9
Bolivia (Plur. State)	164	6.9	45.4	0.6	7 438	7 438	-0.5	7.5
Brazil	9 081	6.5	79.2	1.6	672 157	719 157	2.7	8.2
Cameroon	145	0.7	10.0	0.0	1 450	1 450	-0.8	0.7
China	1 695	3.6	65.7	1.2	116 251	111 454	2.3	4.9
Colombia	172	-8.2	118.1	3.2	38 500	20 273	1.9	-5.3
Congo, Dem. Rep.	40	1.1	45.7	-0.1	1 827	1 827	0.1	0.9
Costa Rica	56	1.7	66.9	-1.8	3 635	3 735	3.9	-0.2
Cuba	431	-8.4	26.2	-2.8	14 900	11 300	-9.3	-11.0
Dominican Republic	85	-3.4	56.5	4.1	4 716	4 781	-4.1	0.6
Ecuador	107	3.3	78.1	1.1	8 473	8 347	-0.3	4.4
Egypt	135	0.0	116.8	-0.0	15 482	15 709	3.6	0.0
El Salvador	63	-0.8	81.3	0.8	5 736	5 127	6.7	-0.0
Fiji	41	-4.2	42.7	-2.9	2 089	1 751	-0.8	-6.9
Guatemala	213	1.6	86.2	-0.5	18 392	18 392	6.6	1.1
Guyana	48	0.9	57.3	-0.7	2 766	2 766	2.1	0.2
Honduras	76	4.9	103.0	2.0	6 895	7 819	2.9	7.0
India	4 200	-0.0	66.1	-0.7	285 029	277 750	3.6	-0.7
Indonesia	420	1.4	63.1	-0.3	26 500	26 500	-1.9	1.0
Iran (Islamic Rep.)	68	10.3	83.2	-1.1	2 823	5 685	3.4	9.2
Jamaica	31	-2.4	63.9	2.2	1 968	1 968	-0.8	-0.3
Kenya	69	1.8	83.1	1.9	5 611	5 710	-0.8	3.8
Liberia	26	0.6	10.2	-0.0	265	265	2.0	0.6
Madagascar	95	3.5	31.6	-0.3	3 000	3 000	1.0	3.2
Mauritius	59	-2.2	74.4	0.6	4 669	4 366	-3.9	-1.6
Mexico	704	1.3	71.6	0.0	49 493	50 422	1.8	1.3
Mozambique	215	23.1	13.0	-1.2	2 207	2 800	4.6	21.6
Myanmar	180	3.1	54.0	2.1	9 715	9 715	12.0	5.3
Nepal	61	0.5	42.5	1.6	2 354	2 592	8.0	2.1
Nicaragua	54	0.6	89.9	2.7	5 116	4 894	4.9	3.3
Nigeria	73	11.8	19.3	-4.0	1 402	1 414	-3.3	7.4
Pakistan	943	-0.7	52.4	1.3	50 045	49 373	5.0	0.6
Panama	35	0.2	54.7	0.5	1 914	1 914	3.9	0.7
Paraguay	100	5.3	51.3	3.1	4 800	5 131	1.8	8.6
Peru	77	1.9	125.5	0.6	9 937	9 661	-0.0	2.5
Philippines	363	-0.8	93.7	4.2	32 500	34 000	-0.8	3.3
Réunion	24	-0.0	79.3	0.5	1 908	1 930	0.9	0.5
South Africa	267	-2.1	60.0	-1.9	18 655	16 016	1.8	-3.9
Sudan	67	0.6	112.0	3.6	7 527	7 527	2.6	4.2
Swaziland	52	3.6	96.2	-1.0	5 000	5 000	1.3	2.6
Thailand	978	0.9	70.4	1.5	66 816	68 808	4.6	2.4
Uganda	40	7.2	60.0	-2.1	2 350	2 400	9.8	5.0
United States of America	355	-1.6	69.9	-2.1	27 608	24 821	2.6	-3.7
Venezuela (Boliv. Rep. of)	125	-0.3	76.0	1.0	9 500	9 500	2.8	0.7
Viet Nam	266	-1.3	59.9	1.9	15 608	15 947	14.1	0.6
Zambia	38	9.9	105.2	-0.1	3 200	4 050	4.3	9.7
Zimbabwe	39	-1.0	79.5	-2.1	3 100	3 100	4.7	-3.1
WORLD	23 832	2.1	70.7	0.9	1 668 562	1 686 014	2.2	3.0
DEVELOPING REGIONS	23 049	2.2	70.6	1.0			2.1	3.3
AFRICA	1 577	2.0	57.5	-1.4	91 663	90 725	1.7	0.5
ASIA	9 347	0.6	65.2	0.4			3.3	1.0
LATIN AMERICA & THE CARIBBEAN	12 076	3.8	76.7	1.7			1.1	5.6
DEVELOPED REGIONS	783	-0.9	73.7	-1.8				
NORTH AMERICA	355	-1.6	69.9	-2.1	27 608	24 821	2.6	-3.7
EUROPE	0	-24.2	80.0	-2.1	6	6	-3.4	-25.8

TABLE 34: Livestock production - milk, eggs and poultry

	Production								
	milk			eggs			poultry		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
WORLD	701 966	720 980	2.2	67 980	68 897	2.2	94 203	97 942	3.6
DEVELOPING REGIONS	360 304	376 424	4.3	48 968	49 618	2.8	55 354	58 026	4.6
AFRICA	38 859	42 237	4.3	2 602	2 676	3.4	4 422	4 638	4.5
North Africa	11 072	11 364	4.0	869	908	3.3	1 856	1 957	3.7
Algeria	2 243	2 304	4.3	185	189	6.5	267	267	0.9
Egypt	5 624	5 742	4.3	333	336	6.6	775	789	2.5
Libya	228	223	0.9	62	62	0.4	125	129	2.7
Morocco	1 889	2 002	4.8	200	230	-0.2	545	618	8.1
Tunisia	1 082	1 093	1.7	88	91	1.0	144	153	2.8
Sub-Saharan Africa	27 786	30 873	4.4	1 734	1 768	3.4	2 566	2 681	5.1
Angola	158	184	-0.6	4	4	0.5	8	8	0.5
Benin	38	40	3.0	13	14	7.4	18	18	3.9
Botswana	116	118	-0.4	4	4	3.5	6	7	-2.6
Burkina Faso	253	265	4.4	51	52	2.8	35	35	3.0
Burundi	44	44	4.8	3	3	0.0	7	7	1.9
Cameroon	236	242	2.5	15	15	1.7	64	68	12.4
Cape Verde	22	23	9.2	2	2	1.2	1	1	4.3
Central African Republic	72	75	1.7	2	2	3.0	6	6	5.9
Chad	266	272	2.2	4	4	0.8	5	5	1.1
Comoros	5	5	1.3	1	1	0.4	1	1	0.5
Congo	1	1	2.4	2	2	3.2	6	6	0.8
Côte d'Ivoire	31	32	1.9	30	32	-0.3	23	24	0.8
Congo, Dem. Rep.	7	8	4.8	9	9	2.6	11	11	-0.6
Djibouti	15	16	1.3						
Equatorial Guinea				0	0	4.7	0	0	0.7
Eritrea	123	151	7.9	2	2	1.2	2	2	-1.4
Ethiopia	1 691	2 121	6.7	31	35	2.1	51	53	3.5
Gabon	2	2	-0.3	2	2	0.8	4	4	0.0
Gambia	9	9	2.0	1	1	2.0	1	1	2.3
Ghana	38	39	1.4	37	37	5.4	48	49	9.6
Guinea	128	131	5.1	23	23	6.8	7	8	6.8
Guinea-Bissau	23	23	2.8	1	1	3.1	2	2	3.2
Kenya	4 258	5 333	8.3	81	81	2.9	25	27	7.4
Lesotho	34	34	0.8	2	2	1.3	2	2	2.4
Liberia	1	1	-0.4	5	5	2.2	11	11	5.4
Madagascar	555	703	2.8	21	21	0.6	71	71	1.0
Malawi	40	51	3.9	20	20	0.4	21	22	3.5
Mali	914	948	6.9	14	14	1.6	41	41	3.4
Mauritania	405	392	1.9	6	5	1.4	4	4	0.9
Mauritius	4	4	-2.6	10	10	-2.2	44	46	8.2
Mozambique	75	76	0.8	14	14	1.6	24	24	-2.6
Namibia	110	115	2.6	4	4	6.8	15	16	4.6
Niger	958	1 002	5.5	8	8	0.6	11	12	0.5
Nigeria	472	496	2.5	613	623	4.5	256	256	4.8
Rwanda	177	216	5.9	3	3	2.8	2	2	5.4
Senegal	162	165	3.3	27	30	5.3	43	49	7.8
Seychelles	0	0	-4.9	1	1	-6.9	1	1	-3.9
Sierra Leone	21	21	7.6	9	9	1.2	12	12	1.2
Somalia	2 319	2 939	3.4	2	2	-0.4	4	4	1.2
Sudan	7 480	7 728	2.9	55	56	2.2	29	29	1.0
South Africa	3 104	3 233	2.4	450	453	3.6	1 394	1 478	6.1
Swaziland	42	42	1.2	1	1	1.0	5	5	4.6
Tanzania, Utd. Rep.	1 710	1 758	8.1	39	39	1.1	50	50	1.5
Togo	10	10	3.0	9	9	4.0	26	28	9.0
Uganda	1 155	1 190	8.8	23	23	1.3	46	49	1.0
Zambia	87	88	1.7	45	50	2.4	40	42	2.0
Zimbabwe	389	493	0.3	30	30	3.0	62	62	9.3

TABLE 34: Livestock production - milk, eggs and poultry (continued)

	Production								
	milk			eggs			poultry		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
ASIA	243 068	253 016	4.7	39 408	39 929	2.7	30 937	32 528	4.4
Central Asia	15 175	15 725	4.9	419	468	8.9	132	157	10.1
Kazakhstan	5 306	5 386	3.7	185	208	8.2	79	103	12.0
Kyrgyzstan	1 315	1 360	2.1	21	21	6.0	4	4	-1.2
Tajikistan	630	661	7.9	11	13	24.0	4	1	26.6
Turkmenistan	2 146	2 150	8.1	50	51	9.1	20	22	13.7
Uzbekistan	5 779	6 169	5.5	153	175	9.5	25	27	5.4
East Asia	47 028	47 654	10.7	32 431	32 840	2.5	23 383	24 385	3.6
Brunei Darussalam	0	0	-2.6	7	7	4.1	19	19	4.9
Cambodia	24	27	2.8	20	22	4.1	27	28	0.6
China	40 385	41 137	12.8	27 773	28 001	2.3	16 415	16 999	3.0
Indonesia	1 278	1 316	5.3	1 306	1 378	5.8	1 435	1 678	7.5
Korea, DPR	95	95	0.6	158	160	3.8	43	43	3.4
Korea, Republic of	2 226	2 107	-0.7	594	602	1.9	553	571	3.2
Lao, PDR	7	7	1.6	15	16	4.5	22	22	6.1
Malaysia	52	53	3.7	524	554	3.3	1 310	1 412	7.1
Mongolia	444	306	-3.4	0	0	2.5	0	0	19.0
Myanmar	1 355	1 402	8.5	287	302	9.5	884	912	13.9
Philippines	9	10	-0.5	442	465	-1.1	744	773	3.4
Singapore				22	22	2.5	91	94	0.3
Thailand	841	851	5.0	970	980	2.0	1 232	1 301	1.3
Viet Nam	311	341	13.6	309	326	5.8	608	531	3.8
South Asia	159 925	167 160	3.7	4 919	5 092	4.6	4 659	5 033	8.4
Afghanistan	1 718	1 818	0.9	17	17	1.4	21	21	4.7
Bangladesh	3 225	3 398	4.7	220	256	3.7	181	187	5.2
Bhutan	46	51	2.2	0	0	-2.4	0	0	0.0
India	110 936	117 000	3.9	3 324	3 414	5.3	2 064	2 338	10.0
Iran (Islamic Rep.)	7 905	7 602	2.6	725	741	2.5	1 622	1 662	7.4
Maldives									
Nepal	1 531	1 584	3.1	32	33	3.4	17	17	2.6
Pakistan	34 362	35 491	3.3	536	566	4.9	655	710	7.9
Sri Lanka	202	215	3.1	65	65	2.1	99	99	4.6
West Asia	20 940	22 476	3.3	1 639	1 528	1.1	2 763	2 954	5.1
Armenia	616	601	2.9	35	39	6.2	5	5	16.2
Azerbaijan	1 487	1 529	4.0	73	71	8.8	67	64	14.1
Bahrain	9	10	-6.7	3	3	1.2	6	6	0.8
Cyprus	192	195	0.1	10	10	-0.7	29	29	-1.5
Georgia	563	543	-1.3	24	25	2.1	12	12	-1.6
Iraq	288	298	-7.6	35	36	1.8	49	50	-3.8
Jordan	319	323	4.7	46	47	0.2	141	155	2.7
Kuwait	55	57	4.9	23	22	0.6	43	46	3.3
Lebanon	302	309	4.0	46	47	0.8	136	140	2.9
Occupied Palestinian Territory	166	168	2.3	40	40	0.9	47	49	-3.4
Saudi Arabia	1 535	1 921	7.3	191	193	4.2	571	576	1.8
Syrian Arab Republic	2 407	2 392	3.6	162	166	2.7	189	200	5.8
Turkey	12 542	13 606	3.3	865	740	-0.9	1 308	1 459	8.2
United Arab Emirates	99	106	2.5	26	26	6.0	36	36	2.8
Yemen	405	417	5.4	59	61	6.9	140	144	8.0
LATIN AMERICA & THE CARIBBEAN	78 310	81 101	3.2	6 940	6 993	3.2	19 974	20 835	5.2
Argentina	10 366	10 502	0.4	507	505	4.4	1 546	1 642	5.1
Bahamas	3	3	6.1	1	1	4.6	7	7	-0.0
Barbados	7	8	-0.4	2	2	6.7	14	15	3.1
Belize	4	4	10.8	2	2	2.0	13	13	4.2
Bolivia (Plur. State)	334	347	2.5	69	68	5.8	167	169	2.3
Brazil	30 152	31 816	4.5	2 037	2 087	2.9	10 376	11 140	6.2
Chile	2 360	2 540	2.4	137	146	2.9	604	594	3.0
Colombia	7 545	7 500	2.0	581	510	4.7	1 020	1 000	7.1
Costa Rica	912	951	2.8	52	54	2.7	111	105	3.7

TABLE 34: Livestock production - milk, eggs and poultry (continued)

	Production								
	milk			eggs			poultry		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
Cuba	603	633	0.3	107	107	3.5	33	34	-7.5
Dominica	8	8	1.9	0	0	2.3	0	0	0.0
Dominican Republic	650	701	5.2	92	106	6.1	315	315	4.1
Ecuador	5 239	5 719	11.0	94	93	2.6	331	187	-0.4
El Salvador	542	557	3.7	64	65	0.5	98	105	3.2
French Guiana	0	0	2.5	1	1	2.9	1	1	2.8
Grenada	1	1	2.7	1	1	5.0	1	1	0.1
Guatemala	343	357	3.2	89	97	1.9	166	167	1.8
Guyana	41	43	3.5	1	1	-4.5	23	23	6.9
Haiti	88	92	3.4	5	6	1.9	8	8	0.1
Honduras	704	739	2.6	47	44	0.7	145	152	7.3
Jamaica	216	159	-1.3	7	6	0.3	105	102	2.9
Mexico	10 714	10 838	1.4	2 360	2 381	2.9	2 678	2 722	3.8
Netherlands Antilles	0	0	1.2	1	1	3.9	0	0	0.0
Nicaragua	748	753	3.0	23	24	2.2	90	102	8.0
Panama	193	201	1.7	24	31	9.6	119	126	4.5
Paraguay	380	396	1.9	129	129	6.5	38	39	1.3
Peru	1 677	1 703	4.6	269	285	5.8	964	1 020	6.5
St. Kitts & Nevis				0	0	1.4	0	0	1.6
St. Lucia	1	1	4.1	1	1	7.4	2	2	10.0
St. Vincent & Grenadines	1	1	0.2	1	1	3.5	0	0	0.8
Suriname	6	6	-2.1	2	2	-2.6	10	12	11.3
Trinidad & Tobago	11	12	1.3	4	4	2.5	60	57	3.9
Uruguay	1 872	1 821	2.5	52	52	3.6	74	70	2.1
Venezuela (Boliv. Rep. of)	2 200	2 294	5.0	160	160	-0.9	800	848	2.0
OCEANIA	67	70	0.7	17	20	3.7	22	25	3.6
Fiji	59	61	0.9	3	6	6.0	12	15	5.9
French Polynesia	1	1	-0.3	3	3	7.6	1	1	-0.7
New Caledonia	0	0	-10.3	3	3	7.0	1	1	2.0
Papua New Guinea	0	0	2.1	5	5	0.0	6	6	0.8
Samoa	2	2	0.0	0	0	5.0	1	1	4.2
Solomon Islands	2	1	0.4	0	0	0.9	0	0	1.2
Tonga	0	0	0.0	0	0	-1.1	0	0	-1.4
Vanuatu	3	3	0.0	0	0	4.0	0	0	-0.8
DEVELOPED REGIONS	341 469	344 361	0.4	19 002	19 269	0.8	38 820	39 887	2.3
NORTH AMERICA	94 095	95 706	1.3	5 772	5 841	0.8	20 164	20 800	1.8
Bermuda	1	1	-0.6	0	0	1.5	0	0	1.0
Canada	8 213	8 243	0.1	422	429	1.4	1 211	1 216	1.3
United States of America	85 880	87 461	1.4	5 349	5 412	0.8	18 953	19 584	1.8
ASIA & OCEANIA	34 282	35 086	0.7	2 826	2 855	0.2	2 937	3 014	2.5
Australia	9 388	9 023	-1.8	159	174	2.0	872	923	3.7
Israel	1 317	1 332	0.9	101	102	1.5	534	546	2.8
Japan	7 909	7 720	-1.0	2 508	2 515	-0.1	1 394	1 401	1.6
New Zealand	15 667	17 010	3.3	58	64	3.4	137	145	3.1
EUROPE	213 092	213 570	-0.1	10 405	10 573	1.0	15 719	16 073	3.1
Albania	1 045	1 070	1.2	30	31	4.1	17	17	15.6
Belarus	6 577	6 628	4.0	192	198	0.7	220	260	13.1
Bosnia & Herzegovina	816	734	2.8	24	21	1.3	33	38	19.2
Croatia	838	780	2.4	48	42	-1.0	38	29	-1.2
European Union	151 365	152 666	-0.2	6 764	6 769	0.2	11 906	11 931	1.2
Iceland	126	123	1.7	3	3	0.6	7	7	8.5
Macedonia, FYR	396	399	4.4	15	19	-3.0	3	3	-4.1
Montenegro	152	179		3	4		5	6	
Norway	1 576	1 583	-1.0	59	60	2.5	84	83	6.8
Republic of Moldova	575	581	0.1	36	40	2.3	35	41	9.7
Russian Federation	32 565	32 136	-0.0	2 210	2 274	1.8	2 360	2 580	12.8
Serbia	1 535	1 517		51	61		80	84	
Switzerland	4 094	4 106	0.5	42	43	1.8	65	69	3.4
Ukraine	11 610	11 249	-1.2	938	1 018	7.3	894	953	17.3

TABLE 35: Livestock production - pig meat, beef and buffalo meat, and sheep and goat meat

	Production								
	pig meat			beef and buffalo meat			sheep and goat meat		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
WORLD	106 405	109 258	2.0	65 042	65 716	1.1	13 607	13 674	1.8
DEVELOPING REGIONS	66 251	68 428	2.7	37 600	37 986	2.2	11 036	11 218	2.8
AFRICA	1 189	1 232	4.8	6 682	6 922	4.8	2 683	2 763	3.3
North Africa	1	2	-9.3	1 119	1 128	2.5	515	528	0.7
Algeria	0	0	0.0	127	132	-0.0	192	194	1.0
Egypt	1	0	-16.7	742	743	3.2	66	68	-0.9
Libya				9	9	1.1	42	43	3.7
Morocco	1	1	2.1	190	192	3.2	156	162	1.0
Tunisia	0	0	-1.6	52	52	-1.4	59	59	-0.6
Sub-Saharan Africa	1 188	1 231	4.9	5 563	5 794	5.3	2 168	2 236	4.1
Angola	28	32	1.1	104	106	1.2	13	13	1.5
Benin	4	5	2.1	28	29	4.8	8	8	2.3
Botswana	0	0	-6.5	36	37	2.5	7	7	0.3
Burkina Faso	31	28	3.3	110	134	4.7	50	52	3.0
Burundi	12	12	11.2	15	16	6.2	7	7	6.5
Cameroon	31	38	8.9	110	124	2.9	30	37	1.4
Cape Verde	8	8	2.5	1	1	6.7	1	1	7.3
Central African Republic	14	16	2.9	82	85	2.4	19	20	6.0
Chad	1	1	2.7	91	95	2.5	40	40	2.7
Comoros				1	1	2.1	0	0	0.8
Congo	2	2	2.9	6	6	14.3	1	1	3.0
Côte d'Ivoire	7	7	1.4	34	35	0.5	12	12	1.5
Congo, Dem. Rep.	24	26	-0.0	12	12	-0.8	21	21	-0.6
Djibouti				6	6	0.0	5	5	0.0
Equatorial Guinea	0	0	0.5	0	0	0.4	0	0	0.4
Eritrea				23	22	3.0	10	10	-1.2
Ethiopia	2	2	0.7	390	373	2.4	150	153	9.5
Gabon	3	3	0.3	1	1	0.1	1	1	0.4
Gambia	1	1	6.9	4	4	1.8	2	2	9.0
Ghana	18	18	4.9	26	26	0.7	31	31	4.7
Guinea	2	2	0.6	52	55	5.6	15	15	6.9
Guinea-Bissau	13	13	1.9	6	6	3.5	2	2	3.9
Kenya	18	15	2.9	483	462	6.1	87	88	4.3
Lesotho	4	4	-4.2	10	10	0.3	6	6	0.2
Liberia	8	9	7.4	1	1	1.0	2	2	3.5
Madagascar	55	55	10.1	150	150	0.2	12	12	5.2
Malawi	45	45	7.7	30	34	7.0	22	22	11.4
Mali	3	3	3.1	136	144	9.8	89	93	6.1
Mauritania				26	26	2.3	38	44	2.5
Mauritius	1	1	-1.1	2	2	-2.9	0	0	-6.0
Mozambique	94	97	-2.3	19	19	4.6	23	24	-0.4
Namibia	4	4	9.6	36	36	-5.4	16	16	-1.0
Niger	1	1	0.3	220	240	7.4	103	109	5.5
Nigeria	226	226	3.7	298	304	0.8	433	440	2.7
Rwanda	7	8	8.7	35	36	7.8	9	9	10.3
Senegal	11	11	2.1	82	84	6.2	33	34	3.7
Seychelles	0	0	-11.9	0	0	-11.8	0	0	0.2
Sierra Leone	2	2	-0.9	9	9	4.2	3	3	10.8
Somalia	0	0	0.4	66	66	0.7	90	90	2.9
Sudan				1 442	1 505	17.7	484	509	6.9
South Africa	313	338	12.5	768	884	3.5	176	175	1.3
Swaziland	2	2	4.2	15	16	-1.0	2	2	-3.6
Tanzania, Utd. Rep.	14	14	1.1	290	292	2.4	44	45	1.2
Togo	9	9	4.5	9	9	2.6	8	8	1.7
Uganda	111	113	3.9	129	130	3.0	41	41	3.2
Zambia	15	16	5.0	60	61	1.4	9	9	6.1
Zimbabwe	31	31	3.6	104	100	-0.2	13	13	-0.4

TABLE 35: Livestock production - pig meat, beef and buffalo meat, and sheep and goat meat (continued)

	Production								
	pig meat			beef and buffalo meat			sheep and goat meat		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
ASIA	58 615	60 591	2.6	15 378	15 815	2.5	7 911	8 011	2.7
Central Asia	249	245	3.6	1 281	1 348	4.3	452	468	4.5
Kazakhstan	209	206	4.4	396	407	2.9	135	143	4.2
Kyrgyzstan	17	16	-4.2	97	99	-0.2	49	46	0.8
Tajikistan	3	3		26	29	6.8	37	39	11.8
Turkmenistan	0	0	-5.0	140	148	7.5	138	139	7.0
Uzbekistan	20	21	3.8	623	665	5.5	93	100	2.3
East Asia	57 977	59 970	2.7	8 344	8 595	2.3	4 309	4 318	3.9
Brunei Darussalam	0	0	0.7	1	1	-13.9	0	0	7.9
Cambodia	105	100	-0.5	75	73	0.6			
China	49 874	51 720	2.4	6 370	6 546	2.4	3 897	3 943	3.9
Indonesia	637	637	4.4	443	461	1.8	128	131	5.3
Korea, DPR	110	110	-2.4	22	22	0.8	16	16	3.3
Korea, Republic of	1 062	1 097	1.8	283	308	0.1	2	2	-5.9
Lao, PDR	65	73	10.2	44	44	2.8	1	1	10.1
Malaysia	206	234	3.9	27	29	5.0	2	2	8.3
Mongolia	0	0	-8.4	59	48	-8.3	169	126	0.5
Myanmar	450	459	14.1	183	184	7.1	29	30	10.1
Philippines	1 596	1 613	2.9	283	294	1.2	55	55	5.0
Singapore	17	19	-1.1	0	0	3.1	0	0	-2.5
Thailand	809	862	2.2	211	223	1.0	2	2	7.4
Viet Nam	3 036	3 036	8.0	342	363	7.0	9	9	6.2
South Asia	370	352	-3.1	4 928	5 025	2.5	2 193	2 244	1.5
Afghanistan				135	134	0.6	137	137	-2.1
Bangladesh				194	195	1.0	229	246	6.5
Bhutan	1	1	-2.9	5	5	0.3	0	0	-0.9
India	350	332	-3.3	2 518	2 549	1.3	853	876	2.4
Iran (Islamic Rep.)	0	0		406	411	3.9	496	498	1.3
Maldives									
Nepal	17	17	1.5	207	212	2.3	51	53	2.8
Pakistan				1 436	1 490	5.3	424	433	-0.8
Sri Lanka	2	2	-0.5	27	28	-1.3	1	1	-3.1
West Asia	19	23	-7.2	824	847	1.1	957	981	0.6
Armenia	9	9	-0.2	50	49	4.7	7	7	-1.2
Azerbaijan	1	1	-2.5	103	114	7.5	67	74	7.8
Bahrain				1	1	0.8	13	13	7.0
Cyprus	58	57	0.9	4	4	0.1	5	5	-7.5
Georgia	8	13	-10.0	29	27	-5.7	4	5	-5.7
Iraq				49	51	0.6	62	62	7.2
Jordan				13	14	8.0	16	16	2.0
Kuwait				3	3	4.0	31	31	-1.1
Lebanon	1	1	-9.0	47	47	-2.0	12	12	3.8
Occupied Palestinian Territory				5	5	-9.0	16	16	3.3
Saudi Arabia				29	30	3.3	79	82	-1.7
Syrian Arab Republic				63	66	3.4	198	207	0.9
Turkey	0	0	-36.3	326	323	-1.1	299	296	-2.3
United Arab Emirates				6	6	-9.7	44	44	1.3
Yemen				97	108	7.6	62	69	4.0
LATIN AMERICA & THE CARIBBEAN	6 357	6 514	2.4	15 519	15 228	1.0	442	443	0.6
Argentina	289	281	2.8	3 378	2 630	-0.3	55	55	-0.6
Bahamas	0	0	0.6	0	0	-0.2	0	0	1.7
Barbados	3	3	3.1	0	0	-12.6	0	0	4.8
Belize	1	1	3.6	2	2	3.5	0	0	6.0
Bolivia (Plur. State)	117	118	4.4	255	247	4.5	27	27	2.3
Brazil	2 930	3 078	1.7	6 662	6 977	0.6	110	111	0.9
Chile	514	498	6.7	210	211	-0.7	16	16	-0.1
Colombia	179	180	5.5	936	930	2.2	15	15	0.9
Costa Rica	54	54	5.7	93	97	1.7	0	0	-0.8

TABLE 35: Livestock production - pig meat, beef and buffalo meat, and sheep and goat meat (continued)

	Production								
	pig meat			beef and buffalo meat			sheep and goat meat		
	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.	thousand tonnes	thousand tonnes	% p.a.
	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10	2009	2010	growth: 2000-10
Cuba	179	172	6.2	65	64	-1.8	12	12	4.1
Dominica	0	0	0.0	1	1	0.0	0	0	0.1
Dominican Republic	82	87	3.6	102	100	3.8	1	1	0.4
Ecuador	180	185	5.0	245	238	3.4	10	10	-0.6
El Salvador	8	8	-2.5	31	33	-0.5	0	0	0.8
French Guiana	0	0	-9.9	0	0	-2.4	0	0	-19.9
Grenada	0	0	2.9	0	0	0.2	0	0	2.7
Guatemala	55	56	6.3	75	75	2.0	2	2	0.5
Guyana	1	1	10.0	2	2	-0.5	1	1	0.5
Haiti	33	35	2.3	44	45	1.1	7	6	-1.3
Honduras	14	10	0.1	56	59	0.6	0	0	-1.4
Jamaica	9	8	1.9	5	5	-9.3	1	1	5.4
Mexico	1 162	1 175	1.3	1 705	1 745	2.2	97	99	3.2
Netherlands Antilles	0	0	1.6	0	0	2.3	0	0	0.7
Nicaragua	7	8	2.7	108	121	8.7	0	0	-1.7
Panama	31	30	3.2	75	79	1.3			
Paraguay	187	200	2.4	315	385	5.2	4	4	2.4
Peru	115	116	2.4	165	172	2.8	40	40	0.5
St. Kitts & Nevis	0	0	-13.8	0	0	-2.5	0	0	-16.9
St. Lucia	1	1	3.2	0	0	2.3	0	0	0.4
St. Vincent & Grenadines	1	1	-0.2	0	0	-0.9	0	0	0.8
Suriname	2	2	5.1	2	2	-0.4	0	0	-2.6
Trinidad & Tobago	3	3	5.9	1	1	-0.6	0	0	1.3
Uruguay	17	18	-3.4	491	524	1.5	33	32	-4.7
Venezuela (Boliv. Rep. of)	165	169	3.0	480	466	0.8	8	9	-0.8
OCEANIA	91	91	1.6	20	20	-0.7	1	0	-8.6
Fiji	4	4	0.4	8	8	-0.5	0	0	-12.5
French Polynesia	1	1	-0.1	0	0	-1.9	0	0	0.0
New Caledonia	2	2	4.8	3	3	-1.4	0	0	-2.8
Papua New Guinea	68	68	1.6	3	3	1.7	0	0	1.3
Samoa	4	5	3.0	1	1	1.0			
Solomon Islands	2	2	1.0	1	1	1.9			
Tonga	2	2	0.7	0	0	0.3	0	0	0.6
Vanuatu	4	4	2.5	3	2	-4.0	0	0	0.7
DEVELOPED REGIONS	40 096	40 773	0.9	27 439	27 725	-0.3	2 565	2 452	-1.6
NORTH AMERICA	12 385	12 112	1.7	13 143	13 319	-0.2	97	92	-2.5
Bermuda	0	0	3.4	0	0	1.5	0	0	0.7
Canada	1 943	1 926	1.6	1 252	1 272	0.1	16	16	2.3
United States of America	10 442	10 186	1.7	11 891	12 047	-0.2	80	76	-3.2
ASIA & OCEANIA	1 697	1 693	0.1	3 382	3 365	0.7	1 150	1 063	-1.5
Australia	321	336	-0.8	2 124	2 108	0.6	660	581	-1.7
Israel	20	19	2.4	104	108	5.4	10	10	2.6
Japan	1 310	1 291	0.3	517	513	-0.3	0	0	-3.7
New Zealand	47	47	0.1	637	635	1.1	480	472	-1.2
EUROPE	26 013	26 968	0.6	10 914	11 041	-0.6	1 318	1 296	-1.7
Albania	12	12	4.8	39	41	1.3	22	21	0.8
Belarus	388	398	2.8	308	309	3.8	1	1	-6.0
Bosnia & Herzegovina	10	13	7.8	23	23	3.7	2	2	3.2
Croatia	131	121	6.6	37	38	3.0	3	2	0.6
European Union	22 161	22 821	0.5	7 963	8 147	-0.3	1 024	994	-2.6
Iceland	6	6	2.6	4	4	0.7	9	9	-0.6
Macedonia, FYR	8	8	-1.5	7	7	1.2	5	5	1.1
Montenegro	2	2		5	6		0	1	
Norway	124	129	2.0	85	84	-0.8	24	25	0.5
Republic of Moldova	42	57	1.4	11	10	-5.5	2	2	-4.1
Russian Federation	2 169	2 308	3.9	1 741	1 711	-1.0	183	188	3.0
Serbia	252	269		100	96		24	23	
Switzerland	238	249	1.0	142	143	1.1	6	6	-0.1
Ukraine	526	631	-0.7	454	428	-5.5	18	21	2.1

TABLE 36: Fish production

	Fish production									
	capture					aquaculture				
	total	inland	marine	total	total	total	inland	marine	total	total
	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09
WORLD	89 585	10 324	78 593	88 917	−0.6	52 925	38 065	17 612	55 677	6.2
DEVELOPING REGIONS	66 038	9 847	55 882	65 729	0.1	49 038	37 227	14 357	51 584	6.7
AFRICA	7 337	2 424	4 774	7 197	0.7	943	984	6	990	10.6
North Africa	1 652	245	1 569	1 814	1.8	702	710	4	714	8.4
Algeria	139		128	128	1.4	3	2	0	2	22.4
Egypt	374	238	136	374	−0.3	694	706		706	8.4
Libya	48		52	52	0.5	0	0	0	0	10.2
Morocco	993	6	1 156	1 162	2.8	1	1	0	1	−2.7
Tunisia	98	1	97	98	0.3	3	1	3	4	11.7
Sub-Saharan Africa	5 686	2 179	3 204	5 383	0.3	242	274	2	276	19.4
Angola	306	6	266	272	1.4	0	0		0	51.5
Benin	37	30	9	39	2.1	0	0		0	
Botswana	0	0		0	−7.0					
Burkina Faso	11	12		12	3.7	0	0		0	51.1
Burundi	18	18		18	0.2	0	0		0	8.0
Cameroon	138	74	64	138	2.3	0	0		0	26.0
Cape Verde	24		17	17	5.3					
Central African Republic	15	15		15	0.0					
Chad	40	40		40	−7.8					
Comoros	30		20	20	5.0					
Congo	54	28	33	61	3.2	0	0		0	−1.2
Côte d'Ivoire	58	3	45	48	−5.6	1	1		1	0.8
Congo, Dem. Rep.	236	230	6	236	−0.5	3	3		3	4.1
Djibouti	1		1	1	3.2					
Equatorial Guinea	5	1	7	8	8.7	0	0		0	
Eritrea	2		3	3	−14.7					
Ethiopia	17	17		17	0.9	0	0		0	5.8
Gabon	30	10	20	30	−5.0	0	0		0	−15.4
Gambia	43	4	41	46	5.2					
Ghana	360	89	233	322	−3.7	6	7		7	4.1
Guinea	87	4	82	86	−0.7	0	0		0	
Guinea-Bissau	7	0	7	7	0.8					
Kenya	135	133	6	139	−4.7	4	5		5	28.5
Lesotho	0	0		0	3.9	0	0		0	33.5
Liberia	8	1	7	8	−4.0	0	0		0	−3.5
Madagascar	120	33	98	131	1.0	11	6	0	6	−2.0
Malawi	70	69		69	3.7	2	2		2	13.2
Mali	100	100		100	−1.0	1	1		1	43.9
Mauritania	195	15	164	179	5.1					
Mauritius	7		8	8	−2.5	0	0	0	0	19.7
Mozambique	120	10	58	68	5.6	1	0	0	0	
Namibia	373	3	367	369	−5.1	0	0	1	1	30.1
Niger	30	30		30	7.0	0	0		0	18.7
Nigeria	601	286	312	598	3.4	143	153		153	21.9
Rwanda	9	9		9	3.4	0	0		0	4.1
Senegal	449	59	400	459	0.6	0	0	0	0	7.5
Seychelles	69		81	81	10.6	0	0		0	−3.8
Sierra Leone	204	14	186	200	11.6	0	0		0	3.2
Somalia	30	0	30	30	2.4					
Sudan	69	66	6	72	3.4	2	2		2	9.2
South Africa	645	1	510	511	−2.5	4	3	1	3	2.3
Swaziland	0	0		0	0.0		0		0	0.6
Tanzania, Utd. Rep.	350	269	71	340	−0.2	0	0		0	−0.4
Togo	24	5	22	27	2.2	0	0		0	20.5
Uganda	450	400		400	6.9	52	77		77	65.6
Zambia	79	85		85	2.7	6	9		9	8.0
Zimbabwe	10	10		10	−2.4	3	3		3	2.4

TABLE 36: Fish production (continued)


	Fish production									
	capture					aquaculture				
	total	inland	marine	total	total	total	inland	marine	total	total
	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09
ASIA	42 109	6 922	35 738	42 660	1.2	46 245	35 480	13 224	48 704	6.5
Central Asia	74	55		55	0.5	4	4		4	-5.2
Kazakhstan	56	34		34	-0.9	0	0		0	-10.4
Kyrgyzstan	0	0		0	-16.7	0	0		0	9.7
Tajikistan	0	0		0	7.2	0	0		0	12.8
Turkmenistan	15	15		15	2.3	0	0		0	-14.9
Uzbekistan	3	6		6	6.9	3	3		3	-5.4
East Asia	34 007	4 411	29 852	34 263	1.0	40 849	30 279	12 993	43 272	6.4
Brunei Darussalam	2		2	2	-0.6	0	0	0	0	16.1
Cambodia	431	390	75	465	5.6	40	48	2	50	14.8
China	15 967	2 184	13 666	15 850	-0.0	33 060	23 384	11 687	35 071	5.4
Indonesia	5 002	310	4 789	5 099	2.5	1 690	1 721	13	1 733	9.1
Korea, DPR	205	5	200	205	-0.4	64	4	60	64	-0.4
Korea, Republic of	1 950	12	1 845	1 857	0.2	474	18	455	473	5.5
Lao, PDR	29	30		30	0.3	64	75		75	6.6
Malaysia	1 399	4	1 391	1 396	0.9	243	222	111	333	9.1
Mongolia	0	0		0	-15.8					
Myanmar	2 494	899	1 868	2 767	10.9	675	746	32	778	25.8
Philippines	2 561	186	2 416	2 602	3.6	741	617	120	737	7.2
Singapore	2		2	2	-9.8	4	0	3	4	-3.9
Thailand	1 873	246	1 496	1 742	-5.9	1 331	1 059	337	1 396	7.3
Viet Nam	2 088	145	2 098	2 243	3.7	2 462	2 384	172	2 556	19.9
South Asia	7 000	2 388	4 948	7 336	2.0	5 181	5 060	148	5 208	7.7
Afghanistan	1	1		1	0.0					
Bangladesh	1 558	1 219	603	1 822	6.8	1 006	1 064		1 064	5.5
Bhutan	0	0		0	-4.0	0	0		0	4.9
India	4 099	916	3 137	4 053	1.1	3 851	3 644	148	3 792	7.7
Iran (Islamic Rep.)	408	72	348	420	1.0	155	180		180	18.0
Maldives	133		117	117	-0.2					
Nepal	22	22		22	2.8	27	27		27	6.6
Pakistan	451	112	434	546	-1.3	135	138	0	138	30.6
Sri Lanka	327	47	309	356	1.3	7	8	0	8	6.1
West Asia	1 029	67	937	1 005	0.3	211	136	84	220	9.6
Armenia	1	1		1	-6.5	5	5		5	21.7
Azerbaijan	2	1		1	-26.3	0	0		0	-3.6
Bahrain	14		16	16	3.8	0		0	0	-18.1
Cyprus	2	0	1	1	-35.0	3	0	3	3	6.6
Georgia	27	0	25	25	34.1	0	0		0	10.4
Iraq	34	22	12	35	5.8	19	19		19	30.2
Jordan	0	0	0	1	0.4	1	0		0	-2.8
Kuwait	4		4	4	-5.1	0	0	0	0	-0.5
Lebanon	4	0	4	4	0.4	1	1		1	8.1
Occupied Palestinian Territory	3		2	2	-5.8	0	0		0	
Saudi Arabia	69		69	69	3.8	22	25	1	26	17.7
Syrian Arab Republic	7	4	3	7	0.1	9	9		9	2.8
Turkey	494	39	425	464	-0.9	152	76	83	159	8.1
United Arab Emirates	74		78	78	-3.3	1				
Yemen	127		127	127	1.1					
LATIN AMERICA & THE CARIBBEAN	15 994	486	14 784	15 270	-2.9	1 848	763	1 125	1 887	9.4
Argentina	995	16	844	860	-0.8	3	2	0	3	4.3
Bahamas	9		9	9	-2.3		0		0	0.0
Barbados	4		3	3	1.1					
Belize	34		5	5	-23.1	10	9	0	10	11.5
Bolivia (Plur. State)	7	8		8	2.4	1	1		1	7.5
Brazil	792	239	586	825	2.4	365	403	13	416	10.3
Chile	3 555		3 454	3 454	-2.4	843	29	764	793	8.2
Colombia	114	23	84	107	-2.7	68	67	18	85	3.7
Costa Rica	22	1	21	22	-5.3	27	25	0	25	10.9

TABLE 36: Fish production (continued)


	Fish production									
	capture					aquaculture				
	total	inland	marine	total	total	total	inland	marine	total	total
	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 2009	thousand tonnes 2009	% p.a. growth: 2000-09
Cuba	31	3	26	29	−9.1	35	35	1	36	1.1
Dominica	1		1	1	−4.5					
Dominican Republic	15	0	14	14	2.9	1	0	1	1	−8.2
Ecuador	470	0	478	478	−2.3	172	39	179	218	15.2
El Salvador	32	4	28	32	14.1	4	4		4	36.7
French Guiana	4		4	4	−1.7	0	0		0	1.4
Grenada	2		3	3	4.9					
Guatemala	23	2	18	20	−7.2	19	17		17	17.3
Guyana	42	1	43	44	−1.3	0	1		1	−1.9
Haiti	8	0	8	8	3.3	0	0		0	23.8
Honduras	13	0	11	11	−4.9	47	29		29	12.4
Jamaica	13	0	13	13	9.9	6	6		6	3.2
Mexico	1 581	112	1 499	1 611	2.3	159	26	131	157	12.6
Netherlands Antilles	17		19	19	−0.6					
Nicaragua	30	1	35	36	5.3	16	19		19	14.9
Panama	225	2	220	222	−0.2	8	6		6	15.3
Paraguay	2	2		2	−26.7	2	2		2	39.8
Peru	7 392	46	6 869	6 914	−4.7	43	28	16	44	23.6
St. Kitts & Nevis	0		0	0	−0.5					
St. Lucia	2		2	2	0.4		0		0	−13.9
St. Vincent & Grenadines	4		4	4	−19.4					
Suriname	24	0	25	26	2.2	0	0		0	−21.0
Trinidad & Tobago	14		14	14	−0.3	0	0		0	−7.0
Uruguay	109	1	81	81	−3.6	0	0		0	−7.7
Venezuela (Boliv. Rep. of)	295	25	271	296	−2.0	19	15		15	1.1
OCEANIA	597	16	587	603	6.5	3	1	2	3	−4.3
Fiji	44	2	37	40	−0.3	0	0		0	−20.3
French Polynesia	12	0	12	12	−1.2	0		0	0	−3.1
New Caledonia	4		4	4	0.5	2		2	2	0.9
Papua New Guinea	222	14	216	230	8.5	0	0		0	22.1
Samoa	14	0	13	13	4.9	0	0		0	
Solomon Islands	26		28	28	4.3	0				
Tonga	3		2	2	−6.7	0				
Vanuatu	171		145	145	8.3	0	0		0	
DEVELOPED REGIONS	23 482	477	22 650	23 127	−2.1	3 887	839	3 255	4 094	1.7
NORTH AMERICA	5 526	54	5 307	5 361	−1.0	652	310	324	634	0.9
Bermuda	0		0	0	3.3					
Canada	943	31	908	939	−0.7	152	9	146	154	2.1
United States of America	4 350	22	4 200	4 222	−1.2	500	301	179	480	0.6
ASIA & OCEANIA	4 961	43	4 418	4 461	−2.9	921	65	910	976	0.9
Australia	182	2	171	173	−1.1	59	6	59	65	8.2
Israel	3	0	3	3	−7.1	20	18	1	19	−0.4
Japan	4 324	40	3 807	3 847	−3.0	730	41	746	787	0.3
New Zealand	452	1	437	438	−2.6	112		105	105	2.3
EUROPE	12 996	380	12 925	13 305	−2.2	2 313	463	2 021	2 484	2.2
Albania	6	2	4	6	6.7	2	1	2	2	24.3
Belarus	1	1		1	5.6	4	4		4	−5.2
Bosnia & Herzegovina	2	2	0	2	0.0	8	7	0	8	
Croatia	49	0	55	56	11.4	12	5	8	13	7.7
European Union	5 138	114	5 078	5 192	−2.8	1 236	291	986	1 277	−1.0
Iceland	1 284	0	1 142	1 142	−5.9	5	2	3	5	4.0
Macedonia, FYR	0	0		0	−4.2	1	2		2	0.2
Montenegro	2	1	2	2		1	0	0	1	
Norway	2 431	1	2 524	2 524	−0.7	848	0	962	962	7.7
Republic of Moldova	1	2		2	18.7	5	5		5	18.9
Russian Federation	3 384	246	3 580	3 826	−0.4	115	113	3	117	5.2
Serbia	3	4		4		8	7		7	
Switzerland	2	2		2	0.2	1	1		1	1.4
Ukraine	195	6	207	213	−6.5	24	24	1	24	−2.8

TABLE 37: Volume of total cereal trade

	Cereals							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	264 486	314 565	315 693	314 850	265 448	327 144	317 720	329 234
DEVELOPING REGIONS	170 409	202 309	202 644	204 006	53 579	100 452	83 484	72 603
AFRICA	39 740	59 238	55 159	51 605	1 946	3 155	2 622	3 444
North Africa	25 028	29 427	33 229	22 667	507	1 464	422	910
Algeria	7 846	7 287	9 443	7 910	0	1	23	6
Egypt	9 070	10 509	12 324	6 043	328	1 250	258	774
Libya	1 718	2 356	2 276	2 317	0	1	1	1
Morocco	4 379	6 150	6 127	4 415	65	146	95	100
Tunisia	2 015	3 125	3 059	1 981	115	65	45	30
Sub-Saharan Africa	14 711	29 811	21 930	28 938	1 438	1 692	2 201	2 534
Angola	397	641	734	700	0	1	1	1
Benin	127	236	226	271	0	18	5	4
Botswana	161	145	177	209	1	5	2	7
Burkina Faso	300	249	205	375	4	17	11	18
Burundi	15	89	29	67	0	0	0	0
Cameroon	402	717	858	907	1	0	1	0
Cape Verde	80	86	103	135	0	0	1	0
Central African Republic	36	30	32	42	0	0	0	0
Chad	50	146	147	195	0	0	0	0
Comoros	47	50	47	46	0	0	0	0
Congo	207	130	65	40	0	1	1	0
Côte d'Ivoire	727	1 200	1 090	1 665	15	25	38	127
Congo, Dem. Rep.	290	649	902	479	0	5	5	5
Djibouti	169	202	201	193	0	0	0	0
Equatorial Guinea	12	21	30	25				
Eritrea	80	211	119	127	0	0	0	0
Ethiopia	704	694	1 424	2 229	3	3	2	0
Gabon	139	113	135	133	0	0	0	0
Gambia	104	163	169	219	1	0	0	1
Ghana	288	836	825	835	24	12	0	0
Guinea	331	463	324	413	0	2	15	15
Guinea-Bissau	67	47	32	25	0	0	0	0
Kenya	753	1 136	1 100	2 711	61	55	30	19
Lesotho	205	257	259	254	2	0	0	0
Liberia	162	257	262	192	0	0	0	0
Madagascar	167	368	276	221	1	4	3	1
Malawi	120	123	259	215	6	410	31	15
Mali	157	267	252	263	5	6	4	4
Mauritania	370	362	438	556				
Mauritius	288	295	282	328	26	26	18	42
Mozambique	381	811	610	804	0	21	30	16
Namibia	255	100	201	119	2	0	3	3
Niger	160	294	320	172	1	17	30	30
Nigeria	2 418	9 013	1 364	4 035	6	16	5	5
Rwanda	31	117	56	131	0	3	8	0
Senegal	884	1 594	1 533	1 348	0	95	37	104
Seychelles	13	20	19	17	0	0	0	0
Sierra Leone	187	147	214	88	0	0	0	0
Somalia	245	352	452	516	0	0	0	0
Sudan	726	1 476	1 664	2 329	322	119	170	9
South Africa	1 546	3 379	2 302	2 153	633	145	1 279	1 824
Swaziland	94	186	182	159	3	2	1	1
Tanzania, Utd. Rep.	221	876	548	950	40	324	136	71
Togo	125	151	307	163	24	17	19	32
Uganda	145	500	439	514	25	104	73	105
Zambia	73	39	48	70	12	238	238	71
Zimbabwe	244	558	652	1 277	218	1	1	0

TABLE 37: Volume of total cereal trade (continued)

	Cereals							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	88 940	93 503	98 315	106 116	30 864	52 579	39 888	35 436
Central Asia	1 385	3 030	3 478	3 502	4 176	8 919	8 164	6 731
Kazakhstan	22	87	124	182	4 145	8 901	8 147	6 710
Kyrgyzstan	153	549	508	492	30	3	3	3
Tajikistan	443	1 016	1 064	1 001	0	2	2	5
Turkmenistan	40	174	461	325				
Uzbekistan	727	1 205	1 320	1 501	0	14	13	13
East Asia	42 811	43 272	38 752	43 387	19 508	25 477	18 620	15 449
Brunei Darussalam	64	42	47	43	0	0	0	0
Cambodia	80	43	22	32	4	83	317	111
China	10 158	8 407	7 623	9 877	7 553	10 194	1 907	1 449
Indonesia	8 599	7 576	5 829	6 152	94	201	188	106
Korea, DPR	1 195	1 095	356	455	0	0	0	0
Korea, Republic of	12 804	12 224	12 177	11 573	43	14	13	19
Lao, PDR	10	32	27	58	2	23	127	232
Malaysia	4 151	5 703	4 403	4 956	146	78	61	53
Mongolia	86	268	342	306	0	0	0	0
Myanmar	110	126	126	85	143	519	189	193
Philippines	3 055	3 942	4 270	5 311	0	16	20	16
Singapore	830	624	596	588	65	166	112	95
Thailand	922	1 222	1 367	1 685	6 948	9 624	10 939	9 752
Viet Nam	711	1 904	1 503	2 201	4 511	4 558	4 748	3 423
South Asia	19 851	13 948	18 371	21 828	3 790	14 360	9 973	8 350
Afghanistan	295	1 300	2 028	1 172	0	0	0	0
Bangladesh	4 859	3 558	2 287	4 687	0	19	9	5
Bhutan	70	9	8	8	19	0	0	0
India	1 611	2 689	22	200	1 912	9 723	6 499	5 090
Iran (Islamic Rep.)	8 439	4 722	10 725	11 196	5	117	106	89
Maldives	35	44	52	49	0	0	0	0
Nepal	75	294	134	150	58	3	5	54
Pakistan	3 243	158	1 971	3 174	1 795	4 310	3 205	2 978
Sri Lanka	1 224	1 173	1 144	1 192	1	188	149	135
West Asia	24 893	33 253	37 713	37 399	3 389	3 822	3 131	4 905
Armenia	297	626	416	446	0	0	0	0
Azerbaijan	732	1 523	1 580	1 085	0	14	42	19
Bahrain	98	60	134	143	0	0	0	0
Cyprus	584	514	569	575	1	9	21	7
Georgia	885	927	625	646	22	51	20	22
Iraq	2 624	3 912	4 367	4 975	27	1	0	0
Jordan	1 694	2 559	2 231	1 756	16	12	21	49
Kuwait	701	752	889	974	19	2	2	50
Lebanon	828	825	856	1 056	6	19	65	34
Occupied Palestinian Territory	635	558	570	589	9	9	13	9
Saudi Arabia	6 726	9 987	10 966	10 199	1	39	13	13
Syrian Arab Republic	1 368	1 843	3 135	3 864	113	1 079	106	106
Turkey	2 943	3 551	5 360	4 191	2 597	1 974	1 752	3 500
United Arab Emirates	2 005	2 098	2 610	2 723	461	490	872	860
Yemen	2 697	3 142	2 854	3 764	5	18	98	142
LATIN AMERICA & THE CARIBBEAN	40 945	48 855	48 446	45 652	20 768	44 688	40 947	33 699
Argentina	26	18	18	17	18 632	27 931	28 108	17 678
Bahamas	24	22	21	14	0	0	0	0
Barbados	74	70	78	66	5	6	6	4
Belize	15	20	20	21	0	0	1	1
Bolivia (Plur. State)	346	445	461	498	13	56	33	70
Brazil	9 078	9 609	8 510	8 615	61	11 470	7 632	8 770
Chile	2 157	3 171	2 760	2 161	50	111	100	112
Colombia	3 094	5 091	5 181	5 113	0	9	5	3
Costa Rica	671	1 036	958	954	22	32	38	29

TABLE 37: Volume of total cereal trade (continued)

	Cereals							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	1 569	2 095	2 150	1 989	0	0	0	0
Dominica	6	7	7	7	0	0	0	0
Dominican Republic	1 333	1 572	1 452	1 401	0	3	3	2
Ecuador	744	1 111	929	921	106	120	25	33
El Salvador	304	882	812	739	5	14	11	19
French Guiana								
Grenada	24	28	43	9	15	9	7	0
Guatemala	690	1 291	1 168	1 183	48	21	33	20
Guyana	62	56	72	84	252	180	198	210
Haiti	523	518	564	627	0	0	0	0
Honduras	408	539	431	690	2	3	5	3
Jamaica	440	510	415	395	0	4	10	8
Mexico	13 593	13 958	14 905	13 363	375	950	1 608	1 555
Netherlands Antilles	28	24	19	21	4	0	0	0
Nicaragua	197	380	365	331	3	26	33	23
Panama	342	566	528	466	0	0	0	0
Paraguay	47	32	19	11	175	2 464	1 718	2 872
Peru	2 472	3 310	3 191	3 257	13	18	53	72
St. Kitts & Nevis	4	3	1	2	0	0	0	0
St. Lucia	16	16	12	16	0	0	0	0
St. Vincent & Grenadines	45	41	51	31	26	21	20	19
Suriname	37	27	14	21	51	22	25	23
Trinidad & Tobago	205	231	271	188	9	35	10	20
Uruguay	79	127	218	177	837	1 155	1 264	2 149
Venezuela (Boliv. Rep. of)	2 275	2 023	2 779	2 243	65	18	0	0
OCEANIA	784	713	724	633	1	29	26	25
Fiji	126	169	184	127	1	28	26	25
French Polynesia	35	38	43	36	0	0	0	0
New Caledonia	35	42	39	43	0	0	0	0
Papua New Guinea	487	355	375	333	0	0	0	0
Samoa	12	14	11	31	0	0	0	0
Solomon Islands	36	50	44	23	0	0	0	0
Tonga	8	7	7	6	0	0	0	0
Vanuatu	17	18	6	18	0	0	0	0
DEVELOPED REGIONS	87 963	111 742	112 479	110 269	208 543	226 683	234 215	256 623
NORTH AMERICA	7 032	9 406	10 544	8 748	111 201	122 765	115 714	100 358
Bermuda	2	2	2	2				
Canada	1 395	3 252	3 474	2 663	20 045	22 784	21 739	23 256
United States of America	5 634	6 152	7 068	6 083	91 156	99 981	93 974	77 102
ASIA & OCEANIA	31 222	28 883	29 092	29 516	22 676	17 444	12 743	21 561
Australia	53	137	202	226	22 061	17 066	12 377	21 210
Israel	3 004	2 754	2 894	3 324	1	2	40	24
Japan	27 813	25 546	25 458	25 604	609	373	300	311
New Zealand	352	446	538	361	5	3	25	15
EUROPE	55 239	73 453	72 843	72 005	77 992	86 474	105 758	134 705
Albania	364	468	422	395	1	2	0	0
Belarus	1 686	652	525	272	11	2	16	11
Bosnia & Herzegovina	363	648	643	590	154	6	7	28
Croatia	83	180	207	60	100	457	266	701
European Union	45 059	68 979	68 688	69 168	69 896	63 594	73 801	83 053
Iceland	59	88	77	75	0	0	0	0
Macedonia, FYR	116	132	184	176	9	2	4	3
Montenegro		17	19	137		0	0	13
Norway	535	535	600	393	3	0	1	0
Republic of Moldova	23	143	133	98	343	82	239	550
Russian Federation	7 012	1 104	979	431	987	16 938	14 121	22 315
Serbia		43	40	26		1 003	805	2 045
Switzerland	392	776	762	644	1	1	3	6
Ukraine	94	192	120	100	6 299	4 394	16 518	25 987

TABLE 38: Volume of wheat trade

	Wheat and flour (wheat equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	123 849	141 658	142 846	155 778	126 664	147 219	145 970	165 197
DEVELOPING REGIONS	82 164	99 431	99 170	106 326	17 326	29 579	25 436	21 863
AFRICA	21 995	35 709	33 936	31 850	615	687	612	642
North Africa	13 876	17 808	22 576	14 874	200	227	167	215
Algeria	4 383	4 863	6 934	5 731	0	1	23	6
Egypt	4 342	5 911	8 328	4 063	21	17	8	84
Libya	1 234	1 646	1 450	1 450	0	1	1	1
Morocco	2 816	3 690	4 086	2 394	65	146	92	95
Tunisia	1 101	1 698	1 779	1 237	115	62	44	30
Sub-Saharan Africa	8 119	17 902	11 360	16 976	415	460	445	427
Angola	281	467	505	548	0	0	0	0
Benin	54	43	40	67	0	5	2	1
Botswana	61	58	85	95	0	3	0	1
Burkina Faso	80	86	65	105	0	0	0	0
Burundi	11	9	3	31	0	0	0	0
Cameroon	246	241	425	411	1	0	0	0
Cape Verde	17	24	30	30	0	0	0	0
Central African Republic	34	25	28	30	0	0	0	0
Chad	50	96	97	112	0	0	0	0
Comoros	5	12	10	13	0	0	0	0
Congo	150	90	55	25	0	1	0	0
Côte d'Ivoire	297	388	320	511	3	23	14	72
Congo, Dem. Rep.	221	473	452	407	0	5	5	5
Djibouti	142	138	175	170	0	0	0	0
Equatorial Guinea	12	16	20	20				
Eritrea	74	160	75	83	0	0	0	0
Ethiopia	606	602	1 113	1 874	0	0	0	0
Gabon	66	81	81	92	0	0	0	0
Gambia	37	47	49	70	1	0	0	0
Ghana	219	385	362	379	18	0	0	0
Guinea	121	132	108	108	0	2	15	15
Guinea-Bissau	5	11	11	4	0	0	0	0
Kenya	603	720	570	811	30	3	5	7
Lesotho	82	97	97	92	2	0	0	0
Liberia	72	58	42	48	0	0	0	0
Madagascar	72	164	102	97	0	0	0	0
Malawi	90	97	225	153	0	14	8	4
Mali	72	112	72	85	0	3	3	3
Mauritania	246	311	311	417				
Mauritius	140	158	122	166	26	25	17	41
Mozambique	197	354	244	440	0	1	1	1
Namibia	94	51	50	14	1	0	3	3
Niger	43	52	33	48	0	0	0	0
Nigeria	1 583	7 795	1 132	3 804	5	4	4	4
Rwanda	15	51	35	36	0	2	5	0
Senegal	238	424	378	443	0	19	15	9
Seychelles	7	6	7	6	0	0	0	0
Sierra Leone	32	30	48	24	0	0	0	0
Somalia	143	111	124	117	0	0	0	0
Sudan	706	1 193	1 292	1 882	0	0	1	1
South Africa	509	1 115	1 440	1 326	203	62	174	132
Swaziland	51	60	60	37	2	0	0	0
Tanzania, Utd. Rep.	100	816	459	893	6	214	105	41
Togo	62	72	57	76	24	15	15	32
Uganda	78	338	278	418	0	22	6	5
Zambia	49	20	30	18	4	36	45	50
Zimbabwe	38	102	36	334	89	0	0	0

TABLE 38: Volume of wheat trade (continued)

	Wheat and flour (wheat equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	41 558	42 722	45 061	55 828	6 845	16 643	11 244	10 986
Central Asia	1 332	2 880	3 283	3 313	3 481	8 215	7 467	6 370
Kazakhstan	18	5	33	89	3 451	8 199	7 452	6 352
Kyrgyzstan	143	508	458	448	30	2	2	2
Tajikistan	443	1 007	1 045	983	0	0	0	4
Turkmenistan	38	173	461	325				
Uzbekistan	690	1 187	1 284	1 467	0	14	13	13
East Asia	15 091	18 057	14 770	19 947	496	3 724	695	568
Brunei Darussalam	8	8	10	10	0	0	0	0
Cambodia	26	28	12	25	0	0	0	0
China	1 808	1 778	1 374	2 433	259	3 416	416	370
Indonesia	3 225	5 457	5 237	5 554	1	98	79	41
Korea, DPR	531	236	68	204				
Korea, Republic of	4 190	3 279	2 766	3 906	43	14	13	15
Lao, PDR	4	4	4	5				
Malaysia	1 332	2 231	1 167	1 223	120	75	59	51
Mongolia	71	232	313	278	0	0	0	0
Myanmar	101	122	45	62	0	0	0	0
Philippines	2 057	1 957	1 777	3 199	0	15	17	15
Singapore	385	286	298	293	53	88	96	62
Thailand	788	1 105	895	1 267	21	17	14	14
Viet Nam	559	1 328	798	1 480				
South Asia	14 430	7 864	11 250	15 011	59	1 519	650	457
Afghanistan	189	1 170	1 898	1 135				
Bangladesh	2 518	2 719	1 336	4 054	0	0	0	0
Bhutan	20	1	1	1	19	0	0	0
India	1 371	2 679	1	166	2	45	15	49
Iran (Islamic Rep.)	6 156	153	5 197	5 460	1	114	103	85
Maldives	19	24	26	22	0	0	0	0
Nepal	25	2	0	1	33	0	2	50
Pakistan	3 240	136	1 833	3 103	4	1 178	385	143
Sri Lanka	891	981	957	1 067	0	183	145	130
West Asia	10 706	13 921	15 758	17 558	2 809	3 185	2 432	3 592
Armenia	265	505	333	383	0	0	0	0
Azerbaijan	696	1 453	1 459	978	0	13	42	19
Bahrain	56	5	68	66	0	0	0	0
Cyprus	91	94	111	119	1	9	10	7
Georgia	882	893	589	600	22	27	13	15
Iraq	1 843	3 167	3 643	4 189	2	1	0	0
Jordan	407	1 082	984	538	0	7	15	15
Kuwait	179	254	316	368	17	2	2	46
Lebanon	407	411	428	550	2	15	58	27
Occupied Palestinian Territory	350	336	353	358	7	5	3	7
Saudi Arabia	67	76	347	1 381	0	2	9	9
Syrian Arab Republic	17	55	76	65	112	1 077	106	106
Turkey	1 614	2 147	3 709	3 396	2 200	1 748	1 729	2 854
United Arab Emirates	1 246	690	877	1 431	346	167	285	285
Yemen	2 330	2 394	2 150	2 826	0	7	79	120
LATIN AMERICA & THE CARIBBEAN	18 290	20 601	19 815	18 315	9 866	12 222	13 555	10 210
Argentina	3	2	1	2	9 330	10 878	10 155	6 454
Bahamas	11	9	7	4	0	0	0	0
Barbados	27	27	30	22	5	6	6	4
Belize	14	14	19	20	0	0	0	0
Bolivia (Plur. State)	337	427	412	478	3	4	0	0
Brazil	7 170	7 528	6 998	6 349	5	107	648	386
Chile	634	1 095	801	691	0	0	0	1
Colombia	1 059	1 289	1 376	1 354	0	3	1	1
Costa Rica	212	223	241	270	11	26	28	22

TABLE 38: Volume of wheat trade (continued)

	Wheat and flour (wheat equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	1 046	795	857	786	0	0	0	0
Dominica	6	6	6	6	0	0	0	0
Dominican Republic	340	390	384	404	0	3	3	2
Ecuador	458	473	496	508	0	0	0	0
El Salvador	194	226	216	235	1	9	7	10
French Guiana								
Grenada	20	18	28	6	15	9	7	0
Guatemala	344	521	503	470	1	5	9	7
Guyana	61	49	57	55	0	0	2	2
Haiti	274	201	222	271	0	0	0	0
Honduras	231	238	116	191	0	0	0	0
Jamaica	168	172	187	200	0	4	9	8
Mexico	2 711	3 338	3 300	2 854	347	672	1 539	1 258
Netherlands Antilles	14	16	12	13	2	0	0	0
Nicaragua	94	130	119	140	1	17	20	17
Panama	99	120	115	116	0	0	0	0
Paraguay	42	17	2	1	2	276	584	875
Peru	1 291	1 531	1 495	1 514	4	7	25	12
St. Kitts & Nevis	3	2	1	1				
St. Lucia	13	14	10	13	0	0	0	0
St. Vincent & Grenadines	24	24	33	22	17	16	14	15
Suriname	21	13	6	6				
Trinidad & Tobago	140	149	128	87	8	31	9	9
Uruguay	6	49	61	32	110	139	487	1 127
Venezuela (Boliv. Rep. of)	1 209	1 468	1 557	1 183	4	0	0	0
OCEANIA	321	398	358	334	1	28	25	24
Fiji	89	136	122	93	1	28	25	24
French Polynesia	22	23	26	22	0	0	0	0
New Caledonia	24	31	29	29	0	0	0	0
Papua New Guinea	146	160	141	146	0	0	0	0
Samoa	6	11	10	10	0	0	0	0
Solomon Islands	12	15	9	12	0	0	0	0
Tonga	8	7	7	6				
Vanuatu	6	7	5	7				
DEVELOPED REGIONS	38 103	42 133	43 566	49 333	106 645	117 631	120 524	143 327
NORTH AMERICA	2 485	2 863	3 096	3 121	46 224	51 305	46 512	41 871
Bermuda	2	2	2	2				
Canada	77	239	299	257	16 386	17 863	16 047	19 526
United States of America	2 406	2 622	2 795	2 862	29 839	33 442	30 465	22 346
ASIA & OCEANIA	7 765	6 874	7 785	7 605	17 353	15 336	8 832	17 961
Australia	3	7	6	19	16 887	14 980	8 563	17 676
Israel	1 571	1 228	1 675	1 830	0	0	8	6
Japan	5 975	5 278	5 783	5 478	465	355	260	272
New Zealand	217	361	322	278	1	2	1	7
EUROPE	31 343	32 397	32 685	38 607	45 759	50 990	65 180	83 494
Albania	322	366	321	309	1	2	0	0
Belarus	1 166	337	236	116	8	2	15	2
Bosnia & Herzegovina	222	446	428	395	0	5	6	16
Croatia	15	18	61	19	38	433	54	313
European Union	24 287	29 931	30 533	36 700	40 041	33 921	44 569	51 904
Iceland	22	43	40	44	0	0	0	0
Macedonia, FYR	37	66	116	125	4	0	0	0
Montenegro		16	18	115		0	0	12
Norway	361	285	309	306	2	0	0	0
Republic of Moldova	18	104	100	85	171	42	54	333
Russian Federation	4 720	503	200	103	838	14 830	12 350	17 366
Serbia		3	6	6		577	248	424
Switzerland	251	337	407	386	0	0	2	5
Ukraine	3	27	7	5	4 587	1 187	7 892	13 124

TABLE 39: Volume of rice trade

	Rice							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	27 317	30 950	28 409	26 543	25 280	33 688	29 458	26 598
DEVELOPING REGIONS	22 799	25 423	22 732	20 909	20 304	28 795	24 329	21 962
AFRICA	4 824	8 859	7 014	7 160	344	1 385	383	910
North Africa	193	393	211	217	307	1 223	244	653
Algeria	54	73	71	76	0	0	0	0
Egypt	7	118	9	16	307	1 223	241	649
Libya	110	174	104	104	0	0	0	0
Morocco	1	11	7	12	0	0	2	4
Tunisia	21	18	20	10	0	0	0	0
Sub-Saharan Africa	4 630	8 466	6 802	6 943	37	162	139	257
Angola	31	166	195	113	0	0	0	0
Benin	73	192	182	202	0	1	0	0
Botswana	13	28	26	20	0	1	0	1
Burkina Faso	205	150	137	264	0	0	0	1
Burundi	0	7	4	10	0	0	0	0
Cameroon	152	471	427	469	0	0	1	0
Cape Verde	26	36	47	93	0	0	1	0
Central African Republic	2	3	4	6	0	0	0	0
Chad	0	1	1	1	0	0	0	0
Comoros	42	39	38	34				
Congo	53	40	10	15	0	0	1	0
Côte d'Ivoire	423	809	762	1 121	3	1	22	53
Congo, Dem. Rep.	55	164	42	40	0	0	0	0
Djibouti	24	62	23	20	0	0	0	0
Equatorial Guinea	0	5	10	5				
Eritrea	0	0	1	1				
Ethiopia	9	44	22	30	0	0	0	0
Gabon	72	32	54	40	0	0	0	0
Gambia	67	116	119	150	0	0	0	1
Ghana	69	442	395	442	1	0	0	0
Guinea	210	330	209	302	0	0	0	0
Guinea-Bissau	62	33	20	20	0	0	0	0
Kenya	53	259	265	296	0	1	1	2
Lesotho	10	5	5	5				
Liberia	41	149	170	95	0	0	0	0
Madagascar	94	191	169	109	1	2	0	0
Malawi	1	4	5	7	5	5	2	8
Mali	82	147	172	171	0	0	0	0
Mauritania	122	50	122	134				
Mauritius	83	63	69	80	0	1	0	2
Mozambique	34	426	264	280	0	0	0	0
Namibia	5	7	6	6	1	0	0	0
Niger	84	173	269	106	0	17	30	30
Nigeria	812	1 217	217	217	0	0	0	0
Rwanda	14	19	13	32	0	0	0	0
Senegal	625	1 073	1 012	771	0	74	20	94
Seychelles	4	5	7	5	0	0	0	0
Sierra Leone	150	112	165	59				
Somalia	69	115	38	108	0	0	0	0
Sudan	13	56	10	37	0	0	0	0
South Africa	515	959	650	745	7	8	24	24
Swaziland	12	21	20	20	1	1	1	1
Tanzania, Utd. Rep.	86	48	64	40	16	20	6	1
Togo	63	79	246	85	0	2	4	0
Uganda	40	75	63	80	0	25	25	38
Zambia	7	12	16	10	0	4	0	1
Zimbabwe	22	30	30	36	0	0	0	0

TABLE 39: Volume of rice trade (continued)

	Rice							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	14 617	13 117	12 477	10 502	18 162	25 517	21 912	18 405
Central Asia	39	55	79	98	43	44	29	9
Kazakhstan	3	14	21	34	43	42	26	6
Kyrgyzstan	4	32	43	37	0	0	1	1
Tajikistan	1	7	6	11	0	2	2	2
Turkmenistan	2	0	0	0				
Uzbekistan	30	1	8	16	0	0	0	0
East Asia	7 669	6 525	5 471	4 808	14 239	15 527	15 998	12 914
Brunei Darussalam	33	34	36	33	0	0	0	0
Cambodia	54	12	8	4	3	3	5	13
China	525	979	732	785	2 827	1 333	981	788
Indonesia	4 748	1 406	288	248	3	1	2	2
Korea, DPR	250	785	67	114	0	0	0	0
Korea, Republic of	156	265	309	267	0	1	0	4
Lao, PDR	5	24	22	41				
Malaysia	612	798	1 120	1 087	0	0	1	1
Mongolia	8	28	20	20	0	0	0	0
Myanmar	7	3	81	23	54	359	43	43
Philippines	834	1 806	2 432	1 775	0	1	1	0
Singapore	404	327	289	278	5	77	14	32
Thailand	1	3	14	77	6 839	9 196	10 216	8 620
Viet Nam	5	2	1	1	4 508	4 558	4 735	3 411
South Asia	3 506	2 058	2 297	1 076	3 713	9 605	5 308	4 912
Afghanistan	106	126	107	29				
Bangladesh	2 215	617	839	35	0	19	9	5
Bhutan	39	7	6	6	0	0	0	0
India	34	0	0	0	1 895	6 450	2 484	2 148
Iran (Islamic Rep.)	852	949	1 138	802	0	1	1	1
Maldives	16	20	26	26				
Nepal	36	227	93	103	24	0	0	2
Pakistan	1	3	4	4	1 791	3 129	2 809	2 751
Sri Lanka	206	109	84	70	1	6	4	5
West Asia	3 403	4 479	4 630	4 520	167	342	577	569
Armenia	12	29	16	11	0	0	0	0
Azerbaijan	18	15	27	22	0	1	0	0
Bahrain	36	52	56	60	0	0	0	0
Cyprus	4	6	8	5	0	0	0	0
Georgia	1	12	9	10	0	0	0	0
Iraq	781	736	697	758	25	0	0	0
Jordan	114	158	134	166	15	3	4	2
Kuwait	126	214	182	186	2	0	0	4
Lebanon	51	43	47	50	2	0	2	0
Occupied Palestinian Territory	122	133	111	108	1	0	1	0
Saudi Arabia	840	969	956	1 310	0	31	1	1
Syrian Arab Republic	134	291	108	207	1	0	0	0
Turkey	247	194	224	205	1	1	8	19
United Arab Emirates	557	1 039	1 293	746	115	303	525	526
Yemen	207	347	317	417	0	1	5	9
LATIN AMERICA & THE CARIBBEAN	2 921	3 190	2 960	3 014	1 799	1 892	2 033	2 646
Argentina	16	9	8	7	659	451	423	613
Bahamas	12	13	14	10	0	0	0	0
Barbados	5	6	6	6	0	0	0	0
Belize	1	0	0	0	0	0	0	0
Bolivia (Plur. State)	2	13	44	16	0	6	0	0
Brazil	984	704	431	646	48	201	512	592
Chile	108	112	124	119	0	0	0	1
Colombia	37	135	30	102	0	0	1	0
Costa Rica	52	123	70	79	11	5	10	7

TABLE 39: Volume of rice trade (continued)

	Rice							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	462	590	576	520				
Dominica	0	1	1	1	0	0	0	0
Dominican Republic	82	13	17	12	0	0	0	0
Ecuador	3	0	1	0	30	100	5	5
El Salvador	22	59	58	61	0	5	4	5
French Guiana								
Grenada	2	2	2	2	0	0	0	0
Guatemala	17	66	62	57	1	6	5	4
Guyana	0	0	0	0	251	180	196	208
Haiti	249	313	325	335	0	0	0	0
Honduras	62	71	92	111	0	2	3	2
Jamaica	86	88	86	74	0	0	1	0
Mexico	405	558	547	563	9	14	11	7
Netherlands Antilles	10	7	7	8	2	0	0	0
Nicaragua	82	118	121	85	0	3	5	4
Panama	5	49	64	15	0	0	0	0
Paraguay	3	1	1	1	1	72	68	122
Peru	150	80	146	91	2	0	18	48
St. Kitts & Nevis	1	1	0	0	0	0	0	0
St. Lucia	3	3	2	3	0	0	0	0
St. Vincent & Grenadines	18	12	17	6	9	5	6	4
Suriname	0	0	0	0	51	22	25	23
Trinidad & Tobago	39	38	36	46	1	2	0	1
Uruguay	2	0	0	1	699	799	741	994
Venezuela (Boliv. Rep. of)	0	0	68	25	23	18	0	0
OCEANIA	437	257	282	234	0	0	1	1
Fiji	35	33	50	31	0	0	1	1
French Polynesia	7	10	12	9	0	0	0	0
New Caledonia	9	10	6	10	0	0	0	0
Papua New Guinea	325	146	171	134	0	0	0	0
Samoa	6	3	1	21	0	0	0	0
Solomon Islands	24	36	35	11	0	0	0	0
Tonga	0	0	0	0				
Vanuatu	11	11	1	12				
DEVELOPED REGIONS	4 301	5 520	5 670	5 628	4 852	4 893	5 129	4 636
NORTH AMERICA	616	1 032	1 007	1 047	2 670	2 991	3 325	2 955
Bermuda	0	0	0	0				
Canada	262	348	374	383	1	5	8	8
United States of America	354	683	632	664	2 668	2 987	3 316	2 947
ASIA & OCEANIA	829	916	930	1 021	813	212	90	56
Australia	50	124	195	204	669	192	48	17
Israel	87	109	98	110	0	1	1	0
Japan	664	643	597	664	144	19	40	38
New Zealand	28	39	41	42	0	0	0	0
EUROPE	3 067	3 573	3 733	3 561	1 493	1 690	1 714	1 625
Albania	17	24	18	21	0	0	0	0
Belarus	20	33	33	27	2	0	0	0
Bosnia & Herzegovina	2	7	7	6	0	0	0	0
Croatia	9	10	11	12	0	0	0	0
European Union	2 314	2 979	3 201	3 010	1 480	1 669	1 685	1 538
Iceland	1	1	1	1	0	0	0	0
Macedonia, FYR	0	1	0	0	5	1	3	2
Montenegro		1	1	1		0	0	0
Norway	16	22	23	23	0	0	0	0
Republic of Moldova	4	16	7	10	0	0	0	0
Russian Federation	558	232	271	257	5	12	21	81
Serbia		13	12	14		0	0	0
Switzerland	55	118	81	106	0	1	1	1
Ukraine	67	121	74	76	0	7	3	2

TABLE 40: Volume of coarse grain trade

	Coarse grains							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	113 064	141 629	143 997	132 238	113 285	145 916	141 907	137 084
DEVELOPING REGIONS	65 378	77 274	80 484	76 596	15 897	41 916	33 471	28 569
AFRICA	12 908	14 603	14 151	12 563	979	1 068	1 616	1 871
North Africa	10 952	11 223	10 439	7 575	0	11	10	41
Algeria	3 407	2 351	2 438	2 104	0	0	0	0
Egypt	4 716	4 480	3 987	1 964	0	8	9	41
Libya	374	535	722	763	0	0	0	0
Morocco	1 561	2 448	2 033	2 008	0	0	1	1
Tunisia	894	1 409	1 260	735	0	3	1	0
Sub-Saharan Africa	1 956	3 379	3 712	4 988	979	1 057	1 605	1 830
Angola	85	7	34	40	0	0	0	0
Benin	0	0	4	2	0	13	3	3
Botswana	87	58	66	93	1	1	1	5
Burkina Faso	14	13	2	5	4	17	11	17
Burundi	3	72	22	27	0	0	0	0
Cameroon	3	5	6	27	0	0	0	0
Cape Verde	37	26	26	12	0	0	0	0
Central African Republic	0	2	0	5	0	0	0	0
Chad	0	45	46	78	0	0	0	0
Comoros	0	0	0	0				
Congo	4	0	0	0	0	0	0	0
Côte d'Ivoire	7	3	8	33	9	1	2	1
Congo, Dem. Rep.	14	12	407	32	0	0	0	0
Djibouti	3	3	3	3	0	0	0	0
Equatorial Guinea								
Eritrea	6	51	43	43	0	0	0	0
Ethiopia	89	48	289	324	3	3	2	0
Gabon	1	0	0	0	0	0	0	0
Gambia	0	0	1	0	0	0	0	0
Ghana	0	8	65	10	6	12	0	0
Guinea	0	1	7	3	0	0	0	0
Guinea-Bissau	0	3	2	1	0	0	0	0
Kenya	97	118	254	1 591	32	51	24	10
Lesotho	113	156	158	158	0	0	0	0
Liberia	50	50	50	50				
Madagascar	0	13	5	15	0	2	3	1
Malawi	29	22	28	55	0	391	21	4
Mali	3	5	8	8	0	1	1	1
Mauritania	1	2	5	5				
Mauritius	64	74	91	82	0	0	1	0
Mozambique	150	30	101	82	0	19	29	15
Namibia	156	36	142	96	1	0	0	0
Niger	34	68	15	19	0	0	0	0
Nigeria	23	1	15	15	1	11	1	1
Rwanda	2	47	9	63	0	2	3	0
Senegal	20	97	122	133	0	1	2	0
Seychelles	2	9	5	6	0	0	0	0
Sierra Leone	5	4	1	5				
Somalia	33	126	290	291	0	0	0	0
Sudan	7	227	361	410	321	114	163	3
South Africa	518	1 296	207	78	423	74	1 081	1 669
Swaziland	31	105	102	102	0	1	0	0
Tanzania, Utd. Rep.	36	11	23	18	17	88	24	17
Togo	0	1	3	2	0	0	0	0
Uganda	27	88	98	16	24	56	40	62
Zambia	16	6	2	42	8	198	191	20
Zimbabwe	183	426	586	907	129	1	1	0

TABLE 40: Volume of coarse grain trade (continued)

	Coarse grains							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	32 721	37 562	40 588	39 656	5 828	10 279	6 498	5 858
Central Asia	14	96	116	91	652	661	664	351
Kazakhstan	1	68	70	58	652	661	664	351
Kyrgyzstan	6	8	7	7	0	0	0	0
Tajikistan	0	2	12	7				
Turkmenistan	0	0	0	0				
Uzbekistan	7	17	27	19	0	0	0	0
East Asia	20 017	18 629	18 436	18 581	4 752	6 196	1 891	1 945
Brunei Darussalam	23	0	0	0	0	0	0	0
Cambodia	0	3	3	2	0	80	312	98
China	7 822	5 637	5 488	6 656	4 446	5 421	492	276
Indonesia	619	705	293	341	91	102	107	63
Korea, DPR	413	74	222	137	0	0	0	0
Korea, Republic of	8 447	8 662	9 086	7 384	0	0	0	0
Lao, PDR	1	4	2	12	2	23	127	232
Malaysia	2 204	2 669	2 112	2 642	26	2	1	1
Mongolia	0	2	2	2	0	0	0	0
Myanmar	2	0	0	0	89	160	146	150
Philippines	163	173	55	326	0	0	2	1
Singapore	41	11	10	17	8	1	1	0
Thailand	130	109	455	337	88	407	691	1 111
Viet Nam	147	574	704	720	2	0	12	12
South Asia	1 913	4 013	4 809	5 710	11	3 127	3 823	2 822
Afghanistan	0	4	24	8	0	0	0	0
Bangladesh	125	223	112	597	0	0	0	0
Bhutan	10	0	0	0	0	0	0	0
India	205	10	18	31	10	3 119	3 809	2 734
Iran (Islamic Rep.)	1 431	3 620	4 389	4 934	0	2	2	2
Maldives	0	0	0	0				
Nepal	14	60	34	34	0	3	3	2
Pakistan	2	17	134	56	0	3	10	84
Sri Lanka	126	79	99	51	0	0	0	0
West Asia	10 777	14 823	17 226	15 273	413	295	120	739
Armenia	20	91	67	52	0	0	0	0
Azerbaijan	19	54	95	85	0	0	0	0
Bahrain	6	2	10	16	0	0	0	0
Cyprus	489	414	451	450	0	0	12	0
Georgia	1	23	27	35	0	24	7	6
Iraq	0	9	27	28	0	0	0	0
Jordan	1 173	1 318	1 112	1 052	1	2	2	31
Kuwait	395	284	390	419	0	0	0	0
Lebanon	369	370	381	454	1	3	6	6
Occupied Palestinian Territory	163	90	106	123	1	4	9	1
Saudi Arabia	5 818	8 935	9 652	7 508	0	6	3	3
Syrian Arab Republic	1 218	1 497	2 951	3 592	0	2	0	0
Turkey	1 077	1 209	1 426	587	395	224	15	627
United Arab Emirates	202	361	408	522	0	19	61	48
Yemen	160	388	335	503	5	10	13	11
LATIN AMERICA & THE CARIBBEAN	19 723	25 053	25 660	24 313	9 090	30 569	25 357	20 840
Argentina	7	7	9	8	8 628	16 597	17 528	10 610
Bahamas	1	0	0	0				
Barbados	42	37	42	37	0	0	0	0
Belize	0	5	0	0	0	0	1	1
Bolivia (Plur. State)	7	5	6	4	10	46	33	70
Brazil	918	1 374	1 079	1 618	9	11 161	6 472	7 792
Chile	1 414	1 962	1 835	1 351	49	111	100	110
Colombia	1 998	3 666	3 775	3 656	0	6	2	1
Costa Rica	407	689	646	605	0	1	0	0

TABLE 40: Volume of coarse grain trade (continued)

	Coarse grains							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	61	709	717	683				
Dominica	0	0	0	0				
Dominican Republic	910	1 169	1 050	985	0	0	0	0
Ecuador	283	638	432	413	76	20	19	27
El Salvador	88	597	538	442	3	0	1	3
French Guiana								
Grenada	3	9	13	1	0	0	0	0
Guatemala	328	704	602	654	47	10	19	9
Guyana	1	6	15	29	0	0	0	0
Haiti	1	4	16	21	0	0	0	0
Honduras	115	231	223	388	2	1	2	0
Jamaica	186	250	143	121	0	0	0	0
Mexico	10 473	10 057	11 052	9 940	19	265	59	289
Netherlands Antilles	4	0	0	0	0	0	0	0
Nicaragua	21	132	125	107	2	6	8	1
Panama	238	397	349	335	0	0	0	0
Paraguay	3	14	16	9	171	2 116	1 066	1 875
Peru	1 031	1 698	1 549	1 652	7	11	11	12
St. Kitts & Nevis	0	0	0	0	0	0	0	0
St. Lucia	0	0	0	0				
St. Vincent & Grenadines	3	5	1	3	0	0	0	0
Suriname	16	14	8	15				
Trinidad & Tobago	26	44	107	55	0	2	1	10
Uruguay	72	77	157	145	27	217	36	28
Venezuela (Boliv. Rep. of)	1 065	554	1 154	1 035	38	0	0	0
OCEANIA	26	57	85	65	0	0	0	0
Fiji	2	0	13	3	0	0	0	0
French Polynesia	6	6	5	5				
New Caledonia	2	0	3	4	0	0	0	0
Papua New Guinea	16	50	63	54	0	0	0	0
Samoa	0	0	0	0				
Solomon Islands	0	0	0	0				
Tonga	0	0	0	0	0	0	0	0
Vanuatu	0	0	0	0	0	0	0	0
DEVELOPED REGIONS	45 393	63 942	63 063	55 192	96 887	103 999	108 424	108 515
NORTH AMERICA	3 920	5 504	6 432	4 568	62 261	68 427	65 835	55 488
Bermuda	0	0	0	0				
Canada	1 047	2 658	2 793	2 012	3 657	4 908	5 678	3 720
United States of America	2 874	2 845	3 639	2 556	58 604	63 518	60 156	51 768
ASIA & OCEANIA	22 610	21 077	20 360	20 877	4 489	1 895	3 808	3 535
Australia	0	2	1	3	4 485	1 893	3 752	3 509
Israel	1 345	1 416	1 119	1 382	0	1	31	18
Japan	21 159	19 614	19 066	19 451	0	0	0	0
New Zealand	106	45	174	41	4	1	24	8
EUROPE	20 667	37 361	36 271	29 747	30 638	33 677	38 782	49 492
Albania	25	78	83	65	0	0	0	0
Belarus	499	282	255	128	0	1	1	9
Bosnia & Herzegovina	139	195	209	189	154	1	1	12
Croatia	59	151	135	29	61	24	212	387
European Union	18 320	35 952	34 810	29 373	28 310	27 951	27 506	29 569
Iceland	36	44	35	31	0	0	0	0
Macedonia, FYR	79	65	68	51	0	0	0	0
Montenegro		0	0	20		0	0	1
Norway	158	229	268	63	0	0	0	0
Republic of Moldova	2	23	26	3	172	40	185	217
Russian Federation	1 718	368	503	71	122	2 069	1 731	4 865
Serbia		27	21	6		426	557	1 620
Switzerland	82	317	268	149	0	0	1	0
Ukraine	24	42	40	18	1 698	3 166	8 600	12 812

TABLE 41: Volume of sugar trade

	Sugar (raw equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	39 839	49 597	47 478	47 352	42 467	54 727	47 991	51 010
DEVELOPING REGIONS	22 553	31 996	28 954	30 453	29 186	42 760	39 865	42 347
AFRICA	6 038	8 215	8 964	8 040	2 598	3 820	2 454	2 807
North Africa	3 094	3 035	3 694	3 165	0	282	61	235
Algeria	903	1 216	1 131	1 251	0	5	0	15
Egypt	1 206	443	1 262	424	0	272	56	215
Libya	221	256	208	191	0	0	1	1
Morocco	467	748	752	976	0	0	0	0
Tunisia	296	372	341	322	0	4	3	4
Sub-Saharan Africa	2 944	5 180	5 270	4 875	2 597	3 538	2 394	2 572
Angola	136	289	337	228	0	0	0	0
Benin	61	30	66	94	0	20	21	19
Botswana	51	54	66	82	1	0	0	1
Burkina Faso	27	46	27	27	0	1	0	0
Burundi	2	9	14	10	2	2	3	3
Cameroon	43	73	56	36	1	0	6	3
Cape Verde	16	20	13	19	0	0	0	0
Central African Republic	5	8	12	12	0	0	0	0
Chad	16	61	53	43	0	0	0	0
Comoros	4	9	8	5				
Congo	1	0	3	0	25	22	34	15
Côte d'Ivoire	49	1	1	1	25	0	6	6
Congo, Dem. Rep.	64	227	123	149	0	0	7	7
Djibouti	9	161	171	98	0	3	0	0
Equatorial Guinea	3	4	4	5				
Eritrea	12	103	32	76	0	75	0	45
Ethiopia	2	92	161	85	1	25	19	27
Gabon	7	3	0	0	0	3	1	1
Gambia	93	139	98	97	0	60	0	60
Ghana	109	345	263	338	2	265	255	110
Guinea	79	113	141	112	0	0	0	0
Guinea-Bissau	5	37	14	18	0	15	0	0
Kenya	62	248	234	197	5	23	48	2
Lesotho	26	30	30	30				
Liberia	8	15	21	18	0	0	0	0
Madagascar	27	107	123	134	7	6	11	35
Malawi	0	0	0	0	48	115	78	119
Mali	137	144	140	77	0	0	0	0
Mauritania	156	223	207	174	0	0	0	0
Mauritius	38	42	44	36	534	442	427	348
Mozambique	102	13	55	55	20	115	138	109
Namibia	37	15	4	4	5	2	2	2
Niger	57	66	74	74	0	10	22	22
Nigeria	890	1 213	1 570	1 220	0	0	3	3
Rwanda	17	23	26	31	0	0	0	0
Senegal	41	75	56	88	0	1	0	0
Seychelles	4	4	4	4	0	0	0	0
Sierra Leone	9	23	24	21	0	0	0	0
Somalia	251	321	235	252	0	0	0	0
Sudan	4	283	297	347	103	29	3	35
South Africa	1	104	163	127	1 138	1 059	704	929
Swaziland	0	1	4	2	395	904	298	272
Tanzania, Utd. Rep.	182	193	72	109	25	65	10	6
Togo	19	54	72	157	0	4	6	2
Uganda	51	150	146	137	5	75	91	91
Zambia	28	0	3	0	90	135	98	161
Zimbabwe	1	0	4	41	165	62	103	139

TABLE 41: Volume of sugar trade (continued)

	Sugar (raw equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	14 863	21 020	17 688	19 975	6 572	13 522	11 528	7 681
Central Asia	867	1 449	1 506	1 413	14	43	20	3
Kazakhstan	305	482	554	367	2	36	19	3
Kyrgyzstan	49	88	77	89	12	6	1	0
Tajikistan	38	283	196	241	0	0	0	0
Turkmenistan	100	87	99	105				
Uzbekistan	375	510	580	611				
East Asia	6 901	9 016	6 771	7 736	4 577	6 072	6 182	6 262
Brunei Darussalam	7	12	11	14	0	0	0	0
Cambodia	166	221	342	476	0	0	0	0
China	917	1 687	1 474	1 860	435	175	104	89
Indonesia	2 324	3 170	1 057	1 505	3	1	2	1
Korea, DPR	92	95	115	76	0	0	0	0
Korea, Republic of	1 376	1 518	1 648	1 651	323	393	310	316
Lao, PDR	24	23	53	50				
Malaysia	1 158	1 669	1 451	1 568	219	439	158	195
Mongolia	16	37	30	30	0	0	0	0
Myanmar	14	6	5	6	3	0	5	5
Philippines	397	29	28	22	143	244	215	249
Singapore	361	475	418	377	43	176	195	113
Thailand	0	0	4	1	3 380	4 610	5 189	5 288
Viet Nam	47	61	129	96	29	35	6	6
South Asia	3 325	4 200	3 421	5 465	1 004	5 486	3 792	76
Afghanistan	71	230	253	101				
Bangladesh	152	1 146	1 278	1 420	0	0	0	0
Bhutan	6	0	1	1	0	0	0	0
India	1 242	1	386	2 596	12	4 880	3 494	44
Iran (Islamic Rep.)	1 250	1 548	809	660	4	601	0	0
Maldives	5	11	13	9				
Nepal	66	10	31	39	1	0	0	0
Pakistan	23	686	41	140	987	3	298	31
Sri Lanka	510	569	609	499	0	1	0	0
West Asia	3 770	6 354	5 991	5 360	976	1 921	1 534	1 341
Armenia	76	95	112	70	0	0	0	0
Azerbaijan	68	322	267	307	0	317	180	192
Bahrain	21	26	31	60	0	0	1	0
Cyprus	31	23	23	25	1	0	0	0
Georgia	161	261	182	107	0	75	16	1
Iraq	447	406	793	820	0	0	0	0
Jordan	189	279	334	233	14	6	11	15
Kuwait	71	99	112	94	0	0	0	0
Lebanon	100	175	164	182	0	0	0	0
Occupied Palestinian Territory	75	90	93	64	2	3	3	4
Saudi Arabia	693	1 340	1 564	1 166	2	403	334	275
Syrian Arab Republic	649	868	899	792	0	3	0	0
Turkey	2	5	5	5	527	42	6	6
United Arab Emirates	739	1 624	655	655	430	1 058	973	804
Yemen	439	655	606	646	0	3	4	27
LATIN AMERICA & THE CARIBBEAN	1 601	2 697	2 170	2 360	19 724	25 200	25 623	31 674
Argentina	1	2	31	3	175	363	412	813
Bahamas	11	9	6	5	0	0	0	0
Barbados	12	13	14	13	50	35	28	17
Belize	0	0	0	0	120	84	67	79
Bolivia (Plur. State)	7	0	0	0	31	91	156	213
Brazil	0	0	0	0	12 472	19 961	19 981	24 848
Chile	246	480	595	606	0	0	0	0
Colombia	16	164	169	142	954	802	444	976
Costa Rica	0	0	0	0	149	146	91	73

TABLE 41: Volume of sugar trade (continued)

	Sugar (raw equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	0	257	119	3	2 984	739	806	742
Dominica	2	3	3	2	0	0	0	0
Dominican Republic	75	93	50	50	176	278	224	231
Ecuador	13	17	10	12	48	16	41	12
El Salvador	0	0	0	0	223	268	304	304
French Guiana								
Grenada	5	5	3	5	0	0	0	0
Guatemala	0	0	0	0	1 146	1 295	1 297	1 591
Guyana	10	11	5	4	275	269	207	195
Haiti	109	224	156	139	0	0	0	0
Honduras	42	0	0	0	16	43	40	80
Jamaica	72	116	110	102	178	153	136	120
Mexico	43	290	197	631	521	207	1 036	1 049
Netherlands Antilles	25	22	18	14	21	5	3	2
Nicaragua	0	0	0	0	22	239	134	143
Panama	5	0	0	0	34	48	34	29
Paraguay	13	14	0	0	23	75	102	58
Peru	378	265	225	158	22	49	72	86
St. Kitts & Nevis	1	2	2	2	17	0	0	0
St. Lucia	6	7	3	3	0	0	0	0
St. Vincent & Grenadines	5	5	5	5	0	0	0	0
Suriname	26	26	14	12	0	0	0	0
Trinidad & Tobago	51	92	65	66	65	33	10	4
Uruguay	93	108	87	90	0	0	0	0
Venezuela (Boliv. Rep. of)	327	461	275	277	3	0	0	0
OCEANIA	51	65	132	78	292	217	260	184
Fiji	7	8	78	27	292	217	260	184
French Polynesia	9	8	9	9	0	0	0	0
New Caledonia	7	8	8	8	0	0	0	0
Papua New Guinea	3	13	7	7	0	0	0	0
Samoa	5	8	8	9	0	0	0	0
Solomon Islands	3	4	6	5	0	0	0	0
Tonga	4	2	2	2	0	0	0	0
Vanuatu	3	4	3	2				
DEVELOPED REGIONS	16 306	17 577	18 502	16 874	12 194	11 967	8 126	8 663
NORTH AMERICA	2 551	3 214	4 071	3 635	148	391	365	191
Bermuda	2	1	1	1				
Canada	845	1 243	1 374	1 060	12	39	108	24
United States of America	1 705	1 969	2 696	2 575	136	352	257	166
ASIA & OCEANIA	2 256	2 312	2 249	2 062	4 217	4 183	236	230
Australia	4	11	13	56	4 190	4 156	214	209
Israel	489	541	594	535	1	0	1	0
Japan	1 523	1 528	1 402	1 221	5	2	1	1
New Zealand	241	232	240	250	21	25	20	19
EUROPE	12 447	12 051	12 182	11 177	8 915	7 393	7 524	8 242
Albania	71	64	93	47	0	0	0	0
Belarus	427	127	221	214	257	296	352	478
Bosnia & Herzegovina	97	169	186	163	0	0	11	21
Croatia	11	249	215	122	0	273	245	189
European Union	5 204	7 312	8 379	8 717	8 369	6 237	6 621	7 119
Iceland	13	12	12	12	0	0	0	0
Macedonia, FYR	28	77	82	67	0	1	0	0
Montenegro		1	2	18		0	0	0
Norway	189	150	152	150	1	1	0	0
Republic of Moldova	0	3	14	15	67	47	17	57
Russian Federation	5 913	3 540	2 491	1 361	147	328	58	145
Serbia		10	9	4		203	204	201
Switzerland	148	340	262	188	0	3	4	3
Ukraine	320	19	86	124	74	6	13	28

TABLE 42: Volume of oilseed trade

	Oilseeds							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	61 213	97 089	104 594	110 012	60 545	97 771	105 846	111 151
DEVELOPING REGIONS	24 751	59 575	64 914	70 164	18 296	44 202	44 986	41 014
AFRICA	690	2 160	2 070	1 803	784	1 038	986	1 365
North Africa	555	1 746	1 670	1 286	20	18	34	69
Algeria	2	36	24	55	0	0	0	0
Egypt	157	1 150	1 225	586	10	17	34	68
Libya	58	2	1	1	9	0	0	0
Morocco	310	538	383	400	0	0	0	0
Tunisia	27	19	38	244	0	0	0	0
Sub-Saharan Africa	135	414	400	517	765	1 020	952	1 296
Angola	0	3	1	1	0	0	0	0
Benin	1	0	0	0	127	17	7	4
Botswana	2	6	5	9	4	5	1	3
Burkina Faso	0	9	9	1	28	37	37	62
Burundi	0	0	1	1	0	0	0	0
Cameroon	0	0	0	5	0	1	0	0
Cape Verde	1	0	0	0	0	0	0	0
Central African Republic	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	0
Comoros	0	0	0	0	0	0	0	0
Congo	0	0	0	0	0	0	0	0
Côte d'Ivoire	0	16	17	19	3	42	52	14
Congo, Dem. Rep.	0	0	46	46	0	0	0	0
Djibouti	0	3	3	3	0	1	1	1
Equatorial Guinea								
Eritrea					0	3	1	1
Ethiopia	0	0	15	16	38	171	170	324
Gabon	1	2	1	1	0	0	0	0
Gambia	15	10	9	9	18	18	18	18
Ghana	0	5	15	15	50	67	52	52
Guinea	0	0	1	1	15	0	0	0
Guinea-Bissau	0	1	1	1	6	2	2	2
Kenya	0	27	36	63	2	14	8	8
Lesotho	2	2	2	2				
Liberia	0	0	0	0	0	0	0	0
Madagascar	0	0	3	2	0	1	1	1
Malawi	5	2	15	13	7	78	21	43
Mali	1	8	9	9	16	43	7	7
Mauritania	2	0	0	0	0	0	0	0
Mauritius	2	2	2	2	0	0	0	0
Mozambique	0	3	2	2	17	62	50	62
Namibia	1	3	3	3	0	0	0	0
Niger	0	5	2	2	3	2	1	1
Nigeria	14	18	35	34	50	118	128	135
Rwanda	0	2	8	14	0	0	0	0
Senegal	0	9	5	7	8	5	6	3
Seychelles	1	2	2	2	0	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0
Somalia	0	0	0	0	0	0	0	0
Sudan	0	2	8	9	187	107	119	146
South Africa	64	232	62	166	89	16	151	228
Swaziland	4	5	5	5	18	1	1	1
Tanzania, Utd. Rep.	2	14	15	16	13	110	67	96
Togo	2	0	0	0	23	1	1	0
Uganda	0	14	15	21	5	16	23	19
Zambia	2	3	36	8	20	71	9	20
Zimbabwe	10	3	8	11	17	11	14	44

TABLE 42: Volume of oilseed trade (continued)

	Oilseeds							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	16 949	47 385	52 577	60 440	1 603	2 401	2 260	2 319
Central Asia	64	118	42	88	79	115	114	135
Kazakhstan	2	112	28	77	14	50	56	75
Kyrgyzstan	30	1	1	0	17	1	0	0
Tajikistan	0	0	0	0	2	1	1	1
Turkmenistan					46	47	47	47
Uzbekistan	32	4	14	11	0	16	9	11
East Asia	14 583	41 234	47 069	54 318	1 076	1 393	1 285	1 292
Brunei Darussalam	2	1	1	1	0	0	0	0
Cambodia	0	2	0	0	6	22	14	52
China	9 399	34 558	41 217	48 827	748	1 008	964	836
Indonesia	1 431	2 438	1 409	1 526	56	129	53	190
Korea, DPR	8	43	42	31	0	0	0	0
Korea, Republic of	1 604	1 436	1 543	1 318	1	0	0	0
Lao, PDR	0	0	0	0	2	3	4	7
Malaysia	719	728	637	589	81	51	44	52
Mongolia	2	0	0	0	0	7	2	0
Myanmar	1	1	3	1	26	62	127	68
Philippines	309	315	245	203	1	2	3	1
Singapore	82	40	40	39	31	10	9	7
Thailand	1 024	1 593	1 792	1 603	23	27	16	17
Viet Nam	0	81	138	180	99	69	47	58
South Asia	1 051	2 510	2 015	2 239	352	775	770	738
Afghanistan					0	9	4	9
Bangladesh	417	354	234	376	0	0	2	4
Bhutan	0	0	0	0	1	0	0	0
India	16	67	48	86	312	689	688	664
Iran (Islamic Rep.)	394	833	798	1 035	5	6	7	6
Maldives	0	0	0	0	0	0	0	0
Nepal	89	56	74	96	4	1	0	0
Pakistan	124	1 192	852	638	19	56	55	47
Sri Lanka	10	8	9	8	11	14	14	6
West Asia	1 251	3 523	3 452	3 795	96	118	91	155
Armenia	2	4	5	11	0	0	0	0
Azerbaijan	0	21	10	20	0	15	4	7
Bahrain	0	1	1	8	0	0	0	0
Cyprus	16	6	3	3	0	0	0	0
Georgia	1	10	12	90	0	2	4	49
Iraq	0	2	8	6	0	0	0	0
Jordan	26	27	21	27	8	1	1	2
Kuwait	3	9	8	8	0	0	0	0
Lebanon	53	38	27	36	0	1	0	0
Occupied Palestinian Territory	3	2	1	1	0	0	0	0
Saudi Arabia	68	110	234	250	1	1	1	1
Syrian Arab Republic	103	449	396	618	52	6	2	3
Turkey	921	2 244	2 047	1 818	31	33	22	37
United Arab Emirates	11	572	647	869	0	58	56	56
Yemen	43	21	15	21	2	0	1	1
LATIN AMERICA & THE CARIBBEAN	7 108	10 026	10 256	7 912	15 784	40 695	41 653	37 251
Argentina	306	2 283	2 922	1 029	4 242	12 151	12 008	4 606
Bahamas	0	0	0	0				
Barbados	23	24	29	23	0	0	0	0
Belize	0	0	0	0	0	0	0	0
Bolivia (Plur. State)	150	246	62	16	257	171	186	297
Brazil	600	127	128	130	8 919	23 779	24 559	28 691
Chile	77	226	151	39	7	6	9	23
Colombia	250	343	241	328	1	0	1	0
Costa Rica	227	311	238	268	1	5	34	34

TABLE 42: Volume of oilseed trade (continued)

	Oilseeds							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	24	371	396	396	0	0	0	0
Dominica	0	0	0	0	0	0	0	0
Dominican Republic	0	0	0	0	0	0	0	0
Ecuador	1	3	5	2	24	5	2	0
El Salvador	6	7	6	5	3	1	0	1
French Guiana								
Grenada	0	0	0	0	0	0	0	0
Guatemala	4	14	16	13	19	28	14	20
Guyana	0	4	4	1	1	0	1	2
Haiti	3	0	0	0	0	0	0	0
Honduras	2	2	3	3	1	1	3	1
Jamaica	0	0	0	0	0	0	0	0
Mexico	5 242	5 828	5 742	5 288	28	15	15	16
Netherlands Antilles	0	0	0	0	0	0	0	0
Nicaragua	1	1	1	0	28	82	111	85
Panama	1	28	40	39	0	1	32	24
Paraguay	10	18	31	42	2 098	3 640	3 820	2 338
Peru	42	133	168	187	1	1	0	0
St. Kitts & Nevis	0	0	0	0	0	0	0	0
St. Lucia	0	0	0	0	0	0	0	0
St. Vincent & Grenadines	0	1	1	2	0	0	0	0
Suriname	0	1	0	0	0	0	0	0
Trinidad & Tobago	40	17	18	8	0	0	0	4
Uruguay	7	28	25	24	99	793	850	1 101
Venezuela (Boliv. Rep. of)	90	11	29	66	55	16	7	8
OCEANIA	5	4	10	9	125	68	87	78
Fiji	0	0	0	0	0	0	0	0
French Polynesia	0	0	0	0	0	0	0	0
New Caledonia	0	0	0	0	0	0	0	0
Papua New Guinea	5	3	9	8	64	28	47	31
Samoa	0	0	0	0	6	1	1	1
Solomon Islands	0	0	0	0	15	28	35	31
Tonga	0	0	0	0	0	0	0	0
Vanuatu	0	0	0	0	28	11	3	15
DEVELOPED REGIONS	33 669	37 508	39 677	39 844	41 910	53 569	60 860	70 137
NORTH AMERICA	1 702	1 990	2 375	2 080	29 762	41 096	46 192	53 264
Bermuda								
Canada	705	553	653	696	5 475	8 332	9 430	10 719
United States of America	997	1 438	1 722	1 384	24 287	32 764	36 762	42 546
ASIA & OCEANIA	8 502	7 411	6 864	6 600	2 192	289	587	1 359
Australia	182	92	45	36	2 172	267	568	1 341
Israel	706	605	406	434	18	18	17	17
Japan	7 590	6 669	6 397	6 122	0	2	1	1
New Zealand	23	44	16	8	2	2	1	1
EUROPE	26 242	28 107	30 439	31 164	10 294	12 183	14 081	15 514
Albania	5	0	0	1	0	0	0	0
Belarus	24	24	20	18	1	1	0	177
Bosnia & Herzegovina	3	68	100	97	0	0	1	0
Croatia	47	27	29	5	20	49	71	132
European Union	25 313	27 029	28 917	29 313	9 101	10 079	10 928	11 719
Iceland	1	1	2	2				
Macedonia, FYR	6	6	12	10	0	0	1	1
Montenegro		0	0	1		0	0	0
Norway	389	488	478	456	0	3	2	0
Republic of Moldova	0	34	9	15	74	145	145	193
Russian Federation	291	265	700	1 074	370	248	199	335
Serbia		41	53	82		16	22	36
Switzerland	133	81	68	59	1	1	1	1
Ukraine	27	48	54	32	724	1 641	2 712	2 919

TABLE 43: Volume of vegetable oil trade

	Vegetable oils and animal fats							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	40 262	69 034	74 606	75 186	42 346	67 955	75 834	76 830
DEVELOPING REGIONS	23 797	41 138	44 341	45 616	26 728	46 247	52 975	53 058
AFRICA	3 668	7 187	8 016	7 188	673	1 116	1 139	1 263
North Africa	1 743	1 956	2 866	2 016	264	362	359	413
Algeria	419	522	558	678	6	45	28	39
Egypt	687	558	1 405	477	32	14	43	127
Libya	96	93	78	72	3	0	0	0
Morocco	327	473	453	508	17	24	25	16
Tunisia	215	310	373	281	206	278	264	230
Sub-Saharan Africa	1 924	5 231	5 150	5 172	409	754	780	851
Angola	40	175	181	163	0	12	20	13
Benin	17	222	239	253	19	204	216	222
Botswana	17	21	21	16	1	1	1	1
Burkina Faso	31	22	25	30	0	5	1	1
Burundi	1	7	5	11	0	0	0	0
Cameroon	13	34	42	37	13	12	10	6
Cape Verde	6	8	9	8	0	0	0	0
Central African Republic	1	5	8	8	0	0	0	0
Chad	1	5	4	4	0	0	0	0
Comoros	1	2	3	2	0	0	0	0
Congo	22	25	15	10	0	0	0	0
Côte d'Ivoire	30	14	15	13	147	141	174	247
Congo, Dem. Rep.	21	75	103	101	2	1	1	1
Djibouti	28	91	128	133	0	0	0	0
Equatorial Guinea	2	3	3	3	0	0	0	0
Eritrea	4	2	2	1				
Ethiopia	49	114	200	234	0	1	0	0
Gabon	7	6	12	26	6	1	1	2
Gambia	31	74	59	81	3	2	2	7
Ghana	22	223	220	170	12	102	89	54
Guinea	18	38	34	32	0	0	0	0
Guinea-Bissau	4	13	9	7	0	0	0	0
Kenya	263	456	442	525	31	51	51	75
Lesotho	4	1	0	1				
Liberia	8	19	16	18	6	1	1	1
Madagascar	22	72	80	102	0	0	0	0
Malawi	11	35	30	34	0	1	0	4
Mali	16	65	70	64	9	8	4	2
Mauritania	41	66	78	79	0	0	0	0
Mauritius	40	39	39	51	1	1	1	2
Mozambique	62	105	165	168	4	7	7	6
Namibia	8	125	24	24	1	2	2	2
Niger	33	44	58	46	0	3	2	2
Nigeria	157	892	846	873	14	23	33	18
Rwanda	9	29	27	40	0	0	0	0
Senegal	151	172	158	133	73	71	13	32
Seychelles	6	7	5	6	0	0	0	0
Sierra Leone	4	12	12	13	0	0	0	0
Somalia	23	49	77	59	0	0	0	0
Sudan	92	165	149	146	0	0	0	0
South Africa	326	927	834	758	47	24	69	80
Swaziland	16	7	6	6	7	0	1	1
Tanzania, Utd. Rep.	86	393	244	217	3	19	33	15
Togo	10	23	76	76	1	5	6	6
Uganda	84	192	229	203	3	47	37	44
Zambia	19	67	59	68	1	4	1	1
Zimbabwe	69	90	89	115	4	2	2	3

TABLE 43: Volume of vegetable oil trade (continued)

	Vegetable oils and animal fats							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	16 819	29 593	31 749	34 174	18 125	32 801	40 404	41 776
Central Asia	151	229	289	339	22	45	28	56
Kazakhstan	48	86	149	134	1	21	8	27
Kyrgyzstan	7	26	31	40	1	0	0	0
Tajikistan	21	67	59	64	0	0	0	0
Turkmenistan	18	5	5	10	0	2	2	2
Uzbekistan	58	46	46	91	20	22	18	27
East Asia	6 104	14 987	15 112	16 563	16 960	31 229	38 727	40 145
Brunei Darussalam	7	9	7	8	0	0	0	0
Cambodia	23	19	17	18	0	3	8	10
China	3 545	10 617	10 335	11 452	423	327	406	295
Indonesia	34	74	86	97	4 644	12 068	17 428	20 005
Korea, DPR	32	41	48	40				
Korea, Republic of	618	954	941	1 075	18	21	27	21
Lao, PDR	0	0	0	0				
Malaysia	584	1 335	1 586	1 859	10 746	16 936	18 868	18 184
Mongolia	6	16	12	11	0	0	0	0
Myanmar	282	412	438	390	0	0	1	1
Philippines	173	251	253	216	516	941	884	861
Singapore	539	576	638	621	433	393	463	393
Thailand	76	127	165	142	146	534	628	363
Viet Nam	183	550	583	629	35	8	13	13
South Asia	8 241	10 937	12 134	13 365	576	783	725	706
Afghanistan	56	326	250	181				
Bangladesh	675	1 408	1 129	1 311	0	1	1	1
Bhutan	3	1	0	0	0	0	0	0
India	4 721	5 437	7 115	8 414	282	408	427	496
Iran (Islamic Rep.)	1 089	1 228	1 213	1 081	261	93	94	90
Maldives	5	7	8	7				
Nepal	52	183	152	174	6	55	52	6
Pakistan	1 509	1 974	2 086	2 086	23	116	113	102
Sri Lanka	130	373	180	112	4	111	37	11
West Asia	2 323	3 440	4 214	3 907	567	743	924	869
Armenia	19	38	35	34	0	3	0	0
Azerbaijan	22	82	95	103	6	50	56	43
Bahrain	24	18	14	21	25	0	0	1
Cyprus	27	24	35	32	8	3	3	2
Georgia	7	35	38	36	0	1	1	0
Iraq	221	396	698	632	0	0	0	0
Jordan	107	122	192	155	89	18	71	36
Kuwait	51	77	128	105	6	3	1	5
Lebanon	76	99	89	105	4	9	8	8
Occupied Palestinian Territory	26	20	17	22	3	5	5	4
Saudi Arabia	315	571	512	423	15	77	50	52
Syrian Arab Republic	175	144	173	212	18	99	31	28
Turkey	790	1 031	1 288	1 158	217	170	295	315
United Arab Emirates	219	444	567	566	156	195	221	222
Yemen	138	200	159	152	0	8	6	5
LATIN AMERICA & THE CARIBBEAN	3 276	4 303	4 532	4 223	7 554	11 834	10 882	9 418
Argentina	36	39	40	31	5 110	7 452	6 316	5 765
Bahamas	3	4	3	4	0	0	0	0
Barbados	5	8	9	5	1	3	3	2
Belize	1	1	1	1	0	0	0	0
Bolivia (Plur. State)	1	3	5	4	116	261	228	319
Brazil	340	358	448	465	1 653	2 530	2 469	1 763
Chile	175	55	74	64	14	20	20	28
Colombia	217	267	297	304	116	363	338	260
Costa Rica	13	26	27	28	91	183	147	161

TABLE 43: Volume of vegetable oil trade (continued)

	Vegetable oils and animal fats							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	64	64	106	83	0	0	0	0
Dominica	12	5	6	4	1	0	0	0
Dominican Republic	178	256	239	182	0	0	0	0
Ecuador	51	113	133	135	77	197	256	247
El Salvador	151	165	139	135	10	13	12	10
French Guiana								
Grenada	1	1	1	1	0	0	0	0
Guatemala	135	223	209	159	35	160	213	193
Guyana	3	6	5	5	0	1	1	1
Haiti	85	120	132	120	0	0	0	0
Honduras	40	66	65	61	26	189	224	183
Jamaica	40	24	14	8	0	0	0	0
Mexico	1 011	1 321	1 372	1 393	116	82	71	55
Netherlands Antilles	2	1	1	1	0	0	0	0
Nicaragua	65	89	85	91	4	12	18	14
Panama	42	32	41	33	3	3	3	4
Paraguay	15	10	8	9	118	292	494	336
Peru	152	372	372	347	7	2	2	2
St. Kitts & Nevis	0	0	0	0	0	0	0	0
St. Lucia	0	1	1	1	0	0	0	0
St. Vincent & Grenadines	1	1	1	1	0	0	0	0
Suriname	5	9	9	8	0	0	0	0
Trinidad & Tobago	17	32	26	27	5	1	1	1
Uruguay	23	39	42	46	35	69	65	73
Venezuela (Boliv. Rep. of)	392	591	619	464	14	0	0	0
OCEANIA	35	54	43	32	376	497	550	600
Fiji	15	14	16	13	8	7	6	4
French Polynesia	3	3	3	4	5	6	5	5
New Caledonia	2	3	3	3	0	0	0	0
Papua New Guinea	13	13	9	9	325	458	504	559
Samoa	1	1	1	1	2	2	2	2
Solomon Islands	0	1	1	1	36	21	22	24
Tonga	0	0	0	0	1	0	0	0
Vanuatu	0	1	1	1	0	3	10	5
DEVELOPED REGIONS	15 209	27 872	30 231	29 537	14 442	21 705	22 856	23 769
NORTH AMERICA	2 035	3 602	4 111	4 018	4 674	5 322	5 760	5 806
Bermuda	1	1	1	1				
Canada	317	551	520	574	1 108	1 688	1 689	1 895
United States of America	1 717	3 050	3 590	3 443	3 566	3 634	4 071	3 911
ASIA & OCEANIA	1 083	1 572	1 676	1 639	632	631	695	688
Australia	198	335	313	316	482	474	523	487
Israel	112	149	126	134	1	1	10	6
Japan	700	977	1 122	1 089	13	16	25	56
New Zealand	73	111	115	100	137	140	138	140
EUROPE	13 319	22 699	24 443	23 879	10 303	15 752	16 401	17 275
Albania	29	45	43	49	0	1	0	0
Belarus	88	142	125	130	6	35	32	94
Bosnia & Herzegovina	39	49	43	46	0	22	19	25
Croatia	31	61	77	77	12	23	26	23
European Union	11 741	20 294	21 677	21 656	9 999	12 591	13 842	13 312
Iceland	5	7	7	7	0	0	0	0
Macedonia, FYR	32	44	45	47	1	1	8	8
Montenegro		1	2	12		0	0	0
Norway	46	194	254	214	22	90	91	90
Republic of Moldova	1	8	9	6	4	71	49	66
Russian Federation	1 139	1 297	1 495	1 105	40	657	611	1 000
Serbia		35	35	37		106	109	134
Switzerland	103	145	156	150	28	7	7	8
Ukraine	76	401	509	375	192	2 152	1 609	2 516

TABLE 44: Volume of dairy trade

	Dairy (milk equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	65 320	87 632	87 403	90 225	66 240	92 138	92 329	96 514
DEVELOPING REGIONS	26 071	34 846	34 041	37 133	4 402	9 590	9 741	9 411
AFRICA	4 498	7 648	6 541	7 080	418	388	529	975
North Africa	2 750	3 206	3 702	3 870	50	207	204	608
Algeria	1 497	1 863	2 049	2 392	0	2	1	2
Egypt	827	571	863	663	41	106	142	541
Libya	171	355	321	396	0	0	0	0
Morocco	192	364	386	350	8	23	19	18
Tunisia	62	55	84	69	1	76	42	46
Sub-Saharan Africa	1 748	4 441	2 839	3 210	368	181	325	367
Angola	18	27	31	38	0	0	0	0
Benin	30	34	31	28	0	1	0	0
Botswana	139	108	81	94	0	0	1	1
Burkina Faso	51	26	36	43	1	0	0	1
Burundi	3	1	6	4	0	0	0	0
Cameroon	51	58	58	71	4	1	2	4
Cape Verde	27	43	37	39	0	0	0	0
Central African Republic	3	2	4	4	0	0	0	0
Chad	4	8	9	10	0	0	0	0
Comoros	2	5	4	3	0	0	0	0
Congo	32	38	37	13	0	0	0	0
Côte d'Ivoire	150	95	134	113	55	18	27	17
Congo, Dem. Rep.	27	77	71	125	0	0	0	0
Djibouti	36	46	26	23	0	1	1	1
Equatorial Guinea	2	1	1	1				
Eritrea	9	0	0	0	1	1	1	1
Ethiopia	13	11	11	17	0	2	0	0
Gabon	37	45	38	46	0	0	0	0
Gambia	28	35	44	51	0	0	0	9
Ghana	67	169	213	147	0	10	11	12
Guinea	25	32	12	12	0	0	1	1
Guinea-Bissau	2	4	3	4	0	0	0	0
Kenya	26	16	15	27	2	40	35	28
Lesotho	6	7	6	6				
Liberia	6	13	8	9	0	0	0	0
Madagascar	14	18	26	23	0	1	0	0
Malawi	12	22	26	31	0	0	0	0
Mali	85	59	68	79	0	0	39	39
Mauritania	49	114	149	154	0	0	0	0
Mauritius	123	129	128	138	0	2	2	2
Mozambique	26	17	25	19	0	0	0	0
Namibia	33	23	15	15	2	0	0	0
Niger	33	45	73	59	4	0	1	1
Nigeria	210	2 349	697	829	1	0	3	3
Rwanda	12	4	5	9	0	0	0	0
Senegal	129	200	214	347	5	17	9	28
Seychelles	7	16	14	14	0	0	0	0
Sierra Leone	1	12	8	7				
Somalia	5	8	8	3	0	0	0	0
Sudan	44	208	207	271	0	0	1	0
South Africa	60	210	148	139	232	65	152	139
Swaziland	47	25	21	21	5	0	0	0
Tanzania, Utd. Rep.	19	23	25	25	0	3	10	0
Togo	8	27	23	24	4	6	6	18
Uganda	3	10	10	6	1	2	7	17
Zambia	11	18	23	26	1	5	3	39
Zimbabwe	17	2	7	41	49	6	11	7

TABLE 44: Volume of dairy trade (continued)

	Dairy (milk equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	14 453	20 648	20 652	23 263	1 487	5 605	5 234	4 526
Central Asia	127	454	533	502	8	75	56	64
Kazakhstan	66	380	463	428	3	25	11	22
Kyrgyzstan	2	25	25	24	5	50	45	42
Tajikistan	1	9	11	9	0	0	0	0
Turkmenistan	15	5	5	4	0	0	0	0
Uzbekistan	43	35	29	37	0	0	0	0
East Asia	9 189	12 634	11 922	14 303	1 006	2 479	2 750	1 687
Brunei Darussalam	25	22	19	17	0	0	0	0
Cambodia	24	55	73	70	0	0	0	0
China	2 706	3 561	3 698	5 655	499	670	698	180
Indonesia	1 178	1 942	1 675	1 821	35	168	345	239
Korea, DPR	2	19	21	13				
Korea, Republic of	387	670	535	615	3	10	11	17
Lao, PDR	12	17	11	10				
Malaysia	1 177	1 619	1 467	1 422	117	411	465	279
Mongolia	2	8	10	6	0	0	0	0
Myanmar	113	125	81	93				
Philippines	1 313	1 395	1 328	1 374	1	266	278	181
Singapore	769	1 441	1 424	1 477	264	700	748	594
Thailand	1 076	914	960	865	83	252	203	194
Viet Nam	397	843	619	862	3	3	2	2
South Asia	1 267	1 533	1 532	1 954	54	528	534	291
Afghanistan	3	13	20	33	0	0	0	0
Bangladesh	327	342	260	456	0	0	0	1
Bhutan	9	2	2	3	0	0	0	0
India	216	20	55	228	46	431	454	211
Iran (Islamic Rep.)	111	331	441	466	2	38	12	13
Maldives	19	28	30	30	0	0	0	0
Nepal	23	16	28	43	4	7	5	5
Pakistan	127	223	199	206	1	42	60	61
Sri Lanka	432	557	497	490	1	10	2	1
West Asia	3 870	6 028	6 665	6 504	419	2 523	1 894	2 484
Armenia	37	42	47	34	0	3	2	2
Azerbaijan	64	102	99	131	1	2	0	0
Bahrain	30	123	118	192	1	12	20	106
Cyprus	33	57	56	56	16	28	28	33
Georgia	15	56	49	53	20	2	1	0
Iraq	314	228	749	530	0	0	0	0
Jordan	219	218	283	319	11	30	80	86
Kuwait	282	357	308	297	9	17	12	37
Lebanon	288	283	235	318	1	4	4	6
Occupied Palestinian Territory	38	27	19	19	6	1	1	1
Saudi Arabia	1 333	1 848	1 583	1 215	104	1 378	650	1 237
Syrian Arab Republic	127	336	292	286	4	250	79	81
Turkey	122	167	197	257	25	198	165	154
United Arab Emirates	431	1 101	1 266	1 441	19	230	198	220
Yemen	223	467	378	485	7	53	81	46
LATIN AMERICA & THE CARIBBEAN	6 939	6 369	6 688	6 617	2 496	3 594	3 975	3 907
Argentina	53	161	66	78	1 509	1 437	1 485	1 835
Bahamas	28	33	32	41	0	0	0	0
Barbados	24	25	27	23	0	4	2	1
Belize	16	16	13	15	0	0	0	0
Bolivia (Plur. State)	57	22	19	21	5	27	9	32
Brazil	1 956	417	534	834	10	473	778	225
Chile	125	113	145	130	111	312	345	282
Colombia	104	54	70	57	62	77	93	25
Costa Rica	28	30	47	36	37	81	68	76

TABLE 44: Volume of dairy trade (continued)

	Dairy (milk equiv.)							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	338	424	397	423	0	4	4	4
Dominica	7	10	15	15	0	0	0	0
Dominican Republic	127	59	68	67	0	0	0	1
Ecuador	12	8	10	6	6	7	4	7
El Salvador	181	176	174	178	1	6	8	6
French Guiana								
Grenada	10	8	6	9	0	0	0	0
Guatemala	182	222	190	232	2	4	4	6
Guyana	77	35	43	40	0	0	1	1
Haiti	75	67	70	72	0	1	1	1
Honduras	109	100	108	114	7	20	27	51
Jamaica	62	101	75	63	4	1	2	3
Mexico	2 118	2 745	2 483	2 724	105	118	117	114
Netherlands Antilles	35	19	18	19	1	0	0	0
Nicaragua	55	30	23	26	42	123	173	188
Panama	54	77	103	76	15	8	10	8
Paraguay	9	14	15	19	0	7	7	8
Peru	353	218	226	214	4	108	130	104
St. Kitts & Nevis	5	4	3	3	0	0	0	0
St. Lucia	13	13	13	9	0	1	2	2
St. Vincent & Grenadines	7	9	8	9	0	0	0	0
Suriname	14	6	6	6				
Trinidad & Tobago	109	112	115	100	8	5	6	4
Uruguay	5	6	7	8	559	771	697	919
Venezuela (Boliv. Rep. of)	550	1 002	1 529	916	4	0	1	1
OCEANIA	181	181	161	174	0	3	3	3
Fiji	52	55	56	51	0	3	3	3
French Polynesia	26	38	34	35	0	0	0	0
New Caledonia	32	36	28	38	0	0	0	0
Papua New Guinea	31	25	22	25	0	0	0	0
Samoa	6	5	5	6				
Solomon Islands	2	2	2	2				
Tonga	8	6	3	4	0	0	0	0
Vanuatu	2	4	3	4	0	0	0	0
DEVELOPED REGIONS	35 197	52 729	53 305	53 036	57 546	82 520	82 559	87 070
NORTH AMERICA	1 881	2 405	1 957	1 671	3 129	6 581	7 493	5 863
Bermuda	7	10	6	6				
Canada	483	830	638	349	766	446	375	367
United States of America	1 390	1 563	1 312	1 316	2 363	6 135	7 119	5 496
ASIA & OCEANIA	1 978	2 395	2 311	2 286	13 197	15 490	13 021	18 483
Australia	326	469	591	585	5 454	3 826	3 622	4 180
Israel	49	87	93	62	8	15	23	51
Japan	1 567	1 742	1 535	1 499	2	25	12	16
New Zealand	36	98	91	140	7 733	11 624	9 365	14 235
EUROPE	35 356	47 929	49 037	49 080	45 496	60 450	62 046	62 724
Albania	22	33	28	30	0	0	0	0
Belarus	24	48	69	53	278	1 740	1 825	2 299
Bosnia & Herzegovina	72	103	106	115	4	42	51	59
Croatia	119	121	153	136	32	69	62	72
European Union	33 090	45 051	45 911	46 119	44 161	56 355	57 809	58 190
Iceland	1	1	1	1	4	7	12	8
Macedonia, FYR	27	53	39	47	2	1	7	3
Montenegro		10	11	57		0	0	0
Norway	18	42	43	44	138	87	89	92
Republic of Moldova	2	23	21	30	26	14	15	15
Russian Federation	1 720	2 043	2 231	1 914	105	269	270	244
Serbia		36	57	44		57	59	64
Switzerland	224	305	295	300	484	806	876	1 009
Ukraine	30	114	124	242	278	1 031	998	704

TABLE 45: Volume of total meat trade

	Meat							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
WORLD	22 149	33 324	35 379	34 987	23 444	34 685	37 403	37 644
DEVELOPING REGIONS	7 069	10 943	12 016	11 857	4 466	10 958	11 040	11 350
AFRICA	671	1 567	1 342	1 377	114	102	93	118
North Africa	218	482	266	290	2	2	5	6
Algeria	26	83	78	82	0	0	0	0
Egypt	184	350	125	157	1	1	2	3
Libya	1	29	44	30	0	0	0	0
Morocco	3	12	12	13	1	1	3	1
Tunisia	3	8	7	8	1	0	1	2
Sub-Saharan Africa	453	1 085	1 075	1 087	112	100	88	113
Angola	46	200	252	234	0	0	0	0
Benin	42	71	106	115	0	0	0	0
Botswana	4	6	7	7	21	41	25	33
Burkina Faso	0	0	0	0	0	0	0	0
Burundi	0	0	0	0	0	0	0	0
Cameroon	11	5	3	2	0	0	0	0
Cape Verde	1	9	10	11	0	0	0	0
Central African Republic	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	0
Comoros	2	7	6	7	0	0	0	0
Congo	14	38	38	9	0	0	0	0
Côte d'Ivoire	13	22	19	16	0	0	0	0
Congo, Dem. Rep.	13	67	48	55	0	0	0	0
Djibouti	0	16	11	9	0	0	0	0
Equatorial Guinea	4	13	14	16				
Eritrea	0	0	0	0				
Ethiopia	0	0	0	0	2	5	8	7
Gabon	23	58	50	63	0	0	0	0
Gambia	2	7	4	5	0	0	0	0
Ghana	31	114	106	110	0	0	0	0
Guinea	1	6	6	6	0	0	0	0
Guinea-Bissau	1	1	1	1	0	0	0	0
Kenya	0	1	1	0	1	3	4	3
Lesotho	6	8	8	8	0	0	0	0
Liberia	8	9	11	10	0	0	0	0
Madagascar	0	0	1	0	0	0	0	0
Malawi	1	0	0	1	0	0	0	0
Mali	0	0	0	0	0	2	0	0
Mauritania	1	7	5	9	0	0	0	0
Mauritius	15	15	15	16	1	0	0	0
Mozambique	3	12	12	16	0	0	0	0
Namibia	32	22	34	34	34	23	24	25
Niger	0	0	0	0	0	0	0	0
Nigeria	4	1	1	3	0	0	0	0
Rwanda	0	0	0	0	0	0	0	0
Senegal	1	15	12	10	0	0	0	0
Seychelles	1	4	3	3	0	0	0	0
Sierra Leone	0	6	6	6	0	0	0	0
Somalia	0	0	0	0	0	0	0	0
Sudan	0	1	1	2	10	2	0	2
South Africa	158	330	257	264	19	19	22	38
Swaziland	7	6	5	5	2	0	0	0
Tanzania, Utd. Rep.	1	0	2	2	0	1	0	0
Togo	2	6	15	11	0	0	0	1
Uganda	0	0	1	0	0	0	0	0
Zambia	0	0	0	0	0	0	0	0
Zimbabwe	1	1	1	18	21	3	3	1

TABLE 45: Volume of total meat trade (continued)

	Meat							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
ASIA	4 634	6 451	7 685	7 499	2 261	2 754	2 827	3 021
Central Asia	79	266	290	228	13	3	3	0
Kazakhstan	23	198	188	153	13	3	3	0
Kyrgyzstan	1	34	55	35	0	0	0	0
Tajikistan	24	25	33	29	0	0	0	0
Turkmenistan	6	1	7	6				
Uzbekistan	25	9	7	5	0	0	0	0
East Asia	3 508	4 083	5 014	4 686	2 021	2 048	2 103	2 155
Brunei Darussalam	5	4	5	5	0	0	0	0
Cambodia	0	1	1	1	0	0	0	0
China	2 556	2 402	3 250	2 883	1 444	1 451	1 401	1 450
Indonesia	38	66	69	94	7	5	5	6
Korea, DPR	1	1	1	0	0	0	0	0
Korea, Republic of	429	774	750	721	116	20	22	25
Lao, PDR	0	0	0	0	0	0	0	0
Malaysia	145	207	191	203	14	15	25	29
Mongolia	0	1	2	2	15	11	7	9
Myanmar	0	0	0	0	0	0	0	0
Philippines	149	194	232	228	0	7	7	9
Singapore	179	253	256	257	7	22	17	15
Thailand	3	5	5	5	348	502	611	601
Viet Nam	0	169	246	281	70	14	9	11
South Asia	55	118	157	154	188	517	527	600
Afghanistan	0	11	33	24				
Bangladesh	0	1	0	0	0	0	0	0
Bhutan	0	0	0	0	0	0	0	0
India	0	1	1	2	181	498	506	569
Iran (Islamic Rep.)	50	80	106	116	5	3	2	2
Maldives	2	8	7	7	0	0	0	0
Nepal	0	0	0	0	0	0	0	2
Pakistan	0	13	6	3	1	15	18	26
Sri Lanka	3	5	3	1	0	1	1	2
West Asia	991	1 984	2 224	2 431	39	187	193	265
Armenia	30	43	72	53	0	2	1	1
Azerbaijan	31	20	25	24	0	2	2	2
Bahrain	19	38	39	45	0	2	1	1
Cyprus	6	16	16	18	3	4	9	8
Georgia	33	51	62	60	4	1	1	0
Iraq	0	122	152	127	0	0	0	0
Jordan	34	88	107	107	3	13	34	51
Kuwait	74	163	214	246	1	0	0	2
Lebanon	28	50	55	74	1	6	7	7
Occupied Palestinian Territory	11	11	14	15	1	1	1	1
Saudi Arabia	458	668	672	748	9	56	17	15
Syrian Arab Republic	0	8	5	5	0	2	1	1
Turkey	0	0	1	1	12	55	82	121
United Arab Emirates	146	430	490	498	5	41	34	30
Yemen	38	103	81	118	0	0	0	0
LATIN AMERICA & THE CARIBBEAN	1 652	2 803	2 869	2 861	2 088	8 098	8 118	8 208
Argentina	133	41	38	41	352	677	612	839
Bahamas	33	42	40	55	0	0	0	0
Barbados	11	12	10	10	1	1	1	1
Belize	1	3	3	2	0	0	0	0
Bolivia (Plur. State)	2	1	1	5	1	4	2	2
Brazil	49	35	35	39	1 315	6 291	6 244	6 062
Chile	111	199	149	201	36	220	228	276
Colombia	33	51	56	54	2	85	160	108
Costa Rica	3	9	9	10	22	23	28	30

TABLE 45: Volume of total meat trade (continued)

	Meat							
	imports				exports			
	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009	thousand tonnes 1999	thousand tonnes 2007	thousand tonnes 2008	thousand tonnes 2009
Cuba	67	195	187	208	0	0	0	0
Dominica	3	4	4	5	0	0	0	0
Dominican Republic	11	8	18	25	0	0	0	0
Ecuador	2	7	9	7	3	1	1	1
El Salvador	12	40	40	42	2	5	6	8
French Guiana								
Grenada	6	7	6	7	0	0	0	0
Guatemala	30	82	80	94	4	14	17	17
Guyana	9	1	2	2	0	0	0	0
Haiti	37	33	34	39	0	0	0	0
Honduras	11	37	38	38	2	3	7	5
Jamaica	57	57	54	45	1	1	1	1
Mexico	880	1 390	1 514	1 538	70	137	149	135
Netherlands Antilles	19	16	18	22	0	0	0	0
Nicaragua	3	6	7	8	26	75	75	92
Panama	16	16	19	22	6	6	6	5
Paraguay	2	4	4	3	22	184	218	239
Peru	17	18	19	25	0	2	3	3
St. Kitts & Nevis	3	4	4	4	0	0	0	0
St. Lucia	13	12	12	12	0	0	0	0
St. Vincent & Grenadines	7	9	9	8	0	0	0	0
Suriname	9	16	16	17				
Trinidad & Tobago	14	29	36	32	2	1	1	2
Uruguay	8	17	15	15	215	367	359	382
Venezuela (Boliv. Rep. of)	6	379	357	197	0	0	0	0
OCEANIA	111	121	120	120	3	2	3	3
Fiji	15	11	12	10	0	1	2	2
French Polynesia	22	29	28	28	0	0	0	0
New Caledonia	10	11	15	14	0	0	0	0
Papua New Guinea	38	38	38	40	0	0	0	0
Samoa	8	10	11	11	0	0	0	0
Solomon Islands	0	2	1	1				
Tonga	7	9	6	8	0	0	0	0
Vanuatu	1	1	2	2	2	1	1	1
DEVELOPED REGIONS	14 693	22 365	23 347	23 112	17 862	23 723	26 354	26 286
NORTH AMERICA	2 130	2 519	2 270	2 304	5 075	6 740	8 271	7 906
Bermuda	6	9	13	12				
Canada	452	614	633	630	1 052	1 541	1 683	1 652
United States of America	1 672	1 895	1 623	1 661	4 023	5 199	6 587	6 254
ASIA & OCEANIA	2 635	2 938	3 003	3 081	2 309	2 641	2 609	2 557
Australia	32	130	142	165	1 533	1 724	1 712	1 666
Israel	68	87	97	83	6	25	20	11
Japan	2 507	2 669	2 716	2 782	5	7	10	14
New Zealand	28	50	48	50	765	883	867	867
EUROPE	10 310	16 909	18 073	17 727	11 590	14 342	15 474	15 823
Albania	39	46	46	46	0	0	0	0
Belarus	33	28	73	39	34	116	144	182
Bosnia & Herzegovina	36	28	34	39	2	6	8	8
Croatia	28	69	77	89	14	15	18	21
European Union	8 535	13 329	13 955	14 410	11 324	14 088	15 206	15 511
Iceland	0	1	1	1	1	1	2	3
Macedonia, FYR	42	76	57	63	0	4	6	6
Montenegro		16	27	32		0	1	1
Norway	8	25	24	15	22	4	3	3
Republic of Moldova	5	22	40	15	27	4	1	1
Russian Federation	1 381	2 936	3 122	2 506	8	37	47	41
Serbia		7	12	13		25	18	13
Switzerland	87	105	126	110	2	3	3	3
Ukraine	98	233	492	363	156	44	27	39

TABLE 46: Value of total fish trade

	Fish							
	imports				exports			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
WORLD	57 611.1	98 823.3	107 933.4	99 651.3	53 098.7	93 468.3	101 854.2	95 947.6
DEVELOPING REGIONS	8 840.6	21 014.5	23 971.1	23 434.0	25 599.0	45 605.6	50 943.5	48 780.0
AFRICA	972.7	2 807.2	3 052.7	3 371.3	2 468.2	4 509.5	4 792.2	4 508.1
North Africa	202.8	399.1	601.4	763.8	842.4	1 583.4	1 942.4	1 725.4
Algeria	13.3	25.5	29.6	53.9	2.7	12.2	13.3	8.5
Egypt	153.1	223.9	377.8	475.5	1.4	4.5	10.7	14.1
Libya	12.7	35.3	47.7	51.9	5.3	11.7	23.2	4.8
Morocco	10.5	61.7	75.3	115.8	750.8	1 371.1	1 696.5	1 547.8
Tunisia	13.3	52.7	71.0	66.6	82.1	184.1	198.6	150.2
Sub-Saharan Africa	769.8	2 408.1	2 451.3	2 607.5	1 625.8	2 926.1	2 849.8	2 782.6
Angola	14.5	70.3	114.5	97.3	10.0	15.8	9.4	9.1
Benin	7.6	24.3	32.1	28.5	0.9	0.4	0.0	0.2
Botswana	5.1	10.2	12.7	9.3	0.1	0.1	0.0	0.3
Burkina Faso	2.0	5.8	6.5	9.1	0.0	0.8	1.2	1.0
Burundi	0.1	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Cameroon	29.6	126.7	178.1	243.3	1.5	1.4	1.4	2.2
Cape Verde	0.9	2.0	3.3	3.0	2.6	11.3	2.7	14.9
Central African Republic	0.5	1.8	2.0	3.0		0.0	0.0	
Chad	0.0	0.5	0.3	0.5		0.3	0.0	0.0
Comoros	0.5	0.5	1.4	2.5	0.0		0.0	0.0
Congo	18.7	11.9	30.0	5.5	1.7	2.4	1.1	0.7
Côte d'Ivoire	172.8	279.7	398.4	363.5	153.1	171.8	198.5	170.3
Congo, Dem. Rep.	40.7	71.0	88.8	51.0	0.4	0.4	0.4	0.6
Djibouti	2.0	7.6	9.7	16.7	0.1	0.5	0.5	0.5
Equatorial Guinea	2.5	17.4	16.1	25.5	2.3	0.1	0.1	0.1
Eritrea	0.1	0.2	0.3	0.1	1.0	1.5	0.9	1.6
Ethiopia	0.2	0.8	1.7	1.1	0.0	0.6	0.4	0.3
Gabon	9.5	13.8	17.6	19.6	8.9	14.8	7.4	2.1
Gambia	0.4	0.9	0.8	0.8	3.2	3.5	2.8	5.2
Ghana	103.2	170.8	128.7	121.4	72.2	61.0	44.1	53.9
Guinea	13.5	9.1	3.6	8.8	1.7	7.7	5.5	9.3
Guinea-Bissau	0.5	1.5	2.0	1.5	2.0	2.9	1.5	3.1
Kenya	5.3	8.5	6.2	6.6	32.4	61.5	75.7	57.1
Lesotho		2.0	2.8	2.1			0.1	
Liberia	1.4	2.9	6.2	2.6	0.1	0.6	0.6	1.0
Madagascar	11.6	57.6	26.6	18.0	39.3	186.8	160.2	115.2
Malawi	0.7	1.2	1.8	2.7	0.2	0.3	0.3	0.2
Mali	2.9	6.8	7.8	9.4	0.5	0.9	0.1	0.1
Mauritania	0.6	0.2	0.2	0.4	95.6	159.5	148.7	126.4
Mauritius	32.6	227.5	303.7	235.5	38.6	263.0	280.5	284.5
Mozambique	4.8	26.7	38.9	39.8	74.8	70.1	76.8	66.4
Namibia	5.9	35.3	39.4	39.1	291.0	502.6	576.8	574.9
Niger	0.4	0.8	1.3	1.4	1.6	0.3	0.4	0.3
Nigeria	178.1	892.8	618.1	836.6	10.7	50.1	75.1	100.7
Rwanda	0.1	3.0	1.8	5.5		0.0	0.1	0.3
Senegal	3.8	2.1	2.8	1.1	301.5	313.5	223.0	242.2
Seychelles	3.1	81.9	63.5	87.4	108.4	197.8	97.2	210.2
Sierra Leone	3.3	3.6	3.5	4.1	12.3	10.6	10.1	9.8
Somalia	0.2	2.7	3.7	5.5	4.1	3.1	4.5	3.1
Sudan	0.9	2.9	1.9	4.6	0.2		0.3	0.2
South Africa	55.7	192.7	238.7	260.6	260.1	510.8	518.9	441.8
Swaziland	9.7	5.3	4.0	2.9	2.2	0.1	0.2	0.2
Tanzania, Utd. Rep.	0.2	2.3	3.9	4.0	60.2	165.6	184.7	145.5
Togo	12.2	7.8	11.0	10.1	1.5	2.1	2.1	5.0
Uganda	0.1	0.7	0.9	0.8	24.2	118.1	119.4	109.2
Zambia	1.2	10.4	8.9	8.4	0.8	0.4	1.3	1.2
Zimbabwe	9.9	3.5	4.8	6.0	1.5	3.0	1.5	2.2

TABLE 46: Value of total fish trade (continued)

	Fish							
	imports				exports			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
ASIA	6 800.7	15 637.3	17 623.5	17 043.8	16 377.3	29 606.6	33 157.2	32 471.7
Central Asia	16.8	65.5	91.9	78.4	12.6	80.2	84.5	88.1
Kazakhstan	11.9	55.9	77.1	65.8	12.3	79.2	83.4	85.9
Kyrgyzstan	1.9	5.6	7.2	8.0	0.0	0.2	0.4	0.4
Tajikistan	0.1	1.0	1.4	1.1				
Turkmenistan	0.1	0.9	1.9	1.5	0.3	0.0	0.1	0.0
Uzbekistan	2.7	2.1	4.3	2.0	0.0	0.7	0.6	1.8
East Asia	6 215.9	14 294.8	16 060.1	15 465.7	14 390.2	26 024.7	29 431.2	28 478.0
Brunei Darussalam	11.5	15.5	11.8	10.7	0.2	3.2	2.4	0.4
Cambodia	2.8	3.1	2.4	4.6	34.9	23.3	24.7	30.4
China	3 291.0	7 358.7	8 348.4	8 351.3	5 048.1	11 329.4	12 128.3	12 239.6
Indonesia	62.6	115.0	196.2	229.6	1 527.1	2 100.9	2 473.4	2 247.5
Korea, DPR	2.6	73.2	84.4	93.7	71.5	34.4	45.6	60.3
Korea, Republic of	1 150.0	3 090.0	2 928.2	2 693.6	1 394.4	1 088.4	1 286.8	1 348.7
Lao, PDR	1.2	3.7	4.4	4.1	0.1	0.1	0.0	0.0
Malaysia	258.7	633.7	582.2	672.4	299.4	752.3	795.0	654.7
Mongolia	0.1	0.8	1.2	1.2	0.3	0.1	0.4	0.2
Myanmar	1.0	2.8	4.6	6.1	201.3	357.9	560.6	483.0
Philippines	121.5	122.8	146.7	192.3	372.3	473.4	644.5	569.3
Singapore	460.7	796.3	899.5	807.0	390.2	368.4	386.5	307.0
Thailand	840.7	1 714.7	2 400.3	1 978.6	4 109.9	5 708.8	6 532.4	6 235.9
Viet Nam	11.6	364.0	449.2	419.4	940.5	3 783.8	4 550.3	4 300.9
South Asia	161.6	208.3	244.8	256.7	1 737.8	2 825.8	2 711.6	3 091.8
Afghanistan								
Bangladesh	1.1	6.1	9.6	17.3	251.9	630.8	537.4	516.0
Bhutan		3.1	2.3	2.5			0.0	
India	18.9	47.1	57.6	58.8	1 188.7	1 670.5	1 623.5	2 015.2
Iran (Islamic Rep.)	80.7	25.4	36.7	34.0	42.0	55.0	57.9	76.3
Maldives		8.4	8.5	8.2	38.9	106.0	124.3	74.9
Nepal	0.2	1.1	1.9	2.8	0.0			0.0
Pakistan	0.8	3.5	2.1	2.0	142.1	191.7	193.2	228.5
Sri Lanka	59.8	113.5	126.1	131.2	74.1	171.7	175.2	180.9
West Asia	406.4	1 068.7	1 226.6	1 242.9	236.6	676.0	929.9	813.7
Armenia	2.3	4.1	8.8	7.9	0.5	4.7	5.4	3.6
Azerbaijan	0.8	5.8	11.1	16.1	3.9	5.9	5.6	6.0
Bahrain	3.2	8.9	17.0	14.3	6.9	15.6	19.2	16.2
Cyprus	31.9	79.5	100.2	78.0	4.3	31.6	42.8	13.7
Georgia	1.4	34.7	46.1	32.3	0.2	2.5	6.7	5.3
Iraq	1.3	27.9	44.1	22.6		0.1	0.1	0.1
Jordan	21.0	56.9	79.3	86.0	1.2	1.0	4.9	7.1
Kuwait	22.1	62.4	75.9	79.8	4.7	1.6	2.1	2.6
Lebanon	48.0	73.9	86.8	97.5	0.3	2.7	4.5	6.2
Occupied Palestinian Territory		7.2	10.5	12.6		0.5	0.3	0.4
Saudi Arabia	110.0	249.6	222.6	223.3	9.7	61.7	65.2	71.2
Syrian Arab Republic	55.0	42.4	41.1	59.9		0.3	0.2	0.6
Turkey	59.2	175.0	198.6	187.0	98.2	221.3	435.4	342.5
United Arab Emirates	67.3	259.2	301.7	313.0	50.5	89.4	89.1	71.0
Yemen	4.3	9.4	10.1	8.9	20.5	173.8	206.7	190.4
LATIN AMERICA & THE CARIBBEAN	1 016.5	2 460.9	3 171.8	2 902.7	6 535.4	11 099.4	12 549.3	11 337.9
Argentina	88.4	100.3	100.1	97.8	783.3	1 103.7	1 310.2	1 147.9
Bahamas	10.1	17.8	21.8	20.8	99.4	83.4	82.5	65.1
Barbados	11.0	18.8	20.3	18.1	1.0	0.9	0.7	0.4
Belize	3.0	1.5	2.1	1.3	33.3	20.9	23.8	26.3
Bolivia (Plur. State)	2.9	5.4	10.1	10.3	0.0	0.0	0.0	0.0
Brazil	289.8	568.3	689.8	721.6	138.2	313.8	274.0	196.6
Chile	54.6	177.9	250.7	113.6	1 702.0	3 677.0	3 931.0	3 606.3
Colombia	71.0	174.1	240.4	228.3	183.7	188.7	240.0	208.7
Costa Rica	25.4	45.0	61.0	54.7	148.3	107.3	127.1	116.3

TABLE 46: Value of total fish trade (continued)

	Fish							
	imports				exports			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
Cuba	32.5	49.2	66.4	36.6	96.1	81.0	79.7	44.1
Dominica	1.5	1.8	2.0	2.4		0.0	0.0	0.0
Dominican Republic	53.1	90.4	116.6	126.2	3.0	3.6	4.4	4.5
Ecuador	5.1	55.9	233.5	225.1	954.5	1 399.2	1 754.8	1 610.8
El Salvador	6.6	54.3	29.4	77.0	33.6	109.4	119.7	94.2
French Guiana								
Grenada	2.5	4.7	4.6	3.8	3.5	4.1	3.0	4.9
Guatemala	6.8	44.0	36.8	43.8	28.1	89.6	77.9	86.7
Guyana	2.5	2.7	1.2	1.6	42.6	63.7	68.0	53.3
Haiti	8.0	17.0	21.9	26.5	3.7	4.9	4.8	5.0
Honduras	15.4	19.1	26.6	21.3	198.4	186.9	186.0	152.8
Jamaica	59.3	94.4	102.8	88.6	14.7	9.2	9.4	6.5
Mexico	125.7	540.4	590.6	384.6	649.9	830.2	828.2	802.7
Netherlands Antilles	6.4	11.1	14.0	15.5	5.7	6.2	21.7	33.7
Nicaragua	7.8	6.6	7.3	5.8	78.6	96.4	127.4	108.0
Panama	15.1	25.1	32.2	33.0	194.9	365.0	409.6	381.4
Paraguay	1.6	2.5	3.9	4.2	0.0	0.2	0.1	0.0
Peru	16.7	35.9	72.5	78.5	788.4	1 962.2	2 422.7	2 208.9
St. Kitts & Nevis	2.2	3.9	3.3	3.1	0.2	0.4	0.3	0.1
St. Lucia	5.2	6.8	8.3	6.3		0.0	0.1	
St. Vincent & Grenadines	1.5	2.2	2.5	1.9	0.9	0.3	0.5	0.4
Suriname	1.9	6.3	4.9	6.6	37.2	49.2	53.4	71.8
Trinidad & Tobago	8.0	25.7	26.6	28.9	12.3	8.7	10.4	10.5
Uruguay	13.1	44.0	51.1	50.9	99.0	176.9	208.0	176.4
Venezuela (Boliv. Rep. of)	40.4	179.3	290.1	337.8	134.1	33.0	28.3	14.2
OCEANIA	50.7	109.1	123.2	116.2	218.1	390.1	444.8	462.4
Fiji	16.2	34.3	40.8	38.5	22.3	68.8	88.7	89.6
French Polynesia	8.9	18.3	18.5	18.9	3.1	5.6	3.4	6.2
New Caledonia	5.7	14.2	16.5	11.1	18.8	24.9	28.2	23.7
Papua New Guinea	7.8	21.6	28.0	27.6	38.9	138.7	138.7	159.8
Samoa	6.0	6.6	6.7	5.1	11.7	8.7	5.6	7.6
Solomon Islands	0.1	2.4	2.6	3.0	25.1	22.0	18.9	19.1
Tonga	0.9	2.4	1.4	1.7	2.6	2.8	2.4	4.2
Vanuatu	0.7	2.8	2.3	2.7	70.8	62.7	51.5	51.5
DEVELOPED REGIONS	48 770.5	77 808.8	83 962.2	76 217.3	27 499.7	47 862.7	50 910.7	47 167.6
NORTH AMERICA	10 753.6	16 445.5	17 007.5	15 882.2	5 834.4	8 447.3	8 539.5	7 724.9
Bermuda	7.6	7.3	6.1	6.7	0.0	0.0	0.3	0.4
Canada	1 338.6	1 994.4	2 045.5	2 013.2	2 617.8	3 711.9	3 706.2	3 239.5
United States of America	9 405.1	14 440.5	14 952.4	13 858.2	2 945.0	4 436.7	4 463.1	4 144.6
ASIA & OCEANIA	15 418.0	14 544.7	16 416.9	14 645.4	2 339.6	3 544.8	3 562.4	3 330.3
Australia	486.9	1 065.9	1 101.2	1 058.3	899.0	941.5	948.5	823.9
Israel	129.9	194.7	246.5	227.2	8.5	17.3	21.2	21.5
Japan	14 748.7	13 184.5	14 947.5	13 258.1	719.8	1 662.6	1 698.2	1 583.1
New Zealand	52.4	99.6	121.9	101.8	712.3	923.4	894.4	901.7
EUROPE	22 598.9	46 818.6	50 537.8	45 689.7	19 325.7	35 870.6	38 808.9	36 112.4
Albania	6.1	17.7	26.1	27.2	8.6	25.1	29.1	32.5
Belarus	54.9	285.0	339.7	298.0	14.0	107.4	138.1	98.0
Bosnia & Herzegovina	9.8	34.1	39.7	36.9		10.5	13.3	12.9
Croatia	34.8	127.0	142.0	104.0	34.8	152.6	149.8	164.5
European Union	21 132.5	41 922.6	44 731.3	40 697.1	12 405.8	24 244.5	26 129.2	23 946.4
Iceland	80.7	99.1	110.1	73.8	1 379.4	2 028.5	2 089.5	1 726.4
Macedonia, FYR	9.8	20.0	23.0	24.5	0.1	0.4	0.8	0.8
Montenegro		6.4	16.3	13.1		0.7	0.3	1.5
Norway	612.5	1 095.1	1 211.3	1 168.8	3 764.8	6 228.1	6 936.6	7 072.7
Republic of Moldova	2.8	32.2	49.5	39.8	0.4	0.0	0.0	0.2
Russian Federation	199.1	2 017.3	2 421.5	1 991.0	1 217.7	2 364.0	2 618.8	2 316.8
Serbia		90.4	106.0	101.6		2.0	7.6	6.3
Switzerland	375.7	593.0	648.6	627.3	3.0	16.2	24.2	21.6
Ukraine	96.8	543.0	742.0	541.1	75.1	33.4	39.5	60.5

TABLE 47: Value of net trade (exports-imports) in selected cash crops


	Coffee, tea, cocoa and spices				Fruit and vegetables			
	net trade in cash crops (value)				net trade in cash crops (value)			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
WORLD	-1 228.4	-1 444.5	-1 344.9	-224.7	-7 525.7	-10 777.5	-11 716.9	-8 581.5
DEVELOPING REGIONS	13 472.9	17 728.2	22 027.6	22 213.8	14 416.5	30 137.2	32 419.1	30 936.5
AFRICA	3 814.2	5 283.5	6 577.2	7 743.3	1 676.7	2 418.8	3 310.0	3 811.9
North Africa	-482.2	-565.3	-753.2	-858.3	349.2	707.2	1 139.4	1 930.9
Algeria	-171.3	-242.9	-285.6	-314.6	-176.6	-453.4	-513.7	-518.8
Egypt	-129.5	-63.0	-162.0	-296.3	-111.5	251.3	446.0	1 404.5
Libya	-39.9	-59.4	-76.8	-27.2	-62.8	-173.9	-264.2	-245.8
Morocco	-103.7	-170.7	-181.8	-189.3	645.3	936.6	1 222.3	1 088.0
Tunisia	-37.8	-29.3	-47.2	-30.9	54.9	146.6	248.9	203.1
Sub-Saharan Africa	4 298.9	5 850.7	7 332.4	8 603.5	1 327.5	1 711.6	2 170.6	1 881.0
Angola	2.1	-19.7	-28.8	-35.7	-21.1	-106.1	-148.5	-145.1
Benin	-1.4	-3.0	-4.9	-3.8	-0.6	-5.2	16.0	39.6
Botswana	-15.4	-23.5	-25.9	-28.6	-57.9	-87.6	-98.0	-99.7
Burkina Faso	-7.6	-6.3	-4.3	-6.4	-19.4	2.9	-2.8	-5.8
Burundi	43.5	51.0	46.2	47.1	-1.1	-12.2	-3.7	-0.8
Cameroon	267.2	346.3	508.5	660.9	41.1	53.1	76.1	58.3
Cape Verde	-2.8	-4.2	-4.4	-4.3	-12.4	-30.1	-36.1	-30.4
Central African Republic	12.7	3.0	0.0	1.2	-0.5	-1.7	-1.5	-2.1
Chad	-1.0	-1.1	-0.6	-1.6	-0.3	-2.1	-5.7	-5.8
Comoros	3.9	8.0	7.7	10.1	-0.9	-1.8	-2.7	-2.1
Congo	-0.4	12.8	13.9	18.8	-9.1	-11.5	-12.6	-3.7
Côte d'Ivoire	1 764.2	2 339.3	2 913.3	3 812.6	205.6	232.2	271.8	255.8
Congo, Dem. Rep.	31.5	4.0	12.9	8.3	-17.7	-36.7	-47.5	-47.2
Djibouti	-1.5	-6.6	-7.7	-6.2	-3.7	-15.6	-40.8	-45.5
Equatorial Guinea	6.3	4.0	3.1	2.0	0.0	-0.1	-0.2	-0.3
Eritrea	-0.3	-1.2	-0.6	-0.6	-2.7	-2.8	-9.4	-5.3
Ethiopia	269.9	427.1	485.0	374.9	13.3	86.5	151.5	216.6
Gabon	-1.7	-4.3	-3.8	-8.0	-12.6	-23.3	-26.5	-26.7
Gambia	-1.9	-5.0	-3.3	1.2	-4.1	-8.2	-6.4	-5.1
Ghana	466.1	1 043.9	1 037.2	1 341.4	12.6	2.4	78.4	-45.6
Guinea	9.0	48.1	6.7	3.9	-8.6	-14.6	-9.4	-8.8
Guinea-Bissau	-0.1	-0.2	-0.5	-0.7	49.0	52.9	93.7	99.2
Kenya	625.5	857.3	1 086.4	1 092.0	143.6	353.3	406.1	291.8
Lesotho					-28.8	-27.2	-25.1	-25.8
Liberia	2.7	1.3	9.2	9.8	-4.7	-9.4	-8.3	-9.0
Madagascar	47.9	118.7	115.7	113.4	15.4	26.0	26.6	21.7
Malawi	48.7	59.3	40.2	79.6	6.5	17.6	17.4	28.1
Mali	-17.9	-19.5	-27.1	-36.9	-4.5	-8.6	-11.5	-13.8
Mauritania	-8.2	-18.1	-11.5	-38.9	-7.4	-32.9	-30.9	-35.9
Mauritius	-6.7	-15.2	-17.9	-21.7	-35.9	-58.0	-66.2	-71.4
Mozambique	-4.8	-6.6	-10.7	-15.9	9.9	24.2	6.9	12.3
Namibia	-11.7	-39.5	-33.3	-33.3	-28.9	10.5	29.6	24.6
Niger	-5.9	-11.3	-11.7	-17.3	24.1	22.2	7.7	5.1
Nigeria	307.0	279.1	523.2	631.2	25.6	-118.5	-66.7	-176.8
Rwanda	44.7	62.2	178.0	68.5	-3.4	-2.1	10.0	-6.1
Senegal	-18.1	-22.1	-26.5	-28.4	-13.2	-50.5	-59.7	-53.5
Seychelles	-0.9	-2.7	-2.4	-2.4	-8.2	-17.6	-12.6	-11.4
Sierra Leone	5.1	21.4	22.7	21.9	-3.6	-7.8	-10.7	-9.0
Somalia	-2.8	-3.1	-7.1	-5.2	4.3	-6.0	-22.2	-12.7
Sudan	-58.2	-117.9	-151.7	-135.5	6.7	-73.9	-132.0	-136.7
South Africa	-46.5	-150.1	-200.5	-151.2	886.9	1 560.5	1 732.8	1 792.8
Swaziland	-7.1	2.7	-5.3	-5.3	2.5	-13.6	24.3	12.8
Tanzania, Utd. Rep.	163.2	177.3	184.7	224.3	160.6	49.0	138.5	140.8
Togo	32.3	142.7	245.4	288.8	-1.4	-4.3	-7.6	-5.4
Uganda	310.7	302.6	471.1	368.4	-1.4	-8.9	7.0	7.5
Zambia	6.1	5.6	1.1	0.9	-1.8	6.2	3.2	-6.9
Zimbabwe	46.8	10.9	6.2	4.8	36.1	13.1	-19.6	-69.3

TABLE 47: Value of net trade (exports-imports) in selected cash crops (continued)


	Coffee, tea, cocoa and spices				Fruit and vegetables			
	net trade in cash crops (value)				net trade in cash crops (value)			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
ASIA	2 853.9	3 533.2	4 709.3	4 388.4	4 202.2	10 017.8	10 559.0	8 530.4
Central Asia	-96.2	-352.4	-470.4	-450.6	-28.9	364.4	195.7	260.2
Kazakhstan	-46.2	-260.0	-307.2	-275.9	-0.5	-92.0	-148.6	-217.3
Kyrgyzstan	-7.5	-33.9	-48.4	-60.8	8.2	51.3	66.5	160.6
Tajikistan	-1.2	-22.6	-37.9	-30.4	11.1	91.8	68.8	86.4
Turkmenistan	-33.1	-12.1	-31.0	-38.5	-14.8	-1.0	-2.4	-3.0
Uzbekistan	-8.3	-23.8	-45.8	-45.0	-32.8	314.3	211.3	233.5
East Asia	2 482.2	3 983.2	4 971.1	4 813.9	2 786.8	9 097.0	9 518.4	8 588.6
Brunei Darussalam	-6.9	-15.7	-16.3	-17.0	-27.5	-31.9	-35.5	-35.9
Cambodia	-1.0	-13.8	-3.5	-9.8	-6.2	-25.6	-26.8	-26.4
China	305.2	626.7	744.9	826.5	1 431.6	7 380.6	8 040.7	7 106.7
Indonesia	1 212.6	1 778.0	2 563.8	2 553.3	170.0	-242.0	-152.8	-415.3
Korea, DPR					0.9	-10.5	2.5	12.0
Korea, Republic of	-200.8	-358.1	-419.2	-372.6	-225.3	-1 292.4	-1 431.8	-1 089.3
Lao, PDR	21.7	9.9	8.8	5.5	-0.4	-8.9	-5.6	-7.4
Malaysia	151.1	-242.9	-356.2	-27.0	-219.9	-511.6	-516.0	-653.5
Mongolia	-3.5	-22.1	-33.1	-30.4	-6.2	-29.4	-32.6	-26.2
Myanmar	-14.8	-28.4	-23.3	-22.8	180.0	789.4	474.1	658.6
Philippines	-53.0	-108.6	-142.9	-150.7	428.6	849.7	861.3	737.0
Singapore	243.4	69.4	110.9	96.3	-400.4	-637.9	-759.7	-760.0
Thailand	41.6	-3.9	-32.9	17.2	1 303.5	2 055.0	2 109.3	2 164.7
Viet Nam	774.4	2 290.3	2 557.7	1 937.4	166.6	824.9	1 000.1	933.0
South Asia	1 320.4	1 483.5	2 320.6	2 014.4	728.9	-320.5	-437.1	-1 918.4
Afghanistan	-56.1	-38.4	-42.5	-2.4	39.3	101.6	143.1	189.7
Bangladesh	16.7	-53.2	-57.5	-102.7	-162.4	-214.7	-440.3	-865.0
Bhutan	0.9	0.0	-0.0	-0.0	6.5	-0.1	-0.2	-0.4
India	996.8	1 337.0	1 631.1	1 374.9	464.9	-541.9	-452.7	-1 294.2
Iran (Islamic Rep.)	0.2	-53.7	-269.8	-193.7	473.0	817.6	726.7	519.9
Maldives								
Nepal	-10.1	-4.0	7.7	12.8	-11.1	-80.1	-63.0	-14.9
Pakistan	-276.0	-251.2	-243.9	-259.5	-46.9	-246.5	-187.0	-285.5
Sri Lanka	651.9	558.8	1 309.6	1 198.9	-13.2	-105.6	-106.0	-124.6
West Asia	-856.3	-1 592.9	-2 126.1	-2 003.1	694.2	826.1	1 224.3	1 556.5
Armenia	-17.0	-44.1	-69.6	-59.1	-7.8	-39.2	-51.3	-39.9
Azerbaijan	-2.7	-17.2	-26.5	-16.6	6.4	133.4	197.5	154.4
Bahrain	-2.2	-32.7	-35.1	-38.9	-32.8	-95.1	-90.7	-140.9
Cyprus	-21.7	-52.0	-68.2	-68.1	39.1	30.8	0.2	-17.8
Georgia	4.5	-62.0	-80.6	-68.2	13.8	25.7	-60.9	39.4
Iraq	-34.7	-64.7	-106.7	-107.3	-12.8	-332.7	-270.3	-293.8
Jordan	-33.1	-74.6	-112.3	-116.9	31.4	231.8	230.6	197.9
Kuwait	-99.5	-76.9	-132.7	-101.9	-265.6	-287.8	-262.8	-231.2
Lebanon	-63.9	-101.0	-112.5	-114.9	-104.0	-88.7	-97.0	-86.5
Occupied Palestinian Territory	-21.3	-23.1	-11.2	-9.6	-65.9	-52.7	-55.6	-52.0
Saudi Arabia	-204.2	-606.2	-497.8	-538.5	-630.6	-925.5	-952.4	-793.1
Syrian Arab Republic	-84.2	98.0	-207.0	-263.0	326.2	708.4	109.1	42.1
Turkey	6.6	-35.6	58.4	30.5	1 974.8	3 104.6	4 507.9	4 746.4
United Arab Emirates	-268.5	-399.9	-610.8	-428.1	-386.7	-1 112.7	-1 357.6	-1 399.9
Yemen	3.3	-21.1	-17.5	-10.5	-13.8	-71.3	-86.6	-104.9
LATIN AMERICA & THE CARIBBEAN	6 609.9	8 715.3	10 425.0	9 747.7	8 595.9	17 808.3	18 667.6	18 706.1
Argentina	-22.5	-7.0	-45.9	-0.1	787.9	2 084.8	2 744.4	2 144.3
Bahamas	-3.0	-11.6	-11.8	-12.6	-42.3	-85.1	-91.9	-90.1
Barbados	-5.9	-7.8	-8.6	-8.8	-28.5	-36.5	-38.8	-37.2
Belize	-0.7	-3.1	-3.3	-5.7	65.4	93.6	100.3	96.4
Bolivia (Plur. State)	5.6	-1.1	-6.6	0.3	34.9	101.3	133.4	112.5
Brazil	2 608.9	4 207.4	5 109.9	4 498.0	1 067.4	2 588.1	2 024.8	1 614.8
Chile	-25.1	-74.4	-104.0	-85.2	1 434.3	3 465.6	3 719.1	3 890.1
Colombia	1 414.4	1 884.9	2 117.0	1 732.0	449.9	511.7	548.6	674.7
Costa Rica	317.0	244.7	323.7	218.4	965.0	1 467.5	1 604.4	1 552.5

TABLE 47: Value of net trade (exports-imports) in selected cash crops (continued)

	Coffee, tea, cocoa and spices				Fruit and vegetables			
	net trade in cash crops (value)				net trade in cash crops (value)			
	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009	US\$ million 1999	US\$ million 2007	US\$ million 2008	US\$ million 2009
Cuba	-2.3	-43.1	-57.1	-40.2	-21.9	-131.7	-115.1	-139.5
Dominica	0.3	-0.7	-0.6	-0.6	20.4	8.0	10.2	8.5
Dominican Republic	43.8	85.9	100.8	163.7	44.7	71.2	66.3	103.8
Ecuador	177.3	306.4	339.2	485.5	1 059.2	1 533.1	1 839.3	2 238.0
El Salvador	241.5	154.2	222.7	196.5	-65.8	-110.5	-121.1	-126.4
French Guiana								
Grenada	17.8	1.7	1.8	-1.2	-3.7	-5.5	-2.9	-6.5
Guatemala	608.5	696.1	826.6	857.6	237.1	563.4	575.0	741.7
Guyana	-2.9	-3.4	-4.3	-3.8	-7.5	-14.9	-9.9	-9.0
Haiti	14.3	7.9	11.9	10.4	-14.9	-30.2	-32.8	-32.0
Honduras	254.9	491.1	563.1	504.9	53.0	187.2	191.7	215.2
Jamaica	28.2	24.7	17.1	28.3	22.2	-35.4	-50.3	-36.3
Mexico	559.9	195.0	158.4	434.3	2 406.1	4 960.6	4 885.7	5 143.4
Netherlands Antilles	-4.0	-16.4	-16.5	-16.4	-25.3	-24.3	-18.2	-14.7
Nicaragua	134.7	194.1	278.7	251.9	-6.6	48.4	57.5	61.2
Panama	6.2	-0.7	-7.6	-10.6	148.5	221.5	285.9	71.4
Paraguay	-9.0	-18.3	-28.3	-26.9	-11.5	-22.7	-28.2	-31.8
Peru	278.4	538.7	817.5	730.6	204.0	919.3	1 075.6	1 060.0
St. Kitts & Nevis	-0.3	-0.8	-0.6	-0.6	-3.4	-8.0	-5.2	-5.5
St. Lucia	-1.6	-2.6	-2.7	-2.4	22.4	-1.1	6.4	15.0
St. Vincent & Grenadines	-0.2	-0.8	-0.9	-0.7	23.7	11.1	6.6	8.2
Suriname	-2.6	-6.4	-6.8	-7.2	11.3	10.6	21.4	21.1
Trinidad & Tobago	-1.1	-5.2	-13.0	-8.8	-28.2	-51.9	-57.3	-65.6
Uruguay	-47.9	-56.3	-72.6	-70.5	6.7	36.2	14.5	7.4
Venezuela (Boliv. Rep. of)	34.0	-50.6	-62.8	-53.5	-172.4	-447.9	-612.4	-423.7
OCEANIA	192.5	194.3	314.2	332.5	-58.2	-107.7	-117.5	-111.9
Fiji	-2.5	-3.8	-4.6	-4.7	-8.5	-17.8	-23.7	-15.6
French Polynesia	-7.8	-16.4	-16.7	-17.6	-26.5	-39.7	-44.1	-39.5
New Caledonia	-3.7	-11.8	-9.1	-14.0	-14.3	-33.0	-31.7	-41.6
Papua New Guinea	201.4	232.9	342.9	361.4	-6.3	-9.0	-12.4	-12.0
Samoa	-0.4	-6.8	-6.2	-4.3	0.6	-0.1	-0.9	-1.0
Solomon Islands	4.8	4.1	7.6	11.0	-0.3	-1.4	-1.2	-1.2
Tonga	0.2	-0.6	-0.5	-0.6	5.2	1.1	0.4	-0.8
Vanuatu	1.3	0.8	1.6	2.0	-2.2	0.5	0.9	3.9
DEVELOPED REGIONS	-15 047.9	-19 045.4	-23 223.8	-22 319.2	-22 550.8	-40 859.8	-44 036.3	-39 413.1
NORTH AMERICA	-4 846.3	-6 776.0	-8 200.8	-8 006.5	-4 525.8	-8 859.6	-7 977.3	-7 272.7
Bermuda								
Canada	-533.4	-900.7	-1 170.7	-1 232.8	-1 532.2	-2 531.0	-2 374.8	-2 303.0
United States of America	-4 310.0	-5 868.3	-7 024.4	-6 767.7	-2 978.9	-6 320.5	-5 586.8	-4 953.2
ASIA & OCEANIA	-2 221.4	-3 154.3	-3 599.1	-3 662.6	-5 046.3	-5 160.6	-5 612.7	-5 407.5
Australia	-290.3	-576.1	-691.3	-705.8	258.9	-193.7	-185.0	82.4
Israel	-110.5	-164.6	-204.3	-186.1	335.1	781.8	527.8	706.4
Japan	-1 760.4	-2 297.2	-2 540.9	-2 572.4	-6 117.9	-6 671.3	-6 871.9	-7 142.8
New Zealand	-60.1	-116.4	-162.5	-198.2	477.7	922.6	916.4	946.5
EUROPE	-7 597.8	-9 128.5	-11 436.9	-10 663.2	-12 375.8	-26 863.7	-30 479.3	-26 767.4
Albania	-4.5	-25.2	-33.5	-33.3	-39.1	-96.6	-99.2	-96.7
Belarus	-20.6	-164.9	-217.4	-195.4	-24.6	-208.0	-321.0	-226.7
Bosnia & Herzegovina	-25.4	-130.2	-151.7	-134.7	-16.6	-105.2	-128.2	-97.1
Croatia	-59.9	-107.0	-137.8	-127.1	-116.5	-307.9	-371.0	-310.3
European Union	-6 498.5	-6 936.8	-8 887.8	-8 547.4	-9 734.7	-17 368.6	-18 396.0	-15 936.1
Iceland	-17.5	-31.8	-34.4	-30.0	-37.9	-102.8	-103.5	-79.1
Macedonia, FYR	-13.8	-53.9	-52.7	-53.2	16.3	29.4	87.4	65.0
Montenegro		-12.5	-17.1	-53.8		-9.1	-13.0	-43.4
Norway	-189.1	-343.5	-395.6	-367.2	-466.7	-1 115.3	-1 334.2	-1 123.2
Republic of Moldova	-1.9	-28.3	-38.0	-33.9	54.4	101.6	47.0	86.9
Russian Federation	-556.2	-1 521.3	-1 838.4	-1 721.9	-970.1	-6 087.3	-7 494.9	-6 984.1
Serbia		-99.7	-141.0	-58.4		198.0	137.0	200.4
Switzerland	-20.0	481.8	709.4	854.3	-1 031.2	-1 638.8	-1 924.5	-1 796.9
Ukraine	-107.4	-200.8	-261.8	-222.1	-9.4	-106.4	-547.9	-426.0

Definitions and sources

Bovine meat production

P3.FEED.FAO.ESS.BF.QP 

Page: table 35 (p. 233).

Production of meat from bovine animals including buffaloes, 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of beverages (value)

P3.FEED.FAO.ESS.BV.EXv 


Page: chart 93, 95 (p. 212, 213).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of beverages (value)

P3.FEED.FAO.ESS.BV.IMv 

Page: chart 94 (p. 213).

Value of imports of coffee, tea and cocoa in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Net trade in cash crops (value)

P3.FEED.FAO.ESS.BVS.NT 


Page: table 47 (p. 269).

Net trade (exports-imports) of cash crops, including coffee, tea, cocoa and spices.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of cocoa (value)

P3.FEED.FAO.ESS.CC.EXv 

Page: chart 90 (p. 211).

Value of exports of cocoa in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Cereal exports (volume)

P3.FEED.FAO.ESS.CE.EX 


Page: table 37 (p. 239).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of cereals (value)

P3.FEED.FAO.ESS.CE.EXv 

Page: chart 87, 93, 95 (p. 210, 212, 213).

Value of exports of cereals in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Cereal imports (volume)

P3.FEED.FAO.ESS.CE.IM 

Page: table 37 (p. 239).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of cereals (value)

P3.FEED.FAO.ESS.CE.IMv 

Page: chart 94 (p. 213).

Value of imports of cereals in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of coffee (value)

P3.FEED.FAO.ESS.CF.EXv 

Page: chart 90 (p. 211).

Value of exports of coffee in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Coarse grain harvested area

P3.FEED.FAO.ESS.CG.AH 


Page: table 29 (p. 223), chart 68 (p. 180).

Data refer to the area from which coarse grain crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Coarse grain exports (volume)


P3.FEED.FAO.ESS.CG.EX 

Page: table 40 (p. 248).

Exports of coarse grains (volume). Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Coarse grain imports (volume)P3.FEED.FAO.ESS.CG.IM 

Page: table 40 (p. 248).

Imports of coarse grains (volume). Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Coarse grain productionP3.FEED.FAO.ESS.CG.QP 

Page: table 29 (p. 223), chart 69 (p. 181), map 40 (p. 186).

Coarse grain production data refer to the actual harvested production from the field, excluding harvesting 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. Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita coarse grain productionP3.FEED.FAO.ESS.CG.QPPC 

Page: chart 73 (p. 187).

Per capita production of coarse grains.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Coarse grain yieldP3.FEED.FAO.ESS.CG.YLD 

Page: table 29 (p. 223), chart 70 (p. 181).

Harvested production per unit of harvested area for coarse grain crops. Coarse grains include Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Sources of growth in crop production: Yield, Cropping intensity and Area expansion.

P3.FEED.FAO.ESS.CRPS.GSRCE


Page: chart 67 (p. 179).

Where cropping intensity is the frequency with which crops are harvested from a given area. Therefore, the

harvested area expressed as a percentage of the arable area is the cropping intensity.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Production of eggs in shellP3.FEED.FAO.ESS.EG.QP 

Page: table 34 (p. 230).

Production of eggs in shell, including hens and other birds. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of food (value)P3.FEED.FAO.ESS.FD.EXV 

Page: chart 93, 95 (p. 212, 213).

Value of exports of food in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Imports of food (value)P3.FEED.FAO.ESS.FD.IMV 

Page: chart 94 (p. 213).

Value of imports of food in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Global food trade index (calories)P3.FEED.FAO.ESS.FD.IXc 

Page: chart 86 (p. 209).

Index of the caloric value of world food exports, 2004-2006 = 100.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Global food trade index (value)

P3.FEED.FAO.ESS.FD.IXv

Page: chart 86 (p. 209).

Index of the value (current US\$) of world food exports, 2004-2006 = 100.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Net food trade balance of developing countriesP3.FEED.FAO.ESS.FD.NTV 

Page: chart 92 (p. 211).

The value of total food net trade (exports-imports).

Source: Statistics Division (FAOSTAT)

Owner: FAO


Net food trade balance of developing countries, excluding Brazil and ChinaP3.FEED.FAO.ESS.FD.NTx 

Page: chart 91 (p. 211).

Net food trade balance of developing countries, excluding Brazil and China.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Index of per capita food production (calories)P3.FEED.FAO.ESS.FD.QP 

Page: chart 65 (p. 175), map 35 (p. 174).

Index of per capita food production converted in calorie equivalent. See <http://www.fao.org/DOCREP/006/Y5022E/y5022e04.htm> for conversion factors.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of cash crops (value)P3.FEED.FAO.ESS.FV.EXv 

Page: chart 88, 93, 95 (p. 210, 212, 213).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of cash crops (value)P3.FEED.FAO.ESS.FV.IMv 

Page: chart 94 (p. 213).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO


Net trade in cash crops (value)P3.FEED.FAO.ESS.FV.NT 

Page: table 47 (p. 269).

Value of net trade (exports-imports) of fruit and vegetables in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Gross per capita crop production index numberP3.FEED.FAO.ESS.GPCPIN.CRPS 

Page: table 26 (p. 220).

Gross per capita FAO index of crop production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Growth in per capita food production (value)P3.FEED.FAO.ESS.GPCPIN.FD.PCP 

Page: map 36 (p. 176).

The growth in the gross per capita FAO index of food production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Gross per capita production index number foodP3.FEED.FAO.ESS.GPCPIN.FOOD 

Page: table 26 (p. 220).

Gross per capita FAO index of food production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Gross per capita livestock production index numberP3.FEED.FAO.ESS.GPCPIN.LSTK 

Page: table 26 (p. 220).

Gross per capita FAO index of livestock production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Gross per capita non-food production index numberP3.FEED.FAO.ESS.GPCPIN.NFOOD 

Page: table 26 (p. 220).

Gross per capita FAO index of non-food production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Growth in crop productionP3.FEED.FAO.ESS.GPIN.CRPS 

Page: map 37 (p. 178).

The growth in the gross per capita FAO index of crop production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Index of per capita food production, valueP3.FEED.FAO.ESS.GPIN.FD 

Page: chart 66 (p. 177).

Gross per capita FAO index of food production. See *Concepts and methods*.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Dairy exports (volume)P3.FEED.FAO.ESS.MK.EX 

Page: table 44 (p. 260).

Exports (volume) of dairy products in milk equivalent in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of dairy (volume)P3.FEED.FAO.ESS.MK.EXv 

Page: chart 89, 93, 95 (p. 211, 212, 213).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Dairy imports (volume)P3.FEED.FAO.ESS.MK.IM 

Page: table 44 (p. 260).

Imports (volume) of dairy products in milk equivalent in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of dairy (volume)P3.FEED.FAO.ESS.MK.IMv 

Page: chart 94 (p. 213).

Value of imports of dairy products in milk equivalent in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Milk productionP3.FEED.FAO.ESS.MK.QP 

Page: table 34 (p. 230), map 47 (p. 200).

The sum of whole fresh milk production from Buffalos, Camels, Cows, Goats and Sheep.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita milk productionP3.FEED.FAO.ESS.MK.QPPC 

Page: chart 80 (p. 201).

Milk production expressed as a ratio of population, i.e. per capita production of milk.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of total meat (volume)P3.FEED.FAO.ESS.MT.EX 

Page: table 45 (p. 263).

Exports (volume) of meat.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of total meat (value)P3.FEED.FAO.ESS.MT.EXv 

Page: chart 89, 93, 95 (p. 211, 212, 213).

Value of exports of meat in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of total meat (volume)P3.FEED.FAO.ESS.MT.IM 

Page: table 45 (p. 263).

Imports (volume) of meat.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of total meat (value)P3.FEED.FAO.ESS.MT.IMv 

Page: chart 94 (p. 213).

Value of imports of meat in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Total meat productionP3.FEED.FAO.ESS.MT.QP 

Page: map 46 (p. 198).

Production of 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. .

Source: Statistics Division (FAOSTAT)

Owner: FAO


Per capita total meat productionP3.FEED.FAO.ESS.MT.QPPC 

Page: chart 79 (p. 199).

Meat production expressed as a ratio of population, i.e. per capita production of meat .

Source: Statistics Division (FAOSTAT)

Owner: FAO


Oil-bearing crops harvested areaP3.FEED.FAO.ESS.OS.AH 

Page: table 30 (p. 224), chart 68 (p. 180).

Data refer to the area from which oil-bearing crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of oilcrops (volume)P3.FEED.FAO.ESS.OS.EX 

Page: table 42 (p. 254).


Exports (volume) of oilseeds. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of oilcrops (value)

P3.FEED.FAO.ESS.OS.EXv 


Page: chart 87, 93, 95 (p. 210, 212, 213).

Value of exports of oil-Bearing crops in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of oilcrops (volume)

P3.FEED.FAO.ESS.OS.IM 


Page: table 42 (p. 254).

Imports (volume) of oilseeds. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of oilcrops (value)

P3.FEED.FAO.ESS.OS.IMv 

Page: chart 94 (p. 213).

Value of imports of oil-Bearing crops in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Oilcrop production

P3.FEED.FAO.ESS.OS.QP 

Page: table 30 (p. 224), chart 69 (p. 181), map 41 (p. 188).


Oil-bearing crop production data refer to the actual harvested production from the field, excluding harvesting 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. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita oilcrop production

P3.FEED.FAO.ESS.OS.QPPC 

Page: chart 74 (p. 189).

Oil-bearing crop production expressed as a ratio of population, i.e. per capita production of oil-bearing crops. Oil-bearing 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Oilcrop yield

P3.FEED.FAO.ESS.OS.YLD 


Page: table 30 (p. 224), chart 70 (p. 181).

Harvested production per unit of harvested area for 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Pigmeat production

P3.FEED.FAO.ESS.PK.QP 

Page: table 35 (p. 233).

Production of meat from domestic or wild pigs (e.g. wild boars), 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Pulse crops harvested areaP3.FEED.FAO.ESS.PS.AH *Page:* table 31 (p. 225), chart 68 (p. 180).

Data refer to the area from which pulse crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. 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.

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Pulse crops production**P3.FEED.FAO.ESS.PS.QP *Page:* table 31 (p. 225), chart 69 (p. 181), map 42 (p. 190).

Pulse production data refer to the actual harvested production from the field, excluding harvesting 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. 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.

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Per capita pulses production**P3.FEED.FAO.ESS.PS.QPPC *Page:* chart 75 (p. 191).

Per capita production of pulses.

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Pulse crops yield**P3.FEED.FAO.ESS.PS.YLD *Page:* table 31 (p. 225), chart 70 (p. 181).

Harvested production per unit of harvested area for pulse crops. 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.

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Poultry meat production**P3.FEED.FAO.ESS.PT.QP *Page:* table 34 (p. 230).

Production of meat from 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. .

Source: Statistics Division (FAOSTAT)*Owner:* FAO**Rice harvested area**P3.FEED.FAO.ESS.RI.AH *Page:* table 28 (p. 222), chart 68 (p. 180).

Data refer to the area from which rice crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested.

Source: Statistics Division (FAOSTAT)*Owner:* FAO

Rice exports (volume)P3.FEED.FAO.ESS.RI.EX 

Page: table 39 (p. 245).

Exports (volume) of rice in milled equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Rice imports (volume)P3.FEED.FAO.ESS.RI.IM 

Page: table 39 (p. 245).

Imports (volume) of rice in milled equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Rice productionP3.FEED.FAO.ESS.RI.QP 

Page: table 28 (p. 222), chart 69 (p. 181), map 38 (p. 182).

Rice production data refer to the actual harvested production from the field, excluding harvesting or 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita rice productionP3.FEED.FAO.ESS.RI.QPPC 

Page: chart 71 (p. 183).

Per capita production of rice.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Rice yieldP3.FEED.FAO.ESS.RI.YLD 

Page: table 28 (p. 222), chart 70, 113 (p. 181, 305).

Harvested production per unit of harvested area for rice crops.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Root and tuber crops harvested areaP3.FEED.FAO.ESS.RT.AH 

Page: table 32 (p. 226), chart 68 (p. 180).

Data refer to the area from which root and tuber crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during

the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. 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. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Root and tuber crops productionP3.FEED.FAO.ESS.RT.QP 

Page: table 32 (p. 226), chart 69 (p. 181), map 43 (p. 192).

Root and tubers production data refer to the actual harvested production from the field, excluding harvesting 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. 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. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita roots and tuber crops productionP3.FEED.FAO.ESS.RT.QPPC 

Page: chart 76 (p. 193).

Roots and tubers production expressed as a ratio of population, i.e. per capita production of roots and tubers. 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. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Root and tuber crops yieldP3.FEED.FAO.ESS.RT.YLD 

Page: table 32 (p. 226), chart 70 (p. 181).

Harvested production per unit of harvested area for 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. .

Source: Statistics Division (FAOSTAT)

Owner: FAO


Sugar cane harvested areaP3.FEED.FAO.ESS.SC.AH 

Page: table 33 (p. 227), chart 68 (p. 180).

Data refer to the area from which sugar cane crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Sugar cane productionP3.FEED.FAO.ESS.SC.QP 

Page: table 33 (p. 227), chart 69 (p. 181).

Sugar cane production data refer to the actual harvested production from the field, excluding harvesting 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Sugar cane yieldP3.FEED.FAO.ESS.SC.YLD 

Page: table 33 (p. 227), chart 70 (p. 181).

Harvested production per unit of harvested area for sugar cane crops.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Sheep and goat meat productionP3.FEED.FAO.ESS.SH.QP 

Page: table 35 (p. 233).

Production of meat from sheep and goats, including kids and lambs, 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Exports of spices (value)P3.FEED.FAO.ESS.SP.EXv 

Page: chart 90 (p. 211).

Value of exports of spices in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Sugar exports (volume)P3.FEED.FAO.ESS.SU.EX 

Page: table 41 (p. 251).

Exports (volume) of sugar from sugar crops (cane and beet) expressed in raw equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of sugar (value)P3.FEED.FAO.ESS.SU.EXv 

Page: chart 87, 93, 95 (p. 210, 212, 213).

Value of exports of sugar from sugar crops (cane and beet) expressed in raw equivalent in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Sugar imports (volume)P3.FEED.FAO.ESS.SU.IM 

Page: table 41 (p. 251).

Imports (volume) of sugar from sugar crops (cane and beet) expressed in raw equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of sugar (value)P3.FEED.FAO.ESS.SU.IMv 

Page: chart 94 (p. 213).

Value of imports of sugar from sugar crops (cane and beet) expressed in raw equivalent in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Production of sugar (raw equivalent)P3.FTW.FAO.SU.QP 

Page: map 45 (p. 196).

Production of sugar from sugar crops (cane and beet) expressed in raw equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Per capita production of sugar (raw equivalent)P3.FEED.FAO.ESS.SU.QPPC 

Page: chart 78 (p. 197).

Sugar production expressed as a ratio of population, i.e. per capita production of sugar. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of tea (value)P3.FEED.FAO.ESS.T.EXv 

Page: chart 90 (p. 211).

Value of exports of tea in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Vegetable productionP3.FEED.FAO.ESS.VG.QP 

Page: map 44 (p. 194).

Production of vegetables. See www.fao.org/waicent/faoinfo/economic/faodef/fdef07e.htm for a description.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Per capita vegetable productionP3.FEED.FAO.ESS.VG.QPPC 

Page: chart 77 (p. 195).

Per capita production of vegetables.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of vegetable oils and animal fats (volume)P3.FEED.FAO.ESS.VL.EX 

Page: table 43 (p. 257).

Exports (volume) of vegetable oils.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Exports of vegetable oils and animal fats (value)P3.FEED.FAO.ESS.VL.EXV 

Page: chart 88, 93, 95 (p. 210, 212, 213).

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of vegetable oils and animal fats (volume)P3.FEED.FAO.ESS.VL.IM 

Page: table 43 (p. 257).

Imports (volume) of vegetable oils.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Imports of vegetable oils and animal fats (value)P3.FEED.FAO.ESS.VL.IMV 

Page: chart 94 (p. 213).

Value of imports of vegetable oils in current US\$.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Wheat harvested areaP3.FEED.FAO.ESS.WT.AH 

Page: table 27 (p. 221), chart 68 (p. 180).

Data refer to the area from which wheat crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested.

Source: Statistics Division (FAOSTAT)

Owner: FAO


Wheat exports (volume)P3.FEED.FAO.ESS.WT.EX 

Page: table 38 (p. 242).

Exports (volume) of wheat and wheat flour, in wheat equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Wheat imports (volume)P3.FEED.FAO.ESS.WT.IM 

Page: table 38 (p. 242).

Imports (volume) of wheat and wheat flour, in wheat equivalent.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Wheat productionP3.FEED.FAO.ESS.WT.QP 

Page: table 27 (p. 221), map 39 (p. 184).

Wheat production data refer to the actual harvested production from the field, excluding harvesting 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. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita wheat productionP3.FEED.FAO.ESS.WT.QPPC 

Page: chart 72 (p. 185).

Per capita production of wheat.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Wheat yieldP3.FEED.FAO.ESS.WT.YLD 

Page: table 27 (p. 221), chart 69, 70, 113 (p. 181, 181, 305).

Harvested production per unit of harvested area for wheat crops. 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Per capita total food losses and wasteP3.FTW.FAO.AGS.LOSS *Page:* map 53 (p. 216).


See http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf for data sources and assumptions.

Source: Global Food Losses and Waste*Owner:* FAO**Per capita food losses and waste at consumption and pre-consumptions stages.**


P3.FTW.FAO.AGS.LOSSr

Page: chart 97 (p. 217).


See http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf for data sources and assumptions.

Source: Global Food Losses and Waste*Owner:* FAO**Import dependency (calories)**P3.FTW.FAO.ESS.IMPDC *Page:* map 51 (p. 208).


Import dependency ratio (IDR) is defined as: $IDR = \frac{\text{imports} \times 100}{\text{production} + \text{imports} - \text{exports}}$. The complement of this ratio to 100 would represent that part of the domestic food supply that has been produced in the country itself. However, there is a caveat to be kept in mind: these ratios hold only if imports are mainly used for domestic utilization and are not re-exported.

Source: Statistics Division*Owner:* FAO**Aquaculture production**P3.FTW.FAO.FI.ACQ.QP *Page:* table 36 (p. 236), chart 82 (p. 205), map 49 (p. 204).

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**Inland aquaculture production**P3.FTW.FAO.FI.ACQ.QPi *Page:* table 36 (p. 236).*Aquaculture production from inland areas.**Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)*Owner:* FAO**Marine aquaculture production**P3.FTW.FAO.FI.ACQ.QPm *Page:* table 36 (p. 236).*Aquaculture production from marine areas.**Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)*Owner:* FAO**Capture production**P3.FTW.FAO.FI.CAP.QP *Page:* table 36 (p. 236), chart 81 (p. 203), map 48 (p. 202).

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**Inland capture production**P3.FTW.FAO.FI.CAP.QPi *Page:* table 36 (p. 236).*Capture fishery production from inland areas.**Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)*Owner:* FAO**Marine capture production**P3.FTW.FAO.FI.CAP.QPm *Page:* table 36 (p. 236).*Capture fishery production from marine areas.**Source:* Fisheries and Aquaculture Department (Fishery and Aquaculture statistics)*Owner:* FAO**Status of world fish stocks**

P3.FTW.FAO.FI.STK

Page: chart 83 (p. 206).

A stock is considered "fully exploited" when its abundance is maintained at or close to the level that can

produce maximum sustainable yield (MSY). "Recovering, depleted or overexploited" stocks have abundance below the MSY level, differentiated by the extent of abundance reduction as recovering, depleted or overfished, with reduced spawning biomass and reproductive capacity. Such stocks require rebuilding and the recovery time will depend on the current condition of the stock, the level of protection afforded to the stock, and environmental conditions. In contrast, if abundance of a stock is higher than the level corresponding to the MSY, the stock is classified as "under or moderately exploited", depending on its abundance. These stocks have the potential to produce more than their current catches.

Source: State of the World's Fisheries (2010)

Owner: FAO

Composition of fish products

P3.FTW.FAO.FI.CFP

Page: chart 84 (p. 206).

Species composition of aquaculture and capture output

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

Owner: FAO

Exports of fish (value)

P3.FTW.FAO.FI.TOT.EXv 

Page: table 46 (p. 266), chart 89 (p. 211).

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

imports of fish (value)

P3.FTW.FAO.FI.TOT.IMv 

Page: table 46 (p. 266), chart 89 (p. 211).

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

Total fish production

P3.FTW.FAO.FI.TOT.QP 

Page: chart 85 (p. 207).

Per capita production of fish and fishery commodities by capture and aquaculture, used for direct human food

consumption, in live weight equivalent. This corresponds to the capture and aquaculture production excluding those destined for the preparation of fish-meal, fish oils and other non-food use.

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

Owner: FAO

Geo-location of harvests

P3.FTW.FAO.FI.HARV

Page: map 50 (p. 207).

Consolidated statistics of capture and aquaculture production. Data reported include fish, molluscs, crustaceans and miscellaneous aquatic animals but exclude marine mammals, crocodiles, corals, pearls, sponges and aquatic plants. Data contain attribute of species, producing countries and the location where production occurred as classified by FAO Major Areas defined by the Coordinating Working Party on Fishery Statistics (www.fao.org/fishery/cwp/en).

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

Owner: FAO

Sustainability dimensions

Introduction

With 30 percent of the earth's land used for growing crops and pastureland, another 30 percent covered by forests, and a full 70 percent of abstracted fresh water used by agriculture, there is no question that agriculture must be at the centre of any discussion of natural resource management and global environmental objectives. Ensuring adequate food and water for all while at the same time achieving sustainable rural development and livelihoods for current and future generations hinge upon the responsible management of natural resources. Agriculture, though, has a complex relationship with natural resources and the environment.

While agriculture is a major user of land and water it must also maintain the quantity and quality of those resources in order to stay viable. Despite efforts to conserve and recycle natural resources, the agriculture sector generates waste and pollution that can negatively impact landscapes and wildlife habitats. For instance, as the largest consumer of water, agriculture is the main source of nitrate and ammonia pollution in both ground and surface water. It is a major contributor to the phosphate pollution of waterways and the release of powerful greenhouse gases (methane and nitrous oxide) into the atmosphere.

Increasingly, however, agriculture and forestry are recognized as having potentially positive externalities, such as the provision of environmental services and amenities

through water storage and purification, carbon sequestration and the maintenance of rural landscapes. Moreover, research-driven intensification is saving vast areas of natural forest and grassland that would have been developed in the absence of higher crop, meat and milk yields. But conversely, intensification has in some instances contributed to air and water pollution that has led to reduced productivity growth.

Both new and traditional demands for produce are putting intense pressure on scarce agricultural resources. While the sector will be forced to compete for land and water with mushrooming urban settlements and industrial zones, it will also be required to serve on another major front: to meet the increasing demands of the emerging bio-based economy, especially bioenergy and markets for renewable and sustainable industrial products.

Key Resources

The State of the World's Forests (SOFO)

The State of the World's Forests reports on the status of forests, recent major policy and institutional developments and key issues concerning the forest sector. It makes current, reliable and policy-relevant information widely available to facilitate informed discussion and decision-making with regard to the world's forests.

SOFO 2011 considers the theme 'Changing pathways, changing lives: forests as multiple pathways to sustainable development.' It takes a holistic view of the multiple ways in which forests support livelihoods. The chapters include regional trends on forest resources, the development of sustainable forest industries, climate change mitigation and adaptation, and the local value of forests.

2011: Changing pathways, changing lives: forests as multiple pathways to sustainable development

2009: Society, forests and forestry: adapting for the future

Publication cycle: Biennial

Webpage:

<http://www.fao.org/forestry/sofo/en/>



The State of the World's Land and Water Resources for Food and Agriculture (SOLAW)

The State of the World's Land and Water Resources for Food and Agriculture analyses a variety of options for overcoming constraints and improving resource management in these areas of heightened risk.

By 2050, food production is projected to increase by about 70 percent globally and nearly 100 percent in developing countries. This incremental demand for food, together with demand from other competing uses, will place unprecedented pressure on many agricultural production systems across the world. These “systems at risk” are facing growing competition for land and water resources and they are often constrained by unsustainable agricultural practices. They therefore require particular attention and specific remedial action.

2011: Managing systems at risk.

Webpage:

<http://www.fao.org/nr/solaw/en/>



Land

As populations and economies grow, productive lands in some countries are being displaced by urban and industrial development, roads and reservoirs. This is because, for sound historic and strategic reasons, many urban areas and industrial zones are situated on flat coastal plains or river valleys with fertile soils. Where land cannot be viably expanded, the loss of prime-quality cropland has put additional pressure on agriculture to perform, especially through intensification.

Changes in **landcover** have caused the most pressing environmental issue in recent decades. Deforestation and land use intensification, especially its impact on soil degradation, are at the heart of the issue. But, in much of the world, the current picture of landcover change shows a continuing slowdown of converting forests to areas for crop or livestock production and the steady growth of protected areas.

The latest estimate of the world's total **forest area** is at over four billion hectares, corresponding to 31 percent of total land area or an average of 0.6 hectares per capita. The five most forest-rich countries (the Russian Federation, Brazil, Canada, the United States of America and China) presently account for more than half of the planet's total forest area. Ten countries or areas have no forest at all, and an additional 54 have forest on less than 10 percent of their total land area. While the rate of **deforestation** and loss of forest from natural causes is still high, it is slowing down. At the global level, it has decreased from an estimated 16 million hectares per year in the 1990s to around 13 million hectares per year in the last decade.

At the same time, afforestation and natural expansion of forests in some countries and areas have significantly reduced the net loss of forest area at the global level. The net change in forest area over the period 2000–10 was estimated at -5.2 million hectares per year, down by 35 percent per year in the prior decade. However, most of the loss of forest continued to take place in countries and areas in the tropical regions, while most of the gain took place in the temperate and boreal zones and in some emerging economies.

On the positive side, close to 75 percent of the world's forests were covered by a national forest programme – a participatory process for the development and implementation of forest-related policies and international commitments at the national level.

Map 54:



Source: FAO, Land and Water Division

Metalink: [P4.ENV.FAO.FOR.LCF.SOLAW](#), p. 348 

- Land and water are indispensable for agricultural production
- Many production systems are increasingly constrained by low availability of and access to these key resources
- Unsustainable practises, growing socio-economic pressures and climate change represent additional pressures

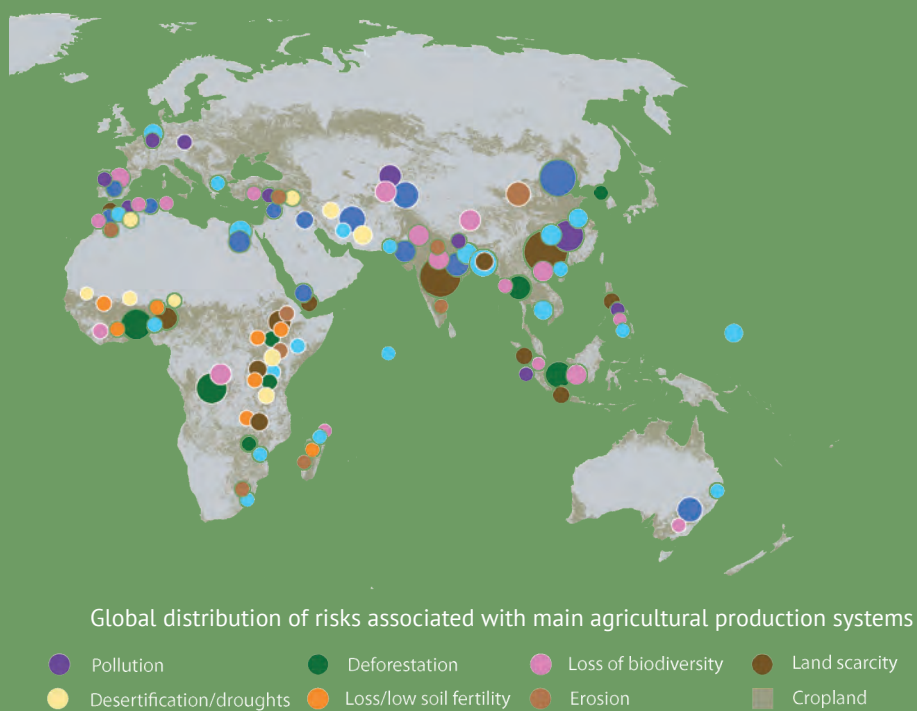
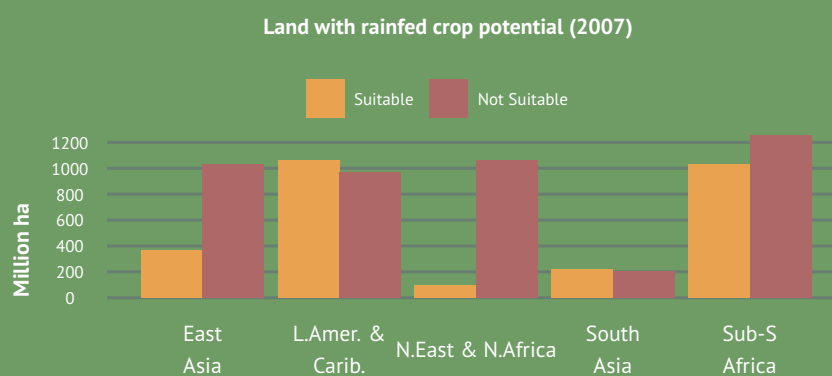


Chart 98: Land surface in many regions is unable to sustain crop cultivation, leading to environmental pressure from the intensification of existing cropland



Source: FAO, Statistics Division
 Metalink: P4.ENV.LND.SUIT, p. 350

Historically, production of wood and wood products has been the main objective of forest management and other functions were not explicitly accounted for. However, there has been a shift towards assigning a higher priority to the environmental and social functions of forests.

Currently, more than 1.6 billion people depend on forests for their livelihoods, with some 300 million living in them. Forests provide habitats to about two-thirds of all species on earth. In addition, forests serve as carbon reservoirs by storing large amounts of carbon in trees and soil. When forests are cleared or degraded, their sink potential is reduced and they can become a substantial source of CO₂.

Overall, forests contain just over half of the **carbon** in terrestrial vegetation and soil, amounting to 1200 Gt of carbon. Boreal (coniferous) forests account for more carbon than any other terrestrial ecosystem (26 percent), while tropical and temperate forests account for 20 and 7 percent respectively. The Intergovernmental Panel on Climate Change (IPCC) has estimated that, globally, carbon sequestration from reduced deforestation, forest regeneration and plantation development could equal approximately 15 percent of the total carbon dioxide emissions generated by fossil fuels.

Crop intensification has the potential to structurally lower crop productivity through land degradation. This term refers to the reduction of the land's capacity to provide an ecosystem functioning over a period of time for the beneficiaries of these functions, namely farming.

According to the Land Degradation Assessment in Drylands (LADA) initiative, **land degradation** costs an estimated US\$40 billion annually worldwide, without taking into account the hidden costs incurred by increased fertilizer use and loss of biodiversity and unique landscapes. The consequences of land degradation include reduced land productivity and socio-economic problems such as uncertainty in food security, migration, limited economic development and damage to ecosystems. Reclamation of degraded land is costly and, if severely degraded, impractical.

Map 55:



Source: FAO, Statistics Division

Metalink: [P4.ENV.FAO.FOR.LCF.SQ](#), p. 348 

- Carbon content in topsoil is a good measure of soil fertility, but when removed, soil depletion results, leading to poor crop yields
- Depletion arises owing to excessively intense cultivation and inadequate soil management
- Sub-Saharan Africa and parts of Asia suffer from inherently low soil fertility

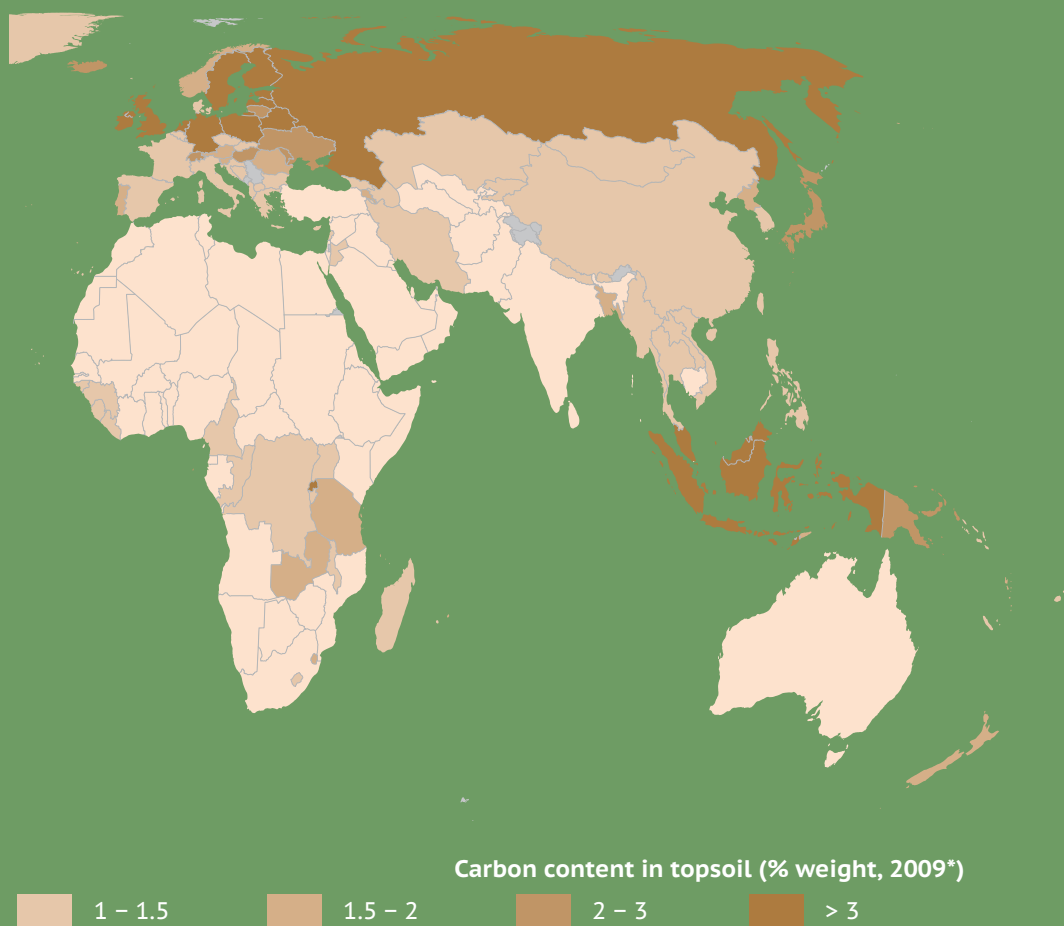
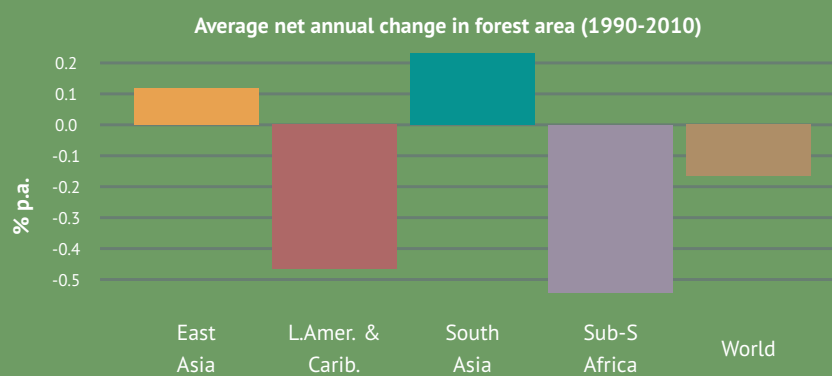


Chart 99: Rates of annual net loss of forests are still very high in some regions



Source: FAO, 2010. Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.DEF, p. 347 

Land degradation affects large zones and many people around the world, particularly in dryland areas. The transfer of critical production elements to other uses (e.g. dry-season grazing lands), the introduction of cash crops, and the use of water for industrial and urban purposes at the expense of rural agricultural producers sever the links in traditional dryland production chains. Left uncompensated, such changes lead to the breakdown of entire production systems.

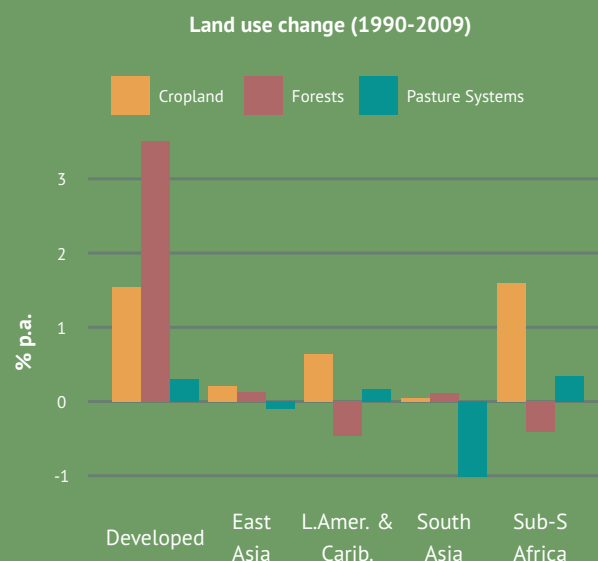
Removing the protective cover to reduce competition for water and nutrients, ploughing, heavy grazing and deforestation leave the soil highly vulnerable to wind erosion, particularly during severe droughts. Heavy grazing around water points or during long droughts prevents or delays the re-growth of vegetation or favours only invasive shrubs.

This problem is particularly acute in numerous parts of sub-Saharan Africa, where inherently low soil fertility, severe nutrient depletion and poor soil structure are prevalent. Large fertilizer applications are unaffordable and too risky in these low-potential rainfed cropping systems. However, sustainable land and water management techniques can greatly restore productivity. These techniques include soil fertility management, applying a combination of organic and inorganic nutrients, agro-nomic techniques (such as plant diversity, agroforestry, crop rotation) and the maintenance of protective soil cover.

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 State of the World's Forests 2011 (www.fao.org/docrep/013/i2000e/i2000e00.htm)
- FAO Global Forest Resources Assessment 2010 (www.fao.org/forestry/fra/fra2010/en/)
- UN International Year of Forests 2011 (www.fao.org/forestry/iyf2011/en/)
- FAO Land degradation assessment (www.fao.org/nr/land/degradation/en/)
- FAO Land Degradation Assessment in Drylands, LADA (www.fao.org/nr/lada/)

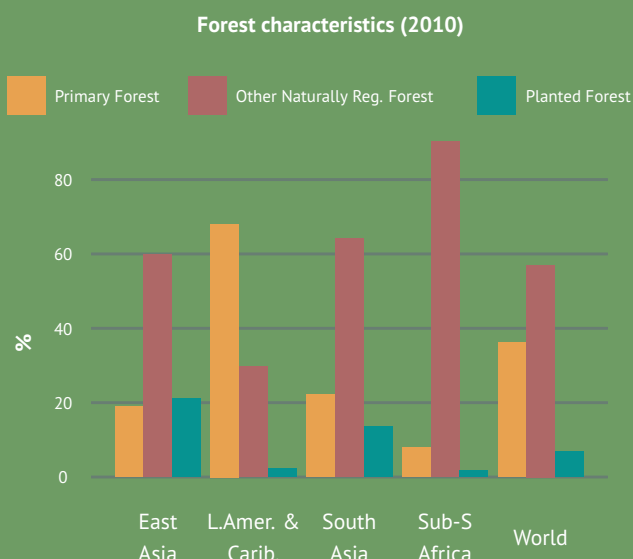
Chart 100: Cropland has expanded at the expense of forest cover



Source: FAO, Statistics Division (FAOSTAT)

Metalink: P4.ENV.FAO.ESS.LAND.CROP, p. 346

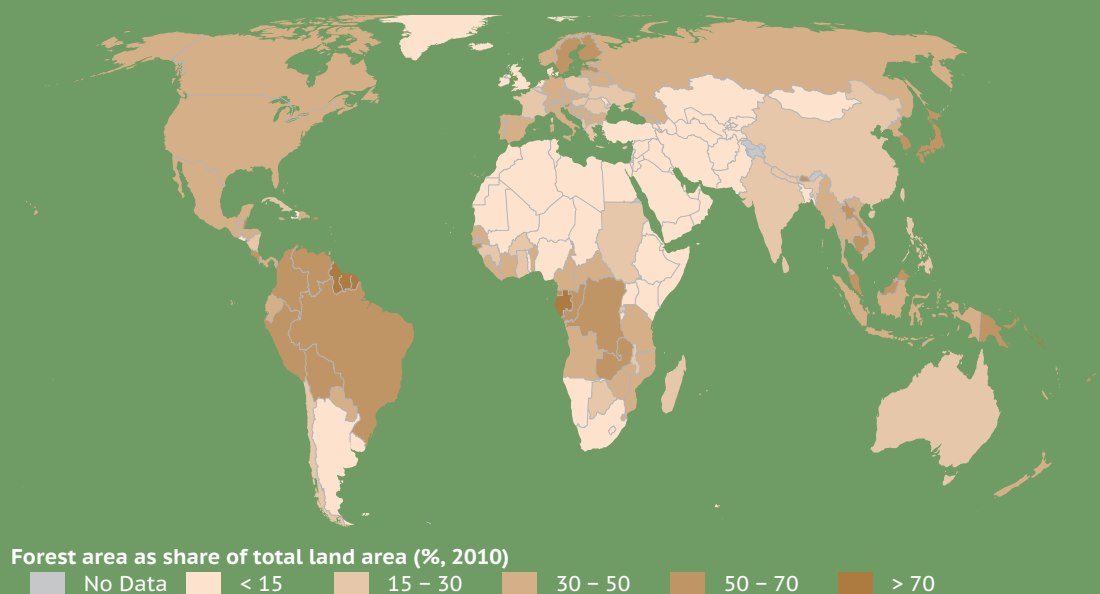
Chart 101: Primary forests now make up a small proportion of forest area



Source: FAO, 2010. Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.FOCx, p. 347

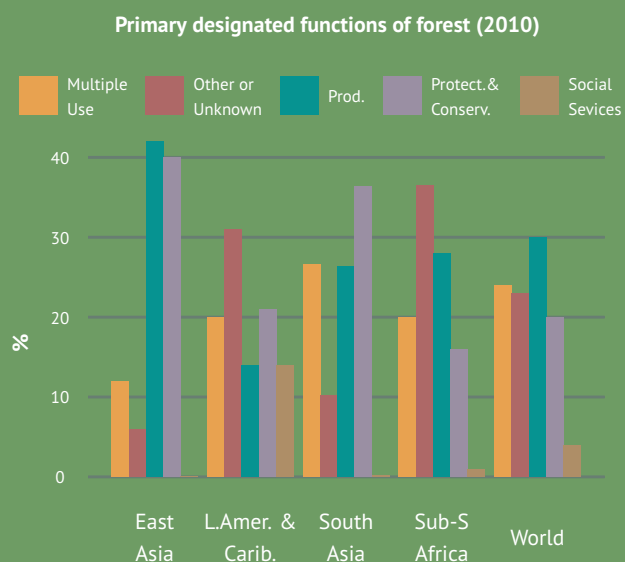
Map 56: At 4 billion hectares, the world's forests cover 31 percent of total land area



Source: FAO, 2010. Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.FOA, p. 347 

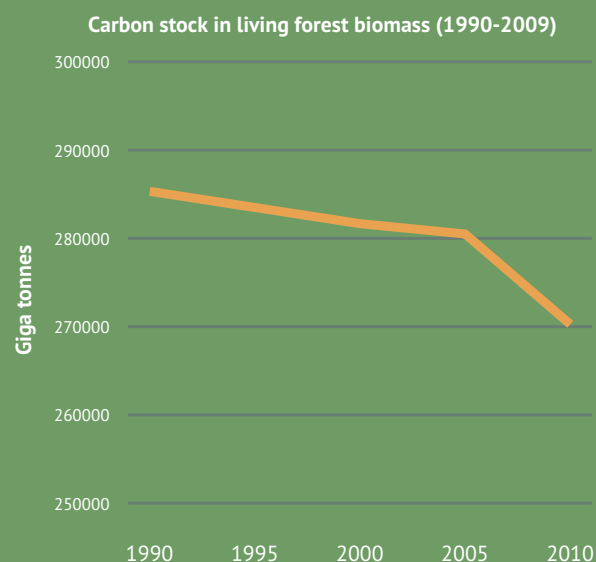
Chart 102: Other than wood production, forests perform a diverse set of functions across regions



Source: FAO, 2010. Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.PFF, p. 347 

Chart 103: 289 gigatonnes of carbon are stored in global forest biomass, but levels have fallen owing to a reduction in prime carbon-storing forests



Source: FAO, 2010. Global Forest Resources Assessment 2010

Metalink: P4.ENV.FAO.FOR.LCF.CSFO, p. 347 

Water

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

Global demand for water has risen sharply within the last century. At the beginning of the twentieth-century, each person withdrew 360 m^3 of water on average per year. By the year 2005 this had risen to 607 m^3 , while total annual water withdrawal by agriculture, industry and municipalities together rose from 580 km^3 to 3941 km^3 over the same period.

Precipitation provides some of the water needed by crops to satisfy their transpiration requirements. The soil, acting as a buffer, stores part of the precipitation water as soil moisture and returns it to the crops in times of deficit. In humid climates, this mechanism is usually sufficient to ensure satisfactory growth in rain-fed agriculture. In arid climates or during the dry season, irrigation is required to compensate for the deficit resulting from insufficient or erratic precipitation.

Today, agriculture accounts for about 70 percent of the **freshwater withdrawals** in the world, mostly through irrigation. This has been crucial for gains in food production. Irrigation reduces drought risk and encourages crop diversification, thus enhancing rural incomes.

Consumptive use of **irrigation water** can be computed as the volume of water needed to compensate for the deficit between potential evapotranspiration of plants and effective precipitation over the crop's growing period. The pressure of irrigation on water resources can be defined as the share of water withdrawal in total renewable water resources.

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

Increasing **water productivity** is therefore critical in these countries. And, more generally, it is necessary to reduce over-extraction of groundwater, increase the infiltration of rainwater into soils and reduce the deterioration of water quality owing to waterlogging and salinization. Some of these phenomena are fuelled by agricultural intensification, which affects water availability through increased contamination of groundwater and surface water from fertilizers, pesticides and animal wastes.

Map 57:



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: [P4.ENV.FAO.NRL.WAT.TWWpc](https://www.fao.org/land-water/aquastat/en/indicators/P4 ENV FAO NRL WAT TWW pc), p. 348 

- In 2005, 3941 km^3 of water was withdrawn for agricultural, industrial and municipal purposes, representing on average 607 m^3 per person
- 70 percent of global water withdrawals accounted for by agriculture
- Increasing water scarcity increases the competition for water by different sectors

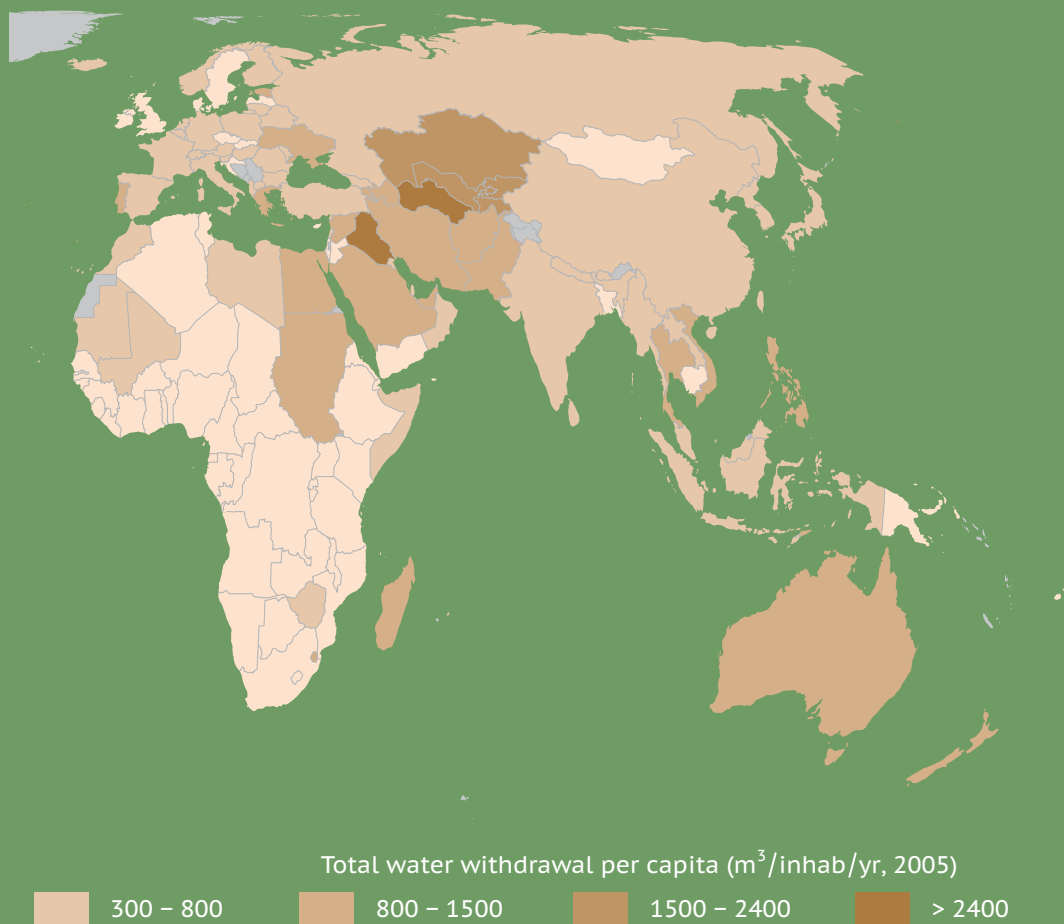
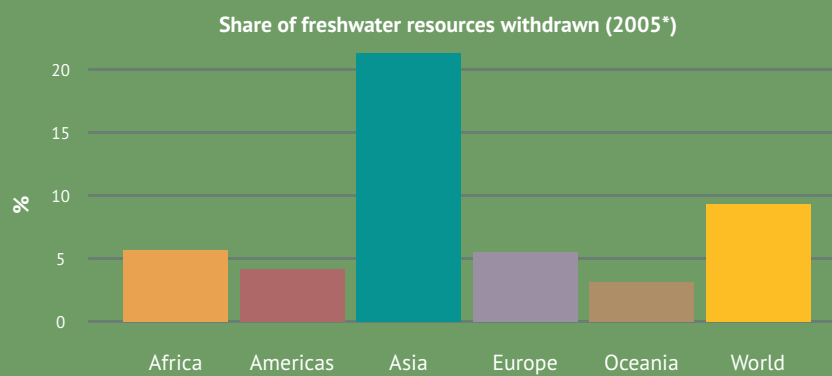


Chart 104: Share of freshwater resources withdrawn highest in Asia, owing to large annual withdrawals by countries in the west of the region



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.NRL.WAT.WWfr, p. 348 

Widespread and largely unregulated groundwater withdrawals by agriculture have resulted in depletion and degradation of some of the world's most accessible and high-quality aquifers. Examples exist in the Central Valley in California, the Ogallala aquifer in the US Great Plains, the Punjab in Pakistan, the North China Plain, the Souss basin in Morocco and parts of India. In some coastal areas, over-extraction causes saltwater to permeate into freshwater aquifers, making them unfit for irrigation or drinking water without costly treatment.

Irrigation mismanagement can also contribute to waterlogging and **salinization**. Waterlogged soil results from over-irrigation and inadequate drainage. It restricts plant growth and in many cases precedes salinization. Generally, salinization results from the build-up of dissolved solids in soils, and can also occur in rain-fed areas with inherently susceptible soils.

The United Nations Environmental Programme (UNEP) considers salinization to be the second largest cause of land loss. In some semi-arid countries, 10 to 50 percent of the irrigated area is affected to a greater or lesser degree with average yield decreases of 10 to 25 percent for many crops. Worldwide, FAO estimates that 34 million hectares (11 percent of the irrigated area) are affected by some level of salinization; Pakistan, China, United States of America and India represent more than 60 percent of the total (21 million ha). An additional 60-80 million hectares are affected to some extent by waterlogging and related salinity.

Appropriate measures need be implemented to limit over-extraction, waterlogging and salinization that can lead to considerable losses of irrigated land and result in unsustainably high operating costs.

Climate change prospects make such measures even more urgent. Given the likely increase of associated risks, such as aridity and further increases in soil moisture deficits, improving water management becomes even more crucial. Sustainable land and water management can not only increase resilience of farming in the face of climate change, but it can also have a positive impact on the drivers of climate change, offering cost-effective mitigation options. Many management techniques that strengthen production systems also tend to sequester carbon either above or below the ground, as well as reducing direct greenhouse gas emissions.

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/)

Map 58:



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: P4.ENV.FAO.NRL.WAT.WWfrag, p. 348 

- Measured against the sum of all renewable water resources, withdrawal by agriculture accounts for a significant share in some regions
- In water scarce regions, such as the Near East and North Africa, agricultural withdrawal can exceed 100 percent of freshwater resources
- In these instances, water is extracted from non-renewable aquifers (fossil water), desalination plants or from recycling

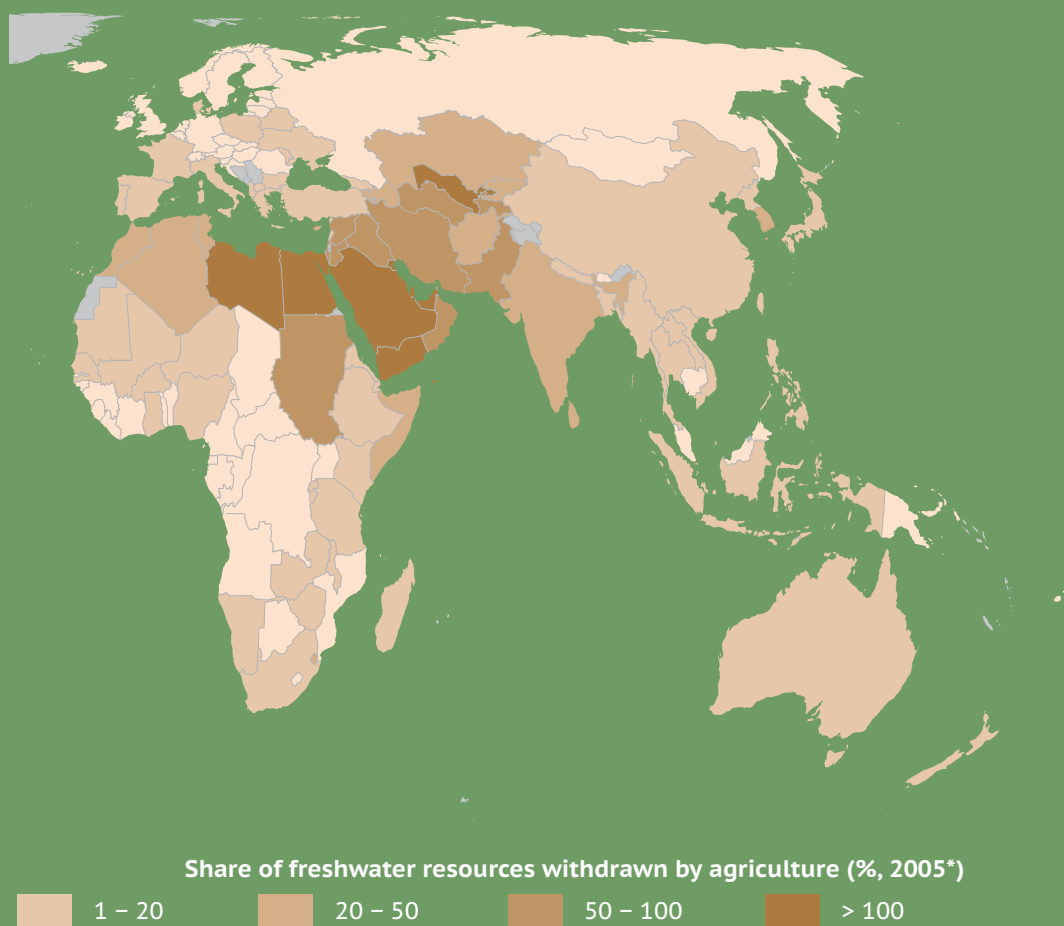
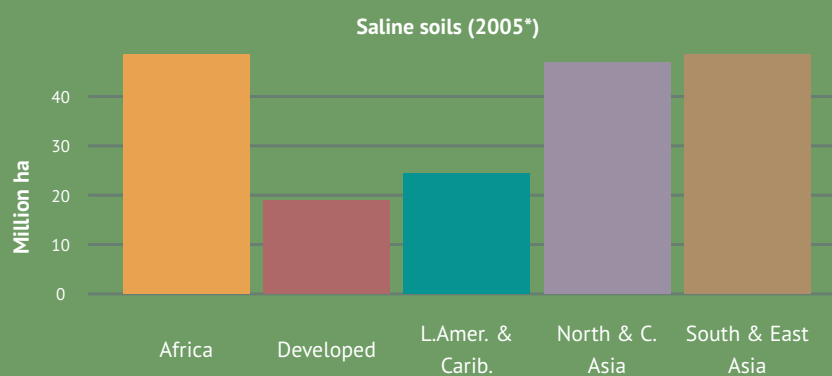


Chart 105: Around 168 million hectares of developing country land affected by salinity



Source: FAO, Statistics Division

Metalink: P4.ENV.FAO.POL.SAL, p. 349

Pollution from agriculture

Public attention tends to focus on the more perceptible signs of agriculture's impact on the environment, but the non-visible or less obvious effects of pollution have the greatest economic costs.

Agriculture affects air quality and the atmosphere in four main ways: 1) particulate matter and Greenhouse Gases (GHGs) from land clearance by fire (mainly rangeland and forest) and the burning of rice residues; 2) methane from rice and livestock production; 3) nitrous oxide from fertilizers and manure; and 4) ammonia from manure and urine.

Pollution from agriculture is not confined to atmospheric contaminants; the same pollutant sources – especially runoff from fertilizers, pesticides and animal wastes – can affect both groundwater and as well as surface water.

Pollution problems caused by agriculture are by no means insurmountable. Industry has shown that the environmental impact of agricultural pollution can be moderated through better management and regulation.

Soot, dust and trace gases are released by biomass burning during forest, bush or rangeland clearance for agriculture. Burning is traditionally practised in “slash and burn” tropical farming, in firing of savannah regions by pastoralists to stimulate forage growth and in clearing of fallow land and disposing of crop residues, particularly rice. Burning has had major global impacts, causing air pollution in tropical regions far from the source of the fires.

Agriculture now contributes about 30 percent of total global anthropogenic (human induced) **emissions of GHGs**. There is increasing concern not just with carbon dioxide but also with the growth of agricultural emissions of other greenhouse producing gases such as methane, nitrous oxide and ammonia arising from crop and livestock production. In some countries these can account for more than 80 percent of GHG emissions from agriculture. The conversion of tropical forests to agricultural land, the expansion of rice and livestock production and the increased use of nitrogen fertilizers have all been significant contributors to GHG emissions.

Map 59:



Source: World Bank

Metalink: [P4.ENV.WBK.WDI.POL.MTHEA](#), p. 351 

- Methane is a principal greenhouse gas driving climate change
- It has a warming potential 20 times more powerful than carbon dioxide
- Global methane emissions currently amount to about 540 million tonnes per annum with agriculture contributing around 40 percent

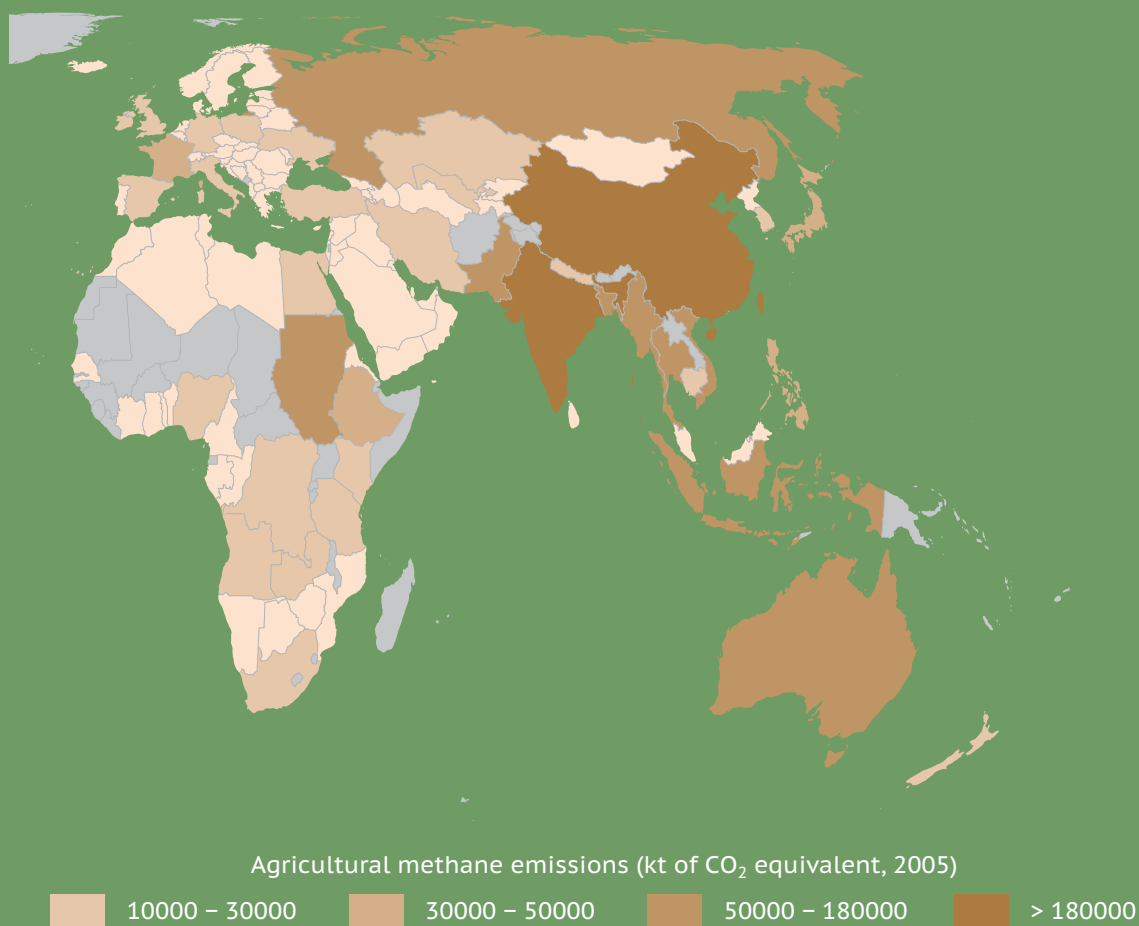
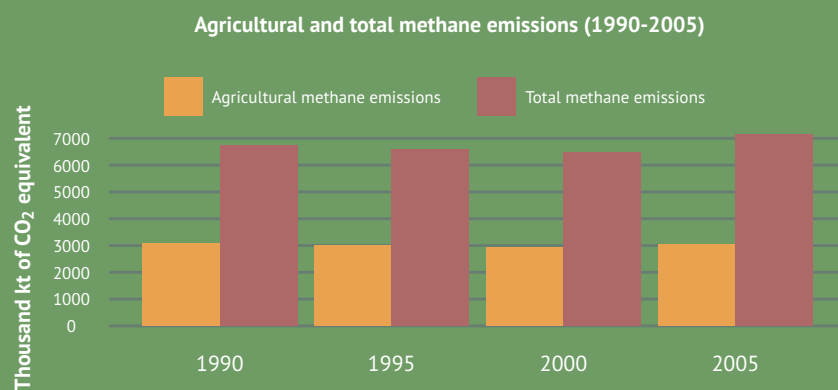


Chart 106: Despite a reduction in recent years, agriculture still accounts for more than 40 percent of total methane emissions



Source: World Bank

Metalink: P4.ENV.WBK.WDI.POL.MTHEA, p. 351 

Methane is a principal GHG driving climate change. Its warming potential is about 20 times more powerful than carbon dioxide. Global methane emissions amount at present to about 540 million tonnes per annum, increasing at an annual rate of 20-30 million tonnes. Rice production currently contributes about 11 percent of global methane emissions (up to 90 percent of the methane from rice fields is emitted through the rice plant). Depending on the extent and level of intensification, around 15 percent comes from livestock (from enteric fermentation by cattle, sheep and goats and from animal excreta). The storage of manure in a liquid or waterlogged state is another principal source of methane emissions from agriculture – these are conditions typical of the lagoons, pits and storage tanks used by intensive stall-feeding systems.

But there are solutions. For instance, as ruminant production structures in developing countries evolve towards those found in industrial ones, the lessons of improved feed intake and digestibility can significantly lower emissions per animal. Regarding the storage of manure, when appropriate technologies are introduced to harness methane in local power production, as has been done in some South and East Asian countries, environmental impacts can even become beneficial. Finally, as a greater proportion of rice is being grown under controlled irrigation and better nutrient management, methane emissions are potentially manageable.

Nitrous oxide (N_2O) is the other powerful GHG for which agriculture is the dominant human-induced or anthropogenic source. Mineral fertilizer use and cattle production are the main culprits. N_2O is generated by natural biogenic processes, but is enhanced by agriculture through nitrogen fertilizers, the creation of crop residues, animal urine and faeces, and nitrogen leaching and runoff. N_2O formation is sensitive to climate, soil type, tillage practices and type and placement of fertilizer. It is also linked to the release of nitric oxide and ammonia, which contribute to acid rain and the acidification of soils and drainage systems. Nitrogen fertilizer, a major source of nitrous oxide emissions, is used very inefficiently in many developing countries. In China, for example, the world's largest nitrogen fertilizer consumer, it is not uncommon for half to be lost by volatilization and 5 to 10 percent by leaching.

The livestock sector is the other major source of N_2O emissions resulting from the breakdown (nitrification-denitrification) of manure applied as fertilizer primarily to crops but also to pastures. In developed countries, only about 15 percent of the nitrogen applied to crops is thought to be derived from livestock manure. In developing countries, the relative contribution of livestock manure can be high but is not well documented. However, where growth in industrial-scale livestock production is separate from crop production, where labour availability is low and where subsidies are available, the trend is to rely more on mineral fertilizers to maintain or raise crop yields.

Map 60:



Source: World Bank

Metalink: [P4.ENV.WBK.WDI.POL.NOEA](https://data.worldbank.org/indicator/P4.ENV.WBK.WDI.POL.NOEA), p. 351 

- Nitrous oxide is the other powerful green house gas for which agriculture is the dominant human-induced source
- Around two-thirds of total nitrous oxide emissions are attributed to agriculture
- Major sources of emissions are fertilizer production and livestock rearing

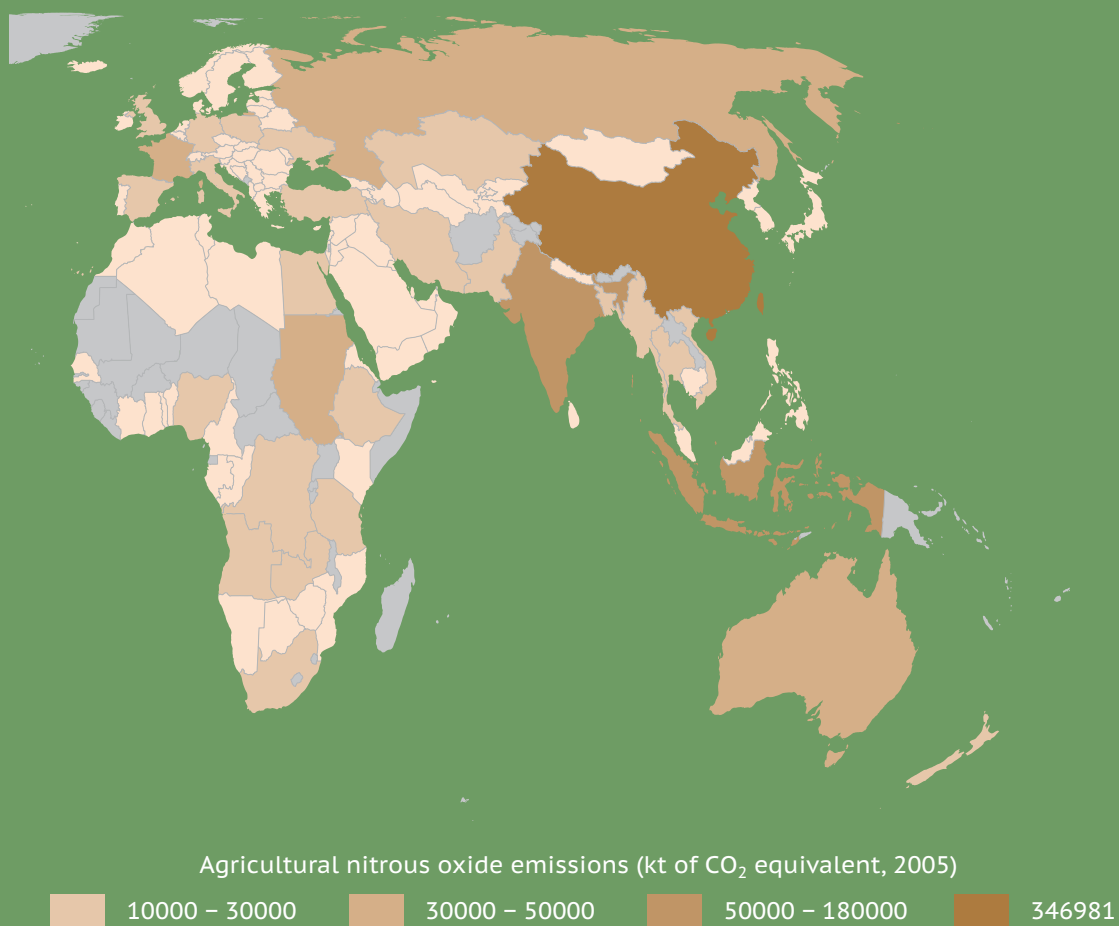
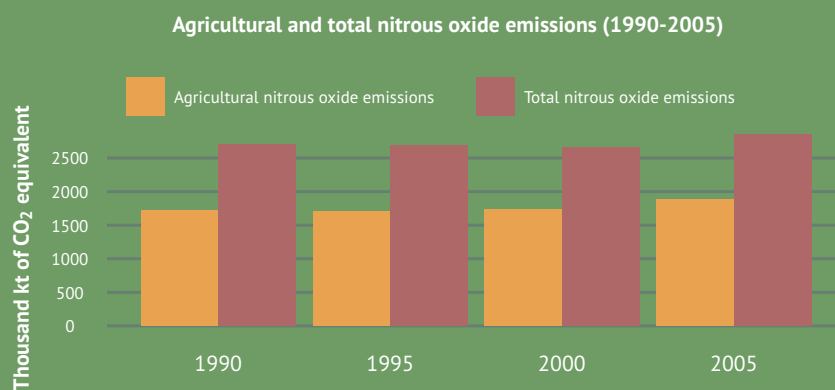


Chart 107: Agriculture accounts for more than 66 percent of total nitrous oxide emissions, and rising



Source: World Bank

Metalink: [P4.ENV.WBK.WDI.POL.NOEA](#), p. 351



Agriculture is the dominant source of **ammonia** emissions, which are nearly fourfold greater than natural emissions. Livestock production, particularly of cattle, accounts for about 44 percent of ammonia emissions, mineral fertilizers for 17 percent and biomass burning and crop residues for about 11 percent, of the global total. Volatilization rates from mineral fertilizers in developing countries are about four times greater than in developed countries because of higher temperatures and lower quality fertilizers. Ammonia emissions are potentially even more acidifying than emissions of sulphur dioxide and nitrogen oxides.

Concerning **water pollution** by agriculture, extensive leaching of nitrates from soils into surface water and groundwater, which was traditionally an issue in almost all industrial countries, is now becoming a problem in many developing countries. It poses a risk to human health and contributes to eutrophication of rivers, lakes and coastal waters. The bulk comes from diffuse sources arising from mineral fertilizer and manure use on both crops and grasslands. The problem occurs primarily when nitrogen application rates exceed crop nutrient uptake. The risk depends on crop type and yield, soil type and underlying rocks. However, extensive areas in both developed and developing countries already receive large nitrogen fertilizer applications in commensurate with the availability of adequate soil moisture, other nutrients and management practices employed to attain higher yields.

Pesticide use, the cause of serious water pollution in many industrialized countries, is now appearing in developing countries as well, and is exacerbated by the availability of cheap, out-of-patent, locally produced chemicals. Shortages of farm labour, reduced use of flood irrigation for rice and the spread of minimal tillage systems are leading to major increases in the use of herbicides. Water pollution also arises from intensive dairying and landless rearing of pigs and poultry, particularly in East Asia. The problem arises from discharges or runoff of nitrogen and other nutrients into surface waters because of bad waste management.

Further reading

- FAO Natural Resources Department (www.fao.org/nr/nr-home/en/)
- Bruinsma (2003)

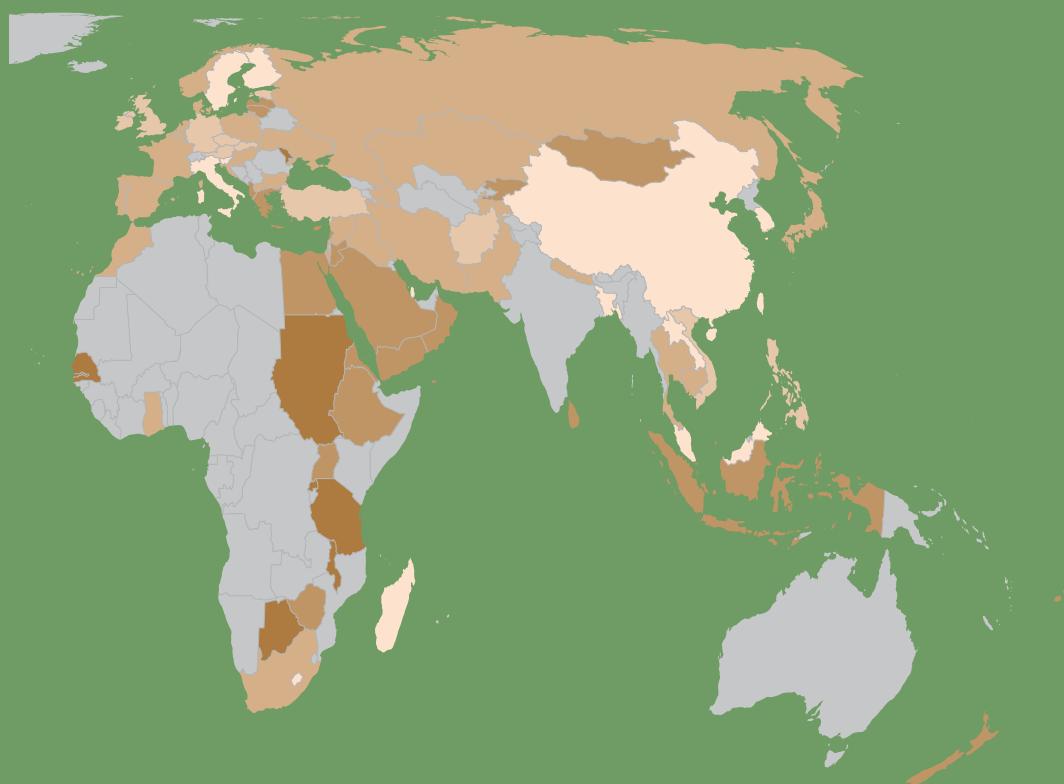
Map 61:



Source: World Bank

Metalink: [P4.ENV.WBK.WDI.POL.WATF](https://data.worldbank.org/indicator/P4.ENV.WBK.WDI.POL.WATF), p. 351 

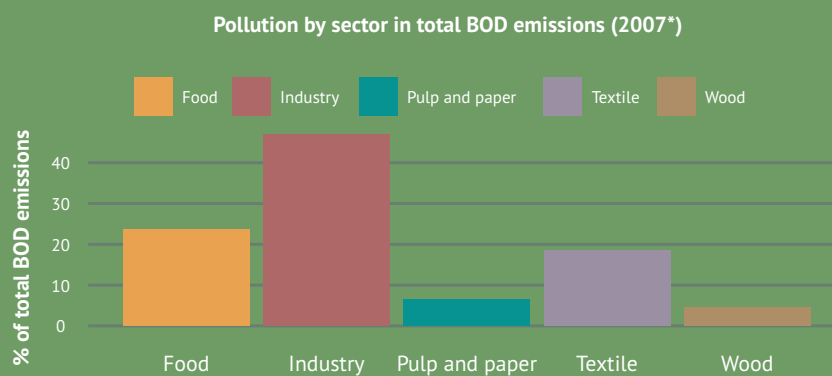
- Water pollution is becoming a serious concern in many developing countries
- In lower income countries, the contribution of the food sector to the production of organic water pollutants amounts to 54 percent, compared to 40 percent in high-income countries
- Unregulated livestock waste management and fertilizer applications result in the substantial leaching of nitrates from soils into surface water and groundwater



Water pollution, food industry (% of total BOD emissions, 2007*)



Chart 108: The food sector is a significant source of water pollution but industry dominates



Source: World Bank

Metalink: P4.ENV.WBK.WDI.POL.WAT, p. 351

Climate change

Historically, farmers, pastoralists, forest dwellers and fishers have learned to cope with climate variability and have often adapted crops and farming practices to suit new conditions. But the severity and pace of climate change is presenting new, unprecedented challenges.

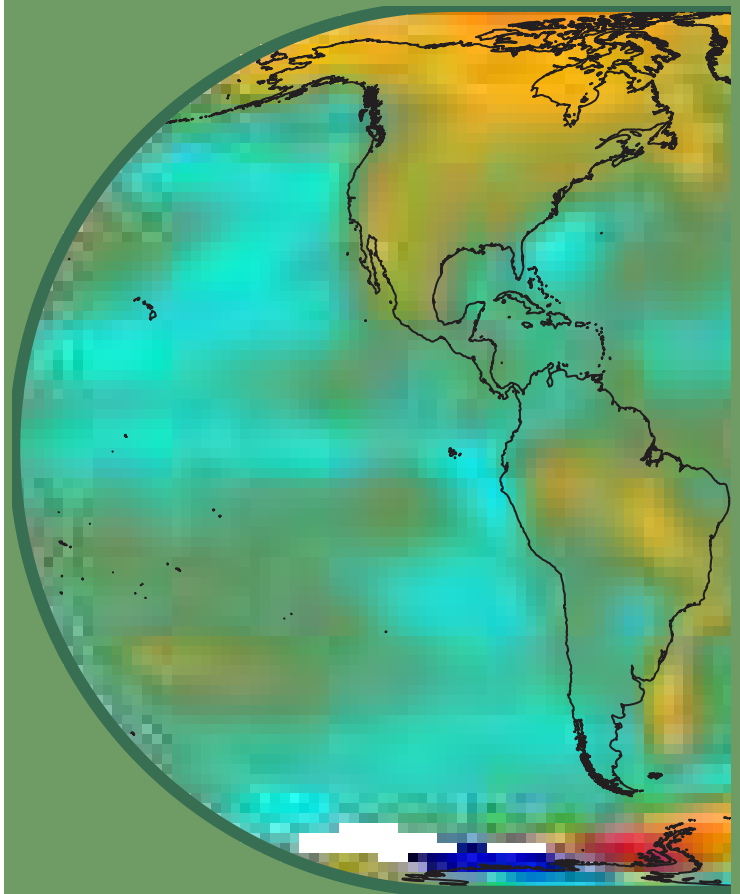
The poorest and most food-insecure regions around the globe are the most vulnerable to effects of climate change. In Africa, low levels of food security and economic development conspire with high levels of climate risk, while large populations and heavily exploited natural resources and climate risk threaten South Asia's poor.

Climate change will significantly impact agriculture by increasing water demand, limiting crop productivity and reducing water availability in areas where irrigation is most needed or has comparative advantage. Global atmospheric **temperature** is predicted to rise by approximately 4 °C by 2080, consistent with a doubling of atmospheric CO₂ concentration. Mean temperatures are expected to rise at a faster rate in the upper latitudes, with slower rates in equatorial regions. Mean temperature rise at altitude is expected to be higher than at sea level, resulting in intensification of convective precipitation and acceleration of snowmelt and glacier retreat.

In response to global warming, the hydrological cycle is expected to accelerate as rising temperatures increase the rate of evaporation from land and sea. Thus rainfall is predicted to rise in the tropics and in higher latitudes, but decrease in the already dry semi-arid to arid mid-latitudes and in the interior of large continents. Water-scarce areas of the world will generally become drier and hotter. Both rainfall and temperatures are predicted to become more variable, with a consequent higher incidence of droughts and floods, sometimes in the same place.

The future availability of water to match crop water requirements is compounded in areas with lower rainfall, i.e. in those that are presently arid or semi-arid, in addition to the southern, drier parts of Europe and North America. Runoff (the water flow from soil when infiltrated to full capacity) and groundwater recharge are both likely to decline dramatically in these areas.

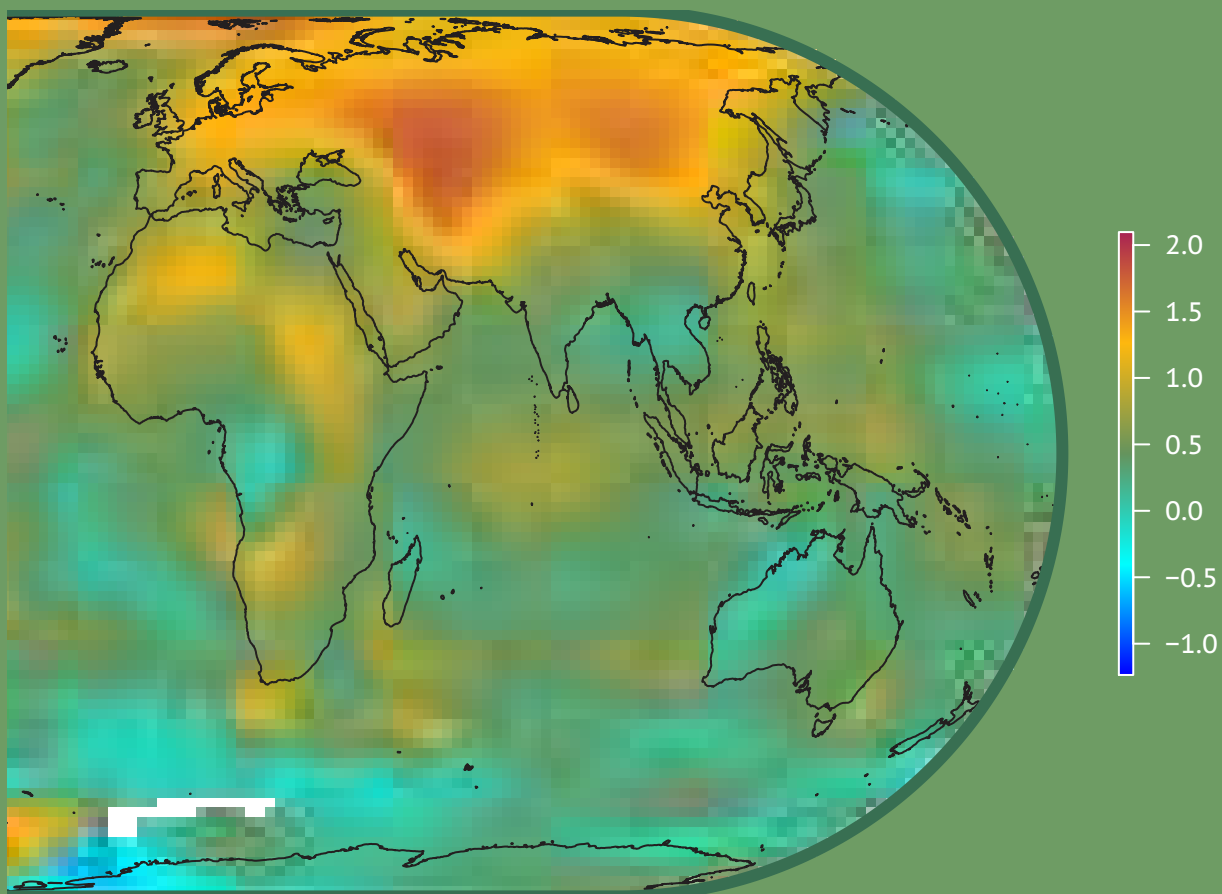
Map 62:



Source: IPCC

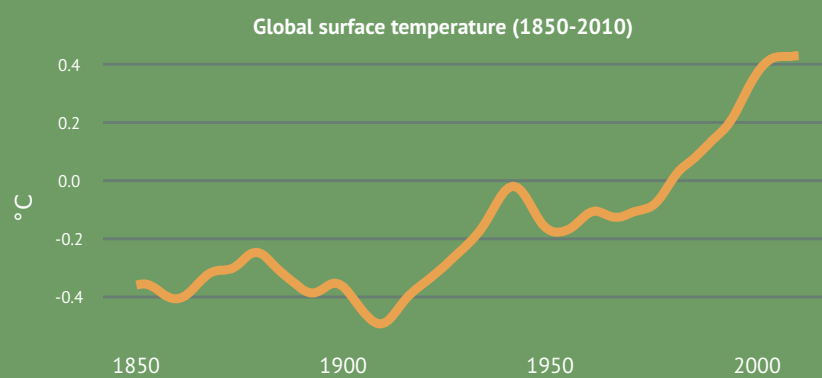
Metalink: [P4.ENV.IPCC.CC.GSTG](#), p. 349 

- Global warming will have significant impacts on agriculture
- Most notably, these include rising surface temperatures, increasing carbon dioxide concentration and changing rainfall patterns
- The extent of these changes will determine the carrying capacity of bio systems to produce enough food



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

Chart 109: Rising surface temperature is symptomatic of climatic change



Source: IPCC

Metalink: P4.ENV.IPCC.CC.GST, p. 349

Runoff is also expected to decline dramatically in areas where annual potential evapotranspiration exceeds rainfall, such as in south eastern Australia where a 40 percent decrease is anticipated. Relatively small reductions in rainfall will translate into much larger reductions in runoff, for example, a 5 percent precipitation decrease in Morocco will result in a 25 percent reduction in runoff.

Although mean annual runoff may be less affected in glacier-fed river systems, the timing of flows will change, which could have critical consequences for agriculture. Where **rainfall** volume increases and becomes more intense (Indian monsoon, humid tropics), a greater proportion of runoff will occur as flood flow that should be captured in dams or groundwater to be useable.

About 40 percent of the world's irrigation is supported by flows originating in the Himalayas and other large mountain systems (e.g. Rocky Mountains in the western United States of America and Tien Shan in Central Asia). The loss of glaciers worldwide has been one of the strongest indicators of global warming. The impacts on some river systems (such as the Indus) are likely to be significant and will change the availability of surface water for storage and diversion as well as the amount of groundwater recharge.

As temperatures rise, the efficiency of photosynthesis increases to a maximum and then falls, while the rate of respiration continues to increase more or less up to the point that a plant dies. All else being equal, the productivity of vegetation thus declines once temperature exceeds an optimum. In general, plants are more sensitive to heat stress at specific earlier growth stages (sometimes over relatively short periods), than to seasonal average temperatures.

Increased atmospheric temperature will extend the length of the growing season in the northern temperate zones, but will reduce it almost everywhere else. Coupled with increased rates of evapotranspiration, water productivity and potential crop yields will fall. However, low yields and water productivity in many parts of the developing world do not necessarily mean that they will decline in the long term. Rather, farmers will have to make agronomic improvements to increase productivity from current levels.

Map 63:



Source: FAO, Land and Water Division (AQUASTAT)

Metalink: [P4.ENV.FAO.ACQ.CLIM.APD](#), p. 344 

- Average precipitation is the long-term average in depth (over space and time) of annual rainfall in a country
- Harvest outcomes in many countries are dependent on sufficient rainfall
- Over 90 percent of agriculture in sub-Saharan Africa, for example, is managed under rainfed systems

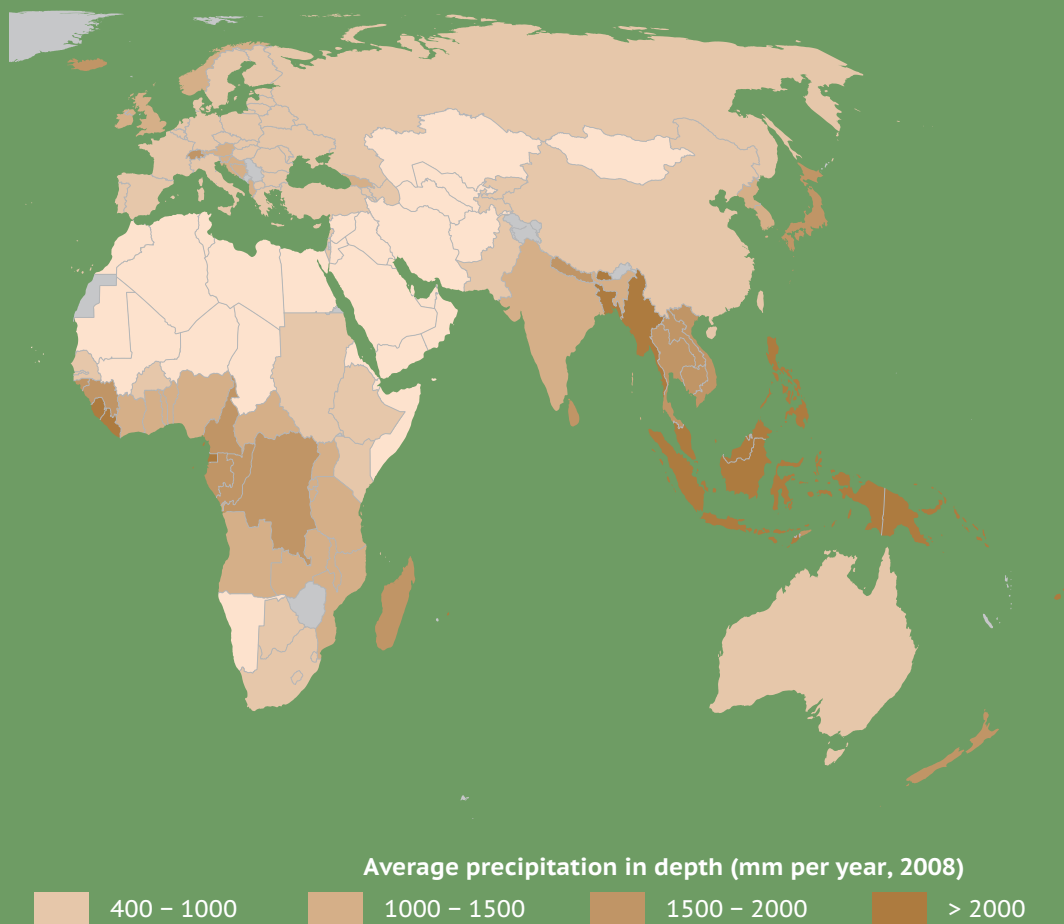
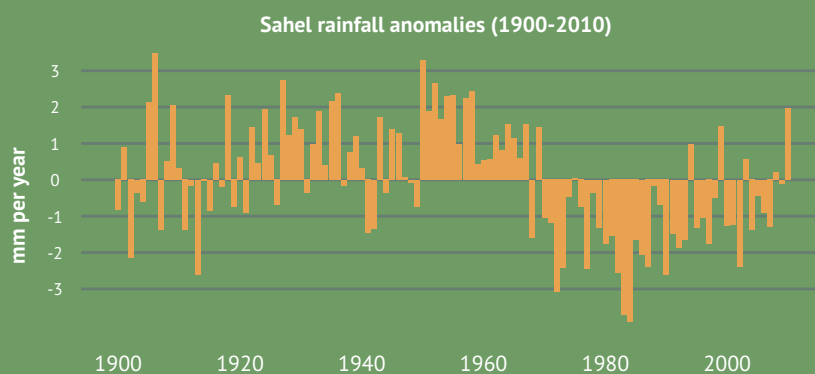


Chart 110: Despite a large increase in average rainfall in 2010, Sahel precipitation rates have been persistently below the long-term mean in recent decades



Source: JISAO

Metalink: P4.ENV.JISAO.CLIM.SAHEL, p. 350

Increased atmospheric **concentrations of CO₂** enhance photosynthetic efficiency and reduce rates of respiration, offsetting the loss of production potential due to temperature rise. However, scientific evidence demonstrates that all factors of production need to be optimal to realize the benefits of CO₂ fertilisation.

Early hopes for substantial CO₂ mitigation of production losses from global warming have not materialized. Also, by the time CO₂ levels have doubled, temperatures will also have risen by 4 °C, negating any benefit.

Agriculture will also be impacted by more active storm systems, especially in the tropics, where cyclone activity is likely to intensify in conjunction with increasing ocean temperatures. The evidence of this is starting to emerge.

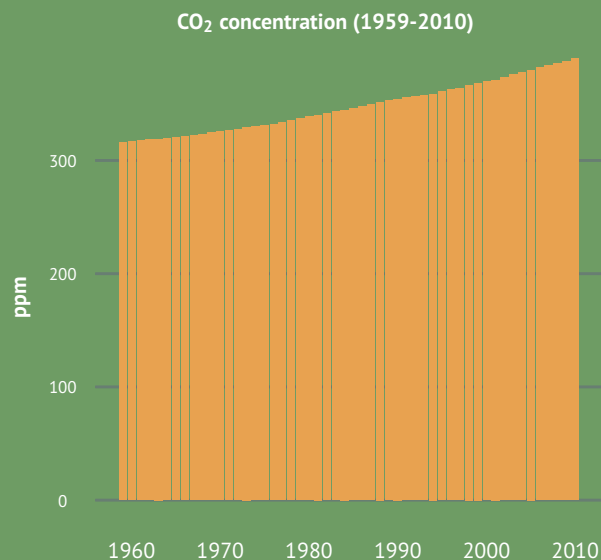
Sea level rise will affect drainage and water levels in coastal areas, particularly in low-lying deltas, and will result in saline intrusion into coastal aquifers and river estuaries.

In order to stabilize output and income, production systems must become more resilient, i.e. more capable of performing well in the face of disruptive events. More productive and resilient agriculture requires transformations in the management of natural resources (e.g. land, water, soil nutrients, and genetic resources) and higher efficiency in the use of these resources and inputs for production. Transitioning to such systems could also generate significant mitigation benefits by increasing carbon sinks, as well as reducing emissions per unit of agricultural product.

Further reading

- FAO Climate Change (www.fao.org/climatechange/)
- FAO Climate change, water and food security - FAO (www.fao.org/docrep/014/i2096e/i2096e00.htm)
- 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/)

Chart 111: In the past two decades CO₂ concentration has risen by 10 percent. Land use and biomass burning account for over 9 percent of global CO₂ emissions

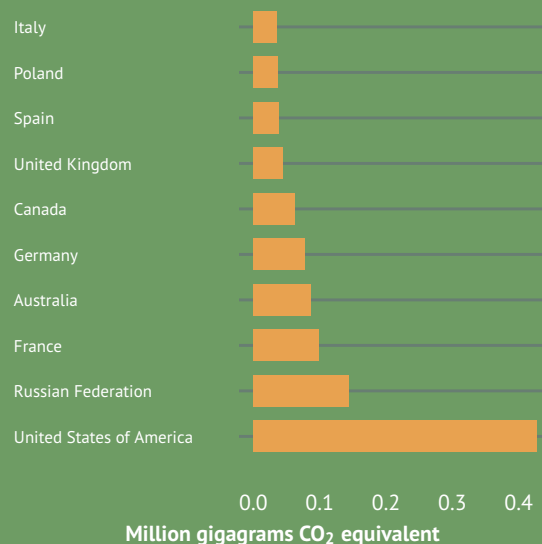


Source: IPCC

Metalink: P4.ENV.IPCC.CC.CO2, p. 349

Chart 112: Agriculture in the United States emits far more GHGs than any other country, and almost three times more than the next largest emitting country

Total Greenhouse Gas (GHG) emissions from agriculture (2008)



Source: World Bank

Metalink: P4.ENV.FAO.BIO.GHG.AG, p. 344 

Biodiversity and conservation

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

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

The conservation and sustainable use of biodiversity for food and agriculture plays a critical role in the fight against hunger, by ensuring environmental sustainability while increasing food and agriculture production. It is imperative to do so in a sustainable way: harvesting resources without compromising the natural capital, including biodiversity and ecosystem services, and capitalizing on biological processes.

To achieve sustainable increases in productivity and provide a sounder ecological basis for agriculture, a large reservoir of genetic and species diversity will need to be maintained and sustainably used. The use of multi-species and multi-breed herds and flocks is one strategy that many traditional livestock farmers use to maintain high diversity. Species combinations also enhance productivity in aquatic systems. Crop rotations, intercropping, alley farming and growing different varieties of a single crop have all been shown to have beneficial effects on crop performance, nutrient availability, pest and disease control and water management. Ensuring diversity will help maintain and rehabilitate productive ecosystems to supply future generations with abundant food and agriculture.

Further reading

- [FAO Biodiversity \(www.fao.org/biodiversity\)](http://www.fao.org/biodiversity)
- [UN International Year of Biodiversity 2010 \(www.fao.org/biodiversity/2010-international-year-of-biodiversity\)](http://www.fao.org/biodiversity/2010-international-year-of-biodiversity)

Map 64:



Source: World Bank

Metalink: [P4.ENV.WBK.WDI.CON.PROT](https://data.worldbank.org/indicator/P4.ENV.WBK.WDI.CON.PROT), p. 350 

- 12.5 million hectares of the world's land terrain is currently protected by law - but this represents a fraction of the world's land area
- What is more, protected areas are particularly scarce in countries that apply the most intensive production systems in agriculture

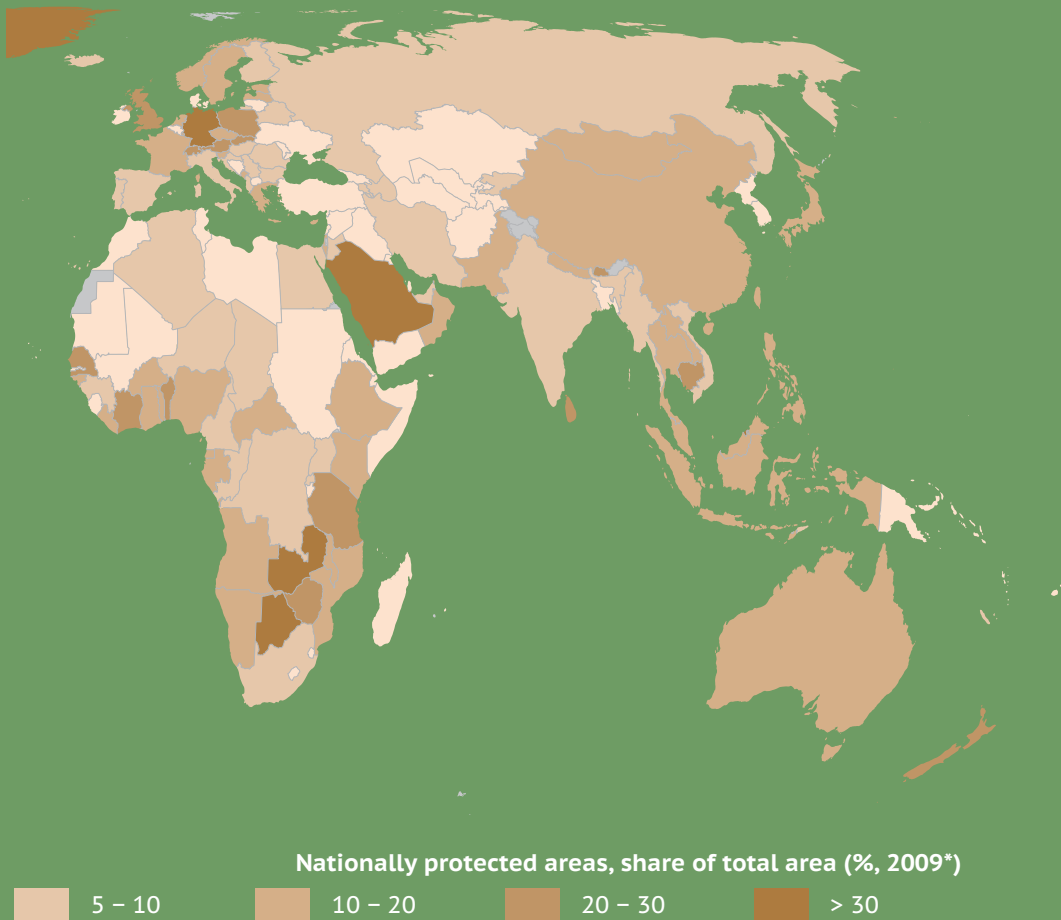
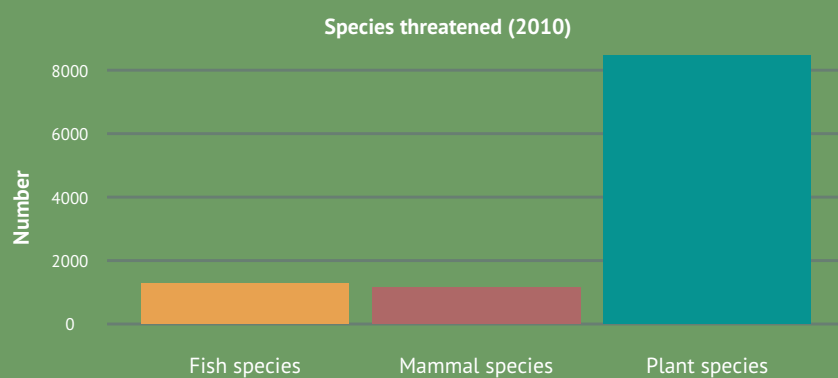


Chart 115: A large number of animal and plant species threatened from human activity including the intensification of agriculture



Source: World Bank

Metalink: P4.ENV.WBK.WDI.BIOD.PST, p. 350

Organic farming

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

Growth rates of land under organic management in Western Europe, Latin America and the Caribbean, and the United States of America have been impressive despite low-base beginnings and the reclassification of land. Between 1995 and 2010, the combined area of organic cultivation tripled to 38 million hectares. A number of industrial countries have action plans for developing organic agriculture. Targets are set for the sector's growth and resources are allocated to compensate farmers during, and sometimes after, the conversion period, and also to support research and extension in organic agriculture.

Organic practices that encourage soil biological activity and nutrient cycling include: manipulating crop rotations and strip cropping; green manuring and organic fertilization (animal manure, compost, crop residues), minimum tillage or zero tillage and avoidance of pesticide and herbicide use. Research indicates that organic agriculture significantly increases the density of beneficial invertebrates, earthworms, root symbionts and other micro-organisms (fungi, bacteria). Properly managed organic agriculture reduces or eliminates water pollution and helps conserve water and soil on the farm.

At the international level, the general principles and requirements for organic agriculture are defined in the Codex Alimentarius guidelines adopted in 1999 and regularly updated between 2001 and 2010. The growing interest in organic crop, livestock and fish products is mainly driven by health and food quality concerns. However, organic agriculture does not make a product claim that its food is healthier or safer, but rather a process claim intending to make food production and processing methods respectful of the environment.

Map 65:



Source: FAO-FiBL-IFOAM

Metalink: [P4.ENV.FAO.BIO.ORGAN.HA](https://www.fao.org/land-water/organic-agriculture/organic-agriculture-ha/en), p. 345 

- 38 million hectares of land were organically farmed in 2009
- Oceania has more area under organic farming than any other region

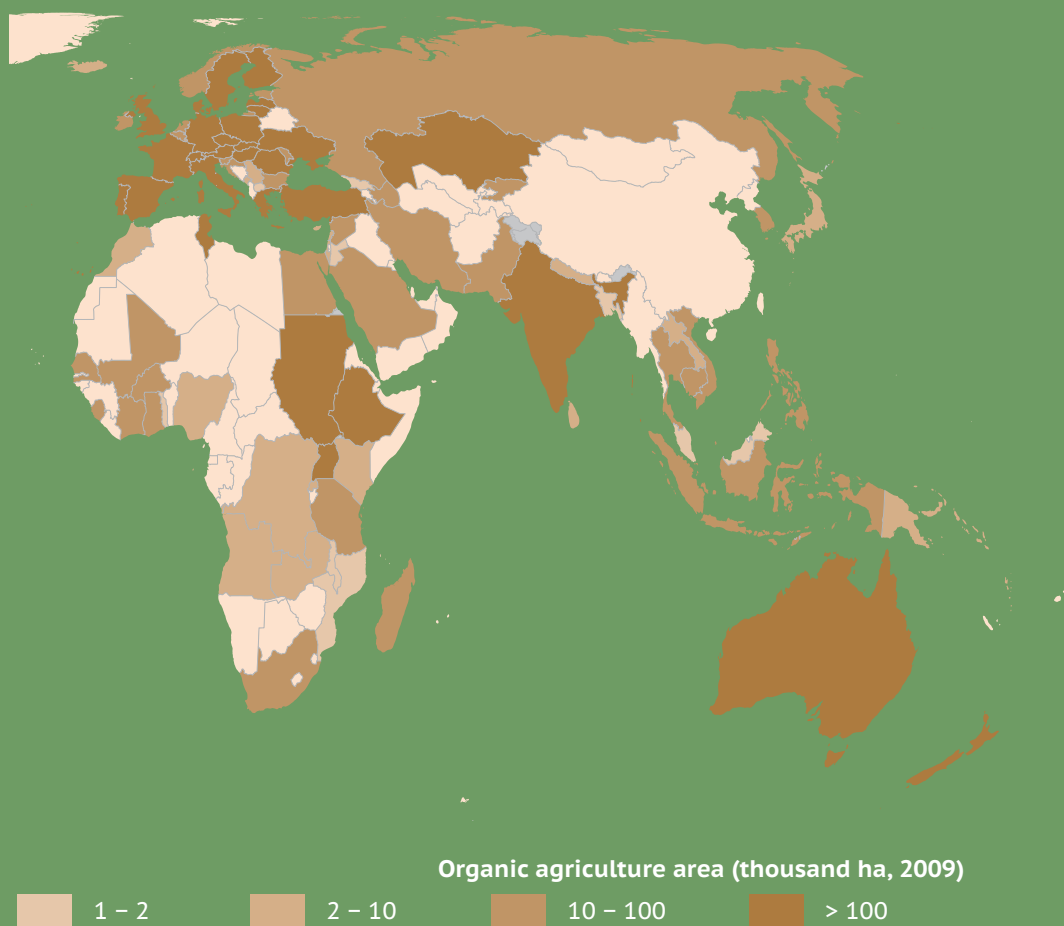
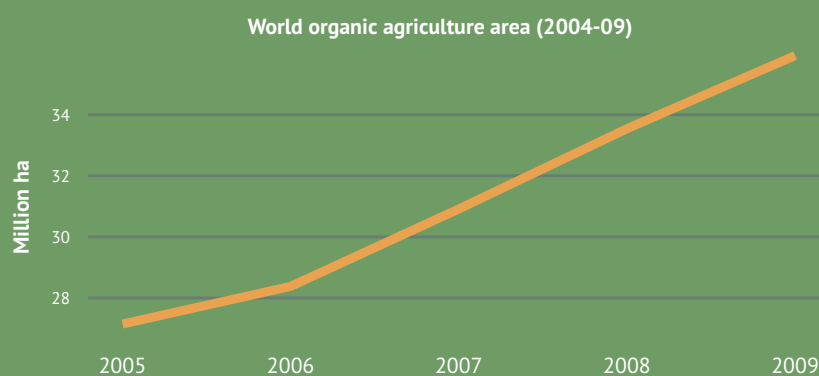


Chart 116: Organic area rose by almost 30 percent in the second half of the last decade



Source: FAO-FiBL-IFOAM

Metalink: [P4.ENV.FAO.BIO.ORGAN.HA](https://www.fao.org/3/a/p4env040.pdf), p. 345



Organic agriculture is not limited to certified organic farms and products. Non-certified products can be included as long as they fully meet the requirements of organic agriculture. This is the case for many non-certified organic agricultural systems in both developing and industrial countries where produce is consumed locally or sold directly on the farm or without labels.

Organic production systems can make important contributions to food supply stability and farmer livelihoods by establishing soil fertility and providing diversity and thus resilience to food production systems in light of the many uncertainties of climate change. In particular, they contribute positively to food stability in terms of fertile and well-structured soils, improved water retention, protection of biodiversity with beneficial side effects on phytomedicine (plant health) stability and nutrients and efficient water use.

Thus far, organic agriculture has proven to be a relatively cheap and practical option to address climate instability. This option is based on scientific evidence for certain regions and extensive, though not scientifically documented, effective field application. Reports consistently show that organic systems have enhanced ability to withstand droughts and floods and maintain high resilience in the face of unpredictable impacts of climate change.

The deficits of organic agriculture are mainly related to lower productivity. However, the deficits should not be exaggerated. Significantly lower yields, those in the range of more than 20 to 30 percent compared to conventional agriculture, occur mostly in cash-crop-focused production systems and under most favourable climate and soil conditions.

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>)

Map 66:



Source: FAO-FiBL-IFOAM

Metalink: P4.ENV.FAO.BIO.ORGAN.SHA, p. 345 

- Despite significant growth in organic farming, as a percentage of overall area cultivated, the sector remains miniscule in comparison
- In Europe the percentage of agricultural area allocated to organic farming rises to single digit levels, but elsewhere a fraction of a percentage point is common

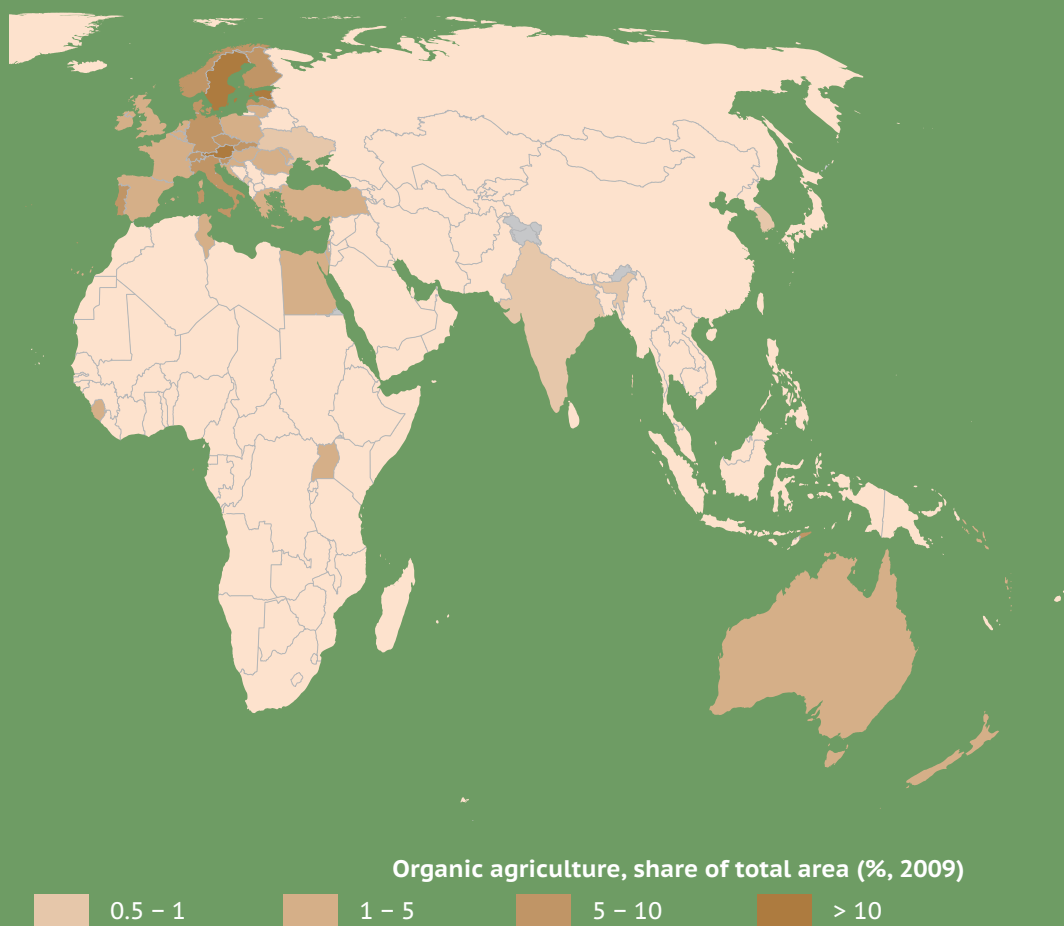
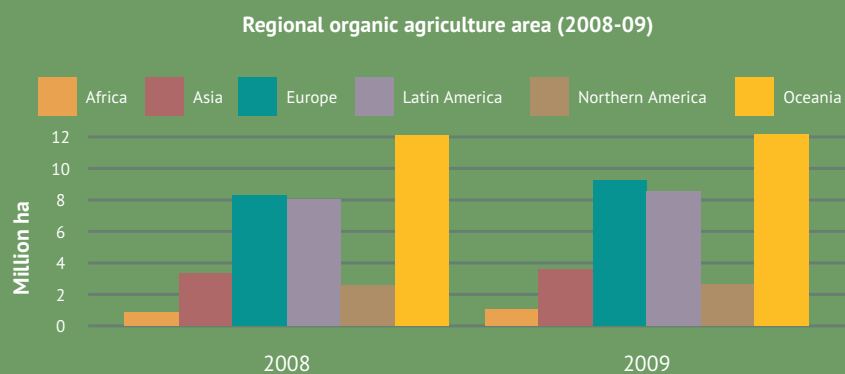


Chart 117: Europe added an extra one million hectares of organically farmed area in 2009



Source: FAO-FiBL-IFOAM

Metalink: [P4.ENV.FAO.BIO.ORGAN.HA](https://www.fao.org/3/a/p4env020.pdf), p. 345



Genetically modified crops

Biotechnology encompasses a wide range of technologies and they can be applied for a range of different purposes, such as the genetic improvement of plant varieties and animal populations to increase their yields or efficiency; genetic characterization and conservation of genetic resources; plant or animal disease diagnosis; vaccine development; and improvement of feeds. Some of the technologies may be applied to all the food and agriculture sectors, such as the use of molecular DNA markers or genetic modification, while others are more sector-specific, such as tissue culture (in crops and forest trees), embryo transfer (livestock) or triploidization and sex-reversal (fish).

Higher productivity holds the key in the fight against rural poverty. Biotechnology promises to boost productivity and thus raise rural incomes, much in the same way that the green revolution did in large parts of Asia during the 1960s to 1980s. Productivity gains encompass essentially all factors of agricultural production. This may mean higher crop and livestock yields, lower pesticide and fertilizer applications, less demanding production techniques, higher product quality, better storage and easier processing, or enhanced methods to monitor the health of plants and animals.

One type of technology, however, has given rise to a host of concerns and questions, namely **Genetically Modified Organisms (GMOs)**. GMOs are those organisms that have been modified by the application of recombinant DNA technology or genetic engineering, a technique used for altering a living organism's genetic material. With the rapid advances in biotechnology, a number of genetically modified (GM) crops or transgenic crops carrying novel traits have been developed and released for commercial agriculture production. These include, *inter alia*, pest resistant cotton, maize, canola (mainly Bt or *Bacillus thuringiensis*), herbicide glyphosate resistant soybean, cotton and viral disease resistant potatoes, papaya and squash. In addition, various transgenic crops are under development and not yet commercially released with traits for biofortification, phytoremediation and production of pharmaceuticals, such as rice with high level of carotenoid for production of Vitamin A (e.g. golden rice) and bananas with vaccines.

Commercial cultivation of transgenic crops started in the early 1990s. Herbicide tolerance and insect resistance are the main GM traits that are currently under commercial cultivation, and the main crops are: soybean, maize, canola and cotton. GM crops are now commercially planted on about 100 million hectares in some 22 developed and developing countries. Argentina, Brazil, China and India are the largest developing-country producers of transgenic crops. The choice of GM crops varies among the developing countries, with insect resistant cotton being the most important commercially produced transgenic crop in Asian and African countries, while herbicide-resistant soybean followed by insect-resistant corn is predominant in the Latin American continent.

Map 67:



Source: Clive James, ISAAA

Metalink: P4.ENV.ISAAA.BIO.GM.HA, p. 349 

- Almost 150 million hectares of world crop acreage planted with GM crops
- The Americas constitute the largest growing region, but GM cotton area is substantial in Asia

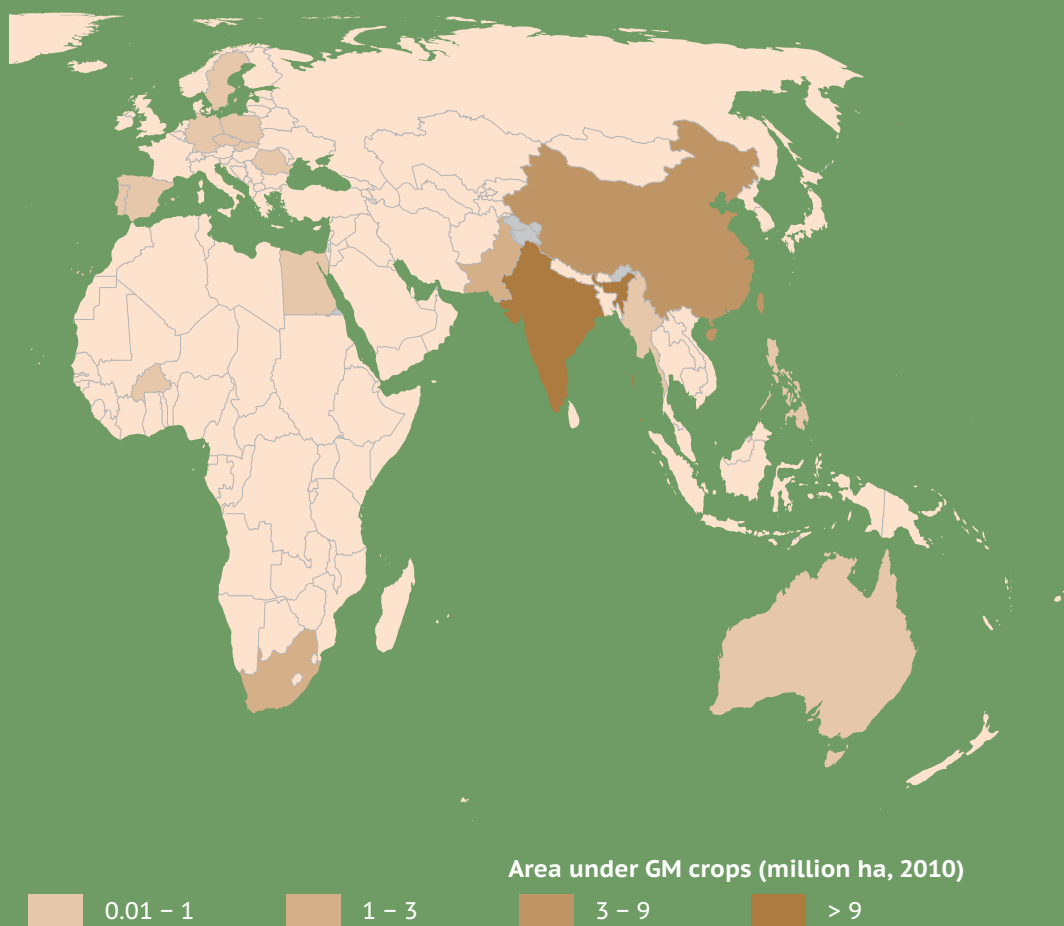
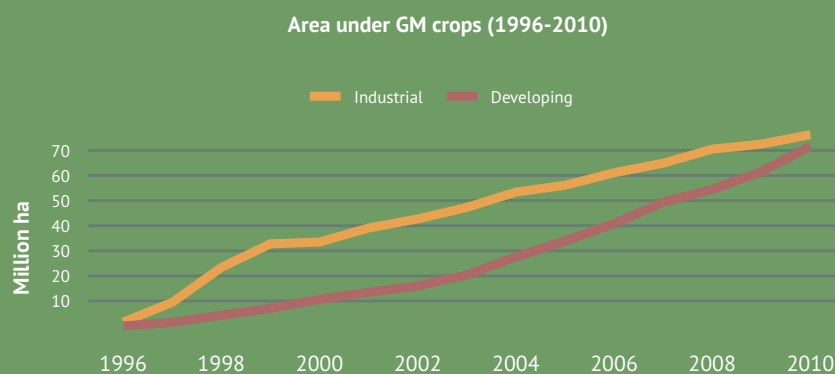


Chart 118: Genetically modified crops also becoming important in developing countries



Source: Clive James, ISAAA

Metalink: P4.ENV.ISAAA.BIO.GM.RHA, p. 350

In most cases these GM technologies are proprietary, developed by the private sector and released for commercial production through licensing agreements. Cultivation and commercial production of GM crops are capital intensive owing to high costs of seed and technology. Nevertheless, their cultivation has generally increased, mainly because of the benefits accrued from lower labour and production costs, reduction in use of chemical inputs and improved economic gain. The United States of America, Argentina and Canada are the major producers and exporters of GM crops and products. The four main global GM crops are among the major commodities traded on world markets.

The increasing cultivation of GM crops has raised a wide range of concerns with respect to food safety, environmental effects and socio-economic issues. From the food and health perspective, the main concerns are related to possible toxicity and allergenicity of GM foods and products. Concerns about environmental risks include the impact of introgression of the transgenes into the natural landscape, impact of gene flow, effect on non-target organisms, evolution of pest resistance and loss of biodiversity. Adoption of GM technologies has also evoked a range of social and ethical concerns about restricting access to genetic resources and new technologies, loss of traditions (such as saving seeds), private sector monopoly and loss of income of resource-poor farmers. The scientific evidence concerning the environmental and health impacts of GMOs is still emerging, but so far there is no conclusive information on the definitive negative impacts of GMOs on health or the environment. Nevertheless, public perceptions about GMOs in food and agriculture are divided with a tendency toward avoiding GM food and products in many developed and developing countries.

Regarding international agreements, the Cartagena Protocol on Biosafety came into force in 2003, and by October 2011 has been ratified by 161 countries. The objective of the Protocol, as stated "is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements". In a host of countries, it is also mandatory to label products that use GM ingredients. As a consequence, GM and non-GM crops must be kept separate, but as the area cultivated with GM varieties increases, this task is becoming more difficult and costly.

Further reading

- FAO Biotechnology (www.fao.org/biotech/en/)
- FAO Biotechnologies for agricultural development (www.fao.org/docrep/014/i2300e/i2300e00.htm)
- Cartagena Protocol on Biosafety (bch.cbd.int/protocol)

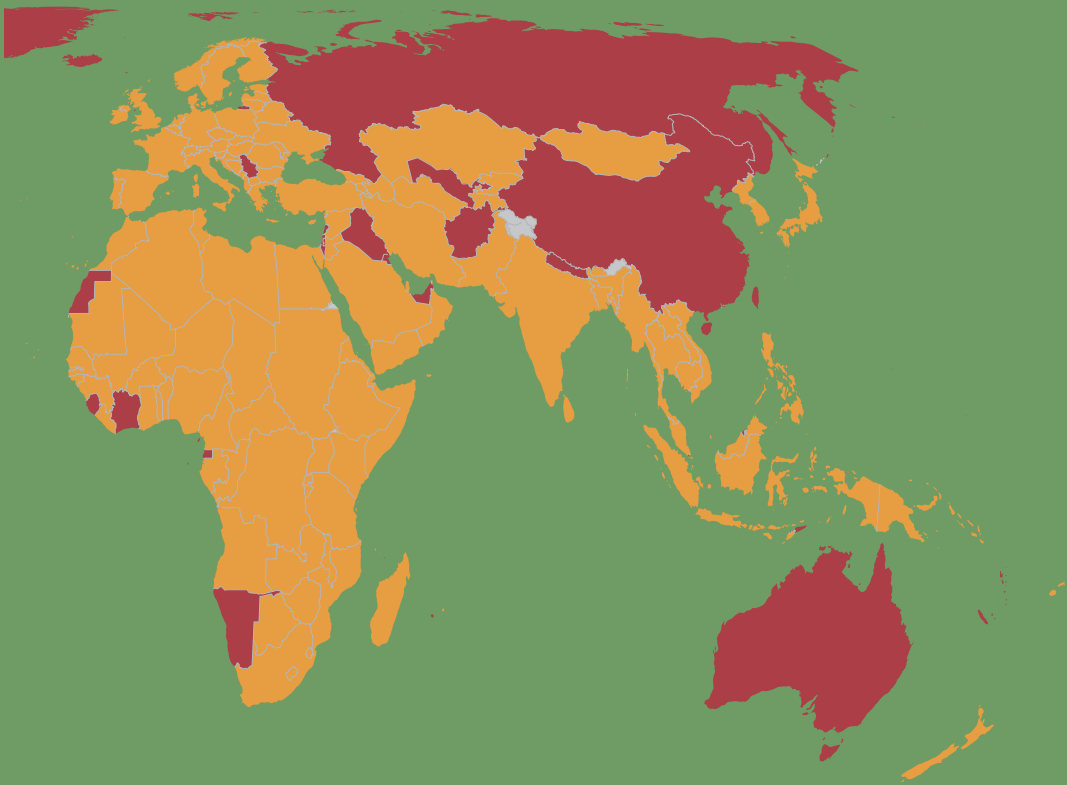
Map 68:



Source: Convention on Biological Diversity

Metalink: P4.ENV.CBD.GMO.CBP, p. 344 

- 163 countries are now party to the "Biosafety Protocol"
- Notable exceptions include several of the major grain exporters, such as the United States



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

No Data No Yes

Chart 119: Many crops, among them food, have been subject to genetic modification

Species		
Alfalfa	Melon	Rose
Argentine Canola	Papaya	Soybean
Carnation	Petunia	Squash
Chicory	Plum	Sugar Beet
Cotton	Polish canola	Sweet pepper
Creeping Bentgrass	Poplar	Tobacco
Flax, Linseed	Potato	Tomato
Maize	Rice	Wheat

Source: ISAAA
Metalink: P4.ENV.ISAAA.BIO.GM.CROPS, p. 349

Agriculture and the bio-based economy

Agriculture is playing an increasingly important role in the bio-based economy, providing feedstocks for the production of liquid fuels, chemicals and advanced materials such as natural fibre composites for industry. The emergence of green industries provides expanded opportunities for the rural sector beyond traditional forestry and the supply of wood. Biological science has the ability to make both incremental efficiency improvements and to bring about radical change in a wide range of sectors. This includes enzymes, fermentation and organisms for processes and products in the energy, chemical, pharmaceutical, food, textile, and pulp and paper industries.

Above all, biological and material science working with agriculture has the greatest potential in the energy, natural fibre composite and starch sectors. Much of this potential is already being realized, especially when considering the rapid growth of the biofuel sector. Currently, ethanol is being 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 oil) using a process of chemical modification. The expansion of liquid biofuels has been rapid – doubling 68.3 million tonnes in 2006 to 130 million tonnes in 2011, currently drawing upon feedstocks from over 45 million ha of land.

The emerging bio-based economy is based on energy efficiency, renewable feed stocks in polymer products, industrial processes that reduce carbon emissions and recyclable materials. Natural fibres exemplify these attributes. For example, growing one tonne of jute fibre requires less than 10 percent of the energy used for the production of competing polypropylene. Sisal processing produces residues that can be used in biocomposites for building houses or to generate electricity. At the end of their life cycle, natural fibres are 100 percent biodegradable.

Natural fibres have intrinsic properties – mechanical strength, low weight and low cost – that have made them particularly attractive to the automobile industry. Car manufacturers are using abaca, flax and hemp in press-moulded thermoplastic panels for interior components. The low density of plant fibres also reduces vehicle weight, which cuts fuel consumption. Worldwide, the construction industry is moving to natural fibres for a range of products, including light structural walls, insulation materials, floor and wall coverings, and roofing. Among recent innovations are cement blocks reinforced with sisal fibre now being manufactured in Tanzania and Brazil.

Map 69:



Source: IEA

Metalink: [P4.ENV.IEA.BIO.BF.QP](#), p. 349 

- Global expansion of biofuel production from crops has been rapid - doubling from 68.3 million tonnes in 2006 to 130 million tonnes in 2011
- The bioenergy sector currently draws upon feedstocks from over 45 million hectares of land
- The United States and Brazil are the largest producers of biofuels

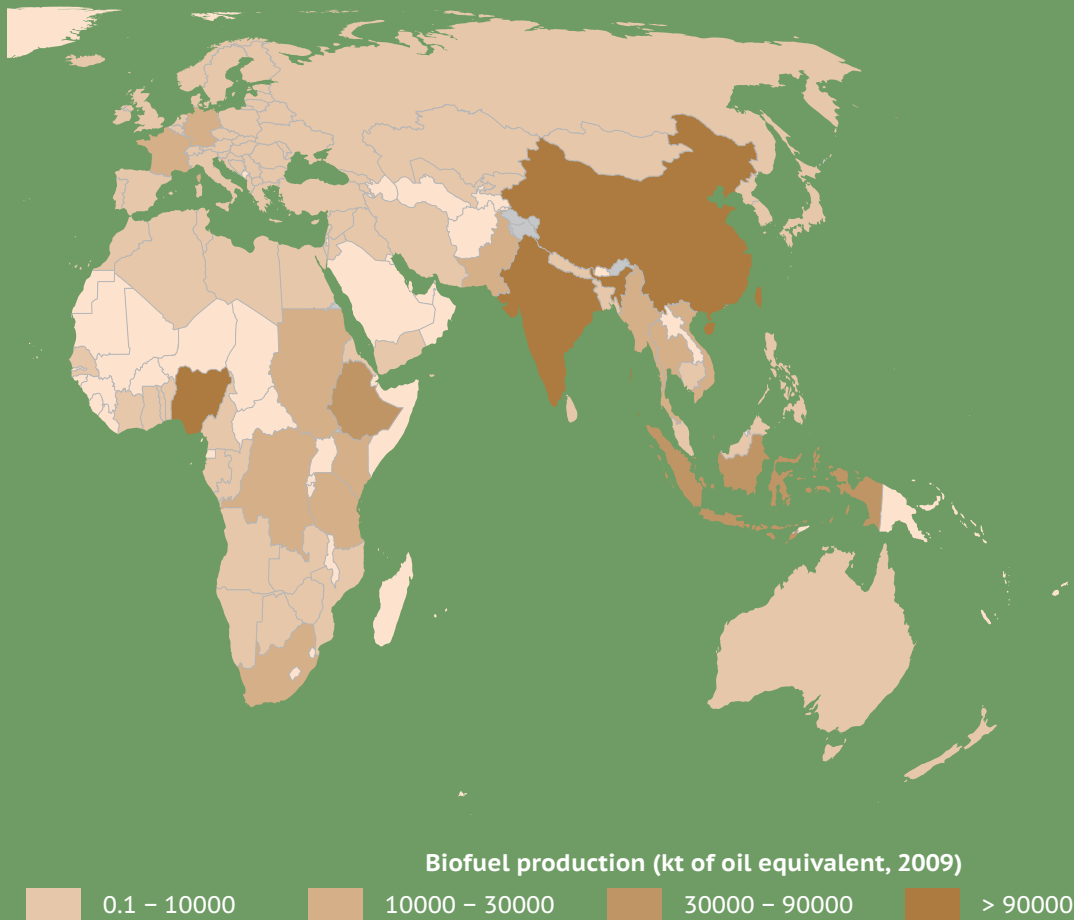
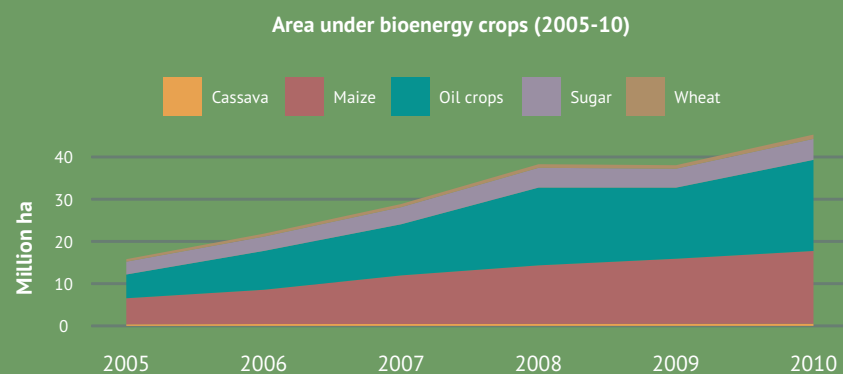


Chart 120: In the space of five years, the global crop area used to produce biofuels rose almost threefold



Source: FAO, Statistics Division

Metalink: [P4.ENV.FAO.BIO.BF.HA](#), p. 344

In India, a growing shortage of timber for the construction industry has spurred development of composite board made from jute veneer and coir ply, whose high lignin content has been shown to make it both stronger and more resistant to rotting than teak. In Europe, hemp fibres are being used in cement and to make particle boards half the weight of wood-based boards. Geotextiles are another promising outlet for natural fibre producers. Made from hard natural fibres, they strengthen earthworks and encourage the growth of plants and trees, which provide further reinforcement.

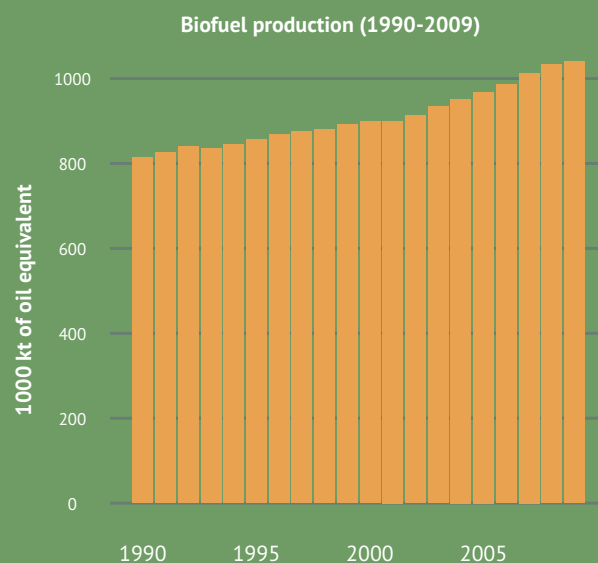
The starch industry extracts starch from cereals and roots and tubers and processes it into products that are used as ingredients and functional supplements in food, feed and non-food applications. There are more than 600 different starches and starch derivatives, ranging from native starches to physically or chemically modified starches, liquid and solid sugars. The starch industry uses enzymatic technologies for hydrolysis that are playing a pivotal role in the development of green chemistry as an alternative to fossil-fuel-based products. For instance, in the chemical sector, starch is used for the production of surfactants, polyurethane, resins, biodegradable plastics and pharmaceuticals. When fermented, starches are used in the production of citric acid, lactic acid, amino acids, organic acids, enzymes, yeast and ethanol. Other bio-based applications involving starch products include binders, solvents, biopesticides and lubricants.

The sustainability of a rapidly growing agricultural bio-based economy, especially one reliant on liquid fuels, has generated the “food versus fuel” debate. The links between bio-industries and food security are complex and multi-faceted. Ensuring the sustainable development of bio sectors becomes challenging when one tries to capture its potential benefits for rural development, climate and non-food security. For instance, the rapid growth and sheer scale of the biofuel sector has potentially negative implications for all four dimensions of food security (availability, access, stability and utilization) as it may result in increased competition for land and water resources, leading to higher and less stable food prices. At the same time, however, it may create new employment, income-generating opportunities and investment in production technologies, especially in countries with abundant marginal land and climates conducive to feedstock production, where such land would be too costly to bring into food cultivation. Such opportunities exist, for example, in countries of Latin America, South-East Asia and sub-Saharan Africa.

Further reading

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

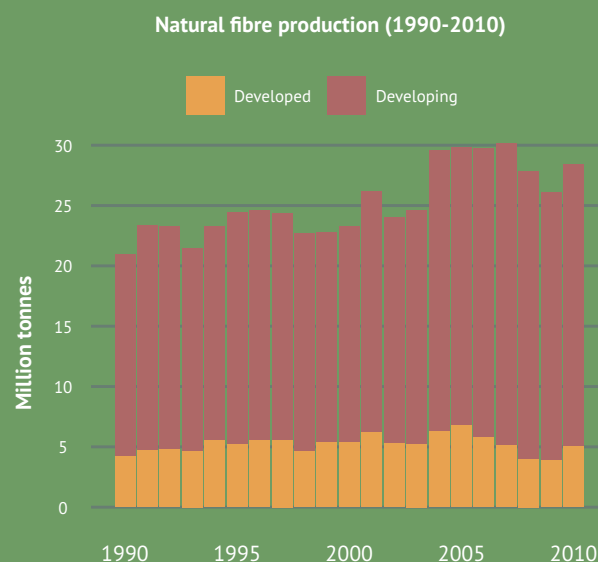
Chart 121: Driven by mandates, growth in world bioenergy production is around 2 percent per annum



Source: IEA

Metalink: P4.ENV.IEA.BIO.BF.QP, p. 349 

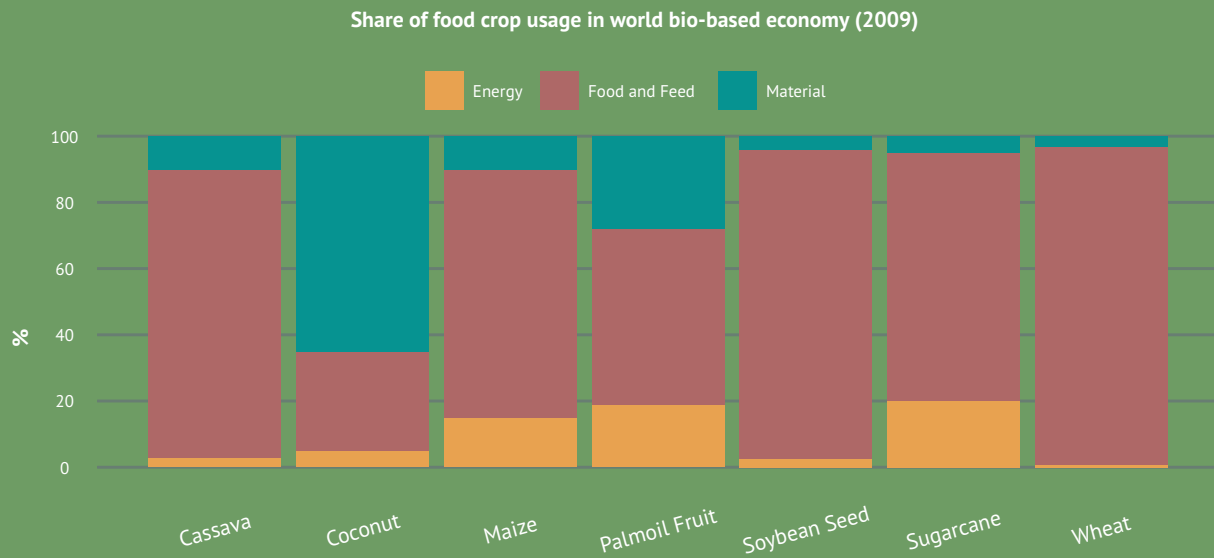
Chart 122: Developing countries are by the far the largest producers of natural fibres



Source: FAO, Statistics Division

Metalink: P4.ENV.FAO.BIO.NF.QP, p. 344 

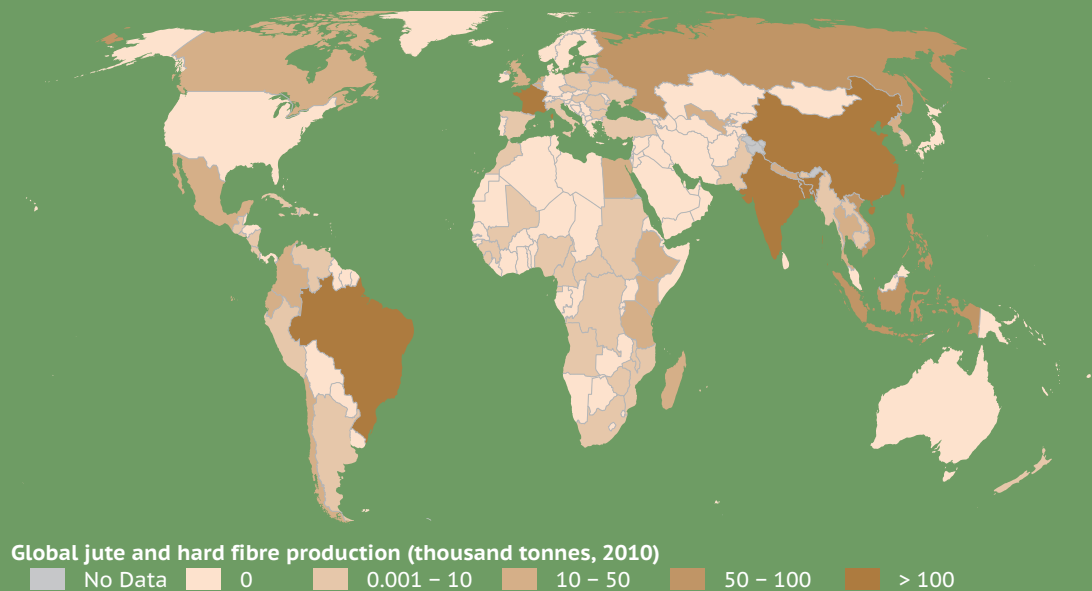
Chart 123: A substantial share of traditional food crops enter industry as a renewable material or as an energy feedstock



Source: FAO, Statistics Division

Metalink: P4.ENV.FAO.BIO.FD.FDSTK, p. 344

Map 70: Sisal, jute, abaca and coir can become the backbone of the bio-based economy offering opportunities for developing countries



Source: FAO, Statistics Division

Metalink: P4.ENV.FAO.BIO.CT.QP, p. 344 

TABLE 48: Land indicators


	Average net annual change in forest area	Forest area	Other wooded area	Carbon content in topsoil	Carbon stock in living forest biomass	Land use change		
						cropland	pasture	forest
	% p.a.	thousand ha	thousand ha	% weight	giga tonnes	% p.a.	% p.a.	% p.a.
	1990-2010	2010	2010	2009*	2009*	1990-2009	1990-2009	1990-2009
WORLD	-0.2	4 033 060	1 223 797	1.5	270 265	0.0	0.0	-0.2
DEVELOPING REGIONS	-0.3	2 231 023		1.3	190 740	0.7	0.8	-0.3
AFRICA	-0.5	674 419	381 103	0.9	55 736	1.1	0.1	-0.5
North Africa	0.2	8 623		0.6	348	0.3	0.2	0.1
Algeria	-0.6	1 492	2 685	0.8	70	0.5	0.3	-0.6
Egypt	2.3	70	56	0.4	7	1.8		2.4
Libya	0.0	217	330	0.5	6	-0.3	0.1	0.0
Morocco	0.1	5 131	2 231	0.8	223	-0.2	0.0	0.1
Tunisia	2.3	1 006	2 504	0.7	9	0.1	1.3	2.0
Sub-Saharan Africa	-0.5	665 797		1.0	55 388	1.6	0.3	-0.4
Angola	-0.2	58 480	0	0.6	4 385	1.2	-0.0	-0.2
Benin	-1.2	4 561	3 178	0.8	263	2.5	0.0	-1.2
Botswana	-0.9	11 351	34 791	0.6	646	-2.7	0.0	-0.9
Burkina Faso	-1.0	5 649	10 911	0.8	292	2.7	0.0	-1.0
Burundi	-2.6	172	722	1.0	17	-0.2	0.4	-2.6
Cameroon	-1.0	19 916	12 715	1.1	2 696	0.1	0.0	-1.0
Cape Verde	1.9	85	0	1.2	5	2.0	0.0	2.0
Central African Republic	-0.1	22 605	10 122	0.9	2 861	0.1	0.3	-0.1
Chad	-0.6	11 525	8 847	0.9	635	1.4	0.0	-0.6
Comoros	-6.7	3	0	1.6		1.1	0.0	-6.4
Congo	-0.1	22 411	10 513	1.5	3 438	0.4	0.0	-0.1
Côte d'Ivoire	0.1	10 403	3 026	0.9	1 842	1.0	0.1	0.1
Congo, Dem. Rep.	-0.2	154 135	11 513	1.1	19 639	-0.3	0.0	-0.2
Djibouti	0.0	6	220	0.5		3.7	1.4	0.0
Equatorial Guinea	-0.7	1 626	8	1.0	203	-0.7	0.0	-0.7
Eritrea	-0.3	1 532	7 153	0.6				
Ethiopia	-1.0	12 296	44 650	0.9	219			
Gabon	0.0	22 000	0	1.0	2 710	0.2	-0.0	0.0
Gambia	0.4	480	103	0.9	32	4.2	-2.8	0.4
Ghana	-2.0	4 940	0	0.9	381	2.9	-0.1	-2.0
Guinea	-0.5	6 544	5 850	1.3	619	0.3	-0.0	-0.5
Guinea-Bissau	-0.5	2 022	230	1.1	96	2.2	0.0	-0.5
Kenya	-0.3	3 467	39 035	0.9	476	0.5	0.0	-0.3
Lesotho	0.5	44	97	1.3	2	0.3	0.0	0.5
Liberia	-0.6	4 329	0	1.1	585	1.1	0.0	-0.6
Madagascar	-0.4	12 553	15 688	1.1	1 626	0.3	0.6	-0.4
Malawi	-0.9	3 237	0	1.3	144	2.4	0.0	-0.9
Mali	-0.6	12 490	8 227	0.7	282	6.0	0.8	-0.6
Mauritania	-2.7	242	3 060	0.9	7	-0.1	0.0	-2.7
Mauritius	-0.5	35	12	1.9	2	-0.8	0.0	-0.5
Mozambique	-0.5	39 022	14 566	0.8	1 692	1.9	0.0	-0.5
Namibia	-0.9	7 290	8 290	0.3	210	1.1	0.0	-0.9
Niger	-2.4	1 204	11 440	0.6	37	1.6	1.4	-2.4
Nigeria	-3.2	9 041	4 333	0.8	1 085	0.8	-0.3	-3.1
Rwanda	1.6	435	61	8.3	39	1.5	-2.6	1.5
Senegal	-0.5	8 473	6 085	0.8	340	1.2	-0.1	-0.5
Seychelles	0.0	41	0		4	-1.5		0.0
Sierra Leone	-0.7	2 726	198	1.2	216	3.6	-0.0	-0.7
Somalia	-1.0	6 747	0	0.5	394	-0.1	0.0	-1.0
Sudan	-0.4	69 949	50 224	0.7	1 393	2.4	0.3	-0.5
South Africa	0.0	9 241	24 588	0.6	807	0.4	0.1	0.0
Swaziland	0.9	563	427	1.7	22	-0.1	-0.1	0.9
Tanzania, Utd. Rep.	-1.1	33 428	11 619	1.6	2 019	0.7	0.0	-1.1
Togo	-4.3	287	1 246	0.9		0.4	0.0	-4.1
Uganda	-2.3	2 988	3 383	1.1	109	1.4	0.0	-2.3
Zambia	-0.3	49 468	6 075	1.6	2 416	0.8	0.6	-0.3
Zimbabwe	-1.7	15 624	0	0.5	492	1.9	1.0	-1.7

TABLE 48: Land indicators (continued)


		Average net annual change in forest area	Forest area	Other wooded area	Carbon content in topsoil	Carbon stock in living forest biomass	Land use change		
							cropland	pasture	forest
		% p.a.	thousand ha	thousand ha	% weight	giga tonnes	% p.a.	% p.a.	% p.a.
		1990-2010	2010	2010	2009*	2009*	1990-2009	1990-2009	1990-2009
ASIA		0.1	567 207		1.3	34 883	0.4	1.6	0.3
Central Asia		0.1	12 076		0.7	227			
Kazakhstan		-0.2	3 309	16 482	1.0	137			
Kyrgyzstan		0.7	954	390	1.2	56			
Tajikistan		0.0	410	244	0.9	3			
Turkmenistan		0.0	4 127	0	0.3	12			
Uzbekistan		0.4	3 276	1 218	0.5	19			
East Asia		0.1	443 711		1.7	29 253	0.2	-0.1	0.1
Brunei Darussalam		-0.4	380	50	10.2	72	1.5	-2.0	-0.4
Cambodia		-1.2	10 094	133	1.0	464	0.3	4.5	-1.2
China		1.4	206 861	102 012	1.1	6 203	-0.3	0.0	1.4
Indonesia		-1.1	94 432	21 003	5.2	13 017	1.5	-0.9	-1.2
Korea, DPR		-1.8	5 666	0	1.6	171	0.8	0.0	-1.8
Korea, Republic of		-0.1	6 222	0	1.3	268	-0.8	-1.0	-0.1
Lao, PDR		-0.5	15 751	4 834	1.0	1 074	2.9	0.5	-0.5
Malaysia		-0.4	20 456	0	3.5	3 212	0.5	0.2	-0.4
Mongolia		-0.7	10 898	1 947	1.1	583	-1.8	-0.4	-0.7
Myanmar		-1.0	31 773	20 113	1.3	1 654	1.0	-0.8	-1.1
Philippines		0.8	7 665	10 128	1.3	663	0.3	0.9	0.8
Singapore		0.0	2	0	0.6		-5.4		0.0
Thailand		-0.1	18 972	0	1.0	880	-0.4	0.1	-0.2
Viet Nam		2.0	13 797	1 124	1.3	992	2.2	3.4	2.0
South Asia		0.2	92 734		1.0	4 271	0.0	-1.0	0.1
Afghanistan		0.0	1 350	29 471	0.9	38	-0.1	0.0	0.0
Bangladesh		-0.2	1 442	2 498	1.9	80	-0.7	0.0	-0.2
Bhutan		0.3	3 249	613	1.1	336	-2.2	1.6	0.3
India		0.3	68 434	4 795	0.9	2 800	0.0	-0.6	0.3
Iran (Islamic Rep.)		0.0	11 075	5 423	1.0	258	0.7	-2.2	0.0
Maldives		0.0	1	0			-0.7	0.0	0.0
Nepal		-1.4	3 636	1 897	1.3	485	0.4	-0.2	-1.5
Pakistan		-2.0	1 687	1 455	0.9	213	0.1	0.0	-2.0
Sri Lanka		-1.2	1 860	0	0.9	61	0.7	0.0	-1.2
West Asia		0.5	18 686		0.8	1 132	-0.2	1.6	1.9
Armenia		-1.4	262	45	1.6	13			
Azerbaijan		0.0	936	54	1.2	54			
Bahrain			1	0	0.3		-0.3	0.0	5.1
Cyprus		0.4	173	240	1.0	3	-1.4	-0.8	0.4
Georgia		-0.1	2 742	51	1.1	212			
Iraq		0.1	825	329	0.6		-1.3	0.0	0.1
Jordan		0.0	98	273	1.0	2	0.7	-0.3	0.0
Kuwait		3.5	6	0	0.4		6.0	0.0	2.9
Lebanon		0.2	137	220	1.2	2	-0.3	1.5	0.2
Occupied Palestinian Territory		0.0	9	0			-0.2	-0.0	0.1
Saudi Arabia		0.0	977	1 822	0.6	6	-0.1	1.9	0.0
Syrian Arab Republic		1.4	491	266	0.8		0.0	0.2	1.4
Turkey		0.8	11 334	12 921	1.0	822	-0.7	1.0	0.8
United Arab Emirates		1.3	317	192	0.5	16	8.6	1.5	1.4
Yemen		0.0	549	1 906	0.6	5	-0.6	0.0	0.0
LATIN AMERICA & THE CARIBBEAN		-0.5	955 584		1.9	97 511	0.6	0.2	-0.5
Argentina		-0.8	29 400	61 471	1.5	3 062	0.8	0.4	-0.8
Bahamas		0.0	515	36	0.4		1.0	0.0	0.0
Barbados		0.0	8	1	1.6		0.0	0.0	0.0
Belize		-0.6	1 393	113	1.6	171	1.5	0.1	-0.6
Bolivia (Plur. State)		-0.5	57 196	2 473	1.0	4 442	3.0	-0.0	-0.5
Brazil		-0.5	519 522	43 772	1.2	62 607	0.9	0.3	-0.5
Chile		0.3	16 231	14 658	2.2	1 349	-2.9	0.5	0.3
Colombia		-0.2	60 499	22 727	3.8	6 805	-2.1	-0.1	-0.2
Costa Rica		0.1	2 605	12	3.3	238	-0.1	-1.7	0.0

TABLE 48: Land indicators (continued)


	Average net annual change in forest area	Forest area	Other wooded area	Carbon content in topsoil	Carbon stock in living forest biomass	Land use change		
						cropland	pasture	forest
	% p.a.	thousand ha	thousand ha	% weight	giga tonnes	% p.a.	% p.a.	% p.a.
	1990-2010	2010	2010	2009*	2009*	1990-2009	1990-2009	1990-2009
Cuba	1.7	2 870	299	1.2	226	0.2	-0.5	1.7
Dominica	-0.5	45	0	5.1		1.8	0.0	-0.6
Dominican Republic	0.0	1 972	850	1.0	114	-0.3	-0.0	0.0
Ecuador	-1.7	9 865	1 519	2.1		-0.7	0.1	-1.7
El Salvador	-1.4	287	384	1.8		0.6	0.3	-1.3
French Guiana	-0.1	8 082	0	1.3	1 651	1.4	-1.0	-0.1
Grenada	0.0	17	1	1.6	1	-0.2	0.0	0.0
Guatemala	-1.3	3 657	1 811	2.1	281	1.7	-1.3	-1.3
Guyana	0.0	15 205	3 580	3.5	1 629	-0.6	0.0	0.0
Haiti	-0.7	101	0	0.9	5	1.1	-0.1	-0.7
Honduras	-2.2	5 192	1 475	1.4	330	-1.3	0.8	-2.2
Jamaica	-0.1	337	271	1.7	48	0.0	-0.6	-0.1
Mexico	-0.4	64 802	20 181	3.0	2 043	0.3	-0.2	-0.4
Netherlands Antilles	0.0	1	33	2.3		0.0		0.0
Nicaragua	-1.8	3 114	2 219	1.8	349	1.9	0.9	-1.8
Panama	-0.8	3 251	1 581	1.8	367	0.3	0.2	-0.8
Paraguay	-0.9	17 582	0	1.0		3.1	0.7	-0.9
Peru	-0.2	67 992	22 832	1.6	8 560	0.7	-0.3	-0.2
St. Kitts & Nevis	0.0	11	2	5.1		-4.5	-2.2	0.0
St. Lucia	0.3	47	0	1.6		-3.0	-3.6	0.4
St. Vincent & Grenadines	0.4	27	3	1.6		-1.2	0.0	0.3
Suriname	-0.0	14 758	0	3.4	3 165	-0.3	-0.7	-0.0
Trinidad & Tobago	-0.3	226	121	1.8	19	-2.1	0.8	-0.3
Uruguay	3.2	1 744	17	2.7		2.0	-0.2	3.3
Venezuela (Boliv. Rep. of)	-0.6	46 275	7 317	1.5		-0.3	-0.1	-0.6
OCEANIA	-0.4	33 812		2.0	2 610	1.0	0.8	-0.4
Fiji	0.3	1 014	144	1.4		0.1	0.2	0.3
French Polynesia	5.3	155	50		21	0.3	0.0	5.4
New Caledonia	0.0	839	371	1.4	60	-1.2	0.5	0.0
Papua New Guinea	-0.5	28 726	4 474	2.2	2 306	1.4	1.8	-0.5
Samoa	1.4	171	85	2.3		-0.1	2.2	1.5
Solomon Islands	-0.2	2 213	129	1.4	182	1.0	2.5	-0.2
Tonga	0.0	9	57	3.5	1	-0.2	0.0	0.0
Vanuatu	0.0	440	476	2.0		1.1	1.0	0.0
DEVELOPED REGIONS	0.1	1 801 865		2.6	79 522	1.5	0.3	3.5
NORTH AMERICA	0.1	614 160		1.8	33 216	-0.5	-0.0	0.1
Bermuda	0.0	1	0			-1.6		0.0
Canada	0.0	310 134	91 951	4.3	13 908	0.0	-0.2	0.0
United States of America	0.1	304 022	41 926	1.5	19 308	-0.7	-0.0	0.1
ASIA & OCEANIA	-0.1	182 702		2.0	1 297	-0.3	-0.8	-0.1
Australia	-0.2	149 300	135 367	0.6		-0.1	-0.7	-0.1
Israel	0.8	154	34	1.0	5	-0.6	-0.3	0.8
Japan	0.0	24 979	0	2.3		-0.7		0.0
New Zealand	0.3	8 269	2 557	1.9	1 292	-8.1	-1.1	0.4
EUROPE	0.1	1 005 001	109 705	3.0	45 009	-1.2	-4.3	-0.0
Albania	-0.1	776	255	1.2	49	-0.0	1.0	-0.1
Belarus	0.5	8 630	520	5.1	611			
Bosnia & Herzegovina	-0.1	2 185	549	1.3	118			
Croatia	0.2	1 920	759	1.3	253			
European Union	0.4	156 865		2.9	9 819	-0.1	-0.3	0.9
Iceland	6.2	30	96	2.4		0.0	0.0	6.5
Macedonia, FYR	0.5	998	143	1.1	60			
Montenegro	0.0	543	175		33			
Norway	0.5	10 065	2 703	1.7	395	-0.2	2.4	0.5
Republic of Moldova	1.0	386	70	2.1	29			
Russian Federation	0.0	809 090	78 870	3.9	32 500			
Serbia	0.8	2 713	485		240			
Switzerland	0.4	1 240	71	2.1	143	-0.0	-0.2	0.4
Ukraine	0.2	9 705	948	2.3	761			

TABLE 49: Forestry indicators


	Forest characteristics			Primary designated functions of forest				
	primary forest	other naturally regenerated forest	planted forest	production	protection and conservation	social services	multiple use	other or unknown
	million ha	million ha	million ha	%	%	%	%	%
	2010	2010	2010	2010	2010	2010	2010	2010
WORLD				30	20	4	24	23
DEVELOPING REGIONS				32	33	2	26	8
AFRICA				30	17	1	17	35
North Africa				14	48	0	38	0
Algeria	0.0	1.1	0.4	35	65		0	0
Egypt	0.0	0.0	0.1	2	52	0	46	0
Libya	0.0	0.0	0.2	0	100	0	0	0
Morocco	0.0	4.5	0.6	21	12	0	67	0
Tunisia	0.0	0.3	0.7	24	45	0	32	0
Sub-Saharan Africa				28	16	1	20	36
Angola	0.0	58.4	0.1	4	3	0	0	93
Benin	0.0	4.5	0.0	31	28		40	0
Botswana	0.0	11.4	0.0	0	0	0	100	0
Burkina Faso	0.0	5.5	0.1	11	6		84	0
Burundi	0.0	0.1	0.1	9	0	0	0	91
Cameroon				73	20	1	6	
Cape Verde	0.0	0.0	0.1	80	20	0	0	0
Central African Republic	2.4	20.2	0.0	21	1	0	78	0
Chad	0.2	11.3	0.0	90		0	0	0
Comoros	0.0	0.0	0.0	33	67	0	0	0
Congo	7.4	14.9	0.1	88	4	0	7	0
Côte d'Ivoire	0.6	9.4	0.3	89	11		0	0
Congo, Dem. Rep.			0.1	5	17	0	0	78
Djibouti	0.0	0.0	0.0	0	0	0	100	0
Equatorial Guinea	0.0	1.6		5	36	3	53	3
Eritrea	0.0	1.5	0.0	2	6	0	1	91
Ethiopia	0.0	11.8	0.5	4	0	0	96	0
Gabon	14.3	7.6	0.0	45	18		36	0
Gambia	0.0	0.5	0.0		21	0	5	73
Ghana	0.4	4.3	0.3	23	8	1	0	68
Guinea	0.1	6.4	0.1	2	55	0	7	36
Guinea-Bissau	0.0	2.0	0.0	29	67	3	0	0
Kenya	0.7	2.6	0.2	6	94	0	0	0
Lesotho	0.0	0.0	0.0	24	0	0	76	0
Liberia	0.2	4.1	0.0	25	4	0	0	71
Madagascar	3.0	9.1	0.4	26	39	0	34	0
Malawi	0.9	1.9	0.4	37	23	0	0	40
Mali	0.0	12.0	0.5	47	38	0	15	0
Mauritania	0.0	0.2	0.0	0	27	0	73	0
Mauritius	0.0	0.0	0.0	30	61	7	2	0
Mozambique	0.0	39.0	0.1	67	33	0	0	0
Namibia	0.0	7.3		0	9	0	22	69
Niger	0.2	0.8	0.1	1		0	81	0
Nigeria	0.0	8.7	0.4	29	28	0	0	43
Rwanda	0.0	0.1	0.4	74	12	0	14	0
Senegal	1.6	6.5	0.5	60			22	0
Seychelles	0.0	0.0	0.0	1	21	0	14	64
Sierra Leone	0.1	2.6	0.0	9	7	0	0	84
Somalia	0.0	6.7	0.0		0	0	100	0
Sudan	14.0	49.9	6.1	50	20	0	0	30
South Africa	0.9	6.5	1.8	19	10	0	71	0
Swaziland	0.0	0.4	0.1	25	0	0	0	75
Tanzania, Utd. Rep.	0.0	33.2	0.2	71	6	0	24	0
Togo	0.0	0.2	0.0	68	32	0	0	0
Uganda	0.0	2.9	0.1	12	36	15	0	37
Zambia	0.0	49.4	0.1	24	22	0	17	37
Zimbabwe	0.8	14.7	0.1	10	8	0	82	0

TABLE 49: Forestry indicators (continued)


	Forest characteristics			Primary designated functions of forest				
	primary forest	other naturally regenerated forest	planted forest	production	protection and conservation	social services	multiple use	other or unknown
	million ha	million ha	million ha	%	%	%	%	%
	2010	2010	2010	2010	2010	2010	2010	2010
ASIA				36	36	1	26	1
Central Asia				1	75	4	20	0
Kazakhstan	0.0	2.4	0.9	0	16	13	71	0
Kyrgyzstan	0.3	0.6	0.1	0	84	1	15	0
Tajikistan	0.3	0.0	0.1	5	95	0	0	0
Turkmenistan	0.1	4.0	0.0	0	100	0	0	0
Uzbekistan	0.1	2.6	0.6		99	0	0	0
East Asia				42	40	0	12	6
Brunei Darussalam	0.3	0.1	0.0	58	26	1	0	15
Cambodia	0.3	9.7	0.1	33	44	1	4	17
China	11.6	118.1	77.2	41	33	2	24	0
Indonesia	47.2	43.6	3.5	53	40	0	0	7
Korea, DPR	0.8	4.1	0.8	86	14	0	0	0
Korea, Republic of	3.0	1.4	1.8	77	6	9	7	0
Lao, PDR	1.5	14.0	0.2	23	77		0	0
Malaysia	3.8	14.8	1.8	62	23	0	15	0
Mongolia	5.2	5.6	0.1	7	92	1	0	0
Myanmar	3.2	27.6	1.0	62	11	0	27	0
Philippines	0.9	6.5	0.4	76	24	0	0	0
Singapore	0.0	0.0	0.0	0	100	0	0	0
Thailand	6.7	8.3	4.0	14	54	1	0	32
Viet Nam	0.1	10.2	3.5	47	53	0	0	0
South Asia				26	36	0	27	10
Afghanistan				0	0	0	100	0
Bangladesh	0.4	0.8	0.2	49	25	1	25	0
Bhutan	0.4	2.8	0.0	16	73	0	0	11
India	15.7	42.5	10.2	25	45	0	30	0
Iran (Islamic Rep.)	0.2	10.0	0.8	14	1	0	85	0
Maldives								
Nepal	0.5	3.1	0.0	10	26	0	23	40
Pakistan	0.0	1.3	0.3	32	13	0	55	0
Sri Lanka	0.2	1.5	0.2	9	31	0	60	0
West Asia				25	35	0	40	0
Armenia	0.0	0.2	0.0	24	46	0	30	0
Azerbaijan	0.4	0.5	0.0	0	100	0	0	0
Bahrain	0.0	0.0	0.0	0	100	0	0	0
Cyprus	0.0	0.1	0.0	24	2	8	28	38
Georgia	0.5	2.1	0.2	0	87	13	0	0
Iraq	0.0	0.8	0.0	0	100	0	0	0
Jordan	0.0	0.1	0.0	0	99	1	0	0
Kuwait	0.0	0.0	0.0	0	100	0	0	0
Lebanon	0.0	0.1	0.0	6	28	0	66	0
Occupied Palestinian Territory								
Saudi Arabia	0.4	0.6	0.0	0	0	0	100	0
Syrian Arab Republic	0.0	0.2	0.3	0	0	0	100	0
Turkey	1.0	6.9	3.4	70	25		6	0
United Arab Emirates	0.0	0.0	0.3	0	0	0	100	0
Yemen	0.0	0.5	0.0	0	0	0	100	0
LATIN AMERICA & THE CARIBBEAN				14	21	14	20	31
Argentina	1.7	26.3	1.4	5	4	0	9	83
Bahamas	0.0	0.5	0.0					
Barbados	0.0	0.0		0	4	0	0	96
Belize	0.6	0.8	0.0	0	43	0	0	57
Bolivia (Plur. State)	37.2	20.0	0.0	0	19	0	81	
Brazil	476.6	35.5	7.4	7	17	23	4	49
Chile	4.4	9.4	2.4	46	43	0	11	0
Colombia	8.5	51.6	0.4	13	15	0	0	72
Costa Rica	0.6	1.7	0.2	14	35	4	15	32

TABLE 49: Forestry indicators (continued)


	Forest characteristics			Primary designated functions of forest				
	primary forest	other naturally regenerated forest	planted forest	production	protection and conservation	social services	multiple use	other or unknown
	million ha	million ha	million ha	%	%	%	%	%
	2010	2010	2010	2010	2010	2010	2010	2010
Cuba	0.0	2.4	0.5	31	68		0	0
Dominica	0.0	0.0						
Dominican Republic								
Ecuador	4.8	4.9	0.2	2	73	0	21	4
El Salvador	0.0	0.3	0.0	24	16	0	60	0
French Guiana	7.7	0.4	0.0	0	30	0	52	18
Grenada	0.0	0.0		1	17	0	0	82
Guatemala	1.6	1.9	0.2	28	63	0	0	9
Guyana	6.8	8.4	0.0	97	1	2	0	0
Haiti	0.0	0.1	0.0	54	4	0	0	42
Honduras	0.5	4.7	0.0	21	66	13	0	0
Jamaica	0.1	0.2	0.0	2	25	0	6	66
Mexico	34.3	27.3	3.2	5	13	0	82	0
Netherlands Antilles								
Nicaragua	1.2	1.9	0.1	20	71	0	2	8
Panama	0.0	3.2	0.1	14	43	0	43	0
Paraguay	1.9	15.7	0.0				0	89
Peru	60.2	6.8	1.0	37			26	10
St. Kitts & Nevis				0	0	0	100	0
St. Lucia	0.0	0.0	0.0	0	5	0	19	76
St. Vincent & Grenadines	0.0	0.0						
Suriname	14.0	0.7	0.0	27	15	0	4	55
Trinidad & Tobago	0.1	0.1	0.0	34	32	4	32	0
Uruguay	0.3	0.5	1.0	64	36	0	0	0
Venezuela (Boliv. Rep. of)				49	51	0	0	0
OCEANIA				21	11	0	15	54
Fiji	0.4	0.4	0.2	17	18	0	65	0
French Polynesia	0.0	0.1	0.0	4	7	0	0	90
New Caledonia	0.4	0.4	0.0	2	24	7	0	67
Papua New Guinea	26.2	2.4	0.1	25	5	0	5	66
Samoa		0.1	0.0	47	37	4	5	7
Solomon Islands	1.1	1.1	0.0	17	50		0	33
Tonga	0.0	0.0	0.0	11	89	0	0	0
Vanuatu								
DEVELOPED REGIONS				35	28	4	29	6
NORTH AMERICA				27	23	0	50	1
Bermuda								
Canada	165.4	135.7	9.0	1	5	0	87	7
United States of America	75.3	203.4	25.4	30	25	0	46	0
ASIA & OCEANIA				14	61	10	8	6
Australia	5.0	142.4	1.9	1	15	0	39	45
Israel	0.0	0.1	0.1	0	33	3	64	0
Japan	4.7	9.9	10.3	17	70	13	0	0
New Zealand	2.1	4.3	1.8	24	77	0	0	0
EUROPE				52	13	2	11	23
Albania	0.1	0.6	0.1	79	21	0	0	0
Belarus	0.4	6.4	1.9	50	33	18	0	0
Bosnia & Herzegovina	0.0	1.2	1.0	56	1	0	0	43
Croatia	0.0	1.8	0.1	82	7	2	9	0
European Union				39	26	3	32	3
Iceland	0.0	0.0	0.0	20		19	44	4
Macedonia, FYR	0.0	0.9	0.1	81	0	0	0	19
Montenegro				64	15	0	0	21
Norway	0.2	8.4	1.5	60	29	0	11	0
Republic of Moldova	0.0	0.4	0.0	0	27	26	47	0
Russian Federation	256.5	535.6	17.0	51	11	2	10	26
Serbia	0.0	2.5	0.2	89	12			0
Switzerland	0.0	1.0	0.2	40	8	5	0	47
Ukraine	0.1	4.8	4.8	46	35	19	0	0

TABLE 50: Water withdrawal


	Water withdrawal by sector						Water withdrawal		% of freshwater resources withdrawn	
	agricultural		industrial		municipal		total	per capita	total	by agriculture
	million m ³ /yr	% of total	million m ³ /yr	% of total	million m ³ /yr	% of total	million m ³ /yr	m ³ /yr	%	%
	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*
WORLD	2 745 009	70	729 178	19	466 869	12	3 941 055	607	9.3	6.5
DEVELOPING REGIONS										
AFRICA										
North Africa										
Algeria	3 940	61	951	15	1 581	24	6 472	197	55.5	33.8
Egypt	59 000	86	4 000	6	5 300	8	68 300	920	119.2	103.0
Libya	3 584	83	132	3	610	14	4 326	750	721.0	597.3
Morocco	11 010	84	477	4	1 628	12	13 115	432	45.2	38.0
Tunisia	2 165	82	110	4	365	14	2 640	266	57.5	47.1
Sub-Saharan Africa										
Angola	210	27	240	31	320	42	769	47	0.5	0.1
Benin	59	45	30	23	41	32	130	17	0.5	0.2
Botswana	80	39	39	19	88	42	207	110	1.7	0.7
Burkina Faso	690	63	22	2	376	35	1 087	77	8.7	5.5
Burundi	222	79	15	5	43	15	280	39	2.2	1.8
Cameroon	730	68	105	10	247	23	1 081	62	0.4	0.3
Cape Verde	20	91	0	2	2	7	22	47	7.3	6.7
Central African Republic	1	1	12	16	60	82	73	18	0.1	0.0
Chad	190	48	104	26	104	26	397	41	0.9	0.4
Comoros	5	47	1	5	5	48	10	16	0.8	0.4
Congo	4	4	24	26	64	69	92	26	0.0	0.0
Côte d'Ivoire	600	39	318	20	636	41	1 554	86	1.9	0.7
Congo, Dem. Rep.	110	15	147	20	465	64	722	13	0.1	0.0
Djibouti	3	16	0	0	16	84	19	24	6.3	1.0
Equatorial Guinea	1	5	3	15	16	80	20	33	0.1	0.0
Eritrea	550	95	1	0	31	5	582	130	9.2	8.7
Ethiopia	5 204	86	51	1	810	13	6 065	82	5.0	4.3
Gabon	50	34	14	9	85	57	149	109	0.1	0.0
Gambia	20	24	21	26	41	50	82	55	1.0	0.3
Ghana	652	66	95	10	235	24	982	45	1.8	1.2
Guinea	1 360	83	56	3	225	14	1 641	182	0.7	0.6
Guinea-Bissau	144	76	12	6	34	18	190	139	0.6	0.5
Kenya	2 165	79	100	4	470	17	2 735	77	8.9	7.1
Lesotho	10	20	20	40	20	40	50	24	1.7	0.3
Liberia	60	31	53	28	80	41	194	61	0.1	0.0
Madagascar	14 310	97	162	1	296	2	14 768	826	4.4	4.2
Malawi	810	81	48	5	143	14	1 001	78	5.8	4.7
Mali	5 900	90	56	1	590	9	6 546	497	6.5	5.9
Mauritania	1 500	92	32	2	95	6	1 627	534	14.3	13.2
Mauritius	491	68	20	3	214	30	725	577	26.4	17.8
Mozambique	550	65	36	4	254	30	840	40	0.4	0.3
Namibia	213	71	14	5	73	24	300	144	1.7	1.2
Niger	2 080	86	33	1	294	12	2 407	185	7.2	6.2
Nigeria	5 510	48	1 965	17	4 099	35	11 574	83	4.0	1.9
Rwanda	102	55	21	11	61	33	184	20	1.9	1.1
Senegal	2 065	93	58	3	98	4	2 221	204	5.7	5.3
Seychelles	1	7	4	28	9	66	14	163		
Sierra Leone	350	68	56	11	111	21	517	100	0.3	0.2
Somalia	3 281	99	2	0	15	0	3 298	394	22.4	22.3
Sudan	36 070	96	300	1	1 143	3	37 513	977	58.2	55.9
South Africa	7 836	57	948	7	4 893	36	13 677	286	27.4	15.7
Swaziland	1 006	94	21	2	41	4	1 068	967	23.7	22.3
Tanzania, Utd. Rep.	4 632	89	25	0	527	10	5 184	134	5.4	4.8
Togo	76	34	6	3	141	63	223	41	1.5	0.5
Uganda	120	43	44	16	115	41	279	10	0.4	0.2
Zambia	1 320	76	130	7	290	17	1 740	152	1.7	1.3
Zimbabwe	3 318	79	298	7	589	14	4 205	335	21.0	16.6

TABLE 50: Water withdrawal (continued)


	Water withdrawal by sector						Water withdrawal		% of freshwater resources withdrawn	
	agricultural		industrial		municipal		total	per capita	total	by agriculture
	million m³/yr	% of total	million m³/yr	% of total	million m³/yr	% of total	million m³/yr	m³/yr	%	%
	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*
ASIA										
Central Asia										
Kazakhstan	28 630	84	5 051	15	516	2	34 197	2 254	31.2	26.1
Kyrgyzstan	9 450	94	310	3	320	3	10 080	1 999	43.7	40.9
Tajikistan	10 960	92	560	5	440	4	11 960	1 853	74.8	68.6
Turkmenistan	24 040	97	270	1	597	2	24 907	5 246	100.8	97.2
Uzbekistan	54 370	91	1 644	3	3 794	6	59 808	2 305	118.6	107.9
East Asia										
Brunei Darussalam										
Cambodia	2 053	94	33	2	98	4	2 184	163	0.5	0.4
China	358 000	65	128 600	23	67 530	12	554 130	414	19.5	12.6
Indonesia	92 760	71	24 650	19	13 990	11	131 400	578	6.5	4.6
Korea, DPR	6 610	76	1 145	13	903	10	8 658	365	11.2	8.6
Korea, Republic of	15 800	62	3 050	12	6 620	26	25 470	541	36.5	22.7
Lao, PDR	3 960	93	170	4	130	3	4 260	740	1.3	1.2
Malaysia	4 520	34	4 788	36	3 902	30	13 210	506	2.3	0.8
Mongolia	227	44	162	32	122	24	511	201	1.5	0.7
Myanmar	29 570	89	498	1	3 323	10	33 391	721	2.9	2.5
Philippines	67 070	82	8 254	10	6 235	8	81 559	953	17.0	14.0
Singapore	8	0	1 221	53	1 078	47	2 307	541	384.4	1.3
Thailand	51 790	90	2 777	5	2 739	5	57 306	859	13.1	11.8
Viet Nam	77 750	95	3 074	4	1 206	1	82 030	986	9.3	8.8
South Asia										
Afghanistan	22 840	98	170	1	203	1	23 213	841	35.7	35.1
Bangladesh	31 500	88	770	2	3 600	10	35 870	255	2.9	2.6
Bhutan	318	94	3	1	17	5	338	513	0.4	0.4
India	688 000	90	17 000	2	56 000	7	761 000	668	39.8	36.0
Iran (Islamic Rep.)	86 000	92	1 100	1	6 200	7	93 300	1 338	67.9	62.5
Maldives	0	0	0	5	6	95	6	20	19.7	0.0
Nepal	9 610	98	30	0	148	2	9 787	359	4.7	4.6
Pakistan	172 400	94	1 400	1	9 650	5	183 450	1 156	74.3	69.9
Sri Lanka	11 310	87	831	6	805	6	12 946	652	24.5	21.4
West Asia										
Armenia	1 859	66	125	4	843	30	2 827	922	36.4	23.9
Azerbaijan	9 330	76	2 360	19	521	4	12 211	1 422	35.2	26.9
Bahrain	159	45	20	6	178	50	357	493	308.1	137.2
Cyprus	159	86	6	3	19	10	184	178	23.6	20.4
Georgia	1 055	65	208	13	358	22	1 621	362	2.6	1.7
Iraq	52 000	79	9 700	15	4 300	7	66 000	2 412	87.3	68.8
Jordan	611	65	38	4	291	31	941	176	100.4	65.2
Kuwait	492	51	23	2	448	47	964	426	4 817.5	2 459.5
Lebanon	780	60	150	11	380	29	1 310	323	29.1	17.3
Occupied Palestinian Territory	189	45	29	7	200	48	418	118	49.9	22.6
Saudi Arabia	20 830	88	710	3	2 130	9	23 670	985	986.3	867.9
Syrian Arab Republic	14 670	88	615	4	1 475	9	16 760	907	99.8	87.3
Turkey	29 600	74	4 300	11	6 200	15	40 100	588	18.8	13.9
United Arab Emirates	3 312	83	69	2	617	15	3 998	983	2 665.3	2 208.0
Yemen	3 235	91	65	2	265	7	3 565	173	169.8	154.0
LATIN AMERICA & THE CARIBBEAN										
Argentina	21 520	64	4 396	13	7 820	23	33 736	872	4.1	2.6
Bahamas										
Barbados	20	30	26	40	20	30	66	244	82.8	25.0
Belize	30	20	110	73	10	7	150	534	0.8	0.2
Bolivia (Plur. State)	1 160	51	401	18	729	32	2 290	250	0.4	0.2
Brazil	31 700	55	10 140	17	16 230	28	58 070	312	0.7	0.4
Chile	7 970	68	2 610	22	1 172	10	11 752	721	1.3	0.9
Colombia	4 920	37	582	4	7 845	59	13 347	310	0.6	0.2
Costa Rica	1 430	53	460	17	790	29	2 680	622	2.4	1.3

TABLE 50: Water withdrawal (continued)


	Water withdrawal by sector						Water withdrawal		% of freshwater resources withdrawn	
	agricultural		industrial		municipal		total	per capita	total	by agriculture
	million m³/yr	% of total	million m³/yr	% of total	million m³/yr	% of total	million m³/yr	m³/yr	%	%
	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*	2005*
Cuba	5 640	74	761	10	1 187	16	7 588	674	19.9	14.8
Dominica										
Dominican Republic	2 240	60	80	2	1 444	38	3 764	406	17.9	10.7
Ecuador	13 960	88	549	3	1 293	8	15 802	1 177	3.7	3.3
El Salvador	760	53	256	18	410	29	1 426	236	5.7	3.0
French Guiana										
Grenada										
Guatemala	1 610	51	1 063	33	512	16	3 185	250	2.9	1.4
Guyana	1 600	95	20	1	61	4	1 682	2 254	0.7	0.7
Haiti	930	75	52	4	258	21	1 240	133	8.8	6.6
Honduras	690	45	492	32	344	23	1 526	222	1.6	0.7
Jamaica	200	33	138	22	275	45	612	228	6.5	2.1
Mexico	61 200	77	7 400	9	11 200	14	79 800	749	17.5	13.4
Netherlands Antilles										
Nicaragua	1 080	67	74	5	466	29	1 620	299	0.8	0.5
Panama	230	45	19	4	263	51	512	158	0.3	0.2
Paraguay	350	71	40	8	100	20	490	83	0.1	0.1
Peru	16 420	82	1 983	10	1 642	8	20 045	727	1.0	0.9
St. Kitts & Nevis										
St. Lucia										
St. Vincent & Grenadines										
Suriname	620	93	20	3	30	4	670	1 343	0.5	0.5
Trinidad & Tobago	20	8	66	25	174	67	260	197	6.8	0.5
Uruguay	3 170	87	80	2	410	11	3 660	1 101	2.6	2.3
Venezuela (Boliv. Rep. of)	3 970	40	793	8	5 123	52	9 886	371	0.8	0.3
OCEANIA										
Fiji	50	59	10	11	25	30	85	103	0.3	0.2
French Polynesia										
New Caledonia										
Papua New Guinea	1	0	168	43	224	57	392	64	0.0	0.0
Samoa										
Solomon Islands										
Tonga										
Vanuatu										
DEVELOPED REGIONS										
NORTH AMERICA										
Bermuda										
Canada	5 410	12	31 570	69	8 990	20	45 970	1 424	1.6	0.2
United States of America	192 400	40	220 600	46	65 440	14	478 440	1 612	15.6	6.3
ASIA & OCEANIA										
Australia	16 660	74	2 400	11	3 520	16	22 580	1 107	4.6	3.4
Israel	1 129	58	113	6	712	36	1 954	296	109.8	63.4
Japan	56 840	63	15 800	18	17 400	19	90 040	712	20.9	13.2
New Zealand	3 533	74	200	4	1 020	21	4 753	1 150	1.5	1.1
EUROPE										
Albania	1 060	57	232	13	561	30	1 853	590	4.4	2.5
Belarus	840	20	2 268	53	1 134	27	4 242	432	7.3	1.4
Bosnia & Herzegovina										
Croatia	11	2	86	14	534	85	631	142	0.6	0.0
European Union										
Iceland	70	42	14	8	81	49	165	556	0.1	0.0
Macedonia, FYR	126	12	685	67	217	21	1 028	504	16.1	2.0
Montenegro										
Norway	845	29	1 261	43	833	28	2 939	636	0.8	0.2
Republic of Moldova	760	42	883	49	146	8	1 789	475	15.4	6.5
Russian Federation	13 200	20	39 600	60	13 400	20	66 200	460	1.5	0.3
Serbia	77	2	3 361	82	683	17	4 121			
Switzerland	50	2	1 503	59	1 004	39	2 557	345	4.8	0.1
Ukraine	19 690	52	13 440	36	4 614	12	37 744	804	27.0	14.1

TABLE 51: Agricultural emissions and pollution


	Greenhouse gas emissions		Methane emissions		Nitrous oxide emissions	
	by agriculture	share of agriculture in total	total	by agriculture	total	by agriculture
	gigagrams CO ₂ equivalent 2008	% 2008*	kt of CO ₂ equivalent 2005*	% 2005*	kt of CO ₂ equivalent 2005*	% 2005*
WORLD			7 140 000	42.6	2 850 000.0	66.2
DEVELOPING REGIONS				50.1		73.1
AFRICA				42.8		75.5
North Africa			134 660	29.2	33 370.0	74.0
Algeria		5.9	54 200	8.2	4 900.0	58.6
Egypt		16.5	47 000	31.7	19 000.0	80.0
Libya			14 700	5.7	1 290.0	51.9
Morocco		35.0	10 600	51.7	5 810.0	82.6
Tunisia		23.9	8 160	25.5	2 370.0	66.4
Sub-Saharan Africa						
Angola			45 400	27.9	38 900.0	38.4
Benin		96.5	4 080	47.8	2 900.0	61.5
Botswana		54.5	4 500	84.1	3 080.0	92.0
Burkina Faso		78.9				
Burundi		97.9				
Cameroon		61.7	18 500	42.4	9 130.0	75.9
Cape Verde		13.4				
Central African Republic		43.0				
Chad		91.0				
Comoros		85.6				
Congo		15.7	5 580	31.9	3 570.0	51.8
Côte d'Ivoire		71.8	11 000	17.4	7 360.0	29.3
Congo, Dem. Rep.		75.2				
Djibouti		40.4				
Equatorial Guinea						
Eritrea		33.1	2 470	73.2	1 190.0	90.9
Ethiopia		80.6	52 200	72.5	30 500.0	88.8
Gabon			8 220	1.1	482.0	23.3
Gambia		21.0				
Ghana		40.3	8 990	39.5	4 900.0	70.5
Guinea		50.0				
Guinea-Bissau		86.8				
Kenya		56.4	22 100	65.5	10 500.0	88.8
Lesotho		51.6				
Liberia						
Madagascar		90.5				
Malawi		45.3				
Mali		87.4				
Mauritania		81.6				
Mauritius		6.8				
Mozambique		56.2	12 800	44.2	9 500.0	71.4
Namibia		64.4	5 060	94.9	3 800.0	94.3
Niger		78.0				
Nigeria		20.8	130 000	19.8	21 600.0	77.3
Rwanda		40.2				
Senegal		37.1	7 130	68.3	4 080.0	88.5
Seychelles		10.7				
Sierra Leone						
Somalia						
Sudan		83.5	67 400	85.2	49 500.0	92.6
South Africa		9.3	63 800	31.4	24 000.0	59.8
Swaziland		16.4				
Tanzania, Utd. Rep.		75.8	32 000	63.2	21 600.0	78.8
Togo		71.2	2 890	39.8	1 740.0	67.5
Uganda		90.3				
Zambia		41.6	19 300	59.3	25 100.0	71.7
Zimbabwe		20.7	9 540	73.3	6 110.0	85.2

TABLE 51: Agricultural emissions and pollution (continued)


	Greenhouse gas emissions		Methane emissions		Nitrous oxide emissions	
	by agriculture	share of agriculture in total	total	by agriculture	total	by agriculture
	gigagrams CO ₂ equivalent 2008	% 2008*	kt of CO ₂ equivalent 2005*	% 2005*	kt of CO ₂ equivalent 2005*	% 2005*
ASIA			3 319 510	50.5	1 112 482.9	72.4
Central Asia			122 190	37.8	34 770.0	77.3
Kazakhstan	12 101.5	4.9	47 100	25.3	17 600.0	62.5
Kyrgyzstan		16.1	3 590	72.3	1 510.0	72.6
Tajikistan		55.0	3 900	68.6	1 380.0	86.9
Turkmenistan		9.0	28 000	21.6	4 280.0	78.1
Uzbekistan		8.2	39 600	33.7	10 000.0	84.2
East Asia				43.1		71.6
Brunei Darussalam			5 770	0.2	609.0	14.6
Cambodia		82.7	20 200	76.1	5 790.0	66.1
China		14.9	1 332 820	38.6	467 422.0	73.9
Indonesia		25.3	209 000	46.4	123 000.0	71.5
Korea, DPR		5.8	18 200	23.5	3 420.0	62.3
Korea, Republic of		3.0	32 100	38.6	13 500.0	35.9
Lao, PDR		83.0				
Malaysia		5.1	46 500	12.4	15 100.0	64.9
Mongolia		36.5	6 070	92.1	3 490.0	93.2
Myanmar			77 200	69.0	30 900.0	42.9
Philippines		32.8	51 900	63.7	13 000.0	73.1
Singapore			2 240	1.2	1 070.0	2.8
Thailand		34.6	83 300	66.0	22 300.0	65.5
Viet Nam		47.9	83 000	63.9	23 000.0	83.0
South Asia				63.1		74.4
Afghanistan						
Bangladesh		61.2	92 400	70.5	21 400.0	83.1
Bhutan		82.2				
India		28.4	584 000	64.4	213 000.0	73.4
Iran (Islamic Rep.)		7.9	115 000	18.2	26 600.0	75.3
Maldives						
Nepal		87.2	22 100	82.9	4 520.0	76.8
Pakistan		38.6	137 000	63.5	26 800.0	74.2
Sri Lanka		39.4	10 200	65.2	2 060.0	65.1
West Asia			268 320	26.4	60 731.9	63.3
Armenia		17.9	2 960	36.7	580.0	81.6
Azerbaijan		8.5	36 600	13.6	2 630.0	77.5
Bahrain		0.2	2 770	0.6	81.9	16.0
Cyprus			616	44.0	292.0	65.5
Georgia		27.1	4 410	50.8	2 020.0	56.9
Iraq			15 900	18.6	3 440.0	63.3
Jordan		0.9	1 800	21.8	667.0	55.4
Kuwait			14 400	1.1	650.0	16.9
Lebanon		7.0	1 000	25.5	672.0	58.8
Occupied Palestinian Territory						
Saudi Arabia		6.9	48 200	4.0	6 500.0	46.1
Syrian Arab Republic			12 500	28.1	5 510.0	78.1
Turkey	25 043.0	6.8	64 300	33.6	32 800.0	66.4
United Arab Emirates		3.4	23 300	2.6	1 170.0	43.6
Yemen		35.2	6 680	54.9	3 250.0	72.5
LATIN AMERICA & THE CARIBBEAN				56.8		74.5
Argentina		44.3	102 000	70.6	49 800.0	89.2
Bahamas		1.0				
Barbados		1.6				
Belize		4.3				
Bolivia (Plur. State)		26.7	30 300	34.1	15 100.0	36.5
Brazil		48.2	492 000	61.1	236 000.0	67.0
Chile		24.4	18 100	39.4	8 140.0	73.4
Colombia		44.6	58 100	68.0	21 300.0	86.1
Costa Rica		38.0	2 580	67.2	1 330.0	85.4

TABLE 51: Agricultural emissions and pollution (continued)


	Greenhouse gas emissions		Methane emissions		Nitrous oxide emissions	
	by agriculture	share of agriculture in total	total	by agriculture	total	by agriculture
	gigagrams CO ₂ equivalent 2008	% 2008*	kt of CO ₂ equivalent 2005*	% 2005*	kt of CO ₂ equivalent 2005*	% 2005*
Cuba		25.6	9 450	62.4	6 360.0	78.7
Dominica		9.7				
Dominican Republic		21.6	6 080	63.7	2 260.0	76.8
Ecuador		27.3	17 100	57.7	4 570.0	84.9
El Salvador		49.4	3 130	53.1	1 380.0	76.2
French Guiana						
Grenada		0.0				
Guatemala		59.9	8 310	48.8	5 380.0	56.8
Guyana		41.6				
Haiti		80.1	4 010	56.2	1 440.0	84.2
Honduras		31.2	5 190	78.4	2 870.0	85.9
Jamaica		92.3	1 300	50.3	599.0	59.0
Mexico		7.1	128 000	42.3	42 500.0	75.2
Netherlands Antilles			123	3.2	55.1	5.8
Nicaragua		55.8	6 020	74.8	3 340.0	91.7
Panama		44.2	3 220	79.2	1 200.0	83.7
Paraguay		97.0	15 400	84.1	9 070.0	82.6
Peru		35.7	17 200	61.3	7 560.0	81.9
St. Kitts & Nevis		25.8				
St. Lucia		2.9				
St. Vincent & Grenadines		64.4				
Suriname		25.2				
Trinidad & Tobago		2.1	10 100	0.7	230.0	60.3
Uruguay		80.8	19 600	94.3	7 020.0	96.9
Venezuela (Boliv. Rep. of)		17.1	61 200	40.0	14 900.0	75.2
OCEANIA						
Fiji		35.5				
French Polynesia						
New Caledonia						
Papua New Guinea		77.2				
Samoa		76.8				
Solomon Islands						
Tonga		26.9				
Vanuatu		78.5				
DEVELOPED REGIONS			2 036 767	38.8	912 955.6	52.1
NORTH AMERICA				34.3		56.6
Bermuda						
Canada	62 457.8	8.5	89 300	29.3	40 200.0	58.9
United States of America	427 528.5	6.2	548 000	34.8	317 000.0	56.4
ASIA & OCEANIA				67.7		37.7
Australia	87 394.7	15.9	126 000	55.1	63 000.0	78.2
Israel		4.5	3 520	31.2	1 790.0	53.0
Japan	25 844.9	2.0	42 800	71.2	29 800.0	27.9
New Zealand	34 826.3	46.4	27 600	90.2	12 900.0	94.2
EUROPE			1 199 547	34.6	448 265.6	53.1
Albania		34.0	2 410	70.8	1 040.0	78.4
Belarus	22 746.9	25.0	11 500	70.9	11 700.0	72.9
Bosnia & Herzegovina		13.5	2 740	42.4	1 200.0	57.8
Croatia	3 359.4	10.8	3 860	33.3	2 850.0	52.4
European Union			536 000	40.6	327 000.0	56.3
Iceland	566.4	11.6	402	53.5	418.0	79.7
Macedonia, FYR		8.8	1 400	46.6	599.0	63.9
Montenegro		12.3				
Norway	4 356.1	8.0	16 900	12.6	4 740.0	39.0
Republic of Moldova		17.9	3 370	29.4	849.0	73.5
Russian Federation	144 092.1	6.4	563 000	9.1	76 100.0	44.3
Serbia		14.3	7 780	43.7	4 580.0	63.6
Switzerland	5 689.2	10.7	4 750	67.6	2 410.0	59.3
Ukraine	34 636.4	8.1	70 400	23.3	26 100.0	45.6

TABLE 52: Agricultural pollution


	Energy use		Air pollution	Water pollution			
	by agriculture	share of agriculture in total	urban	food industry	paper and pulp industry	textile industry	wood industry
	kt of oil equivalent	%	annual PM ₁₀ [mg/m ³]	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions
	2009*	2009*	2004	2007*	2007*	2007*	2007*
WORLD		2.0	72				
DEVELOPING REGIONS			81				
AFRICA			79				
North Africa			93				
Algeria			65				
Egypt	2 618.6	5.3	136	20.0	4.0	31.1	0.6
Libya	224.9	2.1	121				
Morocco	1 721.6	14.8	27	16.3	2.9	43.5	2.0
Tunisia	423.7	6.5	46				
Sub-Saharan Africa			76				
Angola	4.1	0.0	113				
Benin			51				
Botswana	20.3	1.1	25	43.8	2.4	3.9	
Burkina Faso			97				
Burundi			99				
Cameroon	4.4	0.1	86				
Cape Verde			33				
Central African Republic			24				
Chad			73				
Comoros			125				
Congo			74				
Côte d'Ivoire	64.9	1.1					
Congo, Dem. Rep.	0.1	0.0	57				
Djibouti			68				
Equatorial Guinea			12				
Eritrea			109	27.3	4.4	29.0	0.1
Ethiopia	26.0	0.2	88	34.7	6.0	27.9	1.5
Gabon	8.3	0.5	13				
Gambia			138	48.6	1.3	13.3	18.7
Ghana	91.5	1.2	42	18.6	3.8	10.2	33.3
Guinea			63				
Guinea-Bissau			84				
Kenya	110.4	0.9	38				
Lesotho			94	2.6	0.5	93.5	
Liberia			39				
Madagascar			51	7.6	1.6	58.9	6.3
Malawi			88	82.1	1.4	7.5	1.1
Mali			102				
Mauritania			42				
Mauritius			47	14.7	3.6	63.9	0.7
Mozambique	7.2	0.1	44				
Namibia	223.4	13.9	50				
Niger			86				
Nigeria			95				
Rwanda			100	77.1		1.9	2.9
Senegal	6.1	0.3	93	44.6	6.3	10.5	0.8
Seychelles							
Sierra Leone			69				
Somalia			35				
Sudan	54.1	0.5	219	57.5	1.9	8.0	1.7
South Africa	1 535.0	2.2	24	15.7	6.6	10.4	4.2
Swaziland			71				
Tanzania, Utd. Rep.	717.7	4.2	38	61.2	4.8	12.7	2.9
Togo			45				
Uganda			33	34.8	7.8	17.2	2.3
Zambia	39.7	0.7	71				
Zimbabwe	641.4	7.7	43	21.5	4.7	25.2	1.7

TABLE 52: Agricultural pollution (continued)


	Energy use		Air pollution	Water pollution			
	by agriculture	share of agriculture in total	urban	food industry	paper and pulp industry	textile industry	wood industry
	kt of oil equivalent	%	annual PM ₁₀ [mg/m ³]	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions
	2009*	2009*	2004	2007*	2007*	2007*	2007*
ASIA			87				
Central Asia			59				
Kazakhstan	942.0	2.5	25	18.7	2.4	4.0	0.6
Kyrgyzstan	141.9	5.1	36	24.2	6.3	9.8	1.6
Tajikistan	355.4	17.9	57	18.0	2.7	38.4	0.3
Turkmenistan	254.0	2.2	73				
Uzbekistan	1 955.9	5.5	81				
East Asia			79				
Brunei Darussalam	1.0	0.2	48				
Cambodia	117.4	2.5	51	18.1	0.9	33.6	8.2
China			80	7.4	3.9	20.6	1.7
Indonesia	2 687.9	1.8	114	23.1	4.0	29.2	6.3
Korea, DPR			88				
Korea, Republic of	1 774.2	1.2	43	6.3	5.4	9.3	0.9
Lao, PDR			25	9.2	2.2	49.2	21.4
Malaysia	209.6	0.5	28	9.1	4.9	6.6	7.8
Mongolia	49.8	2.1	16	27.2	5.1	41.6	5.4
Myanmar	1.0	0.0	75				
Philippines	129.5	0.6	34	14.4	4.2	21.6	2.1
Singapore	5.0	0.0	48	5.3	5.5	2.3	0.5
Thailand	3 424.8	4.5	77	16.4	4.2	20.5	2.8
Viet Nam	598.7	1.1	66	12.7	3.5	40.2	3.3
South Asia			98				
Afghanistan			27	14.1	19.7	23.3	
Bangladesh	1 174.9	5.1	157	7.6	2.3	79.3	0.5
Bhutan			13				
India	17 387.3	3.9	84				
Iran (Islamic Rep.)	6 145.7	3.8	68	16.1	2.8	11.2	0.7
Maldives			54				
Nepal	113.4	1.1	161	19.2	3.9	29.4	2.0
Pakistan	894.3	1.3	165	15.1	1.9	55.6	0.4
Sri Lanka	9.2	0.1	93	22.4	4.3	43.6	2.5
West Asia			86				
Armenia	10.7	0.6	84				
Azerbaijan	361.2	5.5	64	19.6	3.0	11.7	1.5
Bahrain	3.8	0.1	65				
Cyprus	37.0	2.1	60	36.3	8.9	5.1	8.0
Georgia	77.9	3.1	46				
Iraq			167	16.9	25.6	9.2	
Jordan	152.5	3.2	69	20.8	6.2	18.6	2.3
Kuwait			129				
Lebanon			43	25.5	7.5	16.7	4.5
Occupied Palestinian Territory							
Saudi Arabia	435.3	0.4	91	20.0	6.9	14.4	3.3
Syrian Arab Republic	265.8	2.0	89	19.9	1.9	32.0	5.2
Turkey	4 726.9	6.5	56	12.4	3.8	32.2	1.7
United Arab Emirates	33.9	0.1	109				
Yemen	995.9	18.7	82	35.9	2.1	15.5	5.1
LATIN AMERICA & THE CARIBBEAN			46				
Argentina	3 324.1	6.3	78	30.5	8.3	14.3	2.1
Bahamas			18	42.0	19.7	6.4	0.4
Barbados			95				
Belize			12				
Bolivia (Plur. State)	2.3	0.1	72	35.4	9.8	18.4	5.3
Brazil	9 453.2	5.0	35				
Chile			62	35.1	6.3	9.1	6.9
Colombia	1 646.5	7.1	42	21.3	8.9	24.1	0.9
Costa Rica	64.4	1.9	40				

TABLE 52: Agricultural pollution (continued)


	Energy use		Air pollution	Water pollution			
	by agriculture	share of agriculture in total	urban	food industry	paper and pulp industry	textile industry	wood industry
	kt of oil equivalent	%	annual PM ₁₀ [mg/m ³]	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions	% of total BOD emissions
	2009*	2009*	2004	2007*	2007*	2007*	2007*
Cuba	181.3	2.5	38				
Dominica			34				
Dominican Republic	143.9	2.6	36	18.6	1.3	73.1	0.1
Ecuador	106.9	1.1	34	46.4	7.8	12.3	2.2
El Salvador	6.6	0.2	48				
French Guiana							
Grenada			49				
Guatemala	6.0	0.1	60				
Guyana			13				
Haiti			47	28.9	1.6	28.7	0.5
Honduras	3.0	0.1	69				
Jamaica	551.4	22.2	43				
Mexico	3 596.5	3.3	49	18.9	7.1	17.0	4.8
Netherlands Antilles							
Nicaragua	14.3	0.7	32				
Panama	14.0	0.5	58	55.2	11.6	4.7	1.6
Paraguay			103	42.6	9.3	11.0	4.5
Peru	377.6	2.7	62				
St. Kitts & Nevis			33				
St. Lucia			74				
St. Vincent & Grenadines			56				
Suriname			13				
Trinidad & Tobago	8.3	0.2	22	39.3	18.2	7.7	8.5
Uruguay	36.2	1.1	154				
Venezuela (Boliv. Rep. of)	39.3	0.1	16				
OCEANIA			12				
Fiji			17	32.7	5.3	40.8	4.0
French Polynesia							
New Caledonia							
Papua New Guinea			11				
Samoa							
Solomon Islands			16				
Tonga				67.3	5.0	4.4	7.3
Vanuatu			10				
DEVELOPED REGIONS			30				
NORTH AMERICA			24				
Bermuda							
Canada	3 372.1	1.7	21	14.0	8.9	7.3	6.5
United States of America	14 313.0	1.0	24	12.0	8.1	4.3	4.1
ASIA & OCEANIA			31				
Australia	2 164.6	2.8	18				
Israel	145.3	1.0	53	16.4	8.9	7.9	1.2
Japan	1 874.0	0.6	33	15.0	7.0	5.3	2.0
New Zealand	522.5	4.2	16	31.1	12.2	5.8	8.0
EUROPE			33				
Albania	75.7	5.0	58	39.8		60.2	
Belarus	1 098.2	5.7	9				
Bosnia & Herzegovina	5.8	0.2	22				
Croatia	249.0	3.6	35	17.6	7.2	14.5	4.9
European Union			33				
Iceland	41.8	1.5	21				
Macedonia, FYR	18.2	1.1	29	15.1	4.7	44.7	2.9
Montenegro							
Norway	327.8	1.7	22	19.1	12.1	2.0	6.0
Republic of Moldova	51.4	3.1	41	95.2	3.8		
Russian Federation	8 344.1	2.0	25	17.9	4.9	6.3	4.2
Serbia	123.2	1.5					
Switzerland	267.9	1.3	27				
Ukraine	1 615.4	2.5	29	19.7	4.3	5.6	2.1

TABLE 53: Conservation and renewable feedstocks


	Nationally protected area	Organic agriculture	Production						
	% of total area	% of total area	biofuel			natural fibre		recovered paper	
	%	%	kt of oil equivalent	kt of oil equivalent	% p.a.	thousand tonnes	% p.a.	thousand tonnes	% p.a.
	2009*	2009	2000	2009	growth: 2000-2009	2010	growth: 1961-2010	2010	growth: 1961-2010
WORLD	12.5		954 280.6	1 132 462.3	1.9	28 443	1.3	207 821	
DEVELOPING REGIONS			806 946.9	933 515.9	1.6	23 311	1.9	75 718	
AFRICA			202 193.4	258 488.2	2.8	1 380	0.3	1 649	
North Africa			2 910.8	3 566.6	2.3	150	-1.7	487	
Algeria	6.3	0.0	76.5	57.2	-3.2	0	-7.4	32	
Egypt	5.9	1.5	1 325.1	1 567.3	1.9	148	-1.7	380	
Libya	0.1		139.6	168.0	2.1				
Morocco	1.5	0.0	436.0	480.1	1.1	2	-0.3	35	
Tunisia	1.3	1.7	933.6	1 294.0	3.7	1	2.5	40	
Sub-Saharan Africa			199 282.7	254 921.6	2.8	1 230	0.8	1 162	
Angola	12.4	0.0	5 538.2	7 150.4	2.9	2	-6.6		
Benin	23.8	0.0	1 445.0	1 995.6	3.7	76	10.5		
Botswana	30.9		542.6	483.2	-1.3	0	-3.0		
Burkina Faso	13.9	0.1				190	11.8		
Burundi	4.8	0.0				1	-3.0		
Cameroon	9.2	0.0	4 984.7	4 436.5	-1.3	62	4.1		
Cape Verde	2.5								
Central African Republic	14.7					4	-2.1		
Chad	9.4					26	0.9		
Comoros	0.0	0.8				0	-100.0		
Congo	9.4		587.6	716.9	2.2				
Côte d'Ivoire	22.6	0.1	4 223.6	7 780.4	7.0	81	8.2	6	
Congo, Dem. Rep.	10.0	0.0	15 758.4	21 473.1	3.5	14	-1.7		
Djibouti	0.0								
Equatorial Guinea	19.2					0	-1.4		
Eritrea	5.0		507.7	561.3	1.1				
Ethiopia	18.4	0.4	17 423.9	30 052.0	6.2	57		2	
Gabon	14.9		924.6	1 108.7	2.0				
Gambia	1.5					0			
Ghana	14.0	0.2	5 315.2	6 456.0	2.2	9			
Guinea	6.8					13	10.5		
Guinea-Bissau	16.1					2			
Kenya	11.6	0.0	11 245.0	14 233.7	2.7	25	-2.0	38	
Lesotho	0.5	0.0							
Liberia	18.1								
Madagascar	2.9	0.0				29	0.3	2	
Malawi	15.0	0.0				6	1.0		
Mali	2.4	0.1				79	7.6		
Mauritania	0.5								
Mauritius	4.5	0.0				0	-4.8	3	
Mozambique	15.8	0.0	6 417.6	7 987.8	2.5	62	-0.2	5	
Namibia	14.5	0.0	172.9	205.7	1.9	1			
Niger	6.8	0.0				3	2.5		
Nigeria	12.8	0.0	74 154.7	91 907.2	2.4	161	2.4	8	
Rwanda	10.0	0.2				0	-100.0		
Senegal	24.1	0.3	1 163.6	1 208.5	0.4	6	8.0	0	
Seychelles	42.0							0	
Sierra Leone	5.0	2.1				5	-0.5		
Somalia	0.6					2	1.7		
Sudan	4.9	0.3	11 055.9	10 754.4	-0.3	62	-1.3	6	
South Africa	6.9	0.1	12 872.4	14 428.8	1.3	12	0.5	1 015	
Swaziland	3.0	0.0				1	-2.8	6	
Tanzania, Utd. Rep.	27.7	0.2	12 457.8	17 204.6	3.7	130	-1.3		
Togo	11.3	0.1	1 756.1	2 183.1	2.4	11	2.7		
Uganda	9.7	1.6				26	-2.0		
Zambia	36.0	0.0	5 144.1	6 357.0	2.4	29			
Zimbabwe	28.0	0.0	5 591.0	6 236.6	1.2	42	7.1	70	

TABLE 53: Conservation and renewable feedstocks (continued)

	Nationally protected area	Organic agriculture	Production						
			biofuel			natural fibre		recovered paper	
	% of total area	% of total area	kt of oil equivalent	kt of oil equivalent	% p.a.	thousand tonnes	% p.a.	thousand tonnes	% p.a.
	2009*	2009	2000	2009	growth: 2000-2009	2010	growth: 1961-2010	2010	growth: 1961-2010
ASIA			514 021.4	551 414.6	0.8	20 069	2.4	64 308	
Central Asia			77.1	160.4	8.5	1 737		15	
Kazakhstan	2.5	0.1	73.3	156.6	8.8	92		15	
Kyrgyzstan	6.9	0.1	3.6	3.6	0.0	24			
Tajikistan	4.1	0.0	0.0	0.0		102			
Turkmenistan	3.0		0.0	0.0		360			
Uzbekistan	2.3	0.0	0.2	0.2	0.0	1 158			
East Asia			314 238.1	328 508.1	0.5	6 749	3.0	60 688	
Brunei Darussalam	42.9		0.0	0.0					
Cambodia	24.0	0.2	3 202.5	3 663.9	1.5	2	-4.7	20	
China	16.6	0.4	203 682.3	203 672.2	-0.0	6 330	3.7	44 105	
Indonesia	14.1	0.1	49 224.0	52 980.6	0.8	93	1.2	3 934	
Korea, DPR	4.0		1 004.8	1 046.1	0.4	28	3.5		
Korea, Republic of	2.4	0.7	232.7	691.4	12.9	0	-14.0	8 857	
Lao, PDR	16.3	0.2				4	2.0		
Malaysia	17.9	0.0	2 546.8	3 205.2	2.6	0	-100.0	1 200	
Mongolia	13.4		99.6	103.3	0.4				
Myanmar	6.3	0.0	9 175.0	10 530.7	1.5	71	3.0	38	
Philippines	10.9	0.4	8 102.5	6 922.4	-1.7	73	-0.6	326	
Singapore	5.4		0.0	0.0				275	
Thailand	19.6	0.1	14 592.9	20 537.7	3.9	49	-3.6	1 856	
Viet Nam	6.2	0.1	22 374.8	25 154.6	1.3	99	2.0	77	
South Asia			192 321.5	217 463.7	1.4	10 829	1.9	1 110	
Afghanistan	0.4	0.0				18	0.1		
Bangladesh	1.6	0.0	7 603.4	8 812.9	1.7	1 224	-0.2		
Bhutan	28.3					0			
India	5.3	0.7	148 879.2	165 421.9	1.2	7 544	2.3	850	
Iran (Islamic Rep.)	7.1	0.0	351.6	403.4	1.5	72	-1.0	80	
Maldives									
Nepal	17.0	0.2	6 987.9	8 544.7	2.3	21	-0.9	4	
Pakistan	10.3	0.1	24 027.6	29 531.3	2.3	1 949	3.7	163	
Sri Lanka	20.8	0.1	4 471.8	4 749.5	0.7	0	-100.0	13	
West Asia			7 384.7	5 282.4	-3.7	754	1.5	2 495	
Armenia	8.0	0.0	1.0	1.0	0.0			0	
Azerbaijan	7.1	0.4	1.6	0.0	-100.0	13		0	
Bahrain	1.3		0.0	0.0				40	
Cyprus	11.0	3.0	8.8	16.1	7.0	0	-100.0	45	
Georgia	3.7	0.0	645.1	382.0	-5.7			10	
Iraq	0.1		26.3	26.3	0.0	16	1.4	6	
Jordan	9.4	0.1	2.3	4.9	8.5			3	
Kuwait	1.6		0.0	0.0				170	
Lebanon	0.5	0.5	128.6	120.0	-0.8				
Occupied Palestinian Territory		0.3							
Saudi Arabia	31.3	0.0	0.0	0.0				1 000	
Syrian Arab Republic	0.6	0.3	5.0	6.4	2.8	246	1.5		
Turkey	1.9	1.3	6 497.4	4 641.4	-3.7	471	1.5	1 016	
United Arab Emirates	5.6	0.1	0.0	0.0				170	
Yemen	0.5		77.4	100.3	2.9	8	1.0		
LATIN AMERICA & THE CARIBBEAN			90 732.1	123 613.2	3.5	1 862	0.0	9 761	
Argentina	5.4	3.1	2 955.4	3 269.4	1.1	233	1.3	900	
Bahamas	13.7								
Barbados	0.1								
Belize	27.9	0.8							
Bolivia (Plur. State)	18.2	0.1	723.1	1 102.2	4.8	29	7.1		
Brazil	28.0	0.7	46 484.2	76 701.2	5.7	1 290	1.3	4 019	
Chile	16.5	0.5	4 255.8	5 051.5	1.9	16	2.4	489	
Colombia	20.4	0.1	4 393.8	4 455.4	0.2	26	-2.6	633	
Costa Rica	20.9	0.4	248.0	772.1	13.4	1	-0.9	29	

TABLE 53: Conservation and renewable feedstocks (continued)

	Nationally protected area	Organic agriculture	Production						
	% of total area	% of total area	biofuel			natural fibre		recovered paper	
	%	%	kt of oil equivalent	kt of oil equivalent	% p.a.	thousand tonnes	% p.a.	thousand tonnes	% p.a.
	2009*	2009	2000	2009	growth: 2000-2009	2010	growth: 1961-2010	2010	growth: 1961-2010
Cuba	6.2	0.2	4 665.6	1 817.2	−9.9	10	−1.1	28	
Dominica	21.7								
Dominican Republic	22.1	6.5	1 355.4	1 765.7	3.0	1	−4.0	15	
Ecuador	25.1	0.9	697.4	615.6	−1.4	31	4.4	150	
El Salvador	0.8	0.4	1 342.7	1 724.9	2.8	4	−5.0	5	
French Guiana		11.5							
Grenada	1.7	0.3				0	−3.7		
Guatemala	30.6	0.3	3 898.7	5 123.9	3.1	1	−5.9	18	
Guyana	4.9	0.3							
Haiti	0.3	0.0	1 517.4	1 848.9	2.2	8	−2.5		
Honduras	18.2	0.4	1 327.8	1 954.3	4.4	1	−1.1	51	
Jamaica	18.9	0.1	579.0	516.9	−1.3	0	−0.8	0	
Mexico	11.1	0.3	8 939.3	8 382.8	−0.7	170	−2.5	3 039	
Netherlands Antilles			0.0	0.0					
Nicaragua	36.7	0.7	1 419.3	1 416.3	−0.0	6	−3.6		
Panama	18.7	0.2	461.5	330.9	−3.6			13	
Paraguay	5.4	0.2	2 237.6	2 708.5	2.1	5	−1.1	30	
Peru	13.6	0.9	2 234.1	2 439.5	1.0	21	−3.7	72	
St. Kitts & Nevis	3.6					0	−100.0		
St. Lucia	14.3							1	
St. Vincent & Grenadines	10.9					0	−100.0		
Suriname	11.4	0.0							
Trinidad & Tobago	31.2		33.7	11.6	−11.1			7	
Uruguay	0.3	6.3	421.4	1 063.8	10.8	0	−100.0	21	
Venezuela (Boliv. Rep. of)	53.7	0.0	540.8	540.8	0.0	9	−1.3	237	
OCEANIA						0	−0.5		
Fiji	1.3	0.0							
French Polynesia	0.4								
New Caledonia	5.5								
Papua New Guinea	3.1	0.3							
Samoa	3.4	14.5				0	−0.5		
Solomon Islands	0.1	4.3							
Tonga	14.5								
Vanuatu	4.3	4.8							
DEVELOPED REGIONS			147 333.7	198 946.4	3.4	5 132	0.7	132 103	
NORTH AMERICA			72 397.4	85 615.6	1.9	3 970	0.5	50 317	3.7
Bermuda	5.6								
Canada	8.0	1.0	11 527.7	11 310.1	−0.2	28	12.2	3 444	
United States of America	14.8	0.5	60 869.6	74 305.4	2.2	3 942	0.5	46 873	3.6
ASIA & OCEANIA			10 590.8	11 714.6	1.1	397	5.6	25 547	
Australia	10.5	2.9	4 856.0	5 690.8	1.8	387	10.0	3 187	
Israel	18.7	1.1	4.4	20.7	18.9	7	−1.4	305	
Japan	16.3	0.2	4 691.8	4 908.3	0.5	0	−100.0	21 800	5.2
New Zealand	25.8	1.1	1 038.5	1 094.9	0.6	3	5.5	255	
EUROPE			64 345.6	101 616.2	5.2	766	−2.5	56 239	5.0
Albania	9.8	0.0	260.0	213.0	−2.2	0	−6.2	0	
Belarus	7.3		814.6	1 334.9	5.6	46		0	
Bosnia & Herzegovina	0.6	0.0	179.6	183.1	0.2			35	
Croatia	7.3	1.4	373.4	438.3	1.8	0		0	
European Union	14.9		55 379.0	93 088.5	5.9	638	0.5	51 989	4.9
Iceland	9.7	0.3	0.0	0.4				20	
Macedonia, FYR	4.8	0.1	206.2	195.2	−0.6	0		2	
Montenegro	13.3	0.9						0	
Norway	14.4	5.6	1 219.9	1 067.1	−1.5			474	4.7
Republic of Moldova	1.4	1.3	58.8	71.6	2.2			3	
Russian Federation	9.0	0.0	4 005.7	2 936.1	−3.4	80		2 100	
Serbia	6.0	0.2	869.2	276.3	−12.0			25	
Switzerland	22.8	7.4	726.2	932.5	2.8			1 298	4.2
Ukraine	3.5	0.7	261.5	895.3	14.7	1		339	

TABLE 54: Forestry production

	Production of selected forest products					
	industrial roundwood		woodfuel		total roundwood	
	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010
WORLD	1 537.2	1.5	1 868.0	0.7	3 405.2	1.0
DEVELOPING REGIONS	538.9	2.8	1 670.4	0.7	2 209.3	1.0
AFRICA	74.2	2.3	616.7	1.8	690.8	1.9
North Africa	1.1	1.5	29.2	0.8	30.3	0.8
Algeria	0.1	-0.4	8.2	2.2	8.3	2.1
Egypt	0.3	3.2	17.5	1.1	17.8	1.2
Libya	0.1	3.5	1.0	2.5	1.1	2.5
Morocco	0.4	0.7	0.4	-5.1	0.8	-3.9
Tunisia	0.2	3.0	2.2	1.1	2.4	1.2
Sub-Saharan Africa	73.1	2.4	587.4	2.3	660.5	2.3
Angola	1.1	1.1	4.0	2.6	5.1	2.2
Benin	0.4	2.5	6.3	0.5	6.7	0.6
Botswana	0.1	2.5	0.7	0.4	0.8	0.5
Burkina Faso	1.2	3.7	12.8	1.5	14.0	1.7
Burundi	0.9	7.5	9.8	2.1	10.7	2.3
Cameroon	2.6	2.6	9.9	0.8	12.5	1.0
Cape Verde			0.2	1.8	0.2	1.8
Central African Republic	0.8	2.7	2.0	0.5	2.8	1.0
Chad	0.8	1.8	7.1	2.0	7.8	2.0
Comoros	0.0		0.3	3.8	0.3	4.0
Congo	2.4	3.2	1.3	1.0	3.8	2.1
Côte d'Ivoire	1.5	-0.1	8.9	0.7	10.4	0.6
Congo, Dem. Rep.	4.6	2.1	76.6	3.0	81.2	2.9
Djibouti	0.0	-100.0	0.4		0.4	10.2
Equatorial Guinea	0.5	1.1	0.4	0.8	1.0	1.0
Eritrea	0.0		1.3		1.3	
Ethiopia	2.9		101.3		104.2	
Gabon	3.4	1.4	1.1	2.3	4.5	1.6
Gambia	0.1	6.2	0.7	2.5	0.8	2.7
Ghana	1.2	-0.9	37.8	3.7	39.0	3.2
Guinea	0.7	1.9	12.0	0.6	12.6	0.7
Guinea-Bissau	0.1	0.7	2.6	3.9	2.7	3.6
Kenya	1.2	2.1	26.4	2.4	27.6	2.4
Lesotho			2.1	0.7	2.1	0.7
Liberia	0.5	2.4	7.0	3.1	7.5	3.1
Madagascar	0.3	-0.8	13.1	3.7	13.4	3.4
Malawi	1.4	4.7	5.4	1.1	6.8	1.5
Mali	0.4	1.7	5.3	1.5	5.7	1.5
Mauritania	0.0	0.0	1.8	2.1	1.8	2.1
Mauritius	0.0	-2.9	0.0	-3.1	0.0	-3.1
Mozambique	1.4	1.1	16.7	1.9	18.1	1.8
Namibia			0.8	1.8	0.8	1.8
Niger	0.7	3.6	2.9	0.6	3.6	0.9
Nigeria	9.4	2.9	63.2	1.1	72.6	1.3
Rwanda	1.2	6.6	5.0	1.2	6.2	1.6
Senegal	0.8	2.2	5.4	1.3	6.2	1.4
Seychelles	0.0		0.0		0.0	
Sierra Leone	0.1	0.5	5.6	-0.0	5.7	0.0
Somalia	0.1	2.0	12.5	3.2	12.6	3.2
Sudan	2.2	1.8	18.8	1.4	20.9	1.4
South Africa	18.9	2.9	12.0	5.8	30.9	3.6
Swaziland	0.3	1.8	1.1		1.4	4.8
Tanzania, Utd. Rep.	2.3	2.2	22.8	1.3	25.1	1.4
Togo	0.2	1.5	4.4	0.5	4.6	0.5
Uganda	4.1	3.4	39.6	2.1	43.7	2.2
Zambia	1.3	3.1	9.1	2.1	10.4	2.2
Zimbabwe	0.7	2.9	8.7	1.6	9.5	1.7

TABLE 54: Forestry production (continued)

	Production of selected forest products					
	industrial roundwood		woodfuel		total roundwood	
	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010
ASIA	250.8	2.3	764.9	-0.1	1 015.7	0.2
Central Asia	0.1		0.4		0.5	
Kazakhstan	0.1		0.3		0.3	
Kyrgyzstan	0.0		0.0		0.0	
Tajikistan	0.0		0.1		0.1	
Turkmenistan	0.0		0.0		0.0	
Uzbekistan	0.0		0.0		0.0	
East Asia	203.8	2.3	367.1	-1.0	570.9	-0.4
Brunei Darussalam	0.1	2.2	0.0	-2.7	0.1	0.8
Cambodia	0.1	-3.8	8.4	-1.1	8.5	-1.1
China	102.4	2.2	188.8	-0.8	291.3	-0.2
Indonesia	54.1	4.8	59.7	-2.8	113.8	-1.5
Korea, DPR	1.5	1.9	6.0	2.0	7.5	2.0
Korea, Republic of	3.2	2.0	2.5	-0.3	5.7	0.7
Lao, PDR	0.2	2.4	5.9	0.4	6.2	0.4
Malaysia	19.7	2.2	2.8	-1.6	22.5	1.1
Mongolia	0.0	-4.2	0.8	0.5	0.8	-0.4
Myanmar	4.3	1.3	38.3	2.9	42.5	2.7
Philippines	3.6	-1.6	12.4	-0.8	16.0	-1.0
Singapore						
Thailand	8.7	2.3	19.3	-0.1	28.0	0.3
Viet Nam	5.8	2.4	22.0	0.6	27.9	0.9
South Asia	31.0	1.5	390.5	1.4	421.5	1.4
Afghanistan	1.8	1.7	1.6	2.2	3.4	1.9
Bangladesh	0.3	-1.6	27.3	1.0	27.6	1.0
Bhutan	0.2		4.8	1.2	5.1	1.3
India	23.2	2.6	309.3	1.4	332.5	1.5
Iran (Islamic Rep.)	0.7	-4.0	0.1	-6.1	0.8	-4.3
Maldives			0.0	1.3	0.0	1.3
Nepal	1.3	1.4	12.5	0.7	13.8	0.8
Pakistan	3.0	3.3	29.7	1.8	32.6	1.9
Sri Lanka	0.6	0.1	5.2	-0.1	5.8	-0.1
West Asia	15.9	4.5	6.9	-0.1	22.8	1.9
Armenia	0.0		0.0		0.0	
Azerbaijan	0.0		0.0		0.0	
Bahrain			0.0	1.9	0.0	1.9
Cyprus	0.0	-3.7	0.0	-2.7	0.0	-3.4
Georgia	0.1		0.7		0.8	
Iraq	0.1	1.9	0.1	3.2	0.2	2.7
Jordan	0.0	1.4	0.3	3.2	0.3	3.2
Kuwait			0.0	5.3	0.0	5.3
Lebanon	0.0	-0.2	0.0	-1.4	0.0	-1.1
Occupied Palestinian Territory						
Saudi Arabia			0.2	5.8	0.2	5.8
Syrian Arab Republic	0.0	0.6	0.0	-1.2	0.1	-0.3
Turkey	15.7	4.6	4.9	-0.8	20.6	1.8
United Arab Emirates			0.0	9.2	0.0	9.2
Yemen			0.4	3.1	0.4	3.1
LATIN AMERICA & THE CARIBBEAN	207.5	3.8	282.9	1.1	490.4	1.8
Argentina	9.8	3.3	4.6	-1.4	14.4	0.5
Bahamas	0.0	-5.4	0.0	0.6	0.0	-3.4
Barbados	0.0		0.0	0.2	0.0	1.8
Belize	0.0	-1.4	0.1	2.4	0.2	0.7
Bolivia (Plur. State)	0.9	5.0	2.3	1.1	3.3	1.7
Brazil	128.4	4.2	143.1	1.0	271.5	2.0
Chile	34.6	5.1	12.7	3.5	47.2	4.6
Colombia	2.4	-0.5	8.8	1.0	11.2	0.6
Costa Rica	1.3	2.2	3.4	0.1	4.7	0.5

TABLE 54: Forestry production (continued)

	Production of selected forest products					
	industrial roundwood		woodfuel		total roundwood	
	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010	million m ³ 2010	% p.a. growth: 1961-2010
Cuba	0.7	1.5	1.1	-0.6	1.9	-0.0
Dominica			0.0	-0.8	0.0	-0.8
Dominican Republic	0.0	-6.6	0.9	1.7	0.9	0.6
Ecuador	2.1	2.2	4.9	2.1	7.0	2.1
El Salvador	0.7	3.8	4.2	1.1	4.9	1.3
French Guiana	0.1	2.7	0.1	4.3	0.2	3.5
Grenada						
Guatemala	0.5	1.1	18.1	2.5	18.5	2.4
Guyana	0.5	1.8	0.8	0.1	1.4	0.6
Haiti	0.2	0.0	2.0	1.0	2.3	0.9
Honduras	0.5	-0.9	8.6	0.2	9.1	0.2
Jamaica	0.2	10.8	0.5	13.7	0.7	12.7
Mexico	6.9	2.0	38.8	1.0	45.7	1.1
Netherlands Antilles			0.0	0.4	0.0	0.4
Nicaragua	0.1	-4.1	6.1	0.8	6.2	0.6
Panama	0.2	0.8	1.0	-0.6	1.2	-0.4
Paraguay	4.0	4.9	6.6	2.8	10.6	3.4
Peru	1.4	2.1	7.3	1.2	8.7	1.3
St. Kitts & Nevis						
St. Lucia			0.0	0.8	0.0	0.8
St. Vincent & Grenadines			0.0	-1.0	0.0	-1.0
Suriname	0.2	0.1	0.0	-1.2	0.3	-0.2
Trinidad & Tobago	0.0	-1.6	0.0	0.6	0.1	-1.0
Uruguay	9.4	8.1	2.4	0.8	11.9	3.8
Venezuela (Boliv. Rep. of)	2.3	4.1	4.1	2.2	6.4	2.8
OCEANIA	6.4	7.1	5.9	1.0	12.3	2.4
Fiji	0.4	4.3	0.0	1.0	0.5	3.8
French Polynesia	0.0		0.0	0.8	0.0	1.3
New Caledonia	0.0	1.0	0.0	1.1	0.0	1.0
Papua New Guinea	4.5	7.1	5.5	1.0	10.0	2.1
Samoa	0.0	3.6	0.1	0.5	0.1	0.6
Solomon Islands	1.5	10.7	0.1	1.7	1.6	6.7
Tonga	0.0		0.0	0.4	0.0	1.7
Vanuatu	0.0	12.2	0.1		0.1	15.5
DEVELOPED REGIONS	998.3	1.0	197.6	0.7	1 195.9	1.0
NORTH AMERICA	429.8	0.5	43.3	-0.2	473.1	0.4
Bermuda						
Canada	129.6	0.8	2.9	-1.7	132.5	0.7
United States of America	300.2	0.4	40.4	-0.0	340.7	0.3
ASIA & OCEANIA	64.3	-0.0	4.7	-2.9	69.1	-0.4
Australia	25.1	1.8	4.7	0.6	29.8	1.5
Israel	0.0	-0.0	0.0	-3.0	0.0	-0.5
Japan	17.2	-2.1	0.1	-10.0	17.3	-2.7
New Zealand	22.0	3.1	0.0	-100.0	22.0	2.9
EUROPE	504.2	0.1	149.5	-0.4	653.7	-0.0
Albania	0.1	-3.6	0.3	-2.2	0.4	-2.6
Belarus	8.1		2.3		10.4	
Bosnia & Herzegovina	2.4		1.3		3.6	
Croatia	3.4		1.1		4.5	
European Union	336.4	1.1	84.9	0.4	421.3	1.0
Iceland	0.0		0.0		0.0	
Macedonia, FYR	0.1		0.5		0.6	
Montenegro	0.2		0.2		0.4	
Norway	8.3	0.1	2.1	0.5	10.4	0.1
Republic of Moldova	0.0		0.3		0.4	
Russian Federation	132.8		40.2		173.0	
Serbia	1.4		6.2		7.6	
Switzerland	3.4	0.7	1.5	0.3	4.9	0.6
Ukraine	7.5		8.6		16.1	

TABLE 55: Forestry production: finished products

	Production of selected forest products							
	sawnwood		wood-based panels		paper and paperboard		wood pulp	
	million m ³	% p.a.	million m ³	% p.a.	million tonnes	% p.a.	million tonnes	% p.a.
	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010
WORLD	390.7	1.3	283.1	5.2	399.8	3.6	168.3	
DEVELOPING REGIONS	136.5	2.7	156.9	9.9	171.4	7.3	41.9	
AFRICA	8.4	2.2	2.8	4.8	3.8	5.0	2.7	4.6
North Africa	0.2	1.3	0.2	6.6	1.0	4.2	0.3	
Algeria	0.0	-3.0	0.0		0.0	0.3		
Egypt	0.0		0.1	5.1	0.7	5.4	0.0	
Libya	0.0	3.8			0.0	2.0		
Morocco	0.1	2.8	0.0	3.7	0.1	2.5	0.2	5.0
Tunisia	0.0	4.4	0.1		0.2	7.3		
Sub-Saharan Africa	8.3	2.2	2.6		2.8		2.5	
Angola	0.0	-5.2	0.0		0.0	-100.0	0.0	
Benin	0.1	4.9						
Botswana								
Burkina Faso	0.0							
Burundi	0.1							
Cameroon	0.8	4.5	0.1	4.5	0.0		0.0	
Cape Verde								
Central African Republic	0.1	1.9	0.0					
Chad	0.0							
Comoros								
Congo	0.2	3.6	0.1	3.9	0.0			
Côte d'Ivoire	0.5	2.9	0.5	10.2				
Congo, Dem. Rep.	0.1	-1.8	0.0	-4.5	0.0	3.3		
Djibouti								
Equatorial Guinea	0.0	-2.6	0.0					
Eritrea								
Ethiopia	0.0		0.1		0.1			
Gabon	0.2	4.3	0.3	2.6				
Gambia	0.0							
Ghana	0.5	0.4	0.4	8.3				
Guinea	0.0	1.2	0.0					
Guinea-Bissau	0.0	1.4						
Kenya	0.1	2.2	0.1		0.0	-100.0	0.0	
Lesotho								
Liberia	0.1	1.2	0.0					
Madagascar	0.1	1.7	0.0		0.0		0.0	
Malawi	0.0	2.9	0.0					
Mali	0.0	0.7						
Mauritania	0.0		0.0		0.0			
Mauritius	0.0	-0.3	0.0		0.0		0.0	
Mozambique	0.2	1.0	0.0	-0.8	0.0			
Namibia								
Niger	0.0							
Nigeria	2.0	3.5	0.1	3.3	0.0		0.0	
Rwanda	0.1		0.0					
Senegal	0.0	0.3			0.0			
Seychelles	0.0		0.0		0.0		0.0	
Sierra Leone	0.0	-1.3						
Somalia	0.0	2.1	0.0					
Sudan	0.1	1.9	0.0		0.0			
South Africa	1.9	1.8	0.7	4.1	2.5	5.3	2.3	4.5
Swaziland	0.1	2.5	0.0		0.0		0.0	0.9
Tanzania, Utd. Rep.	0.0	-2.9	0.0	5.1	0.0		0.1	
Togo	0.0	6.5	0.0					
Uganda	0.1	2.2	0.0	4.0	0.0			
Zambia	0.2	3.4	0.0		0.0			
Zimbabwe	0.6	4.9	0.1		0.1	5.2	0.0	5.2

TABLE 55: Forestry production: finished products (continued)

	Production of selected forest products							
	sawnwood		wood-based panels		paper and paperboard		wood pulp	
	million m ³	% p.a.	million m ³	% p.a.	million tonnes	% p.a.	million tonnes	% p.a.
	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010
ASIA	84.9	2.8	137.3	11.4	146.9	8.0	18.1	
Central Asia	0.2		0.1		0.2		0.0	
Kazakhstan	0.1		0.1		0.2		0.0	
Kyrgyzstan	0.1				0.0			
Tajikistan	0.0		0.0		0.0		0.0	
Turkmenistan								
Uzbekistan	0.0		0.0		0.0		0.0	
East Asia	60.6	2.5	125.8	11.9	127.6	8.1	15.4	
Brunei Darussalam	0.1	3.0						
Cambodia	0.0	-3.8	0.0	4.3	0.0	-100.0		
China	37.7	2.5	103.7	13.1	96.5	7.7	7.5	4.9
Indonesia	4.2	1.8	4.6	16.4	11.5	15.5	5.7	
Korea, DPR	0.3	0.0			0.1	0.6	0.1	
Korea, Republic of	3.8	4.7	3.5	9.3	11.1	11.0	0.5	6.4
Lao, PDR	0.1	6.1	0.0					
Malaysia	4.3	2.0	6.9	13.9	1.6		0.1	
Mongolia	0.3	1.4	0.0					
Myanmar	1.6	2.5	0.1	11.2	0.0		0.0	
Philippines	0.4	-2.1	0.5	2.0	1.1	5.3	0.2	6.6
Singapore	0.0	5.9	0.4		0.1			
Thailand	2.9	2.4	5.4	11.8	4.3	14.5	1.0	
Viet Nam	5.0	5.0	0.6		1.3	11.6	0.3	
South Asia	17.7	3.8	4.7	8.3	11.9	6.5	2.7	8.6
Afghanistan	0.4	1.9	0.0					
Bangladesh	0.4	0.6	0.0		0.1	-0.2	0.0	1.2
Bhutan	0.0		0.0		0.0			
India	14.8	4.4	3.0	7.6	10.3	6.6	2.3	10.4
Iran (Islamic Rep.)	0.0	-2.6	0.9		0.4	9.5	0.2	
Maldives								
Nepal	0.6	2.0	0.1		0.0			
Pakistan	1.4	5.4	0.5	11.7	1.1	8.6	0.1	6.6
Sri Lanka	0.1	-1.3	0.2	5.9	0.0	3.6	0.0	
West Asia	6.3		6.7		7.1		0.1	
Armenia	0.0		0.0		0.0		0.0	
Azerbaijan	0.0		0.0		0.0		0.0	
Bahrain					0.0			
Cyprus	0.0	-3.7	0.0		0.0		0.0	
Georgia	0.1		0.0		0.0		0.0	
Iraq	0.0	2.5	0.0		0.0			
Jordan					0.1			
Kuwait					0.1			
Lebanon	0.0	0.9	0.0	0.8	0.1	8.5		
Occupied Palestinian Territory								
Saudi Arabia					1.1			
Syrian Arab Republic	0.0	1.1	0.0	1.8	0.1			
Turkey	6.2	4.4	6.6	10.9	5.3	9.5	0.1	1.0
United Arab Emirates					0.3			
Yemen					0.0			
LATIN AMERICA & THE CARIBBEAN	43.0	2.6	16.6	7.1	20.7	5.2	21.1	
Argentina	2.2	2.1	1.2	5.8	1.5	2.8	0.7	5.5
Bahamas	0.0	-3.1						
Barbados					0.0			
Belize	0.0	-0.7						
Bolivia (Plur. State)	0.5	5.8	0.0	11.7	0.0	-100.0		
Brazil	25.1	2.8	9.6	7.5	9.8	6.1	14.5	8.2
Chile	6.4	4.1	2.7	10.5	1.2	4.8	4.1	7.1
Colombia	0.5	-1.4	0.3	4.2	1.1	6.0	0.2	
Costa Rica	0.5	1.4	0.1	5.0	0.0	4.2	0.0	

TABLE 55: Forestry production: finished products (continued)

	Production of selected forest products							
	sawnwood		wood-based panels		paper and paperboard		wood pulp	
	million m ³	% p.a.	million m ³	% p.a.	million tonnes	% p.a.	million tonnes	% p.a.
	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010	2010	growth: 1961-2010
Cuba	0.2	1.1	0.1		0.0	-3.0		
Dominica	0.0							
Dominican Republic	0.0	-4.0			0.1	10.7		
Ecuador	0.5	1.0	0.6		0.2	12.6	0.0	
El Salvador	0.0	0.6			0.1	9.7		
French Guiana	0.0	2.8	0.0					
Grenada								
Guatemala	0.4	2.6	0.1	5.9	0.0	5.1		
Guyana	0.1	0.2	0.0	5.0				
Haiti	0.0	-1.0						
Honduras	0.3	-1.2	0.0	2.3	0.1		0.0	
Jamaica	0.1		0.0		0.0			
Mexico	3.6	2.7	0.8	5.1	5.4	5.5	0.3	1.3
Netherlands Antilles								
Nicaragua	0.1	-1.9	0.0	-0.8				
Panama	0.0	-1.4	0.0	1.9	0.0	-100.0		
Paraguay	0.6	5.1	0.2	9.1	0.0	7.4		
Peru	0.6	3.4	0.1		0.2	2.5	0.0	
St. Kitts & Nevis								
St. Lucia								
St. Vincent & Grenadines								
Suriname	0.1	0.7	0.0	-5.6				
Trinidad & Tobago	0.0	-1.6	0.0					
Uruguay	0.3	3.3	0.2	6.9	0.1	2.2	1.1	15.4
Venezuela (Boliv. Rep. of)	0.9	3.8	0.7	8.7	0.8	4.3	0.1	
OCEANIA	0.2	2.2	0.1					
Fiji	0.1	2.6	0.0					
French Polynesia								
New Caledonia	0.0	-0.8						
Papua New Guinea	0.1	1.3	0.1	4.5				
Samoa	0.0	4.8	0.0					
Solomon Islands	0.0	5.0	0.0					
Tonga	0.0							
Vanuatu	0.0							
DEVELOPED REGIONS	254.2	0.8	126.3	3.6	228.4	2.6	126.4	1.7
NORTH AMERICA	97.3	0.6	43.2	2.6	88.5	1.7	68.9	1.5
Bermuda								
Canada	38.7	2.0	9.9	3.9	12.7	1.0	18.9	1.2
United States of America	58.6	0.0	33.3	2.3	75.8	1.9	50.0	1.6
ASIA & OCEANIA	18.2	-1.2	7.9	2.7	31.8	3.4	12.3	2.0
Australia	5.1	0.8	1.8	4.0	3.2	3.7	1.3	2.6
Israel	0.0		0.2	2.2	0.4	4.9	0.0	
Japan	9.4	-2.2	4.4	1.9	27.4	3.4	9.5	1.7
New Zealand	3.7	1.7	1.5	6.9	0.9	3.2	1.6	3.6
EUROPE	138.7	-0.5	75.1	4.1	108.0	3.1	45.2	1.5
Albania	0.0	-6.0	0.0	0.0	0.0		0.0	
Belarus	2.6		0.5		0.6		0.1	
Bosnia & Herzegovina	0.8		0.0		0.1		0.0	
Croatia	0.7		0.2		0.6		0.1	
European Union	100.4	1.0	60.7	4.4	94.6	3.4	36.9	1.8
Iceland	0.0		0.0		0.0		0.0	
Macedonia, FYR	0.0		0.0		0.0		0.0	
Montenegro	0.1		0.0		0.2		0.0	
Norway	2.1	0.6	0.6	2.2	1.7	1.5	2.0	0.6
Republic of Moldova	0.0		0.0		0.1		0.0	
Russian Federation	28.3		10.2		7.3		5.9	
Serbia	0.6		0.2		0.4		0.0	
Switzerland	1.5	0.4	1.0	3.7	1.6	2.3	0.1	-1.4
Ukraine	1.7		1.8		0.9		0.0	

Definitions and sources

Parties to the Cartagena Protocol on Biosafety

P4.ENV.CBD.GMO.CBP 

Page: map 68 (p. 314).

Countries which have deposited instruments of ratification, acceptance, approval or accession with the Depositary of the Cartagena Protocol on Biosafety, assumed by the Secretary General of the United Nations.

Source: www.cbd.int

Owner: Convention on Biological Diversity

Average precipitation in depth

P4.ENV.FAO.ACQ.CLIM.APD 

Page: map 63 (p. 302).

Long-term average (over space and time) of annual endogenous precipitation (produced in the country) in depth.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Area under bioenergy crops

P4.ENV.FAO.BIO.BF.HA

Page: chart 120 (p. 317).

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

Source: Based on IEA biofuel production data

Owner: FAO

Cotton production

P4.ENV.FAO.BIO.CT.QP 

Page: map 70 (p. 319).

The production of fibres from vegetal origin, excluding cotton. This definition covers all fibres extracted from the stems of dicotyledonous plants, including ramie, flax, hemp, sisal, other agaves, abaca, coir, jute and kenaf.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Energy use by agriculture

P4.ENV.FAO.BIO.ENGY.AG 


Page: table 52 (p. 334).

Energy use is indicated by the annual use of energy at farm level by fuel type (GJ/ha), and the energy used to produce mineral fertilisers for agricultural use (GJ/ha).

Source: Statistics Division (FAOSTAT)

Owner: IEA

Energy use by agriculture as a share of total energy use

P4.ENV.FAO.BIO.ENGY.AGS 

Page: table 52 (p. 334).

Energy use is indicated by the annual use of energy at farm level by fuel type (GJ/ha), and the energy used to produce mineral fertilisers for agricultural use (GJ/ha), expressed as a ratio of total energy use.

Source: Statistics Division (FAOSTAT)

Owner: IEA

Share of feedstocks used in bioenergy production

P4.ENV.FAO.BIO.FD.FDSTK

Page: chart 123 (p. 319).

Estimated shares of commodity globally used in non-food sectors, including industrial renewable materials and bioenergy.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Greenhouse gas emissions by agriculture

P4.ENV.FAO.BIO.GHG.AG 

Page: table 51 (p. 331), chart 112 (p. 304).

Greenhouse gas emissions by agriculture: carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Emissions from agricultural transport and energy use are excluded, as these sectors are not defined as part of the agriculture sector by the current IPCC guidance.

Source: Statistics Division (FAOSTAT)

Owner: UNFCCC

Contribution of the agricultural sector to total greenhouse gases

P4.ENV.FAO.BIO.GHG.AGS 

Page: table 51 (p. 331).

Contribution of the agricultural sector to total greenhouse gases: carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Emissions from agricultural transport and energy use are excluded, as these sectors are not defined as part of the agriculture sector by the current IPCC guidance.

Source: Statistics Division (FAOSTAT)

Owner: UNFCCC

Production of industrial roundwood

P4.ENV.FAO.BIO.IR.QP 

Page: table 54 (p. 340).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Natural fibre production

P4.ENV.FAO.BIO.NF.QP 

Page: table 53 (p. 337), chart 122 (p. 318).

Figures relate to the total domestic production whether inside or outside the agricultural sector, i.e. it includes non-commercial production and production from kitchen gardens. Unless otherwise indicated, production is reported at the farm level for crop and livestock products (i.e. in the case of crops, excluding harvesting losses) and in terms of live weight for fish items (i.e. the actual ex-water weight at the time of the catch). Natural fibre crops include Agave Fibres Nes, Cotton lint, Fibre

Crops Nes, Flax fibre and tow, Hemp Tow Waste, Jute, Manila Fibre (Abaca), Other Bastfibres, Ramie, Seed cotton and Sisal. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Organic agriculture area

P4.ENV.FAO.BIO.ORGAN.HA 


Page: chart 116, 117 (p. 309, 311), map 65 (p. 308).

Part of the area of the "Permanent crops" exclusively dedicated to organic agriculture (or which is going through the organic conversion process) and managed by applying organic agriculture methods. It is the portion of land area 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. Data are from FiBL (Research Institute of Organic Agriculture) and International Federation of Organic Agriculture Movements (IFOAM) (2011). Data Tables from the FiBL-IFOAM Survey on Organic Agriculture Worldwide. The Organic World Website (www.organic-world.net) published by the Research Institute of Organic Agriculture (FiBL), Frick, Switzerland. Available at <http://www.organic-world.net/statistics-data-tables.html>.

Source: Statistics Division (FAOSTAT)

Owner: FAO-FiBL-IFOAM

Organic agriculture (share of total area)

P4.ENV.FAO.BIO.ORGAN.SHA 

Page: table 53 (p. 337), map 66 (p. 310).

Organic agriculture area expressed as share of total area. Data are from FiBL (Research Institute of Organic Agriculture) and International Federation of Organic Agriculture Movements (IFOAM) (2011). Data Tables from the FiBL-IFOAM Survey on Organic Agriculture Worldwide. The Organic World Website (www.organic-world.net) published by the Research Institute of Organic Agriculture (FiBL), Frick, Switzerland. Available at <http://www.organic-world.net/statistics-data-tables.html>.

Source: Statistics Division (FAOSTAT)

Owner: FAO-FiBL-IFOAM

Production of paper and paperboard

P4.ENV.FAO.BIO.PP.QP 

Page: table 55 (p. 343).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of recovered paper

P4.ENV.FAO.BIO.RP.QP 

Page: table 53 (p. 337).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of roundwood

P4.ENV.FAO.BIO.RW.QP 

Page: table 54 (p. 340).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of sawnwood

P4.ENV.FAO.BIO.SW.QP 

Page: table 55 (p. 343).

Wood that has been produced from both domestic and imported roundwood, either by sawing lengthways or by a profile-chipping process and that, with a few exceptions, exceeds 5 mm in thickness. It includes: planks, beams, joists, boards, rafters, scantlings, laths, boxboards, sleepers and "lumber", etc., in the following forms: unplanned, planed, grooved, tongued, fingerjointed, chamfered, rabbeted, V-jointed, beaded, etc. It excludes: wooden flooring. See <http://www.fao.org/forestry/62283/en/> for further information.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of wood-based panels

P4.ENV.FAO.BIO.WBP.QP 

Page: table 55 (p. 343).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of woodfuel

P4.ENV.FAO.BIO.WF.QP 

Page: table 54 (p. 340).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Production of wood pulp

P4.ENV.FAO.BIO.WP.QP 

Page: table 55 (p. 343).

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.

Source: Forestry Department (foresSTAT)

Owner: FAO

Wheat harvested area

P4.ENV.FAO.CC.CE.AH

Page: chart 114 (p. 305).

Data refer to the area from which cereal crops are gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Cereal crop production

P4.ENV.FAO.CC.CE.QP

Page: chart 114 (p. 305).

Cereal crop production data refer to the actual harvested production from the field, excluding harvesting

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

Source: Statistics Division (FAOSTAT)

Owner: FAO

Long-term cereal yield variability

P4.ENV.FAO.CC.CE.YLD 

Page: chart 114 (p. 305).

Harvested production per unit of harvested area for cereals. Cereals include Wheat, Paddy Rice, Barley, Maize, Popcorn, Rye, Oats, Millet, Sorghum, Buckwheat, Quinoa, Fonio, Triticale, Canary seed, Mixed grain and Cereals, nes.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Long-term maize yield variability

P4.ENV.FAO.CC.MZ.YLD 

Page: chart 113 (p. 305).

Harvested production per unit of harvested area for maize crops. A grain with a high germ content. Includes white and yellow maize. .

Source: Statistics Division (FAOSTAT)

Owner: FAO

Land use change: cropland

P4.ENV.FAO.ESS.LAND.CROP 


Page: table 48 (p. 322), chart 100 (p. 288).

Change in arable land and permanent crops, where this land category is the sum of areas under "Arable land" and "Permanent crops".

Source: Statistics Division (FAOSTAT)

Owner: FAO

Land use change: pasture

P4.ENV.FAO.ESS.LAND.FOST 

Page: table 48 (p. 322), chart 100 (p. 288).

Change in forest land, where such land spans more than 0.5 hectares with trees higher than 5 meters 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.

Source: Statistics Division (FAOSTAT)

Owner: FAO

Land use change: forestryP4.ENV.FAO.ESS.LAND.PAST 

Page: table 48 (p. 322), chart 100 (p. 288).

Change in permanent meadows and pastures, where such land is used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land).

Source: Statistics Division (FAOSTAT)

Owner: FAO

Carbon stock in living forest biomassP4.ENV.FAO.FOR.LCF.CSFO 

Page: table 48 (p. 322), chart 103 (p. 289).

Carbon in all living biomass above the soil, including stem, stump, branches, bark, seeds, and foliage; and carbon biomass of live roots. Fine roots of less than 2 mm diameter are excluded, because these often cannot be distinguished empirically from soil organic matter or litter.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Average annual rate of deforestationP4.ENV.FAO.FOR.LCF.DEF 

Page: table 48 (p. 322), chart 99 (p. 287).

Rate of net loss of forest area.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Forest areaP4.ENV.FAO.FOR.LCF.FHA 

Page: table 48 (p. 322).

Land spanning more than 0.5 hectares with trees higher than 5 meters 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.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Forest area as % of total land areaP4.ENV.FAO.FOR.LCF.FOA 

Page: map 56 (p. 289).

Forest area expressed as a percentage of total land area. 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.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Forest characteristicsP4.ENV.FAO.FOR.LCF.FOC 

Page: table 49 (p. 325), chart 101 (p. 288).

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. Primary forest is naturally regenerated forest of

native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed. Other naturally regenerated forest is forest where there are clearly visible indications of human activities. Planted forest is forest predominantly composed of trees established through planting and/or deliberate seeding.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Forest characteristics by region

P4.ENV.FAO.FOR.LCF.FOCx

Page: chart 101 (p. 288).

Naturally regenerated forest is forest predominantly composed of trees established through natural regeneration. Primary forest is naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed. Other naturally regenerated forest is forest where there are clearly visible indications of human activities. Planted forest is forest predominantly composed of trees established through planting and/or deliberate seeding.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Primary designated functions of forestP4.ENV.FAO.FOR.LCF.PFF 

Page: table 49 (p. 325), chart 102 (p. 289).

The primary function or management objective assigned to a management unit either by legal prescription, documented decision of the landowner/manager, or evidence provided by documented studies of forest management practices and customary use. Protected areas - areas especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means; Production - Forest area designated primarily for production of wood, fibre, bioenergy and/or non-wood forest products; Protection of soil and water - Forest area designated primarily for protection of soil and water; Conservation of biodiversity - Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas; Social services - Forest area designated primarily for social services; Multiple use - Forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function; and Other - Forest areas designated primarily for a function other than production, protection, conservation, social services or multiple use.

Source: Global Forest Resources Assessment 2010

Owner: FAO

Global distribution of risks associated with main agricultural production systems

P4.ENV.FAO.FOR.LCF.SOLAW

Page: map 54 (p. 284).

See FAO (2011d) State of the World's Land and Water Resources for Food and Agriculture (SOLAW).

Source: Natural Resources and Environment Department

Owner: FAO

Average soil quality

P4.ENV.FAO.FOR.LCF.SQ 

Page: table 48 (p. 322), map 55 (p. 286).

Carbon content in the topsoil, average - Percentage in weight (%). Soils with organic carbon content less than 1% in weight are generally affected by soil degradation processes and erosion. On the other hand, soils with 1-10% organic carbon content have high agricultural value. .

Source: Statistics Division (FAOSTAT)

Owner: FAO, IIASA, ISRIC, ISSCAS, and JRC: Harmonized World Soil Database

Total water withdrawal

P4.ENV.FAO.NRL.WAT.TW 

Page: table 50 (p. 328).

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 (m³/inhab/yr)

P4.ENV.FAO.NRL.WAT.TWpc 

Page: table 50 (p. 328), map 57 (p. 290).

Total annual amount of water withdrawn per capita.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Agricultural water withdrawal

P4.ENV.FAO.NRL.WAT.WWA 

Page: table 50 (p. 328).

Annual quantity of water withdrawn for irrigation, livestock and aquaculture purposes. It includes renewable freshwater resources as well as over-abstraction of renewable groundwater or withdrawal of fossil groundwater, use of agricultural drainage water, (treated) wastewater and desalinated water. .

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Water withdrawal % by agriculture

P4.ENV.FAO.NRL.WAT.WWaperc 

Page: table 50 (p. 328).

Agricultural water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Share of freshwater resources withdrawn by agriculture

P4.ENV.FAO.NRL.WAT.WWfr 

Page: table 50 (p. 328), chart 104 (p. 291).

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

Share of freshwater resources withdrawn by agriculture

P4.ENV.FAO.NRL.WAT.WWfrag 

Page: table 50 (p. 328), map 58 (p. 292).

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

Industrial water withdrawal

P4.ENV.FAO.NRL.WAT.WWI 


Page: table 50 (p. 328).

Annual quantity of water withdrawn for industrial uses. It includes renewable water resources as well as potential over-abstraction of renewable groundwater or withdrawal of fossil groundwater and potential use of desalinated water or treated wastewater. This sector refers to self-supplied industries not connected to the public distribution network. The ratio between net consumption and withdrawal is estimated at less than 5%. It includes water for the cooling of thermoelectric plants, but it does not include hydropower. .

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Water withdrawal % by industry

P4.ENV.FAO.NRL.WAT.WWIperc 

Page: table 50 (p. 328).

Industrial water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO


Municipal water withdrawalP4.ENV.FAO.NRL.WAT.WWM 

Page: table 50 (p. 328).

Annual quantity of water withdrawn primarily for the direct use by the population. It includes renewable freshwater resources as well as potential over-abstraction of renewable groundwater or withdrawal of fossil groundwater and the potential use of desalinated water or treated wastewater. It is usually computed as the total water withdrawn by the public distribution network. It can include that part of the industries, which is connected to the municipal network. The ratio between the net consumption and the water withdrawn can vary from 5 to 15% in urban areas and from 10 to 50% in rural areas.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Water withdrawal % by the municipal sectorP4.ENV.FAO.NRL.WAT.WWMperc 

Page: table 50 (p. 328).

Municipal water withdrawal as percentage of total water withdrawal.

Source: Land and Water Division (AQUASTAT)

Owner: FAO

Saline soils


P4.ENV.FAO.POL.SAL

Page: chart 105 (p. 293).

Saline soils are those which have an electrical conductivity of the saturation soil extract of more than 4 dS/m at 25°C. This value is generally used the world over although the terminology committee of the Soil Science Society of America has lowered the boundary between saline and non-saline soils to 2 dS/m in the saturation extract. Soluble salts most commonly present are the chlorides and sulphates of sodium, calcium and magnesium. Nitrates may be present in appreciable quantities only rarely. Sodium and chloride are by far the most dominant ions, particularly in highly saline soils, although calcium and magnesium are usually present in sufficient quantities to meet the nutritional needs of crops. Many saline soils contain appreciable quantities of gypsum (CaSO₄, 2H₂O) in the profile. Soluble carbonates are always absent. The pH value of the saturated soil paste is always less than 8.2 and more often near neutrality.

Source: Natural Resources and Environment Department

Owner: FAO

Biofuel productionP4.ENV.IEA.BIO.BF.QP 

Page: table 53 (p. 337), chart 121 (p. 318), map 69 (p. 316).

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

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

Owner: IEA

CO₂ concentration

P4.ENV.IPCC.CC.CO2

Page: chart 111 (p. 304).

Data are reported as a dry air mole fraction defined as the number of molecules of carbon dioxide divided by the number of all molecules in air, including CO₂ itself, after water vapour has been removed. The mole fraction is expressed as parts per million (ppm).

Source: Global Climate Change: key indicators

Owner: NASA

Global surface temperature (time series)

P4.ENV.IPCC.CC.GST

Page: chart 109 (p. 301).

The global surface temperature is an estimate of the global mean surface air temperature. However, for changes over time, only anomalies, as departures from a climatology, are used, most commonly based on the area weighted global average of the sea surface temperature anomaly and land surface air temperature anomaly.

Source: IPCC Data Distribution Centre

Owner: IPCC

Global surface temperature (current)

P4.ENV.IPCC.CC.GSTG

Page: map 62 (p. 300).

The global surface temperature is an estimate of the global mean surface air temperature. However, for changes over time, only anomalies, as departures from a climatology, are used, most commonly based on the area weighted global average of the sea surface temperature anomaly and land surface air temperature anomaly.

Source: IPCC Data Distribution Centre

Owner: IPCC

Genetically modified plants

P4.ENV.ISAAA.BIO.GM.CROPS

Page: table 119 (p. 315).

Genetically modified (GM) crops that have been approved as shown in the ISAAA Approval Database. According to the ISAAA, they include species for commercialization and planting and/or for import for food and feed use. Entries in the database are sourced principally from Biotechnology Clearing House of approving countries and from country regulatory websites. See <http://www.isaaa.org/> for further information. In the absence of verification, FAO does not necessarily endorse these data.

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

Owner: International Service for the Acquisition of Agri-biotech Applications (ISAAA)

Area under GM crops (time series of economic regions)P4.ENV.ISAAA.BIO.GM.HA 

Page: map 67 (p. 312).

Data refer to the area from which genetically modified (GM) crops are gathered. See <http://www.isaaa.org/> for

further information. In the absence of verification, FAO does not necessarily endorse these data.

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

Owner: International Service for the Acquisition of Agri-biotech Applications (ISAAA)

Area under GM crops (current)

P4 . ENV . ISAAA . BIO . GM . RHA

Page: chart 118 (p. 313).

Data refer to the regions from which genetically modified (GM) crops are gathered. See <http://www.isaaa.org/> for further information. In the absence of verification, FAO does not necessarily endorse these data.

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

Owner: International Service for the Acquisition of Agri-biotech Applications (ISAAA)

Sahel rainfall anomalies

P4 . ENV . JISAO . CLIM . SAHEL

Page: chart 110 (p. 303).

The Sahel is the ecoclimatic and biogeographic zone of transition between the Sahara desert in the North and the Sudanian Savannas in the south, covering from (west to east) Senegal, southern Mauritania, Mali, Burkina Faso, southern Algeria, Niger, northern Nigeria, Chad, Sudan (including Darfur and the southern part of Sudan), northern Ethiopia and Eritrea. The Sahel rainy season is centered on June through October, and the means are taken for those months. Documentation of the Sahel precipitation climatology, and additional analyses of the variability are provided on <http://jisao.washington.edu/data/sahel/>.

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

Owner: Joint Institute for the Study of the Atmosphere and Ocean (JISAO)

Land with rainfed crop potential

P4 . ENV . LND . SUIT

Page: chart 98 (p. 285).

Calculations based on Bruinsma (2011).

Source: Agricultural Development Economics Division

Owner: FAO

Fish species, threatened

P4 . ENV . WBK . WDI . BIOD . FST

Page: chart 115 (p. 307).

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: FishBase database, www.fishbase.org

Mammal species, threatened

P4 . ENV . WBK . WDI . BIOD . MST

Page: chart 115 (p. 307).

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: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Plant species (higher), threatened

P4 . ENV . WBK . WDI . BIOD . PST

Page: chart 115 (p. 307).

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: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Nationally protected areas (% of total area)

P4 . ENV . WBK . WDI . CON . PROT 

Page: table 53 (p. 337), map 64 (p. 306).

Nationally protected areas are totally or partially protected areas of at least 1000 hectares that are designated as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes, and areas managed mainly for sustainable use. Marine areas, unclassified areas, and littoral (intertidal) areas are not included. The data also do not include sites protected under local or provincial law.

Source: World Bank (WDI)

Owner: UNEP, World Conservation Monitoring Centre and International Union for Conservation of Nature

Agricultural methane emissions (% of total)

P4 . ENV . WBK . WDI . POL . AMTHE 

Page: table 51 (p. 331).

Agricultural methane emissions are emissions from animals, animal waste, rice production, agricultural waste burning (nonenergy, on-site), and savannah burning.

Source: World Bank (WDI)

Owner: IEA

Agricultural nitrous oxide emissions (% of total)

P4 . ENV . WBK . WDI . POL . ANOE 

Page: table 51 (p. 331).

Agricultural nitrous oxide emissions are emissions produced through fertilizer use (synthetic and animal manure), animal waste management, agricultural waste burning (nonenergy, on-site), and savannah burning.

Source: World Bank (WDI)

Owner: IEA

Methane emissions (kt of CO₂ equivalent)P4.ENV.WBK.WDI.POL.MTHE *Page:* table 51 (p. 331), chart 106 (p. 295).

Methane emissions are those stemming from human activities such as agriculture and from industrial methane production.

Source: World Bank (WDI)*Owner:* IEA**Agricultural methane emissions, total**P4.ENV.WBK.WDI.POL.MTHEA *Page:* chart 106 (p. 295), map 59 (p. 294).

Agricultural methane emissions are emissions from animals, animal waste, rice production, agricultural waste burning (nonenergy, on-site), and savannah burning.

Source: World Bank (WDI)*Owner:* IEA**Nitrous oxide emissions (thousand metric tons of CO₂ equivalent)**P4.ENV.WBK.WDI.POL.NOE *Page:* table 51 (p. 331), chart 107 (p. 297).

Nitrous oxide emissions are emissions from agricultural biomass burning, industrial activities, and livestock management.

Source: World Bank (WDI)*Owner:* IEA**Agricultural nitrous oxide emissions, total**P4.ENV.WBK.WDI.POL.NOEA *Page:* chart 107 (p. 297), map 60 (p. 296).

Agricultural nitrous oxide emissions are emissions produced through fertilizer use (synthetic and animal manure), animal waste management, agricultural waste burning (nonenergy, on-site), and savannah burning.

Source: World Bank (WDI)*Owner:* IEA**Pollution by industry in total BOD emissions**

P4.ENV.WBK.WDI.POL.WAT

Page: chart 108 (p. 299).

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: food and beverages (31). textiles (32). wood (33). paper and pulp (34). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)*Owner:* World Bank**Water pollution, food industry (% of total BOD emissions)**P4.ENV.WBK.WDI.POL.WATF *Page:* table 52 (p. 334), map 61 (p. 298).

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: food and beverages (31). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)*Owner:* World Bank**Water pollution, paper and pulp industry (% of total BOD emissions)**P4.ENV.WBK.WDI.POL.WATO *Page:* table 52 (p. 334).

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: paper and pulp (34). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)*Owner:* World Bank**Water pollution, textile industry (% of total BOD emissions)**P4.ENV.WBK.WDI.POL.WATT *Page:* table 52 (p. 334).

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: textiles (32). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)*Owner:* World Bank**Water pollution, wood industry (% of total BOD emissions)**P4.ENV.WBK.WDI.POL.WATW *Page:* table 52 (p. 334).

Industry shares of emissions of organic water pollutants refer to emissions from manufacturing activities as defined by two-digit divisions of the International Standard Industrial Classification (ISIC), revision 2: wood (33). Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount

of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants.

Source: World Bank (WDI)

Owner: World Bank

Urban air pollution

P4.ENV.WHO.GHO.POL.UAP 

Page: table 52 (p. 334).

The mean annual concentration of fine suspended particles of less than 10 microns in diameters is a common measure of air pollution. The mean is a population-weighted average for urban population in cities above 100 000 inhabitants of a country.

Source: Global Health Observatory

Owner: WHO

TABLE 56: List of countries

Developed regions			
North America	Asia and Oceania	Europe	European Union ¹
Bermuda	Australia	Albania	Austria
Canada	Israel	Andorra	Belgium
United States of America	Japan	Austria	Bulgaria
Greenland	New Zealand	Belarus	Cyprus ²
Saint Pierre and Miquelon		Belgium	Czech Republic
		Bosnia and Herzegovina	Denmark
		Bulgaria	Estonia
		Croatia	Finland
		Czech Republic	France
		Denmark	Germany
		Estonia	Greece
		Faroe Islands	Hungary
		Finland	Ireland
		France	Italy
		Germany	Latvia
		Gibraltar	Lithuania
		Greece	Luxembourg
		Holy See	Malta
		Hungary	Netherlands
		Iceland	Poland
		Ireland	Portugal
		Italy	Romania
		Latvia	Slovakia
		Liechtenstein	Slovenia
		Lithuania	Spain
		Luxembourg	Sweden
		Malta	United Kingdom
		Monaco	
		Montenegro	
		Netherlands	
		Norway	
		Poland	
		Portugal	
		Republic of Moldova	
		Romania	
		Russian Federation	
		San Marino	
		Serbia ³	
		Slovakia	
		Slovenia	
		Spain	
		Sweden	
		Switzerland	
		The former Yugoslav Republic of Macedonia	
		Ukraine	
		United Kingdom	

¹The European Union is treated as a group (EU27) and forms the geographical aggregate for Europe excluding Cyprus.

²Situated in West Asia, excluded from the Europe aggregate

³Kosovo is not considered to be a part of Serbia in World Bank sourced data.

Developing regions							
Africa		Asia					
North Africa	Sub-Saharan Africa	Central Asia	East Asia	South Asia	West Asia	Latin America and Caribbean	Oceania
Algeria	Angola	Kazakhstan	Brunei Darussalam	Afghanistan	Armenia	Antigua and Barbuda	Fiji
Egypt	Benin	Kyrgyzstan	Cambodia	Bangladesh	Azerbaijan	Argentina	French Polynesia
Libyan Arab Jamahiriya	Botswana	Tajikistan	China ⁴	Bhutan	Bahrain	Bahamas	Kiribati
Morocco	Burkina Faso	Turkmenistan	Indonesia	India	Cyprus	Barbados	New Caledonia
Tunisia	Burundi	Uzbekistan	Democratic People's Republic of Korea	Iran (Islamic Republic of)	Gaza Strip (Palestine)	Belize	Papua New Guinea
Western Sahara	Cameroon		Republic of Korea	Maldives	Georgia	Bolivia (Plurinational State of)	Samoa
	Cape Verde		Lao People's Democratic Republic	Nepal	Iraq	Brazil	Solomon Islands
	Central African Republic		Malaysia	Pakistan	Jordan	Chile	Tonga
	Chad		Mongolia	Sri Lanka	Kuwait	Colombia	Vanuatu
	Comoros		Myanmar		Lebanon	Costa Rica	American Samoa
	Congo		Philippines		Occupied Palestinian Territory ⁵	Cuba	Cook Islands
	Côte d'Ivoire		Singapore		Saudi Arabia	Dominica	Guam
	Democratic Republic of the Congo		Thailand		Syrian Arab Republic	Dominican Republic	Marshall Islands
	Djibouti		Timor-Leste		Turkey	Ecuador	Micronesia (Federated States of)
	Equatorial Guinea		Viet Nam		United Arab Emirates	El Salvador	Nauru
	Eritrea				West Bank	French Guiana	Niue
	Ethiopia				Yemen	Grenada	Northern Mariana Islands
	Gabon				Oman	Guatemala	Palau
	Gambia				Qatar	Guyana	Tokelau
	Ghana					Haiti	Tuvalu
	Guinea					Honduras	Wallis and Futuna Islands
	Guinea-Bissau					Jamaica	
	Kenya					Mexico	
	Lesotho					Netherlands Antilles	
	Liberia					Nicaragua	
	Madagascar					Panama	
	Malawi					Paraguay	
	Mali					Peru	
	Mauritania					Saint Kitts and Nevis	
	Mauritius					Saint Lucia	
	Mayotte					Saint Vincent and the Grenadines	
	Mozambique					Suriname	
	Namibia					Trinidad and Tobago	
	Niger					Uruguay	
	Nigeria					Venezuela (Bolivarian Republic of)	
	Réunion					Anguilla	
	Rwanda					Aruba	
	Saint Helena					British Virgin Islands	
	Sao Tome and Principe					Cayman Islands	
	Senegal					Falkland Islands (Malvinas)	
	Seychelles					Guadeloupe	
	Sierra Leone					Martinique	
	Somalia					Montserrat	
	Sudan ⁶					Puerto Rico	
	South Africa					Turks and Caicos Islands	
	Swaziland					United States Virgin Islands	
	United Republic of Tanzania						
	Togo						
	Uganda						
	Zambia						
	Zimbabwe						

⁴includes China, mainland; China, Hong Kong SAR; China, Macao SAR; and China, Taiwan Province of. The composition of China in World Bank sourced data is: China, mainland; and China, Taiwan Province of.

⁵Excludes West Bank and Gaza Strip.

⁶Includes South Sudan owing to a lack of data availability.

Concepts and methods

Agricultural production indices

The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 1999-2001. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed. All the indices at the country, regional and world levels are calculated by the Laspeyres formula. Production quantities of each commodity are weighted by 1999-2001 average international commodity prices and summed for each year. To obtain the index, the aggregate for a given year is divided by the average aggregate for the base period 1999-2001. Since the FAO indices are based on the concept of agriculture as a single enterprise, amounts of seed and feed are subtracted from the production data to avoid double counting, once in the production data and once with the crops or livestock produced from them. Deductions for seed (in the case of eggs, for hatching) and for livestock and poultry feed apply to both domestically produced and imported commodities. They cover only primary agricultural products destined to animal feed (e.g. maize, potatoes, milk, etc.). Processed and semi-processed feed items such as bran, oilcakes, meals and molasses have been completely excluded from the calculations at all stages. It should be noted that when calculating indices of agricultural, food and non-food production, all intermediate primary inputs of agricultural origin are deducted. However, for indices of any other commodity group, only inputs originating from within the same group are deducted; thus, only seed is removed from the group "crops" and from all crop subgroups, such as cereals, oil crops, etc.; and both feed and seed originating from within the livestock sector (e.g. milk feed, hatching eggs) are removed from the group "livestock products". For the main two livestock subgroups, namely, meat and milk, only feed originating from the respective subgroup is removed. Indices which take into account deductions for feed and seed are referred to as "net". Indices calculated without any deductions for feed and seed are referred to as "gross". The "international commodity prices" are used in order to avoid the use of exchange rates for obtaining continental and world aggregates, and also to improve and facilitate international comparative analysis of productivity at the national level. These "international prices", expressed in so-called "international dollars", are derived using a Geary-Khamis formula for the agricultural sector. This method assigns a single "price" to each commodity. For example, one metric ton of wheat has the same price regardless of the country where it was produced. The currency unit in which the prices are expressed has no influence on the indices published. The commodities covered in the computation of indices of agricultural

production are all crops and livestock products originating in each country. Practically all products are covered, with the main exception of fodder crops. The category of food production includes commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities because, although edible, they have practically no nutritive value. Prices applied to meat in reality represent the prices of animals for slaughtering in terms of live weight. For example, if the price of one metric ton (1000 kg) of pigs alive is 825 dollars and the ratio meat to live weight is 75 to 100, the price applicable to 750 kg of pig meat will be 825 dollars, corresponding to 1100 dollars per metric tons. The indices are calculated from production data presented on a calendar year basis. The FAO indices may differ from those produced by the countries themselves because of differences in concepts of production, coverage, weights, time reference of data and methods of calculation.

Area harvested

Data refer to the area from which a crop is gathered. Area harvested, therefore, excludes the area from which, although sown or planted, there was no harvest due to damage, failure, etc. It is usually net for temporary crops and some times gross for permanent crops. Net area differs from gross area insofar as the latter includes uncultivated patches, footpaths, ditches, headlands, shoulders, shelterbelts, etc. If the crop under consideration is harvested more than once during the year as a consequence of successive cropping (i.e. the same crop is sown or planted more than once in the same field during the year), the area is counted as many times as harvested. On the contrary, area harvested will be recorded only once in the case of successive gathering of the crop during the year from the same standing crops. With regard to mixed and associated crops, the area sown relating to each crop should be reported separately. When the mixture refers to particular crops, generally grains, it is recommended to treat the mixture as if it were a single crop; therefore, area sown is recorded only for the crop reported.

Capital stock in agriculture and investment in agriculture

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

CIF

Cost-Insurance-Freight. CIF-trade values include the transaction value of the goods, the value of services performed to deliver goods to the border of the exporting

country and the value of the services performed to deliver the goods from the border of the exporting country to the border of the importing country. Import values are mostly reported as CIF.

Crop area

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

Crop production

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

Crop yield

Harvested production per unit of harvested area for crop products. In most of the cases yield data are not recorded but obtained by dividing the production data by the data on area harvested. Data on yields of permanent crops are not as reliable as those for temporary crops either because most of the area information may correspond to

planted area, as for grapes, or because of the scarcity and unreliability of the area figures reported by the countries, as for example for cocoa and coffee.

Domestic supply

Production + imports - exports + changes in stocks (decrease or increase) = supply for domestic utilization. There are various ways of defining supply and, in fact, various concepts are in use. The elements involved are production, imports, exports and changes in stocks (increase or decrease). There is no doubt that production, imports and stock changes (either decrease or increase in stocks) are genuine supply elements.

Feed

Data refer to the quantity of the commodity in question available for feeding to the livestock and poultry during the reference period, whether domestically produced or imported.

FOB

Free-On-Board. FOB-trade values include the transaction value of the goods and the value of services performed to deliver goods to the border of the exporting country. Export values are mostly reported as FOB.

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 there from as a result of further processing. Food from maize, for example, comprises the amount of maize, maize meal and any other products derived there from 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 Balance Sheets

Food Balance Sheets (FBS) are compiled every year by FAO, mainly with country-level data on the production and trade of food commodities. Using these data and the available information on seed rates, waste coefficients, stock changes and types of utilization (feed, food, processing and other utilization), a supply/utilization account is prepared for each commodity in weight terms. The food component of the commodity account, which is usually derived as a balancing item, refers to the total amount of the commodity available for human consumption during the year. Besides commodity-by-commodity information, the FAO FBS also provide total food availability estimates by aggregating the food component of all commodities including fishery products. From these values and the available population estimates, the per person dietary energy and protein and fat supplies are derived and expressed on a daily basis. In the FBS production data refer only to primary products while data for

all other elements also include processed products derived there from, expressed in primary commodity equivalent.

Food insecurity

A situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. It may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level. Food insecurity, poor conditions of health and sanitation, and inappropriate care and feeding practices are the major causes of poor nutritional status. Food insecurity may be chronic, seasonal or transitory.

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 security

A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Growth rates

Growth rates are calculated by the geometric formula:

$$100 \times ((x_t/x_0)^{(1/(t-0))} - 1)$$

Harvested production

Excludes harvesting losses and production not harvested for various reasons. Harvested production is one of the three main concepts of production (and yield) used by countries when reporting to FAO.

Import dependency ratio

Import dependency ratio (IDR) is defined as: $IDR = \text{imports} \times 100 / (\text{production} + \text{imports} - \text{exports})$. The complement of this ratio to 100 would represent that part of the domestic food supply that has been produced in the country itself. However, there is a caveat to be kept in mind: these ratios hold only if imports are mainly used for domestic utilization and are not re-exported.

Kilocalorie (kcal)

Unit of measurement of dietary energy. It should be noted that in accordance to International System of Units, energy is measured in joules, J, but the customary usage of thermochemical energy units of kilocalories (kcal) is mostly used. 1 kcal = 4.184 kJ.

Land use

In agricultural statistics refers to land classification according to the agricultural holders' concepts of use, i.e. arable land, pastures etc.

Livestock

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

Minimum dietary energy requirement

In a specified age and sex group, the amount of dietary energy per person is that considered adequate to meet the energy needs for minimum acceptable weight for attained-height maintaining a healthy life and carrying out a light physical activity. In the entire population, the minimum energy requirement is the weighted average of the minimum energy requirements of the different age and sex groups in the population.

Poverty

According to the United Nations, poverty is defined as a lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion. It is also characterised by lack of participation in decision-making

and in civil, social and cultural life. It occurs in all countries: as mass poverty in many developing countries, pockets of poverty amid wealth in developed countries, loss of livelihoods as a result of economic recession, sudden poverty as a result of disaster or conflict, the poverty of low-wage workers, and the utter destitution of people who fall outside family support systems, social institutions and safety nets. According to the World Bank, poverty is a pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life.

Prevalence of overnourished in total population

Proportion of the population in a condition of overnourishment.

Prevalence of undernourishment

Proportion of the population in a condition of undernourishment. Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity.

Primary crops

Primary crops are those which come directly from the land and without having undergone any real processing, apart from cleaning. They maintain all the biological qualities they had when they were still on the plants. Certain primary crops can be aggregated, with their actual weight, into totals offering meaningful figures on area, yield, production and utilization; for example, cereals, roots and tubers, nuts, vegetables and fruits. Other primary crops can be aggregated only in terms of one or the other component common to all of them. For example, primary crops of the oil-bearing group can be aggregated in terms of oil or oil cake equivalent. Primary crops are divided into temporary and permanent crops. Temporary crops are those which are both sown and harvested during the same agricultural year, sometimes more than once; permanent crops are sown or planted once and not replanted after each annual harvest.

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.

Seed

Data include the amounts of the commodity in question set aside for sowing or planting (or generally for reproduction purposes, e.g. sugar cane planted, potatoes for seed, eggs for hatching and fish for bait, whether domestically produced or imported) during the reference period. Account is taken of double or successive sowing or planting whenever it occurs. The data of seed include also, when it is the case, the quantities necessary for sowing or planting the area relating to crops harvested green for fodder or for food (e.g. green peas, green beans, maize for forage) Data for seed element are stored in tonnes (t). Whenever official data were not available, seed figures have been estimated either as a percentage of supply (e.g. eggs for hatching) or by multiplying a seed rate with the area under the crop of the subsequent year.

Self-sufficiency ratio

The self-sufficiency ratio (SSR) is defined as: $SSR = \text{production} \times 100 / (\text{production} + \text{imports} - \text{exports})$. The SSR can be calculated for individual commodities, groups of commodities of similar nutritional values and, after appropriate conversion of the commodity equations, also for the aggregate of all commodities. In the context of

food security, the SSR is often taken to indicate the extent to which a country relies on its own production resources, i.e. the higher the ratio the greater the self-sufficiency. While the SSR can be the appropriate tool when assessing the supply situation for individual commodities, a certain degree of caution should be observed when looking at the overall food situation. In the case, however, where a large part of a country's production of one commodity, e.g. other cereals, is exported, the SSR may be very high but the country may still have to rely heavily on imports of food commodities to feed the population. The self-sufficiency rate (as defined above) cannot be the complement to 100 of the import dependency rate, or vice-versa.

Shock

An unexpected or unpredictable event that affects livelihoods

Undernourishment

Undernourishment refers to the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity. The number of undernourished people refers to those in this condition.

Variability

The extent to which data in a series or a statistical distribution diverge from the average value

Volatility

Volatility represents the directionless variability of an economic variable, i.e. the dispersion of that variable within a given time horizon. For example, high (low) price volatility is described by situations when prices fluctuate significantly (little) over a short time period in either direction. The following formula is used to measure volatility

$$\sigma = \sqrt{\sum_{i=1}^n [r_t - \mu]^2 / n - 1}$$

where σ is the standard deviation, r_t are the logarithmic changes

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.

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