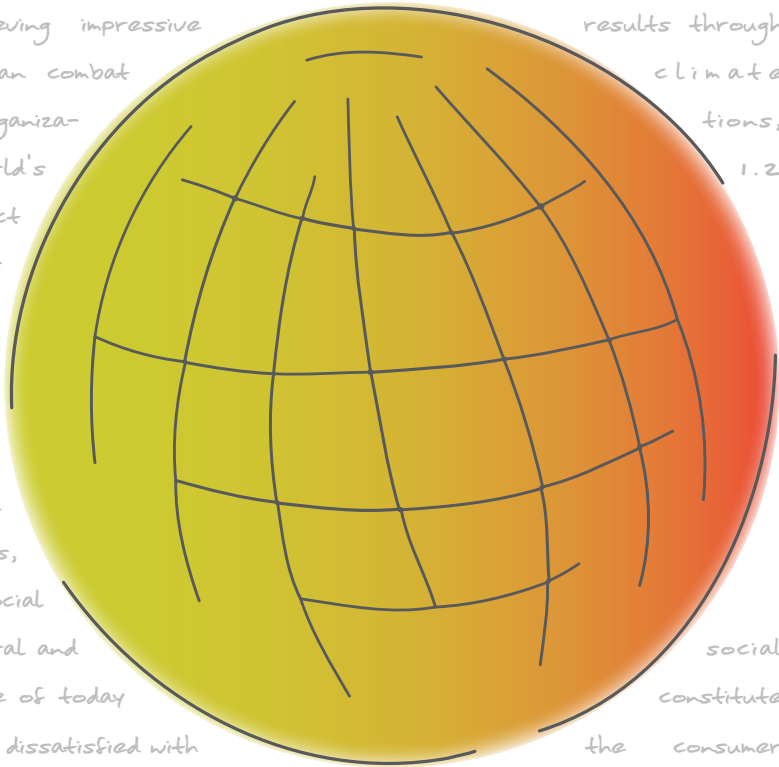


# World Report **YOUTH**

... young people have made it abundantly clear that they want to be involved in the decisions impacting society and addressing climate change is no exception. Throughout the world, youth have developed creative ways to raise awareness, share information, build capacities, and work together on climate change mitigation and adaptation practices—often achieving impressive results through their own initiatives. Young people can combat climate change not only as members of youth organizations, but also as individuals. Each of the world's 1.2 billion young women and men has an impact on the environment. Through the choices they make in their everyday lives, they contribute to the preservation or degradation of their natural surroundings. Historically, the younger generation has promoted change and embraced innovative values. In many cases, youth have been the initiators of social movements that have given rise to cultural and social transformations. While the young people of today constitute a major consumer group, many of them are dissatisfied with the consumer societies in which they live and are seeking alternative lifestyles. This could mean a drive for change. Young people around the world are increasingly making small but important changes that represent essential steps in their transition to a more sustainable lifestyle. Youth can start right where they are, and many...



## Youth & **CLIMATE CHANGE**







**EQUATOR**  
5140 km

**SOUTH POLE**  
4803 km

**CLIMATE  
CHANGE**

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To obtain background information for the *Report*, the United Nations Programme on Youth issued a call for input. The positive response from young individuals, youth-led and youth-focused organizations, and institutions working in the area of climate change is a testimony to the extensive interest in the topic of youth and climate change. Contributions were carefully screened and helped inform the content of the final *Report*. They provided an important overview of the broad range of climate change adaptation and mitigation activities in which young people around the world are engaged. Most of the examples provided in chapter IV of the present *Report* are based on these contributions. Unfortunately, owing to the large volume of contributions received, it is not possible to list all those who provided input individually. The United Nations Programme on Youth is deeply grateful for all the inputs received.

## DESA

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### The following abbreviations have been used in the Report:

AC	air conditioner	UNFCCC	United Nations Framework Convention on Climate Change
C	Celsius	UNEP	United Nations Environment Programme
CDM	Clean Development Mechanism	UNICEF	United Nations Children's Fund
CER	certified emission reduction	USP	University of the South Pacific
CFL	compact fluorescent lighting	YJF	Youth Forum Jeunesse
CO <sub>2</sub>	carbon dioxide	YMCA	Young Men's Christian Association
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change	YOUNGO	youth constituency (COP sessions)
CSD	Commission on Sustainable Development		
DHF	dengue haemorrhagic fever		
ERU	emission reduction unit		
F	Fahrenheit		
FAO	Food and Agriculture Organization of the United Nations		
GHG	greenhouse gas		
ICMYO	International Coordination Meeting of Youth Organisations		
IPCC	Intergovernmental Panel on Climate Change		
KCYP	Kibera Community Youth Programme		
NGO	non-governmental organization		
NYU	New York University		
OECD	Organization for Economic Cooperation and Development		
UNESCO	United Nations Educational, Scientific and Cultural Organization		

### Technical note

In this publication, unless otherwise indicated, the term “youth” refers to all those between the ages of 15 and 24, as reflected in the World Programme of Action for Youth. The term “young people” may be used interchangeably with the word “youth” in the text.

### Note on country groupings and subgroupings

Unless otherwise indicated, the following country groupings and subgroupings have been used in this *Report*:

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Republic, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, Timor-Leste, Viet Nam;

*Sub-Saharan Africa:* Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Réunion, Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe;

*Latin America:* Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Falkland Islands (Malvinas), French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela;

*Middle East and North Africa:* Algeria, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, Occupied Palestinian Territory, Yemen;

*Eastern Europe and the Commonwealth of Independent States:* Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Montenegro, Poland, Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, former Yugoslav Republic of Macedonia;

*Small island developing States:* American Samoa, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cape Verde, Comoros, Cook Islands,

Cuba, Dominica, Dominican Republic, Fiji, French Polynesia, Grenada, Guam, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Federated States of Micronesia, Montserrat, Nauru, Netherlands Antilles, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Puerto Rico, Samoa, Sao Tome and Principe, Seychelles, Singapore, Solomon Islands, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Timor-Leste, Tonga, Trinidad and Tobago;

*Developed market economies:* Australia, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America.

**The following symbols have been used in the annex tables included in the Report:**

Two dots (..) indicate that data are not available or are not separately reported.

An em dash (—) indicates that the item is nil or negligible.

A hyphen (-) indicates that the item is not applicable.

A minus sign (-) indicates a deficit or decrease, except as indicated.

A full stop (.) is used to indicate decimals.

A slash (/) between years indicates a statistical year, for example, 1990/91.

Use of a hyphen (-) between years, for example, 1990-1991, signifies the full period involved, including the beginning and end years.

Details and percentages in tables do not necessarily add to totals, because of rounding.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.



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# INTRODUCTION

## INTRODUCTION

### Why “youth and climate change” now?

Climate change is one of the defining challenges of the twenty-first century. It is a challenge that is global in both its impact and its solutions but one that is not shared equally, as developing countries are likely to be among the most seriously affected by and the least able to address the consequences of climate change. Climate change touches every aspect of life and impinges on development efforts, with consequences ranging from immediate to long term. Major adjustments are required to promote more sustainable patterns of production and consumption at both the collective and individual levels. Solid evidence exists that climate change will have a more serious impact than initially anticipated and that adaptation and mitigation will entail significantly higher costs if action is deferred than if the problem is addressed now.

Addressing and adjusting to the challenge of climate change is certain to be a defining feature of the future of today's youth. It is therefore critical that young people educate themselves and become more actively involved in combating this threat. The present *Report* is designed to assist youth and youth organizations in such an endeavour. It is also meant to affirm the status of young people as key stakeholders in the fight against climate change. The publication comes at a time when efforts to address climate change are receiving unparalleled attention in the international arena, offering youth a unique opportunity for their voice to be heard in the debate.

Youth have long been involved in environmental protection activities at the school and community levels, but the time has come for them to participate more actively in shaping global decisions relating to climate change. Young people must contribute to the process of addressing this critical challenge, as they will feel its impact most acutely throughout their lives.

Young advocates for the environment are becoming more insistent that their voices be heard. In recent years, youth have been recognized as a constituency, albeit with probationary status, at the annual sessions of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the world's most important inter-governmental forum dealing with international efforts and commitments to combat climate change. Young people must continue to move forward, strengthening their position until they occupy a secure place in the decision-making process. To that end, the current *World Youth Report* provides an assessment of youth participation today and identifies steps that can be taken at the local and international levels to facilitate wider and more effective participation among youth in addressing climate change.

## Overview of the Report

Chapter I provides basic information on climate change as well as an overview of the United Nations Framework Convention on Climate Change and its Kyoto Protocol, the relevant international legal and policy framework recognized by most countries. The chapter concludes with a brief outline of the aims of the upcoming United Nations Conference on Sustainable Development, Rio +20.

Chapter II focuses on the consequences of climate change, exploring how the threat it poses to health and safety, food security, and livelihood sustainability may directly affect youth development in developing countries. The chapter also addresses the possibility of ensuing tensions and conflicts over the control of basic natural resources and livelihood opportunities—and their potential outcomes, including migration.

In chapters III and IV, the focus shifts from how young people are likely to be affected by climate change to how they can contribute to remedying the situation. Chapter III identifies trends in young people's consumption behaviours and lifestyles. Youth, especially those in developed countries, constitute a critical mass of present and future consumers, and their consumption decisions could become a key factor in reducing or aggravating climate change and its consequences.

An overwhelming majority of youth indicate that world leaders should do all they can to stop climate change, but do young people take their own responsibilities in this context just as seriously? Education has been identified as a crucial tool in raising environmental awareness and promoting behaviour change among youth. Chapter III highlights education for sustainable development and the role of education in preparing young people to take advantage of "green" job opportunities. It also includes brief mention of additional measures that might be taken to promote green employment options for youth.

Chapter IV showcases existing youth mobilization efforts and initiatives to combat climate change. Youth-led environmental organizations constitute a highly successful model of self-mobilization among young people, and such bodies are likely to play a critical role in tackling climate change challenges. The chapter concludes with an assessment of where youth currently stand in terms of involvement, celebrating recent political developments acknowledging young people as legitimate stakeholders in intergovernmental negotiations on climate change but also identifying barriers to effective youth participation.

The first three chapters end with a short annotated list of references for readers interested in more in-depth information on climate change.

Ultimately, the present *World Youth Report* is intended to highlight the important role played by youth in addressing climate change and to offer suggestions on how young people might be more effectively integrated as individual and collective agents of change within the realm of climate change adaptation and mitigation.





# CHAPTER I

## CHAPTER I

### YOUTH AND CLIMATE CHANGE: THE BASICS

*Climate change ... is the defining challenge of our era. No issue is more fundamental to the global challenges we face—reducing poverty... maintaining economic growth... ensuring peace and stability.*

—Ban Ki-moon, Secretary-General of the United Nations<sup>1</sup>

---

<sup>1</sup> UN News Centre (2009), “Remarks at UNFCCC COP15 High Level Segment”.



## The facts about climate change

Climate change is happening, and it is happening quickly. Although the issue has been a source of controversy among scientists and policymakers, there is growing evidence that the earth's temperature is rising and that polar ice caps and glaciers are melting. For many key parameters, the climate system is already moving beyond the patterns of natural variability (Intergovernmental Panel on Climate Change, 2007a).

Over the past hundred years, the average temperature of the earth's surface has increased by 0.74° C (see figure I.1) (Intergovernmental Panel on Climate Change, 2007a). The most compelling evidence of climate change has emerged over the past couple of decades, with 11 of the 12 warmest years on record occurring between 1995 and 2006 (Intergovernmental Panel on Climate Change, 2007b).

## Figure I.1

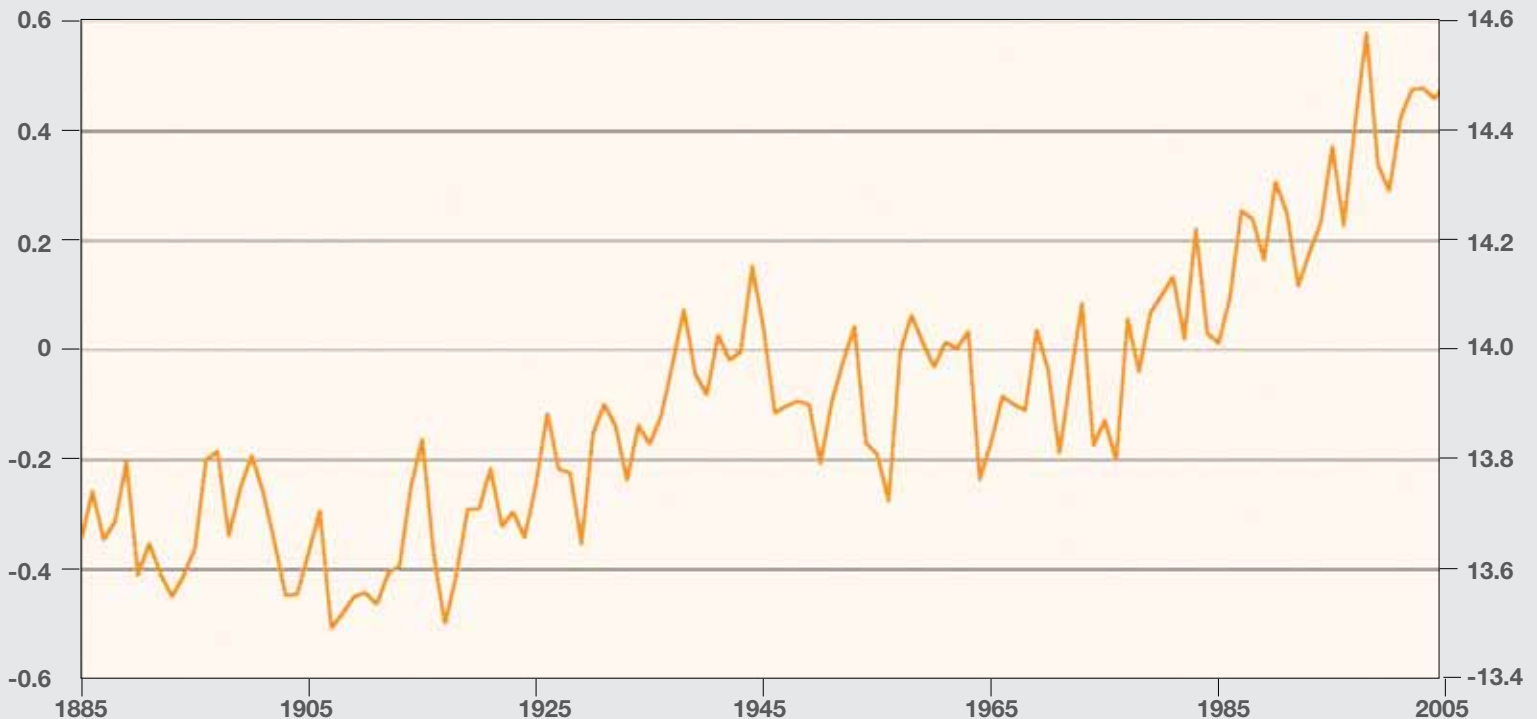
Global warming is also leading to a rise in sea levels through thermal expansion of the oceans, glacier retreat, and the melting of ice sheets. Between 1993 and 2003, the global average sea level increased by approximately 3.1 millimetres. The extent of Arctic sea ice has shrunk by 2.7 per cent per decade over the past 30 years (Intergovernmental Panel on Climate Change, 2007b). During the summers of 2007 and 2008, seasonal melting created an ice-free channel in the Northwest Passage, a water route through the islands of northern Canada separating the Atlantic and Pacific oceans (United Nations Environment Programme, 2009). Antarctica is also losing ice at an unprecedented rate; it is estimated that ice loss from the West Antarctic ice sheet increased by 60 per cent between 1996 and 2006. If this ice sheet were to melt completely, sea levels could rise by as much as 5 metres (United Nations Environment Programme, 2009).

Figure I.1

### Trends in global average surface temperature

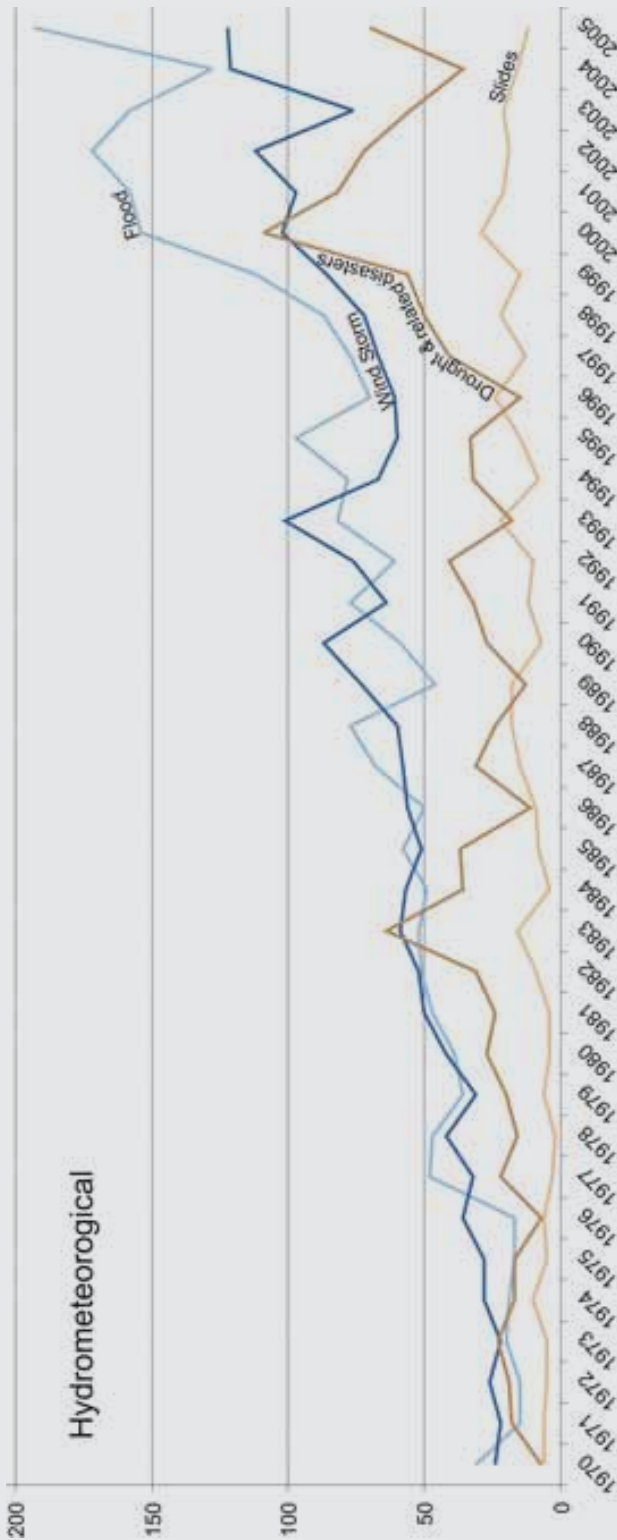
Differences in temperature  
from 1885-1990  
Mean value, °C

Estimated actual global  
mean temperature  
Mean value, °C



Source: United Nations Environment Programme/GRID-Arendal (n.d.).

Figure I.2



Source: United Nations, International Strategy for Disaster Reduction (n.d.).

In addition to affecting global mean surface temperature, sea level, and ice sheet dynamics, climate change brings about ocean acidification, which inhibits the development of many marine organisms.

Climate change may be a key factor contributing to the increased incidence and intensity of extreme weather events such as droughts, heatwaves, floods, and tropical storms (see figure I.2). Over the past 50 years, heatwaves and heavy precipitation events have occurred with greater frequency, and there is evidence that tropical cyclone activity has been rising steadily since 1970 (Intergovernmental Panel on Climate Change, 2007b).

Figure I.2

### Extreme weather events, 1970-2005

According to the United Nations Environment Programme (UNEP), there is a significant possibility that many of the present trends will accelerate, leading to a higher risk of abrupt and/or irreversible climatic shifts and an even more pronounced increase in the frequency and intensity of extreme weather events. If the tipping point is reached, the world may witness the disruption of seasonal weather patterns that support the agricultural activities of half the human population, the diminution of carbon sinks in the oceans and on land, and the destabilization of major ice sheets, leading to unanticipated rates of sea level rise in the twenty-first century (United Nations Environment Programme, n.d.).

There is almost unanimous agreement among scientists and policymakers that human behaviour has contributed to the escalation of climate change through increased emissions of greenhouse gases (GHGs), especially carbon dioxide (CO<sub>2</sub>). Global GHG emissions linked to human activities have increased considerably since pre-industrial times but have accelerated dramatically in recent decades, rising 70 per cent between 1970 and 2004—predominantly owing to the burning of fossil fuels and land-use change (Intergovernmental Panel on Climate Change, 2007b). By 2004, the energy supply sector accounted for about a quarter of all anthropogenic GHG emissions, while the industry, forestry, agriculture, and transport sectors each contributed between 13 and 19 per cent to the overall total (see figure I.3).

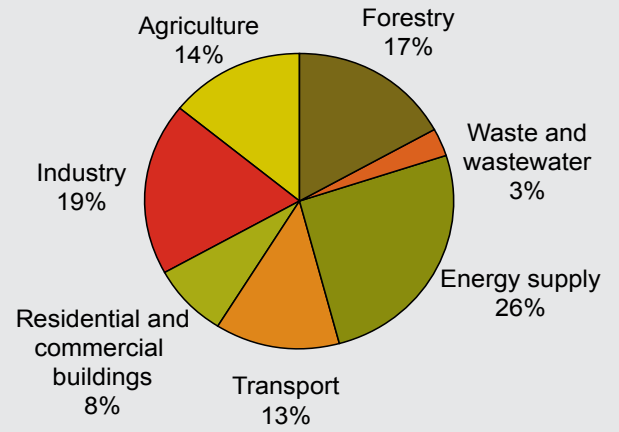


**Figure I.3**

**Share of different sectors in total anthropogenic greenhouse gas emissions in terms of CO<sub>2</sub>-equivalent emissions, 2004**

It is estimated that developed countries are responsible for over three quarters of total GHG emissions (United Nations, 2009a). As figure I.4 illustrates, developing countries still account for a very small proportion of emissions in per capita terms.

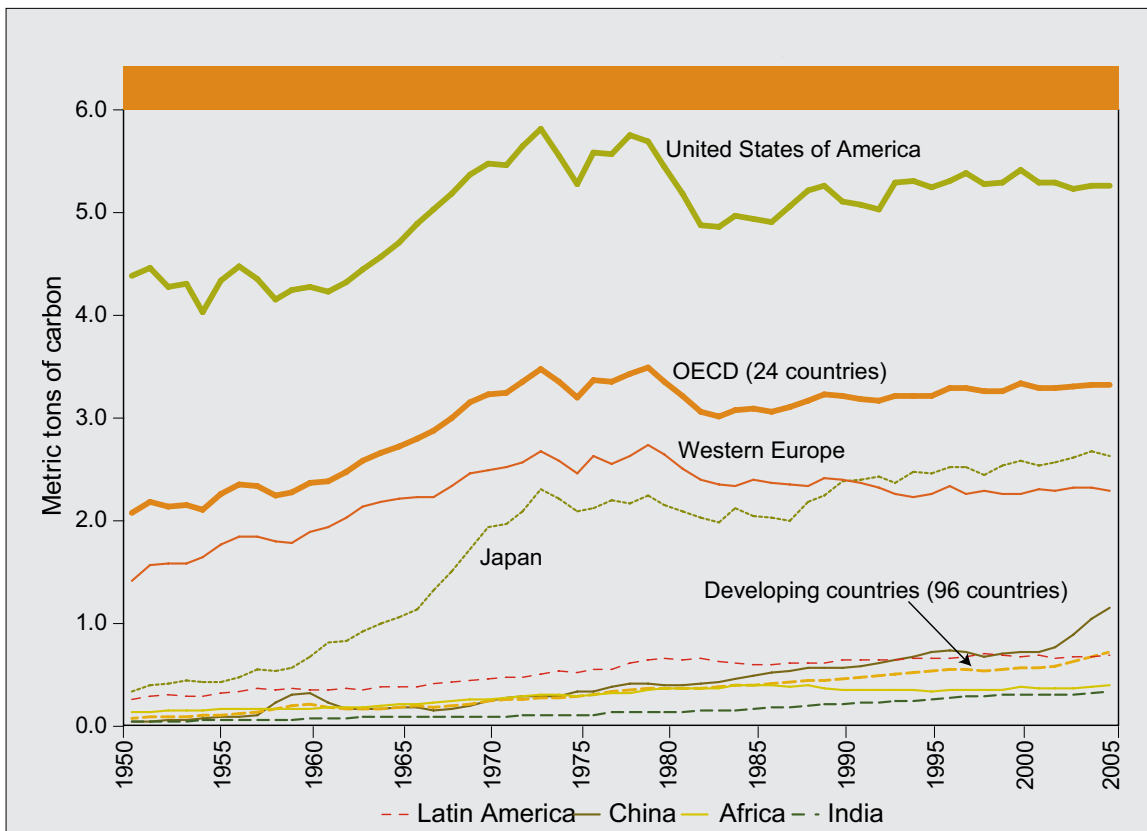
**Figure I.3**



Source: Intergovernmental Panel on Climate Change (2007a).

**Figure I.4**

**Annual per capita emissions in selected regions, 1950-2005**



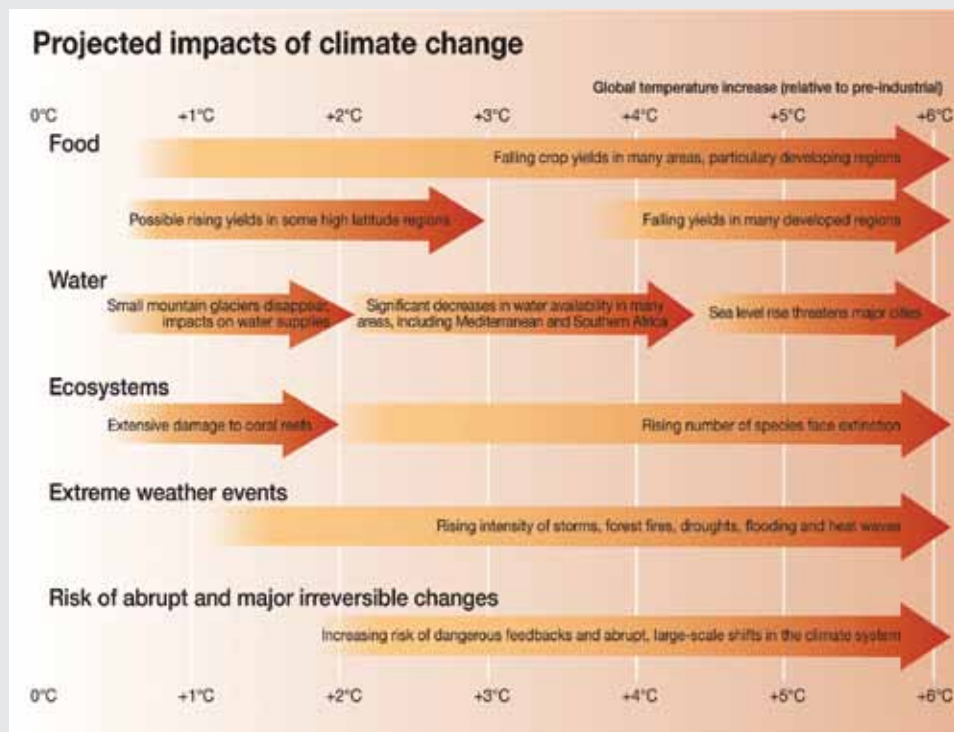
Source: United Nations (2009a).

## THE IMPACT OF A CHANGING CLIMATE ON ECOSYSTEMS AND LIVELIHOODS

All over the world, ecosystems and livelihoods are being drastically affected by climate change (see figure I.5). The environmental shifts brought about by this phenomenon could have serious

direct and indirect consequences, especially for vulnerable groups (Intergovernmental Panel on Climate Change, 2007a; World Health Organization, 2008). Developing countries are most at risk because they lack the social, technological, and financial resources required for climate change adaptation and mitigation (United Nations Framework Convention on Climate Change, 2007a). Their heavy reliance on agriculture further heightens their vulnerability to threats posed by climatic instability.

**Figure I.5**  
**Projected impacts of climate change**



Source: United Nations Environment Programme/GRID-Arendal (2009b).

A high degree of uncertainty exists with regard to the speed of climate change and the scale of its impact. The Intergovernmental Panel on Climate Change (IPCC) has projected that the average global temperature will increase by 1.1°C to 6.4°C over the course of the twenty-first century, with potentially dire consequences for humanity (Intergovernmental Panel on Climate Change, 2007b). By 2020, between 75 million and 250 million residents of Africa may

experience increased water stress as a result of climate change (Intergovernmental Panel on Climate Change, 2007a), with yields from rain-fed agriculture in some African countries declining by up to 50 per cent. By 2050, more than 1 billion people in Asia could be affected by reduced freshwater availability. Individuals living in and around the Andes and the Himalayas will face increased risk of flooding, followed by water scarcity and drought, as glacial sys-

tems in these mountain ranges continue to recede. In Small Island Developing States (SIDS) in the Caribbean and Pacific regions, sea level rise and increasing sea temperatures are already having a negative impact on freshwater resources, fisheries, and coastal ecosystems.

Increased exposure to aggravated environmental stress linked to longer or more intense droughts, storms, floods, or other major weather events has already begun to interfere with the efforts of some of the world's most vulnerable to build a better life for themselves and their families. If climate change continues at its present pace, the health, shelter, and livelihood situations of a significant proportion of the global population will be seriously affected, which could trigger large-scale reversals in human development. Failure to address climate change today will result in diminished opportunities and a widening of the inequality gap within and between countries.

Efforts to combat climate change at the local, national, and international levels have focused on mitigation and adaptation. Mitigation refers to measures that seek to reduce GHG emissions and thereby slow the progression of climate change. Mitigation measures include not only using renewable energy and developing new technologies for transportation and industry, but also protecting and expanding forests, which play a crucial role in absorbing greenhouse gases. Adaptation refers to measures to protect people and ecosystems from the effects of climate change. Since climate change is a transnational issue, effective mitigation and adaptation require international cooperation and coordination.

### **The international framework for combating climate change**

At the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992, 178 Governments agreed that climate change should be addressed from a sustainable development perspective. Section 9.3 of Agenda 21 (1993) states that relevant efforts “should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty”.

The United Nations Framework Convention on Climate Change was also adopted in 1992 and entered into effect in 1994; most countries have since become signatories. The Framework Convention and its Kyoto Protocol are at the core of international efforts to address climate change.

#### **Box I.1**

##### **The Intergovernmental Panel on Climate Change**

The Intergovernmental Panel on Climate Change (IPCC) was established by the United Nations Environment Programme and World Meteorological Organization in 1988 to help Governments better understand changes in the world's climate from a scientific perspective. The IPCC is an expert body that reviews and assesses the most recent scientific, technical, and socio-economic information produced worldwide relevant to the understanding of climate change.

The IPCC comprises three working groups that address different aspects of the climate change issue. Working Group I assesses the “physical scientific aspects of the climate system and climate change”, focusing on variations in temperature, rainfall, sea level, and ice sheets, on climate models and projections, and on the “causes and attribution of climate change”. Working Group II “assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it”. Working Group III “assesses options for mitigating climate change through limiting or preventing greenhouse gas emissions and enhancing activities that remove them from the atmosphere”. Technical support units administer and organize the activities of the working groups.

The IPCC is made up of thousands of scientists from around the world who contribute to the Panel's work on a voluntary basis as authors, contributors, →

and reviewers. The efforts of these scientists are supported by the IPCC secretariat, which plans, coordinates, and oversees the Panel's activities.

The major output of the IPCC is its assessment reports, which comprise separate publications from each working group and, since 1995, a synthesis report. These scientific reports provide the world's most comprehensive coverage of climate change. The *First Assessment Report*, published in 1990, identified climate change as an issue requiring an international political platform. The *Report* served as a catalyst leading to the establishment of the Framework Convention, the landmark international treaty created to reduce global warming and compel countries to deal with the consequences of climate change. The *Second Assessment Report: Climate Change 1995* contributed key input to the process leading to the adoption of the Kyoto Protocol to the Framework Convention in 1997. The third and fourth assessment reports were published in 2001 and 2007 respectively. The participation of the scientific community in the work of the IPCC has grown substantially in terms of both the number of authors and contributors involved in the writing and reviewing of the reports and the geographic distribution and topics covered in the publications.

Along with the assessment reports, the IPCC produces special reports, methodology reports, technical papers, and supporting materials. Through these and other means the Panel provides the United Nations Climate Change secretariat, the Conference of the Parties to the Framework Convention, and other environmental conventions with information on technical and scientific matters.

**Source:** Information summarized and extracted from the Intergovernmental Panel on Climate Change website (<http://www.ipcc/ch>).

## The United Nations Framework Convention on Climate Change

The Framework Convention is an international treaty that establishes broad goals and rules for addressing climate change. Its ultimate objective is to ensure that GHG emissions linked to human activity remain below the level at which the climate system is adversely affected. The Convention is general and flexible in character; its importance derives not from the provision of detailed environmental protection guidelines, but rather from its role in securing global recognition of climate change as a major challenge. The Convention has laid the groundwork for more focused action, including the adoption of the Kyoto Protocol (United Nations Framework Convention on Climate Change, 2009c).

The Conference of the Parties (COP) is the supreme body of the Framework Convention. It comprises all countries that are Parties to the Convention and usually meets annually for a period of about two weeks within the larger context of the United Nations Climate Change Conference. The yearly sessions, which are attended by several thousand government delegates, observer organizations, and journalists, provide the COP with an opportunity to evaluate the status of climate change and the effectiveness of the treaty (United Nations Framework Convention on Climate Change, 2009a; 2009b).

The fifteenth session of the Conference of the Parties (COP 15) was held in Copenhagen from 7 to 18 December 2009. The meeting was attended by 120 heads of State and Government, highlighting the growing importance and urgency attached to climate change by the international community. Country leaders and other high-ranking Government officials and delegates present at the United Nations Climate Change Conference adopted the Copenhagen Accord, through which they committed to significant emission reductions and to the establishment of the Copenhagen Green Climate Fund to support action on climate change in developing countries. Following COP 15, 55 countries that together account for 78 per cent of global emissions pledged to cut and limit greenhouse gases by 2020 (United Nations Framework Convention on Climate Change, 2010), and developed countries agreed to provide approximately US\$ 30 billion for Climate

Fund activities during the period 2010-2012 (United Nations Framework Convention on Climate Change, 2009c). Throughout 2010, negotiations will continue as Member States engage in sustained efforts to convert the Copenhagen Accord into a legally binding instrument.

At COP 15 for the first time, youth were officially recognized as a formal constituency (albeit on probationary terms), legitimizing their status as stakeholders. Over a thousand young environmental activists from approximately 100 countries attended COP 15 (UNFCCC Youth Constituency, 2009a), participating not only in formal interventions but also in activities such as workshops, media events, and silent demonstrations. On 10 December a youth day with the theme Young and Future Generations was held. A more detailed description of youth involvement in the activities surrounding COP 15 is provided in chapter IV of the present *Report*.

### **The Kyoto Protocol to the United Nations Framework Convention on Climate Change**

The Kyoto Protocol was adopted on 11 December 1997 after two and a half years of intensive negotiations, and entered into force on 16 February 2005. The Protocol established legally binding emissions targets for developed countries and incorporated innovative mechanisms to assist those countries in meeting the targets.

Under the terms of the Kyoto Protocol, 37 industrialized countries and the European Union as a whole are required to reduce GHG emissions by an average of 5 per cent relative to 1990 levels over the five-year period 2008-2012. While the Framework Convention *encourages* industrialized countries to stabilize GHG emissions, the Protocol *commits* them to doing so. In recognition of the fact that the current high levels of GHG emissions are a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations.

The Kyoto Protocol introduces three mechanisms that provide countries with flexible options for meeting their commitments. The first is emissions trading, which allows countries with spare emission units to sell this excess capacity to countries that have exceeded their

targets. Since carbon dioxide is the principal GHG, this mechanism is often referred to as the carbon market. Second is the Clean Development Mechanism (CDM), which “allows a country with an emission-reduction or emission-limitation commitment ... to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one ton of CO<sub>2</sub>, which can be counted towards meeting Kyoto targets” (Intergovernmental Panel on Climate Change, n.d.). An example of a CDM project might be a rural electrification project using solar panels or the installation of more energy-efficient boilers. The CDM, operational since the beginning of 2006, has registered more than 1,650 projects to date (United Nations Framework Convention on Climate Change, n.d.). The third mechanism is joint implementation, which “allows a country with an emission reduction or limitation commitment ... to earn emission reduction units (ERUs) from an emission-reduction or emission removal project” in another country with lower emission-reduction or emission-limitation targets (Intergovernmental Panel on Climate Change, n.d.).

The CDM and joint implementation mechanism allow developed countries to transfer some of their technologies for reducing GHG emissions to countries that are expected to become more industrialized. As stipulated in the Protocol, countries’ actual emissions, as well as their transactions, are monitored and recorded by the United Nations Climate Change secretariat, based in Bonn, Germany.

The Kyoto Protocol is generally regarded as an important first step towards the establishment of a truly global emission reduction regime that will stabilize GHG emissions, providing the essential architecture for international climate change agreements yet to come (United Nations Framework Convention on Climate Change, n.d.).

Almost two decades after the adoption of the Framework Convention and more than a decade after the adoption of the Kyoto Protocol, there is a growing consensus that addressing climate change requires both stronger emission reduction efforts among developed countries and the active participation of developing countries, in particular the large emerging





economies. Requiring developing countries to reduce emissions rests on the premise that these countries are set to pursue rapid and sustained economic growth. It also presumes that all developing countries have access to affordable technological solutions that will facilitate the shift to new sources of energy and the adoption of low-emission patterns of production, consumption and development. In order to reach this point, most developing countries will require financial and technical assistance from the more industrialized nations as well as access to mitigation technology at affordable cost.

Against this background, youth and youth organizations have an important role to play in helping to stem the tide of unsustainable development and in harnessing the political will to meet existing emission reduction commitments. In particular, young people can support and contribute to efforts aimed at ensuring that new mechanisms and financial facilities are put in place for transferring and providing access to green technologies. Youth can also play a role in monitoring the implementation and impact of specific initiatives within this framework.

## Youth and Rio+20

In 2012, the United Nations Conference on Sustainable Development – or, Rio+20 – will take place in Rio de Janeiro, Brazil. The overall aims of the Conference are to: (i) follow-up to the United Nations Conference on Environment and Development by assessing progress made in achieving the goals set out in Agenda 21; (ii) consider strategies to implement sustainable and equitable green economies; (iii) strengthen the institutional framework for sustainable development governance, and (iv) secure renewed political commitment for sustainable development. Rio+20 provides an opportunity for Governments to address emerging challenges and establish a new framework for advancing the implementation of the sustainable development agenda through international co-operation.

At the United Nations Conference on Environment and Development held in 1992, also in Rio de Janeiro, the international community recognized the significance of integrating youth into decision-making and implementation pro-

cesses as a means to support the achievement of sustainable development goals. A comprehensive programme of action was adopted – referred to as Agenda 21 – and included the following youth-focused objectives:

- Promoting dialogue between youth and decision-makers at all levels and the provision of mechanisms to permit youth access to information and the opportunity to present their views on sustainable development policy, particularly those directly impacting youth;
- Providing improved access to secondary education as well as vocational and practical skills training programmes, while ensuring that education reflects the economic and social needs of youth and incorporates the concepts of environmental awareness and sustainable development, and prepares them adequately to meet the technological advances in industry and the labour market;
- Developing and implementing awareness raising programmes specifically targeted to the youth population on critical issues pertaining to youth;
- Implementing strategies to improve employment opportunities for youth;
- Supporting mechanisms which facilitate youth representation in national, regional and international processes.

Despite good intentions and an ambitious programme of action, implementation of Agenda 21 is considered lacking. The less than desirable progress is partly attributed to fragmented global environmental and development governance as well as a lack of adequate national legal frameworks for addressing sustainable development. In addition, the onset of multiple socio-economic challenges over the past several years – financial crisis, food crisis, volatile oil prices, increase in climate variability, etc. – have also contributed to delayed action. Rio+20 marks an occasion for Governments, the United Nations system and Civil Society to review these challenges with a view to mitigating the effects and catalyzing progress.



## Box I.2

### Growing Green Globally: A snapshot on the Green Growth model for development

De-linking economic progress from environmental degradation is the premise underpinning the “Green Growth” model for development. It aims to build upon the sustainable development concept by strengthening the environmental component of economic recovery and growth patterns. As the paradigm evolves, demand for greener development models grows.

In 2005, at the 5th Ministerial Conference on Environment and Development, 52 Member States of the United Nations Economic and Social Commission of Asia and the Pacific (UNESCAP) adopted Green Growth as a policy focus, identifying a common path for ecologically sustainable economic progress to foster low-carbon, socially inclusive development.

Then, in 2009, all 30 countries of the Organization for Economic Co-operation and Development (OECD) plus an additional 4 signed the *Declaration on Green Growth*, tasking the OECD with developing a Green Growth strategy to boost economic recovery and build a sustainable growth path for the future.

Some key objectives of the Green Growth model include:

- Improve living standards by meeting the needs of the global population and eliminating inequality
- Reduce environmental risks and ecological scarcities
- Identify transitional pathways to green economies by addressing policy barriers
- Invest in the development of green industries, technologies and jobs including renewable energy and the production of energy efficient materials.

## SUGGESTIONS FOR FURTHER READING

- Intergovernmental Panel on Climate Change (2007). *Climate Change 2007: Synthesis Report—Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, R.K. Pachauri and A. Reisinger, eds. Geneva. Available from [http://www.ipcc.ch/publications\\_and\\_data/publications\\_ipcc\\_fourth\\_assessment\\_report\\_synthesis\\_report.htm](http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm).

As noted in box I.1, the Intergovernmental Panel on Climate Change is an expert body that reviews and assesses the most recent scientific, technical, and socio-economic information produced worldwide relevant to the understanding of climate change. The reports of the IPCC are the most comprehensive scientific publications about climate change available.

- Stern, Nicholas H. (2007). *Stern Review: The Economics of Climate Change*. Cambridge, United Kingdom: Cambridge University Press. Available from [http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/stern\\_review\\_report.cfm](http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm).

The *Stern Review* examines the economic impact of climate change and analyses the policy challenges involved in transitioning to a low-carbon economy.

- United Nations (2009). *World Economic and Social Survey 2009: Promoting Development, Saving the Planet*. Sales No. 09.II.C.1. Available from <http://www.un.org/esa/policy/wess/>.

The *World Economic and Social Survey 2009* examines the close link between climate change and development. The *Survey* argues that the active participation of developing countries is required to meet climate-related challenges, but that such participation is possible only if economic growth and development are allowed to proceed rapidly and sustainably.

- United Nations Development Programme (2007). *Human Development Report 2007/2008—Fighting Climate Change*:

*Human Solidarity in a Divided World.* Basingstoke, United Kingdom: Palgrave Macmillan. Available from [http://hdr.undp.org/en/media/HDR\\_2007\\_2008\\_EN\\_Complete.pdf](http://hdr.undp.org/en/media/HDR_2007_2008_EN_Complete.pdf).

The *Human Development Report 2007/2008* addresses the present and future impact of climate change on human development. The *Report* offers a comprehensive look at the social, economic, political, and human aspects of climate change in developing countries.

- United Nations Development Programme and Peace Child International (2008). *Two Degrees of Separation between Hope and Despair. A Young People's Summary of the 2007/2008 Human Development Report—Fighting Climate Change: Human Solidarity in a Divided World.* New York and Buntingford, United Kingdom. Available from [http://hdr.undp.org/en/media/Two\\_Degrees\\_En.pdf](http://hdr.undp.org/en/media/Two_Degrees_En.pdf).

Jointly published by the United Nations Development Programme and Peace Child International, this summary of the Human Development Report 2007/2008 was produced by and for young people.

- United Nations Population Fund (2009). *At the Frontier: Young People and Climate Change—UNFPA State of World Population 2009: Youth Supplement.* Sales No. E.09.III.H.2. Available from [http://www.unfpa.org/swp/2009/en/pdf/EN\\_YSWOP09.pdf](http://www.unfpa.org/swp/2009/en/pdf/EN_YSWOP09.pdf).

This supplement to the United Nations Population Fund's *State of World Population 2009* includes a compilation of first-hand accounts by young people from all parts of the world about how climate change is affecting their present lives and future prospects.

- World Wide Fund for Nature (2009). *The New Climate Deal: A Pocket Guide.* Gland, Switzerland. Available from [http://assets.panda.org/downloads/wwf\\_climate\\_deal\\_1.pdf](http://assets.panda.org/downloads/wwf_climate_deal_1.pdf).

Produced by the World Wide Fund for Nature (formerly the World Wildlife Fund) during the period leading up to COP 15, this guide provides a critical perspective on climate change and a call to action for all Governments to address relevant challenges.

## CHAPTER II

### CHAPTER II

#### **Compromised futures? Youth development and the effects of climate change**

Climate change is a real phenomenon, and its effects are apparent. There are important tipping points that may already have been reached or passed, causing irreversible damage to many human and ecological systems.

As highlighted in chapter I, the warming temperatures driving climate change can have a direct impact on human activities, and their negative effects can be compounded by existing ecological and social situations. The impact of climate change is, and will continue to be, exacerbated by a variety of interlinked and overlapping factors, undermining the health and safety of populations, compromising food security, threatening livelihoods, and eroding economic security (Intergovernmental Panel on Climate Change, 2007a).

Although climate change affects individuals of all ages, young people can expect to bear a particularly heavy burden because they will live longer and will face this challenge throughout their lifetimes. The situation of youth in less developed countries is especially tenuous. The combination of geography, geology, and uneven social and economic development has made those living in certain areas of Africa, Asia, and the Small Island Developing States (SIDS) more vulnerable than others to climate change and its consequences. In some of the countries within these regions, youth make up as much as one third of the population (United Nations, 2009c), and many of them are already facing a difficult transition to adulthood owing to social and economic instability and widespread poverty. Should climate change continue unabated, existing deficits and limitations could deepen. Such a situation would have immediate and short-term effects on youth and their communities, but it could also pose a major threat within the long-term trajectory of global development. As noted in chapter I, the young women and men living in Africa and Asia represent the vast majority of the world's youth. Failing to address climate-related challenges that can undermine their successful integration into society could ultimately perpetuate or even exacerbate widespread poverty and inequality.

In this chapter the relationship between youth development and the impact of climate change is examined. Particular attention is given to the development of young people in those contexts most vulnerable to the effects of climate change, including health and safety, food security, and livelihood stability. Migration and conflict are also explored as possible consequences of climatic instability. The chapter raises the question of compromised futures: Will climate change hinder the ability of young women and

men to participate fully in society, and can addressing climate change bring about a better future?

## **The compound effects of climate change on health and safety**

Good health constitutes an essential asset, as it lies at the core of human capacity to function effectively in any society. Unless timely and effective action is taken, extreme weather events, water scarcity, higher sustained temperatures, and other phenomena associated with climate change are likely to pose a serious threat to human health and safety.

### **Extreme weather events increase health hazards...**

Extreme weather events constitute a serious natural hazard and can affect human health and safety both directly and indirectly. They are often responsible for physical injury and loss of life, and they may exacerbate already sub-standard living conditions, increasing the exposure of vulnerable residents to many types of disease (Abatzoglou and others, 2007; United Nations Development Programme, Bureau for Crisis Prevention and Recovery, 2004). The incidence of extreme weather is expected to grow with climate change. In fact, the frequency and intensity of many natural hazards have already increased. Since 1980 the number of people affected by extreme weather events has doubled, and by 2015 it could increase by another 50 per cent. Between 1980 and 2007, 98 per cent of those affected by natural disasters were the victims of climate-related events (Ganeshan and Diamond, 2009).

Many young people live in areas where extreme weather events tend to hit hardest. In parts of sub-Saharan Africa, the risk of drought is relatively high, while in the coastal areas of this subregion and in South Asia, Central America, and the Caribbean and Pacific islands, serious flooding poses the greatest threat (United Nations Development Programme, Bureau for Crisis Prevention and Recovery, 2004). The intensification of extreme weather events is likely to be a major factor affecting the health and safety of many youth living in these areas, especially those residing in South Asia, Central America, and the small island developing States of the Caribbean and Pacific regions

(United Nations Development Programme, Bureau for Crisis Prevention and Recovery, 2004; Center for Hazards and Risk Research at Columbia University, 2005).

While extreme weather events are more likely to affect the subregions mentioned above, other parts of the world are vulnerable as well, as climate change is a truly global phenomenon. Populations unaccustomed to particular natural hazards often do not have adequate response mechanisms in place. An upsurge in demand for emergency services and supplies following a natural disaster may put a severe strain on institutions, creating a force multiplier effect whereby health concerns are elevated to a health and safety crisis.

### **...particularly where sanitation is poor and wastewater management insufficient**

In many of these contexts, the higher incidence of extreme weather events combined with poor sanitation can give rise to pervasive health threats. Climate change is often associated with periods of excessive or insufficient precipitation. Where flooding occurs the water can become contaminated with human and animal excrement, while extended drought can reduce the amount of water available for washing and sanitation. Under such circumstances, cholera, typhoid and diarrhoeal diseases can flourish (McMichael and others, 2003; Prüss-Üstün, Bos, and Gore, 2008).

More than a quarter of the world's youth live in countries where at least two thirds of the population does not have access to adequate sanitation (World Health Organization and United Nations Children's Fund, 2006). All of these countries are in Africa, Asia, or Oceania. According to the Townsend Centre for International Poverty Research, some 30-50 per cent of youth in most African countries are deprived of adequate sanitation, and the situation is the same for at least 30 per cent of young people in six Asian countries (United Nations, 2007b). Health conditions can deteriorate rapidly under circumstances such as these. At present, the incidence of diarrhoeal diseases potentially attributable to climate change is highest in South-East Asia, where more than 100 million young women and men reside (United Nations

Framework Convention on Climate Change, 2007a; United Nations, 2009c).

Even in countries with adequate sanitation and water treatment facilities, extreme weather events may disrupt water supplies as systems are overloaded during and after intense storm activity. Water contaminated with biological and chemical toxins (wastewater) may spill over into bodies of water and agricultural lands. Wastewater exposure and consumption not only threatens human health but may also devastate ecosystems.

### **Reduced access to clean water compromises health**

Climate change has a direct impact on water quality, with negative implications for health. Clean water is essential for survival (Prüss-Üstün, Bos and Gore, 2008). However, potable supplies will come under growing pressure as the warming temperatures associated with climate change increase water pollution from bacterial growth and algal blooms (Intergovernmental Panel on Climate Change, 2007b), leading to a rise in the transmission of diarrhoeal diseases and bacterial infections—often with deadly consequences. Already, more than 560 million African youth do not have access to safe drinking water (United Nations, 2007b).

Extended periods of drought expected in some areas as a result of climate change could further limit access to clean water for many, leading to health consequences associated with malnutrition, dehydration, and inadequate sanitation.

### **Higher temperatures increase exposure to disease...**

Not all of the manifestations of climate change with implications for health are as dramatic as the extreme weather events and water scarcity issues addressed above. The fact is that the warming temperatures alone can increase youth exposure to health risks, including vector-borne diseases. A prime example is dengue fever, which has been identified by the World Health Organization as one of the endemic diseases to which a significant proportion of the global population will be exposed. The geography of this disease is related to consistently warm temperatures and adequate precipitation.

With the warming effect of climate change, the areas where the disease and its host can survive are expected to grow, and in many of the areas in which dengue fever is presently found, its virulence is likely to increase (McMichael and others, 2003).

Dengue is one of the world's most important vector-borne diseases, affecting more than 2.5 million people worldwide (see box II.1). Most of the reported fatalities from this disease have been among children and young adults (Centers for Disease Control and Prevention, Division of Vector-Borne and Infectious Diseases, 2008; World Health Organization, 2009). More than 600 million young men and women live in areas infested with the *Aedes aegypti* mosquito, which transmits dengue, and both the mosquito and the incidence of the disease have experienced a dramatic resurgence since the 1970s (Centers for Disease Control and Prevention, Division of Vector-Borne and Infectious Diseases, 2008).

### Box II.1

#### Dengue: a resurgent virus

Dengue is a mosquito-borne viral infection that causes a severe flu-like illness, and in some cases a potentially lethal complication called dengue haemorrhagic fever (DHF) may develop. Dengue occurs in tropical and subtropical regions, typically in and around urban areas, and in recent years has become a major international public health concern.

Over the past few decades the incidence of dengue has grown dramatically. According to World Health Organization estimates, some 50 million people may be infected with the virus each year. In 2007 alone there were more than 890,000 cases of dengue reported in the Americas, and 26,000 of these were DHF.

Today, dengue is endemic in more than a hundred countries in Africa, the Americas, the Eastern Mediterranean, South-East Asia, and the Western Pa-

cific, with the last two regions being the most seriously affected.

The past six years have seen unusually high rates of dengue infection in South-East Asia and the Western Pacific, and climate change may be partly to blame. The *Aedes aegypti* mosquito, which transmits the virus, does better in warm, wet weather, and with climate change, these regions have experienced rising temperatures and longer rainy seasons.

Climate change is not the only factor influencing the resurgence of dengue. Increased urban migration and poor sanitation and water storage are also significant contributors, especially in developing countries. Even in the more developed countries of a vulnerable region, however, the problem has grown more acute. For example, Singapore, a model of dengue control, saw a major outbreak in 2005 and, following a 2006 decline, increased incidence in 2007.

As temperatures continue to rise it will become more difficult to prevent the spread of the disease, even with improved fumigation and prevention methods.

There is no specific treatment for dengue fever.

**Sources:** Krista Mahr (2007), "Vagabond virus: dengue fever is spreading, and some think climate change is to blame", p. 38; and World Health Organization (2009), "Dengue and dengue haemorrhagic fever".

#### ...and increase the threat of heat stress

The rising temperatures climate change brings can increase the incidence of heat stress and heat-related mortality, and those without adequate housing or health services are most vulnerable to this threat (McMichael and others, 2003). According to figures compiled by



the Townsend Centre for International Poverty Research, more than half of all African youth lack adequate shelter, and the same is true for more than one third of young people in some countries in Asia and in Latin America and the Caribbean (United Nations, 2007b). It is these youth who are most likely to feel the heat.

### The food security dilemma

Food security is already being threatened by climatic shifts. This issue raises important concerns about hunger, poverty, health, and productivity—and therefore about broader prospects for human development. Food availability and access constitute one of the most basic and essential requirements for maintaining healthy and productive lives. At present, hunger and malnutrition combined comprise the number-one threat to human health (World Food Programme, 2009). Climate change will continue to affect all aspects of food security, especially in Africa, Asia, and Latin America and the Caribbean (Bates and others, 2008; Food and Agriculture Organization of the United Nations, 2009b), where more than 1 billion young men and women live (United Nations, 2009c).

Food insecurity is likely to be particularly challenging for developing countries that are vulnerable to extreme weather events and that have low incomes and a high incidence of hunger and poverty (Intergovernmental Panel on Climate Change, 2007b; Food and Agriculture Organization of the United Nations, 2009b). Residents of these areas are already at risk and will find it hard to overcome the food production and income losses resulting from extreme weather events. Such a situation could mean short-term and long-term losses in food availability and access. Short-term infrastructural damage from extreme weather events of growing intensity may also make food distribution difficult.

Young women are likely to be the most seriously affected by compromised food security. The results of research carried out in India indicate that nutritional deficits are greater among girls than among boys when food is scarce and/or when food prices are high. The research also shows that rainfall shortages, which serve to reduce food availability, are more strongly correlated with death among girls than among

boys (Stern, 2007). Distinct social and cultural preferences and customs affecting girls and boys translate into different gender-specific vulnerabilities within and across regions. In most cases, these norms work to the detriment of young females (United Nations Children's Fund, Innocenti Research Centre, 2008).

Much of the potential threat to food security comes from the negative effect climate change could have on agriculture. Agricultural productivity could decline between 9 and 21 per cent in developing countries as a result of climate change (Food and Agriculture Organization of the United Nations, 2009b). It is likely that such a decrease would derive largely from shifts in hydrological patterns and compromised water availability, as agriculture accounts for 70 per cent of global water use (Bates and others, 2008; Food and Agriculture Organization of the United Nations, 2009a).

Projections indicate that with the combination of climate change, population growth, and the consequent increase in demand for food, energy, and biofuels, almost half of the global population could be living in areas of high water stress by 2030 (United Nations World Water Assessment Programme, 2009). The anticipated rise in temperatures and sea levels owing to climate change will affect the availability of freshwater sources, with a negative impact on both quantity and quality. In addition, the rate of glacier and snow-cover retreat is likely to increase throughout the twenty-first century, reducing water availability and hydropower potential and changing the seasonality of meltwater flows in regions where major mountain ranges are key water supply sources (Intergovernmental Panel on Climate Change, 2007b).

Rice, wheat, and maize production has declined in some parts of Asia because of the increase in water stress brought about by climate change. At present, the world's highest rates of malnutrition attributable to climate change are found in South-East Asia (United Nations Framework Convention on Climate Change, 2007a; Bates and others, 2008). Communities in China, India, and Pakistan, which together account for more than 40 per cent of the world's youth, will be especially hard hit by the reduction in meltwater flows from the Himalayas and other high, mountainous areas. In fact, India is





expected to be in a state of water stress before 2025 (United Nations Environment Programme/GRID-Arendal, 2007; Bates and others, 2008).

Hardest hit by compromised food security will be the rural areas of Africa (Food and Agriculture Organization of the United Nations, 2009b), where more than half of the region's young people live (United Nations, 2008). The greatest challenge within this context will arise from the impact of climate change on water resources. In rural Africa, groundwater and rainfall are essential inputs for food production and are the main sources of potable water. One area currently experiencing a serious water deficit is the Sahel region, where longer and more intense droughts constitute one of the most dramatic climatic changes recorded in any region. The situation is expected to worsen in the coming years, affecting more than 60 million young women and men (Bates and others, 2008). Outside the Sahel, groundwater supplies are expected to decrease by as much as 10 per cent, even with a 1°C increase in temperature (Bates and others, 2008).

Although the less developed nations are likely to face the greatest threat to food security, developed countries may be affected as well. In northern Australia and the southern United States, for example, food production could decline as a result of drier surface conditions (Cline, 2007). These countries are much better prepared to deal with such a challenge, however, as any projected losses are buffered by the relative strength and stability of their economies (Intergovernmental Panel on Climate Change, 2007a).

### **Climate change mitigation and food security: an added challenge?**

Ironically, some climate change mitigation efforts may themselves undermine food security, especially in less developed areas. The production of biofuels and other forms of bioenergy presents one of the greatest challenges in this regard (Food and Agriculture Organization of the United Nations, 2009a). Bioenergy is the largest new source of agricultural demand in recent years, and this has important implications for food production and availability in areas where agricultural capacity is diminishing. It takes a lot more grain to power the world than to feed it; the corn equivalent of the en-

ergy used for a few minutes of driving would feed a person for an entire day, and that same person could be fed for a year with the equivalent energy burned from a full tank of ethanol in a four-wheel-drive sports utility vehicle (Nellemann and others, 2009). As noted above, the growing prevalence of this type of agricultural production will also contribute to increased water stress (United Nations World Water Assessment Programme, 2009).

With the rising demand for biofuel the commodity value of feedstock grains will increase, making the production of corn and other source crops more profitable. However, this will pose a problem for areas lacking economic security, as the added value means higher food prices in the short and long terms and therefore reduced access to food (Food and Agriculture Organization of the United Nations, 2009a). Such pressures are already being felt: increased biofuel production was identified as one of the factors contributing to the food crisis in early 2008, which led to food riots in some countries. By 2016, food prices are expected to rise by 20 to 50 per cent (Organization for Economic Cooperation and Development and Food and Agriculture Organization of the United Nations, 2008).

## **THE IMPACT OF CLIMATE CHANGE ON YOUNG PEOPLE'S LIVELIHOODS**

Climate change is likely to affect employment patterns in different ways. Rates of unemployment are already higher among youth than among adults, and with most of the world's young people living in areas where dependence on natural resources and persistent poverty intersect, climate change could pose a serious threat to youth livelihood patterns and economic stability. On a more positive note, adaptation and mitigation efforts are opening the door to a new category of employment—green jobs—across a multitude of sectors, and young people could be the segment of the labour market best positioned to access them. However, as previously indicated, this new type of employment may be linked to other development challenges.

## Negative consequences

As is the case in many of the other contexts described thus far, youth in developing countries—especially those in rural areas—are likely to feel the impact of climate change on their livelihoods sooner and more directly than will their peers in developed countries (see box II.2). The more socio-economically vulnerable regions include many communities that depend on the natural environment for their livelihoods, with employment concentrated in sectors such as agriculture, forestry, and fisheries. The effects of climate change on these sectors will vary, but the outlook is largely negative for the developing world as a whole (Intergovernmental Panel on Climate Change, 2007a; Food and Agriculture Organization of the United Nations, 2009b; 2009c). Agriculture is one of the largest and most important employment sectors, but it is also extremely vulnerable to climate-related damage. In the short term, agricultural production is threatened by soil degradation and erosion, crop damage, and reduced harvests resulting from extreme weather events such as droughts, heatwaves, severe storms, and floods—all of which are expected to occur with greater frequency and intensity. The situation may be exacerbated in the long term by the higher sustained temperatures and systemic water scarcity linked to climate change. (Intergovernmental Panel on Climate Change, 2007b; International Assessment of Agricultural Knowledge, Science and Technology for Development, 2009).

The pressure climate change is exerting on traditional livelihood patterns will intensify throughout the lives of today's young women and men if the agriculture sector continues to be the major source of employment in the developing world. At present, agriculture accounts for almost half of all employment in less developed countries (United Nations Development Programme, 2007). In Africa the majority of young people live in rural areas, where agriculture accounts for 65 per cent of total employment (World Bank, 2008a). In several Asian countries youth employment has largely shifted to industry or services, but agriculture remains a significant source of employment for young workers (Asian Development Bank, 2008).

### Box II.2

#### Marjorie's story: a Filipina shell fisher in warm waters

Climate change is affecting marine ecosystems, threatening the livelihoods of many young people who live in coastal and island environments in the developing world. Marjorie's story is a prime example.

Marjorie lives on the island of Zaragoza, just off the coast of Southern Cebu in the Philippines. The small island is inhabited by 300 families whose main occupation is fishing. As a result of rising water temperatures, fishermen on the island have had to work longer hours and go further out to sea in order to make ends meet. Some have had to resort to asking their children to help out. This is how Marjorie started fishing when she was in her early teens:

One day, when I was 13, my mother asked me if I could start fishing more seriously, as if it were a job. ... I was happy, because I had noticed the hard times we were going through, and I knew I could help to catch more fish. The problem was one year later, when my mother told me that things were worse and I had to leave school, so I could work more and save the costs of studying. ... I really wanted to go [to school], because once I graduate I will be able to help my parents send my other siblings to school.

Marjorie was able to convince her family that her work would not suffer if she were allowed to resume her education. She is back in school now, about to begin her second-to-last year of secondary studies, but she still has to work in order to help her family out and finance her education, often fishing through the night before sailing out to school at seven in the morning.

I'm just so excited at the thought of finishing school. I was supposed to graduate two years ago, and now →

I'm afraid that I won't be able to make it. ... If I don't [graduate], people will assume that I don't know anything and I won't be able to work in the city. ... If here on the island there were fish like before, I would stay, because people lived well here. But now, with the climate change, it's impossible to make a living here.

**Source:** Summarized and excerpted from United Nations Population Fund (2009), *At the Frontier: Young People and Climate Change*.

For youth in developed countries the impact of climate change on employment opportunities may not be as negative. In industrialized nations young people tend to be overrepresented in the service sector, which is less likely to be affected by changing weather trends. Statistics for 2007 indicate that in New Zealand, 25 per cent of youth aged 15-24 years were employed in the retail industry and another 12 per cent worked in the accommodation, cafes, and restaurants sector, compared with respective rates of 13 and 5 per cent for all workers (New Zealand Department of Labour, 2007). A similar picture emerges from youth employment data in the United States; in 2008, 18 per cent of young people between the ages of 16 and 24 were employed in retail trade, and 23 per cent worked in the leisure and hospitality industry (United States Bureau of Labor Statistics, 2008). Although the service sector appears to be less vulnerable than many other sectors to the consequences of climate change, there may be some negative long-term effects, especially in the hospitality industry, as the impact of climate change on snowcaps, waterways, and coastal environments may reduce the appeal of many popular tourist destinations.

### **Potential positive consequences— including green jobs**

Shifting perspectives on sustainable development, including concerns over climate change, have created a growing market for green jobs across many sectors including energy supply, recycling, agriculture, and transportation. Green jobs represent an opportunity to make development truly sustainable, as they are spe-

cifically geared towards reducing the ecological footprint of economic activities. Simultaneously, they can play an important role in efforts to address rising unemployment. Green jobs will be explored in greater detail in chapter III.

## **THE MIGRATION EQUATION**

The nature and extent of the impact of climate change on human population distribution remains unclear. Historically, migration has been an important coping strategy for dealing with climate stress (Brown, 2008; Raleigh, Jordan and Salehyan, 2008). In Africa, droughts and floods have led to increased reliance on migration as an adaptation measure (Bates and others, 2008); over the past 20 years more than 10 million people in the region have been displaced owing to environmental degradation and desertification (International Organization for Migration, 2009). In the Sahel, reduced agricultural yields have been a key factor driving migration for roughly 30 years (Brown, 2008); climate change will continue to undermine agricultural productivity in the area and may be responsible for prolonged periods of drought (Intergovernmental Panel on Climate Change, 2007a), further threatening the livelihoods of the nearly 60 million young women and men living there.

Analysing climate-induced migration can be difficult. There is no consensus on the definition or measurement of this phenomenon, and very little relevant data are available. Moreover, migration flows in general have proven hard to predict. Nevertheless, it is reasonably safe to assert that over the next few decades more people may choose—or be forced—to move in response to the impact of climate change (International Organization for Migration, 2009). The nature and extent of climate-induced migration in the years to come will depend on a number of factors, including GHG emission levels, local population growth and distribution rates, the effects of climate change on weather patterns, and the success or failure of efforts undertaken by local and national communities to adapt to the changes. The motivation to migrate will be strongest among those whose economic security is seriously threatened or compromised by extreme weather events, water scarcity, and/or higher temperatures. It is virtually impossible

to predict how many might end up as environmental migrants in the coming decades. Projections are highly speculative and range from 25 million to 1 billion by 2050 (Brown, 2008), with 200 million being the most commonly cited figure (Myers, 2005; Stern, 2007).

Most climate-induced migration occurs within countries, and this trend is likely to continue (Boano, Zetter and Morris, 2008; Warner and others, 2009). As landlessness, poverty, and displacement continue to increase as a result of natural hazards, movement from rural areas to cities is likely to accelerate (Islam, 1996), leading to the expansion of urban slums (Raleigh, Jordan and Salehyan, 2008). Agricultural workers may continue to pursue a rural livelihood, becoming migrant farmers, but in the face of drought and soil degradation jobs may be increasingly hard to find (Warner and others, 2009). Where small countries are affected, some international migration will probably be necessary (International Organization for Migration, 2009). For residents of low-lying SIDS the impact of climate change may be dramatic, which could potentially translate into high rates of climate-induced migration (see box II.3).

### Box II.3

#### Permanent inundation and forced migration

The rising sea levels and hydrological shifts expected with climate change could lead to the permanent inundation of low-lying coastal environments. The results could be devastating for many indigenous islanders and for coastal and small island populations as a whole. The story below illustrates how one community has had to deal with the threats and realities of climate-induced displacement. If something is not done to address climatic shifts, many more will have similar tales to tell.

#### *The Carterets Islands, Papua New Guinea*

The Carterets is a group of islands, and Han is one of them. My name is Nicholas Hakata. I am from the Carterets Islands. It is a holiday paradise

island. Life on the island is easygoing and simple. We go fishing or go to the bush to check the banana plantation or just relax. But only one thing is wrong. The sea is eating our Han Island and shrinking it. We never realized the king tides could destroy our island. We may not have an island in the future. When the tide is high, the sea rises up one to two metres and flows further inland. The sea walls aren't enough to stop the sea from coming in like a river. Areas where the sea never reached are washed over now. The invading king tides left a swamp where mosquitoes are now breeding. Now there are many more mosquitoes, and our children are sick with malaria. This is the middle of the island. The sea recently passed through here and continued, almost to the other side. It destroyed everything in people's gardens. After this happened, our people were starving. We were hungry and ate only fish and coconut. [There is only one] boat that provides supplies and services to us when in need. Often it comes twice a year. It is supposed to come four times a year. When the children are hungry, it distracts them from their education. When the school bell rings, they don't want to turn up. There is nothing in their homes, and in their stomachs, so they refuse to go to school. Our Government has provided food aid, but this is a short-term service of food supply and is not sustainable.

Islanders are thinking about relocating to the Bougainville mainland, where we can produce for ourselves. Recently, we held community meetings to decide on ways to sustain ourselves. An office was set up in Buka to get things done quickly. This is because the Government has not found a solution to assist us. It has not found land to save our people on the Carterets. This situation is bad because the only solution is to relocate. If you don't, there will be no food here and one would die. We conducted a survey and came up with a relocation program. After experiencing the recent king tides, most →

islanders want to relocate and very quickly. We are also learning which skills and resources we can take to the mainland. We need to relocate 120 families. But we need finances to do this. We need 6 million kina [US\$ 2 million] to build houses and other facilities for housing 120 families on the main island of Bougainville. In the future, we plan to come back to these reefs and manage them as our fishing ground. Our reefs will be a source of income, and our children will come back and connect with their ancestral homeland.

**Source:** Nicholas Hakata (personal communication).

It is difficult to predict the extent to which young people will take part in environmental migration. On the one hand, research on famine relief has shown that in situations of induced migration those without dependants usually leave first, followed by older men and then families (Raleigh, Jordan and Salehyan, 2008). This pattern implies that a first wave of climate-induced migration may involve mostly male youth. On the other hand, the ability to migrate is a function of mobility, and prospects for success are heavily influenced by factors such as access to money, family networks, and contacts at the destination (Brown, 2008)—a reality that could limit the migratory flows of young men and women who are just beginning the process of integration into productive society.

A higher probability of conflict may also be linked to climate change and migration. The relationship between these three factors is difficult to define, as it involves many causal pathways and interlinkages. Essentially, though, it revolves around disputes over scarce resources—a situation that could both lead to and arise from migrant flows (Boano, Zetter and Morris, 2008). Whatever the causes, increased conflict of any kind could significantly undermine youth development.

### **Climate, conflict, and youth**

The relationship between climate change and conflict is complex but derives primarily from reduced economic security, increased resource scarcity (especially in areas economically dependent on natural resources), and the circumstances surrounding displacement (Ohlsson, 2000; United Nations Environment Programme, 2009). These three factors are likely to have a significant impact on the world's largest youth cohorts in Africa and Asia, where rural livelihoods and natural resource dependence are dominant.

As figure II.1 illustrates, many of the factors that push youth into situations of conflict—including economic instability, social and political exclusion, unemployment, dissatisfaction with public services, and the breakdown of traditional family and social networks (United States Agency for International Development, 2005)—may be exacerbated by the effects of climate change.



Figure II.1

The complex relationship between conflict over natural resources and climate change



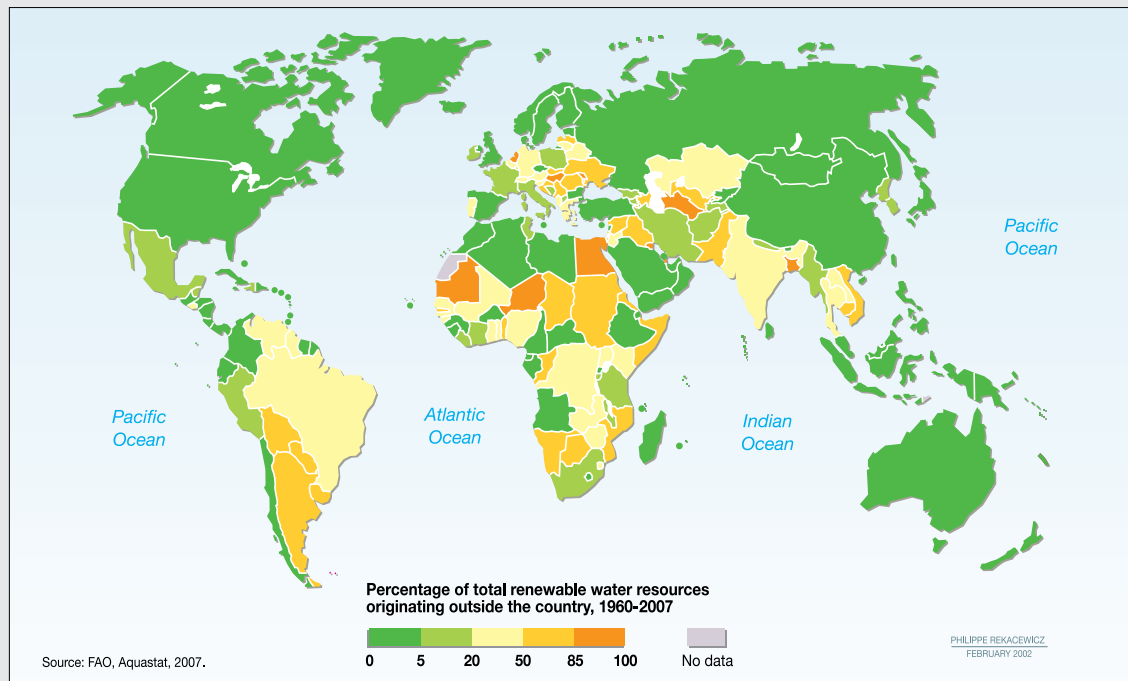
Source: United Nations Environment Programme/GRID-Arendal (2005).

Environmental stress has already been responsible for numerous internal conflicts, and climate change will only increase the strain on the environment, especially in developing regions (Raleigh, Jordan and Salehyan, 2008). Water scarcity is an example of such a threat, a case in point being the ongoing conflict in Darfur, which has been partially attributed to the persistent, worsening drought and the consequent shortage of fertile land (United Nations Environment Programme, 2009). Throughout Africa, almost all major river basins are transboundary

in nature, and any reduction in these water resources could raise tensions on the continent (United Nations Framework Convention on Climate Change, 2007a). Many countries in Central and Southern Asia that depend on water originating outside their boundaries could be similarly affected (United Nations Environment Programme, 2008a). The picture painted by figure II.2 suggests that the potential for conflict linked to water resource availability is quite high in some regions.



**Figure II.2**  
**Dependency ratio in renewable water**



Source: United Nations Environment Programme/GRID-Arendal (2009a).

Note: The dependency ratio in renewable water represents the percentage of total renewable water resources originating outside of a country. This serves as a good indicator of the potential for tension and conflict over water-sharing.

Ongoing conflict can exacerbate the consequences of climate change in affected areas. Many young people in the developing world reside in areas that have endured extended periods of armed conflict, resulting in serious resource depletion and reduced adaptive capacity (Harbom, Melander and Wallenstein, 2008). Prolonged conflict has direct and indirect health consequences relating to displacement, the breakdown of health and social services, and the heightened risk of disease transmission. Any threat climate change poses to youth development is likely to be aggravated by drawn-out conflicts.

## FINAL ANALYSIS

Climate change potentially represents a major threat to the health and socio-economic stability of youth—particularly in developing countries, where the vast majority of young people live. Certain groups, such as indigenous

youth, are especially vulnerable and are likely to encounter even greater obstacles within the contexts highlighted in this chapter (see box II.4). Unless the causes and consequences of climate change are addressed very soon, the youth of today and tomorrow may effectively be prevented from participating fully and productively in society, which could have a serious impact on national development in the long term.

### Box II.4

#### Climate change and indigenous youth

Regardless of where they live in the world, indigenous youth are among the most vulnerable to the threats posed by climate change. In some cases, they are also among those who stand to lose the most as a result of inter-

national mitigation efforts. Ironically, indigenous communities are at risk partly because of their sustainable, carbon-neutral, or even carbon-negative lifestyles.

To understand how and why indigenous youth will be affected by climate change, it is first necessary to recognize the unique, sacred relationship that exists between indigenous peoples and their environment. It is equally important to recognize that indigenous youth cannot be isolated from their cultural context. They are an integral part of their families and communities.

Indigenous peoples coexist with what have become some of the most fragile elements of the ecosystem. Many of them can be found in or around the majority of existing forest tracts, which are home to 80 per cent of the world's biodiversity. Others are long-term inhabitants of the melting ice caps in the Arctic region, the diminishing landforms of low-lying island atolls, and coastal areas (Salick and Byj, 2007). Indigenous peoples do not see land and water as commodities; for them, the earth is a living and sacred entity that provides food, medicine, shelter, and clothing (Borrows, 2006; LaDuke and Alexander, 2004). Their relationship with these elements is often a spiritual one. Once this is understood, it is easy to see why many indigenous peoples view climate change as a human rights issue (Carmen, 2008). For the world's indigenous groups, the impact of climate change on the environment and biodiversity represents a threat not only to their physical survival, but also to their cultures, languages, and world views.

Indigenous youth live an already fragile existence. In several countries, this manifests itself in alarmingly high rates of depression and suicide (Pan American Health Organization, 2007; Health Canada, 2006; Human Rights and Equal Opportunity Commission of

Australia, 2003). These young people are part of the growing phenomenon of forced displacement, violence, social exclusion, and the erosion of cultural and linguistic traditions. With climate change, some of these problems could become much worse.

Indigenous youth living in the Arctic, in semi-arid regions, or on small, low-lying islands may see their self-determination compromised if their communities are forced to relocate. Permanent displacement would have a profound physical and psychological impact, as they would lose access to nutritional inputs that make up their traditional diets and to traditional economic activities such as agriculture, hunting, and fishing. There would also be a gradual loss of the long-standing cultural traditions and location-specific language associated with their territories.

With a major disruption of their livelihood patterns, young displaced people with the least transferable skills and education run the highest risk of poverty. As they move to urban centres to seek employment, they may encounter discrimination while also experiencing a loss of identity and, for perhaps the first time, a lack of family and community support.

Indigenous children and youth are also susceptible to certain health risks associated with climate change, including plant and animal contamination, asthma and other respiratory diseases linked to declining air quality, and the increase in vector-borne diseases.

Indigenous youth and their communities are likely to be affected not only by the problems stemming from climate change but also by some of the proposed solutions. Biofuel production often involves the large-scale cultivation of single crops, which reduces biodiversity. The clearing of land for this purpose can lead to the forced displacement of indigenous communities, →

which violates the provisions of the United Nations Declaration on the Rights of Indigenous Peoples, adopted by the United Nations General Assembly on 13 September 2007. This is already occurring in some areas and in certain instances has led to conflict. Disputes may also arise over water, wood, or other dwindling resources in indigenous lands and territories.

## SUGGESTIONS FOR FURTHER READING

- Food and Agriculture Organization of the United Nations (2009). New challenges: climate change and bioenergy. Issue paper prepared for the World Summit on Food Security, held in Rome from 16 to 18 November 2009. Available from <ftp://ftp.fao.org/docrep/fao/meeting/018/k5987e.pdf>.

This brief paper, produced by the Food and Agriculture Organization of the United Nations for the 2009 World Summit on Food Security, provides a summary of the impact of climate change and bioenergy development on food security.

- Ganeshan, Shamanthy, and Wayne Diamond (2009). Forecasting the numbers of people affected by natural disasters up to 2015. Oxfam papers and reports on climate change, 2009. Available from [http://www.oxfam.org.uk/resources/policy/climate\\_change/downloads/forecasting\\_disasters\\_2015.pdf](http://www.oxfam.org.uk/resources/policy/climate_change/downloads/forecasting_disasters_2015.pdf).

Ganeshan and Diamond offer projections on the human impact of climate change, predicting that by 2015 more than 375 million people per year will be affected by climate-related disasters.

- International Organization for Migration (2009). Migration, climate change and the environment. IOM Policy Brief. Geneva, May. Available from [http://iom.ch/jahia/webdav/shared/shared/main-](http://iom.ch/jahia/webdav/shared/shared/main-site/policy_and_research/policy_documents/policy_brief_envmig.pdf)

[site/policy\\_and\\_research/policy\\_documents/policy\\_brief\\_envmig.pdf](http://iom.ch/jahia/webdav/shared/shared/main-site/policy_and_research/policy_documents/policy_brief_envmig.pdf).

This policy brief provides a general introduction to the dynamic relationship between migration, climate change, and the environment and describes the Organization's perspectives and involvement in this field.

- McMichael, A. J., and others, eds. (2003). *Climate Change and Human Health: Risks and Responses*. Geneva: World Health Organization. Available from <http://www.who.int/globalchange/publications/cchbook/en/>.

Produced jointly by the World Health Organization, World Meteorological Organization, and United Nations Environment Programme, this publication addresses the present and future impact of climate change on human health and proposes ways in which societies can moderate those effects through adaptation strategies and the reduction of GHG emissions.

- United Nations Children's Fund, Innocenti Research Centre (2008). *Climate Change and Children: A Human Security Challenge*. Policy Review Paper. Available from [http://www.unicef-irc.org/publications/pdf/climate\\_change.pdf](http://www.unicef-irc.org/publications/pdf/climate_change.pdf).

This policy review paper examines the vulnerability of children and young people in the context of a changing climate and in the contexts of global, national, and subnational policies and frameworks on climate change and human security. It is argued in the publication that existing agreements and policies do not sufficiently address children's issues within the broader framework of climate change.

- United Nations Framework Convention on Climate Change (2007). *Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries*. Bonn, Germany. Available from <http://unfccc.int/resource/docs/publications/impacts.pdf>.

This publication highlights the needs and concerns of developing countries as they adapt to the effects of climate change. The book describes the impact of and adaptation to climate change in Africa, Asia, Latin America, and small island developing States.





# CHAPTER III

## CHAPTER III

### **Addressing climate change at its roots**

Climate change is a global challenge, with discussions tending to focus on the greenhouse gas emissions of countries or regions. Governments must impose solutions, but it is also essential that climate change be addressed sustainably at the human level. Developing a sense of ownership and accountability begins with explicit acknowledgement that it is the behaviour and lifestyles of individuals and the societies in which they live that are ultimately responsible for the emissions that drive climate change.

Chapter III examines how young people's choices are affecting the environment. Many youth do not fully understand the environmental impact of their lifestyles. Education can play a key role in helping them make the connection between their consumption behaviour and ecological concerns. It can also help prepare young people to take advantage of environmental advocacy opportunities and the growing number of green jobs available, providing them with opportunities to effect change in the workplace and the world.

## CONSUMPTION PATTERNS AND SUSTAINABLE LIFESTYLES

Human consumption is a major contributor to climate change. What people consume and how they consume it affects the natural environment. A significant amount of energy is required for the production, transportation, use, and disposal of the goods consumed, resulting in substantial GHG emissions. Moreover, the extraction of natural resources, the use of water, and the creation of pollution associated with the various stages of the consumption process contribute to environmental degradation in general. Across the spectrum—from the desperate struggle to meet basic needs to the excessive use of resources to satisfy “wants”—consumption puts enormous stress on the environment. The present chapter will focus on the latter end of the spectrum.

The human race has consumed more natural resources in the past 50 years than in all of the previous years of human history combined (Bentley, Fien and Neil, 2004). In many developed and emerging economies, the growth of the market-based system has been paralleled by the emergence of a consumer society. In such a society, the quality of life of individuals—and even the definition of happiness—is increasingly associated with the expansion of ownership of material goods (Clover, 2001).

What, exactly, is consumption? The term is generally associated with the use of goods and services, including food or energy. However, that is just one aspect of the consumption process. As illustrated in figure III.1, consumption

actually involves the selection and purchase of products, their use, and their disposal. Each of these three stages has an effect on the environment.

**Figure III.1**  
**The consumption process**



Source: Anders Nyberg and Eivind Stø (2001).

Consumption and energy-intensive lifestyles are not equally distributed around the world. It is estimated that the 12 per cent of the world's population living in North America and Western Europe account for 60 per cent of global private consumer spending; in contrast, the one third living in South Asia and sub-Saharan Africa account for only 3 per cent (Gardner, Assadourian and Sarin, 2004).

Much of the available data relating to young people's sustainable consumption patterns and lifestyles focus on youth in the urban and suburban areas of developed countries. These youth constitute a minority, but it is their behaviour that has the greatest environmental impact. Conversely, the 79 per cent of the world's youth who live in regions where agriculture accounts for more than one third of employment and where almost half of all youth are rural residents generally leave a substantially smaller carbon footprint, but will bear the brunt of climate change over their lifetimes.

While inequalities in consumption remain high, growing numbers of people in developing countries are adopting lifestyles that incorporate the manifestations of a modern existence, including refrigerators, televisions, computers, and automobiles. It is estimated that the number of individuals with discretionary spending power worldwide is approaching 1.7 billion people and that nearly half live in developing economies (United Nations and United Nations Environment Programme, 2007). This trend seems



likely to continue; energy demand is expected to increase by half between 2007 and 2030, with over 70 per cent of the upsurge coming from developing countries (United Nations Development Programme, 2007). Even with this substantial increase in their share, however, total energy consumption in developing countries is likely to lag behind that of developed countries for some time.

### The dominant youth market

For many youth, consumption has become central to identity construction. The display of certain possessions and a particular style is one of the principal ways young people signal their membership in specific peer groups and their distance from others.

Young women and men represent close to one fifth of the global population, and their combined purchasing power translates into significant market control. In 2003, the combined spending power of youth in 11 major economies exceeded US\$ 750 billion (Bentley, Fien and Neil, 2004). To put this into perspective, this amount is greater than the GDP of the entire African continent in that same year, which amounted to just over US\$ 700 billion (World Bank, 2010). Young people not only make decisions about their own purchases, but they also exert a strong influence over the spending of their families and peers. It is estimated that youth in the United States spend or influence the spending of US\$ 300 billion a year, or about 1 in 3 consumer dollars spent (World Wildlife Fund and Center for a New American Dream, 2003).

The influence young people have over the purchases of their friends and families and the fact that brand loyalties are developed early in life make youth a valuable market segment, especially for fashion items, food, and leisure goods. Youth have been specifically targeted by advertisers since the late 1950s (Kjeldgaard and Askegaard, 2006). Since then, advertising has boomed, becoming so pervasive that youth find it virtually impossible to escape its impact.<sup>1</sup>

<sup>1</sup> It is estimated that most teenagers in Australia, for example, will have been exposed to at least 350,000 television advertisements by the end of secondary school and will deal with more than 3,000 marketing messages each day as they move into adulthood. A study carried out in Hong Kong Special Administrative Region of China found that youth watched an average of two to three hours of television per day and were exposed to a substantial number of promotional messages during this time (Bentley, Fien and Neil, 2004).

The development of powerful information and communication technologies, which are increasingly accessible to youth in even the most remote areas, has helped to spread the advertising messages that have played such an important role in shaping young people's ideas, aspirations, cultures, and lifestyles and have ultimately contributed to the creation of consumer societies. Global media are portraying consumption-intensive lifestyles as desirable for youth from all backgrounds and regions. Influenced by advertising messages and the portrayal of their role models and peers by the media, many young people around the world feel the need to compete in the race for the latest gadgets and the newest and "coolest" products on the market.

### Young people's ecological footprint

Young people are very aware of how the products they own and display influence their social standing. However, many do not realize that their consumption also has a significant impact on the environment. The most serious climate-related consequences of the behaviour of today's youth will take years to manifest themselves, but young people must come to realize that their lifestyles and consumption patterns are having a substantial impact on overall environmental sustainability even now.

Although not enough hard data are available to adequately determine the ecological impact—or carbon footprint—of today's youth population, it is known that young people's expenditures, particularly in developed consumer societies, are largely devoted to conspicuous consumption goods and leisure activities deemed pivotal to youth peer group acceptance and differentiation (Brusdal and Langeby, 2001). Among the most popular consumption items for young people in these contexts are clothes, entertainment and communications equipment, and food (Bentley, Fien and Neil, 2004).

Fashion changes constantly as the frequent redefinition of what is "in" and what is "out" generates a "need" to buy the latest styles. Excess production and waste occur as outmoded products are discarded—not because they no longer fulfil their main functional purpose, but simply because they are no longer deemed desirable. Meeting strong consumer demand can put a strain on the environment. In the apparel sector, for example, the industrial manufacture

of fabric and other fashion goods can undermine air quality; dyeing and printing use vast amounts of water and chemicals, and shipping garments around the world is energy-intensive and constitutes a source of GHG emissions. Even natural fibres are not always environmentally friendly. Cotton production accounts for less than 3 per cent of the world's farmed land but consumes almost 25 per cent of the insecticides and 10 per cent of the herbicides used worldwide (United Nations Educational, Scientific and Cultural Organization and United Nations Environment Programme, 2008).

Technology, like fashion, is constantly evolving. New technology items are becoming increasingly important to young people for the management of their leisure time and social relations, so it is not surprising that youth are among the main consumers of mobile telephones, computers, video game consoles, and other electronic equipment. These devices are becoming pervasive even among youth in some developing regions. In Africa, which has the highest mobile phone growth rate in the developing world, mobile penetration had reached more than 25 per cent by 2008 (International Telecommunication Union, 2009). Although electronic items are often small, their collective carbon footprint is quite large. It is estimated that between 3 and 13 per cent of residential electricity use in Organization for Economic Cooperation and Development (OECD) countries can be attributed to standby power consumption alone (European Environment Agency, 2005). High energy intensity characterizes not only the use but also the manufacture of many small electronic devices. In fact, manufacturing accounts for 80 per cent of a computer's energy use over its life cycle. Taken together, their high energy use in manufacturing and typically short lifespans make computers more energy-intensive than refrigerators (Williams, 2005).

The technology embedded in computers, mobile phones, music players, and video game consoles changes rapidly, and youth are under constant pressure to buy the newest models to take advantage of higher connectivity speeds and improvements in product size and sophistication. Once personal computers, televisions, mobile phones, video game consoles, and other electronic devices are discarded, they become e-waste. It is estimated that 20 million to 50 million metric tons of e-waste are generated worldwide every year, with developed countries accounting

for the bulk of the total (United Nations Environment Programme, 2006; Schmidt, 2006).

Youth in consumer societies tend to have relatively few financial commitments and thus devote a fairly high proportion of their disposable income to leisure activities such as tourism. Their travel choices, including the mode of transportation and type of accommodation selected, the distance travelled, and the activities undertaken, all affect the environment. The precise contribution of tourism to human-induced climate change has not been comprehensively assessed. It is estimated, however, that emissions from three of the main tourism subsectors (transportation, accommodation and activities) represented between 3.9 and 6 per cent of global emissions in 2005, with a best estimate of 4.9 per cent (World Tourism Organization and United Nations Environment Programme, 2008). Staying longer in one location, using public transportation, and lodging with friends or relatives can reduce the environmental impact of tourism.

### **The consumption paradox: Do young people walk the talk?**

Young people around the world are very concerned about the environment. A UNEP poll of nearly 2,000 twelve- to eighteen-year olds in five countries—Brazil, India, the Russian Federation, South Africa, and the United States—found that close to 90 per cent believe world leaders should do whatever is necessary to address climate change (United Nations Environment Programme, 2008b). A number of other surveys have confirmed that youth are worried about the environment and climate change (see, for example, Special Eurobarometer 300, Directorate General for Communication of the European Commission, 2008; and Bentley, Fien and Neil, 2004).

Young people say they care about the environment, but to what extent does their consumption behaviour reflect this concern? Do they understand the environmental impact of their choices as consumers? Quantitative and qualitative studies on young people's perceptions of sustainable lifestyles (defined in box III.1) are limited in number and scope, particularly for youth living in developing countries. To provide an initial mapping of the attitudes, behaviours, and expectations of youth and their sense of power to change lifestyles and promote sustainable consumption, UNEP and the United

Nations Educational, Scientific and Cultural Organization (UNESCO) launched a survey in 2000 on the consumption patterns of more than 5,000 middle-class urban youth in 24 countries. The UNEP/UNESCO *Survey on Youth and Consumption: Is the Future Yours?* constituted part of the UNESCO/UNEP project on Youth, Sustainable Consumption and Life Styles. The few other existing studies on young people's perceptions about sustainable consumption have supported the findings of the UNEP/UNESCO research. UNEP is currently in the process of conducting a follow-up study, the *Global Survey on Sustainable Lifestyles*, which will shed more light on the perceptions and behaviours of youth in developing countries with regard to sustainable consumption and lifestyles.

### Box III.1

#### Defining sustainable lifestyles

Sustainable lifestyles can be defined as practices and choices at the individual and collective levels that enable individuals to meet their needs and aspirations with a sense of responsibility for the well-being of present and future populations, taking into account the environmental and social consequences of their actions. Sustainable consumption behaviour is an important component of a sustainable lifestyle and is characterized by the following: satisfying basic human needs rather than the desire for luxuries; valuing quality-of-life concerns over material standards of living; minimizing resource use, waste and pollution; taking a life-cycle perspective in consumer decision-making; and acting with concern for future generations.

**Source:** Matthew Bentley, John Fien and Cameron Neil (2004), *Sustainable Consumption: Young Australians as Agents of Change*.

The consumer behaviour of young people suggests that their concern for the environment is not reflected in their purchasing decisions. The UNEP/UNESCO study found that young people often failed to consider all three phases of consumption—shopping behaviour, the use of

products, and the disposal of products—in assessing the effect of their own consumption on the environment. Most recognized the environmental impact of the second and third phases but did not acknowledge the critical role their initial product selection and purchase played within this context. Whether it is a case of not knowing enough or not caring enough, environmental concerns appear to be given lower priority than other criteria in shopping decisions. The UNEP/UNESCO Survey found that environmental impact was assigned less weight than factors such as trendiness, price, and quality in young people's buying decisions (Nyberg and Stø, 2001). These results were confirmed by subsequent studies, which showed that variables such as price, brand name, quality, and peer pressure all seemed to exert a greater influence on young people's purchasing decisions than did sustainability considerations. In fact, an Australian study found that only 1 per cent of young respondents found the sustainability of a product to be the most important factor influencing their consumption (Bentley, Fien and Neil, 2004).

Several factors, including age, education, and gender, seem to influence youth perspectives on sustainable living. A number of studies have confirmed that younger members of the youth cohort are less inclined than older youth to believe they consume too much and are less conscious of the effects of their behaviour (see, for example, Bentley, Fien and Neil, 2004; and Autio and Heinonen, 2004). Interest in sustainable development and sustainable consumption appears to be positively correlated with the level of education (Maggi and others, 2001). With respect to gender, many studies have shown a particular tendency among girls and women to favour green values. Whereas males seem to associate environmentally conscious behaviour with limitations on their personal freedom, females generally appear to understand it as a reflection of the need to take action (Autio and Heinonen, 2004). In the UNEP/UNESCO study, more young women than young men reported basing their purchasing decisions on the eco-friendliness of a product (Nyberg and Stø, 2001).

The incongruity between young people's professed concern for the environment and their consumption behaviour is linked to several real and perceived barriers that may deter them from adopting sustainable consumption practices and lifestyles (Bentley, Fien and Neil,

2004). Many young people perceive existing green products to be incompatible with their needs, too expensive, or not readily available. In some cases, there may be no green products that can substitute for everyday goods or that serve the same identity-building function as the more popular consumer items. A substantial number of young people acknowledge that they may require more information about alternative products and services. Youth also need to be made aware of what constitutes over-consumption, as they may find it increasingly difficult to ignore the constant barrage of advertising messages directed at them.

Although many young people are genuinely concerned about the environment and climate change, their purchasing behaviour and leisure activities suggest that they do not fully comprehend the extent to which their purchases and actions affect the planet. Helping youth understand and acknowledge the impact their lifestyles have on the environment can help them make the connection between their consumption behaviour and environmental concerns. Education plays a crucial role in this regard.

## EDUCATION FOR CHANGE

Environmental education is a prerequisite for effective youth engagement and participation in efforts to address climate change. Young people need to be well-informed about climate change science and mitigation options and to be made aware of the consequences of their consumption behaviour so that they can play a strong role in combating climate change and promoting changes in attitudes and behaviours. Education and training in the field of climate change can also prepare young people to take advantage of new employment opportunities arising from the shift to a greener economy.

Climate change education is an element of the broader interdisciplinary framework of education for sustainable development, which promotes understanding of the social, cultural, economic, and environmental dimensions of sustainability and teaches students how to make decisions that take into account the long-term future of the economy, ecology, and society.

In addition to helping put the world on a more sustainable path in the future, climate change

education can produce tangible benefits today. For instance, teaching energy-saving and resource-conserving behaviours not only promotes sustainable lifestyles but can also lead to cost savings. Similarly, learning about disaster risk reduction in schools can increase students' awareness and understanding of their immediate environment and provide them with empowering tools that will facilitate their active involvement in preserving the safety of their communities. Young people can also disseminate information on disaster risk management, educating their families and communities about disaster preparedness (Regional Consultative Committee on Disaster Management, 2007). When the residents of an area are aware of the risks around them and take the time to develop crisis response strategies, the injuries, damage, and trauma associated with disaster situations are significantly reduced.

### Key features of effective education for sustainable development

Education for sustainable development can be presented as a cross-cutting, interdisciplinary theme or integrated into the curricula of existing subjects such as geography, earth science, chemistry, economics, social studies, biology, and technology. The learning outcomes of climate change education and education for sustainable development should include the acquisition of attitudes, knowledge, skills, and behaviour that promote scientific inquiry, ecological and social responsibility, community action and involvement, and global solidarity (Thoresen, 2008).

Experience has shown that it is important to complement thematic teaching with practical activities and projects. These help make abstract information and theories more concrete and allow young people to see the connection between the target messages and their everyday lives. Students who are able to identify the direct relevance of a concept to their own lives are more likely to retain the information and act upon it. An ineffective approach to promoting environmental awareness would be to teach only the scientific facts, leaving out any reference to the personal and social relevance of the information (Uzzell, 1999). In environmental education, the connection between the student, climate change, and personal action is best emphasized through active learning meth-



ods. Students might, for example, be given an ecological footprint activity or asked to use a carbon footprint calculator to enhance their understanding of how their personal energy consumption contributes to climate change (Cordero, Todd and Abellera, 2008).

Other elements of effective environmental education might include presentations by experts, field trips, hands-on exposure to meteorological equipment or the establishment of small meteorological stations in schools, and participation in national science fair competitions that promote the development of environmental solutions. Media such as television and the Internet (including Web-based courses) can also be used effectively in teaching about climate change (United Nations Framework Convention on Climate Change, 2006).

Education for sustainable development continues to be driven by national circumstances and capacities. Educational materials should therefore incorporate locally relevant and culturally appropriate content that takes into account specific conditions and contexts and is geared towards local needs and perceptions.

Effective approaches to integrating climate change and other environmental issues in classroom instruction should be incorporated into teacher education and training. Teachers who are already working should receive additional training in climate change education to strengthen their scientific and pedagogical knowledge in this area (United Nations Framework Convention on Climate Change, 2003). A number of resources are readily available on the Internet to support teachers' efforts to raise environmental awareness. One example is the OzonAction Education Pack, jointly developed by several United Nations entities to ensure that high-quality, copyright-free instructional material on climate change would be available to all primary and secondary schools (see box III.2).

### **Box III.2**

#### **The OzonAction Education Pack**

Environmental education should begin at an early age and continue throughout every phase of schooling. In order to ensure the availability of appropri-

ate materials to achieve this objective, the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization, and the World Health Organization joined forces to develop an environmental awareness programme geared towards primary and secondary school students.

The OzonAction Education Pack for primary schools includes entertaining hands-on curriculum materials that can be used to educate children about the protective role of the ozone layer and the causes and consequences of its depletion. The Pack contains a teaching and learning programme that incorporates basic information as well as practical skill-building and participatory opportunities to provide students with simple, concrete steps they can take to protect the ozone layer and safely enjoy the sun.

The OzonAction Education Pack for secondary schools includes teacher and student materials that explore the same concepts—ozone layer depletion and protection and the health risks of strong ultraviolet radiation—at a more advanced level. The Pack allows young people to acquire a deeper understanding of the scientific concepts linked to ozone issues and provides them with opportunities to develop and apply policy solutions. Role-play is one strategy used to engage students right from the start. The first activity is one in which each student assumes the role of a young journalism graduate who is being considered for a job at an important news agency. The student is asked to write an article that not only informs the world about ozone depletion and its link to climate change but also provides practical tips for children and youth to help protect the planet.

In terms of educational outcomes, children and youth who have participated in this programme should exhibit the following:

- The ability to collect and analyse relevant information and to use it to develop practical action plans;
- A sense of environmental responsibility and a desire to become more active in protecting the ozone layer;
- An understanding of the health issues at stake and of how to protect oneself from the dangers of ultraviolet radiation.

Teacher and student books may be downloaded free of charge from [www.unep.fr/ozonaction/information/educationpack.htm](http://www.unep.fr/ozonaction/information/educationpack.htm) or [www.unep.fr/ozonaction/information/educationpack-sec\\_school.htm](http://www.unep.fr/ozonaction/information/educationpack-sec_school.htm).

**Sources:** United Nations Environment Programme, Division of Technology, Industry and Economics, OzonAction Branch (2006), *OzonAction Education Pack: A Guide for Primary School Teachers*; and (2007), *OzonAction Education Pack for Secondary Schools*.

The evaluation of existing tools and the identification of baseline indicators to monitor and assess the effectiveness of climate change education are also necessary to ensure that young people are benefiting from appropriate environmental content and instruction (United Nations Framework Convention on Climate Change, 2007c).

As a result of coordinated efforts by Governments and international organizations (see box III.3), climate change, sustainable development, and other environmental concerns are receiving increased attention in both developed and developing countries at all levels of education. In many countries, institutional and legal frameworks have been established to support the design and implementation of educational and awareness programmes focusing on climate change or broader sustainable development issues, and specific measures have been adopted to systematically support and monitor the implementation of innovative projects (United Nations Framework Convention on Climate Change, 2007c). In some countries, national climate change education units and coordinat-

ing committees have been set up to ensure that relevant information is effectively integrated throughout the formal education system. Non-governmental organizations (NGOs) have also been actively involved in the development and implementation of many environmental education initiatives.

### Box III.3

#### Promoting education for sustainable development at the highest level

The crucial role played by climate change education in changing behaviours, attitudes, and values is explicitly recognized at the international level. Article 6 of the United Nations Framework Convention on Climate Change calls on Governments to promote and facilitate the development and implementation of relevant educational and public awareness programmes; public participation in efforts to address climate change; public access to pertinent information; and the training of scientific, technical, and managerial personnel. Similarly, article 10(e) of the Kyoto Protocol calls on Parties to “co-operate in and promote at the international level and, where appropriate, using existing bodies, the development and implementation of education and training programmes, including the strengthening of national capacity building ... and [to] facilitate at the national level public awareness of, and public access to information on, climate change” (United Nations Framework Convention on Climate Change, n.d.).

In recognition of the importance of education for sustainable development, the United Nations General Assembly declared 2005-2014 the United Nations Decade of Education for Sustainable Development, with the United Nations Educational, Scientific and Cultural Organization as the lead agency. Information on the goals and strategies associated with the Decade is available at [www.unesco.org/en/esd/](http://www.unesco.org/en/esd/).



## Challenges in implementing education for sustainable development

Effective basic education systems must be in place before education for sustainable development can be fully integrated. Reducing global disparities in educational access and quality is essential for the widespread implementation of climate change education. At this point, per capita spending on students remains highly variable. In 2004, North America and Western Europe accounted for 10 per cent of the world population aged 5 to 25 years, but 55 per cent of global education expenditure. In contrast, sub-Saharan Africa accounted for 15 per cent of the population between the ages of 5 and 25, but only 2 per cent of worldwide spending on education. (United Nations Educational, Scientific and Cultural Organization, 2008)

In developing countries, the implementation of education for sustainable development is often impeded by the lack of institutional, financial, and technical capacities and by the lack of relevant teaching materials and qualified instructors.

In spite of the various challenges, a number of countries have institutionalized environmental

education. Their experience constitutes a valuable source of information and guidance for others seeking to integrate climate change education at the systemic level. In the Seychelles, for instance, the Ministry of Education created an Environmental Education Unit that has facilitated the successful integration of climate change issues into geography and science curricula and has also developed and implemented a compulsory teacher training programme on environmental education. The Unit regularly coordinates environmental education activities in schools, including extracurricular options such as an eco-school programme. Every year it puts together an annual environmental education calendar that includes competitions, environmental theme days, festivals, and other events geared towards increasing environmental awareness (United Nations Framework Convention on Climate Change, 2007b). The University of the South Pacific, a regional tertiary institution supported by 12 Pacific Island countries, has been providing climate change education for several years and now offers a number of degree programmes in the field (see box III.4).



### Box III.4

#### Tertiary climate change education in the Pacific Islands

Climate change threatens the sustainable development of the water supply, agriculture, coastal zones, tourism, health, and many other vital sectors in the Pacific Islands. At the University of the South Pacific (USP), climate change is addressed in a range of undergraduate courses in geography, marine science, agriculture, physics, and economics. For more than a decade, USP has offered a postgraduate course on climate change impacts, vulnerability and adaptation. The course focuses on the specific risks climate change poses to the Pacific Islands and examines strategies for managing those risks. Students are provided with a brief overview of climate science, mitigation measures, and relevant international political and legal institutions, and an adaptation policy framework is presented that can be applied at the community, regional, or national level. USP is offering a new postgraduate diploma in climate change beginning in 2010; the programme will include the existing course on climate change impacts and adaptation as well as a new course on climate science. USP also works closely with the START-Oceania secretariat (based at the University) to provide scholarship- and award-based training opportunities for young scientists studying environmental change.

**Source:** University of the South Pacific (2009); programme information is available from <http://www.usp.ac.fj/index.php?id=8132>.

### Non-formal climate change education

Formal education is only one means of creating awareness about climate change and teaching about adaptation and mitigation. Non-formal, out-of-school approaches also have a crucial role to play in sensitizing youth to the causes and consequences of climate change. By providing real-life experiences and the skills need-

ed to adapt to climate change and mitigate its impact, non-formal and informal learning reinforce and supplement classroom learning. More importantly, non-formal approaches can offer many benefits and opportunities to young people who do not have access to formal education or to those who have dropped out of the formal education system.

Civic engagement and community service represent an important component of non-formal education, providing youth with personal, hands-on experience and training. Young people can play a key role in the promotion of climate change education through advocacy and by participating in local sustainable development initiatives. A number of youth initiatives relating to climate change are described in chapter IV of the present *Report*.

## PREPARING YOUNG PEOPLE TO TAKE ADVANTAGE OF GREEN JOB OPPORTUNITIES

Recent years have seen significant growth in green industries—and green jobs—around the world. In addition to providing much-needed employment opportunities for youth, green jobs represent a way for young people to contribute directly to the fight against climate change. They enable youth to move beyond adopting green behaviours in their private lives, making it possible for them to translate their convictions into action in the workplace.

What, exactly, are green jobs? They are defined by UNEP as work in agriculture, industry, research and development, services, and administration that contributes to preserving or restoring the quality of the environment (United Nations Environment Programme and others, 2008).

The growing attention given to climate change and sustainable development in the midst of the financial and economic crisis that began in 2008 translates into an ideal opportunity to promote green economic growth around the world. In the United States, US\$ 60 billion in fiscal stimulus money will be invested in clean energy, including the creation of green jobs (United States, White House, 2009). In China, 12 per cent of a US\$ 586 billion economic

stimulus package will be allocated to increasing energy efficiency and other environmental improvements (Barbier, 2009). The global market for environmental products and services is expected to double by 2020 (United Nations Environment Programme and others, 2008).

It has been argued that the renewable energy sector may be well situated for the creation of green jobs both now and in the future (United Nations Environment Programme and others, 2008). There have been more than 2.3 million green jobs created in the renewable energy sector in recent years, including 300,000 in the wind industry, 170,000 in solar photovoltaics, 624,000 in the solar thermal industry, and 1,174,000 in biomass production. Investment in renewable energy has increased significantly in the past decade, growing from US\$ 10 billion in 1998 to US\$ 66 billion in 2007. With investment rising at an annual rate of 20 per cent, the number of jobs in the renewable energy sector could exceed 20 million by 2030 (United Nations Environment Programme and others, 2008).

Potential job opportunities exist for youth in many areas of the renewable energy sector, including design and planning, energy policy analysis and development, energy economics and energy management, energy efficiency consulting, assessment of the social and environmental impact of energy systems, and research and development (United Nations Industrial Development Organization, 2003). Some young people, such as those involved in the Kibera Community Youth Programme in Nairobi, have already begun to inject themselves into the sector and its development (see box III.5).

### Box III.5

#### Youth harnessing the power of the sun through the production of solar photovoltaic panels

The Kibera Community Youth Programme (KCYP) is a community-based organization established and run by young people in the Kibera slum in Nairobi, Kenya. The project provides youth with work assembling small and affordable solar panels. KCYP members sell hand-constructed solar char-

gers to other members of their community, enabling the buyers to access a mobile source of electricity (and thus receive news via radio and communicate by cell phone) at an affordable price.

Using skills and equipment passed on to them by a British volunteer, the young people are engaged in the entire line of production, from slicing the silicon sheets to wiring the connectors and calculating the correct voltage. Many of the youth involved in the solar project have never had a job or seen anyone in their families work. The young craftsmen, once trained and operating, receive a small income and see a portion of the profits from the sale of the photovoltaic cell units go directly into funding other KCYP programmes, such as theatre-based HIV/AIDS training, environmental clean-ups, and peace-building soccer teams. The average wage in Kibera is US\$ 1 a day, but a small solar panel, which takes just minutes to put together, can sell for around US\$ 5.

Fred Ouko, the coordinator of KCYP, says that the young people are starting to gain confidence: "What I want to see is real empowerment, real benefit trickling down to individual persons. ... They're actually making something up to a full product and then selling it, and they know now they can do this for themselves."

The programme has had an immediate local impact, benefiting the residents of Kibera and surrounding rural communities. Groups in neighbouring Uganda have asked the members of KCYP to share their experience, knowledge, and training, which implies that even the simplest small-scale endeavour can potentially have a far-reaching impact. In 2007 KCYP won a World Clean Energy Award for its pioneering work.

**Source:** Kibera Community Youth Programme (2005); Alana Herro (2007), "Youth bring low-cost solar panels to Kenyan slum"; and Celeste Hicks (2004), "Kenya slum turns sun into energy" (source of quote from Fred Ouko).

Improving energy efficiency in building and construction constitutes another area with considerable potential for creating green jobs for youth. There are currently 4 million jobs in Europe and the United States devoted to energy resource optimization, and this number could increase significantly. Youth who are willing to complete apprenticeships in this field may find themselves well positioned to take advantage of new employment opportunities in the coming years.

Young people, in particular rural youth who seek continuity in their livelihoods, may want to take advantage of green jobs aimed at minimizing the negative impact of climate change on agriculture. Various efforts are under way to make agriculture more sustainable, both by reducing its effects on the environment and by safeguarding it against the consequences of environmental change. Organic farming is one area with enormous growth potential. This type of production is environmentally friendly, but it is also relatively labour-intensive, so a continued shift in this direction could lead to the creation of more jobs in the agriculture sector. Organic farming is expanding rapidly; in 2006, sales in this subsector amounted to US\$ 100 billion globally (United Nations Environment Programme and others, 2008).

The rural non-farm economy, which accounts for 35-50 per cent of rural income across developing countries, also constitutes a potential source of green jobs for youth (Haggblade, Hazell and Reardon, 2009). Rural non-farm sectors, including energy production, trade, agroprocessing, manufacturing, and commercial and service activities, represent a viable complement or alternative to agriculture in stimulating rural income growth. Although non-farm sectors still frequently rely on a robust and successful agricultural sector, these two segments of the rural economy are increasingly decoupling as improved infrastructure opens up new opportunities that are less dependent on agriculture.

A number of different jobs for youth can be generated in environmental protection and sustainable land management. In South Africa, the Government's Expanded Public Works Programme has created more than 800,000 jobs in infrastructure, services, and agriculture. One particular programme, Working for Water, has provided at least 6,000 young people

with short-term employment and is described in some detail later in the chapter (IRIN, 2009).

The recycling industry may offer young people entrepreneurial opportunities; however, careful implementation is necessary to ensure that practices undermining human development are not perpetuated. While recycling is a growth industry that accounts for a substantial number of new jobs, many of these do not constitute decent work and are concentrated in the informal sector, where wages tend to be relatively low and conditions precarious. Nevertheless, young people in developing countries have successfully started small-scale recycling businesses, an area with great potential for expansion (see box III.6).

### Box III.6

#### City garbage recyclers in low-income estates

A forward-thinking entrepreneur and former truck driver, Andrew Macharia, won grants and awards to address the ever-increasing problem of solid waste, especially plastic bags, in the slums of Nairobi. With the support of local authorities and the Government of Kenya, the Kenya Institute of Manufacturers, the United Nations Children's Fund, the United Nations Development Programme, and other collaborators, he helped set up 20 community groups to collect plastic polyethylene waste products and turn them into reusable items such as fence posts, roofing tiles, rain gutters, and washbasins. The groups, which are all part of a cooperative primarily made up of youth and women, have already collected more than 100 metric tons of waste. The project has created employment for over 500 women and youth and has helped raise income for over 5,000 Nairobi slum residents. The project has also allowed cooperative members to save and take part in credit schemes, further improving their livelihoods. Macharia is encouraging the formation of additional recycling cooperatives and small business ventures that turn urban waste into products such as charcoal briquettes, →



nutrient-rich soil, and mattresses, all of which are ultimately sold back to the community.

**Source:** City Garbage Recyclers, Kenya (2008), “Unclogging sewers and drainage systems in Nairobi’s low-income estates”.

The green economy must be developed in a balanced and sustainable manner, with attention given to social development considerations. Green jobs have the potential to enhance employment in rural areas and across the globe. However, without careful implementation and proper monitoring, some green activities, including certain recycling practices and the production of biofuel crops, could actually undermine human development by, for example, perpetuating substandard working conditions or threatening food security (Food and Agriculture Organization of the United Nations, 2009b).

With climate change expected to bring about major shifts in the labour market and with unprecedented numbers of youth entering the labour market in the years to come, Governments must strive to ensure that young people are ready to take advantage of new environment-oriented employment opportunities. Currently, too few of the green jobs that are being created are filled by youth, primarily because most lack the necessary skills. This is also hampering growth in green sectors. Green energy operators have noted that one of the primary impediments to continued growth in the coming years will be insufficient access to new talent and employees. Although some progress has been made in providing young people with the knowledge and technical skills they need to take advantage of new employment opportunities afforded by the shift to a greener economy, much remains to be done.

### Education and training

As new entrants to the labour force, youth have an advantage over many adults in that they are less likely to suffer the negative effects of technological change. While older workers may experience job dislocation with the introduction of new technologies to combat climate change, youth are well positioned to acquire the req-

uisite skills while they are still in education or training programmes.

In response to the increased interest in greening the workforce, universities and other post-secondary institutions have set up specialized programmes designed to ensure that youth acquire the necessary knowledge and skills. In recent years, the number of university courses and degrees focusing on environmental issues, renewable energy, and sustainable practices has surged.

Although tertiary studies can prepare students for a professional career in the environment sector, many green jobs do not require a university degree. Adjusting educational curricula and encouraging youth to take up technology-related subjects in secondary school are important steps in facilitating the transition to green employment. Vocational training oriented towards new technologies is equally essential. This type of training can range from courses at secondary schools and workforce development centres to longer, more specialized post-secondary programmes that prepare candidates for positions requiring particular skills.

Along with classroom-based learning and formal vocational training, green internships constitute an important means of promoting young people’s interest in environmental employment and facilitating the development of relevant occupational skills. In the United States, the public transport sector has launched several initiatives that provide internship and education opportunities for young people. The Conference of Minority Transportation Officials has an internship programme for students, and similar opportunities that expose youth to the workings of the sector are offered by municipalities and campuses around the country through the National Summer Transportation Institute (United States Department of Transportation, Federal Highway Administration, Office of Civil Rights, 2007). During the Summer Institute students learn about problems such as traffic congestion, inefficient modes of transportation, urban sprawl and appropriate land-use planning, as well as sustainable transportation infrastructure and energy efficiency in the design of transportation projects. This initiative aims at creating awareness of transportation careers among secondary school students and encourages them to consider transportation-related courses in their higher-education pursuits.





Recent experience in green job training has yielded valuable lessons. First, in order to ensure the maintenance of high standards and job transferability, certification programmes must be developed; both Governments and industry leaders can play an important role in this regard. Second, training institutions must work closely with local employers and industry associations to meet emerging labour demand. Finally, it may still be necessary to raise awareness among some employers about the future potential of green sectors. A survey conducted in Australia among young tradespeople indicated that youth were willing to learn green skills; 87 per cent of the respondents were either “interested” or “very interested” in acquiring such skills, but three quarters of them felt they lacked the knowledge and opportunity to pursue their interest. While a significant proportion of those surveyed cited cost as an obstacle to the implementation of green skills on the job, an even larger percentage identified “lack of interest by employer” or “work attitudes” as barriers (Dusseldorp Skills Forum, 2008).

Aside from ensuring that young people are provided with a quality education and appropriate skills training, there are two key strategies that may be adopted to help youth make the transition to green jobs: promoting green entrepreneurship and (temporarily, at least) involving them in environmental public employment schemes.

### Youth entrepreneurship

With increasing numbers of youth joining the labour market, entrepreneurship can be an important source of job creation and can offer young people the chance to effect change. Young entrepreneurs can exploit opportunities to promote environmental sustainability in a number of different sectors including agriculture, renewable energy, and recycling.

Young people’s entrepreneurial potential is fuelled by their creativity and willingness to try new approaches. However, their relative inexperience and limited resources and networks place them at a disadvantage. Starting a new business is risky, and potential entrepreneurs must be well prepared. In order to ensure the viability of green youth ventures, young people must be provided with entrepreneurship training, including support in the development of business plans and access to technology and

technical know-how. Once the groundwork has been laid, seed grants and manageable financing options need to be made available to youth to start their own businesses.

In some regions, notably the Middle East and North Africa, entrepreneurship is still regarded as less appealing than public sector employment. In these areas, new initiatives that foster an entrepreneurial spirit among youth should be implemented, and increased emphasis on green and social entrepreneurship should be incorporated in existing initiatives.

### Environmental public employment programmes

Environmental public employment programmes can provide young people with marketable skills and work opportunities while at the same time engaging them in environmental rehabilitation and conservation. Historically, public employment programmes have been used to create jobs for the poor and unemployed in times of crisis. In some cases, these jobs have contributed to environmental sustainability while also providing a livelihood for those in need. The Civilian Conservation Corps, established in the United States in 1933 as one of the New Deal programmes during the Great Depression, is one such example. Active until 1942, this initiative provided employment for 2 million people. The Corps planted between 2 billion and 3 billion trees, controlled erosion on 40 million acres of farmland, facilitated mosquito control over 230,000 acres of land, established 711 State parks, and developed 3 million acres of land for park use (Lieuw-Kie-Song, 2009). Although this type of environmental public employment programme typically targets the poor, a case could be made for expanding it to include unemployed youth.

In response to the global financial and economic crisis set in motion in 2008, leaders around the world have called for the implementation of the Green Economy Initiative, or Global Green New Deal, launched by UNEP. Components of this initiative could be executed through public employment programmes, with specific areas of concentration selected on the basis of local and national needs and priorities. A number of countries, including India and South Africa, have piloted public employment initiatives that provide poor unemployed or underemployed individuals with labour-intensive work, and

many of these could be adapted to provide green jobs for youth (Lieuw-Kie-Song, 2009). The Working for Water initiative in South Africa is one such example (see box III.7). Public employment schemes could also be a useful mechanism for involving youth in specific industries such as public transportation, which might otherwise not seem like an obvious career choice for young people.

### Box III.7

#### Youth employment through invasive alien species eradication

Under the South African Government's Expanded Public Works Programme, more than 800,000 jobs have been created in sectors such as infrastructure, services, and agriculture. One particular programme—Working for Water—has provided at least 6,000 young people with short-term jobs and training in clearing invasive alien species and has supplied them with the information and experience they need to start their own micro-enterprises in the discipline. The Programme employs out-of-work youth and poor residents to clear areas where invasive alien species of plants are causing problems. Such efforts allow less-water-demanding native vegetation to flourish, increase stream flows and water availability, raise land productivity and hence land values, and strengthen resilience to fires.

The Programme's success has spurred the creation of spin-off initiatives using a similar labour-intensive, cost-effective, and sustainable approach to dealing with natural resource issues. These initiatives include Working for Wetlands, Working on Fire, Working for the Coast, Working on Waste, and more recently, Working for Forests and Working for Energy. The last initiative listed is designed to help provide universal access to affordable energy services through the use of decentralized renewable energy technologies

such as solar water heaters. Because these types of technologies play such an important role in climate change mitigation and adaptation, there is substantial support for the rapid implementation and scaling up of this initiative, which could greatly benefit energy-poor communities and unemployed youth.

**Sources:** Maikel R. Lieuw-Kie-Song (2009), *Green Jobs for the Poor: A Public Employment Approach*; and IRIN (2009), "South Africa: need to create more jobs for the youth".

In order to ensure sustained success, environmental public employment programmes must include components that facilitate young participants' transition to more permanent employment. One option might be to establish a link between these public employment programmes and existing youth training programmes in order to provide young people with targeted skills and environmental awareness so that they will be able to identify entrepreneurship opportunities in the field of environmental conservation and rehabilitation (Lieuw-Kie-Song, 2009).

Despite the divide between the environmental concerns and the consumption behaviour among youth, progress is being made. Climate change education is critical to bridge this gap and can teach youth to adopt a life-cycle perspective when making their consumption choices. What is important is for young people to have access to environmental education that is developed in a way that is relevant to their specific context. There is an opportunity for youth from all walks of life to contribute now, whether it is in their homes, schools or their places of work. Considering the influence young people have over the purchasing decisions of their friends and families, changes made now could produce not only immediate tangible benefits, but also have a far-reaching effect on the future of the economy, ecology and the societies of generations to come.

## SUGGESTIONS FOR FURTHER READING

- Bentley, Matthew, John Fien and Cameron Neil (2004). *Sustainable Consumption: Young Australians as Agents of Change*. Canberra: National Youth Affairs Research Scheme.

This study explores how young people can be encouraged and empowered to make changes in their own consumption patterns as well as being catalysts for change in the wider community. The focus is mainly on Australian youth, though international evidence is reported where available.

- United Nations Educational, Scientific and Cultural Organization and United Nations Environment Programme (2001). *Youth, Sustainable Consumption Patterns and Life Styles*. Prepared within the framework of the UNESCO Management of Social Transformations Programme. SHS-2001/WS/13. Available from <http://unesdoc.unesco.org/images/0012/001242/124238e.pdf>.

This report examines the results of the 2000 UNEP/UNESCO Survey on Youth and Consumption: *Is the Future Yours?*, which constituted part of the UNESCO/UNEP joint project on Youth, Sustainable Consumption and Life Styles. An effort is made in the report to interpret some preliminary findings on young people's attitudes towards consumption, and to identify the potential role of youth in the transition towards sustainable consumption lifestyles.

- United Nations Educational, Scientific and Cultural Organization and United Nations Environment Programme (2008). *Towards Sustainable Lifestyles: youthXchange Training Kit on Responsible Consumption—The Guide*. Available from <http://unesdoc.unesco.org/images/0015/001587/158700e.pdf>; the online training kit is available from [www.youthxchange.net](http://www.youthxchange.net).

The youthXchange guide and related website constitute a toolkit to help teachers, NGOs, and youth groups raise awareness of sustainable consumption and empower youth to put theory into practice. By providing accessible information, concrete examples, and specific

facts and figures, UNEP and UNESCO endeavour to show young people that it is possible to translate their aspirations for a better world into effective action.

- United Nations Environment Programme and others (2008). *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World*. Report prepared by Worldwatch Institute, with assistance from Cornell University Global Labour Institute; commissioned and funded by UNEP as part of the joint UNEP, ILO, IOE, ITUC Green Jobs Initiative. Nairobi: September. DRC/1069/PA. Available from [http://www.unep.org/labour\\_environment/PDFs/Greenjobs/UNEP-Green-Jobs-Report.pdf](http://www.unep.org/labour_environment/PDFs/Greenjobs/UNEP-Green-Jobs-Report.pdf).

The *Green Jobs* report explores the impact a transformation to a green economy could have on work, enterprise, and the way people earn a living. Drawing on information from around the world, this study is the first that has provided a global overview of these issues.

- Worldwatch Institute (2004). *State of the World 2004—Special Focus: The Consumer Society*. New York: W.W. Norton/Worldwatch Institute.

This edition of *State of the World* examines how and why people consume and what kind of impact their consumption choices have on the planet and their fellow human beings. It argues that Governments, businesses, and concerned citizens can harness their purchasing power to build markets for products that do not destroy the environment and maintains that a less consumptive society is not only possible but essential.

- Worldwatch Institute (2010). *State of the World 2010—Transforming Cultures: From Consumerism to Sustainability*. New York: W.W. Norton/Worldwatch Institute. Available from <http://www.worldwatch.org/node/6369>.

The most recent edition of *State of the World* argues that consumerism has engulfed human cultures and the world's ecosystems. In the report, 60 renowned researchers and practitioners describe how the world's leading institutions—education, the media, business, Governments, traditions, and social movements—can be used to reorient cultures toward sustainability.





# CHAPTER IV

## CHAPTER IV

### **Moving forward: youth taking action and making a difference**

The combined acumen and involvement of all individuals, from regular citizens to scientific experts, will be needed as the world moves forward in implementing climate change mitigation and adaptation measures and promoting sustainable development. Young people must be prepared to play a key role within this context, as they are the ones who will live to experience the long-term impact of today's crucial decisions.

The present chapter focuses on the participation of young people in addressing climate change. It begins with a review of the various mechanisms for youth involvement in environmental advocacy within the United Nations system. A framework comprising progressive levels of participation is then presented, and concrete examples are provided of youth involvement in climate change efforts around the globe at each of these levels. The role of youth organizations and obstacles to participation are also examined.



## PROMOTING YOUTH PARTICIPATION WITHIN THE UNITED NATIONS

The United Nations has long recognized the importance of youth participation in decision-making and global policy development. Environmental issues have been assigned priority in recent decades, and a number of mechanisms have been established within the system that enables youth representatives to contribute to climate change deliberations. A variety of youth advisory bodies and youth caucuses provide young people with opportunities to share their ideas. However, as shown later in the chapter, the existing participatory mechanisms frequently do not allow them to contribute meaningfully to the decision-making process.

The Convention on the Rights of the Child emphasizes that participation is a substantive right and is the means through which children and young people may take part in and influence processes, decisions, and activities in order to achieve justice, shape outcomes, expose abuses of power, and realize their rights. The intent underlying this Convention was reaffirmed in 1995, when the United Nations General Assembly adopted the World Programme of Action for Youth to the Year 2000 and Beyond (United Nations, 1995), and again in 2007, in the Supplement to the World Programme of Action (United Nations, 2007a). Generally considered the first global blueprint for developing effective policies for young people, the World Programme of Action for Youth<sup>2</sup> identifies full and effective participation of youth in the life of society and in decision-making as one of fifteen priority areas requiring action by Governments, the international community, civil society, and the private sector (see box IV.1). As stated in the World Programme of Action, “the capacity for progress of our societies is based, among other elements, on their capacity to incorporate the contribution and responsibility of youth in the building and designing of the fu-

<sup>2</sup> In its resolution 47/1 on policies and programmes involving youth, adopted in 2009, the Commission for Social Development stated that the World Programme of Action for Youth to the Year 2000 and Beyond (United Nations, 1995) and its Supplement (United Nations, 2007a) would henceforth be referred to as the World Programme of Action for Youth (United Nations, Commission for Social Development, 2009).

ture. In addition to their intellectual contribution and their ability to mobilize support, they bring unique perspectives that need to be taken into account” (United Nations, 1995, para. 104).

### Box IV.1

#### The World Programme of Action for Youth on the importance of participation

The World Programme of Action for Youth recognizes that the active engagement of young people is central not only to their own development but to the development of society as a whole. It acknowledges that young people are part of the solution to the difficulties facing society—not another problem to be solved.

Because the economic, social, and political participation of youth is essentially a prerequisite for the implementation of the proposals included in all the other priority areas of the Programme of Action, promoting the involvement of young people is critically important. Proposals for action relating specifically to youth participation include the following:

- (a) Improving access to information in order to enable young people to make better use of their opportunities to participate in decision-making;
- (b) Developing and/or strengthening opportunities for young people to learn their rights and responsibilities, promoting their social, political, developmental and environmental participation, removing obstacles that affect their full contribution to society and respecting, inter alia, freedom of association;
- (c) Encouraging and promoting youth associations through financial, educational and technical support and promotion of their activities;
- (d) Taking into account the contribution of youth in designing, →

implementing and evaluating national policies and plans affecting their concerns;

- (e) Encouraging increased national, regional and international cooperation and exchange between youth organizations;
- (f) Inviting Governments to strengthen the involvement of young people in international forums, *inter alia*, by considering the inclusion of youth representatives in their national delegations to the General Assembly.

**Source:** United Nations (1995), World Programme of Action for Youth to the Year 2000 and Beyond; proposals for action are reproduced verbatim from para. 107.

The environment was identified as one of the original ten priority areas in the World Programme of Action for Youth. While climate change was not considered a high priority at the time the Programme was adopted, the deterioration of the natural environment was. Interest in the environment intensified over the years, becoming one of the principal concerns of young people worldwide. In 2008, youth delegates to the United Nations General Assembly identified climate change as one of their key priority areas for action in the lead-up to the regular Assembly sessions. During the General Assembly debate that year, youth delegates spoke about the eagerness of young people to participate in decision-making on critical issues such as climate change.

Another important avenue for youth participation in United Nations intergovernmental processes is the Youth Caucus of the United Nations Commission on Sustainable Development (CSD Youth Caucus). The Youth Caucus is the interface used by the major group representing the interests of children and young people around the world, as mandated by chapter 25 of Agenda 21, to communicate the perspectives of youth and coordinate their participation in the meetings of the Commission on Sustainable Development, and to increase youth visibility and involvement within this context. The Youth Caucus is an international network

of 2,000 youth leaders from more than 1,000 youth organizations, many of which are national networks that bring together young people with a desire to contribute to the creation of a more sustainable world. The Youth Caucus facilitates the introduction of youth perspectives to the Commission on Sustainable Development, which is the highest-level forum within the United Nations system for sustainable development issues. In addition, the Youth Caucus fosters communication and the sharing of information between youth organizations that share an interest in sustainability (United Nations, CSD Youth Caucus, 2008).

Young people have also played a prominent role within the United Nations Permanent Forum on Indigenous Issues, especially at its seventh session (April 2008), whose special theme was “Climate change, bio-cultural diversity and livelihoods: the stewardship role of indigenous peoples and new challenges”. The Indigenous Youth Caucus brought together 145 indigenous young people from more than a dozen countries. In one of its statements to the Forum at the seventh session, the Caucus highlighted the role indigenous youth could play in the fight against climate change but also expressed its concern over the limited participation of indigenous youth in decision-making processes at the local, national, and international levels (see box IV.2).

#### Box IV.2

##### **Mainstreaming indigenous peoples' issues in international development assistance programmes and funds dedicated to addressing climate change**

Indigenous peoples, in particular indigenous youth, feel that they have been largely excluded from discussions on climate change at all levels. Indigenous youth have much to contribute and want the international community to recognize that their people offer unique perspectives and traditional knowledge that can be used in the development of mitigation and adaptation strategies. The involvement of indigenous youth as full and effective partners will be important to the suc-

cess of global climate change mitigation efforts. Prioritizing programmes aimed at increasing climate change awareness among indigenous youth through education and training would greatly enhance their capacity to participate in decision-making processes. Such efforts could also include the strengthening of networks through which indigenous youth might share their perspectives and experiences with their counterparts in other areas of the world.

Paragraph 7 of the Anchorage Declaration, issued on 24 April 2009 at the conclusion of the Indigenous Peoples' Global Summit on Climate Change, reads as follows: "We call for adequate and direct funding in developed and developing States ... to enable Indigenous Peoples' full and effective participation in all climate processes, including adaptation, mitigation, monitoring and transfer of appropriate technologies in order to foster our empowerment, capacity-building, and education. We strongly urge relevant United Nations bodies to facilitate and fund the participation, education, and capacity-building of Indigenous youth and women to ensure engagement in all international and national processes related to climate change."

**Source:** Anchorage Declaration (2009).

Many of the other United Nations organizations that deal with youth issues have identified climate change as a key concern and have made it the focus of various initiatives. For example, the United Nations Children's Fund (UNICEF), in partnership with UNEP, has developed Unite for Climate, a social networking tool that serves as a platform for youth exchange and mobilization for action on climate change. Unite for Climate also enables UNICEF and other United Nations agencies to communicate with youth. The group's software is designed to work in areas with connectivity or bandwidth limitations and to accommodate varying skill levels among users, thereby maximizing participation.

UNEP is working in countries around the world to promote youth involvement in combating climate change. In February 2003 the Programme's Governing Council adopted the Tunza Youth Strategy, a long-term approach to engaging young people in the work of UNEP and supporting their participation in environmental activities and decision-making. Through Tunza, UNEP facilitates youth participation in global and regional environmental negotiations. Initiatives and activities, including the involvement of youth in the UNEP Governing Council sessions, are preceded by a Tunza youth retreat to enable youth leaders to review the issues being discussed and agree on their contributions to these discussions. The Tunza International Youth Conference, held every two years, is one of the key platforms for cooperation and interaction between UNEP and its youth partners.

## YOUTH PARTICIPATION AND THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

As noted in chapter I of the present *Report*, the annual COP sessions constitute the principal forum for Governments to discuss climate change mitigation and adaptation policies as well as national commitments to reduce GHG emissions, so youth involvement in this process is especially critical. The youth presence at COP sessions has gradually gained strength and focus. What was once a relatively loose configuration of participants—generally small numbers of college students and young professionals from developed countries—has evolved into more unified and coordinated youth contingents; hundreds attended COP 14 in Poznan, Poland, in 2008, and more than a thousand participated in COP 15 in Copenhagen.

Young people have been involved in climate change activities for some time. However, it was not until the year 2000, at COP 6 in The Hague, that a youth conference was organized and a youth declaration was prepared. Since then, each COP session has incorporated a youth event, and young people have actively sought official recognition from the Conference. In 2004, at COP 10 in Buenos Aires,

youth participants issued a formal declaration that begins as follows: “Youth participation in the COPs of the UNFCCC, as in many other international, national and local decision-making processes, is scarce and disarticulated. However, the decisions being taken significantly affect our life at present and in the future” (Youth: Protagonists, Not Spectators, 2004). The following year, more than a hundred youth from 24 countries attended the International Youth Summit at COP 11 in Canada, articulating their shared vision in a youth declaration entitled “Our Climate, Our Challenge, Our Future”. This document included a set of demands that focused on climate change mitigation and adaptation policy requirements. The Declaration also reiterated the need for a “permanent, funded youth constituency to be included in the international climate change negotiation process” by the time the COP met at its next session. Over the past several years the participation of youth, including individuals sponsored by Governments and NGOs, has continued to grow. Young people have become increasingly involved in Conference activities, participating in media events, meeting with Government delegations, and expanding the global youth climate change network while continuing to lobby for official status at the COP sessions.

Some of the more recent COP sessions drew over 500 youth delegates from more than 50 nations. In Bali in 2007 and in Poznan in 2008, the young delegates were given the opportunity to make formal statements to the Conference of the Parties on behalf of youth around the world. Because large numbers of youth were in attendance, it was possible to stage large-scale theatrical activities to drive home environmental messages and attract world media attention. The increasing size of the youth contingent prompted the development of strategies for the establishment of an internal secretariat and other governance structures to manage and coordinate the participation and activism of youth delegations (Gracey, 2008).

COP 15, held in Copenhagen in December 2009, attracted more than a thousand young people from over 100 countries. A special youth event, Young and Future Generations Day, was held to showcase different youth activities and draw the delegates’ attention to the efforts being made by young people to address climate change. The youth day encompassed more than 40 events, including a high-level side

event in the form of an intergenerational inquiry on climate change solutions, as well as other side events focusing on the role of education in relation to the climate crisis, forest protection, intergenerational equity, and agriculture. Attendees of all ages showed support for the youth day initiatives by wearing orange clothing.

The youth attending COP 15 called for fair, ambitious, and binding commitments from Governments to prevent catastrophic climate change and ensure the survival of present and future generations (see box IV.3). The young participants voiced their support for those countries that made the most progressive demands and put the most challenging targets on the table. “It’s late, but not too late!” was the message conveyed by young people (Howe, 2009). The collective demands put forward by youth in Copenhagen included the following:

- Ensure climate justice;
- Limit the global temperature increase to 1.5° C;
- Reduce atmospheric carbon dioxide levels to 350 parts per million or less;
- Commit developed countries to allocating at least 5 per cent of their gross domestic product to finance adaptation measures by 2020;
- Reduce the emissions of developed countries to at least 45 per cent below 1990 levels by 2020 (UNFCCC Youth Constituency, 2009b);
- Reduce the emissions of developed countries to at least 80 per cent below 1990 levels by 2050.

### Box IV.3

#### Youth voices at the fifteenth session of the Conference of the Parties (COP 15)

“I came as a part of the Pacific youth delegation, but here I united with the Caribbean, the Maldivian, and the International Youth Climate Movement as a whole, calling out with one united voice for only 1.5 degrees of temperature rise and 350 ppm of carbon



concentration in the atmosphere”, said Krishneil Narayan from Fiji. “If the youth can unite as one movement at COP 15, we expect the leaders deciding our future to do the same” (UNFCCC Youth Constituency, 2009b).

Prisca Randriamampihavana, a 20-year-old youth delegate from Madagascar, challenged the negotiators at COP 15: “We want to ask world leaders, how old will you be in 2050?” (UNFCCC Youth Constituency, 2009a).

COP 15 marked the first time youth were officially recognized as a formal constituency, though the group was assigned provisional status pending a final decision that would legitimize its position by COP 17 (see box IV.4). The youth constituency has already set up an internal system for democratic decision-making and information sharing and is very well-organized. It keeps the United Nations Climate Change secretariat informed of its progress and contributes to crucial discussions and decisions relating to youth participation and representation. The constituency plays an important role in capacity-building for a growing number of youth participants, with those who have been involved for some time helping newcomers understand how the process works through engagement in various advocacy activities. The youth constituency is also active on the political front, producing powerful messages for interventions at the plenary and building relationships with other stakeholders, including the chairs of negotiating bodies and regional groups as well as the other constituencies. All of this has been achieved in a remarkably short time by a group that appears to enjoy an extraordinary degree of unity, coherence, and cohesion.

#### Box IV.4

##### **The status of the youth constituency in activities carried out under the auspices of the United Nations Framework Convention on Climate Change**

The youth constituency, referred to as YOUNGO, was assigned provisional

status during the fifteenth session of the Conference of the Parties and will likely be granted permanent status at COP 17. This unprecedented coalition of participating youth organizations acts as a single entity with a unified voice during official negotiations. As a recognized constituency, young people are given a speaking slot at the high-level segment of COP sessions and can make statements during the plenary. They are also able to cooperate more closely with the United Nations Climate Change secretariat, helping to organize meeting logistics and coordinate fundraising to increase the participation of young people, especially youth from the global south. Conference support for youth involvement is already in evidence; generous funding from the Government of the Netherlands enabled 50 youth from the global south to attend COP 15 in December 2009.

The recognition and support of the youth constituency is in line with the provisions of article 6 of the Framework Convention, which calls for an increase in education, training, and public awareness on climate change issues.

**Source:** UNFCCC YOUNGO Wiki Portal (n.d.), YOUNGO constituency FAQ.

Growing numbers of young people are participating in United Nations efforts to combat climate change, seeking to influence the global policy agenda through more organized environmental activism and lobbying to promote sustainable development. More youth than ever before are attending international meetings, making their voices heard as they demand that Governments and policymakers undertake the commitments necessary to tackle climate change and ensure global sustainability. Unfortunately, while their ideas, concerns, initiatives, and calls for action are being acknowledged, youth are rarely given the consideration they deserve—or the opportunity to participate meaningfully—in the formulation of climate change policy.



The section below takes a closer look at the various levels of youth participation, provides examples of youth involvement in climate change initiatives at each of these levels, and considers what needs to be done to ensure that youth play a more active role in decision-making.

## YOUTH PARTICIPATION: CLIMBING THE LADDER TOWARDS GENUINE EMPOWERMENT

Young people across the globe have been at the forefront of efforts to respond to climate change. However, they have fought a protracted uphill battle to ensure that their voices are not just heard, but heeded. Although youth are allowed to participate in many of the higher-level policy processes, consultations, and activities, they often remain on the periphery, excluded from decision-making. Young people want to be involved and, given their stake in the future, should be involved in shaping climate change policies. Youth participation is critically important and needs to be given the recognition it deserves, as it benefits not only young people themselves, but also society as a whole (Biffi, 2008).

Significant awareness-raising efforts have been undertaken to ensure that young people are informed about the causes and consequences of climate change. Such efforts are important in that they provide a solid knowledge base and in some cases facilitate the development of targeted skills, but they essentially constitute a one-way process that contributes only minimally to building capacities for responding to climate change through meaningful engagement. When young people are empowered to collaborate in setting the agenda for change and shaping policy, they become full partners in action, strengthening the community's capacity to make a difference.

### The ladder of participation

Youth involvement in climate change initiatives may be examined in terms of levels of empowerment, represented as a “ladder of participation” (International Association for Public Participation, 2007). The lowest rungs

on the ladder sometimes constitute what may be termed pseudo-participation (Hart, 1992), where young people serve as window dressing, their involvement is essentially tokenistic, or they are manipulated into arriving at predetermined outcomes. The middle and higher rungs, however, represent a progression towards genuine empowerment and include the following:

1. Informing and educating young people;
2. Gathering information from young people;
3. Consulting with young people;
4. Involving young people;
5. Establishing collaborative partnerships with young people.

Providing young people with information and education on climate change establishes a firm foundation for environmental advocacy. On this first rung of the ladder, however, youth are offered few, if any, opportunities to influence policy decisions. Involvement at this level is usually limited to exchanging ideas and building relationships. In some instances, youth are recruited to help coordinate information sessions or to serve as peer educators.

On the second rung of the ladder, information is collected from young people who care about the environment and want to share their perspectives. At this level of participation youth are heard, but those in positions of authority make no commitment to acting in ways that give the youth voice any force.

The third rung is consulting with youth. This level constitutes a potential tipping point, as it is here that the balance may begin to shift towards meaningful involvement and genuine empowerment. Consultation entails the mutual exchange of information and allows for the possibility that the input of young people might have an impact on the direction policy takes or on the content of programmes being developed.

By the time the fourth rung is reached, the involvement of youth is being actively sought. Young people are given the opportunity to help set the agenda, contribute to deliberations, or otherwise influence the course of events.

At the fifth rung—the highest level—youth are engaged in collaborative partnerships. In such settings, young people are empowered to

share in managing the decision-making process, which includes identifying solutions and reaching agreement as to how the solutions generated will be implemented.

At each of the levels of participation represented by the rungs of the ladder, actions initiated by youth improve their prospects for exerting genuine influence. Every level constitutes a necessary step to the top but is also important in itself. Participation on the lower rungs often leads to action further up the ladder and to enhanced empowerment; however, even those young people whose involvement remains on the lower rungs may contribute to an initiative's success.

In general, the key principles of effective and authentic participation are clarity of intent (the purpose is understood by all involved); inclusiveness (participants are diverse and include those not often heard); participativeness (opportunities are available for two-way exchange, mutual learning, and relationship-building); and the scope to influence (the potential exists to bring about change in some way or to some degree).

## YOUTH PARTICIPATION IN CLIMATE CHANGE INITIATIVES AROUND THE WORLD

Youth initiatives focusing on climate change have a broad range of entry points, and there are examples from all over that show how youth have been involved in mitigation and adaptation efforts. The youth activities highlighted in the sections below constitute a representative sample of the types of advocacy in which young people are currently engaged. Most of the examples derive from contributions submitted by youth and youth-led organizations in response to a call for inputs to the present *World Youth Report*. They are not linked to specific rungs on the ladder of participation but instead reflect the gradual progression from awareness-raising to active collaboration. The examples in this chapter are illustrative and do not comprise a comprehensive catalogue of youth initiatives. The seeming predominance of developed country activities in the sections to come is a reflection of the availability of relevant informa-

tion and inputs; it is unclear at this point whether youth involvement in climate change initiatives is more prevalent in developed countries or whether youth in developed countries are simply more likely to report on their activities. It is also possible that many youth initiatives in developing countries are subsumed under another heading—such as disaster planning or relief—and are therefore not readily identifiable as relating to climate change.

## INFORMING AND EDUCATING YOUTH

Before young people can participate effectively in mitigation and adaptation activities, they must learn about both climate change and successful advocacy. Increased content knowledge is essential, but young people also need to know how to interpret data and assess risks, probabilities, and opportunities. It might appear that participation at this level is limited to one-way, top-down communication in which “experts” tell young people what they think they should know, contributing little to their empowerment. However, there are many examples (including those highlighted below) of youth actively and successfully educating each other in formal, informal, and non-formal contexts. Qualitative evaluations of peer education in other areas have shown that young people appreciate and are positively influenced by well-designed and properly supervised peer-led instruction. Youth serving as peer educators have the opportunity to improve their own knowledge and skills and generally find the experience both challenging and rewarding. In many instances peer educators have been shown to be more effective than adults in establishing norms and changing attitudes (United Nations Children's Fund, 2009).

### International

The International Federation of Red Cross and Red Crescent Societies (2009a) include 186 member National Societies, many of which sponsor dynamic youth volunteer programmes. Initiatives focused on raising awareness about climate change include the following:

#### COLOMBIA

Youth-led community-based approaches to raising awareness about climate change have included the production of dramas and puppet shows and the devel-



opment of informational materials for children. Hundreds of volunteers have been trained, and thousands within the community have participated in local forums or in national conferences or meetings. Many have also benefited from micro-projects relating to climate change.

#### **GUATEMALA**

Students planted trees and put on a hand-made-puppet show to inform audiences about climate change and reducing the risk of landslides.

#### **MALAWI**

Young people participated in a video production on the effects of climate change.

#### **PAKISTAN**

Youth are educating other youth about climate change through drama.

#### **CANADA AND THE UNITED STATES**

The Kick the Carbon Habit Education Campaign was initiated by UNEP to empower and educate youth and the general public in the area of environmental responsibility. Youth leaders and ground teams are recruited to host educational events focusing on climate change issues, where participants are provided with relevant information and learn concrete ways to reduce their carbon footprint and address climate change. Twenty young people spearhead the Campaign. (Kick the Carbon Habit Youth Network, n.d.)

#### **FIJI**

The Fiji Red Cross Society is developing a youth group curriculum on disaster awareness that will include a segment on climate change (International Federation of Red Cross and Red Crescent Societies, 2009a).

## NEW ZEALAND

Enviroschools is a national initiative that takes a whole-school approach to education for a sustainable future. The programme encourages creative thinking and the acknowledgement of others' perspectives and seeks to bring about long-term behavioural change by helping students think critically about the long-term impact of their attitudes, values, and lifestyle choices (Enviroschools Foundation, n.d.).

## SOLOMON ISLANDS

The Honiara Youth and Climate Change Forum, held in November 2008, brought young people from the Solomon Islands together with an elder to learn about climate change through discussion and fieldwork. Participants concluded the event with the development of personal and group action plans (Jionisi and Owens, n.d.). The Solomon Islands Red Cross Society, one of the main organizers of the Forum, began engaging youth in a climate change programme in 2007. Initiatives have included school awareness programmes, village assessments, radio quizzes, advocacy activities, and the building of youth networks. Young people are involved both as participants and as volunteers (International Federation of Red Cross and Red Crescent Societies, 2009a).

## YOUNG PEOPLE SHARING INFORMATION AND BUILDING CAPACITY

Young people have come together in numerous forums around the world to share information and perspectives on climate change. In the process, they have strengthened their social capacity to respond to the challenges associated with this issue. The distinction between informing/educating and information-sharing/capacity-building is not always clear, but it may be argued that the latter is situated slightly higher on the ladder of participation because it entails active learning, sharing, and developing. Capacity-building involves raising awareness, but it also encompasses building analytical skills and enhancing decision-making abilities. These outcomes can be achieved through different approaches, including training, formal

education, seminars and workshops, and networking. Many of the examples of youth participation that appear elsewhere in this chapter incorporate elements of capacity-building. However, those highlighted below are mainly awareness-raising activities. Most appear to be isolated events; it has been suggested that the effectiveness of such activities might be enhanced if they were embedded in long-term programmes that integrated a number of capacity-building approaches (United Nations Environment Programme, Division of Technology, Industry and Economics, Economics and Trade Branch, 2006).

## INDIA

In August 2008, the Indian Youth Summit on Climate Change brought together young people from India and abroad to share views and establish collaborative partnerships. The Summit included keynote speakers and presentations from experts and organizations working with climate change, youth presentations and the exchange of ideas among young people, an international youth panel on climate change, human art formation, and a film festival. One major outcome was a youth declaration that included individual commitments and a collective pledge to work towards a better future in India, together with a strong statement on the importance of youth engagement in policy-making on climate change at all levels (Indian Youth Summit on Climate Change, 2008).

## TUVALU

Climate change adaptation and disaster risk reduction programmes led by the Red Cross Society have engaged youth in workshops on disaster risk assessment and response, including the production of a drama about flooding events that have occurred. This has prompted some young people to initiate similar activities in their own communities. The two programmes have also involved youth in planting pandanus trees and cleaning up the shoreline. Youth unemployment is high in Tuvalu, and while such programmes do not provide any monetary compensation, they do offer youth an opportunity to engage in productive work that benefits their communities. Through the Red Cross Society, youth have also participated in school



programmes on climate change and in a national poster design competition focusing on this issue. (International Federation of Red Cross and Red Crescent Societies, 2009b)

### UNITED KINGDOM

You, Me, and the Climate, an initiative of The National Trust, provides 16- to 19-year-old “climateers” with the organizational, communication, and leadership skills they need to become community advocates and get people in their area thinking about climate change and its consequences. The emphasis is not only on youth taking action, but on young people working together to give their actions force at the national and international levels through joint activities, coordinated media campaigns, and the use of the Web and other new media. (You, Me, and the Climate [YOMAC], n.d.).

## YOUTH APPLYING INFORMATION AND COMMUNICATION TECHNOLOGIES

About 1.8 billion people use the Internet on a regular basis for their work, leisure activities, and general living needs (Internet World Stats, n.d.). Ever-expanding communication networks are connecting people, organizations, and nations in ways that are unprecedented, with enormous potential for enhancing civic participation—including involvement in climate change initiatives. Global Internet usage remains very uneven, however. Although it has grown exponentially in developing countries, penetration rates are still relatively low—8.7 per cent in Africa, 20.1 per cent in Asia, and 28.8 per cent in the Middle East, compared with 76.2 per cent in North America (Internet World Stats, n.d.). Moreover, the global digital divide (the gap between those who have Internet access and those who lack access or the ability to use current technologies) is growing wider.

In the initiatives reviewed involving youth participation in climate change activities, especially in the developed world, computers and the Internet appear to be central to bringing young people together for dialogue and action. Climate change is a global challenge, and the Internet has facilitated the development of worldwide networks, collaborative partner-

ships, and youth-led discussion forums. Where Internet access is limited, other audio-visual and telecommunications technologies have been utilized to engage young people in creative new ways.

### International

Make the Link, Be the Change uses a multilingual website and videoconferencing to develop climate change awareness among students. Participants learn about local environmental consequences, contributing factors, behaviour change, and partnerships using shared lesson plans. This is complemented by out-of-school work including essay writing, drawing, photography, and sculpture representing the impact of climate change. Some of the works created have been displayed at the World Museum Liverpool and at COP 15 as part of the Children in a Changing Climate display. Eighty schools in twelve countries are involved (Plan International, 2009).

### CANADA

TakingITGlobal uses information and communication technologies to provide opportunities for learning, capacity-building, self-development, and cross-cultural awareness. One of the aims of the organization is to increase recognition of the important role youth can play in decision-making processes. The TakingITGlobal website includes a page devoted to introducing youth to climate change issues and offers a downloadable version of the Climate Change Youth Guide to Action. A Web platform is made available to users interested in starting, running, and managing their own initiatives. (TakingITGlobal, n.d.).

### INDIA

In February 2009, the Indian Youth Climate Network organized an electric car caravan that stretched from Chennai to Delhi—the longest such procession ever attempted. As the participants travelled, they reported on local innovative solutions to climate change, conducted numerous youth climate leadership training sessions, and engaged young people in brainstorming sessions. The stories they collected were written and disseminated in ways that appealed to youth, with many



appearing as short movies on YouTube. The aim of the project was to show the world that India was doing something about climate change. (Indian Youth Climate Network, n.d.).

### INDONESIA

Children from a flood-prone informal settlement in Jakarta partnered in the production of a participatory video on climate change, and youth volunteers continue to use the video (International Federation of Red Cross and Red Crescent Societies, 2009a).

### MALAWI

A university student intern produced a five-minute participatory video on climate change in collaboration with the Malawi Red Cross Society, engaging fifteen young people in the process (International Federation of Red Cross and Red Crescent Societies, 2009a).

### NIGERIA

The African Radio Drama Association's climate change project is a 26-episode radio production aimed at improving the capacity of smallholder farmers to respond to climate change. The important role of youth and women in sustainable agriculture is highlighted. (African Radio Drama Association, n.d.).

### NORWAY

NUFF Global held an international youth film festival on climate change in 2007. In their productions, the enthusiastic young filmmakers share stories featuring challenges that have arisen as a result of climate change. Screened at the United Nations Climate Change conferences in Bali in 2007 and in Poznan in 2008, many of the films have garnered international attention. (NUFF Global, n.d.).

### UNITED STATES

Fired Up Media reports from the front lines of the youth climate movement and trains climate change activists through an online organizing wiki. The network is harnessing dynamic advances in digital communications and other new media, creative social entrepreneurship, and ex-

isting youth media on and off campus to build a revolutionary media network. The aim is to empower the global youth climate movement to address the challenge of climate change in the most effective way possible. Youth-produced stories and short videos are featured on the website. (Fired Up Media, n.d.).

## YOUTH GATHERING AND ANALYSING INFORMATION

The collection of local data on social indicators and the physical environment, the creation of databases, descriptions of initiatives, and benchmarking studies provide a deeper understanding of the area-specific effects of climate change and also contribute to building knowledge and skills that can increase local adaptive capacity. Young people around the world have both led and participated in data-gathering initiatives that have bolstered climate change research and strengthened local resilience to the consequences of climate change.

### International

Our Task, an international youth network involved in promoting awareness of global sustainable development issues, works with mentors in analysing, assessing, and summarizing relevant trends, models, and strategies to produce the *Youth Earth Plan*, an annual publication that “presents ... the thinking of young adults on the large-scale changes needed if youth—and all forms of life—are to reach 2100 safely”. Forty young adults from fifteen countries are involved. (Our Task, 2008).

### CHINA

The China Youth Climate Action Network comprises more than a hundred universities, providing a platform for sharing solutions and taking action to combat climate change. The Network is especially active in research and development relating to campus sustainability. Core projects include a survey on youth awareness, a green campus initiative that includes the collection of data on campus GHG emissions and their impact, the maintenance of a university energy consumption database, and the development and dissemination of learning materials to increase awareness among youth. The Network

recently produced the *China Youth Climate Change Guidebook*, which is being used on university campuses to promote student awareness and activism. One of the main goals of the Network is to reduce emissions by 20 per cent on 40 pilot campuses. (China Youth Climate Action Network, 2008).

### **MONGOLIA**

Dynamics of Biodiversity Loss and Permafrost Melt in Lake Hövsgöl National Park, a World Bank/Global Environment Facility project, hired 23 young graduate and post-graduate researchers to help investigate the effects of localized climate variability on permafrost. Working with national mentors and international academics, the young researchers were offered invaluable learning opportunities in areas such as biostatistics, decomposition and ecology of local plants, meteorology, and permafrost studies. (Academy of Natural Sciences, n.d.).

### **NEPAL**

Children in a Changing Climate is a global collaborative programme that undertakes research, advocacy, and education within an action-research framework in partnership with other research and development organizations. The programme has several areas of focus, including gathering and assembling children's perspectives, identifying "child champions" to promote the adoption of environmentally responsible policies at the national and international levels, developing and sharing learning tools, inspiring child-led action through online forums and international networks, and sharing stories about how children are taking action on climate change. (Guatam and Oswald, 2008).

## **YOUTH INVOLVEMENT IN CAMPAIGNING, LOBBYING, AND ADVOCACY**

Youth organizations engaged in campaigning, lobbying, advocacy, and networking represent the most prevalent and possibly the strongest form of youth involvement in the climate change movement. These organizations employ a variety of strategies to achieve their

objectives. Some focus on encouraging young environmental advocates to take the first steps towards action, while others work directly with Government entities to facilitate the integration of green values at the State level. A number of youth organizations concentrate on a particular area, such as addressing legal challenges. A growing number are engaging in Internet activism together with direct action in order to maximize the impact of their efforts and to achieve the critical mass needed to make their voices heard.

### **International**

Established by Greenpeace International in 2003, Solar Generation is a network of young people from 15 countries engaging in climate change advocacy and activism. (Greenpeace, n.d.).

### **CANADA AND THE UNITED STATES**

Young people on high school and college campuses across Canada and the United States have joined the Campus Climate Challenge to demand 100 per cent clean energy policies at their institutions. More than 30 youth organizations and 600 campuses are involved. (Campus Climate Challenge, n.d.).

### **INDIA**

The Indian Youth Climate Network is a coalition of Indian youth and youth-oriented organizations concerned about climate change. The Network has launched, supported, or participated in a wide range of initiatives, including an agents-of-change programme that prepares Indian youth delegations for participation in United Nations climate change negotiations; a rural clean energy project; a campus climate challenge; a climate leaders programme that provides youth with the leadership skills they need to initiate grassroots action in their own communities; and a climate solutions project that includes a website, outreach activities, and an engagement strategy to promote existing solutions to climate change. In recent years the Network has organized a number of Indian youth summits and participated in various youth festivals. (Indian Youth Climate Network, n.d.).

## UNITED STATES

In February 2009, 12,000 young people from across the United States converged on Washington, D.C., to demand bold, comprehensive, and immediate action on climate change at the national level. The aim was to persuade the new Obama Administration to reclaim the future of youth through the implementation of ambitious climate and clean energy policies. Power Shift '09 built on the momentum generated by the Power Vote campaign, which was initiated by the Energy Action Coalition to mobilize 1 million young "climate voters" and make the global climate crisis a key issue in the 2008 election. (Power Shift, n.d.).

## YOUTH ENGAGING IN CONSULTATION

The international frameworks and initiatives described previously have created numerous opportunities for young people to have their say. Similarly, several Governments and international agencies have set up youth advisory councils and other consultative initiatives aimed at eliciting the views of youth on climate change; some of these are highlighted below. Acknowledging the need for dialogue is a step in the right direction, but the extent to which such consultations have resulted in meaningful youth participation is not yet clear. Genuine engagement requires that young people be given the space and opportunity to express their views and that organizations make a commitment to respond to their concerns.

### International

A concept and issues paper entitled "Towards a strategic framework on climate change and development for the World Bank Group" was discussed at a youth consultation event to give young people an opportunity to share their input (World Bank, 2008b).

## AFRICA AND EUROPE

In the months leading up to the 2007 Africa-Europe Youth Summit, consultations were held with young people from Africa and Europe to obtain their input on global issues, including climate change. (EuroAfrica.net, n.d.).

## UNITED KINGDOM

The Department for International Development held a Youth Consultation event on 20 March 2009, soliciting the views of youth on climate change and the economic crisis to inform policy-making by the Department. Fifty young people between the ages of 16 and 24 were involved (United Kingdom, Department for International Development, 2009).

## YOUTH TAKING THE INITIATIVE

Young individuals and youth organizations around the world are actively initiating responses to climate change. Young people are taking personal and social responsibility for protecting the world they live in, engaging in stewardship and advocacy aimed at improving the resilience of their local environment and strengthening the relationship between people and their natural surroundings.

## GHANA

The Young Men's Christian Association (YMCA-Ghana) is engaged in a project to curb deforestation and environmental degradation, which is adversely affecting livelihoods. The project includes a tree-planting programme focusing on women farmers, who traditionally cannot own land, and a youth-run seedling nursery. (World Alliance of YMCAs, n.d.).

## INDIA

The Children International Youth Council in India secured a grant to address climate change in a rural area near Kolkata. The initiative included reforestation activities, efforts to discourage fossil fuel use, and a community awareness programme. Some 1,500 trees were planted by more than 1,000 teenagers and their families. (Children International, n.d.).

## REPUBLIC OF KOREA

Korean students from all over the country participated in the CO2 Zero Eco Campus Competitions, submitting climate-friendly initiatives they had designed. The winners were provided with funding for their projects. (HyunJin, n.d.).





## MADAGASCAR

Girl Guides attend camps where they are trained as community educators to help rural women respond to the challenges of climate change through improved agricultural practices (World Association Girl Guides and Girl Scouts, n.d.).

## MEXICO

Manos a la Tierra is a youth-led alliance that has been involved in reforestation activities since 2007. With over 6,000 volunteers, the alliance has planted more than 70,000 trees and has raised awareness about climate change and the importance of water and biodiversity in the Mexico City metropolitan area. (Manos a la Tierra, n.d.).

## SAMOA

Youth affiliated with the Samoa Red Cross Society produced a community-based drama with a climate change theme. Working together with the Ministry of Natural Resources and Environment, they were also involved in community-based vulnerability and capacity assessments and in the implementation of action plans they had designed. (International Federation of Red Cross and Red Crescent Societies, 2009a).

## UNITED KINGDOM

Student Switch Off is an energy-saving initiative in which university residence halls compete to reduce their energy usage. Eleven universities are currently involved. (Student Switch Off, n.d.).

## UNITED STATES

The Climate Change Action Club was initiated by two students at Brookline High School in Massachusetts. They set up a “carbon café” where town residents could obtain information on climate change and pledge to take action to reduce their carbon footprint. (Ullman, 2009).

## UNITED STATES

The Clinton Global Initiative University, established in 2007, brings young people together to discuss urgent social and environmental problems and to undertake Commitments to Action. Since 2008, more than 3,000 commitments have been made by students, universities, and youth organizations. For example, students from

Columbia University’s Engineers without Borders Uganda Programme have pledged to install a multifunctional energy platform in one farm cooperative in Uganda using jatropha oil as a sustainable fuel source. Several other campuses in the United States have made commitments to infuse climate change awareness and sustainability into campus culture. (Clinton Global Initiative, Commitments Department, 2009).

## YOUTH PARTICIPATING IN POLICY DEVELOPMENT

Policy development constitutes an institutionalized form of influence that typically has a broader reach than one-time initiatives. Because policies shape budgets, decisions, and actions at the local, national, and international levels, they often have a significant public impact. Over the past few decades young people have issued repeated demands for a greater say in climate change policy development and decision-making but have largely been ignored. There are some notable exceptions, however, where young people have been empowered to help develop climate change policies at different levels. In some instances, young people have initiated these efforts, while in others, governing organizations have facilitated youth involvement. Both avenues have led to the same outcome: youth are finally beginning to break through the power barrier and collaborate in shaping the policies that will affect them in the years to come.

## EUROPE

On 15 November 2008, 470 young people participated—both virtually and in-person—in the first IDEAL-EU pan-European town meeting on climate change. The event, held simultaneously at three venues in France, Italy, and Spain, included a full day of discussion and debate focusing on the United Nations policy agenda on climate change. Key questions posed and addressed by youth at the meeting included the following: How can Europe reduce its use of fossil fuels? Why are renewable energies currently not widespread? What measures would be effective in reducing CO<sub>2</sub> emissions? How can we reduce the consumption of energy? What could we change in our daily habits? What’s wrong



with the current model of socio-economic development? The participants were able to vote electronically on innovative proposals emanating from this brainstorming phase. (IDEAL-EU, n.d.).

### LATIN AMERICA

The International Student Initiative for Action on Climate Change provides young academics and professionals with the opportunity to contribute to the development of climate change mitigation policies aimed at protecting their region's tropical forests. The Initiative is built around a network of graduate students and young professionals in Latin America—with regional teams in Brazil, Colombia, and Mexico—who focus on guiding and supporting the development of public policy that addresses the role of tropical forests as carbon sources and sinks. Young people are involved in multiple aspects of policy development, including conducting background research, engaging in policy dialogue, participating in seminars, and consulting with policy-makers, forest specialists, members of academia, and other students. The Initiative has had a genuine impact on policy in Brazil, Colombia, and Mexico. In Brazil, for example, the efforts of the regional team led to the development of new legislation making it more difficult for banks to finance illegal logging projects. (International Student Initiative for Action on Climate Change, n.d.).

### NEPAL

The Nepalese Youth for Climate Action coalition has opened discussions on climate change policy and has developed a draft policy document for stakeholder comment (Nepalese Youth for Climate Action, n.d.).

### UNITED STATES

SustainUS is a United States-based youth-led organization engaged in grassroots advocacy and education as well as policy advocacy and development relating to sustainability. In an effort to influence policy, SustainUS delegations work with Government entities, civil society groups, and other youth organizations. Since 2003, through its agents-of-change programme, SustainUS has sent youth delegations to several conferences and summits, including the COP sessions.

The organization's website includes a wiki for the development of policy positions. (SustainUS, n.d.).

## YOUTH AS PARTNERS IN DECISION-MAKING

Young people can make important contributions and have a significant impact on decision-making outcomes when they are given the opportunity to help frame the issues, develop alternatives, and identify solutions. Youth involvement at this level appears to be increasing but is still relatively rare. Even less frequently, final decisions are placed in the hands of young people and commitments are made to implement these decisions. In both instances, youth engage in collaborative and empowered decision-making.

### EL SALVADOR

In El Salvador, Plan International is actively involving children and young people in environmental resource management and disaster risk reduction. The country is highly vulnerable to disasters, and the risk is increasing with climate change. Disasters take a high toll on the population, and children and youth have traditionally been among those least able to defend themselves against the attendant threats. Plan International's work in this area has had a dual focus: raising awareness among children and youth and engaging them in the implementation of disaster risk management activities. The organization's efforts began with the establishment of school-based children's clubs in which students mapped disaster risks in their area and discussed what they could do in the event of a disaster. As the club participants have grown older, they have begun to take an active role in managing disaster risk in their areas and in lobbying the Government for change. In one project initiated by a youth club, for example, young people successfully lobbied to stop the quarrying of stone from a riverbed because it was increasing the flood risk. In this instance, youth took control of climate change adaptation in their community. (Plan International, n.d.).

### UNITED STATES

The New York University (NYU) Sustainability Initiative, launched in 2006, is a col-

laborative endeavour that brings together students, faculty, staff, alumni, parents, and neighbours of NYU to promote better environmental performance and a green culture on campus. The Initiative's advisory body is the Sustainability Task Force, whose 60 members represent key university constituencies and are involved in various working groups, outreach activities, and the administration of a "green grants" fund used to support projects led by NYU students, faculty, and staff. The various stakeholders have worked together to assess current practices and have created a prioritized green action plan for NYU. Overall, there is a balanced mixture of student-led and staff-led initiatives. Young people are running and participating in programmes and activities in areas as diverse as bicycle recycling, gardening, cooking, project management, and research. (New York University, n.d.).

## YOUTH MOBILIZING THEMSELVES: YOUTH-LED ORGANIZATIONS

Although there is some general concern about youth disengagement, the commitment of young people to civic engagement remains strong. Young activists are effectively combining new advocacy approaches with the more traditional participatory structures of previous generations. They are increasingly developing informal, non-hierarchical ways to communicate and organize, using the Internet, mobile telephones, and other high-technology communication tools; however, membership in formal organizations remains critically important.

Young people are more likely to participate if their peers are involved as well. Youth-led organizations can provide a framework for young people to take action. Youth-led organizations around the world are having an impact on the climate change agenda and will continue to do so. Young people are proving that they constitute a formidable force when they come together under one banner for a specific cause—in this case, climate change.

Youth-led organizations may start out as isolated entities with a limited focus. Eventually they may form coalitions with similar groups,

broadening their reach. In recent years a number of youth coalitions have banded together under the umbrella of regional and global youth movements. The International Youth Climate Movement, for example, is a worldwide coalition of youth organizations working to inspire, empower, and mobilize members of the younger generation to take action on climate change. Regional networks that have joined the Movement include the Australian Youth Climate Coalition (see box IV.5), itself a coalition of more than two dozen youth organizations from across the country; the Canadian Youth Climate Coalition, made up of 48 youth organizations; the China Youth Climate Action Network, which includes seven youth environmental organizations; the French Youth Coalition for Climate and Social Justice, a collective of 13 youth movements; the Indian Youth Climate Network; the Japan Youth Ecology League; the Malaysian Youth Climate Justice Network; South Asia Youth for Environment Education; and the UK Youth Climate Coalition. Other national, regional, and global coalitions and movements have been established that have the same goal as the International Youth Climate Movement. (International Youth Climate Movement, n.d.).

### Box IV.5

#### Youth climate campaigning "down under"

The 50,000-member Australian Youth Climate Coalition develops, supports, and oversees a number of initiatives. Recent activities in which the Coalition has been involved include Power Shift, an Australian youth climate conference held in July 2009; an ongoing Youth Climate Leadership Skills programme; a petition for the establishment of strong emissions targets; a green jobs programme; and a school-based programme to support advocacy. The Coalition has also sent youth delegations to the most recent sessions of the Conference of the Parties to the United Nations Framework Convention on Climate Change. (Australian Youth Climate Coalition, n.d.).

Between 14 and 21 September 2009 more than 37,000 young people →

participated in Youth Decide, Australia's first national youth climate vote and one of the world's largest-ever per capita mobilizations of young people on climate change. Youth Decide was organized by the Australian Youth Climate Coalition in partnership with World Vision Australia, bringing young people together to speak with a united voice to compel the Government of Australia to demonstrate the leadership required to secure an ambitious, fair, and binding global climate agreement at COP 15. A total of 330 youth-led voting events were set up to mobilize youth support. The overall results indicated that more than 90 per cent of voters wanted to see a commitment in Copenhagen to reduce emissions by at least 40 per cent, and an overwhelming 97.5 per cent of young people voted for emissions targets stronger than those currently proposed by the Government. (Youth Decide, n.d.).

International youth NGOs and regional youth platforms participating in the International Coordination Meeting of Youth Organisations (ICMYO) have also been active in climate change initiatives around the globe. ICMYO is held at least once a year to strengthen regional and international cooperation among youth organizations and to coordinate political inputs to global youth policy processes. Between the meetings, the participating organizations maintain contact with one another and operate as an informal network. In order to ensure that the coalition is as representative and inclusive as possible, a special effort is made to solicit the participation of youth organizations in countries and regions that typically receive less attention. The goal is to ensure that the perspectives of all young people are integrated into global processes. (International Coordination Meeting of Youth Organisations, n.d.).

The European Youth Forum, or Youth Forum Jeunesse (YFJ), is one of the organizations participating in ICMYO. It is made up of about a hundred national youth councils and international youth NGOs that are federations of youth organizations in themselves. YFJ brings together tens of millions of young people from

all over Europe and is set up to represent their common interests and concerns. The Forum recently adopted a comprehensive position paper on climate change that calls for decisive action, focusing on adaptation, mitigation, financing, and governance. The paper also emphasizes the importance of supporting youth advocacy and of involving young people in decision-making and policy development processes. (European Youth Forum, 2008; Youth Forum Jeunesse, 2009).

The World Association of Girl Guides and Girl Scouts, another ICMYO participant, has worked with the Food and Agriculture Organization of the United Nations and UNICEF in developing tools and resources for climate change education. Available materials include a guide for teachers and youth leaders on how to undertake climate change activities and initiatives, an educational booklet, a challenge badge, resource packs, and information on organizing drawing competitions. In addition, the Association is a partner organization in the Unite for Climate Web portal, an entry point for global youth action on climate change (see above). (World Association of Girl Guides and Girl Scouts, n.d.).

As shown throughout this chapter, small NGOs around the world are playing a crucial role in climate change mitigation and adaptation. Unfortunately, their work is often not as well documented as that of the larger, better-funded NGOs. Greater attention must be focused on the successful initiatives undertaken by all types of organizations, regardless of their size or complexity, so that good practices can be identified and replicated.

## THE ROLE OF YOUNG PEOPLE IN PROMOTING AND EFFECTING CHANGE

Young people can combat climate change not only as members of youth organizations, but also as individuals. Each of the world's 1.2 billion young women and men has an impact on the environment. Through the choices they make in their everyday lives, they contribute to the preservation or degradation of their natural surroundings.



Historically, the younger generation has promoted change and embraced innovative values. In many cases, youth have been the initiators of social movements that have given rise to cultural and social transformations (Maggi and others, 2001). While the young people of today constitute a major consumer group, many of them are dissatisfied with the consumer societies in which they live and are seeking alternative lifestyles. This could mean a drive for change.

The main constraints young people face in taking action include doubts about how and where to begin, limited confidence in their ability to make a difference, inadequate monetary resources, competing demands on their time, insufficient encouragement from peers, and a lack of political and community support. These are valid concerns, but they should not be perceived as insurmountable obstacles. The fact is that young people all over the world can realize their aspirations for a better world by introducing small changes in their daily lives, strengthening their commitment to action one step at a time. Although everyday measures to reduce

carbon emissions and protect the environment may seem insignificant, they can add up and make a real difference—especially when entire youth communities take part and young people are able not only to alter their own consumer behaviour but also to influence the consumption patterns of their peers and families.

Young people around the world are increasingly making small but important changes that represent essential steps in their transition to a more sustainable lifestyle. Youth can start right where they are, and many actually prefer this approach to organized action, promoting and implementing changes in their homes, social networks, and local communities. As noted in chapter III, consumption choices constitute a key area in which young people can exert a positive influence and make a real impact. As figure IV.1 shows, there are many different areas in which young individuals can take action to make their lifestyles greener and more sustainable. The suggestions included in the figure tend to be somewhat broad, but many of them can easily be adapted to local contexts.

Figure IV.1

## YOUTH ACTIONS FOR SUSTAINABLE LIFESTYLES

### AT HOME:

- Turning the lights off when leaving a room
- Installing compact fluorescent lighting (CFL)
- Unplugging idle electronic items
- Having several members of a household share televisions, computers, and other electronic items
- Wearing an extra layer of clothing to reduce the need for heating
- Reducing the temperature of the thermostat by a few degrees
- Opening windows to create a draft and reducing air conditioner (AC) use
- Using a ceiling fan to help circulate cool air
- Cleaning/replacing dirty AC filters to increase the efficiency of AC units
- Using more energy-efficient electronics and appliances
- Taking showers instead of baths to reduce water use
- Setting the water heater to 50° C (122° F) or lower
- Using eco-friendly cleaning products
- Reducing energy use by sharing a residence (not living alone)
- Installing water-saving taps and shower heads
- Using cold water when possible
- Line-drying clothes
- Running the dishwasher and washing machine only when they are full
- Taking the stairs rather than the elevator

### SHOPPING BEHAVIOUR:

- Saving rather than spending
- Buying long-lasting products
- Refraining from buying the newest version of a product if the current version is still functioning well
- Purchasing environmentally friendly products, including recycled goods and items that are easily recyclable and biodegradable
- Buying used or “vintage” clothing and furniture
- Learning more about the products one buys, including their carbon footprint
- Choosing eco-labelled and ethical-labelled goods and services
- Choosing goods made/distributed by manufacturers and dealers with clear environmental and ethical policies and related codes of conduct
- Not making any purchases for an entire day

### CIVIL ACTION:

- Sharing information on sustainable lifestyles with family and friends
- Planting a tree
- Conducting research on which products and lifestyle choices are eco-friendly
- Joining campaigns to improve manufacturing and employment practices

### TRANSPORTATION:

- Using public transportation, biking, skating, or walking
- Combining errands to avoid extra car trips
- Carpooling
- Renting a car from time to time rather than owning one
- Avoiding unnecessary drives
- Driving in a more fuel-efficient manner (for example, avoiding quick starts and stops and driving slowly)
- Driving a more fuel-efficient car
- Inflating a car's tires
- Turning a car off rather than idling
- Regularly changing a car's air filter

### TRAVEL:

- Travelling less to faraway places
- Engaging in local leisure activities
- If flying cannot be avoided, taking direct flights
- Avoiding overpacking: extra weight means more fuel burned and increased emissions
- Buying certified carbon offsets
- Exploring agro-tourism or eco-tourism
- Staying longer in one location
- Lodging with friends and relatives



## BARRIERS TO YOUTH ENGAGEMENT AND THE WAY FORWARD

For young people to be successful in driving change they require a strong support system that includes parents, teachers, community and religious leaders, the Government, the private sector, the media, and civil society. Various studies have also found that for behaviour change to occur, the willingness or need to address environmental problems must be complemented by both opportunity (the availability of means) and ability (access to means) (Tukker and others, 2008).

Existing infrastructure and social systems are not always supportive of positive change. Many countries have still not introduced policies that are specifically designed to promote environmentally friendly lifestyles. Such supportive policies, together with forward-looking urban policies and development planning, can be effective in helping youth to take action. For example, improving access to communal services used by young people—including public transport, libraries, swimming pools, and community gardens or parks—is one important means of reducing the multiplication of goods and services associated with highly individualized consumption patterns.

Political and other systemic barriers may also exist that effectively preclude meaningful civic engagement among youth. Although youth involvement is widespread and the value of youth participation is internationally acknowledged, the idea that giving young people a role in society can lead to better policy outcomes is far from being universally accepted. The rights and decision-making capacities of young people often remain unrecognized, and their potential as a valuable resource is seldom realized. Even in countries that acknowledge the need to provide young people with opportunities to participate in the policy-making process, youth involvement tends to be highly circumscribed; the views of young people are sought, but they are not allowed to influence decision-making and therefore remain on the fringes of democratic processes. Such restrictions can undermine the potential of young people as agents of social change.

The gap between intent and reality in youth empowerment is not surprising because decision-making mechanisms are rarely set up to allow ordinary adult citizens, let alone young people, to participate in decision-making processes. Institutionalized collaborative decision-making is difficult to find at any level of governance. Consequently, young people—who are typically at a relative disadvantage in terms of power and influence—may find it impossible to secure a formal place at the decision-making table. Institutionalizing collaboration would require the establishment of a formal relationship in which mutual rights and responsibilities are legally defined and societal sanctions are imposed if such engagement fails to occur. Official recognition is essential, but true institutionalization will occur only when youth participation in decision-making becomes embedded within the system and is viewed as the norm. Unfortunately, young people are nowhere near achieving this level of empowerment.

## CONCLUSION

The world's 1.2 billion young people have made it abundantly clear that they want to be involved in the decisions impacting society and addressing climate change is no exception. Throughout the world, youth have developed creative ways to raise awareness, share information, build capacities, and work together on climate change mitigation and adaptation practices – often achieving impressive results through their own initiatives.

In recent years, young people are increasingly attending global gatherings on climate change to express their concerns and press Governments for action. However, they are often denied participation in decision-making processes where their unique perspectives and innovative ideas could be integrated toward more effective policies.

Overall, political progress on the climate change agenda has been stagnant as significant policy adjustments towards more sustainable patterns of production and consumption have not been agreed upon. Delaying action imposes greater sacrificing on the part of youth populations and further strains socio-economic development. Circumstances such as these reverse progress and threaten the very base from which all societies prosper.

By and large, traditional economic growth patterns are environmentally unsustainable due, in part, to their heavy reliance upon the use of natural resources. Within the international community, consensus is emerging for a departure from current models. Enhancing development frameworks by integrating a Green Growth focus offers a pathway toward the transition to green economies including by addressing policy barriers.

In the residuum of the global financial and economic crisis arises an opportunity to bridge the gap from rhetoric to action. As policy-makers and economic managers, Governments are called upon to develop a global vision for a more equitable and greener future. Climate change poses a global threat and requires an inter-governmental response as a matter of urgency. However, commitments made at the international level should bear in mind varying national contexts. In order to provide the widest possible opportunity for universal implementation, national leadership must be able to translate global models into national strategies.

Broad-based partnerships – including Governments, the United Nations, the private sector, civil society and the scientific community – provide stakeholders with a platform to share knowledge and good practices. Partnerships can also diminish the marginalization of relevant points of view, including those of youth. Collective action of this nature is key to developing sound policies for thriving green economies.

While halting climate change and reversing its negative effects require steady political will and the implementation of a robust plan of action over the course of many decades, much can be done in the meantime to lay the groundwork for significant progress. With this knowledge and in the spirit of recognizing their positive contributions to society, young people should be encouraged and supported to take part in the universal endeavour to address climate change, including through meaningful participation in decision-making processes.



# CALLING ALL YOUTH

## CALLING ALL YOUTH

Now that you have read *the World Youth Report: Youth and Climate Change*, it is the hope that with this newly gained knowledge you are inspired to take on the challenges presented by climate change and do your part in achieving sustainable development goals. Here are some suggested steps youth can take toward mobilizing collective action for positive change:

## GET INFORMED:

Keeping in step with the latest scientific advancements and political developments on the climate change agenda is important when advocating for change. Relevant and informed positions lead to better strategies and more success.

## BE THE CHANGE:

Taking a more conscious approach to your everyday behaviours by considering the environmental and social consequences of your actions is a good first step in decreasing your carbon footprint. Practicing a sustainable lifestyle sets a positive example for others to follow; therefore, multiplying your personal efforts.

## EDUCATE:

Share your knowledge, information and innovative ideas with others, including: your peers, school boards, community leaders, Government Officials, business owners, and so on. Encourage them to learn more about climate change and to modify their personal and work-place consumptive behaviours.

## MOBILIZE:

Collectively, youth in action are a powerful force. Consider the deep convictions held by young people, especially with respect to their future prospects, together with the vast number of youth today. In some countries, youth populations outnumber all other groups so, youth groups have great lobbying potential from local to national levels.

## VOLUNTEER:

Youth civic engagement has the potential to profoundly impact local communities' sustainable development efforts. Donating your knowledge, skills and labour on activities such as environmental clean-

ups, building sustainable structures, and recycling programmes have both immediate and long-term effects.

## PARTNER:

Partnerships for sustainable development contribute to the implementation of intergovernmental commitments and were a complementary outcome of the World Summit on Sustainable Development. The UN Commission on Sustainable Development establishes partnerships with a variety of actors, including youth organisations, with the aim of contributing to the implementation of Agenda 21, Rio+5 and the Johannesburg Plan of Implementation. Through formally established multi-sectoral partnerships, organizations have the opportunity to interact with a range of actors and increase their knowledge on emerging climate change issues.

## ADVOCATE FOR GOVERNMENT ACTION:

It is up to the current generation of leaders to take concrete steps to harness the potential young people represent in the fight against climate change. Governments should draw upon their youth populations to compliment their efforts and strengthen the implementation of sustainable development policies and programmes. Youth can call upon their Governments to:

- **Institutionalize youth participation in decision-making.** Tokenistic arrangements must be replaced with formalized inclusive and deliberative processes that allow young people to routinely influence climate change policy development and decision-making. In addition, a mechanism to ensure serious and timely consideration of their proposals should also be established with a component to assess and



explain the adaptation or rejection of their inputs. Just as in other democratic processes, institutionalized youth participation must be characterized by consistency, transparency, and accountability at all levels of decision-making.

- **Invest in youth initiatives.** Strategies to secure funding for youth organizations involved in addressing climate change are required at local, national, regional and international levels. A climate change fund could be administered by and for young people to support initiatives that promote youth engagement in climate change adaptation and mitigation activities.
- **Establish a participatory role in international forums.** Young people are now involved on a regular basis in the activities of various international advisory bodies, including within the United Nations system. The effectiveness of these bodies in integrating youth perspectives and facilitating youth empowerment should be evaluated with the aim of supporting the “ladder of participation” model outlined in chapter IV of this report. Actions such as granting permanent status to the youth constituency (YOUNGO) at COP 17 are a step in the right direction.





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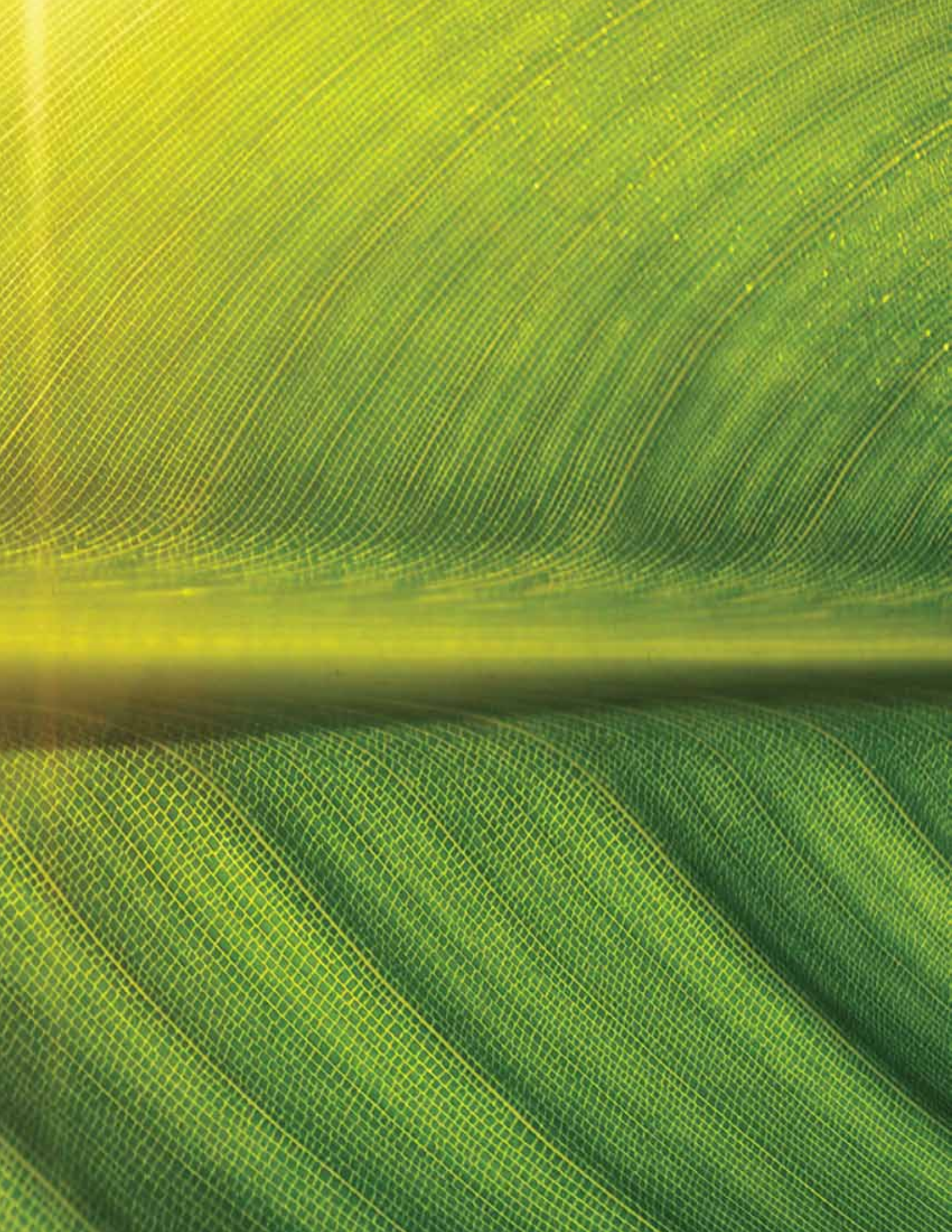
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# STATISTICAL ANNEX

## STATISTICAL ANNEX

### Introduction

Since the 1995 adoption of the World Programme of Action for Youth to the Year 2000 and Beyond, Governments, the international community, and civil society have grown increasingly aware of the importance of investing in youth. Many have partnered with youth-led organizations to address key challenges to youth development. While the World Programme of Action has been instrumental in guiding the formulation and implementation of national youth policies, assessing the impact of interventions and investments remains difficult owing to the fact that age-disaggregated data relevant to youth are not always available. Where such data do exist, they are often part of a larger compilation, and youth-specific trends remain hidden or are glossed over.

A youth-focused statistical annex was first incorporated in the *World Youth Report 2007*, and the present *Report* includes one as well. Existing data relating to core areas of youth development have been collated in order to provide an overview of the youth situation and of the challenges young people face in different parts of the world. The annex comprises a compilation of indicators relating to youth for as many countries and regions as possible. The data presented can be used to facilitate the design, implementation and monitoring of youth programmes and policies, as well as to track progress towards the goals and targets of the World Programme of Action for Youth. The annex brings together existing data from several sources; in some cases, however, new calculations are made to highlight specific aspects of youth development.

The data presented here are by no means exhaustive. There are gaps that must be addressed through improved disaggregation and new data collection. However, the data that are available provide a picture of the global, regional, and national contexts in which today's young people live.

The annex highlights six broad areas and issues. For statistical purposes, youth are defined as individuals between the ages of 15 and 24.

## BASIC DEMOGRAPHICS

Annex table 1 provides a sense of the youth presence in different areas, including indicators on the numbers of youth, changes in these numbers over time, and youth as a proportion of the total population, by country and region. These numbers illustrate the size and share of the population young people represent, highlighting both the youth development challenge and the potential of youth to contribute to development. Young people constitute approximately 18 per cent of the world's population. In many developing countries, however, the youth share is close to or above 20 per cent. This is in sharp contrast to developed countries, where youth account for an average of 12.6 per cent of the total population.

Annex table 2 provides an overall picture of youth living in urban and rural areas. The data indicate that in global terms young people are almost equally distributed between urban and

rural areas. A closer look reveals that in the more developed regions, 75 per cent of youth live in urban areas, while in least developed countries the vast majority of young people (70 per cent) live in rural areas. The table also shows the proportion of the urban and rural population youth represent, as well as the annual growth rate for youth in urban and rural areas during the period 1990-2005. At the global level, the youth population in urban areas increased by 2 per cent per year during this period, while the corresponding growth rate in rural areas was only 0.1 per cent.

## LITERACY

Literacy, as defined by the United Nations Educational, Scientific and Cultural Organization, is measured by the ability of an individual to read and write, with understanding, a simple short statement relating to his/her everyday life. Although today's young people are the best-educated generation in history, wide disparities in literacy persist across countries and regions. Regional averages for Europe, Latin America and the Caribbean, and North America show close to universal youth literacy, but Africa and Asia are lagging behind, with regional average rates of 75 and 90 per cent respectively. In some cases there are also marked differences between male and female youth. In Africa, for example, the literacy rate for young men is 10 per cent higher than that for young women. A comparative analysis of the statistics provided in the table shows progress in literacy since 1985. Although gaps remain, most countries and regions exhibit a steady upward trend towards universal literacy among youth.

## EDUCATION

Several indicators are used in annex tables 4, 5 and 6 to illustrate education coverage.

The gross enrolment ratio (GER) reflects total enrolment in a level of education, regardless of age, expressed as a percentage of the theoretical school-age population in a given school year. The GER can exceed 100 per cent owing to early or late entry and/or grade repetition. This indicator, which is shown by sex for primary, secondary and tertiary education, is widely used to measure the general level of participation in education. It can complement the net enrolment ratio by indicating the extent of over-age and under-age enrolment.

The net enrolment ratio (NER) reflects the number of pupils in the theoretical school-age group at a particular level of education (primary or secondary, in this case), expressed as a percentage of the total population in that age group. The rates listed in annex table 5 show the extent of participation in primary and secondary education among children and youth belonging to the official age group for the particular level of schooling. A high NER denotes a high degree of participation among the official school-age population. The NER is not calculated for tertiary education because the wide variations in student age at this level of education make it difficult to determine an appropriate age group.

A sharp discrepancy between the GER and NER indicates that enrolled children and youth do not progress regularly through the grades and that the system's internal efficiency could be improved.

Annex tables 4 and 5 also include indicators showing how females fare relative to males with respect to gross and net enrolment ratios at each level. A ratio lower than 1 indicates that females are at a disadvantage in terms of school enrolment. It is interesting to note the disparities in the female-to-male ratio across countries and levels of education. In many countries, females appear to outnumber males at the tertiary level, but in others females are not well represented at this level or at the lower levels of education.

Annex table 6 shows primary to secondary school transition rates by sex and country. This indicator measures the degree of progression to a given level of education from the previous level of education. It is calculated by dividing the number of new entrants in the first grade of secondary education by the number of pupils who were enrolled in the final grade of primary education the previous school year, then multiplying by 100 to obtain a percentage. A low transition rate can reflect difficulties with accessibility or problems related to student performance at the primary level. This indicator can also help in assessing the relative selectivity of an education system, which may be linked to pedagogical or financial requirements.

## LABOUR FORCE PARTICIPATION AND EMPLOYMENT

The analysis presented in the *World Youth Report* has highlighted the important role youth

employment can play in climate change mitigation and adaptation. Although there are many gaps in terms of youth employment data, the statistics included in the relevant annex tables are sufficient to provide an overall picture of the situation.

Annex table 7 presents indicators of the youth employment situation in individual countries. The percentage of youth in the labour force is a measure of the proportion of a country's youth population actively involved in the labour market and includes those who are working or looking for work. It provides an indication of the relative size of the youth labour force available to engage in the production of goods and services. Labour force activity among the young may reflect the availability of educational facilities as well as the degree to which young workers are discouraged from joining the labour force. Female/male labour force participation rates show sex differentials in labour force participation. Ratios of less than 1 suggest that females are less likely than males to seek or secure employment.

Annex tables 7 and 8 present a complex global picture with respect to labour force participation and employment among youth. In some countries, virtually all young people—including those in the age 15-19 subgroup—are in the labour force. In other countries, most youth do not enter the labour force until later. Gender differentials in participation also vary, with some countries showing little difference and others showing much lower rates of female youth participation in the labour force. The age transition in labour force participation rate, expressed as a ratio, shows the change that occurs in labour force participation among youth as they progress from the younger to the older subgroup. The data indicate that in every country, with the exception of Tajikistan, labour force participation is higher for older youth. However, the degree of increase is variable across countries and by sex. For example, in Hungary and Lithuania the rates of labour force participation among 20- to 24-year olds are more than ten times the corresponding rates for youth aged 15-19 years, while in about two dozen countries the rates for older youth are not even double those for the younger subgroup. Gender-based ratios are also highly variable. In Haiti and Iceland, labour force participation rates are the same for younger and older female youth, while in Jordan the rate for the latter subgroup

is 12.6 times higher than that recorded for the former. The situation is similar for young males, with ratios ranging from 1.1 in Tajikistan to 12.8 in Martinique.

In annex table 8, which presents various indicators of youth unemployment, the youth labour force is the number of young people who are either working or actively looking for work, and unemployed youth are those who do not have a job but are actively seeking work. Youth are considered to have been employed if they performed some work for at least one hour during the specified reference period for a wage or salary (paid employment) or for profit or family gain (self-employment). It should be noted that the unemployment rate is only indicative of the share of the labour force that is actively but unsuccessfully looking for work. It does not provide any information about those who have given up on the job search (discouraged workers) or those who are outside the labour force for other reasons. Nor does it give any indication of underemployment.

Annex table 8 also shows the youth-to-adult unemployment ratio, which is the youth unemployment rate as a percentage of the unemployment rate for adults aged 25 years and over. The indicator provides a snapshot of how youth fare in labour markets relative to adults. For example, in a country in which the youth unemployment rate is high and the youth-to-adult unemployment ratio is close to 1, it may be concluded that the problem of unemployment is not specific to youth. In all countries, it is normal for the youth unemployment rate to be somewhat higher than the adult unemployment rate. Young people often lack job search skills, and some take time to “shop around” for the right job. Youth may have a hard time finding employment because of their relative lack of work experience.

The youth employment-to-population ratio, which is shown in the last column of annex table 8, is calculated by dividing the number of employed youth by the total youth population. Although it may be assumed that a high employment rate among youth is positive, this is not always the case. If low employment-to-population ratios are due to large numbers of youth remaining in education to build their human capital, they are preferable to high ratios, which might be an indication of limited education options and the need for young people to

take up any work available. Employment-to-population ratios are of particular interest when broken down by sex, as the ratios for males and females can provide information on gender differences in labour market activity in a given country.

## ACCESS TO ADEQUATE NUTRITION, SHELTER, WATER AND SANITATION

Annex tables 9 and 10 present additional information on youth welfare. There is some debate over whether poverty should be measured by income alone. A broader approach is often called for to characterize severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education, and information. Estimates are provided for each of the indicators shown in annex tables 9 and 10, showing poverty in access to nutrition, shelter, and sanitation and water. The data indicate that the basic needs of large proportions of youth in many countries are not being met.<sup>1</sup> These data were compiled by the Townsend Centre for International Poverty Research at the University of Bristol and are based on household surveys, including Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).

The criteria for the calculations include the following:

- Food deprivation: a body mass index of 18.5 or below (underweight);
- Severe food deprivation: a body mass index of 16 or below (severe underweight);
- Shelter deprivation: living in a dwelling with three or more people per room (overcrowding), or in a house with no flooring (for example, a mud floor) or inadequate roofing (including natural roofing materials);
- Deprivation of sanitation facilities: access only to unimproved sanitation facilities,

<sup>1</sup> The proposed indicators described above build on the work undertaken on behalf of the United Nations Children's Fund and the United Kingdom's Department for International Development to operationalize measures of deprivation and severe deprivation for children and adults.



including pour flush latrines, covered pit latrines, open pit latrines, buckets, or no access to toilets of any kind;

- Water deprivation: access only to unimproved sources such as open wells, open springs, or surface water; or having to walk for more than 15 minutes to reach a water source (30 minutes round trip).

## LEADING CAUSES OF DEATH AMONG YOUTH

Annex table 11 provides insight into the primary causes of mortality among young people in 76

countries. Variations across countries indicate a need for differences in policy responses. Although the global picture remains incomplete because of the difficulty in obtaining reliable cause-of-death data for many countries, the available statistics show that land transport accidents, intentional self-harm, and assault/homicide are common causes of death among youth worldwide. The tendency for youth to take more risks and their relative inexperience with motorized vehicles may account for the prevalence of motor vehicle accidents among the causes of death. Suicide is also a growing concern as youth struggle to find their place and gain acceptance in an increasingly complex world.



**ANNEX TABLE 1: Youth population indicators, 2010**

Major region, country or area*		Males			Females			Total 15-24	Youth as percent- age of total population	Percentage change in number of youth (1995-2015)
		Age (years)		Total	Age (years)		Total			
		15-19	20-24	15-24	15-19	20-24	15-24			
<b>WORLD</b>		314 364	312 297	626 662	294 746	296 663	591 409	1 218 070	17.6	14.4
More developed regions	a	38 385	42 727	81 112	36 521	40 938	77 459	158 571	12.8	-13.2
Less developed regions	b	275 979	269 570	545 550	258 224	255 725	513 950	1 059 499	18.7	18.2
Least developed countries (LDCs)	c	46 287	40 739	87 026	45 457	40 296	85 752	172 779	20.2	37.8
Less developed regions, excluding LDCs	d	229 692	228 831	458 524	212 768	215 430	428 197	886 721	18.4	13.9
Less developed regions, excluding China		218 835	205 172	424 006	208 750	197 083	405 833	829 839	19.3	24.3
<b>AFRICA</b>		55 318	49 705	105 023	54 502	49 372	103 874	208 897	20.2	37.0
<b>Sub-Saharan Africa</b>	e	46 981	40 831	87 812	46 480	40 721	87 201	175 013	20.3	40.5
<b>Eastern Africa</b>	1	18 014	15 562	33 576	17 950	15 613	33 563	67 139	20.5	42.8
Burundi		486	477	964	489	483	971	1 935	22.7	40.6
Comoros		35	33	67	34	32	66	133	19.3	27.0
Djibouti		50	45	96	50	45	94	190	21.6	37.3
Eritrea		271	253	524	271	257	528	1 052	20.1	34.3
Ethiopia		4 811	3 950	8 761	4 794	3 958	8 752	17 513	20.6	47.3
Kenya		2 177	2 067	4 245	2 162	2 066	4 228	8 472	20.7	36.6
Madagascar		1 110	913	2 024	1 112	918	2 030	4 053	20.1	44.7
Malawi		885	693	1 578	876	691	1 568	3 146	20.0	47.7
Mauritius	2	56	49	105	54	48	102	207	16.0	-1.1
Mayotte		12	10	22	12	10	21	43	21.7	49.9
Mozambique		1 239	1 059	2 298	1 242	1 068	2 309	4 607	19.7	39.8
Réunion		35	34	69	34	34	68	137	16.4	14.8
Rwanda		525	565	1 090	535	582	1 117	2 207	21.5	56.2
Somalia		468	400	868	469	402	872	1 740	18.6	34.1
Tanzania, United Republic of		2 386	2 076	4 462	2 372	2 073	4 446	8 908	19.8	41.0
Uganda		1 915	1 559	3 473	1 893	1 552	3 445	6 918	20.5	49.9
Zambia		724	621	1 344	719	618	1 337	2 681	20.2	40.5
Zimbabwe		826	753	1 579	830	773	1 603	3 182	25.2	24.8
<b>Middle Africa</b>		7 126	5 995	13 121	7 118	6 017	13 134	26 255	20.4	45.6
Angola		1 056	880	1 935	1 070	896	1 966	3 901	20.5	46.4
Cameroon		1 100	981	2 081	1 088	975	2 063	4 144	20.8	38.3
Central African Republic		240	214	454	244	219	463	916	20.3	37.2
Chad		620	521	1 141	616	520	1 136	2 277	19.8	48.7

**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*	Males			Females			Total 15-24	Youth as percent- age of total population	Percentage change in number of youth (1995-2015)	
	Age (years)		Total	Age (years)		Total				
	15-19	20-24	15-24	15-19	20-24	15-24				
Congo	208	184	392	205	182	387	779	20.7	34.4	
Congo, Democratic Republic of the	3 769	3 101	6 870	3 764	3 111	6 875	13 745	20.3	48.0	
Equatorial Guinea	38	33	70	38	33	71	141	20.4	59.3	
Gabon	86	74	160	85	73	157	318	21.2	41.8	
São Tomé and Príncipe	9	8	18	9	8	17	35	21.1	30.1	
<b>Northern Africa</b>	10 721	10 942	21 664	10 330	10 664	20 993	42 657	20.0	21.0	
Algeria	1 814	1 881	3 695	1 740	1 811	3 551	7 246	20.5	7.7	
Egypt	4 123	4 543	8 666	3 957	4 407	8 364	17 030	20.2	23.9	
Libyan Arab Jamahiriya	278	301	579	267	288	554	1 133	17.3	2.3	
Morocco	1 607	1 589	3 196	1 571	1 609	3 180	6 376	19.7	9.0	
Sudan	2 384	2 068	4 452	2 308	2 013	4 321	8 773	20.3	38.1	
Tunisia	491	535	1 026	464	511	975	2 001	19.3	-0.7	
Western Sahara	24	26	51	23	25	48	99	18.6	53.6	
<b>Southern Africa</b>	2 944	2 958	5 902	2 928	2 940	5 868	11 769	20.3	16.4	
Botswana	109	110	219	108	108	216	435	22.0	23.4	
Lesotho	125	114	239	126	120	246	485	23.3	28.4	
Namibia	127	113	240	126	113	239	479	21.7	33.7	
South Africa	2 505	2 549	5 054	2 489	2 527	5 016	10 070	19.9	13.9	
Swaziland	79	72	150	78	72	150	300	25.0	37.6	
<b>Western Africa</b>	3	16 513	14 248	30 761	16 177	14 139	30 316	61 077	20.0	40.2
Benin	495	422	917	478	406	884	1 802	19.6	47.1	
Burkina Faso	876	743	1 619	851	724	1 575	3 194	19.6	44.1	
Cape Verde	30	27	57	30	28	58	116	22.5	33.4	
Côte d'Ivoire	1 156	1 001	2 157	1 152	999	2 150	4 307	20.0	39.7	
Gambia	91	75	166	91	75	167	333	19.0	50.6	
Ghana	1 333	1 189	2 522	1 273	1 146	2 418	4 940	20.3	34.9	
Guinea	560	480	1 039	540	463	1 003	2 043	19.8	39.6	
Guinea-Bissau	83	69	152	83	69	152	305	18.5	30.4	
Liberia	219	187	406	218	188	406	812	19.8	61.3	
Mali	752	646	1 398	742	644	1 386	2 784	20.9	38.2	
Mauritania	183	164	347	173	155	329	676	20.1	37.5	
Niger	794	578	1 372	812	668	1 480	2 852	17.9	50.8	
Nigeria	8 558	7 462	16 020	8 342	7 351	15 693	31 712	20.0	38.7	
Senegal	728	618	1 347	721	619	1 340	2 687	20.9	41.6	
Sierra Leone	288	258	546	302	272	574	1 120	19.2	37.4	
Togo	367	328	694	369	330	699	1 393	20.6	42.1	
<b>ASIA</b>	196 084	196 828	392 912	179 595	183 324	362 918	755 830	18.1	12.1	
<b>Eastern Asia</b>	63 227	70 514	133 740	55 216	64 418	119 633	253 373	16.2	-10.7	
China	4	56 886	64 150	121 035	49 231	58 396	107 627	228 663	16.9	-8.0
Hong Kong, China SAR	5	241	226	467	224	221	445	912	12.9	-4.8

**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*		Males			Females			Total 15-24	Youth as percentage of total population	Percentage change in number of youth (1995-2015)
		Age (years)		Total	Age (years)		Total			
		15-19	20-24	15-24	15-19	20-24	15-24			
Korea, Democratic People's Republic of		1 049	946	1 996	1 005	906	1 911	3 906	16.3	6.9
Korea, Republic of		1 804	1 636	3 440	1 652	1 493	3 145	6 585	13.6	-25.4
Japan		3 090	3 376	6 466	2 948	3 221	6 168	12 634	9.9	-54.9
Macao, China SAR	6	18	23	41	20	25	45	86	15.7	20.6
Mongolia		139	157	295	137	157	293	589	21.8	6.6
<b>South-central Asia</b>	7	93 395	88 471	181 866	86 482	82 390	168 872	350 738	19.7	24.8
Afghanistan		1 665	1 376	3 042	1 543	1 266	2 809	5 851	20.1	50.7
Bangladesh		8 526	8 314	16 840	8 207	8 028	16 236	33 076	20.1	18.5
Bhutan		39	39	78	38	38	76	154	21.8	37.5
India		63 372	58 756	122 127	57 871	53 978	111 849	233 977	19.3	24.6
Iran (Islamic Republic of)		3 723	4 641	8 363	3 532	4 490	8 021	16 385	21.8	-5.6
Kazakhstan		702	790	1 492	672	767	1 439	2 931	18.6	-12.8
Kyrgyzstan		295	291	587	285	285	570	1 156	20.8	21.4
Maldives		20	20	39	19	19	38	77	24.5	29.8
Nepal		1 702	1 477	3 179	1 610	1 413	3 023	6 203	20.8	38.4
Pakistan		10 224	9 671	19 896	9 674	9 088	18 763	38 658	20.9	38.9
Sri Lanka		796	874	1 670	767	847	1 614	3 284	16.1	-19.6
Tajikistan		430	398	828	418	398	816	1 644	23.2	34.6
Turkmenistan		285	280	564	280	275	554	1 118	21.6	22.3
Uzbekistan		1 616	1 544	3 160	1 565	1 498	3 064	6 224	22.4	25.6
<b>South-eastern Asia</b>		28 032	26 877	54 909	26 884	26 130	53 014	107 923	18.3	10.7
Brunei Darussalam		18	19	38	17	18	36	73	18.0	28.9
Cambodia		938	853	1 791	908	833	1 741	3 532	23.5	47.6
Indonesia		10 386	10 352	20 738	10 068	10 137	20 205	40 943	17.6	3.0
Lao People's Democratic Republic		387	335	721	375	327	703	1 424	22.1	39.1
Malaysia		1 358	1 291	2 649	1 311	1 254	2 565	5 214	18.7	28.4
Myanmar		2 263	2 292	4 555	2 255	2 328	4 583	9 138	18.1	-4.2
Philippines		4 975	4 544	9 519	4 781	4 397	9 178	18 697	20.0	28.6
Singapore		193	164	356	180	153	333	689	14.2	30.2
Thailand		2 716	2 727	5 442	2 612	2 621	5 233	10 675	15.7	-13.1
Timor-Leste		67	56	123	64	53	117	240	20.5	45.2
Viet Nam		4 731	4 244	8 976	4 313	4 010	8 322	17 298	19.4	12.9
<b>Western Asia</b>		11 431	10 966	22 397	11 013	10 386	21 399	43 796	18.8	27.3
Armenia		136	152	288	129	155	283	572	18.5	-7.4
Azerbaijan		449	468	917	432	452	884	1 800	20.2	12.3
Bahrain		37	40	77	35	33	67	144	17.9	37.6
Cyprus		33	35	68	32	33	65	133	15.1	14.3
Georgia		165	178	343	166	176	342	685	16.2	-38.6
Iraq		1 737	1 480	3 218	1 648	1 407	3 055	6 272	19.9	40.3

**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*	Males			Females			Total 15-24	Youth as percent- age of total population	Percentage change in number of youth (1995-2015)	
	Age (years)		Total	Age (years)		Total				
	15-19	20-24	15-24	15-19	20-24	15-24				
Israel	293	282	575	278	270	548	1 123	15.4	20.7	
Jordan	347	330	677	330	315	645	1 322	20.4	27.7	
Kuwait	106	128	234	98	108	206	440	14.4	39.2	
Lebanon	198	190	388	192	185	377	765	18.0	13.7	
Occupied Palestinian Territory	242	208	449	232	198	430	879	19.9	51.7	
Oman	148	172	321	141	135	277	598	20.6	40.0	
Qatar	63	142	205	29	35	64	269	17.9	59.0	
Saudi Arabia	1 274	1 221	2 495	1 289	1 165	2 454	4 949	18.9	40.5	
Syrian Arab Republic	1 138	1 208	2 346	1 098	1 174	2 272	4 618	20.5	29.8	
Turkey	3 461	3 289	6 750	3 350	3 206	6 556	13 307	17.6	6.4	
United Arab Emirates	124	188	312	114	132	247	559	11.9	43.7	
Yemen	1 477	1 256	2 733	1 419	1 207	2 626	5 359	22.1	51.3	
<b>EUROPE</b>	21 744	25 783	47 527	20 696	24 752	45 449	92 976	12.7	-26.4	
<b>Eastern Europe</b>	8 913	12 043	20 956	8 534	11 630	20 164	41 120	14.1	-46.8	
Belarus	312	407	720	296	391	687	1 407	14.7	-36.6	
Bulgaria	205	257	462	194	246	440	903	12.0	-69.9	
Czech Republic	313	366	679	296	340	636	1 315	12.6	-57.1	
Hungary	305	327	632	292	315	607	1 239	12.4	-45.0	
Poland	1 258	1 472	2 730	1 197	1 412	2 609	5 339	14.0	-37.0	
Republic of Moldova	146	175	321	144	178	322	643	18.0	-47.0	
Romania	606	853	1 459	577	820	1 397	2 856	13.5	-66.7	
Russian Federation	4 158	6 148	10 306	3 999	5 971	9 970	20 276	14.4	-45.4	
Slovakia	185	211	396	176	203	379	775	14.3	-38.2	
Ukraine	1 425	1 827	3 252	1 362	1 753	3 115	6 367	14.0	-48.8	
<b>Northern Europe</b>	8	3 270	3 406	3 097	3 252	6 348	13 024	13.2	3.4	
Channel Islands	9	4	5	4	4	9	18	11.7	-4.8	
Denmark	183	163	345	172	153	325	670	12.2	1.8	
Estonia	39	55	94	37	53	90	184	13.8	-43.9	
Finland	10	170	166	337	164	159	323	660	12.3	1.9
Iceland	12	12	24	12	11	23	48	14.5	11.6	
Ireland	144	159	303	139	157	296	599	13.1	-8.9	
Latvia	68	95	163	65	92	157	320	14.3	-48.3	
Lithuania	116	133	250	112	127	239	489	15.0	-32.0	
Norway	11	168	158	326	159	151	310	636	13.1	10.7
Sweden	320	312	633	306	298	603	1 236	13.3	4.1	
United Kingdom	2 039	2 142	4 181	1 924	2 042	3 965	8 147	13.2	7.9	
<b>Southern Europe</b>	12	4 110	4 457	8 567	3 881	4 230	8 111	16 678	10.8	-36.4
Albania	158	152	310	148	146	294	604	19.1	7.8	



**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*	Males			Females			Total 15-24	Youth as percent- age of total population	Percentage change in number of youth (1995-2015)	
	Age (years)		Total	Age (years)		Total				
	15-19	20-24	15-24	15-19	20-24	15-24				
Bosnia and Herzegovina	117	148	264	109	144	254	518	13.8	-19.8	
Croatia	132	141	273	126	136	262	535	12.1	-26.7	
Greece	286	326	612	270	304	573	1 185	10.6	-45.7	
Italy	1 493	1 531	3 025	1 410	1 452	2 861	5 886	9.8	-38.5	
Malta	14	15	29	13	14	27	56	13.7	-8.6	
Montenegro	22	25	47	20	24	45	92	14.7	-20.3	
Portugal	287	312	599	275	299	573	1 172	10.9	-42.3	
Serbia	333	365	698	313	348	662	1 359	13.8	-24.0	
Slovenia	54	66	120	51	63	114	233	11.5	-46.7	
Spain	1 132	1 290	2 423	1 069	1 219	2 288	4 710	10.4	-43.2	
The former Yugoslav Republic of Macedonia	79	81	160	74	77	150	310	15.2	-13.1	
<b>Western Europe</b>	13	5 451	5 877	11 328	5 185	5 641	10 825	22 154	11.7	-6.2
Austria	258	266	524	246	257	503	1 027	12.2	-3.9	
Belgium	326	328	654	314	319	633	1 287	12.0	-1.8	
France	1 909	2 004	3 913	1 813	1 922	3 736	7 649	12.2	-6.1	
Germany	2 183	2 510	4 694	2 076	2 403	4 479	9 172	11.2	-10.8	
Luxembourg	16	15	31	15	15	30	61	12.4	25.0	
Netherlands	524	518	1 041	497	496	993	2 034	12.2	1.2	
Switzerland	234	234	468	222	227	449	916	12.1	6.1	
<b>LATIN AMERICA AND THE CARIBBEAN</b>		27 133	25 947	53 080	26 571	25 806	52 377	105 457	17.9	11.5
<b>Caribbean</b>	14	1 912	1 841	3 752	1 861	1 810	3 671	7 423	17.5	10.1
Aruba	4	3	7	4	3	7	14	13.5	32.6	
Bahamas	16	14	30	15	14	30	59	17.1	12.5	
Barbados	9	10	19	9	9	18	37	14.3	-35.5	
Cuba	391	432	823	370	406	776	1 599	14.3	-22.3	
Dominican Republic	507	464	971	498	462	960	1 931	18.9	18.4	
Grenada	6	6	12	5	6	12	24	22.6	2.8	
Guadeloupe	17	16	32	17	15	32	64	13.7	-17.9	
Haiti	561	515	1 076	552	519	1 071	2 147	21.1	33.8	
Jamaica	144	121	265	141	119	260	525	19.2	11.7	
Martinique	15	14	29	15	14	29	58	14.2	-6.4	
Netherlands Antilles	7	5	12	6	5	12	23	11.5	-33.5	
Puerto Rico	150	144	294	144	141	284	578	14.5	-12.4	
Saint Lucia	9	8	17	9	9	17	34	19.7	16.3	
Saint Vincent and the Grenadines	5	5	10	5	5	10	20	18.7	-13.8	
Trinidad and Tobago	53	67	120	52	66	118	239	17.8	-22.8	

**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*	Males			Females			Total 15-24	Youth as percent- age of total population	Percentage change in number of youth (1995-2015)	
	Age (years)		Total	Age (years)		Total				
	15-19	20-24	15-24	15-19	20-24	15-24				
U.S. Virgin Islands		4	4	8	5	4	8	17	15.3	0.5
<b>Central America</b>		7 496	6 579	14 075	7 533	6 836	14 370	28 445	18.6	10.6
Belize		17	16	33	17	15	32	65	20.8	37.8
Costa Rica		223	231	454	210	219	428	882	19.0	26.4
El Salvador		349	267	617	348	299	647	1 264	20.4	16.7
Guatemala		794	647	1 441	796	676	1 472	2 912	20.3	40.2
Honduras		437	382	818	426	379	805	1 623	21.3	35.7
Mexico		5 184	4 596	9 780	5 254	4 809	10 064	19 844	17.9	1.2
Nicaragua		334	289	623	331	293	624	1 246	21.4	24.9
Panama		157	152	310	151	147	298	608	17.3	16.9
<b>South America</b>	15	17 726	17 527	35 252	17 177	17 160	34 337	69 589	17.7	12.1
Argentina		1 737	1 678	3 415	1 685	1 635	3 320	6 735	16.6	11.3
Bolivia (Plurinational State of)		548	469	1 017	529	457	986	2 003	20.0	32.5
Brazil		8 378	8 687	17 065	8 132	8 524	16 656	33 721	17.3	6.5
Chile		757	742	1 498	732	721	1 452	2 951	17.2	14.4
Colombia		2 218	2 072	4 291	2 144	2 039	4 182	8 473	18.3	17.8
Ecuador		682	622	1 304	660	607	1 267	2 571	18.7	13.5
French Guiana		11	9	21	11	9	20	41	17.8	54.0
Guyana		36	30	66	35	29	64	130	17.1	-16.5
Paraguay		343	321	664	332	313	646	1 309	20.3	33.6
Peru		1 468	1 384	2 851	1 426	1 353	2 779	5 630	19.1	14.6
Suriname		22	23	45	22	23	44	90	17.1	11.5
Uruguay		136	127	263	131	123	254	516	15.3	-2.2
Venezuela (Bolivarian Republic of)		1 389	1 363	2 753	1 338	1 327	2 665	5 418	18.7	22.6
<b>NORTHERN AMERICA</b>	16	12 643	12 660	25 303	12 018	12 094	24 112	49 415	14.1	16.7
Canada		1 147	1 160	2 307	1 091	1 119	2 210	4 517	13.3	9.4
United States of America		11 491	11 495	22 987	10 922	10 971	21 893	44 880	14.1	17.5
<b>OCEANIA</b>		1 442	1 375	2 817	1 364	1 315	2 679	5 495	15.3	18.2
<b>Australia/New Zealand</b>		908	908	1 817	860	870	1 730	3 546	13.7	8.7
Australia	17	744	749	1 493	705	718	1 423	2 917	13.6	8.3
New Zealand		164	159	323	154	152	306	630	14.6	10.9
<b>Melanesia</b>		470	408	878	444	387	831	1 709	19.5	35.1
Fiji		45	40	84	42	37	79	163	19.1	11.0
New Caledonia		11	11	22	11	10	21	43	17.0	20.1
Papua New Guinea		371	318	689	351	304	655	1 344	19.5	37.9
Solomon Islands		30	26	56	27	24	51	108	20.1	35.5
Vanuatu		14	12	26	13	12	24	51	20.6	42.6

**Annex table 1: Youth population indicators, 2010 continued**

Major region, country or area*		Males			Females			Total 15-24	Youth as percentage of total population	Percentage change in number of youth (1995-2015)
		Age (years)		Total	Age (years)		Total			
		15-19	20-24	15-24	15-19	20-24	15-24			
<b>Micronesia</b>	18	28	26	53	27	27	54	107	18.7	25.9
Guam		8	7	15	8	7	15	30	16.8	26.5
Micronesia (Federated States of)		7	6	13	6	6	12	25	22.6	15.0
<b>Polynesia</b>	19	36	34	69	33	31	64	133	19.8	18.7
French Polynesia		12	14	26	11	13	24	50	18.4	17.4
Samoa		12	9	21	11	8	19	40	22.2	19.5
Tonga		6	5	10	5	4	9	19	18.7	7.3

**Source:** United Nations, Department of Economic and Social Affairs, Population Division (2009), *World Population Prospects: The 2008 Revision*, CD-ROM Edition--Extended Dataset.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

- \* Countries or areas listed individually are only those with 100,000 inhabitants or more in 2009; the rest are included in the regional groups but are not listed separately.
- (a) The more developed regions comprise Europe, Northern America, Australia/New Zealand and Japan.
- (b) The less developed regions comprise all regions of Africa, Asia (excluding Japan), Latin America and the Caribbean plus Melanesia, Micronesia and Polynesia.
- (c) There are 49 least developed countries (LDCs): 33 in Africa, 10 in Asia, 5 in Oceania, and 1 in Latin America and the Caribbean.
- (d) Other less developed countries comprise the less developed regions excluding the least developed countries.
- (e) Sub-Saharan Africa refers to all of Africa except Northern Africa, with the Sudan included in sub-Saharan Africa.
- (1) Including Seychelles.
- (2) Including Agalega, Rodrigues, and Saint Brandon.
- (3) Including Saint Helena, Ascension, and Tristan da Cunha.
- (4) For statistical purposes, the data for China do not include Hong Kong and Macao, each of which is a Special Administrative Region (SAR) of China.
- (5) As of 1 July 1997, Hong Kong became a Special Administrative Region (SAR) of China.
- (6) As of 20 December 1999, Macao became a Special Administrative Region (SAR) of China.
- (7) The regions Southern Asia and Central Asia are combined into South-central Asia.
- (8) Including Faeroe Islands and Isle of Man.
- (9) Refers to Guernsey and Jersey.
- (10) Including Åland Islands.
- (11) Including Svalbard and Jan Mayen Islands.
- (12) Including Andorra, Gibraltar, Holy See, and San Marino.
- (13) Including Liechtenstein and Monaco.
- (14) Including Anguilla, Antigua and Barbuda, British Virgin Islands, Cayman Islands, Dominica, Montserrat, Saint Kitts and Nevis, and Turks and Caicos Islands.
- (15) Including the Falkland Islands (Malvinas).
- (16) Including Bermuda, Greenland, and Saint Pierre et Miquelon.
- (17) Including Christmas Island, Cocos (Keeling) Islands, and Norfolk Island.
- (18) Including Kiribati, Marshall Islands, Nauru, Northern Mariana Islands, and Palau.
- (19) Including American Samoa, Cook Islands, Niue, Pitcairn, Tokelau, Tuvalu, Wallis and Futuna Islands.

**ANNEX TABLE 2: Urban and rural distribution of youth, 1990-2005**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
<b>WORLD</b>	582 558	585 464	43	50	18	17	2	—
More developed regions	125 699	40 452	73	76	14	13	—	-1
Less developed regions	456 934	544 936	37	46	20	18	3	—
Least developed countries (LDCs)	47 281	107 732	24	31	23	19	4	2
Less developed regions, excluding LDCs	409 653	437 204	38	48	20	18	2	—
Less developed regions, excluding China	356 373	427 128	41	45	21	19	3	1
<b>Sub-Saharan Africa</b>	61 236	95 663	32	39	23	19	4	2
<b>AFRICA</b>	78 201	111 178	35	41	22	19	4	2
<b>Eastern Africa</b>	15 467	45 119	21	26	24	20	4	3
Burundi	190	1 527	7	11	25	21	6	3
Comoros	51	116	31	31	23	20	3	3
Djibouti	146	24	76	86	21	21	4	-1
Eritrea	217	758	19	22	25	21	4	3
Ethiopia	2 971	12 754	16	19	23	19	4	3
Kenya	1 945	5 971	22	25	26	21	4	3
Madagascar	1 104	2 526	26	30	21	19	4	3
Malawi	557	2 058	14	21	24	19	5	2
Mauritius	78	120	40	40	15	17	—	—
Mozambique	1 596	2 449	26	39	23	18	6	1
Réunion	120	10	81	92	17	17	1	-6
Rwanda	458	1 833	7	20	28	24	11	3
Somalia	553	998	30	36	19	19	2	—
Tanzania, United Republic of	2 253	5 622	22	29	24	19	5	3
Uganda	970	4 901	14	17	27	19	5	3
Zambia	951	1 476	43	39	24	20	2	3
Zimbabwe	1 297	1 970	33	40	28	23	4	2
<b>Middle Africa</b>	10 471	12 028	38	47	23	18	5	2
Angola	2 030	1 197	43	63	23	16	6	—
Cameroon	2 617	1 128	53	70	27	14	5	—
Central African Republic	364	491	41	43	23	19	3	3
Chad	525	1 450	22	27	20	19	5	3
Congo	516	215	63	71	24	15	3	1
Congo, Democratic Republic of the	4 132	7 439	31	36	22	19	4	3
Equatorial Guinea	40	52	39	43	21	18	3	2
Gabon	224	44	69	84	21	21	5	-1
<b>Northern Africa</b>	20 020	19 868	47	50	21	21	3	2
Algeria	4 635	2 774	52	63	22	23	4	1
Egypt	6 561	8 590	45	43	21	21	2	3

**Annex table 2: Urban and rural distribution of youth, 1990-2005 continued**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
Libyan Arab Jamahiriya	990	293	76	77	22	22	2	2
Morocco	3 378	3 059	54	52	20	22	1	2
Sudan	3 055	4 353	28	41	20	20	5	1
Tunisia	1 330	781	58	63	20	22	2	1
Western Sahara	71	18	90	80	20	21	5	10
<b>Southern Africa</b>	6 107	5 078	49	55	20	21	3	1
Botswana	280	150	49	65	27	19	5	1
Lesotho	114	352	15	24	25	23	6	2
Namibia	157	288	31	35	22	22	4	3
South Africa	5 482	4 088	52	57	19	21	2	1
Swaziland	74	200	28	27	27	23	3	3
<b>Western Africa</b>	26 136	29 085	38	47	23	18	5	2
Benin	765	967	41	44	23	19	4	4
Burkina Faso	655	2 162	18	23	26	19	5	2
Cape Verde	72	44	46	62	25	20	5	1
Côte d'Ivoire	2 241	1 793	47	56	26	18	5	3
Gambia	183	115	43	61	21	15	6	1
Ghana	2 578	2 152	41	55	24	18	5	1
Guinea	668	1 097	32	38	22	18	4	2
Guinea-Bissau	101	198	32	34	21	18	3	3
Liberia	463	229	52	67	23	16	5	1
Mali	835	1 528	27	35	24	19	5	2
Mauritania	269	319	45	46	22	18	3	3
Niger	430	1 890	17	19	20	17	4	3
Nigeria	14 574	14 137	39	51	22	19	5	2
Senegal	1 132	1 291	44	47	23	19	4	3
Sierra Leone	444	614	37	42	22	17	3	2
Togo	724	548	43	57	29	15	5	2
<b>ASIA</b>	306 864	413 996	33	43	20	17	2	—
<b>Eastern Asia</b>	118 733	124 995	32	49	18	15	2	-3
China	99 574	117 809	27	46	19	15	3	-3
Hong Kong, China, SAR	907	..	100	100	13	..	—	..
Japan	9 602	4 508	67	68	11	10	-2	-2
Korea, Democratic People's Republic of	2 345	1 362	60	63	16	15	-1	-2
Korea, Republic of	5 885	1 067	75	85	15	12	-1	-5
Macao, China, SAR	80	..	100	100	17	..	2	..
Mongolia	339	249	60	58	23	22	1	2
<b>South-central Asia</b>	110 923	218 015	30	34	22	19	3	2
Afghanistan	1 195	3 715	20	24	21	19	6	4
Bangladesh	9 361	21 805	23	30	24	19	4	1
Bhutan	57	89	21	39	29	20	7	1



**Annex table 2: Urban and rural distribution of youth, 1990-2005 continued**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
India	69 213	149 526	28	32	21	18	3	2
Iran (Islamic Republic of)	11 481	6 045	56	66	25	26	4	2
Kazakhstan	1 590	1 376	57	54	18	21	—	1
Kyrgyzstan	412	688	39	37	22	21	2	2
Nepal	949	4 489	11	17	22	20	6	2
Pakistan	13 184	21 796	33	38	24	21	4	3
Sri Lanka	578	3 045	18	16	20	19	—	1
Tajikistan	382	1 079	32	26	22	22	1	3
Turkmenistan	471	570	44	45	21	22	3	2
Uzbekistan	2 016	3 752	40	35	21	22	2	3
<b>South-eastern Asia</b>	50 421	56 520	35	47	21	18	3	—
Brunei Darussalam	49	18	66	74	18	18	3	—
Cambodia	706	2 573	14	22	26	23	7	3
Indonesia	22 822	20 024	36	53	21	17	3	-1
Lao People's Democratic Republic	333	886	15	27	21	22	6	2
Malaysia	3 435	1 482	53	70	20	18	4	-1
Myanmar	2 998	6 360	26	32	20	19	2	—
Philippines	10 980	5 889	51	65	21	19	4	—
Singapore	551	..	100	100	13	..	—	..
Thailand	3 507	6 608	33	35	17	15	-1	-1
Timor-Leste, Democratic Republic of	60	151	23	28	21	19	3	1
Viet Nam	4 978	12 531	23	28	22	20	3	1
<b>Western Asia</b>	26 788	14 466	63	65	19	20	2	2
Armenia	390	212	66	65	20	20	—	1
Azerbaijan	878	840	51	51	20	21	1	1
Bahrain	105	12	89	89	16	15	3	3
Cyprus	90	40	68	69	15	16	2	1
Georgia	381	359	56	51	16	17	-1	—
Iraq	3 754	1 881	71	67	20	20	2	3
Israel	981	99	89	91	16	18	2	1
Jordan	884	249	73	78	20	21	4	2
Kuwait	424	7	98	98	16	16	1	—
Lebanon	640	81	85	89	18	15	1	-1
Occupied Palestinian Territory	527	198	71	73	20	19	4	3
Oman	388	152	68	72	22	21	4	3
Qatar	106	5	92	95	14	14	4	1
Saudi Arabia	3 549	814	79	81	19	18	3	2
Syrian Arab Republic	2 331	2 058	51	53	23	23	4	3
Turkey	9 497	4 107	63	70	19	17	2	—

**Annex table 2: Urban and rural distribution of youth, 1990-2005 continued**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
United Arab Emirates	526	141	80	79	17	15	6	6
Yemen	1 336	3 211	22	29	22	21	6	4
<b>EUROPE</b>	73 837	27 692	72	73	14	13	—	—
<b>Eastern Europe</b>	33 924	14 444	70	70	17	15	1	1
Belarus	1 301	308	74	81	18	11	1	-1
Bulgaria	818	236	72	78	15	10	-1	-2
Czech Republic	987	363	75	73	13	13	-1	—
Hungary	872	417	70	68	13	12	-1	—
Moldova	323	447	56	42	20	20	-1	3
Poland	3 881	2 340	61	62	17	16	1	1
Romania	1 904	1 398	51	58	16	14	—	-2
Russian Federation	18 050	6 481	77	74	17	17	1	2
Slovakia	495	355	59	58	16	15	—	1
Ukraine	5 294	2 101	71	72	17	14	—	—
<b>Northern Europe</b>	10 774	1 823	85	86	13	12	—	-1
Denmark	509	88	84	85	11	11	-2	-2
Estonia	153	57	72	73	16	14	—	—
Finland	434	219	63	66	13	11	—	-1
Ireland	416	224	62	65	17	14	1	—
Latvia	245	117	71	68	16	16	—	1
Lithuania	360	170	72	68	16	15	-1	1
Norway	437	134	71	77	12	13	—	-2
Sweden	975	140	86	87	13	10	—	-1
United Kingdom	7 192	650	91	92	13	10	—	-1
<b>Southern Europe</b>	11 772	6 083	64	66	12	12	-1	-2
Albania	228	358	32	39	16	21	1	-1
Bosnia and Herzegovina	246	297	39	45	14	14	-1	-3
Croatia	343	255	54	57	13	13	—	-1
Greece	867	488	62	64	13	11	-1	-1
Italy	4 042	1 917	68	68	10	10	-3	-3
Malta	55	4	90	94	15	15	1	-2
Montenegro	60	39	47	60	16	17	2	-2
Portugal	764	563	47	58	13	13	—	-3
Serbia	741	718	50	51	15	15	—	—
Slovenia	132	136	51	49	13	13	-1	—
Spain	4 077	1 186	76	77	12	12	-1	-2
The former Yugoslav Republic of Macedonia	204	122	56	63	15	17	1	-1
<b>Western Europe</b>	17 367	5 342	75	76	12	12	-1	-1
Austria	636	366	63	63	12	13	-1	-1
Belgium	1 221	34	96	97	12	12	-1	-3
France	6 189	1 600	77	79	13	11	—	-1

**Annex table 2: Urban and rural distribution of youth, 1990-2005 continued**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
Germany	7 007	2 753	73	72	12	13	-1	—
Luxembourg	44	9	81	83	12	12	1	—
Netherlands	1 614	334	69	83	12	10	—	-5
Switzerland	651	241	73	73	12	12	—	—
<b>LATIN AMERICA AND THE CARIBBEAN</b>	80 988	23 008	72	78	19	18	2	—
<b>Caribbean</b>	4 653	2 501	58	65	18	17	1	-1
Bahamas	47	10	80	83	18	18	1	-1
Cuba	1 148	421	71	73	13	15	-2	-3
Dominican Republic	1 164	586	57	66	18	19	2	-1
Guadeloupe	58	1	99	98	13	13	-2	-1
Haiti	1 161	874	38	57	29	16	6	1
Jamaica	272	231	52	54	19	18	1	—
Martinique	55	1	98	98	14	14	-1	-2
Puerto Rico	593	17	72	97	15	18	2	-16
Trinidad and Tobago	35	251	9	12	22	22	4	1
<b>Central America</b>	18 969	7 977	68	70	19	19	1	—
Costa Rica	535	321	50	63	20	19	4	1
El Salvador	707	554	51	56	18	21	2	—
Guatemala	1 269	1 290	43	50	21	19	4	2
Honduras	722	723	45	50	23	20	3	2
Mexico	14 646	4 359	74	77	18	18	1	-1
Nicaragua	656	528	54	55	21	22	3	2
Panama	405	174	56	70	18	18	2	-2
<b>South America</b>	57 365	12 529	75	82	19	18	2	-1
Argentina	6 045	558	87	92	17	17	2	-1
Bolivia (Plurinational State of)	1 223	556	62	69	21	17	3	1
Brazil	29 827	5 522	76	84	19	19	2	-2
Chile	2 453	333	84	88	17	17	1	-1
Colombia	6 188	2 207	70	74	19	19	1	—
Ecuador	1 652	861	58	66	20	18	2	—
Guyana	38	91	31	29	18	17	-2	-1
Paraguay	750	474	52	61	22	19	4	1
Peru	3 842	1 478	73	72	20	19	1	1
Suriname	66	23	69	74	20	19	1	-1
Uruguay	461	36	89	93	15	14	—	-3
Venezuela (Bolivarian Republic of)	4 794	383	85	93	19	19	3	-3
<b>NORTHERN AMERICA</b>	39 222	7 895	78	83	15	12	1	-1
Canada	3 523	816	78	81	14	13	1	-1

**Annex table 2: Urban and rural distribution of youth, 1990-2005 continued**

Region, country or territory	Youth aged 15-24 years by urban-rural residence in 2005 (in thousands)		Percentage of youth living in urban areas		Percentage of youth in total urban population (2005)	Percentage of youth in total rural population (2005)	Annual growth rate for youth by urban-rural residence (1990-2005)	
	Urban	Rural	1990	2005			Urban	Rural
United States of America	35 682	7 077	78	83	15	12	1	-1
<b>OCEANIA</b>	3 446	1 696	69	67	15	17	—	1
<b>Australia/New Zealand</b>	3 032	363	87	89	14	12	—	-1
Australia	2 507	301	87	89	14	13	—	-1
New Zealand	525	62	87	89	15	11	—	-1
<b>Melanesia</b>	321	1 199	23	21	22	19	1	2
Fiji	92	72	44	56	22	18	3	—
Papua New Guinea	174	1 002	19	15	23	19	—	2
Solomon Islands	17	80	14	17	21	20	4	2

**Source:** United Nations, Department of Economic and Social Affairs, Population Division (2008), Urban and Rural Population by Age and Sex, 1950-2005, CD-Rom Edition.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

An em dash (—) indicates that the amount is nil or negligible.

**ANNEX TABLE 3: Youth literacy rates, 1985-2008**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)				Youth literacy rate (1995-2004)				Youth literacy rate (2005-2008)						
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
<b>AFRICA</b>		58	74	66			64	77	71			70	79	74	
<b>Eastern Africa</b>		58	68	63			65	77	71			68	77	73	
Burundi	1990	48	59	54		2000	70	77	73		2008	75	77	76	**
Comoros		..	..	..		2000	78	84	80		2008	84	86	85	**
Djibouti		..	..	..			..	..	..			..	..	..	
Eritrea		..	..	..		2002	69	86	78		2008	84	91	88	**
Ethiopia	1994	28	39	34		2004	39	62	50		2008	39	62	50	**
Kenya		..	..	..		2000	92	93	93		2008	93	92	92	**
Madagascar		..	..	..		2000	68	73	70		2008	68	73	70	**
Malawi	1987	49	70	59		1998	71	82	76		2008	85	87	86	**
Mauritius	1990	92	91	91		2000	95	94	95		2008	97	95	96	**
Mozambique		..	..	..		2003	50	74	62		2008	62	78	70	**
Réunion	1994	99	98	99	**	2004	100	99	100	**	2008	100	100	100	**
Rwanda	1991	..	..	75		2000	77	79	78		2008	77	77	77	**
Seychelles	1994	99	98	99		2002	99	99	99		2008	99	99	99	**
Somalia		..	..	..			..	..	..			..	..	..	
Tanzania, United Republic of	1988	78	86	82		2002	76	81	78		2008	76	79	78	**
Uganda	1991	63	77	70		2002	76	86	81		2008	86	89	87	**
Zambia	1990	66	67	66		2002	66	78	69		2008	68	82	75	**
Zimbabwe	1992	94	97	95			..	..	..		2008	99	98	99	**
<b>Middle Africa</b>		61	80	71			63	79	70			65	74	69	
Angola		..	..	..		2001	63	84	72		2008	65	81	73	**
Cameroon		..	..	..		2000	78	88	83		2008	84	88	86	**
Central African Republic	1988	35	63	48		2000	49	73	61		2008	56	72	64	**
Chad	1993	..	..	17		2004	31	54	42		2008	37	54	45	**
Congo		..	..	..			..	..	..		2005	78	87	80	
Congo, Democratic Republic of the		..	..	..		2001	63	78	70		2008	62	69	65	**
Equatorial Guinea		..	..	..		2000	97	98	97		2008	98	98	98	**
Gabon	1993	92	94	93		2004	96	98	97	**	2008	96	98	97	**
Sao Tome and Principe	1991	92	96	94		2001	95	96	95		2008	96	95	95	**
<b>Northern Africa</b>		59	78	69			73	85	79			82	90	86	
Algeria	1987	62	86	74		2002	86	94	90		2006	89	94	92	
Egypt	1986	54	71	63		1996	67	79	73		2006	82	88	85	
Libyan Arab Jamahiriya	1994	96	99	98	**	2004	99	100	100	**	2008	100	100	100	**
Morocco	1994	46	71	58		2004	60	81	70		2008	68	85	77	**
Sudan		..	..	..		2000	72	86	78		2008	82	89	85	**
Tunisia		..	..	..		2004	92	96	94		2008	96	98	97	



**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)				Youth literacy rate (1995-2004)				Youth literacy rate (2005-2008)						
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Western Sahara	..	..	..			..	..	..			..	..	..		
<b>Southern Africa</b>	94	93	93			94	93	94			97	95	96		
Botswana	1991	92	86	89		2003	96	92	94		2008	96	94	95	**
Lesotho		..	..	..		2000	97	85	91		2008	98	86	92	**
Namibia	1991	90	86	88		2001	93	91	92		2008	95	91	93	**
South Africa		..	..	..		1996	94	93	94		2008	98	96	97	**
Swaziland	1986	84	83	84		2000	93	91	92		2008	95	92	93	**
<b>Western Africa</b>		48	68	58			52	68	60			59	72	65	
Benin	1992	27	55	40		2002	33	59	45		2008	42	64	53	**
Burkina Faso	1991	14	27	20		2003	25	38	31		2007	33	47	39	
Cape Verde	1990	86	90	88		2004	98	96	97	**	2008	99	97	98	**
Côte d'Ivoire	1988	38	60	49		2000	52	71	61		2008	60	72	66	**
Gambia		..	..	..		2000	41	64	53		2008	58	70	64	**
Ghana		..	..	..		2000	65	76	71		2008	78	81	79	**
Guinea		..	..	..		2003	34	59	47		2008	51	67	59	**
Guinea-Bissau		..	..	..		2000	46	75	59		2008	62	78	70	**
Liberia	1994	54	66	60	**	2004	73	69	71	**	2008	80	70	75	**
Mali		..	..	..			..	..	..		2006	31	47	39	
Mauritania		..	..	..		2000	55	68	61		2008	63	71	67	**
Niger		..	..	..		2001	14	14	14		2005	23	52	37	
Nigeria	1991	62	81	71		2003	61	78	69		2008	65	78	72	**
Saint Helena		..	..	..			..	..	..			..	..	..	
Senegal	1988	28	49	38		2002	41	58	49		2006	45	58	51	
Sierra Leone		..	..	..		2004	37	60	48		2008	46	66	56	**
Togo		..	..	..		2000	64	84	74		2008	80	87	84	**
<b>ASIA</b>		76	87	82			83	91	87			87	93	90	
<b>Eastern Asia</b>		92	97	95			99	99	99			99	99	99	
China	1990	91	97	94		2000	99	99	99		2008	99	99	99	**
Hong Kong, China SAR		..	..	..			..	..	..			..	..	..	
Japan		..	..	..			..	..	..			..	..	..	
Korea, Democratic People's Republic of		..	..	..			..	..	..		2008	100	100	100	
Korea, Republic of		..	..	..			..	..	..			..	..	..	
Macao, China SAR		..	..	..		2001	100	99	100		2006	100	100	100	
Mongolia		..	..	..		2000	98	97	98		2008	97	93	95	**
<b>South-central Asia</b>		50	73	62			67	82	75			74	86	80	
Afghanistan		..	..	..			..	..	..			..	..	..	
Bangladesh	1991	38	52	45		2001	60	67	64		2008	76	73	74	**

**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)				Youth literacy rate (1995-2004)					Youth literacy rate (2005-2008)					
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Bhutan		..	..	..			..	..	..		2005	68	80	74	
India	1991	49	74	62		2001	68	84	76		2006	74	88	81	
Iran (Islamic Republic of)	1991	81	92	87			..	..	..		2006	96	97	97	
Kazakhstan	1989	100	100	100		1999	100	100	100		2008	100	100	100	**
Kyrgyzstan		..	..	..		1999	100	100	100		2008	100	100	100	**
Maldives	1990	98	98	98		2000	98	98	98		2006	99	99	99	
Nepal	1991	33	68	50		2001	60	81	70		2008	75	86	81	**
Pakistan		..	..	..		1998	43	67	55		2008	59	79	69	
Sri Lanka		..	..	..		2001	96	95	96		2008	99	97	98	
Tajikistan	1989	100	100	100		2000	100	100	100		2008	100	100	100	**
Turkmenistan		..	..	..		1995	100	100	100		2008	100	100	100	**
Uzbekistan		..	..	..		2000	100	100	100		2008	100	100	100	**
<b>South-eastern Asia</b>		93	95	94			96	97	96			96	96	96	
Brunei Darussalam	1991	98	98	98		2001	99	99	99		2008	100	100	100	**
Cambodia		..	..	..		2004	79	88	83		2008	86	89	87	
Indonesia	1990	95	97	96		2004	99	99	99		2006	96	97	97	
Lao People's Democratic Republic		..	..	..		2001	75	83	78		2005	79	89	84	
Malaysia	1991	95	96	96		2000	97	97	97		2008	99	98	98	**
Myanmar		..	..	..		2000	93	96	95		2008	95	96	96	**
Philippines	1990	97	96	97		2003	97	94	95		2008	96	94	95	**
Singapore	1990	99	99	99		2000	100	99	100		2008	100	100	100	**
Thailand		..	..	..		2000	98	98	98		2005	98	98	98	
Timor-Leste		..	..	..			..	..	..			..	..	..	
Viet Nam	1989	93	94	94		2000	94	96	95		2008	96	97	97	**
<b>Western Asia</b>		83	94	89			89	96	92			91	96	93	
Armenia	1989	100	100	100		2001	100	100	100		2008	100	100	100	**
Azerbaijan		..	..	..		1999	100	100	100		2007	100	100	100	
Bahrain	1991	97	97	97		2001	97	97	97		2008	100	100	100	**
Cyprus	1992	100	100	100		2001	100	100	100		2008	100	100	100	**
Georgia		..	..	..		2002	100	100	100		2008	100	100	100	**
Iraq		..	..	..		2000	80	89	85		2008	80	85	82	**
Israel		..	..	..			..	..	..			..	..	..	
Jordan		..	..	..		2003	99	99	99		2007	99	99	99	
Kuwait	1985	84	91	87		1995	90	94	92		2007	99	98	98	
Lebanon		..	..	..			..	..	..		2007	99	98	99	
Occupied Palestinian Territory		..	..	..		2004	99	99	99		2008	99	99	99	
Oman		..	..	..		2003	97	98	97		2008	98	98	98	

**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)					Youth literacy rate (1995-2004)					Youth literacy rate (2005-2008)				
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Qatar	1986	91	89	90		2004	98	95	96		2007	99	99	99	
Saudi Arabia	1992	81	94	88		2004	95	97	96		2008	96	98	97	**
Syrian Arab Republic		..	..	..		2004	90	95	92		2008	93	96	94	**
Turkey	1990	88	97	93		2004	93	98	96		2007	94	99	96	
United Arab Emirates	1985	85	81	82			..	..	..		2005	97	94	95	
Yemen	1994	35	83	60		2004	61	93	77	**	2008	70	95	83	**
<b>EUROPE</b>		100	100	100			100	100	100			100	100	100	
<b>Eastern Europe</b>		100	100	100			100	100	100			100	99	99	
Belarus	1989	100	100	100		1999	100	100	100		2008	100	100	100	**
Bulgaria		..	..	..		2001	98	98	98		2008	97	97	97	**
Czech Republic		..	..	..			..	..	..			..	..	..	
Hungary	1994	99	99	99	**	2004	99	99	99	**	2008	99	98	99	**
Poland		..	..	..		2004	100	100	100	**	2008	100	100	100	**
Republic of Moldova	1989	100	100	100		2000	100	99	100		2008	100	99	100	**
Romania	1992	99	99	99		2002	98	98	98		2008	98	97	97	**
Russian Federation	1989	100	100	100		2002	100	100	100		2008	100	100	100	**
Slovakia		..	..	..			..	..	..			..	..	..	
Ukraine		..	..	..		2001	100	100	100		2008	100	100	100	**
<b>Northern Europe</b>		100	100	100			100	100	100			100	100	100	
Denmark		..	..	..			..	..	..			..	..	..	
Estonia	1989	100	100	100		2000	100	100	100		2008	100	100	100	**
Faeroe Islands		..	..	..			..	..	..			..	..	..	
Finland		..	..	..			..	..	..			..	..	..	
Iceland		..	..	..			..	..	..			..	..	..	
Ireland		..	..	..			..	..	..			..	..	..	
Latvia	1989	100	100	100		2000	100	100	100		2008	100	100	100	**
Lithuania	1989	100	100	100		2001	100	100	100		2008	100	100	100	**
Norway		..	..	..			..	..	..			..	..	..	
Sweden		..	..	..			..	..	..			..	..	..	
United Kingdom		..	..	..			..	..	..			..	..	..	
<b>Southern Europe</b>		100	100	100			100	100	100			100	100	100	
Albania		..	..	..		2001	99	99	99		2008	100	99	99	**
Andorra		..	..	..			..	..	..			..	..	..	
Bosnia and Herzegovina		..	..	..		2000	100	100	100		2008	99	100	99	**
Croatia	1991	100	100	100		2001	100	100	100		2008	100	100	100	**
Gibraltar		..	..	..			..	..	..			..	..	..	
Greece	1991	99	99	99		2001	99	99	99		2008	99	99	99	**
Holy See		..	..	..			..	..	..			..	..	..	

**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)				Youth literacy rate (1995-2004)				Youth literacy rate (2005-2008)						
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Italy		..	..	..		2001	100	100	100		2008	100	100	100	**
Malta	1985	99	97	98		1995	98	94	96		2005	99	97	98	
Montenegro		..	..	..			..	..	..			..	..	..	
Portugal	1991	99	99	99			..	..	..		2008	100	100	100	**
San Marino		..	..	..			..	..	..			..	..	..	
Serbia		..	..	..			..	..	..		2008	99	99	99	**
Slovenia	1991	100	100	100		2004	100	100	100	**	2008	100	100	100	**
Spain	1991	100	100	100			..	..	..		2008	100	100	100	
The former Yugoslav Republic of Macedonia	1994	99	99	99		2002	98	99	99		2008	99	99	99	**
<b>Western Europe</b>		100	100	100			100	100	100			100	100	100	
Austria		..	..	..			..	..	..			..	..	..	
Belgium		..	..	..			..	..	..			..	..	..	
France		..	..	..			..	..	..			..	..	..	
Germany		..	..	..			..	..	..			..	..	..	
Liechtenstein		..	..	..			..	..	..			..	..	..	
Luxembourg		..	..	..			..	..	..			..	..	..	
Monaco		..	..	..			..	..	..			..	..	..	
Netherlands		..	..	..			..	..	..			..	..	..	
Switzerland		..	..	..			..	..	..			..	..	..	
<b>LATIN AMERICA AND THE CARIBBEAN</b>		92	92	92			96	96	96			97	97	97	
<b>Caribbean</b>		87	89	88			88	89	89			89	88	89	
Anguilla		..	..	..			..	..	..			..	..	..	
Antigua and Barbuda		..	..	..			..	..	..			..	..	..	
Aruba		..	..	..		2000	99	99	99		2008	99	99	99	**
Bahamas		..	..	..			..	..	..			..	..	..	
Barbados		..	..	..			..	..	..			..	..	..	
British Virgin Islands		..	..	..			..	..	..			..	..	..	
Cayman Islands		..	..	..			..	..	..		2007	99	99	99	
Cuba		..	..	..		2002	100	100	100		2008	100	100	100	**
Dominica		..	..	..			..	..	..			..	..	..	
Dominican Republic		..	..	..		2002	95	93	94		2007	97	95	96	
Grenada		..	..	..			..	..	..			..	..	..	
Guadeloupe	1994	100	100	100	**	2004	100	100	100	**	2008	100	100	100	**
Haiti		..	..	..			..	..	..			..	..	..	
Jamaica		..	..	..		1999	96	87	92		2008	98	92	95	**

**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)					Youth literacy rate (1995-2004)					Youth literacy rate (2005-2008)				
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Martinique	1994	99	100	100	**	2004	100	100	100	**	2008	100	100	100	**
Montserrat		..	..	..			..	..	..			..	..	..	
Netherlands Antilles	1992	97	97	97			..	..	..		2008	98	98	98	**
Puerto Rico	1990	94	92	93		2004	88	88	88	**	2008	85	86	85	**
Saint Kitts and Nevis		..	..	..			..	..	..			..	..	..	
Saint Lucia		..	..	..			..	..	..			..	..	..	
Saint Vincent and the Grenadines		..	..	..			..	..	..			..	..	..	
Trinidad and Tobago	1990	99	99	99		2004	100	100	100	**	2008	100	100	100	**
Turks and Caicos Islands		..	..	..			..	..	..			..	..	..	
United States Virgin Islands		..	..	..			..	..	..			..	..	..	
<b>Central America</b>		92	93	93			95	95	95			96	96	96	
Belize	1991	77	76	76			..	..	..			..	..	..	
Costa Rica		..	..	..		2000	98	97	98		2008	99	98	98	**
El Salvador	1992	85	85	85			..	..	..		2008	96	95	96	
Guatemala	1994	71	82	76		2002	78	86	82		2008	84	89	86	**
Honduras		..	..	..		2001	91	87	89		2007	95	93	94	
Mexico	1990	95	96	95		2004	98	98	98		2008	98	98	98	
Nicaragua		..	..	..		2001	89	84	86		2005	89	85	87	
Panama	1990	95	95	95		2000	96	97	96		2008	96	97	96	**
<b>South America</b>		93	91	92			98	97	97			98	98	98	
Argentina	1991	99	98	98		2001	99	99	99		2008	99	99	99	**
Bolivia (Pluri-national State of)	1992	92	96	94		2001	96	99	97		2007	99	100	99	
Brazil		..	..	..		2004	98	96	97		2007	99	97	98	
Chile	1992	99	98	98		2002	99	99	99		2008	99	99	99	
Colombia	1993	92	89	91		2004	98	98	98		2008	98	98	98	
Ecuador	1990	96	97	96		2001	96	96	96		2007	96	95	95	
Falkland Islands (Malvinas)		..	..	..			..	..	..			..	..	..	
French Guiana		..	..	..			..	..	..			..	..	..	
Guyana		..	..	..			..	..	..			..	..	..	
Paraguay	1992	95	96	96			..	..	..		2007	99	99	99	
Peru	1993	94	97	95		2004	96	98	97		2007	97	98	97	
Suriname		..	..	..		2004	94	96	95		2008	95	96	95	**
Uruguay	1985	99	98	99		1996	99	98	99		2008	99	99	99	
Venezuela (Bolivarian Republic of)	1990	96	95	95		2001	98	96	97		2007	99	98	98	



**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)				Youth literacy rate (1995-2004)				Youth literacy rate (2005-2008)						
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
<b>NORTHERN AMERICA***</b>		100	98	100			100	98	100			100	100	100	
Bermuda		..	..	..			..	..	..			..	..	..	
Canada		..	..	..			..	..	..			..	..	..	
Greenland		..	..	..			..	..	..			..	..	..	
Saint Pierre and Miquelon		..	..	..			..	..	..			..	..	..	
United States of America		..	..	..			..	..	..			..	..	..	
<b>OCEANIA***</b>		90	93	92			91	93	92			92	91	91	
<b>Oceania (Australia/New Zealand)***</b>		100	100	100			100	100	100			100	100	100	
Australia		..	..	..			..	..	..			..	..	..	
New Zealand		..	..	..			..	..	..			..	..	..	
<b>Oceania (Melanasia)***</b>		65	76	71			71	75	73			74	71	73	
Fiji		..	..	..			..	..	..			..	..	..	
New Caledonia	1989	99	99	99		1996	99	99	99		2008	100	99	100	**
Papua New Guinea		..	..	..		2000	64	69	67		2008	69	65	67	**
Solomon Islands		..	..	..		1999	80	90	85			..	..	..	
Vanuatu	1994	85	87	86	**	2004	92	92	92	**	2008	94	94	94	**
<b>Oceania (Micronesia)***</b>		86	91	88			84	90	87			80	88	84	
Guam		..	..	..			..	..	..			..	..	..	
Kiribati		..	..	..			..	..	..			..	..	..	
Marshall Islands		..	..	..			..	..	..			..	..	..	
Micronesia (Federated States of)		..	..	..			..	..	..			..	..	..	
Nauru		..	..	..			..	..	..			..	..	..	
Palau		..	..	..			..	..	..			..	..	..	
<b>Oceania (Polynesia)***</b>		96	96	96			95	96	96			96	96	96	
American Samoa		..	..	..			..	..	..			..	..	..	
Cook Islands		..	..	..			..	..	..			..	..	..	
French Polynesia		..	..	..			..	..	..			..	..	..	
Niue		..	..	..			..	..	..			..	..	..	
Samoa	1991	99	99	99		2004	99	99	99	**	2008	100	99	100	**
Tokelau		..	..	..			..	..	..			..	..	..	
Tonga		..	..	..		1996	99	99	99		2006	100	99	99	

**Annex table 3: Youth literacy rates, 1985-2008 continued**

Region, country or territory	Percentage of youth population that is literate, by age and sex														
	Youth literacy rate (1985-1994)					Youth literacy rate (1995-2004)					Youth literacy rate (2005-2008)				
	Percentage of youth population that is literate, by age and sex	Female	Male	Total	Note	Year	Female	Male	Total	Note	Year	Female	Male	Total	Note
Tuvalu		..	..	..			..	..	..			..	..	..	

**Source:** UNESCO Institute for Statistics (UIS) database (June 2010). Available from <http://stats.uis.unesco.org>.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

\* The regional averages presented in this table are calculated using the population weighted average of the latest available observed data point for each respective decade or the UIS 2008 GALP estimate for the country or territory without any observed data point for each decade. UIS estimates have been used for countries with missing data.

\*\* UIS estimation.

\*\*\* These averages are for the United Nations Statistical Division regional groupings.

**EXPLANATORY NOTE:**

Data in the UNESCO Institute of Statistics literacy table are for the reference periods 1985-1994, 1995-2004 and 2005-2008. Data are for the most recent year available during the period specified. Most of these data are obtained from national surveys and censuses undertaken during these reference periods unless otherwise indicated in the last column of the table. Refer to the list of literacy definitions (<http://www.uis.unesco.org/glossary/>), along with other metadata, when interpreting the data.

**POPULATION DATA:**

United Nations, Department of Economic and Social Affairs, Population Division (2009), World Population Prospects: The 2008 Revision (advanced Excel tables). The population estimate used corresponds to the reference year between 2005 and 2008.

**ANNEX TABLE 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008**

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note
<b>AFRICA</b>																
<b>Eastern Africa</b>	Burundi	136	139	132	0.95		18	21	15	0.71	**	3	..	..	..	+1
	Comoros	119	125	114	0.92		..	..	..	..		..	..	..	..	
	Djibouti	46	49	43	0.88		30	35	24	0.70		3	3	2	0.69	-1
	Eritrea	52	57	47	0.82		30	36	25	0.71	**	2	3	1	0.32	+1
	Ethiopia	98	103	92	0.89		33	39	28	0.72		4	5	2	0.31	
	Kenya	112	113	110	0.98		58	61	56	0.92		4	5	3	0.70	+1
	Madagascar	152	154	149	0.97		30	31	29	0.94		3	4	3	0.89	
	Malawi	120	119	122	1.03		29	32	27	0.85		-	1	-	0.51	-1
	Mauritius	100	100	100	1.00	+1	87	86	88	1.02	**,+1	26	24	28	1.17	**
	Mozambique	114	121	107	0.88		21	24	18	0.75		..	..	..	..	
	Reunion	..	..	..	..		..	..	..	..		..	..	..	..	
	Rwanda	151	150	152	1.01		22	23	21	0.90		4	..	..	..	
	Seychelles	131	131	130	0.99	*	110	101	120	1.19	*	--	--	--	--	+1
	Somalia	33	42	23	0.55	-1	8	11	5	0.46	**, -1	..	..	..	..	
	Tanzania, United Republic of	110	111	109	0.99		..	..	..	..		1	2	1	0.48	-1
	Uganda	120	120	121	1.01		25	27	23	0.85		4	4	3	0.80	
	Zambia	119	120	118	0.98		46	50	41	0.83		..	..	..	..	
	Zimbabwe	104	104	103	0.99	-2	41	43	39	0.92	-2	..	..	..	..	
<b>Middle Africa</b>	Angola	128	141	114	0.81		..	..	..	..		3	..	..	..	-2
	Cameroon	111	119	102	0.86		37	41	33	0.80		9	10	8	0.79	+1
	Central African Republic	89	104	74	0.71	+1	14	18	10	0.56	+1	2	3	1	0.43	+1
	Chad	83	97	68	0.70		19	26	12	0.45	-1	2	3	..	0.15	
	Congo	114	118	110	0.94		..	..	..	..		..	..	..	..	
	Congo, Democratic Republic of the	90	99	82	0.83		35	45	25	0.55	*	5	..	..	..	
	Equatorial Guinea	99	101	96	0.95	-1	..	..	..	..		..	..	..	..	
	Gabon	..	..	..	..		..	..	..	..		..	..	..	..	
	Sao Tome and Principe	133	133	134	1.01	+1	51	49	54	1.12	+1	4	4	4	0.93	+1
<b>Northern Africa</b>	Algeria	108	111	104	0.94		..	..	..	..		24	20	28	1.40	-1
	Egypt	100	102	97	0.95	-1	..	..	..	..		28	..	..	..	
	Libyan Arab Jamahiriya	110	113	108	0.95	-2	93	86	101	1.17	-2	..	..	..	..	

Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note
	Morocco	107	112	102	0.91		56	60	51	0.86	**,-1	12	13	12	0.89	
	Sudan	74	78	70	0.90	+1	38	40	36	0.88	+1	..	..	..	..	
	Tunisia	107	108	106	0.98		92	88	96	1.08		34	27	40	1.49	
	Western Sahara	..	..	..	..		..	..	..	..		..	..	..	..	
<b>Southern Africa</b>	Botswana	110	111	109	0.98	-2	80	78	82	1.06	-2	8	7	8	1.15	-2
	Lesotho	108	108	107	0.99	-1	40	34	45	1.32	**,-1	4	3	4	1.19	-2
	Namibia	112	113	112	0.99		66	61	71	1.17		9	8	10	1.32	
	South Africa	105	106	103	0.96	-1	95	93	97	1.05	**,-1	..	..	..	..	
	Swaziland	108	112	104	0.93	-1	53	56	50	0.90	-1	4	4	4	0.97	-2
<b>Western Africa</b>	Benin	117	125	108	0.87		..	..	..	..		6	..	..	..	-2
	Burkina Faso	78	83	74	0.89	+1	20	23	17	0.74	+1	3	5	2	0.49	+1
	Cape Verde	101	105	98	0.94		..	..	..	..		12	11	13	1.24	
	Côte d'Ivoire	74	83	66	0.79		..	..	..	..		8	11	6	0.50	-1
	Gambia	86	84	89	1.06		51	52	49	0.94		..	..	..	..	
	Ghana	105	106	105	0.99		55	58	52	0.89		6	8	4	0.54	-1
	Guinea	90	97	83	0.85		36	45	26	0.59		9	14	5	0.34	
	Guinea-Bissau	120	..	..	..	-2	36	..	..	..	-2	3	..	..	..	-2
	Liberia	91	96	86	0.90		32	36	27	0.75		..	..	..	..	
	Mali	95	103	86	0.84	+1	38	46	30	0.65	+1	5	8	3	0.41	+1
	Mauritania	104	101	108	1.08	+1	24	26	23	0.89	**,-1	4	..	..	..	-1
	Niger	62	69	55	0.80	+1	12	14	9	0.61	+1	1	2	1	0.34	+1
	Nigeria	93	99	87	0.88	-1	30	34	27	0.77	-1	..	..	..	..	
	Saint Helena	..	..	..	..		..	..	..	..		..	..	..	..	
	Senegal	84	83	84	1.02		31	34	27	0.81		8	10	6	0.54	*
	Sierra Leone	158	168	148	0.88	-1	35	42	28	0.66	-1	..	..	..	..	
	Togo	115	119	111	0.94	+1	41	54	28	0.53	**,-1	5	..	..	..	-1
<b>ASIA</b>																
<b>Eastern Asia</b>	China	113	111	116	1.04		76	74	78	1.05		23	22	23	1.04	
	Hong Kong, China SAR	..	..	..	..		83	82	84	1.02		34	34	35	1.02	-1
	Japan	102	102	102	1.00		101	101	101	1.00		58	62	54	0.88	
	Korea, Democratic People's Republic of	..	..	..	..		..	..	..	..		..	..	..	..	
	Korea, Republic of	105	106	104	0.98		97	99	95	0.96		98	115	79	0.69	
	Macao, China SAR	100	102	97	0.95	+1	92	94	90	0.96	+1	57	59	54	0.91	

Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note
	Mongolia	102	102	101	0.99		95	92	99	1.08		50	39	61	1.57	
South-central Asia	Afghanistan	106	127	84	0.66		29	41	15	0.38	-1	..	..	..	..	
	Bangladesh	92	89	94	1.06	*	44	43	45	1.05	-1	7	9	5	0.55	-1
	Bhutan	109	108	110	1.01	+1	62	62	61	0.99	+1	7	8	5	0.59	
	India	113	115	111	0.97	-1	57	61	52	0.86	-1	13	16	11	0.70	-1
	Iran (Islamic Republic of)	128	107	151	1.40		80	80	79	0.98		36	34	39	1.14	
	Kazakhstan	108	108	109	1.00	+1	99	101	98	0.98	+1	41	34	49	1.45	+1
	Kyrgyzstan	95	95	94	0.99		85	85	86	1.01	*	52	44	60	1.36	
	Maldives	112	115	109	0.94		84	81	86	1.05	**,-2	--	--	--	--	**,-2
	Nepal	..	..	..	..		..	..	..	..		..	..	..	..	
	Pakistan	85	93	77	0.83		33	37	28	0.76		5	6	5	0.85	*
Sri Lanka	101	101	102	1.00		..	..	..	..		..	..	..	..		
Tajikistan	102	104	100	0.96		84	90	78	0.87		20	29	11	0.40		
Turkmenistan	..	..	..	..		..	..	..	..		..	..	..	..		
Uzbekistan	93	94	92	0.98		101	102	101	0.98		10	12	8	0.68		
South-eastern Asia	Brunei Darussalam	107	107	107	1.00		97	96	98	1.02		16	11	21	1.99	
	Cambodia	116	120	112	0.94		40	44	36	0.82	-1	7	9	5	0.54	
	Indonesia	119	121	118	0.97		74	75	74	0.99		21	22	20	0.92	
	Lao People's Democratic Republic	112	117	106	0.91		44	48	39	0.81		13	15	12	0.78	
	Malaysia	97	97	96	1.00	-1	68	66	71	1.07	-1	32	28	36	1.29	-1
	Myanmar	117	117	117	0.99		53	..	..	..		11	9	12	1.37	-1
	Philippines	110	111	109	0.98		82	79	86	1.09		29	26	23	1.24	
	Singapore	..	..	..	..		..	..	..	..		..	..	..	..	
	Thailand	91	92	90	0.98	+1	76	73	79	1.09	+1	45	40	49	1.24	+1
	Timor-Leste	107	110	103	0.94		..	..	..	..		15	18	13	0.71	+1
Viet Nam	..	..	..	..		..	..	..	..		..	..	..	..		
Western Asia	Armenia	105	104	106	1.02		88	86	90	1.05		34	31	37	1.20	-1
	Azerbaijan	116	117	115	0.99	*	106	107	104	0.98	*	19	19	20	1.02	+1
	Bahrain	105	106	104	0.98		97	95	99	1.04		30	18	44	2.53	-2
	Cyprus	103	104	103	0.99		98	98	99	1.01	*	43	44	42	0.96	*
	Georgia	107	109	106	0.98		90	92	88	0.96		34	31	37	1.19	*
	Iraq	..	..	..	..		..	..	..	..		..	..	..	..	
	Israel	111	110	111	1.01		90	89	91	1.01		60	52	68	1.31	
	Jordan	97	97	97	1.01		88	87	90	1.04		41	39	43	1.11	
	Kuwait	95	96	95	0.98		90	88	91	1.04		..	..	..	..	
	Lebanon	103	104	102	0.98	+1	82	78	87	1.11	+1	53	48	57	1.19	+1



**Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued**

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio***	Note
	Occupied Palestinian Territory	80	80	79	1.00		90	87	93	1.07		47	42	52	1.23	
	Oman	75	74	75	1.01		88	90	87	0.97		29	27	32	1.18	+1
	Qatar	109	109	108	0.99		93	79	115	1.46		11	5	31	6.05	
	Saudi Arabia	98	100	96	0.96		95	102	87	0.85	**	30	23	37	1.65	
	Syrian Arab Republic	124	127	122	0.96		74	75	73	0.98		..	..	..	..	
	Turkey	99	101	98	0.97		82	87	77	0.89		38	43	34	0.78	
	United Arab Emirates	108	108	108	1.00	-1	94	93	95	1.02	**,-1	25	17	36	2.05	
	Yemen	85	94	76	0.80		..	..	..	..		10	14	6	0.42	-1
<b>EUROPE</b>																
<b>Eastern Europe</b>	Belarus	99	98	100	1.02		95	94	96	1.02	-1	73	60	86	1.43	
	Bulgaria	101	101	101	1.00		89	90	87	0.96		51	44	58	1.30	
	Czech Republic	103	103	103	0.99		95	94	96	1.01		59	51	67	1.32	
	Hungary	99	100	98	0.99		97	98	97	0.98		65	54	77	1.43	
	Poland	97	97	97	1.00	-1	100	100	99	0.99	-1	67	56	78	1.40	-1
	Republic of Moldova	94	95	93	0.98	*	88	86	89	1.03	*	40	33	47	1.45	*
	Romania	100	100	99	0.99		92	92	91	0.99		66	56	75	1.34	
	Russian Federation	97	97	97	1.00		85	86	84	0.97		77	66	89	1.36	
	Slovakia	103	103	102	0.99		92	92	93	1.01		54	42	66	1.58	
	Ukraine	98	98	99	1.00	*	94	95	94	0.98	*	79	71	88	1.25	*
<b>Northern Europe</b>	Denmark	99	99	99	1.00	-1	119	117	121	1.03	-1	80	67	94	1.41	-1
	Estonia	100	101	99	0.99		99	98	101	1.03		64	48	80	1.69	
	Faeroe Islands	..	..	..	..		..	..	..	..		..	..	..	..	
	Finland	97	98	97	0.99		110	108	113	1.05		94	85	105	1.24	
	Iceland	98	98	98	1.00		110	108	112	1.03		75	52	99	1.91	
	Ireland	105	105	105	1.01		115	111	119	1.06		58	53	64	1.22	
	Latvia	98	100	96	0.96		98	97	99	1.03		69	48	91	1.89	
	Lithuania	96	97	95	0.98		99	99	99	1.00		77	61	95	1.56	
	Norway	99	99	99	1.00		112	113	110	0.98		73	56	91	1.62	
	Sweden	95	95	95	0.99		103	104	103	0.99		71	55	88	1.59	
	United Kingdom	106	106	106	1.00		99	98	100	1.02		57	48	67	1.40	
<b>Southern Europe</b>	Albania	..	..	..	..		..	..	..	..		..	..	..	..	
	Andorra	87	88	85	0.96		82	78	87	1.11	*	11	9	13	1.45	*

Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio***	Note
	Bosnia and Herzegovina	109	109	110	1.01		90	89	91	1.02		34	..	..	..	-1
	Croatia	99	99	98	1.00	-1	94	92	95	1.03	-1	47	42	52	1.22	-1
	Gibraltar	..	..	..	..		..	..	..	..		-	-	-	-	
	Greece	101	101	101	1.00	-1	102	104	99	0.95	-1	91	87	95	1.10	-1
	Holy See	-	-	-	-		-	-	-	-		..	..	..	..	
	Italy	104	104	103	0.99	-1	100	100	99	0.99	-1	67	56	79	1.41	-1
	Malta	99	99	99	1.00	-1	98	97	99	1.02	-1	33	27	39	1.42	-1
	Montenegro	..	..	..	..		..	..	..	..		..	..	..	..	
	Portugal	115	118	112	0.95	-1	101	98	105	1.07	-1	57	51	63	1.22	-1
	San Marino	..	..	..	..		..	..	..	..		..	..	..	..	
	Serbia	98	98	98	1.00		89	87	90	1.03	*	48	42	54	1.29	*
	Slovenia	97	98	97	0.99		97	97	97	0.99		87	71	103	1.46	
	Spain	107	107	106	0.99		120	117	123	1.06		71	63	78	1.24	
	The former Yugoslav Republic of Macedonia	93	93	93	1.00	-1	84	85	82	0.97		40	37	44	1.20	
<b>Western Europe</b>																
	Austria	100	100	99	0.99		100	102	98	0.96		55	50	59	1.19	
	Belgium	103	103	103	1.00		108	110	107	0.97		63	56	70	1.26	
	France	110	111	109	0.99		113	113	113	1.00		55	48	61	1.28	
	Germany	105	105	105	1.00		102	103	100	0.98		..	..	..	..	
	Liechtenstein	107	107	107	1.00		108	117	100	0.86	*	37	48	25	0.52	*
	Luxembourg	100	100	101	1.01		96	95	98	1.03		10	9	11	1.12	-2
	Monaco	128	131	125	0.95	*,+1	153	153	154	1.01	*,+1	-	-	-	-	
	Netherlands	107	108	106	0.98		121	122	120	0.98		61	58	64	1.11	
	Switzerland	103	103	103	1.00		96	98	94	0.95		49	49	49	1.00	
<b>LATIN AMERICA AND THE CARIBBEAN</b>																
<b>Caribbean</b>																
	Anguilla	94	94	94	1.00		80	82	78	0.95	**	5	2	8	5.01	**
	Antigua and Barbuda	100	105	96	0.92	*	114	119	110	0.93	*	..	..	..	..	
	Aruba	114	116	112	0.96		95	92	98	1.06		33	27	38	1.39	
	Bahamas	103	103	103	1.00		93	92	94	1.03		..	..	..	..	
	Barbados	..	..	..	..		..	..	..	..		..	..	..	..	
	British Virgin Islands	108	110	105	0.96	**,-1	101	95	106	1.11	**,-1	1	-	2	8.30	**
	Cayman Islands	93	102	85	0.84	*	88	87	88	1.01	*	36	24	47	1.98	*
	Cuba	104	104	103	0.98	+1	90	90	89	0.99	+1	118	88	149	1.68	+1

Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note
	Dominica	82	79	84	1.06		105	109	101	0.93	*	4	2	6	3.26	*
	Dominican Republic	104	108	101	0.93		75	69	81	1.19		..	..	..	..	
	Grenada	103	105	100	0.95		108	112	103	0.92		59	51	68	1.34	+1
	Guadeloupe	..	..	..	..		..	..	..	..		..	..	..	..	
	Haiti	..	..	..	..		..	..	..	..		..	..	..	..	
	Jamaica	93	95	92	0.97		91	89	93	1.04		24	15	33	2.22	
	Martinique	..	..	..	..		..	..	..	..		..	..	..	..	
	Montserrat	107	101	113	1.12	*, -1	102	101	103	1.02	*, -1	17	6	31	4.99	**
	Netherlands Antilles	..	..	..	..		..	..	..	..		..	..	..	..	
	Saint Kitts and Nevis	..	..	..	..		..	..	..	..		..	..	..	..	
	Saint Lucia	98	99	97	0.97		93	91	95	1.04		15	9	20	2.25	
	Saint Vincent and the Grenadines	109	114	104	0.92		108	102	114	1.11		..	..	..	..	
	Trinidad and Tobago	103	105	102	0.97		89	86	92	1.07	**	..	..	..	..	
	Turks and Caicos Islands	..	..	..	..		..	..	..	..		-	-	-	0.90	**
	U.S. Virgin Islands	..	..	..	..		..	..	..	..		..	..	..	..	
<b>Central America</b>	Belize	120	122	119	0.97		75	72	78	1.08		11	8	15	1.85	+1
	Costa Rica	110	110	109	0.99		89	87	92	1.06		..	..	..	..	
	El Salvador	115	117	113	0.97		64	63	64	1.02		25	23	26	1.09	
	Guatemala	114	117	110	0.94		57	58	55	0.93		18	18	18	1.00	-1
	Honduras	116	116	116	1.00		65	57	72	1.27		19	15	22	1.51	*
	Mexico	114	115	113	0.98		90	87	93	1.06		27	28	27	0.98	
	Nicaragua	117	118	116	0.98		68	64	72	1.13		..	..	..	..	
	Panama	111	113	109	0.97		71	68	74	1.08		45	35	56	1.59	-1
<b>South America</b>	Argentina	116	116	115	0.99	-1	85	80	90	1.13	-1	33	27	38	1.39	
	Bolivia (Plurinational State of)	108	108	108	1.00	-1	82	83	81	0.97	-1	38	42	35	0.84	*, -1
	Brazil	127	132	123	0.93		101	96	106	1.11		34	30	39	1.29	
	Chile	106	108	103	0.95	-1	91	89	92	1.03	-1	52	52	52	1.01	-1
	Colombia	120	120	120	0.99		91	86	95	1.10		35	36	35	0.99	
	Ecuador	118	119	118	1.00		76	75	76	1.01	**	42	39	45	1.15	
	Falkland Islands (Malvinas)	..	..	..	..		..	..	..	..		..	..	..	..	

Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***	Note
	French Guiana	..	..	..	..		..	..	..	..		..	..	..	..	
	Guyana	109	109	108	0.99		102	102	102	1.01		12	10	13	1.42	
	Paraguay	105	107	104	0.97	-1	66	65	67	1.04	-1	29	24	33	1.35	-1
	Peru	109	109	109	1.00		89	89	89	0.99		34	33	36	1.06	**,-2
	Puerto Rico	..	..	..	..		..	..	..	..		..	..	..	..	
	Suriname	114	116	111	0.95		75	66	85	1.28		..	..	..	..	
	Uruguay	114	116	113	0.97	-1	92	93	91	0.99	-1	64	47	82	1.75	-1
	Venezuela (Bolivarian Republic of)	103	104	102	0.97		81	77	85	1.10		79	59	99	1.69	*
<b>NORTHERN AMERICA</b>																
	Bermuda	100	108	92	0.85	*,-2	84	82	87	1.06	*,-2	25	15	35	2.38	**,-1
	Canada	99	99	99	1.00	-2.0	101	102	100	0.98	-2	..	..	..	..	
	Greenland	..	..	..	..		..	..	..	..		..	..	..	..	
	Saint Pierre and Miquelon	..	..	..	..		..	..	..	..		..	..	..	..	
	United States of America	99	98	99	1.01		94	94	94	1.00		83	69	97	1.40	
<b>OCEANIA</b>																
	Australia	106	106	105	1.00		149	153	146	0.95		77	67	87	1.30	
	New Zealand	101	101	101	1.00		119	115	122	1.05		78	64	94	1.48	
<b>Melanesia</b>																
	Fiji	94	95	94	0.99		81	78	84	1.07		..	..	..	..	
	New Caledonia	..	..	..	..		..	..	..	..		..	..	..	..	
	Papua New Guinea	55	59	50	0.84	-2	..	..	..	..		..	..	..	..	
	Solomon Islands	107	109	106	0.97	-1	35	38	32	0.84	-1	-	-	-	-	
	Vanuatu	109	111	106	0.96	-1	..	..	..	..		..	..	..	..	
<b>Micronesia</b>																
	Guam	..	..	..	..		..	..	..	..		..	..	..	..	
	Kiribati	..	..	..	..		..	..	..	..		-	-	-	-	
	Marshall Islands	93	94	92	0.97	*,-1	66	66	67	1.02	*,-1	..	..	..	..	
	Micronesia (Federated States of)	110	110	111	1.01	-1	91	..	..	..	*,-1	..	..	..	..	
	Nauru	82	80	84	1.06	**	52	47	58	1.23	**	-	-	-	-	*,-2
	Palau	99	98	100	1.02	*,-1	97	98	96	0.97	**,-1	..	..	..	..	
<b>Polynesia</b>																
	American Samoa	..	..	..	..		..	..	..	..		..	..	..	..	
	Cook Islands	..	..	..	..		..	..	..	..		..	..	..	..	
	French Polynesia	..	..	..	..		..	..	..	..		..	..	..	..	

**Annex table 4: Gross enrolment ratios for primary, secondary and tertiary education, 2008 continued**

Region and subregion	Country or territory	Gross enrolment ratios														
		Primary education					Secondary education					Tertiary education				
		Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note	Total	Male	Female	Female/male ratio**	Note
	Niue	..	..	..	..		..	..	..	..		-	-	-	-	
	Samoa	100	101	99	0.98	+1	76	72	81	1.13	+1	..	..	..	..	
	Tokelau	..	..	..	..		..	..	..	..		-	-	-	-	
	Tonga	112	113	110	0.97	-2	103	101	105	1.03	-2	..	..	..	..	
	Tuvalu	106	106	105	0.99	*,-2	..	..	..	..		-	-	-	-	

Source: UNESCO Institute for Statistics (UIS) database (June 2010). Available from <http://stats.uis.unesco.org>.

**NOTES:**

A dash (-) indicates that the item is not applicable.

Two dots (..) indicate that data are not available or are not separately reported.

An em dash (--) indicates that the item is nil or negligible.

\* National estimate.

\*\* UIS estimate.

(-1) data refer to 2007.

(-2) data refer to 2006.

(+1) data refer to 2009.



**ANNEX TABLE 5: Net Enrolment Ratio for primary and secondary education, 2008**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
<b>AFRICA</b>											
<b>Eastern Africa</b>	Burundi		99	..	..	..		..	..	..	..
	Comoros		..	..	..	..		..	..	..	..
	Djibouti		48	51	44	0.86	**	22	25	18	0.71
	Eritrea		40	43	37	0.87	**	26	30	22	0.71
	Ethiopia		79	82	76	0.93	**,-2	25	31	20	0.64
	Kenya		82	82	83	1.01	**	49	50	48	0.96
	Madagascar	+1	99	99	100	1.01		24	23	24	1.05
	Malawi		91	88	94	1.06		25	26	24	0.93
	Mauritius	-1	94	93	95	1.01		..	..	..	..
	Mozambique	-1	80	82	77	0.94		6	6	6	0.93
	Reunion		..	..	..	..	..	..	..	..	..
	Rwanda		96	95	97	1.03		..	..	..	..
	Seychelles		..	..	..	..	*	92	..	..	..
	Somalia		..	..	..	..		..	..	..	..
	Tanzania, United Republic of		100	..	..	..		..	..	..	..
	Uganda		97	96	99	1.03	**	22	22	21	0.92
	Zambia		97	96	97	1.02	**	43	47	39	0.82
	Zimbabwe	-2	91	90	91	1.02	-2	38	39	37	0.96
<b>Middle Africa</b>	Angola		..	..	..	..		..	..	..	..
	Cameroon		88	94	82	0.87		..	..	..	..
	Central African Republic	+1	67	77	57	0.74	+1	10	13	8	0.58
	Chad		..	..	..	..		..	..	..	..
	Congo	-2	64	66	62	0.93		..	..	..	..
	Congo, Democratic Republic of the		..	..	..	..		..	..	..	..
	Equatorial Guinea		..	..	..	..		..	..	..	..
	Gabon		..	..	..	..		..	..	..	..
	Sao Tome and Principe	+1	98	..	..	..	-1	38	36	40	1.11
<b>Northern Africa</b>	Algeria		96	96	95	0.99		..	..	..	..
	Egypt	**,-1	95	97	93	0.96		..	..	..	..
	Libyan Arab Jamahiriya		..	..	..	..		..	..	..	..
	Morocco		90	92	88	0.95		..	..	..	..

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	Sudan		..	..	..	..		..	..	..	..
	Tunisia		100	..	..	..		71	67	76	1.13
	Western Sahara		..	..	..	..		..	..	..	..
<b>Southern Africa</b>	Botswana	-2	90	88	91	1.03		..	..	..	..
	Lesotho	-1	73	71	75	1.05	**,-1	25	20	31	1.58
	Namibia		91	88	93	1.06	**,-1	54	49	60	1.23
	South Africa	**,-1	93	92	94	1.02	**,-1	72	70	74	1.06
	Swaziland	-1	83	82	84	1.02	-1	29	31	26	0.86
<b>Western Africa</b>	Benin		93	99	86	0.87		..	..	..	..
	Burkina Faso	+1	64	68	60	0.89	+1	15	18	13	0.74
	Cape Verde		85	86	84	0.98		..	..	..	..
	Côte d'Ivoire		..	..	..	..		..	..	..	..
	Gambia		72	69	74	1.07		42	42	41	0.98
	Ghana		77	76	77	1.01	**	47	49	45	0.92
	Guinea		72	77	67	0.87		28	34	21	0.61
	Guinea-Bissau		..	..	..	..		..	..	..	..
	Liberia		..	..	..	..		..	..	..	..
	Mali	+1	77	84	70	0.83		29	35	22	0.63
	Mauritania	+1	77	74	79	1.06	**,-1	16	17	15	0.88
	Niger	+1	54	60	48	0.79	-1	9	11	7	0.62
	Nigeria	**,-1	63	66	60	0.91	**,-1	26	29	22	0.77
	Saint Helena		..	..	..	..		..	..	..	..
	Senegal		75	75	76	1.02	**,-1	25	28	22	0.76
	Sierra Leone		..	..	..	..	-1	25	30	20	0.69
	Togo	+1	94	98	89	0.91		..	..	..	..
<b>ASIA</b>											
<b>Eastern Asia</b>	China		..	..	..	..		..	..	..	..
	Hong Kong, China SAR		..	..	..	..	*	75	74	76	1.03
	Japan		100	..	..	..		98	98	98	1.00
	Korea, Democratic People's Republic of		..	..	..	..		..	..	..	..
	Korea, Republic of		99	100	98	0.98		95	97	94	0.96
	Macao, China SAR	+1	87	88	87	0.99	+1	76	76	76	1.00
	Mongolia		99	99	99	1.00		82	79	85	1.08

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
South-central Asia	Afghanistan		..	..	..	..	**,-1	27	38	15	0.38
	Bangladesh		85	85	86	1.02	-1	41	40	43	1.05
	Bhutan	+1	88	87	90	1.03	+1	47	46	49	1.07
	India	-1	96	97	94	0.96		..	..	..	..
	Iran (Islamic Republic of)		..	..	..	..		75	75	75	1.00
	Kazakhstan	+1	89	89	90	1.02	+1	89	88	89	1.01
	Kyrgyzstan		91	91	91	1.00		80	80	81	1.01
	Maldives		96	97	95	0.98	**,-1	69	68	71	1.04
	Nepal		..	..	..	..		..	..	..	..
	Pakistan	*	66	72	60	0.83		33	37	28	0.76
	Sri Lanka		99	99	100	1.01					
	Tajikistan		98	99	96	0.96		83	88	77	0.88
	Turkmenistan		..	..	..	..		..	..	..	..
Uzbekistan		91	92	90	0.98		91	92	90	0.98	
South-eastern Asia	Brunei Darussalam		97	97	97	1.00		88	87	90	1.04
	Cambodia		89	90	87	0.96	**,-1	34	36	32	0.88
	Indonesia		99	..	..	..		68	69	68	0.99
	Lao People's Democratic Republic		82	84	81	0.96	**,-1	36	39	33	0.87
	Malaysia	-1	96	96	96	1.00	-1	68	66	70	1.07
	Myanmar		..	..	..	..		49	49	50	1.01
	Philippines		92	91	93	1.02		61	55	66	1.19
	Singapore		..	..	..	..		..	..	..	..
	Thailand	+1	90	91	89	0.99	+1	72	68	77	1.13
	Timor-Leste		77	79	76	0.96	**,-1	31	30	33	1.10
Viet Nam		..	..	..	..		..	..	..	..	
Western Asia	Armenia	-1	93	92	94	1.03	-1	86	83	88	1.06
	Azerbaijan	*	96	97	95	0.98	*	98	99	97	0.98
	Bahrain		99	100	99	0.99		89	87	92	1.05
	Cyprus		99	99	99	0.99	*	96	95	97	1.02
	Georgia		99	..	..	..	**,-1	81	82	79	0.96
	Iraq		..	..	..	..		..	..	..	..
	Israel		97	97	98	1.01		86	85	88	1.02
	Jordan		94	93	94	1.01		82	80	84	1.05
	Kuwait		93	94	93	0.98	**,-1	80	80	80	1.01
	Lebanon	+1	91	92	90	0.99	+1	75	71	79	1.11

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	Occupied Palestinian Territory		77	77	78	1.00	**	87	85	90	1.07
	Oman		72	71	73	1.03		78	79	78	0.99
	Qatar		..	..	..	..		79	67	98	1.47
	Saudi Arabia		85	85	84	0.99	-1	73*	70**	76**	1.08**
	Syrian Arab Republic		..	..	..	..		68	68	67	0.98
	Turkey		95	96	94	0.98		74	77	70	0.91
	United Arab Emirates	-1	99	99	99	1.00	**,-1	84	83	85	1.02
	Yemen		73	80	66	0.83		..	..	..	..
<b>EUROPE</b>											
<b>Eastern Europe</b>											
	Belarus		95	94	96	1.02	-1	87			
	Bulgaria		97	97	98	1.00		83	85	82	0.97
	Czech Republic	**,-2	90	88	91	1.03					
	Hungary		95	95	95	1.00		91	91	91	0.99
	Poland	-1	96	95	96	1.01	-1	94	93	95	1.02
	Republic of Moldova	*	90	91	90	0.99	*	83	82	85	1.04
	Romania		97	96	97	1.00		73	74	72	0.97
	Russian Federation		..	..	..	..		..	..	..	..
	Slovakia		..	..	..	..		..	..	..	..
	Ukraine	*	89	89	90	1.00		85	84*	85*	1.01*
<b>Northern Europe</b>											
	Denmark	-1	96	95	97	1.02	-1	90	88	91	1.03
	Estonia		97	96	97	1.00		90	88	91	1.03
	Faeroe Islands		..	..	..	..		..	..	..	..
	Finland		96	96	96	1.00		96	96	97	1.01
	Iceland		98	97	98	1.00		90	89	91	1.02
	Ireland		97	96	98	1.02		88	86	90	1.05
	Latvia		..	..	..	..		..	..	..	..
	Lithuania		96	96	96	0.99		92	91	92	1.02
	Norway		99	99	99	1.00		96	96	96	1.00
	Sweden		95	95	94	0.99		99	99	99	1.00
	United Kingdom		100	100	100	1.00		93	92	95	1.03
<b>Southern Europe</b>											
	Albania		..	..	..	..		..	..	..	..
	Andorra		82	82	81	0.98	*	71	69	75	1.09

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	Bosnia and Herzegovina		..	..	..	..		..	..	..	..
	Croatia	-1	99	98	100	1.02	**,-2	88	87	89	1.02
	Gibraltar		..	..	..	..		..	..	..	..
	Greece	-1	100	99	100	1.00	-1	91	91	91	0.99
	Holy See		..	..	..	..		..	..	..	..
	Italy	-1	99	100	99	0.99	-1	92	92	93	1.02
	Malta	-1	91	91	92	1.01	-1	82	79	85	1.07
	Montenegro		..	..	..	..		..	..	..	..
	Portugal	-1	99	99	99	0.99	-1	88	84	92	1.09
	San Marino		..	..	..	..		..	..	..	..
	Serbia		96	96	96	1.00	*	88	87	89	1.03
	Slovenia		97	98	97	1.00		91	91	92	1.01
	Spain		100	100	100	1.00		95	93	97	1.03
<b>Western Europe</b>	The former Yugoslav Republic of Macedonia	-1	92	91	92	1.01		..	..	..	..
	Austria		..	..	..	..		..	..	..	..
	Belgium		99	98	99	1.01	**,-2	87	89	85	0.96
	France		99	99	99	1.00		98	98	98	1.02
	Germany	**,-1	100	..	..	..		..	..	..	..
	Liechtenstein		90	88	92	1.05	*	83	85	81	0.96
	Luxembourg		97	97	98	1.02		84	82	85	1.04
	Monaco		..	..	..	..		..	..	..	..
	Netherlands		99	99	99	0.99		88	88	89	1.01
	Switzerland		99	99	99	1.01		85	87	83	0.96
<b>LATIN AMERICA AND THE CARIBBEAN</b>											
<b>Caribbean</b>	Anguilla		93	93	93	1.00		..	..	..	..
	Antigua and Barbuda	*	89	91	87	0.95		..	..	..	..
	Aruba		99	99	99	0.99		75	72	78	1.08
	Bahamas		92	91	93	1.03		85	83	87	1.05
	Barbados		..	..	..	..		..	..	..	..
	British Virgin Islands	**,-1	97	96	98	1.03	**,-1	84	79	89	1.12
	Cayman Islands	*	87	93	81	0.88	*	81	83	78	0.94
	Cuba	+1	100	..	..	..	+1	83	82	83	1.01



**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	Dominica		76	72	80	1.12	**	68	62	74	1.21
	Dominican Republic		82	82	83	1.02		58	52	63	1.22
	Grenada		98	98	99	1.01		89	93	85	0.91
	Guadeloupe		..	..	..	..		..	..	..	..
	Haiti		..	..	..	..		..	..	..	..
	Jamaica		81	82	79	0.97		77	75	79	1.05
	Martinique		..	..	..	..		..	..	..	..
	Montserrat	*,-1	96	..	..	..	*,-1	96	95	96	1.01
	Netherlands Antilles		..	..	..	..		..	..	..	..
	Saint Kitts and Nevis		..	..	..	..		..	..	..	..
	Saint Lucia		94	94	93	0.99	**	80	77	82	1.06
	Saint Vincent and the Grenadines		98	..	..	..		90	85	95	1.12
	Trinidad and Tobago		95	96	95	0.99	**	74	71	76	1.07
	Turks and Caicos Islands		..	..	..	..		..	..	..	..
	U.S. Virgin Islands		..	..	..	..		..	..	..	..
<b>Central America</b>	Belize		100	99	100	1.00	-1	63	61	66	1.09
	Costa Rica		..	..	..	..		..	..	..	..
	El Salvador		96	95	96	1.02		55	54	56	1.03
	Guatemala		96	98	95	0.97		40	41	39	0.94
	Honduras		97	96	98	1.02		..	..	..	..
	Mexico		100	99	100	1.00		72	71	74	1.03
	Nicaragua		93	93	94	1.01	**	45	42	48	1.16
	Panama		99	99	98	0.99		66	63	69	1.10
<b>South America</b>	Argentina		..	..	..	..	-1	79	75	84	1.12
	Bolivia (Plurinational State of)	-1	95	95	95	1.01	-1	70	70	70	0.99
	Brazil		95	96	94	0.98		82	78	85	1.10
	Chile	-1	95	95	94	0.99	-1	85	84	87	1.03
	Colombia		94	93	94	1.00		71	68	75	1.09
	Ecuador	-1	99	..	..	..	**	62	61	62	1.03
	Falkland Islands (Malvinas)		..	..	..	..		..	..	..	..

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	French Guiana		..	..	..	..		..	..	..	..
	Guyana		99	98	99	1.00					
	Paraguay	-1	91	91	91	1.00	-1	58	57	60	1.07
	Peru		97	97	98	1.01		75	75	75	1.00
	Suriname		90	91	90	0.99		..	..	..	..
	Uruguay	-1	98	98	98	1.00	-1	68	64	71	1.11
	Venezuela (Bolivarian Republic of)		92	92	92	1.01		69	66	74	1.12
<b>NORTHERN AMERICA</b>											
	Bermuda	**,-2	93	..	..	..		..	..	..	..
	Canada		..	..	..	..		..	..	..	..
	Greenland		..	..	..	..		..	..	..	..
	Saint Pierre and Miquelon		..	..	..	..		..	..	..	..
	United States of America		93	93	94	1.01		88	88	89	1.01
<b>OCEANIA</b>											
	Australia		97	97	98	1.01		88	87	89	1.02
	New Zealand		99	99	100	1.01		..	..	..	..
<b>Melanesia</b>	Fiji		89	90	89	0.99	-2	79	76	83	1.10
	New Caledonia		..	..	..	..		..	..	..	..
	Papua New Guinea		..	..	..	..		..	..	..	..
	Solomon Islands	-1	67	67	67	1.00	-1	30	32	29	0.90
	Vanuatu		..	..	..	..		..	..	..	..
<b>Micronesia</b>	Guam		..	..	..	..		..	..	..	..
	Kiribati		..	..	..	..		..	..	..	..
	Marshall Islands	*,-1	67	67	66	0.99	*,-1	45	43	47	1.08
	Micronesia (Federated States of)		..	..	..	..		..	..	..	..
	Nauru	**,-1	72	72	73	1.01		..	..	..	..
	Palau		..	..	..	..		..	..	..	..
<b>Polynesia</b>	American Samoa		..	..	..	..		..	..	..	..
	Cook Islands		..	..	..	..		..	..	..	..
	French Polynesia		..	..	..	..		..	..	..	..
	Niue		..	..	..	..		..	..	..	..
	Samoa	+1	94	94	94	1.00	+1	71	66	75	1.13

**Annex table 5: Net Enrolment Ratio for primary and secondary education, 2008 continued**

Region and subregion	Country or territory	Net enrolment ratios									
		Primary education					Secondary education				
		Note	Total	Male	Female	Female/male ratio***	Note	Total	Male	Female	Female/male ratio***
	Tokelau		..	..	..	..		..	..	..	..
	Tonga	-2	99	..	..	..	**,-2	66	60	74	1.24
	Tuvalu		..	..	..	..		..	..	..	..

**Source:** UNESCO Institute for Statistics (UIS) database (June 2010). Available from <http://stats.uis.unesco.org>.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

\* National estimate.

\*\* UIS estimate.

(-1) data refer to 2007.

(-2) data refer to 2006.

(+1) data refer to 2009.

**ANNEX TABLE 6: Primary to secondary school transition rates, 2007 to 2008**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
<b>AFRICA</b>						
<b>Eastern Africa</b>	Burundi	-1	31	..	..	..
	Comoros		..	..	..	..
	Djibouti	-1	88	90	81	0.94
	Eritrea		83	84	81	0.96
	Ethiopia		88	88	89	1.00
	Kenya		..	..	..	..
	Madagascar		60	61	59	0.97
	Malawi		77	79	75	0.96
	Mauritius	+1	69	64	75	1.16
	Mozambique		57	56	60	1.08
	Reunion		..	..	..	..
	Rwanda		..	..	..	..
	Seychelles	+1	98	99	98	0.99
	Somalia		..	..	..	..
	Tanzania, United Republic of	**,-2	46	47	45	0.96
	Uganda		61	63	60	0.96
	Zambia	**	56	55	58	1.05
	Zimbabwe		..	..	..	..
<b>Middle Africa</b>	Angola		..	..	..	..
	Cameroon		48	46	50	1.07
	Central African Republic	+1	45	45	45	1.00
	Chad	**,-1	64	64	65	1.03
	Congo	**	63	63	63	0.99
	Congo, Democratic Republic of the	*	80	83	76	0.92
	Equatorial Guinea		..	..	..	..
	Gabon		..	..	..	..
	Sao Tome and Principe	+1	50	..	..	..
<b>Northern Africa</b>	Algeria		91	90	92	1.02
	Egypt		..	..	..	..
	Libyan Arab Jamahiriya		..	..	..	..
	Morocco		79	80	78	0.98
	Sudan		94	90	98	1.09
	Tunisia		82	79	86	1.08
	Western Sahara		..	..	..	..
<b>Southern Africa</b>	Botswana	-2	98	98	98	1.00
	Lesotho	-1	67	68	66	0.97
	Namibia		78	76	79	1.04
	South Africa	**,-1	94	93	94	1.01
	Swaziland	-2	89	90	87	0.96
<b>Western Africa</b>	Benin	-2	71	72	70	0.97

**Annex table 6: Primary to secondary school transition rates, 2007 to 2008 continued**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
	Burkina Faso	+1	49	52	45	0.88
	Cape Verde		86	84	87	1.04
	Côte d'Ivoire		47	50	43	0.85
	Gambia	**	84	84	84	1.00
	Ghana		98	97	98	1.01
	Guinea		31	34	26	0.75
	Guinea-Bissau		..	..	..	..
	Liberia		..	..	..	..
	Mali	+1	70	72	68	0.95
	Mauritania	+1	34	38	31	0.81
	Niger	+1	47	49	44	0.90
	Nigeria		..	..	..	..
	Saint Helena		..	..	..	..
	Senegal		62	65	58	0.89
	Sierra Leone		..	..	..	..
	Togo	-1	53	56	49	0.87
<b>ASIA</b>						
<b>Eastern Asia</b>	China		95	95	96	1.01
	Hong Kong, China SAR		100	100	100	1.00
	Japan		..	..	..	..
	Korea, Democratic People's Republic of		..	..	..	..
	Korea, Republic of		100	100	100	1.00
	Macao, China SAR	+1	91	89	94	1.05
	Mongolia		97	96	98	1.02
<b>South-central Asia</b>	Afghanistan		..	..	..	..
	Bangladesh	-2	97	95	100	1.06
	Bhutan	+1	98	95	100	1.05
	India	-1	85	86	84	0.98
	Iran (Islamic Republic of)	**	79	84	74	0.88
	Kazakhstan	+1	100	100	100	1.00
	Kyrgyzstan		100	100	100	1.00
	Maldives		87	83	92	1.10
	Nepal		81	81	81	1.00
	Pakistan		73	73	71	0.97
	Sri Lanka		98	97	99	1.01
	Tajikistan		98	..	..	..
	Turkmenistan		..	..	..	..
	Uzbekistan		100	100	100	1.00
<b>South-eastern Asia</b>	Brunei Darussalam		99	100	99	1.00
	Cambodia		79	80	79	0.99
	Indonesia		90	86	93	1.08



**Annex table 6: Primary to secondary school transition rates, 2007 to 2008 continued**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
	Lao People's Democratic Republic		79	80	77	0.96
	Malaysia	**,-1	99	100	98	0.98
	Myanmar	-1	73	75	70	0.93
	Philippines	-1	98	98	97	0.98
	Singapore		91	88	95	1.08
	Thailand	-1	87	85	89	1.05
	Timor-Leste		100	100	100	1.00
	Viet Nam	**,-2	93	..	..	..
<b>Western Asia</b>	Armenia		99	100	98	0.98
	Azerbaijan		99	100	99	0.99
	Bahrain	-2	96	95	98	1.03
	Cyprus		100	100	100	1.00
	Georgia		99	99	100	1.00
	Iraq		..	..	..	..
	Israel		71	71	70	0.99
	Jordan		99	99	99	0.99
	Kuwait		97	96	98	1.02
	Lebanon	+1	86	84	89	1.06
	Occupied Palestinian Territory		98	98	98	1.01
	Oman		97	97	97	1.00
	Qatar	-1	99	97	100	1.03
	Saudi Arabia		94	92	97	1.05
	Syrian Arab Republic		95	95	96	1.01
	Turkey		..	..	..	..
	United Arab Emirates	-1	98	98	99	1.00
	Yemen		..	..	..	..
<b>EUROPE</b>						
<b>Eastern Europe</b>	Belarus	-1	100	100	100	1.00
	Bulgaria		95	95	95	1.01
	Czech Republic		99	99	99	1.00
	Hungary		99	99	99	1.00
	Poland	**,-2	92	..	..	..
	Republic of Moldova		98	99	98	0.99
	Romania		97	97	97	1.00
	Russian Federation		100	..	..	..
	Slovakia		97	97	97	1.00
	Ukraine	*	100	100	100	1.00
<b>Northern Europe</b>	Denmark	-1	97	97	96	0.99
	Estonia		98	97	99	1.02
	Faeroe Islands		..	..	..	..

**Annex table 6: Primary to secondary school transition rates, 2007 to 2008 continued**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
	Finland		100	100	100	1.00
	Iceland		100	100	100	1.00
	Ireland		..	..	..	..
	Latvia		94	92	97	1.05
	Lithuania		99	99	99	1.00
	Norway		100	100	100	1.00
	Sweden		100	100	100	1.00
	United Kingdom		..	..	..	..
<b>Southern Europe</b>	Albania		..	..	..	..
	Andorra		..	..	..	..
	Bosnia and Herzegovina		..	..	..	..
	Croatia	-1	100	99	100	1.01
	Gibraltar		..	..	..	..
	Greece	-1	97	..	..	..
	Holy See		..	..	..	..
	Italy	-1	100	100	99	0.99
	Malta		..	..	..	..
	Montenegro		..	..	..	..
	Portugal		..	..	..	..
	San Marino		..	..	..	..
	Serbia		99	99	99	1.00
	Slovenia		..	..	..	..
	Spain		..	..	..	..
	The former Yugoslav Republic of Macedonia		99	99	100	1.01
<b>Western Europe</b>	Austria		100	100	99	0.99
	Belgium		99	100	99	0.99
	France		..	..	..	..
	Germany		99	99	99	1.00
	Liechtenstein		99	100	97	0.97
	Luxembourg		..	..	..	..
	Monaco		..	..	..	..
	Netherlands		..	..	..	..
	Switzerland		99	..	..	..
<b>LATIN AMERICA AND THE CARIBBEAN</b>						
<b>Caribbean</b>	Anguilla		..	..	..	..
	Antigua and Barbuda		..	..	..	..
	Aruba	-1	97	95	100	1.06
	Bahamas		100	100	100	1.00
	Barbados	*	99	..	..	..
	British Virgin Islands	-1	95	100	91	0.91

**Annex table 6: Primary to secondary school transition rates, 2007 to 2008 continued**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
	Cayman Islands		97	..	..	..
	Cuba	+1	98	99	98	1.00
	Dominica		95	94	97	1.03
	Dominican Republic		92	90	94	1.05
	Grenada		..	..	..	..
	Guadeloupe		..	..	..	..
	Haiti		..	..	..	..
	Jamaica		..	..	..	..
	Martinique		..	..	..	..
	Montserrat		..	..	..	..
	Netherlands Antilles		..	..	..	..
	Puerto Rico		..	..	..	..
	Saint Kitts and Nevis		..	..	..	..
	Saint Lucia		97	95	100	1.06
	Saint Vincent and the Grenadines		84	79	88	1.11
	Trinidad and Tobago		90	88	92	1.04
	Turks and Caicos Islands		..	..	..	..
	U.S. Virgin Islands		..	..	..	..
<b>Central America</b>	Belize		90	89	92	1.03
	Costa Rica		97	100	94	0.94
	El Salvador		92	92	92	1.00
	Guatemala		91	93	90	0.96
	Honduras	-2	71	68	74	1.09
	Mexico		94	94	93	0.99
	Nicaragua		..	..	..	..
	Panama		99	98	99	1.01
<b>South America</b>	Argentina	-1	94	93	96	1.03
	Bolivia (Plurinational State of)	-1	90	90	90	0.99
	Brazil		..	..	..	..
	Chile		..	..	..	..
	Colombia		98	98	99	1.00
	Ecuador	-1	79	81	77	0.95
	Falkland Islands (Malvinas)		..	..	..	..
	French Guiana		..	..	..	..
	Guyana		93	95	91	0.96
	Paraguay	-1	87	87	88	1.01
	Peru		93	94	93	0.98
	Suriname		53	46	59	1.27
	Uruguay	-1	77	71	83	1.18
	Venezuela (Bolivarian Republic of)		95	95	96	1.00

**Annex table 6: Primary to secondary school transition rates, 2007 to 2008 continued**

Number of pupils admitted to the first grade of secondary education in a specified year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education the previous year, by region, country and sex						
Region and subregion	Country or territory	Note	Total	Male	Female	Female/male ratio***
<b>NORTHERN AMERICA</b>						
	Bermuda	-2	95	..	..	..
	Canada		..	..	..	..
	Greenland		..	..	..	..
	Saint Pierre and Miquelon		..	..	..	..
	United States of America		..	..	..	..
<b>OCEANIA</b>						
	Australia		..	..	..	..
	New Zealand		..	..	..	..
<b>Melanesia</b>	Fiji		100	100	100	1.00
	New Caledonia		..	..	..	..
	Papua New Guinea		..	..	..	..
	Solomon Islands		..	..	..	..
	Vanuatu	-1	79	75	83	1.10
<b>Micronesia</b>	Guam		..	..	..	..
	Kiribati		..	..	..	..
	Marshall Islands		..	..	..	..
	Micronesia (Federated States of)		..	..	..	..
	Nauru		..	..	..	..
	Palau		..	..	..	..
<b>Polynesia</b>	American Samoa		..	..	..	..
	Cook Islands		..	..	..	..
	French Polynesia		..	..	..	..
	Niue		..	..	..	..
	Samoa		..	..	..	..
	Tokelau		..	..	..	..
	Tonga	-2	77	78	75	0.97
	Tuvalu		..	..	..	..

Source: UNESCO Institute for Statistics (UIS) database (June 2010). Available from <http://stats.uis.unesco.org>.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

\* National estimate.

\*\* UIS estimate.

(-1) data refer to 2007.

(-2) data refer to 2006.

(+1) data refer to 2009.

**ANNEX TABLE 7: Youth labour force participation rates, 2008**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
<b>AFRICA</b>												
<b>Eastern Africa</b>	Burundi	65	71	60	1.2	92	94	91	1.0	1.4	1.3	1.5
	Comoros	45	44	46	0.9	77	70	84	0.8	1.7	1.6	1.8
	Djibouti	33	30	36	0.8	72	64	81	0.8	2.2	2.1	2.3
	Eritrea	45	38	52	0.7	75	64	86	0.7	1.7	1.7	1.7
	Ethiopia	71	69	73	0.9	87	83	90	0.9	1.2	1.2	1.2
	Kenya	64	63	66	1.0	82	74	90	0.8	1.3	1.2	1.4
	Madagascar	62	62	61	1.0	86	85	87	1.0	1.4	1.4	1.4
	Malawi	38	45	31	1.5	72	73	71	1.0	1.9	1.6	2.3
	Mauritius	23	18	28	0.6	62	52	71	0.7	2.7	2.9	2.5
	Mozambique	59	68	50	1.4	88	86	90	1.0	1.5	1.3	1.8
	Réunion	9	7	10	0.7	65	62	68	0.9	7.5	8.6	6.7
	Rwanda	63	66	61	1.1	87	88	86	1.0	1.4	1.3	1.4
	Somalia	50	43	58	0.7	73	61	86	0.7	1.5	1.4	1.5
	Tanzania, United Republic of	73	74	72	1.0	92	91	92	1.0	1.3	1.2	1.3
	Uganda	75	73	76	1.0	83	75	92	0.8	1.1	1.0	1.2
	Zambia	50	44	56	0.8	65	57	73	0.8	1.3	1.3	1.3
	Zimbabwe	29	30	28	1.1	72	61	82	0.7	2.5	2.1	3.0
<b>Middle Africa</b>	Angola	71	66	77	0.9	80	75	85	0.9	1.1	1.1	1.1
	Cameroon	37	32	41	0.8	65	45	84	0.5	1.8	1.4	2.0
	Central African Republic	54	51	57	0.9	75	65	85	0.8	1.4	1.3	1.5
	Chad	48	52	44	1.2	64	60	67	0.9	1.3	1.2	1.5
	Congo	41	37	46	0.8	69	54	84	0.6	1.7	1.5	1.8
	Congo, Democratic Republic of the	56	47	66	0.7	75	62	88	0.7	1.3	1.3	1.3
	Equatorial Guinea	68	54	82	0.7	66	35	97	0.4	1.0	0.6	1.2
	Gabon	46	47	46	1.0	76	67	84	0.8	1.6	1.4	1.8
	Sao Tome and Principe	22	13	30	0.4	62	41	83	0.5	2.8	3.0	2.7
<b>Northern Africa</b>	Algeria	31	14	48	0.3	63	45	80	0.6	2.0	3.3	1.7
	Egypt	19	10	29	0.3	47	28	66	0.4	2.5	2.9	2.3
	Libyan Arab Jamahiriya	18	8	28	0.3	52	28	75	0.4	2.9	3.6	2.7
	Morocco	34	19	48	0.4	51	28	75	0.4	1.5	1.5	1.6
	Sudan	23	19	26	0.7	44	32	56	0.6	1.9	1.7	2.1
	Tunisia	21	13	28	0.5	45	30	59	0.5	2.2	2.3	2.1
	Western Sahara	23	22	23	0.9	74	69	79	0.9	3.2	3.1	3.4



**Annex table 7: Youth labour force participation rates, 2008 continued**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
<b>Southern Africa</b>	Botswana	35	33	36	0.9	84	82	86	1.0	2.4	2.5	2.4
	Lesotho	52	45	58	0.8	73	71	76	0.9	1.4	1.6	1.3
	Namibia	10	10	11	0.9	50	48	52	0.9	4.8	5.0	4.7
	South Africa	9	8	10	0.8	53	48	59	0.8	5.9	5.8	6.0
	Swaziland	35	33	36	0.9	67	58	77	0.8	1.9	1.8	2.1
<b>Western Africa</b>	Benin	48	50	46	1.1	68	66	70	0.9	1.4	1.3	1.5
	Burkina Faso	74	71	77	0.9	83	76	89	0.9	1.1	1.1	1.2
	Cape Verde	38	29	48	0.6	73	59	88	0.7	1.9	2.1	1.8
	Côte d'Ivoire	43	36	50	0.7	61	47	76	0.6	1.4	1.3	1.5
	Gambia	57	61	52	1.2	76	68	83	0.8	1.3	1.1	1.6
	Ghana	35	36	33	1.1	69	72	67	1.1	2.0	2.0	2.0
	Guinea	69	69	70	1.0	85	79	90	0.9	1.2	1.2	1.3
	Guinea-Bissau	47	40	55	0.7	75	64	86	0.7	1.6	1.6	1.6
	Liberia	53	53	53	1.0	65	63	66	1.0	1.2	1.2	1.2
	Mali	32	25	39	0.7	49	37	61	0.6	1.5	1.5	1.6
	Mauritania	38	34	42	0.8	72	62	81	0.8	1.9	1.8	2.0
	Niger	53	35	72	0.5	57	36	83	0.4	1.1	1.0	1.2
	Nigeria	18	12	25	0.5	44	28	59	0.5	2.4	2.4	2.4
	Senegal	61	49	73	0.7	73	57	89	0.6	1.2	1.2	1.2
	Sierra Leone	34	39	27	1.4	56	60	52	1.2	1.7	1.5	1.9
	Togo	49	44	54	0.8	74	61	88	0.7	1.5	1.4	1.6
<b>ASIA</b>												
<b>Eastern Asia</b>	China	40	42	39	1.1	79	83	76	1.1	2.0	2.0	2.0
	Hong Kong, China SAR	13	12	13	1.0	68	70	66	1.1	5.3	5.6	5.1
	Japan	16	16	16	1.0	69	70	69	1.0	4.3	4.3	4.3
	Korea, Democratic People's Republic of	24	18	29	0.6	65	59	71	0.8	2.7	3.3	2.4
	Korea, Republic of	7	8	6	1.3	49	55	44	1.2	7.5	7.3	7.8
	Macao, China SAR	14	13	14	1.0	77	77	77	1.0	5.6	5.8	5.5
	Mongolia	31	25	37	0.7	70	62	77	0.8	2.2	2.4	2.1
<b>South-central Asia</b>	Afghanistan	39	25	52	0.5	65	39	89	0.4	1.7	1.6	1.7
	Bangladesh	49	43	56	0.8	69	60	78	0.8	1.4	1.4	1.4
	Bhutan	29	31	28	1.1	65	56	72	0.8	2.2	1.8	2.6
	India	33	21	45	0.5	57	29	82	0.4	1.7	1.4	1.8
	Iran (Islamic Republic of)	25	23	26	0.9	53	40	67	0.6	2.2	1.7	2.5
	Kazakhstan	23	20	25	0.8	69	66	73	0.9	3.0	3.3	2.9
	Kyrgyzstan	31	24	37	0.6	70	55	85	0.6	2.3	2.3	2.3

**Annex table 7: Youth labour force participation rates, 2008 continued**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
	Maldives	33	31	35	0.9	74	66	81	0.8	2.2	2.1	2.3
	Nepal	49	49	48	1.0	70	65	75	0.9	1.4	1.3	1.6
	Pakistan	37	16	56	0.3	55	21	87	0.2	1.5	1.3	1.5
	Sri Lanka	20	13	26	0.5	62	45	79	0.6	3.1	3.4	3.0
	Tajikistan	61	59	64	0.9	58	49	68	0.7	0.9	0.8	1.1
	Turkmenistan	26	24	28	0.9	72	65	80	0.8	2.8	2.7	2.9
	Uzbekistan	32	30	33	0.9	66	57	75	0.8	2.1	1.9	2.3
<b>South-eastern Asia</b>	Brunei Darussalam	18	18	19	0.9	75	69	80	0.9	4.1	4.0	4.3
	Cambodia	63	63	63	1.0	81	78	84	0.9	1.3	1.2	1.3
	Indonesia	35	30	41	0.7	69	54	84	0.6	1.9	1.8	2.1
	Lao People's Democratic Republic	47	57	37	1.5	84	90	79	1.1	1.8	1.6	2.1
	Malaysia	22	17	27	0.6	72	62	83	0.7	3.2	3.6	3.0
	Myanmar	37	29	44	0.7	66	49	83	0.6	1.8	1.7	1.9
	Philippines	29	20	37	0.6	63	50	76	0.7	2.2	2.5	2.1
	Singapore	13	12	14	0.8	67	67	66	1.0	5.2	5.8	4.8
	Thailand	27	19	34	0.6	71	62	80	0.8	2.7	3.2	2.4
	Timor-Leste	55	53	57	0.9	78	68	87	0.8	1.4	1.3	1.5
	Viet Nam	35	35	35	1.0	74	73	76	1.0	2.1	2.1	2.1
<b>Western Asia</b>	Armenia	36	29	43	0.7	78	71	85	0.8	2.1	2.4	2.0
	Azerbaijan	20	22	18	1.2	52	49	55	0.9	2.6	2.2	3.1
	Bahrain	12	5	18	0.3	63	38	84	0.5	5.4	7.5	4.7
	Cyprus	11	9	13	0.7	70	69	71	1.0	6.3	7.5	5.4
	Georgia	18	13	22	0.6	49	37	61	0.6	2.8	2.8	2.7
	Iraq	21	6	35	0.2	38	10	64	0.2	1.8	1.8	1.8
	Israel	8	7	9	0.8	70	71	69	1.0	8.7	10.2	7.6
	Jordan	12	1	21	0.0	44	18	68	0.3	3.8	16.8	3.2
	Kuwait	6	3	8	0.4	57	42	69	0.6	9.8	12.1	8.7
	Lebanon	15	6	24	0.2	44	29	59	0.5	2.9	5.1	2.4
	Oman	13	9	17	0.6	59	36	78	0.5	4.6	4.0	4.7
	Qatar	21	5	27	0.2	86	54	94	0.6	4.2	10.7	3.4
	Saudi Arabia	12	2	21	0.1	48	18	75	0.2	4.1	8.9	3.5
	Syrian Arab Republic	31	14	48	0.3	52	26	77	0.3	1.7	1.9	1.6
	Turkey	26	17	36	0.5	52	32	71	0.5	1.9	1.9	2.0
United Arab Emirates	10	6	14	0.4	69	48	83	0.6	6.8	8.0	5.9	
Occupied Palestinian Territory	16	2	29	0.1	44	20	68	0.3	2.8	9.9	2.3	

**Annex table 7: Youth labour force participation rates, 2008 continued**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
	Yemen	23	14	31	0.5	45	18	70	0.3	1.9	1.3	2.2
<b>EUROPE</b>												
<b>Eastern Europe</b>	Belarus	10	8	13	0.6	68	65	70	0.9	6.6	8.5	5.6
	Bulgaria	8	6	9	0.7	56	48	64	0.7	7.4	8.0	7.0
	Czech Republic	7	6	8	0.8	53	44	61	0.7	7.2	7.0	7.2
	Hungary	4	3	6	0.5	45	39	51	0.8	10.2	12.9	8.9
	Poland	8	7	9	0.8	56	50	63	0.8	7.3	7.5	7.2
	Republic of Moldova	13	12	14	0.8	33	32	34	0.9	2.5	2.8	2.4
	Romania	13	9	17	0.5	45	38	52	0.7	3.5	4.2	3.1
	Russian Federation	15	12	17	0.7	59	55	64	0.9	4.0	4.5	3.7
	Slovakia	7	6	9	0.6	55	46	64	0.7	7.4	8.4	6.8
	Ukraine	15	13	16	0.8	63	55	70	0.8	4.3	4.3	4.3
<b>Northern Europe</b>	Channel Islands	7	6	7	0.9	67	64	71	0.9	10.0	10.2	9.8
	Denmark	65	66	65	1.0	80	78	83	0.9	1.2	1.2	1.3
	Estonia	13	12	14	0.9	68	61	75	0.8	5.2	5.0	5.4
	Finland	34	37	31	1.2	74	70	78	0.9	2.2	1.9	2.5
	Iceland	75	80	71	1.1	81	80	82	1.0	1.1	1.0	1.2
	Ireland	26	25	27	0.9	75	70	80	0.9	2.9	2.8	3.0
	Latvia	13	9	16	0.6	70	61	78	0.8	5.4	6.6	4.8
	Lithuania	5	4	6	0.7	55	47	63	0.7	10.4	10.6	10.2
	Norway	49	51	47	1.1	76	74	78	1.0	1.6	1.5	1.7
	Sweden	35	39	31	1.3	74	70	78	0.9	2.1	1.8	2.5
	United Kingdom	45	44	46	1.0	77	71	82	0.9	1.7	1.6	1.8
<b>Southern Europe</b>	Albania	37	35	39	0.9	62	52	72	0.7	1.7	1.5	1.8
	Bosnia and Herzegovina	23	21	25	0.8	71	64	78	0.8	3.1	3.1	3.1
	Croatia	14	12	16	0.7	55	45	64	0.7	4.0	3.9	4.0
	Greece	9	7	11	0.7	51	45	56	0.8	5.7	6.3	5.2
	Italy	11	8	13	0.6	50	42	58	0.7	4.6	5.0	4.3
	Malta	30	28	32	0.9	75	72	79	0.9	2.5	2.5	2.4
	Portugal	16	13	19	0.7	65	62	68	0.9	4.1	4.9	3.6
	Serbia	15	12	18	0.6	49	41	57	0.7	3.3	3.6	3.2
	Slovenia	19	17	21	0.8	62	55	68	0.8	3.3	3.3	3.3
	Spain	23	20	26	0.8	68	63	73	0.9	2.9	3.1	2.8
	The former Yugoslav Republic of Macedonia	17	12	22	0.5	53	42	64	0.7	3.1	3.6	2.8

**Annex table 7: Youth labour force participation rates, 2008 continued**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
<b>Western Europe</b>	Austria	46	42	50	0.8	75	71	79	0.9	1.6	1.7	1.6
	Belgium	10	7	12	0.6	58	54	61	0.9	6.0	7.5	5.1
	France	16	13	20	0.7	63	59	67	0.9	3.8	4.6	3.4
	Germany	32	29	35	0.8	72	69	74	0.9	2.2	2.4	2.1
	Luxembourg	9	5	13	0.4	50	50	50	1.0	5.5	9.7	3.9
	Netherlands	65	65	65	1.0	82	81	83	1.0	1.3	1.2	1.3
	Switzerland	55	52	57	0.9	80	81	79	1.0	1.5	1.5	1.4
<b>LATIN AMERICA AND THE CARIBBEAN</b>												
<b>Caribbean</b>	Bahamas	33	28	37	0.8	78	80	77	1.0	2.4	2.8	2.1
	Barbados	29	24	34	0.7	81	77	86	0.9	2.8	3.2	2.5
	Cuba	18	13	22	0.6	59	51	68	0.8	3.3	3.8	3.0
	Dominican Republic	34	23	44	0.5	74	62	85	0.7	2.2	2.7	1.9
	Guadeloupe	21	20	22	0.9	77	77	76	1.0	3.6	3.8	3.5
	Haiti	61	67	56	1.2	71	65	77	0.8	1.2	1.0	1.4
	Jamaica	16	13	20	0.7	73	64	82	0.8	4.4	4.8	4.2
	Martinique	4	3	4	0.7	52	48	55	0.9	14.2	16.5	12.8
	Netherlands Antilles	13	11	15	0.8	54	51	57	0.9	4.1	4.5	3.9
	Puerto Rico	13	9	16	0.6	49	39	59	0.7	3.8	4.1	3.7
	Saint Lucia	26	20	31	0.6	72	62	82	0.8	2.8	3.1	2.6
	Saint Vincent and the Grenadines	29	20	38	0.5	79	67	90	0.8	2.7	3.4	2.4
	Trinidad and Tobago	25	19	31	0.6	75	65	85	0.8	3.0	3.4	2.7
	U.S. Virgin Islands	28	19	38	0.5	72	60	84	0.7	2.5	3.2	2.2
<b>Central America</b>	Belize	34	25	43	0.6	72	57	87	0.7	2.1	2.3	2.0
	Costa Rica	29	20	37	0.5	70	55	84	0.7	2.4	2.8	2.3
	El Salvador	35	23	46	0.5	64	48	82	0.6	1.8	2.1	1.8
	Guatemala	52	35	69	0.5	70	50	92	0.5	1.4	1.4	1.3
	Honduras	37	20	54	0.4	63	43	83	0.5	1.7	2.2	1.5
	Mexico	36	24	48	0.5	63	46	80	0.6	1.7	1.9	1.7
	Nicaragua	34	20	49	0.4	62	45	80	0.6	1.8	2.3	1.6
	Panama	32	19	45	0.4	69	50	88	0.6	2.2	2.7	2.0
<b>South America</b>	Argentina	26	22	30	0.7	65	54	75	0.7	2.5	2.5	2.5
	Bolivia (Plurinational State of)	41	39	42	0.9	66	53	79	0.7	1.6	1.4	1.9
	Brazil	49	41	57	0.7	78	68	87	0.8	1.6	1.7	1.5
	Chile	15	11	18	0.6	55	42	68	0.6	3.7	3.7	3.7

**Annex table 7: Youth labour force participation rates, 2008 continued**

Region and subregion	Country or territory	Percentage of youth in the labour force								Age transition in LFPR* (ratio)		
		15-19 years				20-24 years				Total	Female	Male
		Total	Female	Male	Female/male LFPR**	Total	Female	Male	Female/male LFPR**			
	Colombia	29	20	38	0.5	60	43	76	0.6	2.0	2.1	2.0
	Ecuador	28	24	32	0.8	58	43	72	0.6	2.0	1.8	2.2
	French Guiana	8	9	8	1.1	55	51	59	0.9	6.6	5.7	7.5
	Guyana	35	23	46	0.5	65	41	89	0.5	1.9	1.8	1.9
	Paraguay	50	36	63	0.6	74	59	88	0.7	1.5	1.7	1.4
	Peru	28	31	25	1.2	66	60	71	0.8	2.4	2.0	2.9
	Suriname	9	6	12	0.5	45	32	58	0.5	5.1	5.7	4.8
	Uruguay	31	23	39	0.6	75	66	83	0.8	2.4	2.9	2.2
	Venezuela (Bolivarian Republic of)	27	17	37	0.4	64	48	79	0.6	2.4	2.9	2.1
<b>NORTHERN AMERICA</b>												
	Canada	56	58	54	1.1	78	76	81	0.9	1.4	1.3	1.5
	United States of America	40	40	40	1.0	74	70	79	0.9	1.9	1.7	2.0
<b>OCEANIA</b>												
	Australia	59	60	59	1.0	82	79	85	0.9	1.4	1.3	1.4
	New Zealand	54	53	55	1.0	74	69	78	0.9	1.4	1.3	1.4
<b>Melanesia</b>												
	Fiji	28	18	37	0.5	63	45	80	0.6	2.3	2.5	2.1
	New Caledonia	25	20	29	0.7	76	67	85	0.8	3.1	3.3	2.9
	Papua New Guinea	49	51	47	1.1	70	70	69	1.0	1.4	1.4	1.5
	Solomon Islands	21	18	23	0.8	41	29	52	0.6	2.0	1.6	2.2
	Vanuatu	68	67	70	1.0	85	80	90	0.9	1.2	1.2	1.3
<b>Micronesia</b>												
	Guam	23	18	28	0.6	68	59	77	0.8	2.9	3.3	2.7
<b>Polynesia</b>												
	French Polynesia	18	12	23	0.5	66	57	75	0.8	3.7	4.6	3.3
	Samoa	17	9	25	0.4	71	52	88	0.6	4.2	5.9	3.5
	Tonga	20	13	25	0.5	63	55	71	0.8	3.2	4.1	2.8

Source: International Labour Organization, Economically Active Population Estimates and Projections data set for 2009.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

\* Indicates the ratio of labour force participation among older youth aged 20-24 years to that among younger youth aged 15-19 years.

\*\* Transition ratios close to 1 suggest little change in youth labour force participation across age subgroups. A ratio of less than 1 means females are less likely than males to participate in the labour force.

LFPR = labour force participation rate



**ANNEX TABLE 8: Youth unemployment indicators**

Country or territory	Year	Youth population (thousands)	Youth labour force (thousands)	Unemployed youth (thousands)	Female youth unemployment rate (percentage)	Male youth unemployment rate (percentage)	Ratio of female to male youth unemployment
<b>AFRICA</b>							
Algeria	2006	..	2208	536	..	..	..
Benin	2002	1217	708	6	1	1	0.5
Botswana	2006	..	..	48	..	..	..
Burkina Faso	1985	1352	1112	24	0	4	
Burundi	1990	928	757	5	0	1	0.4
Cape Verde	1990	67	42	17	42	41	1.0
Egypt	2006	..	..	1633	..	..	..
Ethiopia	2006	2709	1420	353	29	20	1.5
Gabon	1993	191	67	27	40	42	1.0
Ghana	2000	3485	1875	310	17	16	1.0
Lesotho	1999	393	255	85	43	26	1.7
Liberia	2007	..	317	15	4	6	0.6
Madagascar	2005	3357	2462	56	3	2	1.6
Malawi	1983	1663	1174	106	10	9	1.1
Mauritius	2007	174	79	19	31	20	1.6
Morocco	2007	6275	2563	452	16	18	0.9
Namibia	2004	346	106	44	47	37	1.3
Niger	2001	1998	1076	34	2	4	0.4
Nigeria	1986	15273	4635	712	22	12	1.9
Réunion	2007	..	..	19	..	..	..
Rwanda	1996	1162	918	7	1	1	0.5
Saint Helena	1998	1	1	0	24	24	1.0
Sao Tome and Principe	1991	23	10	1	14	6	2.3
Senegal	2006	..	..	148	..	..	..
Seychelles	2002	15	9	2	..	..	..
Sierra Leone	2004	794	389	20	4	7	0.5
South Africa	2007	9648	2895	1357	52	43	1.2
Swaziland	1997	197	60	33	48	42	1.2
Tanzania, United Republic of	2006	..	5286	468	10	7	1.4
Tunisia	2005	2043	671	206	29	31	0.9
Uganda	1992	..	..	56	..	..	..
Zambia	2000	2647	1057	226	20	23	0.8
Zimbabwe	2002	2726	1520	378	21	28	0.8
<b>ASIA</b>							
Armenia	2001	582	321	155	56	42	1.3
Azerbaijan	2007	1797	647	91	10	18	0.6
Bangladesh	2005	23415	11117	1030	14	8	1.7
Bahrain	2001	110	46	9	27	17	1.6
Bhutan	2005	146	70	4	7	6	1.3
Cambodia	2001	..	..	62	..	..	..
China	1994	..	..	3010	..	..	..

	Youth unemployment rate (percentage)	Adult unemployment rate (percentage)	Ratio of youth unemployment rate to adult unemployment rate	Share of unemployed youth in total unemployed (percentage)	Percentage of unemployed youth in youth population
	24	9	2.7	43	..
	1	1	1.3	33	1
	..	..	..	42	..
	2	1	2.6	56	2
	1	0	1.7	41	1
	41	12	3.4	66	26
	..	..	..	67	..
	25	13	1.9	47	13
	41	13	3.2	41	14
	17	9	1.9	36	9
	34	24	1.4	41	22
	5	6	0.8	24	..
	2	3	0.8	24	2
	9	3	2.7	60	6
	25	6	4.2	42	11
	18	8	2.3	40	7
	42	34	1.2	41	13
	3	1	4.2	64	2
	15	2	8.1	59	5
	..	..	..	25	..
	1	1	1.5	45	1
	24	17	1.4	28	17
	8	2	5.1	67	4
	..	..	..	42	..
	20	7	2.9	43	13
	5	3	1.7	31	3
	47	18	2.6	34	14
	55	15	3.7	63	17
	9	3	2.9	53	..
	31	10	3.0	42	10
	..	..	..	83	..
	21	9	2.5	55	9
	25	4	5.7	68	14
	48	33	1.5	27	27
	14	5	2.7	32	5
	9	3	3.3	49	4
	20	3	6.8	54	8
	6	2	3.2	54	3
	..	..	..	60	..
	..	..	..	..	..

**Annex table 8: Youth unemployment indicators continued**

Country or territory	Year	Youth population (thousands)	Youth labour force (thousands)	Unemployed youth (thousands)	Female youth unemployment rate (percentage)	Male youth unemployment rate (percentage)	Ratio of female to male youth unemployment
Hong Kong, China SAR	2007	899	386	35	7	11	0.7
India	2004	177270	80119	8435	11	10	1.0
Indonesia	2007	..	22513	5660	27	24	1.1
Iran (Islamic Republic of)	2007	16671	5264	1174	30	20	1.5
Israel	2007	1152	373	60	17	15	1.1
Japan	2007	13590	6100	470	7	8	0.9
Kazakhstan	2004	2713	1343	192	16	13	1.2
Korea, Republic of	2007	5937	1671	148	7	11	0.6
Kyrgyzstan	2006	1075	500	73	16	14	1.2
Lao People's Democratic Republic	1995	820	608	30	4	6	0.6
Lebanon	2004	..	216	45	..	..	..
Macau, China SAR	2007	99	44	3	4	9	0.4
Malaysia	2007	..	2092	228	12	11	1.1
Maldives	2006	75	40	9	31	16	2.0
Mongolia	2003	457	199	40	21	20	1.1
Nepal	1999	3456	2818	84	2	4	0.6
Pakistan	2007	31957	14139	1057	9	7	1.3
Occupied Palestinian Territories	2007	..	194	68	43	34	1.3
Papua New Guinea	2000	1029	609	32	..	..	..
Philippines	2007	17366	7680	1145	17	14	1.2
Qatar	2004	102	43	5	30	8	3.9
Saudi Arabia	2007	..	..	236	..	..	..
Singapore	2007	487	180	16	11	7	1.6
Sri Lanka	2007		1195	254	28	17	1.6
Syrian Arab Republic	2003	3691	1499	292	33	16	2.1
Taiwan, Province of China	2007	..	973	103	..	..	..
Thailand	2007	10540	5214	233	4	5	0.9
Turkey	2008	11239	4152	752	18	18	1.0
United Arab Emirates	2005	666	332	27	13	7	2.0
Viet Nam	2004	15524	9276	428	5	4	1.1
Yemen	1999	..	..	227	..	..	..
<b>EUROPE</b>							
Albania	2001	527	315	112	27	42	0.7
Austria	2008	994	604	49	8	8	1.0
Belgium	2008	1298	434	78	19	17	1.1

	Youth unemployment rate (percentage)	Adult unemployment rate (percentage)	Ratio of youth unemployment rate to adult unemployment rate	Share of unemployed youth in total unemployed (percentage)	Percentage of unemployed youth in youth population
	9	3	2.6	24	4
	11	4	3.0	46	5
	25	5	5.1	57	..
	22	7	3.1	47	7
	16	6	2.7	28	5
	8	4	2.2	18	4
	14	7	2.0	29	7
	9	3	3.1	19	3
	15	7	2.2	39	7
	5	1	5.6	57	4
	21	5	4.1	48	..
	6	3	2.4	29	3
	11	1	7.8	65	..
	22	11	2.0	47	12
	20	13	1.6	28	9
	3	1	2.2	47	2
	8	4	1.8	44	3
	35	18	2.0	37	..
	5	2	2.6	49	3
	15	4	3.8	51	7
	11	1	22.2	70	5
	..	..	..	51	..
	9	4	2.6	21	3
	21	3	6.9	57	..
	20	6	3.1	57	8
	11	3	3.3	25	..
	5	1	6.9	53	2
	18	8	2.4	34	7
	8	2	3.4	33	4
	5	2	3.1	46	3
	..	..	..	48	..
	36	19	1.9	37	21
	8	3	2.6	30	5
	18	6	3.1	23	6

**Annex table 8: Youth unemployment indicators continued**

Country or territory	Year	Youth population (thousands)	Youth labour force (thousands)	Unemployed youth (thousands)	Female youth unemployment rate (percentage)	Male youth unemployment rate (percentage)	Ratio of female to male youth unemployment
Bosnia and Herzegovina	2007	485	162	95	62	55	1.1
Bulgaria	2008	998	301	38	11	14	0.8
Croatia	2008	522	181	40	27	19	1.5
Cyprus	2008	93	39	4	9	9	1.1
Czech Republic	2008	1343	418	41	10	10	1.0
Denmark	2008	632	459	35	8	7	1.2
Estonia	2008	201	83	10	12	12	0.9
Faeroe Islands	2005	..	..	1	..	..	..
Finland	2008	637	341	56	16	17	0.9
France	2008	7479	2938	532	18	18	1.0
Georgia	2007		183	58	37	28	1.3
Germany	2008	9391	4927	518	10	11	0.9
Gibraltar	1991	..	..	0	..	..	..
Greece	2008	1148	347	77	29	17	1.7
Hungary	2008	1228	307	61	21	19	1.1
Iceland	2008	40	31	3	7	9	0.8
Ireland	2008	619	326	41	10	15	0.6
Isle of Man	2006	9	5	0	5	10	0.5
Italy	2008	6070	1877	399	25	19	1.3
Latvia	2008	354	152	20	13	13	1.0
Lithuania	2008	535	165	22	15	13	1.2
Luxembourg	2008	54	16	3	24	13	1.8
Malta	2008	58	30	4	10	14	0.7
Monaco	2000	3	0	0	7	7	1.1
Netherlands	2008	1965	1387	101	8	7	1.2
Norway	2008	598	371	28	7	8	0.8
Poland	2008	5403	1787	309	20	15	1.3
Portugal	2008	1221	508	84	20	13	1.5
Republic of Moldova	2007	..	140	20	14	15	0.9
Romania	2008	3135	953	177	18	19	1.0
Russian Federation	2007	23365	9570	1387	15	14	1.0
Serbia	2007	878	292	128	48	41	1.2
Slovakia	2008	835	271	52	20	19	1.1
Slovenia	2008	255	109	11	11	10	1.1
Spain	2008	5049	2408	593	26	24	1.1
Sweden	2008	1206	637	129	21	20	1.1
Switzerland	2008	906	609	43	7	7	1.1
The former Yugoslav Republic of Macedonia	2007	326	117	68	58	57	1.0
Ukraine	2007	..	..	388	..	..	..
United Kingdom	2008	7815	4820	722	13	17	0.7



	Youth unemployment rate (percentage)	Adult unemployment rate (percentage)	Ratio of youth unemployment rate to adult unemployment rate	Share of unemployed youth in total unemployed (percentage)	Percentage of unemployed youth in youth population
	59	25	2.3	28	20
	13	5	2.6	19	4
	22	7	3.2	27	8
	9	3	2.9	24	4
	10	4	2.5	18	3
	8	3	3.0	36	6
	12	5	2.6	26	5
	..	..	..	50	..
	17	5	3.3	33	9
	18	6	3.0	26	7
	32	11	2.8	22	..
	11	7	1.5	17	6
	..	..	..	30	..
	22	7	3.4	20	7
	20	7	2.9	19	5
	8	2	4.5	48	7
	13	5	2.6	31	7
	7	2	4.1	35	4
	21	6	3.8	24	7
	13	7	2.0	22	6
	13	5	2.7	23	4
	18	4	4.4	26	5
	12	5	2.6	36	6
	7	4	2.0	7	1
	7	3	2.5	33	5
	8	2	4.4	42	5
	17	6	2.9	26	6
	17	7	2.5	20	7
	15	4	3.7	31	..
	19	4	4.2	31	6
	15	5	3.0	30	6
	44	16	2.8	22	15
	19	8	2.3	20	6
	10	4	2.9	25	5
	25	10	2.5	23	12
	20	4	4.9	42	11
	7	3	2.5	29	5
	58	32	1.8	21	21
	..	..	..	27	..
	15	4	3.8	41	9

**Annex table 8: Youth unemployment indicators continued**

Country or territory	Year	Youth population (thousands)	Youth labour force (thousands)	Unemployed youth (thousands)	Female youth unemployment rate (percentage)	Male youth unemployment rate (percentage)	Ratio of female to male youth unemployment
<b>LATIN AMERICA AND THE CARIBBEAN</b>							
Anguilla	2001	2	1	0	17	10	1.6
Antigua and Barbuda	2001	12	6	1	22	18	1.2
Argentina	2006	4282	1966	460	29	19	1.5
Aruba	1997	..	5	1	25	17	1.5
Bahamas	2007		32	6	22	17	1.3
Barbados	2003	36	21	5	29	24	1.2
Belize	2005	58	29	6	29	14	2.1
Bolivia (Plurinational State of)	2002	..	911	84	12	7	1.6
Brazil	2006	..	..	3939	..	..	..
British Virgin Islands	1991	..	2	0	7	8	0.9
Cayman Islands	2007	5	3	0	11	11	1.0
Chile	2007	2880	963	180	23	16	1.4
Colombia	2007	10779	3928	827	28	16	1.7
Costa Rica	2007	903	464	50	15	8	1.8
Cuba	2007	..	..	37	..	..	..
Dominican Republic	2007	1816	953	289	45	21	2.1
Ecuador	2006	1767	907	148	23	12	1.9
El Salvador	2006	1346	640	79	10	14	0.7
French Guiana	2007	..	..	2	..	..	..
Grenada	1998	16	10	3	39	25	1.6
Guadeloupe	2006	..	..	8	..	..	..
Guatemala	1994	..	..	11	..	..	..
Guyana	2002	131	64	15	31	21	1.5
Haiti	1999	1554	497	89	21	15	1.4
Honduras	2005	1562	757	53	11	5	2.2
Jamaica	2006	..	..	46	..	..	..
Martinique	2007	..	..	8	..	..	..
Mexico	2007	19485	9239	618	8	6	1.2
Netherlands Antilles	2007	18	5	1	26	23	1.2
Nicaragua	2006	1237	591	51	10	8	1.2
Panama	2007	543	256	42	24	13	1.8
Paraguay	2007	1236	718	88	18	9	2.1
Peru	2007	1557	890	127	15	14	1.1
Puerto Rico	2007	525	167	37	19	24	0.8
Saint Lucia	2004	..	16	7	46	37	1.2
Saint Vincent and the Grenadines	1991	22	13	5	43	32	1.4

	Youth unemployment rate (percentage)	Adult unemployment rate (percentage)	Ratio of youth unemployment rate to adult unemployment rate	Share of unemployed youth in total unemployed (percentage)	Percentage of unemployed youth in youth population
	13	5	2.6	38	9
	20	6	3.2	38	10
	23	6	3.6	44	11
	20	6	3.5	31	..
	19	6	3.4	41	..
	26	9	3.1	34	15
	20	8	2.4	46	10
	9	4	2.2	42	..
	..	..	..	49	..
	8	3	2.8	41	..
	11	3	3.5	24	6
	19	5	3.5	35	6
	21	8	2.5	37	8
	11	3	4.0	54	6
	..	..	..	42	..
	30	11	2.7	44	16
	16	5	3.0	45	8
	12	5	2.6	44	6
	..	..	..	18	..
	32	10	3.1	49	19
	..	..	..	17	..
	..	..	..	68	..
	24	8	3.0	49	12
	18	5	3.6	43	6
	7	3	2.4	50	3
	..	..	..	39	..
	..	..	..	20	..
	7	3	2.7	41	3
	24	11	2.2	17	7
	9	4	2.1	45	4
	17	5	3.6	46	8
	12	3	3.7	56	7
	14	5	3.0	43	8
	22	9	2.4	24	7
	41	16	2.6	40	..
	37	13	2.8	55	21

**Annex table 8: Youth unemployment indicators continued**

Country or territory	Year	Youth population (thousands)	Youth labour force (thousands)	Unemployed youth (thousands)	Female youth unemployment rate (percentage)	Male youth unemployment rate (percentage)	Ratio of female to male youth unemployment
Suriname	2004	..	29	6	..	..	..
Trinidad and Tobago	2005	245	132	22	22	13	1.7
Uruguay	2007	546	273	66	30	20	1.5
Venezuela (Bolivarian Republic of)	2007	5221	2363	339	17	13	1.4
<b>NORTHERN AMERICA</b>							
Bermuda	2000	7	3	0	8	14	0.5
Canada	2007	4353	2915	326	10	12	0.8
United States of America	2007	37410	22217	2342	9	12	0.8
<b>OCEANIA</b>							
American Samoa	1990	9	3	0	12	12	1.0
Australia	2007	2895	2051	192	9	9	1.0
Cook Islands	1991	4	2	0	20	13	1.6
Fiji	1996	151	67	9	17	11	1.5
French Polynesia	2002	44	18	6	39	29	1.3
Guam	1987	..	..	1	..	..	..
New Caledonia	1996	..	..	10	..	..	..
New Zealand	2007	607	394	38	10	10	1.0
Niue	2001	0	0	0	8	10	0.7
Northern Mariana Islands	2003	10	7	0	4	11	0.4
Samoa	2001	..	12	2	16	11	1.5
Solomon Islands	1999	86	25	11	46	46	1.0
Tonga	2003	..	7	1	15	10	1.5

**Source:** International Labour Organization (2009), Key Indicators of the Labour Market, 6th ed. (Geneva).

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

Data repositories are mainly from LABORSTA, an International Labour Office database on labour statistics, and the Organization for Economic Cooperation and Development (OECD). Detailed information on data, including type of survey, geographic and coverage limitations, reference period, and other remarks are available from the source publication listed above.

	Youth unemployment rate (percentage)	Adult unemployment rate (percentage)	Ratio of youth unemployment rate to adult unemployment rate	Share of unemployed youth in total unemployed (percentage)	Percentage of unemployed youth in youth population
	22	7	3.0	38	..
	17	6	2.9	44	9
	24	6	4.0	44	12
	14	6	2.4	37	7
	11	2	5.7	37	6
	11	5	2.2	30	8
	11	4	2.9	33	6
	12	4	3.4	43	4
	9	3	2.9	40	7
	15	4	3.8	63	8
	13	4	3.6	51	6
	33	7	4.7	50	13
	..	..	..	61	..
	..	..	..	66	..
	10	2	4.3	48	6
	9	1	9.1	62	5
	6	4	1.4	23	4
	12	3	4.5	58	..
	46	26	1.8	42	13
	12	4	3.3	43	..

**ANNEX TABLE 9: Youth undernutrition and shelter deprivation**

Region, subregion and country	Percentage of underweight youth				Percentage of youth deprived of shelter							
	Survey year*	Female			Survey year*	Female	Male	Female	Male	Female	Male	All youth
		15-19	20-24	15-24		15-19	15-19	20-24	20-24	15-24	15-24	15-24
<b>AFRICA</b>												
<b>Eastern Africa</b>												
Comoros	..	..	..	..	1996	46	43	44	39	45	41	43
Ethiopia	2005	19	23	22	2000	90	92	92	92	91	92	91
Kenya	2003	13	11	12	2003	63	69	54	57	59	63	61
Madagascar	2003-2004	22	20	21	2004	18	16	15	16	17	16	16
Malawi	2004	7	8	8	2005	76	76	80	79	78	77	78
Mozambique	2003	11	10	10	2003	82	80	86	84	84	82	83
Rwanda	2005	3	5	5	..	..	..	..	..	..	..	..
Tanzania, United Republic of	2004-2005	12	6	8	2004	77	82	79	75	78	79	78
Uganda	2006	7	9	8	2001	73	77	73	76	73	76	75
Zambia	2007	12	9	10	2001-2002	55	59	56	50	55	55	55
Zimbabwe	2005-2006	9	8	8	2005-2006	57	58	59	48	58	53	56
<b>Middle Africa</b>												
Angola	..	..	..	..	2001	62	60	63	58	63	59	61
Burundi	..	..	..	..	2005	90	89	91	88	90	89	89
Cameroon	2004	11	6	8	2005	56	58	59	48	57	53	55
Central African Republic	1995	14	14	14	1995	79	77	80	80	79	78	79
Chad	2004	31	25	27	2000	95	95	95	92	95	94	94
Congo	2005	20	15	16	2005	64	62	67	54	65	58	62
Congo, Democratic Republic of the	2007	26	18	20	2005	70	73	77	73	73	73	73
Equatorial Guinea	..	..	..	..	2000	66	64	61	60	64	62	63
Gabon	2000	9	9	9	2000	16	19	16	14	16	17	16
Sao Tome and Principe	..	..	..	..	2000	22	24	19	19	20	22	21
<b>Northern Africa</b>												
Egypt	2005	2	1	1	2005	23	24	20	22	22	23	22
Morocco	2003-2004	4	6	6	2005	37	38	33	34	35	36	36
Sudan	..	..	..	..	2000	93	92	91	90	92	91	92
<b>Southern Africa</b>												
Lesotho	2004	3	6	5	2000	55	55	58	56	56	56	56
Namibia	2006-2007	20	17	17	2000	77	77	72	72	75	75	75
South Africa	..	..	..	..	1998	18	18	15	14	17	16	16
Swaziland	2006-2007	5	2	3	2000	34	32	31	28	32	30	31
<b>Western Africa</b>												
Benin	2006	11	10	10	2001	36	36	39	41	38	38	38
Burkina Faso	2003	17	17	17	2003	53	59	55	52	54	56	55



**Annex table 9: Youth undernutrition and shelter deprivation continued**

Region, subregion and country	Percentage of underweight youth				Percentage of youth deprived of shelter							
	Survey year*	Female			Survey year*	Female	Male	Female	Male	Female	Male	All youth
		15-19	20-24	15-24		15-19	15-19	20-24	20-24	15-24	15-24	15-24
Côte d'Ivoire	1999	11	7	9	1999	15	15	14	15	14	15	15
Gambia	..	..	..	..	2000	55	58	50	51	52	55	54
Ghana	2008	10	8	9	2005	61	64	64	56	63	60	61
Guinea	2005	15	12	13	2000	46	45	50	42	48	44	46
Guinea-Bissau	..	..	..	..	2000	65	64	65	57	65	61	63
Liberia	2007	17	10	12	..	..	..	..	..	..	..	..
Mali	2006	14	12	13	2001	69	74	75	66	72	71	71
Mauritania	2001	25	15	20	2001	61	59	59	56	60	58	59
Niger	2006	21	17	18	2006	92	91	92	90	92	91	91
Nigeria	2003	22	19	20	2005	60	66	62	56	61	62	61
Senegal	2005	17	16	16	2005	59	61	59	57	59	59	59
Sierra Leone	..	..	..	..	2005	80	78	82	72	81	75	78
Togo	1998	15	13	14	1998	21	25	20	24	20	25	23
<b>ASIA</b>												
<b>Eastern Asia</b>												
China **	2000	26	14	20	1992	6	5	6	5	6	5	5
Mongolia	..	..	..	..	2005	74	77	76	75	75	76	75
<b>South-central Asia</b>												
Bangladesh	2007	36	34	35	2005	83	85	83	81	83	83	83
Bhutan	..	..	..	..	2007	52	59	41	51	48	55	51
India	2005-2006	48	43	44	2005-2006	79	77	77	72	78	75	76
Kazakhstan	1999	14	13	13	1999	1	1	1	2	1	2	1
Kyrgyzstan	1997	14	6	11	2005	39	42	40	43	39	42	41
Nepal	2006	26	25	25	2006	86	81	83	77	85	79	82
Pakistan	..	..	..	..	2007	52	52	50	50	51	51	51
Tajikistan	..	..	..	..	2000	61	61	59	61	60	61	61
Uzbekistan	1996	18	10	14	2005	32	31	30	30	31	30	31
<b>South-eastern Asia</b>												
Cambodia	2005	22	21	21	2005	88	90	86	89	87	90	89
Indonesia	..	..	..	..	2003	13	14	13	13	14	13	13
Lao People's Democratic Republic	..	..	..	..	2005	56	59	61	57	58	58	58
Myanmar	..	..	..	..	2000	67	68	66	64	67	66	66
Philippines	..	..	..	..	2005	11	12	9	12	10	12	11
Thailand	..	..	..	..	2005	30	31	29	31	29	31	30
Viet Nam	..	..	..	..	2005	37	36	38	36	37	36	37
<b>Western Asia</b>												
Armenia	2005	2	11	11	2000	1	1	1	1	1	1	1
Azerbaijan	2006	2	7	7	2000	32	32	34	33	33	32	33
Cyprus***	2003	..	..	19	..	..	..	..	..	..	..	..
Iraq	..	..	..	..	2000	28	29	22	24	25	27	26

**Annex table 9: Youth undernutrition and shelter deprivation continued**

Region, subregion and country	Percentage of underweight youth				Percentage of youth deprived of shelter							
	Survey year*	Female			Survey year*	Female	Male	Female	Male	Female	Male	All youth
		15-19	20-24	15-24		15-19	15-19	20-24	20-24	15-24	15-24	15-24
Jordan	2007	2	5	5	..	..	..	..	..	..	..	..
Occupied Palestinian Territory	..	..	..	..	2006	26	25	19	22	23	24	23
Turkey	1998	6	4	4	1998	8	8	7	8	8	8	8
Yemen	1997	29	28	28	2005	74	76	70	69	72	73	72
<b>EUROPE ***</b>												
<b>Eastern Europe</b>												
Bulgaria	2001	..	..	19	..	..	..	..	..	..	..	..
Czech Republic	2002	..	..	13	..	..	..	..	..	..	..	..
Hungary	2003	..	..	15	..	..	..	..	..	..	..	..
Poland	1996	..	..	17	..	..	..	..	..	..	..	..
Republic of Moldova	2005	12	9	9	2000	12	13	15	13	13	13	13
Romania	2000	..	..	16	..	..	..	..	..	..	..	..
Russian Federation ****	..	..	..	..	2004	4	4	4	2	4	3	4
Slovakia	2002	..	..	19	..	..	..	..	..	..	..	..
Ukraine	..	..	..	..	2005	11	10	13	10	12	10	11
<b>Northern Europe</b>												
Denmark	2000	..	..	9	..	..	..	..	..	..	..	..
Estonia	1996	..	..	15	..	..	..	..	..	..	..	..
Finland	2003	..	..	12	..	..	..	..	..	..	..	..
Iceland	1998	..	..	7	..	..	..	..	..	..	..	..
Ireland	2002	..	..	4	..	..	..	..	..	..	..	..
Latvia	2003	..	..	18	..	..	..	..	..	..	..	..
Lithuania	2002	..	..	9	..	..	..	..	..	..	..	..
Norway	2002	..	..	..	..	..	..	..	..	..	..	..
Sweden	2002-2003	..	..	10	..	..	..	..	..	..	..	..
United Kingdom	2002	..	..	17	..	..	..	..	..	..	..	..
<b>Southern Europe</b>												
Albania	..	..	..	..	2000	41	40	38	36	39	38	39
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..
Greece	2002	..	..	9	..	..	..	..	..	..	..	..
Italy	2002	..	..	18	..	..	..	..	..	..	..	..
Malta	2002	..	..	11	..	..	..	..	..	..	..	..
Portugal	1999	..	..	10	..	..	..	..	..	..	..	..
Slovenia	2001	..	..	10	..	..	..	..	..	..	..	..
Spain	2003	..	..	14	..	..	..	..	..	..	..	..
<b>Western Europe</b>												
Austria	1999	..	..	13	..	..	..	..	..	..	..	..
Belgium	2001	..	..	15	..	..	..	..	..	..	..	..
France	2000	..	..	19	..	..	..	..	..	..	..	..

**Annex table 9: Youth undernutrition and shelter deprivation continued**

Region, subregion and country	Percentage of underweight youth				Percentage of youth deprived of shelter							
	Survey year*	Female			Survey year*	Female	Male	Female	Male	Female	Male	All youth
		15-19	20-24	15-24		15-19	15-19	20-24	20-24	15-24	15-24	15-24
Germany	1998	..	..	4	..	..	..	..	..	..	..	..
Netherlands	2001-2002	..	..	13	..	..	..	..	..	..	..	..
Switzerland	2002	..	..	17	..	..	..	..	..	..	..	..
<b>LATIN AMERICA AND THE CARIBBEAN</b>												
<b>Caribbean</b>												
Dominican Republic	2002	11	7	8	2002	11	13	12	14	12	13	13
Haiti	2005-2006	13	16	15	2000	37	43	40	39	38	42	40
<b>Central America</b>												
Guatemala	1999	2	2	2	1999	35	46	34	36	35	42	38
Honduras	2005-2006	6	4	5	..	..	..	..	..	..	..	..
Nicaragua	2001	7	4	6	2001	64	67	58	63	61	65	63
<b>South America</b>												
Bolivia (Plurinational State of)	2003	3	2	2	2003	50	51	51	47	51	50	50
Brazil	1996	8	7	8	1996	8	10	7	9	7	9	8
Colombia	2005	9	7	7	2005	8	11	6	8	7	10	8
Guyana	..	..	..	..	2000	35	37	36	32	35	35	35
Peru	2003	2	1	1	2003	47	53	43	48	45	51	48
Suriname	..	..	..	..	2000	13	11	13	7	13	9	11
Venezuela (Bolivarian Republic of)	..	..	..	..	2000	47	44	47	44	47	44	46

**Source:** Calculated by the Townsend Centre for International Poverty Research, University of Bristol. Available from <http://www.bristol.ac.uk/poverty>.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

\* Unless otherwise indicated, data are taken from Demographic Health Surveys (DHS) or Multiple Indicator Cluster Surveys (MICS) for the latest available year (range: 1995-2008).

\*\* China, excluding Hong Kong (SAR) and Macao (SAR); data sources are the China Health and Nutrition Survey (CHNS) and National Statistical Society of China (NSSC).

\*\*\* Data taken from Eurostat New Cronos and European Community Household Panel survey (ECHP).

\*\*\*\* Russian Federation: data taken from Russian Longitudinal Monitoring Surveys (RLMS).

**ANNEX TABLE 10: Youth access to sanitation and water**

Region, subregion and country	Percentage of youth deprived of sanitation by age (years) and sex							
	Survey year*	15-19		20-24		15-24		All youth 15-24
		Females	Males	Females	Males	Females	Males	Both sexes
<b>AFRICA</b>								
<b>Eastern Africa</b>								
Comoros	1996	—	0	0	0	0	0	0
Ethiopia	2000	75	79	77	81	76	80	78
Kenya	2003	14	18	12	13	13	16	14
Madagascar	2004	43	47	42	43	43	45	44
Malawi	2005	79	76	78	77	79	77	78
Mozambique	2003	54	52	62	57	58	54	56
Tanzania, United Republic of	2004	13	13	16	15	15	14	14
Uganda	2001	13	11	13	14	13	12	13
Zambia	2001-2002	23	23	27	22	25	23	24
Zimbabwe	2005-2006	32	34	30	27	31	31	31
<b>Middle Africa</b>								
Angola	2001	38	35	41	38	40	36	38
Burundi	2005	70	68	67	67	68	67	68
Cameroon	2005	60	63	61	55	60	59	60
Central African Republic	1995	23	24	25	24	24	24	24
Chad	2000	73	70	73	65	73	68	71
Congo	2005	9	8	10	8	9	8	9
Congo, Democratic Republic of the	2005	57	56	61	55	59	55	57
Equatorial Guinea	2000	8	8	10	9	9	9	9
Gabon	2000	2	2	2	2	2	2	2
Sao Tome and Principe	2000	68	69	69	70	69	69	69
<b>Northern Africa</b>								
Egypt	2005	1	2	1	1	1	1	1
Morocco**	2005	17	18	16	16	16	17	17
Sudan	2000	31	29	30	24	31	27	29
<b>Southern Africa</b>								
Lesotho	2000	76	77	75	78	75	78	76
Namibia	2000	61	57	51	54	56	55	56
South Africa	1998	17	19	16	15	17	17	17
Swaziland	2000	63	68	64	67	63	68	65
<b>Western Africa</b>								
Benin	2001	58	60	64	59	60	59	60
Burkina Faso	2003	62	69	62	60	62	65	63
Côte d'Ivoire	1999	25	29	27	28	26	28	27
Gambia	2000	10	12	10	8	10	10	10
Ghana	2005	35	40	32	37	34	39	36
Guinea	2000	30	28	31	28	30	28	29
Guinea-Bissau	2000	33	34	33	31	33	33	33



**Annex table 10: Youth access to sanitation and water continued**

Region, subregion and country	Percentage of youth deprived of sanitation by age (years) and sex							
	Survey year*	15-19		20-24		15-24		All youth 15-24
		Females	Males	Females	Males	Females	Males	Both sexes
Mali	2001	17	17	20	16	18	17	18
Mauritania	2001	49	46	43	39	46	43	44
Niger	2006	75	71	76	68	76	70	73
Nigeria	2005	49	55	47	49	48	52	50
Senegal	2005	18	19	18	15	18	17	18
Sierra Leone	2005	61	62	65	57	63	60	61
Togo	1998	97	97	98	97	97	97	97
<b>ASIA</b>								
<b>Eastern Asia</b>								
China ***	1992	8	7	8	7	8	7	7
Mongolia	2005	18	21	26	24	22	22	22
<b>South-central Asia</b>								
Bangladesh	2005	58	60	57	55	57	58	58
Bhutan****	2007	9	10	8	10	8	10	9
India†	2005-2006	57	56	54	51	56	54	55
Kazakhstan	1999	1	—	1	0	1	0	0
Kyrgyzstan	2005	4	3	2	3	3	3	3
Nepal	2006	60	56	59	54	60	55	57
Pakistan	2007	36	36	33	34	35	35	35
Tajikistan	2000	9	10	9	9	9	9	9
Uzbekistan	2005	1	1	1	1	1	1	1
<b>South-eastern Asia</b>								
Cambodia	2005	63	68	66	65	65	67	66
Indonesia	2003	21	23	21	21	21	22	22
Lao People's Democratic Republic	2005	46	50	48	45	47	48	47
Myanmar	2000	80	80	80	80	80	80	80
Philippines	2005	10	13	10	10	10	12	11
Thailand	2005	1	1	1	1	1	1	1
Viet Nam	2005	22	24	21	21	21	23	22
<b>Western Asia</b>								
Armenia	2000	—	0	—	—	—	—	—
Azerbaijan	2000	20	20	18	18	19	19	19
Iraq	2000	7	7	6	6	6	7	6
Occupied Palestinian Territory**	2006	..	..	..	..	..	..	..
Turkey	1998	37	36	30	33	34	35	34
Yemen	2005	26	23	23	23	24	23	24
<b>EUROPE</b>								
<b>Eastern Europe</b>								
Republic of Moldova	2000	1	1	1	1	1	1	1
Russian Federation‡	2004	—	—	—	—	—	—	—
Ukraine	2005	5	5	3	4	4	5	4



Percentage of youth deprived of water by age (years) and sex								
Survey year*	15-19		20-24		15-24		All youth 15-24	
	Females	Males	Females	Males	Females	Males	Both sexes	
2001	56	61	61	55	58	58	58	
2001	54	54	52	49	53	51	52	
2006	60	57	61	53	61	55	58	
2005	52	55	50	50	52	53	52	
2005	31	30	31	28	31	29	30	
2005	51	52	53	44	52	48	50	
1998	39	44	39	41	39	43	41	
1992	34	34	32	33	33	33	33	
2005	33	35	38	36	35	36	35	
2005	3	3	3	3	3	3	3	
2007	12	13	12	11	12	12	12	
2005-2006	15	15	15	14	15	15	15	
1999	45	49	45	44	45	46	46	
2005	11	16	10	12	11	14	12	
2006	16	16	17	17	16	16	16	
2007	10	9	8	9	9	9	9	
2000	53	58	54	55	53	56	55	
2005	9	10	11	10	10	10	10	
2005	26	27	27	27	26	27	27	
2003	37	38	37	37	37	37	37	
2005	60	61	62	61	61	61	61	
2000	68	68	67	68	68	68	68	
2005	17	17	17	16	17	17	17	
2005	32	31	40	40	36	35	36	
2005	11	13	11	11	11	12	12	
2000	11	13	9	10	10	11	11	
2000	36	38	35	40	35	39	37	
2000	18	18	17	16	17	17	17	
2006	29	29	28	30	29	29	29	
1998	37	32	35	35	36	33	34	
2005	47	45	45	46	46	45	46	
2000	15	16	13	17	14	16	15	
2004	2	3	2	2	2	2	2	
2005	6	6	6	4	6	5	5	

**Annex table 10: Youth access to sanitation and water continued**

Region, subregion and country	Percentage of youth deprived of sanitation by age (years) and sex							
	Survey year*	15-19		20-24		15-24		All youth 15-24
		Females	Males	Females	Males	Females	Males	Both sexes
<b>Southern Europe</b>								
Albania	2000	9	10	9	9	9	10	9
Bosnia and Herzegovina	2000	5	5	5	6	5	6	5
<b>LATIN AMERICA AND THE CARIBBEAN</b>								
<b>Caribbean</b>								
Dominican Republic	2002	4	4	5	6	4	5	5
Haiti	2000	45	55	49	50	47	53	50
Jamaica	2005	2	2	2	1	2	2	2
<b>Central America</b>								
Guatemala	1999	11	14	13	12	12	13	12
Nicaragua	2001	12	14	15	15	14	15	14
<b>South America</b>								
Bolivia (Plurinational State of)	2003	28	31	25	26	27	28	28
Brazil	1996	11	13	9	12	10	12	11
Colombia	2005	7	9	6	7	7	8	7
Guyana	2000	2	2	1	1	1	2	1
Peru	2003	13	15	10	13	11	14	13
Suriname	2000	13	6	14	4	13	5	9
Venezuela (Bolivarian Republic of)	2000	6	7	7	5	6	6	6

**Source:** Calculated by the Townsend Centre for International Poverty Research, University of Bristol. Available from <http://www.bristol.ac.uk/poverty>.

**NOTES:**

Two dots (..) indicate that data are not available or are not separately reported.

An em dash (—) indicates that the amount is nil or negligible.

\* Unless otherwise indicated, data are taken from Demographic Health Surveys (DHS) or Multiple Indicator Cluster Surveys (MICS) for the latest available year (range: 1992-2004).

\*\* Morocco and Occupied Palestinian Territory: data are from the Pan Arab Project for Family Health (PAPFAM).

\*\*\* China, excluding Hong Kong and Macao (male data in parentheses): data sources are the China Health and Nutrition Survey (CHNS) and National Statistical Society of China (NSSC).

\*\*\*\* Russian Federation: data taken from Russian Longitudinal Monitoring Surveys (RLMS).

† India: data are from the National Family Health Survey (NFHS3).

‡ Russian Federation: data are from Russian Longitudinal Monitoring Surveys (RLMS).

Percentage of youth deprived of water by age (years) and sex								
Survey year*	15-19		20-24		15-24		All youth 15-24	
	Females	Males	Females	Males	Females	Males	Both sexes	
2000	17	15	15	14	16	15	15	
2000	5	5	5	5	5	5	5	
2002	62	57	67	59	64	58	61	
2000	36	46	35	38	36	42	39	
2005	8	8	6	7	7	8	7	
1999	25	23	26	25	26	24	25	
2001	9	10	8	9	8	10	9	
2003	8	10	8	9	8	10	9	
1996	3	2	3	2	3	2	3	
2005	11	14	10	12	11	13	12	
2000	15	19	22	19	18	19	19	
2003	19	21	17	20	18	20	19	
2000	14	8	15	5	14	7	11	
2000	9	10	12	13	11	11	11	

**ANNEX TABLE 11: Leading causes of death among youth**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
<b>AFRICA</b>							
Egypt	2000	Event of undetermined intent	Heart failure and complications and ill-defined descriptions of heart disease	Land transport accidents	1 675	11 977	14
Mauritius	2007	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion/assault (homicide)**	28	129	22
South Africa	2006	Event of undetermined intent	Tuberculosis	Influenza and pneumonia	7 844	34 744	23
<b>ASIA</b>							
Bahrain	2001	Land transport accidents	Event of undetermined intent	Heart failure and complications and ill-defined descriptions of heart disease	22	70	31
Brunei Darussalam	2000	Transport accidents	Accidental drowning and submersion	..	12	46	26
Georgia	2001	Influenza and pneumonia	Chronic lower respiratory diseases	Assault (homicide)	72	391	18
Israel	2006	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	120	459	26
Japan	2007	Intentional self-harm (suicide)	Land transport accidents	Malignant neoplasms of lymphoid, haematopoietic and related tissue	1 848	4 648	40
Kazakhstan	2007	Transport accidents	Intentional self-harm (suicide)	Assault (homicide)	1 007	4 952	20
Kyrgyzstan	2006	Land transport accidents	Intentional self-harm (suicide)	Tuberculosis	115	952	12
Kuwait	2002	Land transport accidents	Malignant neoplasms of lymphoid, haematopoietic and related tissue	Epilepsy and status epilepticus/congenital malformations, deformations and chromosomal abnormalities**	97	211	46
Korea, Republic of	2006	Intentional self-harm (suicide)	Land transport accidents	Malignant neoplasms of lymphoid, haematopoietic and related tissue	628	2 450	26
Philippines	2003	Assault (homicide)	Land transport accidents	Tuberculosis	2 337	16 472	14
Singapore*	2006	Land transport accidents	Intentional self-harm (suicide)	Influenza and pneumonia	38	131	29

**Annex table 11: Leading causes of death among youth continued**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
Sri Lanka	2003	Intentional self-harm (suicide)	Transport accidents	Accidental drowning and submersion	867	4 555	19
Thailand	2002	Land transport accidents	Event of undetermined intent	Intentional self-harm (suicide)	3 856	16 613	23
<b>EUROPE</b>							
Austria	2008	Land transport accidents	Intentional self-harm (suicide)	Mental and behavioural disorders due to psychoactive substance use	148	505	29
Belarus	2003	Transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	383	1 740	22
Belgium	2004	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	271	661	41
Bulgaria	2006	Land transport accidents	Intentional self-harm (suicide)	Heart failure and complications and ill-defined descriptions of heart disease	133	672	20
Croatia	2006	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	137	326	42
Czech Republic	2007	Land transport accidents	Intentional self-harm (suicide)	Event of undetermined intent	242	675	36
Denmark	2006	Land transport accidents	Intentional self-harm (suicide)	Accidental poisoning	82	239	34
Estonia	2005	Land transport accidents	Accidental poisoning	Intentional self-harm (suicide)	35	191	18
Finland	2007	Intentional self-harm (suicide)	Land transport accidents	Accidental poisoning	120	395	30
France	2006	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	1 211	3 488	35
Germany	2006	Land transport accidents	Intentional self-harm (suicide)	Event of undetermined intent	1 180	3 518	34
Greece*	2007	Land transport accidents	Accidental poisoning	Accidental falls	354	734	48

**Annex table 11: Leading causes of death among youth continued**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
Hungary	2005	Land transport accidents	Intentional self-harm (suicide)	Congenital malformations, deformations and chromosomal abnormalities	203	625	32
Iceland	2006	Land transport accidents	Intentional self-harm (suicide)	Congenital malformations, deformations and chromosomal abnormalities	11	26	42
Ireland	2007	Intentional self-harm (suicide)	Land transport accidents	Accidental poisoning	85	353	24
Italy	2006	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	1 082	2 492	43
Latvia	2007	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	77	276	28
Lithuania	2007	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	176	556	32
Luxembourg	2006	Land transport accidents	Accidental poisoning	Intentional self-harm (suicide)	9	27	33
Malta	2007	Land transport accidents	Accidental poisoning	..	4	25	16
Netherlands	2007	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	170	612	28
Norway	2006	Intentional self-harm (suicide)	Land transport accidents	Accidental poisoning	86	276	31
Poland	2007	Land transport accidents	Intentional self-harm (suicide)	Event of undetermined intent	1 175	3 581	33
Portugal	2003	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	349	870	40
Republic of Moldova	2007	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	155	570	27
Romania	2008	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	546	2 050	27



**Annex table 11: Leading causes of death among youth continued**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
Russian Federation	2006	Transport accidents	Intentional self-harm (suicide)	Accidental poisoning by and exposure to noxious substances	7 549	40 083	19
Serbia	2007	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	106	561	19
Slovakia	2005	Land transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	121	433	28
Slovenia	2007	Land transport accidents	Intentional self-harm (suicide)	Accidental falls	74	159	47
Spain	2005	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue	920	2 344	39
Sweden	2006	Intentional self-harm (suicide)	Land transport accidents	Accidental poisoning	124	464	27
Switzerland	2007	Intentional self-harm (suicide)	Land transport accidents	Accidental poisoning	110	373	29
The former Yugoslav Republic of Macedonia*	2003	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	23	171	13
Ukraine	2005	Transport accidents	Intentional self-harm (suicide)	Accidental drowning and submersion	1 792	8 414	21
United Kingdom	2007	Land transport accidents	Intentional self-harm (suicide)	Mental and behavioural disorders due to psychoactive substance use	860	3 415	25
<b>LATIN AMERICA AND THE CARIBBEAN</b>							
Argentina	2006	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	877	5 385	16
Bahamas	2005	Assault (homicide)	Land transport accidents	Human immunodeficiency virus (HIV) disease	16	57	28
Barbados	2003	Diseases of the musculoskeletal system and connective tissue	Land transport accidents	..	7	41	17
Belize	2005	Event of undetermined intent	Land transport accidents	Assault (homicide)	22	86	26

**Annex table: Leading causes of death among youth continued**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
Brazil	2005	Assault (homicide)	Land transport accidents	Event of undetermined intent	17 994	45 336	40
Chile	2005	Intentional self-harm (suicide)	Land transport accidents	Assault (homicide)	326	1 688	19
Colombia	2006	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	5 130	11 010	47
Costa Rica	2006	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	129	588	22
Cuba	2006	Land transport accidents	Assault (homicide)	Intentional self-harm (suicide)	147	799	18
Ecuador	2002	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	583	3 249	18
El Salvador	2006	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	1 258	2 265	56
Guatemala	2006	Assault (homicide)	Event of undetermined intent	Influenza and pneumonia	1 592	5 324	30
Mexico	2006	Land transport accidents	Assault (homicide)	Intentional self-harm (suicide)	3 707	17 293	21
Panama	2006	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	140	595	24
Paraguay	2006	Land transport accidents	Assault (homicide)	Intentional self-harm (suicide)	253	1 027	25
Saint Lucia	2002	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	8	33	24
Saint Vincent and Grenadines	2004	Assault (homicide)	Human immunodeficiency virus (HIV) disease	..	7	21	33
Trinidad and Tobago	2002	Assault (homicide)	Land transport accidents	Intentional self-harm (suicide)	49	311	16
Uruguay	2004	Intentional self-harm (suicide)	Land transport accidents	Assault (homicide)	73	376	19
Venezuela (Bolivarian Republic of)	2005	Assault (homicide)	Event of undetermined intent	Land transport accidents	3 105	8 777	35
<b>NORTHERN AMERICA</b>							
Canada	2004	Land transport accidents	Intentional self-harm (suicide)	Assault (homicide)	715	2 221	32
United States of America	2005	Land transport accidents	Assault (homicide)	Intentional self-harm (suicide)	11 100	34 234	32
<b>OCEANIA</b>							
Australia	2006	Land transport accidents	Intentional self-harm (suicide)	Accidental poisoning	393	1 276	31

**Annex table 11: Leading causes of death among youth continued**

Region and country	Year	Leading cause of death	Second leading cause of death	Third leading cause of death	Number of deaths for leading cause of death	Total number of deaths	Deaths from leading cause as a proportion of total deaths (percentage)
New Zealand	2005	Land transport accidents	Intentional self-harm (suicide)	Malignant neoplasms of lymphoid, haematopoietic and related tissue/Accidental drowning and submersion**	145	422	34

**Source:** World Health Organization (WHO), Mortality Data Base as of 15 September 2009. These are data as reported by countries to WHO.

**NOTES:**

Countries with fewer than 20 deaths among those aged 15-24 years have been excluded from the table.

The number of deaths and population are in units.

Two dots (..) indicate that data are not available or are not separately reported.

# PROFILE OF YOUTH

## BRIEF DEMOGRAPHIC AND DEVELOPMENT PROFILE OF YOUTH

For statistical purposes, the United Nations defines youth as individuals between the ages of 15 and 24. Young people currently number 1.2 billion, accounting for approximately 18 per cent of the global population (United Nations, 2009b). Youth do not constitute a homogeneous group; their socio-economic, demographic, and geographical situations vary widely both within and between regions. Notwithstanding these differences, regional-level analysis provides a general understanding of their development profile. The vast majority of the world's youth—some 87 per cent—live in developing countries and face challenges deriving from limited access to resources, education, training, employment, and broader economic development opportunities.

At present, 62 per cent of the world's youth live in Asia and 17 per cent (the next largest proportion) live in Africa; the population of young men and women in the two regions totals about 960 million. By the middle of the twenty-first century, the proportion of youth living in Asia is expected to decline to 53 per cent, while in Africa the proportion will likely rise significantly, to 29 per cent (United Nations, 2009b).

Although there are no disaggregated data on youth living below the poverty line, it is evident that a substantial number of young people reside in areas in which poverty constitutes a major challenge. Approximately 64 per cent of youth in Africa and 84 per cent in Asia live in countries where at least one third of the population subsists on less than US\$ 2 per day (United Nations, 2009b; World Bank, 2007). Youth are also concentrated in areas with limited access to basic social services.

Employment is an integral part of the transition to adulthood and plays a central role in the social integration of young people. It provides youth with economic security and facilitates their participation in society at multiple levels. Youth access to employment essentially translates into income and resource access, both of which are pivotal to shaping adaptive capacity (United Nations, 2007b). However, young people continue to be overrepresented among the world's unemployed; in 2007, youth comprised only 25 per cent of the working-age population but accounted for more than 40 per cent of those who were jobless (International Labour Office, 2008). The global youth unemployment rate for 2007 stood at 12 per cent, or three times the adult rate. In South-East Asia and the Pacific, youth unemployment rates as high as six times those of adults have been recorded (International Labour Office, 2008).

For the vast majority of youth living in developing countries, unemployment rates tell only part of the story. For young people in these areas, informal, non-secure, and low-wage employment is the norm, with labour activity among youth concentrated in agriculture and related industries and in the informal sector. More than 79 per cent of the world's youth live in Africa, Asia, and Oceania, where employment in agriculture comprises at least 35 per cent of total employment (World Bank, 2008a; United Nations, 2009b). In sub-Saharan Africa, for example, agriculture accounts for 65 per cent of

employment (World Bank, 2008a). In several Asian countries youth employment has shifted towards manufacturing or services, but agriculture remains a significant employer of young workers, especially the younger segment of the youth cohort (Asian Development Bank, 2008).

Education is another essential element in the transition to adulthood. However, a substantial number of young people in developing countries continue to face challenges relating to educational access and quality. Although the global youth literacy rate increased from 84 per cent during the period 1985-1994 to 89 per cent during the period 2000-2006, progress has been uneven, with youth literacy rates below 80 per cent recorded in sub-Saharan Africa and in Southern and Western Asia (United Nations Educational, Scientific and Cultural Organization, 2008). Secondary enrolment levels are as low as 25 per cent in some Pacific countries and 16 per cent in parts of Asia, but the lowest rates are found among youth in Africa (United Nations Educational, Scientific and Cultural Organization, 2008). Large disparities in educational quality and access also exist within countries owing to factors such as income, location, gender, and ethnicity.

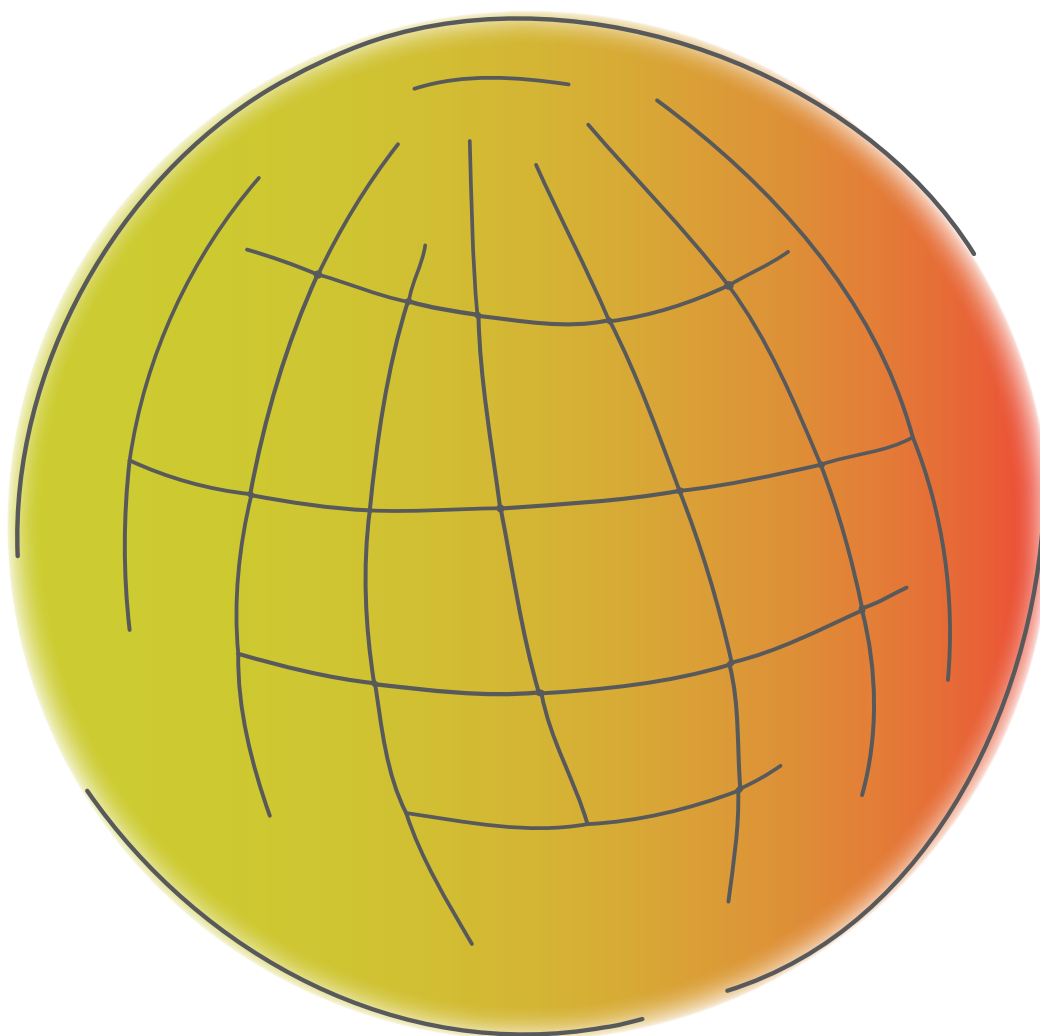












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