

state of world population 2011



The State of World Population 2011

This report was produced by the Information and External Relations Division of UNFPA, the United Nations Population Fund

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Acknowledgements

The editorial team is grateful to the report's Advisory Board for guiding the conceptualization and development of the report and for providing invaluable feedback on drafts.

Heads or acting chiefs of seven UNFPA field offices (and their staff) set up interviews, arranged logistics and helped identify story ideas and guided the reporting in each location: Bernard Coquelin (China), Ziad Rifai (Egypt), Benoit Kalasa (Ethiopia), Marc Derveeuw (India), Diego Palacios (Mexico), Patricia Guzmán (Mozambique), Agathe Lawson (Nigeria), and François Farah and Tatjana Sikoska (the former Yugoslav Republic of Macedonia). UNFPA's regional directors provided valuable support to the development of the report: Hafedh Chekir (Arab States), Thea Fierens (Eastern Europe and Central Asia), Nobuko Horibe (Asia and the Pacific), Bunmi Makinwa (Africa) and Marcela Suazo (Latin America and the Caribbean). Hilkka Vuorenmaa, senior advocacy officer of Väestöliitto, the Family Federation of Finland, laid the groundwork for reporting in that country.

Invaluable guidance was also provided by Safiye Çağar, Director of the Information and External Relations Division; Neil Ford, Chief of the Media and Communications Branch; and Delia

Barcelona, Saturnin Epie, Ann Erb-Leoncavallo, Antti Kaartinen, Bettina Maas, Purnima Mane, Niyi Ojuolape, Elena Pirondini, Sherin Saadallah and Mari Simonen of UNFPA's Office of the Executive Director.

Other colleagues in UNFPA's Technical Division and Programme Division—too numerous to fully list here—also provided insightful comments on drafts, ensured accuracy of data and lent focus on direction to the issues covered in the report.

The Population Division of the United Nations Department of Economic and Social Affairs, the source of most of the data in the report, guided the analysis and presentation of population projections. Without their support, this report would not have been possible. UNESCO's Institute for Statistics, UNICEF, the World Health Organization, the Food and Agriculture Organization of the United Nations, the World Bank and the UNFPA/NIDI Resource Flows Project and the Statistics Division of the United Nations Department of Economic and Social Affairs also provided critical data. Edilberto Loiaza of UNFPA's Population and Development Branch guided the selection and presentation of indicators.

Thanks to generous financial support from UNFPA's Technical Division, this report features all original photography of the people and places mentioned in the narrative.

Original photography in each location by Guo Tieliu (China); Matthew Cassel (Egypt); Antonio Fiorente (Ethiopia); Sami Sallinen (Finland); Sanjit Das and Atul Loke (India); Ricardo Ramirez Arriola (Mexico); Pedro Sa Da Bandeira (Mozambique); Akintunde Akinleye (Nigeria); and Antonin Kratochvil (the former Yugoslav Republic of Macedonia).

The editorial team also wishes to thank the individuals who told their stories for this report.

Cover photo:

Geography class, Eduardo Mondlane University, Maputo, Mozambique

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People and possibilities in a world of 7 billion

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Foreword

Seven billion people will inhabit the earth on 31 October. During my lifetime, I have seen world population nearly triple. And 13 years from now, I will see another billion added to our numbers. In my grandchildren's lifetimes, there could be as many as 10 billion people in our world.

How did we become so many? How large a number can our Earth sustain?

These are important questions, but perhaps not the right ones for our times. When we look only at the big number, we risk being overwhelmed and losing sight of new opportunities to make life better for everyone in the future.

So instead of asking questions like, "Are we too many?" we should instead be asking, "What can I do to make our world better?" or, "What can we do to transform our growing cities into forces for sustainability?" We should also ask ourselves what each of us can do to empower the elderly so they can play a more active role in their communities. What can we do to unleash the creativity and potential of the largest youth cohort humanity has ever seen? And what can we do to remove barriers to equality between women and men so that everyone has the full power to make their own decisions and realize their full potential?

The State of World Population 2011 looks at the trends—the dynamics—that are defining our world of 7 billion and shows what people in vastly different countries and circumstances are doing in their own

communities to make the most of our world of 7 billion.

Some of the trends are remarkable: Today, there are 893 million people over the age of 60 worldwide. By the middle of this century that number will rise to 2.4 billion. About one in two people lives in a city, and in only about 35 years, two out of three will. People under the age of 25 already make up 43 per cent of the world's population, reaching as much as 60 per cent in some countries.

This report provides a snapshot of how China, Egypt, Ethiopia, Finland, India, Mexico, Mozambique, Nigeria, and the former Yugoslav Republic of Macedonia are facing diverse demographic challenges, ranging from ageing populations to high fertility rates, and from urbanization to the emergence of new generations of young people. Some of these countries are coping with high fertility rates and others are facing rates so low that governments are already looking for ways to increase population size. Some countries with labour shortages are looking to migrants to fill jobs, while others are relying on the remittances sent back home by citizens working overseas to buoy their economies. And while some countries are attracting more people to emerging mega-cities



UNFPA Executive
Director Babatunde
Osotimehin.

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where jobs are plentiful and the cost of living is high, others are seeing waves of migration from city centres to peri-urban areas where the cost of living may be lower but basic services and jobs may be in short supply.

This report makes the case that with planning and the right investments in people now—to empower them to make choices that are not only good for themselves but for our global commons—our world of 7 billion can have thriving, sustainable cities, productive labour forces that can fuel economic growth, youth populations that contribute to the well-being of economies and societies, and a generation of older people who are healthy and actively engaged in the social and economic affairs of their communities.

In many parts of the developing world, where population growth is outpacing economic growth, the need for reproductive health services, especially family planning, remains great. The attainment of a stable population is a sine qua non for accelerated, planned economic growth and development. Governments that are serious about eradicating poverty should also be serious about providing the services, supplies, information that women need to exercise their reproductive rights.

Our record population size can be viewed in many ways as a success for humanity: People are living longer, healthier lives. But not everyone has benefited from this achievement or the higher quality of life that this implies. Great disparities exist between and within countries. Disparities in rights and opportunities also exist between men and women, girls and boys. Charting a path now to development that promotes equality, rather than exacerbates or reinforces inequalities, is more important than ever.

We all have a stake in the future of humanity. Every individual, every government, every business, is more interconnected and interdependent than ever, so what each of us does now will matter to all of us long into the future. Together we can change and improve the world.

We are 7 billion people with 7 billion possibilities.

Babatunde Osotimehin Executive Director, UNFPA



CHAPTER ONE

A closer look at our world of 7 billion

The milestone of 7 billion is marked by achievements, setbacks and paradoxes. While women are on average having fewer children than they were in the 1960s, our numbers continue to rise. Globally, people are younger—and older—than ever before. In some of the poorest countries, high fertility rates hamper development and perpetuate poverty, while in some of the richest countries, low fertility rates and too few people entering the job market are raising concerns

about prospects for sustained economic growth and about the viability of social security systems. While labour shortages threaten to stymie the economies of some industrialized countries, unemployed would-be migrants in developing countries are finding more and more national borders closed to them and the expertise they may have to offer. And while progress is being made in reducing extreme poverty, gaps between rich and poor are widening almost everywhere.

The State of World Population 2011 explores some of these paradoxes from the perspective of individuals and describes the obstacles they confront—and overcome—in trying to build better lives for themselves, their families, communities and nations.

Through personal stories, this report sheds light on the real-life challenges we face in our world of 7 billion. It is mainly a report from the field, from nine countries where the ordinary people who live there, the national experts who study demographic trends and the policymakers who must make decisions based on local conditions talk directly about their lives and work: China, Egypt, Ethiopia, Finland, India, Mexico, Mozambique, Nigeria and the former Yugoslav Republic of Macedonia.

Together, the people profiled from these countries form a collage of the diverse human experiences, aspirations and priorities that illustrate the diversity in our world population and the trends behind it.

In conversations with people living and working in these countries, it does not take long to discover that no population issue is now seen as unconnected to others. The lives of ageing citizens, for example, are universally bound up with trends among youth. In many developed and developing countries, younger job-seekers are migrating from rural areas to cities or to other countries where employment prospects are better, often leaving older

 Pedestrians in Mexico City.
 ©UNFPA/Ricardo Ramirez Arriola family members behind, sometimes without the support they need to carry out their daily lives. In some of the richer countries, smaller numbers of young people mean uncertainty about who will care for the old in future years and pay for the benefits seniors enjoy.

Each of the countries featured in the report is seeing in their specific population trends, such as urbanization, longer life expectancies and rapidly expanding workingage populations, not only big challenges but also enormous opportunities to seize these moments and turn them into good news.

These trends are sometimes obscured in discussions about population size, yet it is only when scrutinizing them that many of the immediate challenges and opportunities become apparent.

China's Shaanxi province, for example, is looking for ways to shelter and support growing numbers of older people. In a mega-city such as Lagos, Nigeria, planners are trying to redevelop neighbourhoods and create more cohesive, manageable and livable communities. In Mexico City, people-friendly parks, roadside green spaces and more public transportation

YEARS WHEN WORLD POPULATION REACHED INCREMENTS OF 1 BILLION



are priorities in the quest to make urban life healthier and more sustainable.

Nations like the former Yugoslav Republic of Macedonia and Finland, where fertility is lower and childbearing later than in most other parts of the world, are looking for ways to support women who have more children. Nations like Ethiopia and India have launched campaigns to end child marriages and prevent life-threatening adolescent pregnancies.

Cities are growing almost everywhere. With good planning and thoughtful policies,

/E IN A WORLD **OF 10 BILLION?** 2050 2000

Governments can usher in urban growth that boosts economies and creates jobs while using energy more efficiently and making social services available to more people.

People under 25 make up 43 per cent of the world's population. When young people can claim their rights to health, education and decent working conditions, they become a powerful force for economic development and positive change. Throughout the developing world, social scientists and policymakers want to make the most of large youthful populations, for the sake of hopeful young people themselves as well as in the interests of economic growth and development. Yet this opportunity of a "demographic dividend" is a fleeting moment that must be claimed quickly or lost.

In the poorest countries, extreme poverty, food insecurity, inequality, high death rates and high birth rates are linked in a vicious cycle. Reducing poverty by investing in health and education, especially for women and girls, can break this cycle. As living conditions improve, parents can feel more confident that most of their children will survive. Many then choose to have smaller families. This allows for greater investment in each child's health care and education, improved productivity and better long-term prospects—for the family and for the country.

Celebrating achievements, planning for the future

There is much to celebrate in world population trends over the last 60 years, especially the average life expectancy, which leapt from about 48 years in the early 1950s to about 68 in the first decade of the new century. Infant mortality plunged from about 133

deaths in 1,000 births in the 1950s to 46 per 1,000 in the period from 2005 to 2010. Immunization campaigns reduced the prevalence of childhood diseases worldwide.

In addition, fertility, the number of children a woman is expected to have in her reproductive years, dropped by more than half, from about 6.0 to 2.5, partly because of countries' economic growth and development but also because of a complex mix of social and cultural forces and greater access by women to education, income-earning opportunities and sexual and reproductive health services, including modern methods of contraception.

In some regions, the total fertility rate declined drastically between 1950 and today. In Central America, for example, the total

CHINA AND INDIA: THE BILLIONAIRES

China and India recently released the findings of their latest censuses, giving the world a glimpse of how these two population behemoths are realigning in numbers and rates of growth. Below are the two countries in numbers, using official figures or United Nations projections.

According to projections by the Population Division of the United Nations Department of Economic and Social Affairs, in 2025, India, with 1.46 billion people, will have overtaken China, with 1.39 billion, as the world's most populous nation. China's population will then, based on a medium variant, decline to about 1.3 billion by 2050. India will continue to grow to about 1.7 billion by 2060 before beginning to decline.

	China	India
Total population, 2011	1.35 billion	1.24 billion
Increase 2001-2011	69.7 million	170.1 million
Fertility rate	1.6	2.5
Year population likely to stabilize	2025	2060

Source: Population Division of the United Nations Department of Economic and Social Affairs.

fertility rate was about 6.7 children, while 61 years later it dropped to 2.6, a half percentage point above the population "replacement level" of 2.1 children, one of them a girl. In East Asia the total fertility rate in 1950 was about 6 children per woman and today is 1.6, well below replacement level. In some parts of Africa, however, there has been only a modest drop in total fertility, which today remains at more than 5 children per woman.

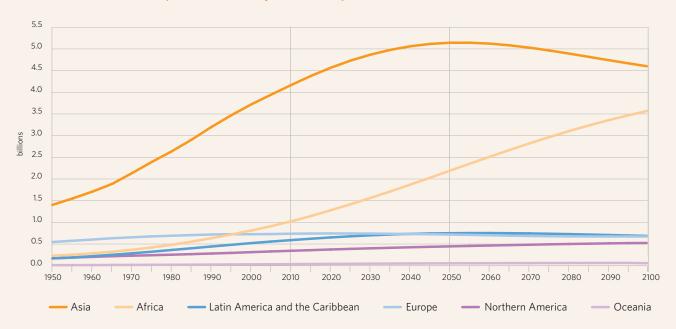
But despite global fertility declines, about 80 million people are added to the world each year, a number roughly equivalent to the population of Germany or Ethiopia. Considerable population growth continues today because of the high numbers of births in the 1950s and 1960s, which have resulted in larger base populations with millions of young people reaching their reproductive years over succeeding generations.

The Population Division of the United Nations Department of Economic and Social Affairs, in its World Population Prospects: The 2010 Revision (published in May 2011) foresees a global population of 9.3 billion people at 2050, an increase over earlier estimates, and more than 10 billion by the end of this century—and that scenario assumes lower fertility rates over time. With only a small variation in fertility, particularly in the more populous countries, the total could be higher: 10.6 billion people could be living on Earth by 2050 and more than 15 billion in 2100, the Population Division estimates. "Much of this increase is expected to come from the high-fertility countries, which comprise 39 in Africa, nine in Asia, six in Oceania and four in Latin America," the United Nations reports.

According to John Cleland of the London School of Hygiene and Tropical Medicine, an international expert on reproductive issues in Africa, sub-Saharan Africa is "the one remaining region of the world where the population is set to double or treble in the next 40 years." The reason for demographers' increasing focus on the region is clear, he said: "The escape from poverty and hunger is made more difficult by rapid population growth."

"Clearly we are living through an extraordinary period in human history, an era of unprecedented growth in our species," says Steven Sinding, who has observed population trends over the years as director of the office of population at the United States Agency for International Development, professor of population and family health at Columbia University and director-general

ESTIMATED AND PROJECTED POPULATION BY MAJOR AREA, MEDIUM VARIANT, 1950-2100 (BILLIONS)



Asia will remain the most populous major area in the world during the 21st century but Africa will gain ground as its population more than triples, passing from 1 billion in 2011 to 3.6 billion in 2100.

In 2011, 60 per cent of the world population lived in Asia and 15 per cent in Africa. Africa's population has been growing 2.3 per cent per year, a rate more than double that of Asia's population (1 per cent per year). The population of Africa first surpassed a billion in 2009 and is

expected to add another billion in just 35 years (by 2044), even as its fertility drops from 4.6 children per woman in 2005-2010 to 3.0 children per woman in 2040-2045.

Asia's population, which is currently 4.2 billion, is expected to peak around the middle of the century (it is projected to reach 5.2 billion in 2052) and to start a slow decline thereafter.

The populations of all other major areas combined (the Americas, Europe

and Oceania) amount to 1.7 billion in 2011 and are projected to rise to nearly 2 billion in 2060 and then decline very slowly, remaining still near 2 billion by the turn of the century. Among the regions, the population of Europe is projected to peak around 2025 at 0.74 billion and decline thereafter.

Source: Population Division of the United Nations Department of Economic and Social Affairs.

of the International Planned Parenthood Federation. "The pace of growth poses enormous challenges for many of the poorest countries, which lack the resources not only to keep up with demand for infrastructure, basic health and education services and job opportunities for the rising number of young people, but also to adapt to climate change."

Stabilizing population growth, especially in the poorest countries, requires better and more universal access to reproductive health services particularly family planning for the countries. These services must be based on and reinforce human rights and should include sexuality education for young people, particularly adolescent girls.

José Ángel Aguilar Gil, the director of Democracia y Sexualidad, A.C., a Mexicobased non-governmental organization that promotes sexual health and reproductive rights, says that adolescent and young women "have the right to access integrated sexuality

■ Gabriela Rivera, National programme associate on sexual and reproductive health for young people and vulnerable populations, UNFPA, Mexico. ©UNFPA/Ricardo Ramirez Arriola



education as part of a broader human right: the right to have an education," he says.

Gabriela Rivera, a programme associate in UNFPA's office in Mexico City says there is "wide evidence" about the benefits of rights-based sexuality education. Successful programmes, she says, provide timely, sufficient and scientific information, tailored to the needs of each age group. "Evaluation studies have shown that sex education has an impact in delaying the age at the first sexual intercourse, in increasing the use of contraception methods and condoms, and in decreasing the levels of violence against young girls," she says. "The above implies the reduction of early and unwanted pregnancies, and the decrease of HIV/AIDS."

7 billion: it's about people

While much of the world will undoubtedly be focusing on numbers on 31 October, the day demographers estimate that the world's population reaches 7 billion, this report focuses on individuals and the analysts who study the trends that affect people's everyday lives. It looks at the decisions that individuals make—or would like to make, if they had the opportunity.

At the International Conference on Population and Development in 1994, nations agreed that progress in addressing population issues could be better achieved through empowering women and girls to participate in their societies and economies on equal footing with men and boys and to make fundamental decisions about their lives, including decisions related to the timing and spacing of pregnancies and births. By the time delegations to Cairo issued their historic Programme of Action, abundant research and



Amsalu Buke (left) and assistant. ©UNFPA/Antonio Fiorente

experience from many countries had already documented that when women have equal rights and opportunities in their societies and when girls are educated and healthy, fertility rates fall. The Programme of Action also made it clear that empowerment of women is not simply an end in itself, but also a step towards eradicating poverty.

The State of World Population 2011 begins with a sampling of young people and a look at what their growing populations mean in different settings. The chapters that follow then explore ageing populations, migration, the interrelationship among fertility patterns, reproductive health services, gender and the rights of women and girls, the management of vast urban areas and environmental strains.

In this report thoughtful, visionary individuals around the world talk about the challenges and opportunities they have in shaping their societies and the global population for this century and beyond. Many of them are young, and conscious of the demographic fact that they will be designing the 21st century world.

POPULATION AND POVERTY

Excerpts from the International Conference on Population and Development's Programme of Action

...Persistent widespread poverty as well as serious social and gender inequities have significant influences on, and are in turn influenced by, demographic parameters such as population growth, structure and distribution.... Efforts to slow down population growth, to reduce poverty, to achieve economic progress, to improve environmental protection, and to reduce unsustainable consumption and production patterns are mutually reinforcing.... Eradication of poverty will contribute to slowing population growth and to achieving early population stabilization.



CHAPTER TWO

Youth: a new global power reshaping the world

Ethel Phiri, a 22-year-old peer educator at the Family Planning Association of Mozambique, AMODEFA, one of the non-governmental organizations that implement the country's Geração Biz youth-outreach programme, runs *bancadas femininas*, discussion groups at schools, markets or elsewhere in communities around Maputo to support young people with issues of sexual and reproductive health and HIV prevention and teach them about women's rights. Her groups

"talk a lot about domination of women by men," she says. "Women don't have a voice in the home. They want to change the culture, and they want the Government to pay more attention to their issues." Phiri says.

Young people in China find ways to learn about economic opportunities that lie ahead, and try to position themselves to qualify for them. Young Chinese migrant workers in Xian, in Shaanxi province, described their jobs in market stalls and factories as a way to save money to return home and open businesses of their own. Han Qian, who is 21, first studied medicine, then drifted into pharmacy and got a job testing drugs. Bored, she became fascinated by a tea market nearby and is saving her earnings to accumulate enough capital to start a tea shop.

In the isolated Ethiopian village of Tare, Amsalu Buke, with a box of medical supplies on a strap slung over her shoulder, is a quiet revolutionary to the women who live in this region without doctors or roads. Walking across parched fields from hamlet to hamlet, Amsalu, just 20 years old, brings family planning to women so eager for her help that they waylay her on her rounds, pleading discreetly for contraceptives.

In Skopje, the capital of the former Yugoslav Republic of Macedonia, a group of young women talked about the entrepreneurial opportunities they have seized in a transitional economy to position themselves for success in new businesses and services. Several of them had lived abroad and gained both skills and self-confidence, as many young migrants do, whether they travel to work beyond borders or to cities within their own countries. One of the new entrepreneurs in Skopje, Marina Anchevska, returned from work in the Netherlands to establish herself as a personal and business coach, with yoga classes a specialty. She wants to change the atmosphere of offices and boardrooms as the once-socialist country appeals for foreign investment and international economic partners to help it develop.

Ricardo Moreno
and Sara Gonzalez
in Mexico City. The
couple, who are
engaged, have decided
jointly that they will
wait until she has
finished her education
and has a job before
they marry and
have children.
©UNFPA/Ricardo
Ramirez Atriola

In Nigeria, Fauziya Abdullahi, a resident of the vast city of Lagos, is an organizer of an urban-based campaign that registered young people to vote in recent national elections in Africa's most populous country, where 70 per cent of the population is under 35 years of age. Her campaign—Buggie the Vote, inspired by a television show for youth called *School Buggie*—promoted political debate and involvement under the slogan "Youth negotiating the future with their votes."

In Mexico, the food production and service industries are seen as good prospects for a career. Sixteen-year-old Leo Romero, pausing to talk amid the din of skateboarders and bicyclists roaring down ramps built for them under a city overpass, said his aim is to study at a culinary arts institute for a career in gastronomy. A part-time musician who earns money working with a salsa band, Romero says he tells friends to stay in school and not marry until they have good jobs.

And in India, many thousands of youthful university-level graduates have joined the

global economy through call-centre work, hoping to make that the first step towards an advanced technology career.

These are all young people with hope, ambition and commitment to improve their own lives and those of their peers, neighbours, communities and countries. Their success, however, will depend on their ability to take advantage of educational and economic opportunities as they arise and to overcome obstacles to their sexual health and reproductive rights.

More young people, more potential

Although people 24 years old or younger make up almost half of the world's 7 billion population (with 1.2 billion between the ages of 10 and 19), their percentage of the population in some major developing countries is already at its peak, according to the Population Division of the United Nations Department of Economic and Social Affairs in its World Population Prospects: The 2010 Revision. In fact, the percentage of young people—ages 10 to 24, according to United Nations classifications—has begun to decline in many places, not only in developed industrial nations but also in middle income countries. In Mexico, where fertility has decreased significantly in recent decades, the country's population "pyramid" has been steadily shrinking at the bottom, with the birth-to-14 age group down from 38.6 per cent of the total national count in 1990 to 34.1 per cent in 2000, and then to 29.3 per cent in 2010. The country's median age has consequently risen from 19 to 26 in two decades. The bulge moves upward into middle age, and the pyramid is reshaped.

A youth mobilizer, Pauzia Abdullahi, in Lagos, Nigeria. ©UNFPA/Akintunde Akinleye



Statistics like these demonstrate that in middle-income and some rapidly developing lower-income countries the number of years in which a large, young working population can be counted on to fuel development may be fleeting, and governments and the private sector need to act expeditiously to prepare the young for productive roles and create jobs for them early in their working lives.

In sub-Saharan Africa, where economic growth rates remain relatively high, governments were warned in the 2011 Economic Report on Africa by the United Nations Economic Commission for Africa and the African Union that this performance was not being translated into needed jobs. The report urged more effective government intervention to create employment-building policies and programmes.

In Skopje, sociologist Antoanela Petkovska of the Ss. Cyril and Methodius University, worries about the demoralizing effect on young people when they study hard without much hope of satisfying careers. "Young people are very pessimistic towards their future, especially because of the high rate of unemployment," she said. "They don't have opportunities. So they are fighting for diplomas mostly, not for knowledge." She looks to the Government for more help in integrating young people into a wider European intellectual community to broaden their education, and wants the Government to upgrade the country's higher education system, including scientific research, to make university exchanges possible. "I'm very, very sorry for my students sometimes because they are smart young people, they just have to be supported in some of their needs." she said. "We have really very big possibilities."

Economic and social developments affecting youth in India, with 1.2 billion people, are of particular interest to many demographers because the country is on course to overtake China, now with about 1.3 billion, as the world's most populous nation by 2025 and its size will affect the global population profile.

In India, where the fertility rate, at 2.5 children per woman, is still well above the replacement level of 2.1, there are more than 600 million people who are 24 years old or

"You can say no to sex, but never to condoms!," says a brochure presented by Ethel Phiri, an activist at AMODEFA, in Maputo, Mozambiaue. ©UNFPA/Pedro Sá da Bandeira





▲ Young Egyptians near Cairo's Tahir Square. ©UNFPA/Matthew Cassel

younger. Indian government officials have expressed confidence that this large cohort of youth and children will be good for the economy for years to come. Demographers and social scientists are skeptical, however, asking how many young people will be ready to lead productive lives in an ever more complex and sophisticated economy when more than 48 per cent of India's children are malnourished, only 66 per cent complete primary school and half or fewer attend secondary school, according to UNICEF's *State of the World's Children 2011*.

C. Chandramouli, Registrar General and Census Commissioner of India, argues that there is still time to be optimistic about industrial growth because India's large working-age youth population has the potential to fuel the economy for decades. Economists outside India see this factor, and a democratic political system capable of policy corrections, as indicators that India's strong economic growth will continue. But Chandramouli adds a caution. "Now the question is how the 'youth bulge' is handled," he said. "What kind of skills do you give them? How do you make them into assets?"

Entering the labour force when jobs are scarce

Secure jobs that offer a decent wage are in short supply almost everywhere today, especially for young people.

The International Labour Organization, the ILO, reported in 2010 that 81 million of the 620 million economically active youth from ages 15 to 24 globally—or 13 per cent of that age group—were unemployed the year before, largely because of the world financial and economic crisis.

At the peak of the economic crisis, the global youth unemployment rate saw its largest annual increase ever—from 11.9 per cent to 13.0 per cent between 2007 and 2009.

Young women have had more difficulty than young men in finding work, the ILO adds. The female youth unemployment rate in 2009 stood at 13.2 per cent compared to the male rate of 12.9 per cent. The situation is especially "dire" in the Arab States, and "can only be made worse as the economic crisis closes even the few doors open to those who seek to gain some income and satisfaction through employment," states the ILO, adding that there is "a gross waste of the productive potential of young women."

Even under the best of economic conditions, young women generally have more difficulties finding work than young men. When they do find a job, it is often lower paid and in the informal economy, where there is no job security or social benefits.

Youth unemployment and situations where young people simply give up looking for work "incur costs to the economy, to society and to the individual and their family," warns the ILO, adding "there is a demonstrated link between youth unem-

ployment and social exclusion." Some young people who are unable to earn their own incomes have to be financially supported by their families, leaving less for spending and investments in their households. Societies lose their investments in education. Governments miss out on contributions to social security systems. "All this is a threat to the growth and development potential of economies," says the ILO. Creating income-earning opportunities is imperative because young people are not only the generators of ideas and innovation, but are also "the drivers of economic development" in a country. "Foregoing this potential is an economic waste."

In 2011, amid revolutions on the streets of Arab countries, the ILO also suggested that a 23.4 youth unemployment rate in the Arab world was a major contributor to the uprisings.

"It's hard to be a young person in Mozambique," says Rui Pedro Cossa, a 24-year-old geography student at the University Eduardo Mondlane in Maputo. "Normally in youth, you're supposed to gain experience for the future," he says. "But here you have more problems than opportunities. There's no way to overcome the obstacles."

Cossa's classmate Fernanda Paola Manhique agrees, adding the employment prospects for young people are "difficult."

As hard as it may be now for Cossa and Manhique to find a job in their field, the situation is likely to be even worse for job-seekers without a higher education in the years ahead.

Young people try to take the lead in expanding opportunities many places. In Nigeria in 2008, a formal role was created



for young people with the establishment of the National Youth Parliament, which the federal Government designed to teach through participation how laws are written, budgets planned and policies devised. With more than 100 members, the Youth Parliament, which meets in the capital, Abuja, in the halls of the Nigerian National Assembly, is tasked with passing advisory resolutions for the Government to consider. In its first year it proposed a number of measures that have since been adopted at federal Government level, among them a national youth employment plan.

Fernanda Manhique, a geography student at Eduardo Mondlane University in Maputo, Mozambique. ©UNFPA/Pedro Sá da Bandeira

Olalekan Azeez-Iginla, Lagos state coordinator of the National Youth Network on HIV-AIDS, Population and Development, is already working on the employment issue. He says that until recently, young people

YOUTH LABOUR FORCE PARTICIPATION RATE, BY REGION AND SEX, 2010

Labour force participation rates for young women are lower than for young men in all regions except East Asia, mainly reflecting differing cultural traditions and the lack of opportunities for women to combine work and family responsibilities not only in the developing world but also in the industrialized world. In many regions, gender gaps in youth participation rates have narrowed over the past decade, but they remain large in South Asia, the Middle East and North Africa. In the latter region, the female participation rate decreased faster than the male rate, actually increasing the gender gap.

	Total %	Male %	Female %
World	50.9	58.9	42.4
Developed Economies and European Union	50.2	52.6	47.7
Central and South- Eastern Europe (non-European Union) and the CIS	41.7	47.7	35.5
East Asia	59.2	57.0	61.6
South-East Asia and the Pacific	51.3	59.1	43.3
South Asia	46.5	64.3	27.3
Latin America and the Caribbean	52.1	61.3	42.7
Middle East	36.3	50.3	21.5
North Africa	37.9	52.5	22.9
Sub-Saharan Africa	57.5	62.7	52.2

Source: Global Employment Trends for Youth. International Labour Organization

have not had significant input into policymaking and governance. He keeps a directory of qualified youth who "want to help plan the future they will be part of." His goal is to ask the governor of Lagos, a state as well as a city, to find or create jobs for up to a million qualified young people.

Many young people having smaller families

Today's young women and men—a large number of them still adolescents in least developed countries—are demanding better education, good health care and ultimately jobs to support themselves and their families. In many countries of the global North, young women and men are marrying later and having fewer children, and the same trend is emerging, if slowly, in many developing nations. The trend is linked not only to improved education and jobs, but also to unfettered access to reproductive health, including contraceptives.

In Ethiopia, a low-income country with 39 per cent of its 82.9 million people living below the international poverty line of \$1.25 a day, according to the World Bank, hardship rather than rising expectations and better living standards may be the major factor in motivating young women and men in cities when family choices are made. Assefa Hailemariam, the former director of the Population Studies and Research Centre at Addis Ababa University's Institute of Development Studies, said that young urbanites are bringing fertility rates down very fast for economic reasons.

"Urban life is demanding," Hailemariam said. "You can't count on relatives to look after your kids. You can't have too many-



A youth mobilizer, Olalekan Azeez-Iginla speaks during an interview at the UNFPA office in Lagos, Nigeria. ©UNFPA/Akintunde Akinleye

bringing them up, taking care of them. Also urban people have access to communications [media] so they are aware that having a smaller number of kids is better for their future—you can educate your children, buy them clothing and so on."

Nationally, Ethiopia's fertility rate has been 3.8 for the period of 2010-2015. In Addis Ababa, the capital, Hailemariam said, the rate has fallen below 1.5. "In 2000 it was 1.9 or so: now we expect that it would be much lower," he said. "This is not necessarily just because of contraceptive use, although contraceptive use has played a role, but because of a number of development issues—a higher age of marriage in Addis, education, health improvement, contraceptive access."

Promoting later marriage

Very young herself, Amsalu Buke, who brings family planning to outlying Ethiopian communities where access is limited, has become an astute observer of the lives of girls in their teens and

younger. In her four years at her post in the village of Tare, she said, she has seen child marriages declining. "Thirteen and 14 year olds used to marry," she said. "Now because of advocacy by local women's organizations, the practice is disappearing."

THE ECONOMIC CASE FOR **INVESTING IN YOUTH**

Adolescence is an important time to acquire the skills, health, social networks and other attributes that form the social capital needed for a fulfilling life. The fact that the human capital formed during adolescence and in youth is also an important determinant of long-term growth makes a strong macro-economic argument to support investing more in young people.

Social investments in young people's education, health and employment can enable countries to build a strong economic base, thereby reversing intergenerational poverty. Enhancing young people's capacities can yield larger returns during the course of their economically active lives.

Young people are also an enormous resource for growth in the short run. Having young people sit idle is costly in foregone output... The loss of income among the younger generation translates into a lack of savings as well as a loss of aggregate demand.—Excerpted from The Case for Investing in Young People as Part of a National Poverty Reduction Strategy. UNFPA, 2010.

Amsalu Buke and assistant begin their trek to bring family planning to outlying Ethiopian communities. ©UNFPA/Antonio Fiorente



Ethiopia, where half the girls are married by age 18, is one of several countries where child marriages—which effectively end a girl's chances of education and may destroy her health or end her life—are declining, according to UNFPA and the Population Reference Bureau, an independent research organization in the United States. But in the Amhara region and some other parts of Ethiopia, the practice remains a stubborn problem and continues to rob girls and young women of their rights, education and health.

Of the ten countries with the highest child marriage rates, according to the Population Reference Bureau's 2011 survey, Who Speaks for Me? Ending Child Marriage, eight are in Africa, and Niger is at the top, with three-quarters of girls married before the age of 18. The remaining two coun-

tries outside that region are Nepal, where 7 per cent of girls are married by age 10 and 40 per cent by age 15, and Bangladesh. Several states in India also rank high in child marriages. In India, the Centre for Health, Education, Training and Nutrition Awareness, a non-governmental organization based in the state of Gujarat, battles widespread anemia among girls, which weakens them and contributes to an estimated 6,000 deaths in adolescent pregnancies annually, many because of early marriage, according to a recent report by Swapna Majumdar of Women's eNews.

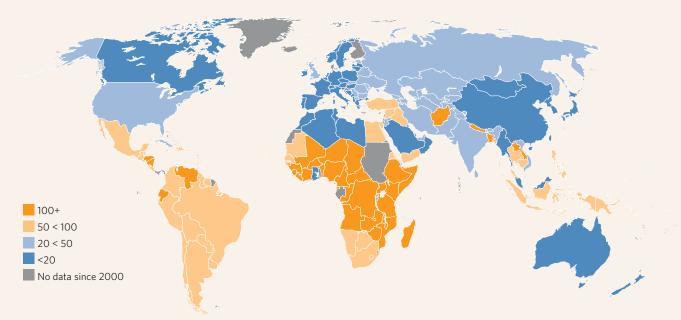
"Child marriage undermines nearly every Millennium Development Goal; it is an obstacle to eradicating poverty, achieving universal primary education, promoting gender equality, improving maternal and child health and reducing HIV and AIDS," the Population Reference Bureau survey says. It adds that because young girls are often married to older men who may have had numerous sexual partners, their chances of HIV infection are greater than those of unmarried sexually active girls.

Forcing a child into marriage for any reason is a violation of the Convention on the Elimination of All Forms of Discrimination Against Women and the Convention on the Rights of the Child. Gender inequality is an underlying cause of child marriage, says UNFPA gender expert Gayle Nelson. "And without addressing this issue, it will be impossible to eradicate this or other discriminatory harmful practices."

In Mozambique, the balance of power in a relationship in favour of the man is tipped even further by early marriage, which also chips away at a young woman's right to determine her own reproductive destiny and often resulting in early and numerous pregnancies. A young woman's decision-making power may be additionally diluted in polygamous settings, in which about one in four Mozambican women is involved.

According to a study by Mozambique's National Statistics Institute, more than half of women between ages 20 and 49 say they were married before the age of 18, and about one in five say they married before age 15. In Mozambique as in many other countries, early marriage is more common among girls with little or no formal education.

COUNTRIES WITH HIGH ADOLESCENT BIRTH RATES ARE CONCENTRATED IN SUB-SAHARAN AFRICA AND LATIN AMERICA AND THE CARIBBEAN



Adolescent birth rates by country, most recent estimates (Number of births per 1,000 women aged 15-19)

Source: Population Division of the United Nations Department of Economic and Social Affairs.

The designations employed do not imply the expression of any opinion on the part of UNFPA concerning the legal status of any country, territory, area or its authorities, or the delimitation of frontiers or boundaries. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

The Government of Mozambique outlawed marriage before the age of 16, and since 2004 when a new Family Law went into effect, a child may not marry before reaching 18 without parental consent, which is often granted by fathers who are eager to have their daughters marry as early as possible. Furthermore, the law is difficult to enforce, particularly in remote areas. And the law can do nothing to stop girls from entering into a relationship outside of marriage. About two in five women who are married or in a partnership are involved with men who are 10 or more years older than they are.

A report from UNFPA and the Population Council in 2003 describes the "demographic consequence" of child marriage: short spans between generations and

Amsalu Buke visits an outlying community in Ethiopia.

©UNFPA/Antonio Fiorente



population growth. "The bride's young age, often combined with the older age of her partner, intensifies power differentials in the relationship," the report states. "Her young age is indicative of a relatively low level of education. Her lack of knowledge and skills may make her more reliant on high numbers of children for security with the marriage, as well as long-term social security."

Integrated services targeted to youth by youth

In Ethiopia, where the median age is 18.7 and half the population is between the ages of 15 and 29, young people are visible everywhere helping to run a variety of programmes for youth. In Addis Ababa there are 56 youth clubs or centres and another 50 under construction, with a range of government programmes supported by UNFPA and UNICEF, among others. At one busy youth club, Dawit Yitagesu of the Addis Ababa HIV/AIDS Prevention and Control Office listed services young people can find in these centres, including HIV testing and counseling, reproductive health services, livelihood programmes and business training, credit and savings help and in at least one large centre, a well-stocked library, packed with young people reading in silence, away from homes where studying is difficult.

Boys dominate the youth clubs and vastly outnumber girls in centres' activities, so programmes are being designed to attract girls, including young domestic workers who, isolated and confined to their jobs in other peoples' homes for long hours, rarely have time to look for help and advice. Youth centres draw them into life-skills sessions and discussion groups.

There is no youth centre where Amsalu Buke, the peripatetic Ethiopian health worker, makes her rounds near Debre Tseige, southeast of the capital. But her cheerful, youthful presence makes her approachable to young women with questions about reproductive health as well as older women seeking contraceptives or anyone who needs something to cure a stomach upset, diarrhea or a headache. She vaccinates village people, keeping track meticulously on her home-made wall chart of every inoculation given to prevent meningitis, tetanus, polio and tuberculosis.

The Tare Giorgis health post, Amsalu's base, has no running water or electricity. Vaccines are stored in a small, generatorpowered refrigerator given to her by UNICEF in one cramped room of the threeroom clinic built of mud and straw. The main room has space for only a desk and a few chairs. Beside it is the maternity room, just big enough for an examination table equipped for birth deliveries and a small side table for basins and basic medical instruments. Amsalu also delivers babies in homes, reaching villages by foot, horse or donkey unless she is lucky enough to hitch a ride on a passing vehicle when she gets to a road.

Amsalu Buke is one of more than 37,000 health extension workers positioned around the country is recent years, according to Fisseha Mekonnen, executive director of the Family Guidance Association of Ethiopia, which is working with the Government to improve health and expand access to family planning in rural areas and nursing services in cities. The corps of health extension workers, many of them very young, is viewed as a basic model for other developing nations with scant health coverage; it is also a model

in giving young people a role and a stake in national programmes that matter to everyone, regardless of age.

In some primary care health posts, Fisseha said, solar-powered DVD players are installed, with videos on various health, nutrition and lifestyle issues. "The DVDs are meant to be kept on when patients come," he said. "The community owns the system, and civil society has the privilege of using it." A DVD player has not yet come to her health post in Debre Tseige, but Amsalu has placed prominently on her desk a drawing of a woman receiving an injectable contraceptive, a widely requested method of contraception in sub-Saharan Africa.

"The bride's young age, often combined with the older age of her partner, intensifies power differentials in the relationship."

Amsalu, who has a young assistant to help keep records and make the rounds of villages, has only a secondary school education and a year of primary health-care training, including instructions needed to become a midwife. Her monthly net income is 570 Ethiopian birr (about \$34).

Fisseha said that there are plans to upgrade the education and training of health extension workers, at least to professional paramedic level. In the meantime, he said, "We feel they are doing their level best." They know when more expert help is needed, and are expected to send patients to hospitals at the first signs of serious illness. Amsalu,

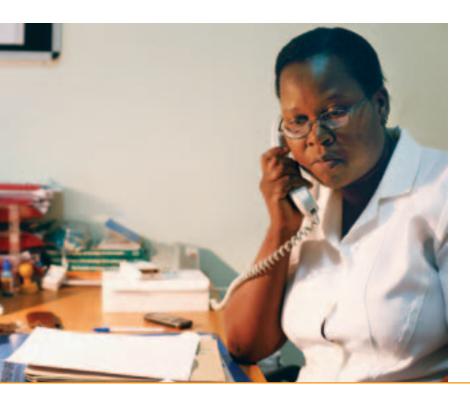
who has been in charge of her health post for four years, is lucky to have a hospital less than five miles away in the nearest town, but that can seem very far when there is no ambulance, or even a taxi of sorts, to call in an emergency.

population is 24 years old or younger.

Young people have the potential to bring positive change to any country and contribute to a vital economy, but in Mozambique, youth are more often than not "among the hardest hit" by the challenging economic, educational and health conditions, says Emidio Sebastião Cuna, a UNFPA-Mozambique staff member who oversees Geração Biz ("busy generation," in Portuguese), a Government programme that aims to reduce the incidence of early pregnancy and prevent HIV and other sexually transmitted infections among adolescents. Three ministries and national

Today, almost half of the Mozambique's

Ester Cabele, nurse at AMODEFA, in Maputo, Mozambiaue. ©UNFPA/Pedro Sá da Bandeira



non-governmental organizations implement the programme, with technical support from Pathfinder International and UNFPA, which also provides financial support along with Denmark, Norway and Sweden.

Through Geração Biz, the ministries of health, education and youth and sports jointly provide youth-friendly sexual and reproductive health services, school-based information campaigns about contraception and HIV prevention, and community-based information to reach young people who are not in school.

The need for services targeted to youth became acute after the country's civil war, when thousands of unemployed young people poured into cities looking for opportunities to earn a living. But jobs were scarce because of the weakened economy and social services could not keep up with the demand for them. One of the results of this wave of rural-to-urban migration was a large number of sexually active young people with little or no access to information about sex, pregnancy or the risk of sexually transmitted infections.

"Traditionally it is a taboo to discuss sexual health with adolescents" said Julião Matsinhe, a UNFPA adviser in Mozambique. "In no area did lack of information on sexual and reproductive health prove more catastrophic than in the context of HIV/AIDS." HIV today affects 11.5 per cent of the population between the ages of 15 and 49.

Through a network of 5,000 peer counselors, Geração Biz is moving beyond taboos by breaking the silence and providing nonjudgemental, confidential information and services to Mozambique's youth.

Yolanda, 24, has come to the Maputo office of the Family Planning Association of Mozambique—AMODEFA—for a check-up during her first pregnancy. AMODEFA is one of the non-governmental organizations that implement the Geração Biz programme and provides free services to anyone 24 or younger. Yolanda started coming to AMODEFA several years ago for information about contraceptives and preventing HIV. "Here it's easier to talk about these difficult topics, like HIV. It's easier here than at home."

Ester Cabele, a service provider at AMODEFA, says that every month, she sees about 120 new clients-almost all of them women—who want contraceptives. She offers each a free HIV test, and in April 2011 alone, six of them were found to be positive. Cabele says that AMODEFA's services are more popular than those available at Government-run health centres because they are less crowded, have staff who are trained to work with young people, and offer advice and services in a safe environment. Without AMODEFA's services. Cabele says that more young people would end up with unplanned pregnancies or HIV infections and end up dropping out of school, jeopardizing their futures.

At Coalisão, another non-governmental organization that implements the Geração Biz programme, Maria Feliciana, 26, coordinates information and outreach about sexual and reproductive health, but also about life skills and income generation. She thinks many young women become pregnant because they lack information about contraception or are ill-equipped to negotiate with their partners about using condoms. "It's difficult because all sexual initiative in this



culture comes from the man. If a woman wants her male partner to use a condom, he will suspect she is HIV-positive."

At at Núcleo de Mavalane, another implementer of Geração Biz, Jossias Chitive, 28, runs door-to-door information campaigns about HIV prevention. The young men he meets "don't like to talk about condoms" but notes that the organization's free-condom dispenser out front must be refilled every morning.

Getting young men and women to talk about sex remains a challenge, despite the abundance of information and services now available to them, says Fenius Matsinhe, a youth counselor at the Boane Health Centre halfway between Maputo and the border with Swaziland. "Both boys and girls have a hard time to be open with each other," he says. Still, experience with the Geração Biz programme shows that attitudes and behaviours can change as people become more informed about their choices and rights.

Jossias Chitive, HIV activist and supervisor of activities and student, Eduardo Mondlane University. ©UNFPA/Pedro Sá da Bandeira

Sexuality education informing, empowering young people

Millions of girls and boys have dreams of living lives that are fulfilling, happy and safe. Yet the vast majority of them receive little reliable information related to sex, sexuality or gender. The consequences are well known: without access to comprehensive sexuality education and sexual and reproductive health services, young people—especially girls—are more vulnerable to daunting reproductive and sexual health problems, 80 experts agreed at a Global Consultation on Sexuality Education, in Bogotá, Colombia, in December 2010.

"There are far too many young people who do not have access to sexuality education."

Sexuality education helps promote health and help prevent sexually transmitted infections, including HIV and help prevent unwanted pregnancies among young people, but it also promotes equitable gender norms and the empowerment of young women, says UNFPA Technical Division deputy director Mona Kaidbey, who oversees UNFPA's youth initiatives and was one of the organizers of the Bogotá event.

Sexuality education programmes that address gender and power in relationships are more effective at reducing risky behaviours, Kaidbey says, citing as an example, Program H, an initiative in Brazil that works with young men to challenge inequitable gender attitudes and practices. An evaluation of the programme found that risk behaviours—

and the incidence of sexually transmitted infections—decreased among participating young people.

The right to comprehensive and non-discriminatory sexuality education is based on the Programme of Action of the International Conference on Population and Development and a number of international agreements, Kaidbey says, "yet there are far too many young people who do not have access to sexuality education programmes."

"It is a fact that most young people do not have access to appropriate information about sexuality and do not know how to protect themselves from sexually transmitted infections, including HIV, or unintended pregnancy." she says. Policymakers and community leaders often avoid promoting sexuality education because they do not want to provoke controversy, she adds. Another obstacle to sexuality education has been weaknesses in educational systems. "School curricula are packed, teachers are often overwhelmed and underpaid, funding for training and materials are limited, and the incentives to take on a new-often sensitive topic—are few. With cuts in social sector spending, it has been difficult to find the financial resources that are needed to train teachers and establish effective methodologies."

Sustainability is also a challenge. Changes in government can affect the policies of the ministries of education. "The policy environment often is not supportive of the scale-up of sexuality education; if you do not have national policies in place and commitment at the highest levels, there will be ministers who will highlight sexuality education and others who won't."

Research has shown that sexuality education is effective beyond the prevention of high-risk behaviours. If it is gender-focused and rights-based, it can improve the general well-being of young people. "Now we have a new generation of programmes that are promising because they are built on research and evaluation that clearly show positive impact," Kaidbey says.

But while building sexuality education into school curricula is important, so is developing programmes for young people who are not in school, including young married women, migrants or youth living in conflict areas, or those in remote regions. The programmes need to address the diversity and complexity of young people's lives. "Sexuality education programmes should be carried out in diverse settings—going to where the youth are."

Youth in the "driver's seat"

In Nigeria, where the median age is 18.5 and more than half the national population is 24 or younger, young people have been taking an increasing part in political life in order to make their voices heard and their presence visible, not only in the country's Youth Parliament. The youth-registration and voting drive mounted by Fauziya Abdullahi and her colleagues for elections in 2011 is continuing as a civic awareness campaign. Abdullahi said the elections showed "a need for intensive civic education and capacity building that empowers young people to be at the driver's seat of their destiny."

On the outskirts of the Egyptian city of Ismailia, on the Suez Canal, a boy in his mid-teens reflected the excitement of his generation and its hope of building political influence after the recent political change: "We have made this revolution. Our families were used to keeping quiet. We didn't keep quiet. We went out to get our dream." He has joined a group of politically active young people in their teens and 20s who have plans to spread awareness about youth concerns and priorities.

The group, sponsored by the Government and UNFPA through partnership with Y-Peer, a network of youth organizations to promote healthy lifestyles of young people, is one of numerous similar networks in other Arab States, Eastern Europe, Central Asia and East Africa. In Ismailia it gives young people a rare venue to learn and talk openly about

From left to right: Sharouq, Mona, and Hossam head to a concert in Cairo. ©UNFPA/Matthew Cassel



reproductive health and changes in their own bodies. "Now a lot of young people want to know more about politics than health," said Heba Mohammed Ahmed. But, she added, they must also stay focused on health as a part of human security and human rights—and also the right of women to participate in constitutional debates.

Although the large youth presence in street demonstrations in the Arab States received much of the media attention in 2011, the power of young people not in the spotlight, using their numerical strength and their vision of the societies they want, may in the long run change the world in even more fundamental ways.

When a 26-year-old street vendor in Tunisia set fire to himself in an act of desperation, he also ignited a flame of protest that rocked the entire Arab region. Youth's involvement in the "Arab spring" has been unprecedented. Using social media platforms such as Facebook and Twitter, protests by young people against human rights violations, unemployment and the status quo spread throughout the region. From Tunisia to Egypt, their voices were

heard around the world. "Youth in Arab states have had an incredible sense of responsibility, and have therefore renewed the idea of the universality of human rights," says Mona Kaidbey, Deputy Director of UNFPA's Technical Division.

Young people in the Arab States constitute about one-third of the region's population, yet they are often excluded from decision-making because of a lack of education, high unemployment and poverty. As youth took the streets and political regimes in Tunisia and Egypt collapsed, many governments and organizations had to rethink their engagement with youth.

The UNFPA-supported Y-Peer network, active in the region for several years, became an even more important way to connect and raise awareness about reproductive health challenges, especially in times of crisis. Through its network of youth educators in Libya, for example, UNFPA was able to conduct a virtual assessment at the height of the conflict to understand youth's evolving needs and aspirations. Youth leaders gathered answers through questionnaires given to small groups of young people.

MEDIAN AGE OF THE TOTAL POPULATION (YEARS)



- 1. For statistical purposes, the data for China do not include Hong Kong and Macao, Special Administrative Regions (SAR) of China.
- 2. Including Åland Islands.
- 3. The former Yugoslav Republic of Macedonia

Source: United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision.

Many young people in the network insist that they should not be seen as victims of their societies' problems. "We shouldn't work with youth because they are marginalized, but because they are real actors in our society," explained Ahmed Awadalla, a member of Y-Peer in Egypt.

As traditional value systems are changing in the Arab states, so are the challenges affecting youth. Tensions between modernity and religion can still be felt, while reproductive health issues are increasingly becoming a preoccupation. In Tunisia for instance, there has been a significant rise in recent years of births outside marriage. "Civic engagement must be at the centre of our work," said Hafedh Chekir, director of UNFPA's Arab States Regional Office. "We cannot continue to ignore the needs of youth."

Political participation and influence on policymaking on a scale that matches youth's numbers is on the minds of young people globally, to judge from demands made by young men and women who took part in activities surrounding a World Youth Conference held in Guanajuato, Mexico, in August 2010, at the start of an International Year of Youth declared by the United Nations General Assembly.

Youth from Mexico, an upper-middleincome country that is a member of the Group of 20 and the Organization for Economic Cooperation and Development, the OECD, dominated the events surrounding the conference, drawing more than 22,000 people over several days. UNFPA's Mexico representative Diego Palacios, project coordinator on youth issues Iván Castellanos and colleagues created a space within a global interactive forum called The Cube



that invited young people to express themselves in messages and drawings on a blank wall, among other youth-directed activities designed for learning and sharing.

Ministers and other officials at the Global Governmental Forum part of the Mexico event produced an official declaration, which called for greater involvement by youth in development initiatives, more access to jobs, education, and reproductive health services for young people and equal rights for women and men.

The delegations wrote that governments everywhere should "promote the enrollment and retention of young people in educational institutions...with special attention to women and young people living in poverty and in vulnerable situations...," and "improve the quality and relevance of educational curricula...towards the comprehensive development of young people that includes: intercultural, civic and peace

A boy at central Cairo's Tahrir Square sells erk sous, a drink made from licorice. ©UNFPA/Matthew Cassel

ADOLESCENT SEXUALITY EDUCATION MATTERS: THE EXPERIENCE OF FINLAND

Dan Apter, the chief physician and director of the sexual health clinic at Väestöliitto, the Family Federation of Finland, the country's leading nongovernmental social and health sector organization, says that he often begins lectures on his nation's reproductive health story with "a little bit about history." At the end of World War II, he said, Finland was "just a small country suffering after the war, with contraception at a very low level, sexually transmitted infections common and women dying of abortions."

What turned Finland into a model in reproductive health and education six decades later was enlightened political decision-making, the integration of reproductive health into general education and a focus in the health services on sexual health, he said. Väestöliitto played a role in these developments.

"Sexual education became an obligatory school subject in 1970," Apter said. "We had an abortion law also from 1970, allowing abortion then on social grounds or any reason that a woman may want to present, and making contraceptive counseling an obligatory part of the abortion procedure."

After changes in the public health laws in 1972, municipalities were required to provide free contraceptive counseling, and abortions and births entered a long period of decline. "In the mid-1990s, in an international perspective, the abortion rate was quite low in Finland—about 10 abortions in 1,000 [pregnancies] for 15-to-19 year old girls," he said. "So that can be seen as the result of services as well as sexual education."

There was some backtracking in the mid-1990s, however, as the decentralization of health care (with some municipalities too small to provide the ideal range of services) and cuts in health budgets because of an economic slump led to a decision to make health education optional in schools. Studies by the late 1990s began to confirm that the result was "a clear deterioration in sexuality education in school, both in quality and quantity," Apter said. It was a powerful lesson.

"We saw an increase in the number of abortions by about 50 per cent," he said. "We saw an increase in the number of people who started to have intercourse at a very young age—at the age of 14 or 15. There was a decrease in contraceptive use." More sexually transmitted infections, especially chlamydia, were detected. "Then something had to be done again," Apter said. "Even Finnish politicians realized that sexual education provided in schools was really quite bad."

By 2006, a national curriculum in health and sexuality education, including an emphasis on healthy living generally, had been created and become mandatory. Lessons begin in the seventh year of school, taught by specialist educators or teachers trained to add this to their normal duties.

"There are examinations in this topic as there are in any other topic in school," Apter said. "And it continues in high school, where it is a requirement for graduation." The troubling statistics from the 1990s were quickly reversed, he said. "There was a decrease in the number of young

people who started to have intercourse at an early age. There was an increase in the use of contraception, and a quite large decrease in the number of teenage abortions and deliveries."

In addition to sexuality education, reproductive health services for adolescents have been introduced. "School nurses can provide the first three months of contraceptives," Apter said. Public health clinics are expected to be youth friendly. Since a law in 1970 made abortion a woman's sole prerogative, he said, "If a very young girl asks for an abortion, it is recommended that she involves the parents, but it is up to her decision. Very, very few under-15s have babies in Finland. In the Nordic countries, Finland has the lowest number of teen pregnancies."

When parents object, including some among new immigrant populations with different views about sexual behaviour and education, they cannot withdraw children from those classes, Apter said, though in some schools where there are cultural issues, girls and boys can be separated. "But basically it is an obligatory subject." Of about 114 hours spent in health courses up to grade 9, students get 20 hours of sexuality education. "Because sexuality education is provided at an early age" he said, "there is no need for experimentation."

education, solidarity, human rights education, education for sustainable development, comprehensive education on human sexuality, the promotion of gender equality and the empowerment of women."

Governments, they said, should also "establish public policies that guarantee young people's access to health without any discrimination and increase the quality and coverage of health systems and health-care services, including for sexual and reproductive health" and take actions to halt and reverse the spread of HIV and AIDS and other diseases among young people.

Separate from the formal Global Governmental Forum, a group of more than 200 young people from 153 countries took part in a meeting of non-government organizations and wrote their own document, independent of the official proceedings. Their statement called for more space in politics and civic participation generally and significant roles in the development of green technologies and climate change mitigation. "For our generation, effective action against climate change is a matter of survival," they wrote.

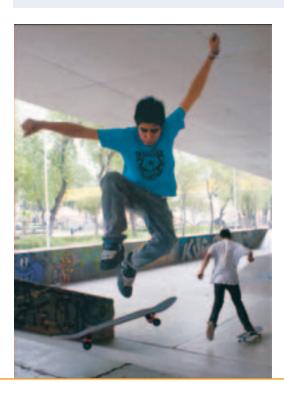
These young people also demanded that governments "develop strategies and implement action against any manifestation of cultural practices that violate basic human rights of individuals or groups, regardless of their sociocultural or economic status, gender identities, sexual orientation, abilities, religion or geographical background."

Despite the differing views of the official and unofficial proceedings, one thing was apparent to all: Today's generation of young people is poised to change the world in fundamental ways. Governments would be better served to cultivate and harness their potential rather than miss out on opportunities they offer for development.

YOUTH

Excerpts from the International Conference on Population and Development's Programme of Action

...A large number of developing countries continue to have very large proportions of children and young people in their populations.... Countries should aim to meet the needs and aspirations of youth, particularly in the areas of formal and non-formal education, training, employment opportunities, housing and health, thereby ensuring their integration and participation in all spheres of society, including participation in the political process and preparation for leadership roles.... Youth should be actively involved in the planning, implementation and evaluation of development activities that have a direct impact on their daily lives.



Leo Romero plans to study culinary arts in Mexico. ©UNFPA/Ricardo Ramirez Arriola



CHAPTER THREE

Security, economic strength and independence in old age

Any picture of old age in a world of 7 billion people is kaleidoscopic, reflecting the many cultural imperatives, social factors, levels of development and available resources that define a country or society. On a spring morning in Xi'an, in China's Shaanxi province, the air is filled with music at a huge middle class apartment complex, a private sector-provincial Government partnership dedicated to making life pleasant and healthy for its oldest citizens. Indoors in a senior

centre, a chorus is practicing its repertoire to the accompaniment of a resident's accordion. Outdoors in a spacious plaza away from the sounds of busy streets, morning exercises—tai chi with a little modern dance and aerobics—are under way to traditional tunes from a boom-box-sized CD player. UNFPA officials in China consider Shaanxi to be ahead of many other provinces in its work with ageing populations.

Elsewhere in China, on the other side of a social and urban-rural divide where life is much harder, women in old age are still labouring long hours in fields and farmyards, a reflection of widening income gaps found in some of the fastest developing counties.

In numerous Chinese farming towns there may be large new homes built with earnings from family members who have migrated to distant cities for jobs, but the houses are often ghostly in their emptiness, a frequent hallmark of villages wherever migration of the young in large numbers occurs, dividing traditional intergenerational families and leaving behind "empty nests." Other grandparents are kept busy raising grandchildren who are left at home by migrating working families.

Half a world away in Finland, the staff of a state-of-the-art centre for the elderly has cleared away space for a dance, with a band that plays old Finnish favourites for those nostalgic for younger days. All around the centre, activities crowd days that might otherwise be lonely ones. Nutritional meals keep bodies and spirits alive.

In Ethiopia, half a dozen old women are celebrating International Women's Day at a small refuge in Addis Ababa run single-handedly by a sympathetic philanthropist, Sasu

Elderly residents stroll near the ancient city wall in Xi'an, China. @UNFPA/Guo Tieliu



▲ Sara Topelson Fridman, vice-minister of urban and territorial development of Mexico's Ministry of Social Development. ©UNFPA/Ricardo Ramirez Arriola

Nina Tesfamariam, who gives them simple food, advice and company.

In rural Mexico where, as in many places, the elderly can no longer always count on a reassuring family home in the last years of their lives, the Government has instituted a system of paying people over 70 years of age a small living allowance to help them contribute to household income and perhaps relieve intergenerational tensions. "It's very good for the elderly in the rural areas, because we all know that the sons start to see their parents in their 70s as a burden," said Sara Topelson Fridman, a vice minister in the Ministry of Social Development. "Because they get a check every two months, they are not a burden—at least they have money for food. So it becomes easier."

Greying world

Every country—rich or poor, industrial or still developing—has a population that is ageing to one degree or another. As today's youth moves into middle age and beyond, the ageing population will grow faster than any other sector of the global population until at least 2050, according to a 2009 report from the Population Division of the

United Nations Department of Economic and Social Affairs, *World Population Ageing* 1950-2050. This is already a recognized major policy challenge in countries where longevity is high and the youth population is shrinking. In middle-income and low-income countries, too, population percentages of the 60-plus, 70-plus and even in some cases 80-plus are steadily creeping upwards.

Over six decades, changes in national demographic profiles show that while life expectancy at birth grew by 11 years in more developed countries between 1950 and 2010, gains were far larger in less developed regions where life expectancy increased by 26 years in the same period. In the least developed countries, the increase was 19.5 years. To be sure, the more developed countries started from higher life expectancy with less room to grow. But that does not detract from the enormous gains in the developing world, as more people began to share in medical advances that save and prolong lives, especially among infants and children.

Nations differ significantly in how they plan for ageing populations and what services governments make available. More and more, non-governmental organizations, communities, philanthropic individuals and the private sector are asked to supplement government efforts in caring for old people, providing not only their most basic material needs but also their emotional, psychological, social and even technological needs. In an era of increased mobility and migration when families drift apart, grandparents are asking for lessons in using e-mail, social media sites and video links or Skype, their only personal links to their grandchildren. Often, nongovernmental actors are filling vacuums in

public services or adding new programmes to make life more interesting and rewarding. Much research into old age is also done by non-governmental or intergovernmental agencies working with national governments and local non-governmental groups.

In Ethiopia, 75-year-old Tilahun Abebe is on a mission, armed with the results of a 2010 survey of the elderly in the capital, Addis Ababa, by HelpAge International, the International Organization for Migration and the United Nations Office for the Coordination of Humanitarian Affairs. The survey found that in a country where respect and care for the elderly was the tradition for centuries, there are now old people who are homeless and hungry.

Ethiopia, poor and stricken periodically with drought or other calamities, has a relatively small but growing population of people 60 years old or older, 5.2 per cent of the total population of 82.9 million. Life expectancy at birth is just over 57 years. Against this background, the needs of old people are often overlooked, Tilahun says. A retired government health official, he is deputy chair of the Elderly People and Pensioners National Association, and he wants to make it an effective lobby for older people. A demand for some sort of financial safety net in old age is high on his list.

"Only Government employees, the military, the police and civil servants get pensions," he said. "There is no social security." Homes for the elderly who have nowhere to live, or who require special care is another need, added Tilahun, who worked with an American malaria control project before receiving a graduate degree in preventive health in the United States and returning

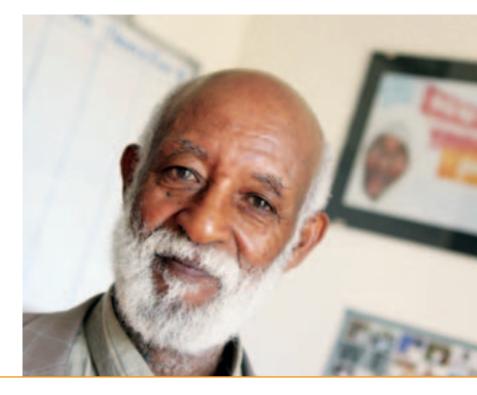
to Ethiopia where he became a ministry of health administrator.

It is not only a matter of increasing the number of old age homes, he said, but also of reviewing how existing ones function to make sure they run at full capacity and offer better services.

The campaign Tilahun is leading on behalf of the national association for the elderly has a headquarters in the capital and two regional branches; at least eight more are in the plans, or his dreams. "We have to advocate for new and better thinking," he said. He proposes more, and smaller, centres around the country, where residents or day visitors could be cared for and trained for income-generating jobs, or kept busy in other activities to bolster their psychological health.

The 2010 survey to which Tilahun refers, made for the national and local ministries of labour and social affairs with the help of four Ethiopian non-governmental organizations,

Tilahun Abebe, deputy chair of the Elderly People and Pensioners National Association of Ethiopia. © UNFPA/Antonio Fiorentel





Elderly practice Chinese martial arts in a modern community of Xi'an, China. ©UNFPA/Guo Tieliu

found that 88 per cent of homeless older people and 66 per cent of those living at home in the capital city do not have enough to eat. Ninety-three per cent of all older people had no bath or shower, 78 per cent had chronic health problems and 51 per cent said they had no family support.

Jiang Xiangqun is a gerontologist and professor of population at Renmin University in Beijing. He and his colleagues figure that 98 per cent of old people in China remain in their homes, or are trying to. Many—possibly as high as 70 per cent of them in Beijing; much lower in rural areas—are in those "empty nests" as their children have moved away to work or to start their own families in single-generation homes. Chinese demographers say that Government policy is to keep people at home in old age because that is what they want, and that will also reduce costs for building new accommodations and providing additional services.

In a recent academic discussion paper he wrote with Yang Qingfang, who lectures at the university's School of Continuing Studies—*Review and Analysis of China*' Population Ageing and the Situation of the Elderly—Professor Jiang emphasized the point that China is getting old before it is getting rich, unlike highly developed countries, where greater resources and a longer span of time were available to meet the transition to an ageing population. When the developed countries entered a period of significant population ageing, Jiang argues, they had a much higher level of per capita income.

"In the mid-21st century, when the population ageing peak is approaching, China's economic development can only reach the level of moderately developed countries," the authors wrote in their paper. If more older people will be living alone and seeking help outside their families, "that makes more urgent tasks for old-age security, medical care and social services."

In China, the percentage of the elderly in the national population is moving steadily and rapidly upward, a combination of low fertility rates resulting from the family planning policy that limited most families to one child and the healthier, longer lives that have increased the numbers of the old. When China began releasing figures from its 2010 census in late April of 2011, officials said that the over-60 age segment of the population had increased to 13.3 per cent, nearly 3 percentage points higher than what was recorded in the 2000 census.

In an informal gathering of population experts at Renmin University in Beijing meeting to talk about changes in Chinese demography, development and the environment, the gerontologist Jiang and others said that their specialty was suddenly a popular subject with students who never found it interesting earlier. "Gerontology is a new

field," one said. "People are paying attention to ageing even in their own families. There is a need to know more about how to care for the elderly, keep them healthy and teach them good lifestyle habits."

Common and emerging health challenges

In a quiet residential area of Addis Ababa, Sasu Nina Tesfamariam confronts a common medical condition in the elderly: poor eyesight because of cataracts. Raising money for operations anywhere she can, she provides temporary refuge to candidates for surgery. More than 100 old women have been helped to improve their vision through this small shelter, where they can recover on cots with clean linens. "And when they leave, we give them the bed," Sasu Nina said.

She also teaches women about Alzheimer's and other cognitive problems they may encounter in old age. In societies where the elderly have to fend for themselves, a loss of mental capacity is treacherous for vulnerable women.

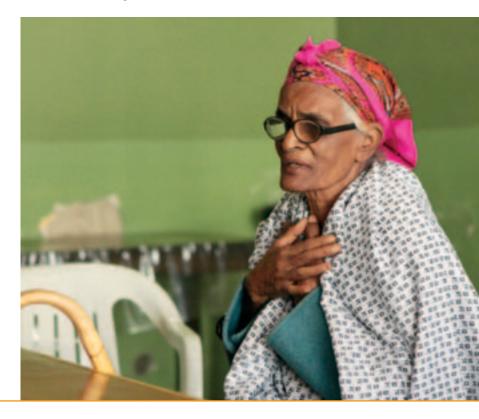
At one of two refuges run by Sasu Nina's charitable organization, called Agar, which means "helper" in the Amharic language, a woman who suffers from panic attacks talked about what brought her there. "I had saved a little," the woman said. "That is all gone. If I weren't here, I would be hungry. I have no children to look after me."

Sasu Nina, who was educated in the United States, said that when she began the study of gerontology, she knew she would one day go back to Ethiopia. Since then, in two shelters, she has rescued older women whose lives she said had become more like nightmares.

In the United States, the National Prevention Information Network of the Centres for Disease Control and Prevention warns that older people in developed countries are at increasing risk of HIV infections. At least one-fifth of all people infected with HIV in the United States are over 50 years of age, and the rate may be considerably higher because the elderly often do not think of getting tested. There is also the good news that people living with HIV are living longer because of antiretroviral drugs.

A variety of factors account for increasing risks to older people, according to the Centers for Disease Control. These factors, which may be universal to one degree or another, include not knowing much about HIV and AIDS because the old are not targeted for education on the subject as much as younger people are. Older people may be inhibited in talking about sexual activity or

A resident of one of Agar Ethiopia's shelters for elderly women. ©UNFPA/ Antonio Fiorente



drug use, or simply assume that a deterioration in their health is due to their advancing age. In Ethiopia and other developing countries, studies show that older people caring for orphaned grandchildren or other family members living with HIV may themselves have become infected because of inadequate information about precautions against accidental transfers of the virus.

Investing in the elderly

At a time when there is much informal discussion in China about rethinking the country's family planning policy, which has limited most couples to one child (but allows for exceptions), Renmin University's Jiang Xiangqun suggests that raising fertility, as some other countries as diverse as Japan and Russia are advocating, would not be enough to offset the rapid ageing trend in China in this century, and Chinese

OLDER CITIZENS IN NATIONAL POPULATIONS (PER CENT)

	60 or over	65 or over	80 or over
China	12.3	8.2	1.4
Egypt	8.0	5.0	0.7
Ethiopia	5.2	3.3	0.4
Finland	24.8	17.2	4.7
India	7.6	4.9	0.7
Mexico	9.0	6.3	1.3
Mozambique	5.1	3.3	0.4
Nigeria	5.0	3.2	1.1
The former Yugoslav Republic of Macedonia	16.7	11.8	2.1

Source: Population Division of the United Nations Department of Economic and Social Affairs.

officials want to move towards a stable population. It is a complex but urgent issue. "How to deal with the urgent challenge of population ageing will determine China's stability and prosperity to some extent," concludes Jiang in the academic paper he wrote with Yang Qingfang.

For China, with the world's largest population (until India surpasses it in about 2025), the issues it confronts looking into the future are underscored by a 2009 study by the Population Division of the United Nations Department of Economic and Social Affairs, which listed four major global findings: Population ageing is unprecedented. Population ageing is pervasive. Population ageing is profound. Population ageing is enduring.

On the last point, the Population Division found that the global proportion of people over 60 years of age was 8 per cent in 1950, rose to 11 per cent in 2009 and is projected to reach 22 per cent by 2050. "Globally, the population of older persons is growing at a rate of 2.6 per cent per year, considerably faster than the population as a whole...Such rapid growth will require farreaching economic and social adjustments in most countries," the 2009 ageing report said.

In the ancient city of Xi'an, in China's Shaanxi Province, 1,220 kilometres southwest of Beijing, the director of the Shaanxi Working Committee on Ageing, Ai Xiangdong, suggested one kind of forward-looking policy adjustment as he described the mix of Government initiatives and private sector contributions that are becoming national policy. He started with the demography. Shaanxi has more than 5 million people over 60, he said, and a proportion of men

and women over 80 that is higher than the national average.

"We don't know the reason why people live longer here," he said, "but our health services have improved for people over 65. There are free checkups, and urban people have health insurance. Most old people live with their families, where they eat familiar food that they like. Institutions cannot cater to individual tastes." In 2010 Shaanxi began making special grants to the oldest of the old, in addition to other allowance and pensions they may be receiving after the age of 60. For people aged 80 to 89, the payment is 50 yuan a month, or about \$7.70; from age 90 to 99 it doubles to 100 yuan, and for those who are 100 or older it doubles again to 200 yuan. In Shaanxi, a staff member of the commission delivers the money in person to those over 90.

Working committees on ageing, with members drawn from a variety of relevant ministries, have been established at the national and provincial levels in China, some more effective than others. They were created, Ai said, "to coordinate services, protect the rights and interests of older people and organize cultural, social and sports activities for them. Older people can feel the changes and see investments being made in them."

In the city of Xi'an, which is redefining itself as a technology hub, there is a rich cultural environment and many civic amenities, which Ai acknowledges make it a good place for senior citizens. "They can exercise in parks in the morning and evening. There are performance groups. A college for the old teaches computer skills, painting and calligraphy." In rural areas, services are not at that level, officials concede, and in one village not



far from the city there was some grumbling about that. But Ai insists that even rural areas have new programmes.

In Beijing, Wu Yushao, vice president of the China National Working Committee on Ageing, which works directly at State Council level, above ministries, said that Government ministries and departments joined forces in 2006 to write new regulations protecting old people. Aware of the income differentials between town and country, the Government will by 2015 provide all elderly rural people, about 100 million of them, with pensions covered entirely by state funds. People receiving the pensions in rural areas or cities, Wu said, will be expected to draw on them to pay for enhanced services for seniors. In line with international trends, the elderly will also be encouraged to buy insurance against old-age expenditures and consider borrowing against the value of their properties.

In Xi'an, Ai said that in an effort to afford expanded programmes for the elderly, the

A woman plays a traditional instrument near the Xi'an ancient city wall in China. ©UNFPA/Guo Tieliu

national Government wants to make a priority of increasing old-age accommodations built by the private sector, and to improve products produced for the elderly that make life easier. "Old age is a growth industry," Ai said. "There is increased attention to different aspects of ageing. Universities are doing studies; the business sector sees the possibilities."

The trend, reflected in the latest national five-year plan, is on display in the Weiyang district of Xi'an, where nearly 12 per cent of the population is over 60. There the Jinyuan Xinshiji residential compound, a privately built, gated community of well-designed and landscaped apartment buildings along pedestrian-only thoroughfares, houses about 15,000 people, 600 of them over 60 years of age and 30 over 80, all living in family homes. Similar residential complexes have been built recently in numerous large cities in China, though not always with the range of services for the elderly offered in Jinyuan Xinshiji, a name that combines the phrases "beautiful garden, new century."

China has not adopted the system of building family housing with "granny flats" on the model of Singapore, where apart-

ments may have attached smaller living spaces with their own entrances so that older people can remain close to families while both generations enjoy privacy and independence. But in Jinyuan Xinshiji, large (and expensive) apartments can accommodate an intergenerational family comfortably, said Yao Naigup, president of the Older People's Association of the community and director of the senior centre in the compound purpose-built for the elderly.

In the senior centre, Yao pointed to a computer corner, a classroom where the chorus was practicing, a medical checkup room, a fitness centre and a cluster of *mah jong* tables for afternoon entertainment. There is also a room furnished with beds for naps. Everything is free except lunch for those who do not eat at home. The elderly in the apartment complex are given discount cards for public transportation, help with filling in official documents, special prices in shops in the community and free delivery of purchases. Sale of craftwork by residents helps raise money for centre activities.

"What old people need is not only support in material terms," Yao said. "More important is mental support. After retirement, a lot of people feel a sense of lost purpose. Now that people are better off, they want more, spiritually and culturally."

Gengxi village in Zhouzhi county, about an hour by car from Xi'an, has only 1,365 people (179 of them over age 60 in early 2011), and because of its small size, there are few special facilities for the elderly. The local older persons association, however, tries to make up for it.

The association was set up in 1997, its officers said, after some households were

Elderly residents perform

local opera near the Xi'an

ancient city wall.

© UNFPA/Guo Tieliu



found to have left elderly relatives behind. Gengxi, in a mountainous region, was then a very poor cluster of villages trying to survive on field crops like wheat, corn and beans. In 2003, its agricultural face was completely transformed, and the local people now derive their income from fruit orchards and arbors, which older people can tend. Annual per capita earnings shot up in less than a decade, they say, from about 1,000 yuan, or \$154, to 6,480 yuan, just under \$1,000.

Towards greater independence

In China as well as India, interest in the growing population of people over age 60 is producing considerable research and reexamination of the long-held view that families will naturally take on the responsibility of elder care—or should be compelled by law to do so. New realities need to be confronted, says K R.G. Nair, Honorary Research Professor with the Centre for

Policy Research in New Delhi. The elderly, living longer, do not always fare well or end their days happily, Nair wrote in an introductory essay summarizing the writing of experts collected in the 2009 book Status of Ageing in India: Challenges and Opportunities, which he also edited.

Nair cited examples of abuse, abandonment, the lack of adequate recognition of the problems of ageing men and the toll that entrenched and widespread poverty takes on young families expected to care for their elders. India has the world's largest number of people living on \$1.25 or less. Nair cautioned that passing laws requiring family members to care for the elderly, being discussed in the Government, could have the result of reducing Government responsibility for support to senior citizens. Nair also advises not forgetting the potential of the "young old" in their 60s who are still capable of contributing to the economy and society. He detects a reluctance to keep them employed.

Elderly women await visitors at the St. Mary's Home, New Delhi, India. ©Sanjit Das/Panos



Shiela Harrison Matthew pulls out a Bible from her shelf in her room at the St. Mary's Home in New Delhi, India. @Sanjit Das/Panos

Government-run clinics often suffer from understaffing in rural areas, where a large proportion of Indian old people live, according to Dr. Oomen George, head of medical services for HelpAge India, writing in the same book. Private medicine is too costly for many. George drew attention to a survey by the Government of India and the World Health Organization India Office, which also suggested that "mental health and rehabilitation needed to be seriously addressed when planning health care for the elderly," George wrote.

Leading demographers studying recent statistics say that even in the most advanced states of South India, where human development indicators have rivaled those of more developed countries, the rising number of the elderly poses new challenges. C. Chandramouli, the Registrar General and Census Commissioner of India, said that in Kerala new issues are arising, among them a shortage of geriatric care.

In 2011, India published a new draft policy on ageing, taking into account the latest

national trends, which are described as "the demographic explosion among the elderly, the changing economy and social milieu, advancement in medical research, science and technology and high levels of destitution among the elderly rural poor." But this *National Policy for Senior Citizens 2011*, which was awaiting Cabinet approval at this writing, reaffirms that "the care of senior citizens has to remain vested in the family which would partner with the community, Government and the private sector."

The policy draft emphasizes that elderly women in India need special attention. Many old women, especially widows, lead barely sustainable lives. "The problems of elderly women are exacerbated by a lifetime of gender-based discrimination, often stemming from deep-rooted cultural and social bias," the draft says. "It is compounded by other forms of discrimination based on class, caste, disability, illiteracy, unemployment and marital status."

Reaching the marginalized

Mathew Cherian, chief executive of HelpAge India, was on the committee that drafted proposals for a new ageing policy. His nongovernmental organization has been active in many facets of elderly life. It maintains a hotline for people who need assistance, though Cherian says sadly that "Whatever we do is just a drop in the ocean." He said that small social security payments to the oldest citizens do not reach very far in the contemporary Indian economy, and private health insurers will not write policies for the elderly.

Longevity in India may be increasing, Cherian said, but it varies markedly in various sectors of society. "For the poor, for Dalits ["untouchables"] and for tribes, it is such a tough life that they don't live very long."

In 2010, the Government, responding to growing medical and economic needs of the older poor, allocated money for 100 of India's 662 administrative districts to establish dedicated geriatric care, Cherian said. Eight regional medical centres were also chosen to set up programmes. The Government of India's Department of Science and Technology is working with HelpAge India to design products and services for the elderly, such as voice-activated devices, mobile physiotherapy vans and video links to specialist medical advice for local doctors.

Concerned about abuse of the elderly, HelpAge India has opened help lines in 20 towns, does mediation work in troubled families and, when necessary, reports abuse cases to the police. A study of elder abuse conducted in four large metropolitan areas and four smaller cities by the organization found violence on the increase generally, but especially within families. "The family home is still the place most older people live," Cherian said.

"Assisted living and old-age homes are not prevalent in India," he said, adding that there are only about 3,600 such homes across the country, most of them either privately owned or established by charities or religious organizations. "Many of them house between 20 and 50 seniors," Cherian said. "The total capacity is still very low."

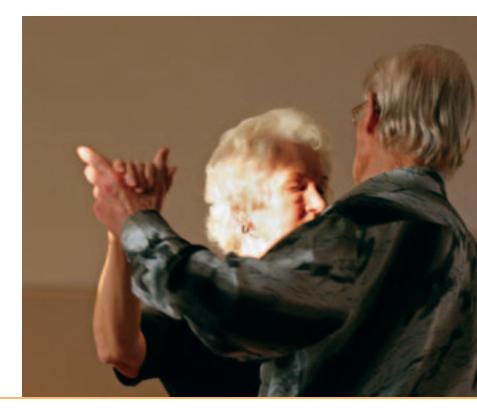
Family structures in flux

Finland, like a number of European nations, Japan and the Republic of Korea, has seen its population grow older so quickly—the result of very low fertility and much longer lives—that ageing became the biggest issue

of socio-economic concern for policymakers. At the University of Helsinki, Professor Pekka Martikainen, a demographer in the population research unit in the department of sociology, said that ageing is only part of a complex set of challenges. Low fertility persists, even though Finland has seen a slight rise in recent years, from about 1.7 children per woman in the 1990–1995 period to about 1.8 children per woman in 2005–2010. (Globally, a "replacement rate" of 2.1 stabilizes growth; below that populations begin to decline.) But the numbers do not tell the whole story.

"There has been a big change in European family structures, family ties, that partly relate to declining fertility rates—high rates of divorce, reconstituted families, a rapid decline in household size," he said. "There is an increasing prevalence of older people, but also an increasing prevalence

Thursday afternoon dance for pensioners at the Malmi Workers' House, a popular cultural venue in Helsinki, Finland. ©UNFPA/Sami Sallinen



of young people living alone, after leaving parental homes." Women stay in the labour market longer, delaying marriage and child-bearing—or deciding not to have children at all. A group of young women, meeting in Helsinki over a bottle of wine after work, confirmed that. None of them, all with jobs they found interesting, were eager to start families. One said that getting married did not appeal to her because she did not want to be "tied down."

The Government, Martikainen said, does not openly promote more childbearing, but rather offers excellent social services such as day care that make parenthood easier, yet many young people still prefer to wait, believing the services will always be there. Meanwhile, the elderly population continues to grow, and grow older. People age 60 and older now make up almost a quarter of the national population, and the percentages of those over age 70 and 80 are climbing.

Finnish pensioners

Hannu and Armi

at home.

©UNFPA/Sami Sallinen



"Mortality levels have declined rapidly, particularly in the oldest population, the 70-plus," Martikainen said. "The related issue is whether the functioning of these people is improving at a similar rate—basically the issue of whether extra years of life are also healthy years of life." The questions are urgent, because a "baby boomer" generation is beginning to enter retirement age, adding to the large numbers of the old without significantly increasing the numbers of the young. As in other developed countries, the question is, where will the money come from to continue making life good?

Martikainen notices in Finland some of the same thinking encountered in developing countries where Government resources are much smaller. "There is more talk in Finland and elsewhere about family obligations in taking care of the elderly," he said. "But it could also be that the there's a push for shifting the cost of old-age care to individuals and their families, and that relates to issues of intergenerational solidarity and family support. There's a huge emphasis in Europe on providing old-age care in the community, so people can live at home. But how do you actually organize that?" With traditional family structures changing, the task is formidable.

Centres for the elderly in Finland are the responsibility of municipal social services departments, as are day care centres for children and other community programmes. The elderly over age 75 have access to daytime activities, home help, hospital care and housing for various special needs. The Riistavuori centre in Helsinki is an example of the extensive services such facilities can provide.

Riistavuori has a group home for dementia patients and another for people with

mental illness. There are other units for crisis care or rehabilitation, 85-one-room apartments for assisted living (designed with every safety feature necessary) and studios and rooms for visiting family members. There are seven saunas, a gym and exercise room, a restaurant and café, a library, a hair salon, spaces for craft work and massage, chiropodist and osteopathic services. Forty-three practical nurses and 21 general nurses are employed by the centre, which also has a corps of instructors in various fields, a therapy unit and a magnificent all-white quiet room called Shangri La, created by a designer using dimmed lights, classical music, aroma therapy and scenes of forests, underwater life or views of Helsinki projected soundlessly on a large wall. Day visitors as well as residents can utilize these services—a "good mood group" meets every Monday.

The centre is not free, but payments are made on a sliding scale, depending on the economic levels of those who use it or live there, up to about 80 per cent of a person's retirement income. Kirsi Santama, the centre's head social adviser, said that the rich may pay as much as €3,500 a month (about \$5,000), while most people would pay under €1,000 monthly (\$1,420) for 24-hour care. The centre's clients pay for their own medications, up to a limit of €600 (\$850) a year, after which they are free. Finland is a highincome country, with per capita annual gross national income above \$46,000, and some of the world's most generous public and private sector pension plans, according to the Organization for Economic Cooperation and Development.

"Being old isn't a sickness" is the message at Riistavuori, Santama said. But how long can this level of care last as the numbers who need help in old age grow? Will this kind of life in old age, enjoyed at the highest European standard, become an endangered species in an elderly world, where rich nations are already feeling strains and where people in poorer countries will never even know such luxury?

Finnish pensioners Hannu and Armi enjoy skiing in the winter. ©UNFPA/Sami Sallinen



THE ELDERLY

Excerpts from the International Conference on Population and Development Development's Programme of Action

...In most societies, women, because they live longer than men, constitute the majority of the elderly population.... The steady increase of older age groups in national populations, both in absolute numbers and in relation to the working-age population, has significant implications for a majority of countries, particularly with regard to the future viability of existing formal and informal modalities for assistance to elderly people. The economic and social impact of this 'ageing of populations' is both an opportunity and a challenge to all societies.



CHAPTER FOUR

What influences fertility?

Fertility—the number of children a woman has—is not just a barometer for predicting population growth or decline. It can also be a measure of the quality of women's lives, whether they have no children, a few or many. Linked to this indicator of the size of families, nations or the global population, are other factors such as health, education, economic opportunity, equality and the right of every woman to make decisions about the timing and spacing of births, free of

coercion from a partner, family, a community or a national policy.

In the more developed countries, the average fertility rate is about 1.7 births—below the replacement level of 2.1 births. In the least developed countries, the rate is about 4.2, with sub-Saharan Africa reporting a rate of 4.8. Worldwide, however, fertility rates have been gradually dropping since the middle of the last century. Each region—and country—has a unique set of circumstances that influence the number of children a woman has.

The evidence shows that reductions in fertility so far have accelerated economic growth and reduced poverty, Hania Zlotnik, Director of the Population Division of the United Nations Department of Economic and Social Affairs, said at a meeting of the Commission on Population and Development in New York in April 2011. "Furthermore, fertility reductions have been achieved through improvements in reproductive health, child health, education and the empowerment of

women. In country after country, parents have decided to have fewer children in order to provide them with better opportunities."

High fertility can mean high economic, health and social costs in some countries. In Mozambique, for example, "high fertility rates are a public health issue," particularly for mothers who do not have at least two years between pregnancies and who are therefore weakened and vulnerable to illness, according to Leonardo Chavane at the Ministry of Health. Pregnant mothers, Chavane says, may not have "enough time to watch over their own health or the health of their other children."

Women in rural Mozambique, especially in the north, typically do all the farming, and if pregnancy or poor health prevents them from producing enough food for the family, the children risk going hungry or becoming malnourished, Chavane explains. Nationally, 44 per cent of children are chronically malnourished, he says. In one northern province,

 Ana Maria Sibanda, mother of two girls, hopes her next child is a boy. ©UNFPA/Pedro Sá da



Leonardo Chavane, deputy national director of public health, Ministry of Health, Mozambique. ©UNFPA/Pedro Sá da Bandeira

Cabo Delgado, where almost one in three girls is married before the age of 15 and where only 3 per cent of the female population uses modern contraception, about 59 per cent of children are chronically malnourished. A malnourished child, Chavane says, is at risk of becoming cognitively or physically stunted, jeopardizing his or her chances for a long, healthy and productive life.

Elisio Nhantumbo, head of the Department for Population Analysis and Studies at Mozambique's Ministry of Development and Planning, calls the country's high fertility rate "a matter of concern" because population growth exceeds the State's capacity to provide goods, services and income-earning opportunities, especially for its rapidly expanding youth population. According to the United Nations Development Assistance Framework for Mozambique for 2012 to 2015, the country's small formal economy "is largely unable to absorb the estimated 300,000 young people who enter the labor market each year."

What are the obstacles that prevent people in some countries featured in this report from deciding freely and responsibly how many children to have? What are the forces

that contribute to below-replacement level fertility or a levelling off of fertility in others?

The agreement adopted by 179 countries meeting in Cairo at the 1994 International Conference on Population and Development set in motion a 20-year Programme of Action that reflected a new awareness that fertility, health, poverty, patterns of production and consumption and empowerment are so closely interconnected that none of them can be considered in isolation.

The empowerment of women as critical to the task of moving populations to stabilization levels through their own choices and not by Government demands has been a central theme of subsequent action and a touchstone for policymaking ever since. Hand in hand with the empowerment of women, men and their families in making reproductive choices was the international community's pledge to ensure access by 2015 to reproductive health care, including family planning. This was recognized as a necessary prerequisite to enabling free choice in the number and spacing of births. A hoped-for outcome was that with a host of actions to empower individuals, promote development, improve health and expand access to education, fertility rates would move towards the replacement level of 2.1 births for each woman (one of those children a girl, the next generation's mother).

In 2011, the world is just three years from the goal line set in Cairo, and four years from the deadline envisioned for achieving the Millennium Development Goals, which contain numerous targets for improving the lives and rights of women and girls. Some of these targets are being met in some places. But access to family planning is often a glaring

exception, along with guarantees of the rights of women to make choices in their reproductive lives. Today, an estimated 215 million women of reproductive age in developing countries would use family planning if they had access to it. Hundreds of thousands of women are still dying annually from pregnancy-related causes, many that are preventable.

In some countries, lack of access is the result of weak transportation networks that make it next to impossible to deliver supplies to remote areas. In other countries, cultural forces and gender inequality interfere with a women's ability to exercise her reproductive rights, even when family planning services and supplies are readily available. And in others, demand for contraceptives is falling, for a combination of economic and social reasons, some of which are still unclear to demographers and others who study these trends.

Some cite drop-off in family planning for plateauing fertility in Egypt

In Egypt, with 81 million people, decades of official and non-governmental family planning programmes were credited by many for a steep decline in fertility. In the 1950s, the number was 6.37 children per woman; it fell to about 3 in the 2005-2010 period. The goal a decade ago was to see fertility reach replacement level of 2.1 by about 2017.

Projections now put the replacement fertility date closer to 2030, but even that is questioned by some demographers and social scientists who have watched the downward movement stall on a "plateau" and are engaged in multi-year studies of the phenomenon. Some local family planning advocates attribute the plateau to a slackening of

emphasis on family size by Government and the media in the last decade.

"Failure to reach replacement level would be a problem for Egypt," said Hisham Makhlouf, chairman of the Egyptian Demographers' Association and professor in the Institute of Statistics at Cairo University. "We are already suffering from a shortage of water for drinking and irrigation." With arable land at a premium and Egyptians able to make living on only 5 per cent or 6 per cent of the national territory, "A population policy has to be the priority of any government," he said, adding, "In family planning, we are seeing a high discontinuation rate in the use of contraceptives—one-third of women stop using them by the end of the first year."

Makhlouf is among those who believe that some of the explanation for the plateauing of fertility lies in the rise of more conservative views about society in Egypt, some of them influenced over decades by migrant workers and other travelers to the Gulf States.

At Al Azhar University in Cairo, Gamal Serour, director of International Islamic Centre for Population Studies and Research, a centre for Muslim religious scholars from around the world, says that religion cannot be blamed for Egypt's plateauing fertility. The experiences of other Muslim-majority countries such as Tunisia and Indonesia, which have experienced dramatic declines in fertility, attest to that. North Africa, where Tunisia was a pioneer in reproductive health and rights, has lower fertility rates than most of the rest of Africa.

Serour, who is also president of the London-based International Federation of Gynecology and Obstetrics, said that Al

Azhar, a university he described as the most conservative institution of higher learning in the Muslim world, established the population research centre in 1974 "because we wanted to enlighten people that Islam is not against family planning; Islam is not against the protection of women's health." He published a guide on the subject, quoting from religious texts, and he is taking its message as far afield as Afghanistan through imams he trains.

Serour points to a need for better reproductive health information and services for

the young. He says that the country cannot risk what he called a "population explosion" or fail to address maternal mortality, unsafe abortion and other health issues harmful to girls and women in Egypt, all linked to reproductive health care. "We are not importing Western ideas," he said. "We are not importing Western policy. We're talking about our problems."

After conducting a survey of students on their knowledge of sexual and reproductive issues and finding the results "appalling," he

YOUNG EGYPTIAN WOMEN'S ACCESS TO FAMILY PLANNING INFORMATION AND SERVICES

In a semirural area near the Egyptian city of Ismailia, on the west bank of the Suez Canal, Dalia Shams offers services from her cramped office that doubles as an examination room at an Egyptian Family Planning Association centre supported by UNFPA through its Youth-Friendly Clinics programme. Shams spends a lot of time listening, especially to adolescent girls. "It starts with a chat so they can learn to trust me," she said. "Then they talk without hiding anything."

"Girls know little about sex and they are afraid," she said. "They come to ask about losing their virginity in a shower or riding a donkey. They ask about menstrual problems, or infections. Sometimes the mother comes with the girl. She is also afraid." Shams talks to them frankly about sex and also about nutrition, cleanliness and healthy living in general. When she is asked by a mother about whether to have her girl's genitals cut, "I have to work carefully around the issue not to scare her away." The family planning association opposes the practice, which is still widespread in Egypt although it has

been outlawed and is thought to be decreasing.

Shams also counsels young women and men about to be married. Most young women she sees marry between the ages of 18 and 25, she said, although in urban Ismailia, where she grew up, 16-year-old brides are not uncommon, in violation of the law. At any age, young women and their husbands know very little about what to expect sexually, since premarital chastity is strongly guarded.

When it comes time for family plan-

ning, Shams has intrauterine devices, condoms, injectables, implants and oral contraceptives to offer. She must wait until after marriage to dispense them because she said a bride's virginity must be intact on her wedding day. But by then the woman has been informed about choices.

"Many men try to prohibit family planning," Shams said. "I try to talk with them about the health of the mother and the need for spacing. I advise them to wait two years between births."

Dalia Shams, physician at the Youth Friendly Clinic at the Egyptian Family Planning Association in Abo Attwa, near Ismailia. ©UNFPA/Matthew Cassel



said, he introduced these topics in courses at Al Azhar with the support of the university administration.

Serour said sharp cuts in international aid for family planning over the last two decades contributed to the slowing of Egypt's fertility decline. He is critical of those who view family planning aid a cultural intrusion or as a tool of outdated and unacceptable population control. When powerless women in poor countries are denied contraception for ideological reasons, he said, "That's a violation of human rights."

"Family planning can prevent the deaths of 1 million children every year," Serour said. "In Africa, there are 68,000 women who die from unsafe abortions every year because they have unmet needs [for family planning]. So why don't you provide contraception?" An estimated 9.2 per cent of married or partnered women of reproductive age in Egypt have an unmet need for family planning.

Interplay of forces sustaining fertility, limiting use of family planning

Traditions, gender inequality, a belief that large families are a sign of wealth and misconceptions about modern contraceptives together discourage many women and men from taking advantage of family planning services in Mozambique, where only 11.8 per cent of reproductive age women rely on modern methods of contraception, such as the pill or condoms to prevent pregnancy.

In some parts of the country, supplies of contraceptives are limited, mainly because of difficulties transporting them to distribution centres in remote areas. But contraceptive



Carlos Arnaldo, Professor of Demography at Eduardo Mondlane University, Maputo, Mozambique. ©UNFPA/Pedro Sá da Bandeira

prevalence is low also because demand for them may be low in some areas.

To Mozambique's rural poor, the whole notion of family planning may seem irrelevant, says Patricia Guzmán, the UNFPA Representative in Maputo. "How do you 'plan' your family when you can't plan any other aspect of your life? The question of how many kids you want is out of most people's frameworks."

Overall, however, an April 2011 World Bank profile of reproductive health in Mozambique says the country has a "high" unmet demand for family planning, which means that "women may not be achieving their desired family size."

According to the National Directorate of Studies and Policy Analysis of Mozambique's Ministry of Planning and Development, the unmet need for family planning has indeed risen, which shows that more and more women or couples are increasingly aware of contraceptives and that the health system is not able to satisfy the demand for these items.

Family planning is increasingly available in urban areas, but "the cultural setting" prevents many people from taking advantage

of it, says Carlos Arnaldo, a demographer at Eduardo Mondlane University in Maputo. "Family planning is being implemented, but women are not the decision-makers," he says. "Men are against family planning because they want more children."

Leonardo Chavane in the Ministry of Health says Mozambique must accelerate and expand women's access to information about modern methods of family planning, so that more people will understand that it is safe and can improve their lives. Mozambique also needs to change the approach to family planning so that it includes men. "Until now, family planning in Mozambique has focused on women," he says. "We are now doing

Mothers and their children wait to see a doctor at the Egyptian Family Planning Association in Abo Attwa, near Ismailia. ©UNFPA/Matthew Cassel



more to reach the whole family, encourage discussion and raise demand for family planning." It is not only men who want large families. According to a 2003 survey, the average woman in Mozambique wanted an average of 5.3 children.

In Mozambique as in many other countries, family planning services are increasingly integrated with sexual and reproductive health programmes, including HIV prevention, UNFPA's Guzmán says. The aim is to build synergies that will reduce unplanned pregnancies and hold down HIV infection rates. So today, family planning services also offer HIV tests, complementing the tests that are offered by pre-natal care providers. And HIV-prevention and treatment services encourage the use of condoms and provide anti-retroviral drugs to pregnant mothers to prevent transmission of the virus to their newborns. Integrated services are already the norm through Geração Biz, a joint effort of three Government ministries to prevent HIV infection and unplanned pregnancy among the country's rapidly growing youth population.

According to Samuel Mills, a senior health specialist at the World Bank, Mozambique—and many other countries—could do more to explain the benefits of using contraceptives, spacing pregnancies and having smaller families.

"To the men, we need to say that it makes good economic sense to space pregnancies or have fewer children: If you have fewer children, you'll be better able to afford their education, and you'll need to spend less on food. To the women, the message should be that space between pregnancies means healthier children and a healthier mother."

Chavane in Mozambique's Ministry of Health says use of contraceptives would rise in that country if more women had access to information. "We don't try to convince people to have smaller families," Chavane says. "We encourage them to wait before they become pregnant the first time. We tell them that to have healthy children and healthy mothers, families should wait at least two years between pregnancies." Chavane says the Government has kicked off a campaign to raise awareness about the benefits of spacing births and uses wellknown figures, such as First Lady Maria da Luz Guebuza, to champion the cause of family planning.

Limiting pregnancies through sterilization in India

Of the few modern methods of contraception available free through Government-run services in India, sterilization is the most common. More than 37 per cent of Indian women who use modern methods of contraception are sterilized, and 1 per cent of men, according to the Population Division of the United Nations Department of Economic and Social Affairs. Worldwide, sterilizations account for 18.9 per cent of the modern methods of contraception used by women and 2.4 per cent by men. In India, male condoms, for example, account for a little more than 5 per cent of total contraception. The pill is used by 3.1 per cent of women. Injectables are not provided by the Government.

A.R. Nanda, a former census commissioner, Secretary of Health and Family Welfare in the central Government and later executive director of the independent Population Foundation of India, says he has been "clamoring" for a study of why sterilizations disproportionately outnumber other contraceptives and whether all national standards for quality, safety and choice are being met. As for quality and safety, Nanda said that a public interest law group filed a suit against the Government over the way sterilizations were performed in temporary medical sites commonly referred to as "camps," resulting in a Supreme Court ruling requiring all doctors and camp administrators nationwide to adhere to national quality, safety and procedural standards. Under these standards, Nanda said, no doctor is permitted to perform more than 30 sterilizations a day. "In the past, some of them had done 50 or 60," he said, adding that he expects enforcement of quality standards to reduce complications. Ensuring free choice in individuals' decisions to undergo irreversible sterilizations has been a priority for reproductive health and human rights advocates since the 1970s when the Government had attempted to slow population growth, partly through forced sterilizations.

"In India," he said, 'target-itis' [i.e., an excess of targets] is the biggest devil," referring to the number of sterilizations doctors are expected to perform per day or per month in some parts of the country. He said he thinks that targets should be eliminated and that family planning, including contraception, should be provided not in isolation but instead within an integrated Government reproductive health programme. "A reproductive health approach is a much better idea," he said. "It is much more effective and benefits women."

There have been reports in the media of targets set and incentives offered for sterilizations in some regions of the country, but this is against national policy, according to the Delhi office of UNFPA, which says it brings such accounts to the attention of the Government for action.

Poonam Muttreja is the successor to
Nanda as executive director of the Population
Foundation of India, a strong and influential
non-governmental organization that does
research and advocacy on a wide range of
population, health and gender issues. She
said that the limited range of contraceptive
choices—skewed toward sterilizations—
available for free from Government providers
in India is both a deterrent and a danger to
women. "Unmet [need for] contraception is
not a demand-side failure," she said. "The
demand exists, the supply does not."

India's maternal mortality rate, 230 in 100,000 pregnancies, could be cut by better, more comprehensive, family planning services, she said, saving many lives. "There are 10 million-plus abortions in India, most of them by married women," Muttreja said. "This is tragic." Abortion-related complications account for 8 per cent of maternal mortality, she said.

Studies have shown that in countries such as Brazil and Mexico, where a "cafeteria" approach to the choice of contraceptives—offering the full range—has been adopted, fertility rates have plummeted. Similar approaches have helped stabilize population growth in numerous East Asian and Southeast Asian nations. But when sterilization is the most common or only option, fertility rates may actually rise: women may wait until they have more children than they might have had

through birth spacing before considering this irreversible procedure, suggests research by Zoë Matthews and others at the Max Planck Institute for Demographic Research.

Gender inequality and high fertility

At the Boane Health Centre about an hour outside the Mozambican capital of Maputo, Ana Maria, an expectant mother, says, "I want three children," pointing to her belly as she waits for prenatal care. "I already have two—a boy and a girl—and I want this to be my last," she says, explaining that raising children is expensive and that she would rather use their money to build a new house, one that has four rooms.

Meanwhile, at an impromptu market on the outskirts of Maputo, Açucena, a 22-year-old tomato vendor, says she wants only three children. The women working the adjacent stalls all say they want only two or three children.

Yet despite what these and other women say, the average Mozambican woman has about five children in her lifetime, and those who live in some rural areas have an average of nearly seven.

Why is there a disconnect between the number of children some women want and the number they actually have?

According to a number of population and development experts and aid agencies in Mozambique, the low status of women—and the related dearth of economic and social opportunities that accompany it—is partly responsible for high fertility rates.

On a ranking of 169 countries according to the severity of gender inequality, Mozambique is in 111th place. This "gender inequality index" featured in the 2010

edition of the United Nations Development Programme's Human Development Report, measures inequalities between women and men in reproductive health, political participation, income-earning opportunities and education. The index reveals that nearly three-quarters of Mozambique's human development is lost because of these inequalities, particularly in the area of reproductive health.

"Persistent gender inequality means that women and children are disproportionately victims of poverty, food insecurity and disease," states the United Nations Development Assistance Framework for Mozambique for 2012 to 2015.

In Mozambique, "Women are not the decision makers," especially when it comes to choices about how many children to have or when to have them, says demographer Carlos Arnaldo.

Widespread domestic violence in spite of a law that criminalized it in 2009 is one symptom of a situation where women have little freedom to make major life decisions, including those related to reproduction. "Violence against women in Mozambique is directly related to the social status of women vis-à-vis men," says Berta Chilundo, deputy president of Women, Law and Development, or MULEIDE, a non-governmental organization that provides legal aid and psychological support for battered women.

Maria Fatima, 43, came to MULEIDE last year for support when she decided she could no longer live with her partner who started beating her two years into their relationship. "When I met him in 1995, I had a job with the railways, and I was studying economics at the university," she says. "But that year I became pregnant, so my partner forced



me to quit my job and drop out of school. That made me totally dependent on him."

After years of enduring domestic violence, Fatima moved out and reported the latest incident to the police, who are prosecuting her partner under a two-year-old law that made domestic violence a "public crime," which means that once charges are filed, they cannot be dropped, even at the request of the victim.

Sometimes domestic violence in Mozambique erupts as a result of the woman asserting herself about wanting to use family planning or asking her partner to use a condom when they have sex, says MULEIDE's Chilundo.

Many women themselves believe they deserve to be beaten. A 2003 demographic and health survey found that nationally, more than one in three women thought a beating was justified for reasons ranging from burning dinner or failing to say goodbye on their way out the door. Acceptance of domestic violence

Berta Chilundo, lawyer and deputy president of MULEIDE, a non-governmental organization that aims to improve the status of women in Mozambique. ©UNFPA/Pedro Sá da Bandeira

UNMET NEED FOR FAMILY PLANNING REMAINS HIGH

In 2005, a United Nations World Summit pledged to make access to reproductive health universal by 2015, as promised in Target B of Millennium Development Goal 5, and decided that a measure of unmet contraceptive need would be an indicator of progress towards that goal. In 2011, the Population Division of the United Nations Department of Economic and Social Affairs published the latest data on contraception worldwide, which shows that while contraceptive use is rising, there are still 46 countries where 20 per cent or more of women who are married or living in a union still have an unmet need. The unmet need for family planning has remained at the same moderate to high level in most regions since 2000, but is highest in sub-Saharan Africa and the Caribbean.

Proportion of women who have an unmet need for family planning among women aged 15-49 who are married or in a union, 1990, 2000 and 2008 (Percentage)



Source: Millennium Development Goals Report 2011. United Nations.

is more common in rural areas, and the levels of acceptance are inversely correlated with the amount of education the woman has had.

Graça Samo, Executive Director of Forum Mulher, a group that advocates for women's rights and development, says that education of women is crucial to rectifying gender inequalities in Mozambique but cannot resolve them without also changing the way girls are socialized into having low expectations for themselves. Women are taught "that a man will be your solution," she says. "A woman's status comes from a man—the husband, the father, a brother."

Samo argues that leveling the playing field for women and men requires not only interventions by the State and non-profits, but also by families, which can have a tremendous influence on how girls—and boys—perceive themselves and each other in society. While it's important to socialize girls in a way that encourages them to recognize their strengths and possibilities, it is equally important to change the way boys are socialized so they understand early in life that gender equality for men and women benefits everyone.

Preference for boys

In India, the effects of a preference for male children worries demographers, the media, policymakers and many others because of what it has done to sex ratios and the message it sends about how little a society values girls. The issue was heightened by results of the 2011 national census, which showed that in the birth-to-6-year-old age group the number of girls had plunged to 914 for every 1,000 boys, widening the 2001 ratio of 927 girls per 1,000 boys. The new child sex

ratio is the biggest gap since independence in 1947. Sex-selective abortions, though illegal, and the sometimes fatal neglect of girls after they are born, are widely assumed to be leading causes of this anomaly. The use of ultrasound to determine sex has become cheaper and more widely available around the country, even though this procedure is illegal.

C. Chandramouli, the Registrar General and Census Commissioner of India, who led the 2011 census, calls the trend a grave concern. He said he sees this as a social problem, not a demographic problem, compounded by the failure of authorities to enforce laws against sex selection by monitoring clinics that advertise ultrasound technology. "Technology is the main culprit," he added. The only way out of what some critics are calling "gendercide" is a social campaign, buttressed by more effective Government incentives, to improve the status of the girl child, he said.

His views are backed by international organizations. A 2011 inter-agency publication, Preventing Gender-biased Sex Selection, from The World Health Organization, UNFPA, UNICEF, UNWomen and the Office of the High Commissioner for Human Rights, noted that a woman's health anywhere is undermined when family pressures demand pregnancy after pregnancy in the hope of having a male child. In some cases, women have been pressured into unsafe abortions and risk violence for giving birth to a girl, UNFPA gender expert Gayle Nelson points out.

"Imbalanced sex ratios are an unacceptable manifestation of gender discrimination against girls and women and a violation of their human rights," the inter-agency statement said. But it also said that technologies such as ultrasonography and amniocentesis were not the root cause of the problem. When governments try to restrict or prohibit the misuse of technologies, the agencies said, "experience indicates that legal restrictions in isolation from broader social policies and other measures to address deep-seated social

Graca Samo. Executive Director of Forum Mulher, Maputo, Mozambique. ©UNFPA/Pedro Sá da Bandeira



GENDER EQUALITY

Excerpts from the International Conference on Population and Development

...Improving the status of women also enhances their decisionmaking capacity at all levels in all spheres of life, especially in the area of sexuality and reproduction. This, in turn, is essential for the long-term success of population programmes.... Men play a key role in bringing about gender equality since, in most societies, men exercise preponderant power in nearly every sphere of life, ranging from personal decisions regarding the size of families to the policy and programme decisions taken at all levels of Government.

norms and effect behaviour change may be ineffective and may even detrimentally impact upon the human and reproductive rights of women."

Chandramouli sees some hope, pointing to 2011 Indian census findings that show that in a few states that once had the largest gender gaps among children the divide is narrowing slightly, though many other states are moving in the opposite direction, with female-to-male child ratios dipping into the 800s, well below the 914-to-1,000 national average.

In India, there are traditional economic arguments against having girls, who are often regarded as financial burdens because of expensive dowries parents must pay to secure a good husband or because women cannot add much to a family's income. These arguments can be countered, according to Poonam Muttreja, executive director of the Population Foundation of India. "We can build evidence to show that boys and girls both can support families. India has not

REPRODUCTIVE HEALTH AND RIGHTS

Excerpts from the International Conference on Population and Development

...Reproductive health...implies that people...have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. ...Reproductive rights embrace certain human rights.... These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so.

invested in women and in people issues generally," she says.

Nanda, the former Indian Secretary of Health and Family Welfare, says that a worsening sex ratio among children is "a very serious problem" that has to be viewed in connection with the declining fertility rates. He and others point to the data showing that many if not most of the sex-selective abortions are arranged by rich people in affluent urban neighbourhoods who want smaller families. When the preference for smaller families meets the demand for sons, aborting female fetuses may be the result. Rich parents are not swayed by cash incentives of a few thousand rupees, Nanda says.

"They give cash transfers to raise and educate girls, then do not enforce dowry or property laws," he said. "It becomes tokenism." As the top non-political official in the health ministry, he sent decoys into clinics to identify doctors willing to perform illegal sex-determination procedures using ultrasonography, for example, and had some arrested. "But they have to be properly prosecuted," he said. So far, that has not happened widely.

Large families as social security

In Mozambique, especially in the rural north, children represent wealth. More children mean more help with chores and more hands to work the family farm. More children also mean more security for the parents as they grow old.

"Children represent family capital," says Graça Samo, Executive Director of Forum Mulher. "Having children has been seen as a way of getting power."

Seeing children as wealth makes sense in a country where financial wealth is scarce.

With a per capita gross domestic income of \$440, Mozambique is the 14th-poorest country, with three-quarters of the population subsisting on \$1.25 a day.

About 70 per cent of the population lives in rural areas, and most depend on subsistence agriculture, according to the United Nations Development Assistance Framework for Mozambique for 2012-2015: "Extremely low agricultural productivity, combined with high vulnerability to climatic shocks means that a very high number of the population is chronically food insecure, and income from agricultural products is low and unreliable," the framework states.

And it is in these same rural areas where fertility rates are highest, where educational levels are lowest, where early marriage is most common and where relatively few people use family planning.

With poverty come shorter life expectancies and higher mortality rates for mothers and their children. "People have more kids when child mortality is high," according to World Bank senior health specialist Samuel Mills. "Where child mortality is low, people feel less of a need to have big families."

António Francisco, Rosimina Ali and Yasfir Ibraimo of the Institute for Social and Economic Studies in Maputo say that "Having too many children was for a long time, and still is today, the main form of social protection in Mozambique." They say that because most cannot count on the Government to provide them an income when they are old or unable to work, they create their own social security systems by having children. "Having children remains the main form of social protection for most of the population" of Mozambique, they argue.



When more births are wanted

In Europe, from north to south and east to west, low fertility rates—not population growth—have caused alarm, and some countries have adopted incentive programmes to encourage births of more children. Such policies, called natalist or pro-birth, often come with appeals to families to have more children for the sake of sustaining national economic growth. Many women asked about this in low-fertility Europe seem to find that this is an extraordinary if not unacceptable reason to add another child or two to a family, even when money or other incentives are involved.

In the former Yugoslav Republic of Macedonia's capital, Skopje, some numbers behind a new pro-birth policy emerge quickly in a conversation with Spiro Ristovski, Deputy Minister of Labour and Social Policy. He says, for example, that some employers spend six to nine months searching for people to fill jobs as the country tries to

Kindergarten for the Roma community in Skopje, in the former Yugoslav Republic of Macedonia.

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 Spiro Ristovski, Deputy Minister of Labour and Social Policy for the former Yugoslav Republic of Macedonia.
 VII/Antonin Kratochvil



strengthen its economy and integrate it into Europe and the wider world. The country emerged relatively poor from the breakup of Yugoslavia in the 1990s.

The country's fertility rate is down to about 1.5 children per woman by United Nations calculations (the Government uses a figure of 1.3 in some reports) and that, coupled with the migration of young people to Western Europe and North America in search of better jobs and living standards, has reduced the pool of employable talent. Low fertility is prevalent throughout southern and eastern Europe, including Russia, with fertility rates at 1.5 or below across the region. (The exception is Montenegro at 1.6.) Western European fertility rates are also low, regionally averaging 1.6, with France and Ireland higher at about 2.0.

Ristovski said that it will take five to seven years to determine whether the monetary incentive to have a third child has made a difference in boosting population numbers. Women interviewed around the country had mixed feelings about the plan, questioning whether the added income would cover the

cost of raising a third child. (The total fertility rate indicates that many families don't yet have two children.)

In the last two years, 5,000 families have taken advantage of the cash incentive programme. The majority of them are in Skopje, according to Government figures. More than half of the recipients of the benefit, 54 per cent, are ethnic Albanian, who traditionally tended to have larger families; 31 per cent are ethnic Macedonian, and; almost 10 per cent are Roma.

Anica Dragovic, a demography expert in the Institute of Sociology at Ss. Cyril and Methodious University in Skopje, said she had doubts about the payment plan, asking if the money might not be going to people already planning larger families. Women with jobs and plans for fewer children may not judge the financial incentive worthwhile in their lives. Dragovic also said that the pro-birth plan does little or nothing for women's empowerment.

"Young people think it is better to have fewer children," a young woman in the northern village of Bogovinje, said, as she joined older women in a predominantly ethnic Albanian Muslim neighbourhood to talk about their lives. "The economy is bad. But also, we would like to have more time for ourselves."

In the Bogovinje area, where economic growth is beginning to show and fertility is already just below replacement level, women said that until men's attitudes change, women are still expected to do all the work around a house as well as care for elders, and more children would only add to their tasks. Even if a woman is not discouraged or prohibited by her husband from working outside the home and finds a job, there are no free or

subsidized day care centres or kindergartens for her preschool children, a common situation in much of the country.

The middle-aged women in Bogovinje, some of whom had very little schooling, also looked for opportunities to earn money. They said that adult education would be welcome, and also more attention to creating jobs for women and economic support for those who want to start businesses.

Their younger, still unmarried counterparts had found their way into a range of careers, from teaching to working in professional offices—one is a orthodontist's assistant, others have joined companies and seek out training in private educational institutions to pick up technical skills and languages to prepare for future economic development with foreign investment. In this mountainous region both manufacturing and tourism have the potential for growth.

In the southern part of the country, tourism around Lake Ohrid and the area's unique historic sites helps sustain local economies in the towns of Struga and Ohrid, and in villages and farms in the surrounding area. Although unemployment is still a problem and wages for female workers fall below those of men, young women are finding jobs in the hospitality sector.

Representatives of various active women's groups and women in professional jobs who gathered in Struga to talk about their lives and concerns did not agree on the value of the Government's benefit plan for a third child, some saying it added a "not insignificant" sum to family incomes, and others arguing that in towns where women were delaying marriage and divorce rates were rising, skills training and support for women's

entrepreneurship were needed more. At the Ministry of Labour and Social Policy, Ristovski said that the economic empowerment of women is in the development plans and programmes of the central Government.

At the State Statistical Office in Skopje, Blagica Novkovska, the director, said that more women were finding jobs in the private sector, changing the traditional pattern of female employment, when 80 per cent of working women were in Government jobs. Female students are also breaking with tradition by enrolling in technological and scientific university studies rather than the humanities, and taking management courses in private business schools, Novkovska said. Her office is studying this trend, and expects to publish more data in coming years. The questions remain whether giving women more career opportunities will run counter to efforts to persuade women to have more children, or whether those empowered women will fill many vacant jobs—sooner than those children who will be born because of a birth incentive.

In the village of Bogovigne, the former Yugoslav Republic of Macedonia, a group of women talk about the need for economic support to start husinesses ©VII/Antonin Kratochvil



Making it easier to start a family

In Finland, the provision of day care for children in all municipalities has made the decision to have children much easier for working women and two-career couples. The fertility rate in Finland has been below the replacement level of 2.1 births per woman since the 1970s. By the end of the last century concerns had grown that the country, where immigration levels have been low, would be seriously short of labour.

Pekka Martikainen of the University of Helsinki says that generous welfare policies have not, however, been designed to boost fertility but rather to support families in many ways so that they can make their own choices without fearing severe economic consequences. "Finnish women do, to a large extent, stay in the labour market," he said. "The participation of women is almost as high as for men. There is only a small dip in female participation at certain ages, and that usually relates to women staying home with young kids. In Finland, typically women would stay at home until the end of the breast-feeding period."

For working women in Finland, especially in urban areas, child-related benefits are both generous and considered as legal rights. In Helsinki, for example, this includes an unconditional right to day care for all children five hours a day and provisions for full-day, evening, weekend and round-the clock care for a payment that is based on the client's income but that does not exceed €254 (about \$366) a month. Meals are provided in all plans parents choose. Parents of children under age 3 who are not in municipal day care receive a family allowance that in Helsinki ranges between €448 (\$645) and €746 (\$1,075) a month.

Private day care by a provider who is not a relative is also subsidized.

Municipal day care centres are staffed generously, scaled to the ages of children in each staff member's care, with one care member for each two children under a year old up to one staff per 13 children in preschool. As numbers of non-Finnish immigrant children go up slowly, Helsinki trains teachers in multicultural issues and provides for the teaching of Finnish as a second language at day-care level. Special classes are reserved for children with physical handicaps or learning disabilities.

All mothers are entitled to 105 paid days of maternity leave in Finland, and the right to return to their jobs or similar ones at the same level. Expectant mothers get a cash benefit of €140 (\$201) or a maternity kit of childcare items to prepare for a birth and a baby's needs thereafter. When maternity leave ends, the Government pays a parental allowance for 158 days for either parent, calculated on individual needs and resources. Fathers get 18 days of paternity leave, which when added to 12 days of paternal leave pay for what Finns call the "daddy month."

All of this, while possibly playing a part in a recent rise in fertility because of the supportive atmosphere a wavering would-be parent can count on, has not necessarily led to larger families, a common situation in most European countries.

Anneli Miettinen, a researcher on fertility and infertility at Väestöliitto, the Family Federation of Finland, is not so concerned about low fertility rates as about delayed births. "We need to have a stable population," she said. "We need to have two children per family, and we are about there with the fertility rate of 1.85."

"But there are several problems," she said. "One is that the average age at which women are having their first child has been rising. Currently it is about 28, 29—and if you look at the capital area, it's about 30. Women are no longer young when they start having or are thinking about having a family. I don't think we realize that this means eventually that many of those young adults who choose to postpone their childbearing end up with infertility problems."

"By 35 your biological age is getting a little bit old in terms of fecundity," Miettinen said. "Sometimes they say, Well, I have all the time, and I don't really have to think about these things. I have to finish my education, and I have to find the permanent job and a good father before I think of starting a family."

A survey of Finnish women in the 1970s found that they thought 37 was the oldest age at which they should have children. Now women do not want to set an age limit. "Now people are starting to have children at the age of 37," Miettinen said. "It has completely changed the picture."

Infertility may increase in the future because of these decisions, she said. Women over 35 are already finding it more difficult to conceive. More women are turning to in vitro fertilization. "We don't have any age limit written in the law," Miettinen said. It is left to the doctors to decide whether the woman is capable or there won't be any health problems for the mother or the child. I think this leans too much on the ethical considerations of the doctors. When a doctor has to decide whether a 45-year-old woman is too old to have an IVF [in vitro fertilization] treatment, it is really a heavy burden on the doctor."



Katariina Sorsa is a 36-year old Lutheran pastor who has benefited from Government health services in her successful experiences with in vitro fertilization. Her first child, a boy, Martti, was born in 2008, when she was 34; her second son, Janne, was born in June 2011. Sorsa and her husband had been married while university students but did not discover until they were into their 30s that they were unable to have a child.

They considered adoption but decided against it. Artificial insemination did not work. So they turned for help from her doctor in the public health service of the region where they live, north of Helsinki. The two successful implants were done in a local public hospital, at little cost to them. Sorsa said that they spent only several hundred euros of their own money for miscellaneous expenses and drugs surrounding these procedures and births; a private hospital would have cost thousands of euros. "For my husband and me, everything went well," she said.

Katariina Sorsa, a pastor in the Lutheran Church, is expecting her second child through in vitro fertilization. ©UNFPA/Sami Sallinen

As a pastor, Sorsa sees more babies brought to the church for baptism, and generally encounters more children born since 2006 or 2007, not only to married couples but also to unmarried partners and single mothers. There are no social bars to fertility treatments in Finland.

Infertility among the poor

In the developing world, infertility is often an overlooked sadness, neglected when family planning issues and contraception are assigned higher priorities, or women who do not have children are written off as human failures. Their problems may not be part of available reproductive health care. In December 2010, the World Health Organization, WHO, published a paper, *Mother or Nothing: The Agony of Infertility,* which said that an inability to bear children has numerous causes, among them ectopic pregnancies, genital tuberculosis, tubal occlusions from reproductive tract infections, unsafe abortions and sexually transmitted infections.

World Health Organization experts say that although male infertility accounts for over half the failures of couples to conceive, women are blamed disproportionately. Women may be divorced against their will, or stigmatized and ostracized by the community. Although infertility is global, Africa has a recognized "infertility belt" stretching east to west from Tanzania to Gabon, the paper said. Often surgical repairs can help a woman, but in vitro fertilization such as that practiced in Finland is more often than not too expensive for either families to use or service providers to offer.

According to the World Health Organization paper, Egypt and India have established pioneering programmes to treat infertility, and find ways to lower costs. In Cairo, Gamal Serour of Al Azhar University says that poor women should also have the right to infertility treatment. "Demographic studies by WHO showed that there are more than 186 million women of reproductive age in low resource countries (excluding China) who are infertile," he says. "Infertility is a disease that contributes to the global burden of diseases, involves gender-based sufferings and should be alleviated by all means, as its prevention and treatment is a reproductive right." Furthermore, he said, family planning programmes that encourage couples to postpone, delay or widely space pregnancies

FERTILITY 1950-2010 (CHILDREN PER WOMAN)



- 1. For statistical purposes, the data for China do not include Hong Kong and Macao, Special Administrative Regions (SAR) of China.
- Including Åland Islands.
- 3. The former Yugoslav Republic of Macedonia

Source: United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision.

HIGH FERTILITY'S LONG-TERM EFFECTS ON POPULATION GROWTH IN AFRICA

The countries of the African continent. from the northern region bordering the Mediterranean across the Sahara and sub-Saharan nations to the southern tip of the Cape of Good Hope, are a very diverse group, and no generality covers them all. Collectively, Africa accounts for nearly 15 per cent of the global population now.

When demographers were beginning to analyse the statistics collected in World Population Prospects: The 2010 Revision, which was published in April 2011, Thomas Buettner, assistant director of the Population Division of the Department of Economic and Social Affairs, said this to a meeting of the Commission on Population and Development:

"What would happen over the long run if today's levels of fertility and mortality remained unchanged at country level? Such a scenario produces a world population of 3.5 trillion people in 2300, a figure too large to plot in a graph showing other scenarios and so utterly impossible that it indicates the current levels of fertility and mortality are not sustainable. Looking at the results with detail, we find that the high fertility of countries in Africa, when maintained over 300 years, leads to a 2300 population of 3.1 trillion for that continent alone."

The year 2300 is too far away for most people to imagine, but the years 2050 or 2100 are well within the range of the grandchildren or great-grandchildren of many people alive today. Joseph Chamie, a former director of the Population Division of the United Nations Department of Economic and Social Affairs and now director of research at the Center for Migration Studies in New York, recently analysed the latest projections and wrote about how Africa, and Nigeria in particular, appears likely to skew

future global growth. (He also notes that if India, which aims for a stabilized population by 2045, does not reduce fertility rates, its current population of 1.2 billion could rise as high as 2 billion by 2050.)

"If Africa's fertility rates were to remain unchanged over the coming decades, the population of the continent would grow extremely rapidly, reaching 3 billion by 2050, and an incredible 15 billion by 2100, or about 15 times Africa's current population," Chamie wrote in The Globalist, an online magazine published by the Washington-based Globalist Research Center, in June 2011. "Globally, it now seems likely that Africa will be the last continent to advance through the demographic transition—that is, the progression from high to low rates of birth and death."

"should be reassured that they will be helped to achieve pregnancy should they decide so later. Family planning is not just contraception. It is also planning for a family."

The power to make an informed choice

The experiences of Egypt, India and Mozambique show that there are no easy explanations for high fertility and no single way of ensuring that women have the information, tools and freedoms they need to freely make decisions about the timing and spacing of births.

The experiences of Finland and the former Yugoslav Republic of Macedonia show that the path to higher fertility rates is similarly complex.

Whether the aim is to make it easier for couples to have fewer—or more—children, governments must base their actions on principles of free choice and empowerment, as nations of the world agreed at the International Conference on Population and Development.

Research over the past two decades has repeatedly shown that when women are healthy, are educated and have access to



In a township hospital in Xialiang, China, a woman prepares to have her child vaccinated. @UNFPA/Guo Tieliu

integrated sexual and reproductive health services, including family planning, fertility rates—and average family sizes—decrease.

A "multiple indicators cluster survey" carried out in 2008 by Mozambique's National Institute of Statistics, for example, showed that contraceptive use in that country has been strongly associated with a woman's level of education and wealth. Contraceptives are used by only about 12 per cent of women who never attended school, while they are used by 37 per cent of women who have at least a secondary education. Women who take advantage of family planning services have greater control over the number, timing and spacing of births.

A.R. Nanda, India's former Secretary of Health and Family Welfare says that in parts of the country that have emphasized the empowerment of girls and women have also seen fertility rates drop. The southern Indian state of Kerala is one such place that

reached fertility and development levels comparable to those in richer countries through gender-sensitive policies that included long-established and near-universal education for girls and easy access to health care. The experience of Kerala, Nanda argues, shows that major declines in fertility are possible without government pressure on women to have fewer children. Education for girls is also seen as central to Mozambique's efforts to reduce fertility rates in the future: Leonardo Chavane in the Ministry of Health says that the first order of business is to educate women. "Women need education to master their situations," he says.

In China, some demographers say that low fertility rates there are not necessarily the result of the country's current family planning policy that limits most couples to one child. Instead, they attribute much of the fertility declines to economic and social development, which they say was bringing down fertility even before the current family planning policy was put in place. And if the policy were suddenly relaxed or rolled back, they say, most families would not rush to have more children than they can afford because they have learned the value and benefits of fewer children to family economies and to the children themselves. Some of China's East Asian and Southeast Asian neighbours reached low fertility levels without policies limiting the number of children a family may have. The fertility rate in Taiwan Province of China is also known to have fallen below that of the mainland without restrictions on family size. According to the Population Reference Bureau in New York, Taiwan Province of China's fertility rate of 0.9 children is thought to be the world's

lowest, although new figures from China's 2010 census show that the Shanghai metropolitan area is now down to 0.8.

The Republic of Korea, which lowered population growth largely without restrictive policies, is also considered a success story in reducing sex selection and gender gaps among the young. An expanding economy with more jobs for women, the movement

from rural areas into cities, effective regulations against sex selection, laws reinforcing the rights of women within marriage and a multimedia "Love-your-daughter" campaign combined to improve gender ratios in little more than a decade.

THE ICPD AND THE MILLENNIUM DEVELOPMENT GOALS

Six years after the breakthrough International Conference on Population and Development, ICPD, in Cairo, the Member States of the United Nations meeting in New York adopted a Millennium Declaration and eight ambitious and comprehensive guidelines to reduce poverty, disease, environmental destruction and social and economic inequities by 2015. These Millennium Development Goals, and the concrete targets and indicators to measure them that were added later, gave the United Nations a scorecard for keeping track of progress.

The 1990s had been a busy decade for the United Nations, which held important international conferences on the environment, in Rio de Janeiro in 1992; human rights, in Vienna in 1993, population and development in Cairo and the advancement of women in Beijing in 1995. Declarations and plans of action from all of these conferences fed into the writing of the Millennium Declaration and the Millennium Development Goals. But as the world became increasingly aware of the central role women had to play in all aspects of development if poverty in its many dimensions

were to be overcome, the ICPD Programme of Action offered perhaps the best hope of progress. The lives and rights of women—half of the world's people—touched all the goals: eradicating poverty, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental sustainability and creating global partnerships for development.

None of these goals can be achieved without more progress in promoting women's reproductive health and protecting maternal and newborn health. But of all the Millennium Development Goals, the fifth—to improve maternal health has made the least progress. It is the most underfunded of the healthrelated goals. In 2007, the world's leaders added a second target under Millennium Development Goal 5: universal access to reproductive health.

Culminating a global summit on the Millennium Development Goals in September 2010, United Nations Secretary-General Ban Ki-moon and Heads of State and Government, along with the private sector, foundations, international organizations, civil society and research organizations, kicked off a concerted world-wide effort to save the lives of more than 16 million women and children. At a special United Nations event to launch the Global Strategy for Women's and Children's Health, stakeholders pledged over \$40 billion in resources for women's and children' health. "We know what works to save women's and children's lives, and we know that women and children are critical to all of the Millennium Development Goals," said the Secretary-General.

Although youth issues are not included in the eight Millennium Development Goals, they have the potential to achieve them, especially Goal 1, to reduce poverty, said Samuel Kissi, a youth activist from Ghana, speaking at a youth event during the Millennium Development Review Summit in 2010, "We are 1.8 billion and we are ready to get involved," Kissi said. "We are not just resources, we are partners and we are ready to make a significant contribution to the Millennium Development Goals."



CHAPTER **FIVE**

Decision to move: the power and impact of migration

In the picturesque mountain village of Rostushe in the former Yugoslav Republic of Macedonia, the gloom of a grey wintery day was reflected in the faces of women talking about how migration had taken the heart and spirit out of their community. Migration is not a new phenomenon in this village, they said. Young men have been going abroad for work since the 1960s, to Turkey, then later to Western Europe and North America.

They would go and come back periodically to spend time with their families.

What has happened most recently, residents of Rostushe said, is that the young women and children are now also gone. Joining the men or looking for jobs of their own, women and their families establish new lives in new countries. Big houses and chalets they have built stand empty for all but a few weeks to a month of the year, when families return for summer vacations.

Sanida Ismaili, a teacher in the village school, said there are almost no children now in Rostushe—only three in one of her classes, none in some other classrooms. The age of the town's population of about 8,500 ranges from about 45 to 90, women said. The health system no longer offers much gynecological care; there isn't much need for an obstetrician. There are no special facilities for older people.

"We survive alone or with friends," one resident said.

An economic collapse following the breakup of Yugoslavia in the 1990s into new countries, of which the former Yugoslav Republic of Macedonia emerged the poorest, hastened the emptying of the town of its young people. Factories closed, including a landmark textile mill that once employed women. Efforts to find alternative incomes for the town have failed. There is some potential for limited mountain tourism in Rostushe, with its gleaming copper-topped minaret towering over old houses on hilly streets against forested hills. But there is no investment to develop it. A few residents devised a plan to market bottled spring water, but the Government offered no aid and no private investment could be found for that either.

 Arrivals and departures at the central railway station in Helsinki. Finland. ©UNFPA/Sami Sallinen "Socialism hangs on," someone said.

"The ends of state enterprises, the closing of factories, have not been replaced by private job creation."

The Population Division of the United Nations Department of Economic and Social Affairs estimates that in today's world of 7 billion people at least 214 million are living outside their countries of birth; an unknown number move around inside their own nations. In China, recently released 2010 census figures show that more than 260 million people, mainly rural residents, live away from the address of their household registration, up 81 per cent in a decade, said Ma Jiantang, director of the National Bureau of Statistics, speaking at a news conference in April 2011.

The International Organization for Migration, IOM, an intergovernmental body of 132 nations and 17 observer countries, calls international immigration "one of the defining global issues of the early 21st century." The impulse to move, aided by intercontinental transportation and more knowledge of the world through mass media and social networking, has led to better lives for many.

The United Nations defines migrant as someone who has resided in a foreign country for more than one year regardless of the causes—whether voluntary or involuntary—or the means used—lawful or otherwise. People who live in another country without authorization or documentation are considered "irregular migrants," while those who have been smuggled or trafficked from one country to another are considered "illegal migrants."

China and India—the world's two most populous nations—experience both emigration and immigration. Most of the migrants coming into India are from neighbouring Bangladesh and Nepal. An estimated 5 million Nepalese are working in India. But all immigrants to India from any country together account for only 0.4 per cent of the total population. Outward migration is more significant, with an official Indian estimate of more than 24 million "non-resident Indians" and "persons of Indian origin" the Government's terms for people in its diaspora who have, respectively, retained their citizenship or are citizens of other countries. China's diaspora, like India's, is estimated to be 35 million.

Weighing the opportunities

A decision to leave home may depend on whether there will be friends, families or compatriots waiting for them at their destination. Sometimes the decision depends on the opportunities for jobs, housing or

 Civic leaders and activists in Rostushe, the former Yugoslav Republic of Macedonia.
 VII/Antonin Kratochvil



higher education that might be available when they get there. Many potential migrants rely on international networks to supply the information that informs their decisions to move—or to stay.

In Mexico, officials have noticed that calculations about whether or not to risk moving to the United States are based in part on information that potential migrants receive from friends and relatives about jobs and other opportunities on the other side or the border.

"When real GDP per capita in the United States slows, there is a very rapid response in migration flows," said Félix Vélez, Secretary-General of the National Population Council, a Government body known as CONAPO. "Part of it has to do with links between Mexicans living in Mexico and Mexicans living in the United States. There's a lot of information. So when the ability to find a job in the United States is almost nonexistent. people decide not to go."

But other factors have also affected Mexican migration to the United States, where officials and advocates for immigrants estimate that there are 11 million to 12 million undocumented foreigners living, the majority from Mexico. "Now that people in Mexico are not so young any more, that decreases the probability of migration because the bulk of the phenomenon takes place between the ages of 15 and 29," Vélez said. "So even if the American economy recovers and border controls are not so high, even in that scenario my prediction for the future would be lower."

Moreover, "Mexicans are getting more affluent," he said. "In the census you see that the number of Mexicans who are rich—with cars, computers, laundry machines—



Félix Vélez, general secretary of the National Population Council, Mexico City. ©UNFPA/Ricardo Ramirez Arriola

increased dramatically, and that had to do with low inflation and low interest rates. For the first time since the 1960s, we have had a rather longer period of macroeconomic stability. Credit is easier to get than ever." Added to all that, Vélez said, are the risks of crossing northern Mexico's border with the United States, where high crime rates associated with narcotics smuggling and the Mexican Government's campaign against the traffickers have left many people dead. The "golden years of migration to the United States" are over, Vélez asserts.

In Finland, where migrants from Russia and the Baltic States have been settling for years, African immigrants are now arriving in greater, though still very small, numbers. Feeling more isolated than European immigrants, they build their own networks with the help of non-governmental organizations and sometimes Government social services. The Family Federation of Finland's multicultural centre, which maintains a help hotline in several languages, estimates that 11,000 to 12,000



Shemen Sunamo (right) and Abrham Tamrat (left) discuss life in an IOM transit centre in Addis Ababa, Ethiopia. @UNFPA/Antonio Fiorente

Somalis, many of whom have arrived as asylum seekers and later brought in family members, have settled in the country over 20 years.

Leaving, despite the risks

In Africa, a transit centre in Addis Ababa, the Ethiopian capital, is a temporary refuge for young men and women—many of them still boys and girls in their teens—who tried and failed to escape poverty by making a debilitating and dangerous trek by land and sea to Saudi Arabia, their vision of a land of opportunity. Most of them in the shelter, being fed and given health care while they

wait for UNICEF to reconnect them to their Ethiopian families, were found in Yemen and repatriated with the help of the IOM. They share the transit centre with Somalis who have fled their ravaged country.

As a lunch of spaghetti cooked in the background, Shemen Sunamo, an Ethiopian teenager, told the story of what he had endured to get to Saudi Arabia, where, he heard, there were jobs as shepherds or field hands who watered crops. His trip began with more than a week of walking overland to the coast of Djibouti, on the Gulf of Aden, living along the way on a mash of sorghum flour and water, and sleeping unprotected on the ground at night. From there he was put on a boat to Yemen, and then trekked overland to Saudi Arabia. Three months later, he was caught by Saudi police and forced back into Yemen. There he found an IOM office and asked for help.

In some ways the greater tragedy for him is what a loss this ill-fated attempt at migration caused his family. Shemen, whose home is Siltea, in the south of Ethiopia, needed 5,500 birr (about \$326) to pay a smuggler to make the arduous trip. His parents, who were against the venture from the start, refused to help him, or did not have the means to do so. But an older brother, knowing how much hope Shemen had put into his dream, sold his oxen to raise the cash.

At that point in the story, Shemen lowers his head into his hands and cannot go on. An ox is a major capital investment for an Ethiopian farmer, and Shemen is pained and ashamed of what his foolish hope has cost his brother. Asked if he will make another attempt to leave Ethiopia, he raises his head and says defiantly, "Never!"

Sitting next to him is Abrham Tamrat, another boy returned from an abortive attempt to reach Saudi Arabia, or anywhere else that offers the good life, and he may try again. He has a bit of a swagger about him, saying, "I don't want to work in Ethiopia; I want more out of life." He has heard of other boys and young men who raise 15,000 birr (about \$890) to be smuggled all the way to South Africa. Some of them are then smuggled to Mexico and Central America on the promise of getting to the United States, immigrant aid groups working on the United States-Mexico border report.

In Ethiopia, some girls and young women also gamble on international migration, to find work in distant places. Others gamble on leaving their homes for other parts of the country, sometimes to avoid marriages their parents have arranged for them. A Government-run centre in Addis Ababa that receives support from UNFPA has offered informal education in mathematics, English, reproductive health and life skills to hundreds of girls who ran away from home to avoid early marriage. One of them, Mulu, was only 12 when she fled after being told by a neighbour that her parents had found her a husband and were planning her wedding.

For three years, she has been working as a domestic servant, and does not complain about her life because her employer allows her to spend time in the centre, which is close to the city's main bus station, where many girls arrive not knowing what to do next. Wages for domestic servants like Mulu are low by any standard. One, named Wude, 23, earns the equivalent of about \$3 a month.

Another young woman told how she stole a sheep from the family flock to pay a guide

to take her to Addis Ababa from her home in the south, and had to fight off his sexual advances along the way. She was found in the street near the capital's bus station, crying because she was unable to locate relatives she knew were somewhere in the sprawling city. When she did find them, they put her to work in their house for two years with long hours and no pay. Only a chance meeting in

INTERNATIONAL MIGRATION

International migrant population, 2010	
Europe	69.8 million
Asia	61.3 million
North America	50.0 million
Africa	19.3 million
Latin America	7.5 million
Oceania	

Countries hosting the largest number of international migrants in 2010	
United States	42.8 million
Russian Federation	12.3 million
Germany	10.8 million
Saudi Arabia	7.3 million
Canada	7.2 million

Top-three migrant-sending countries and estimated diaspora in millions	
China	35.0 million
India	20.0 million
The Philippines	7.0 million

Source: Population Division of the United Nations Department of Economic and Social Affairs

church with a woman who offered her a better job improved her life, if only marginally.

Vulnerability to smugglers and traffickers

At Addis Ababa University, the demographer Assefa Hailemariam, co-editor of a new book, *The Demographic Transition and Development in Africa: The Unique Case of Ethiopia*, said that for boys, a shortage of land to be divided among sons may lead to their migration. A related issue puts pressure on families to find relatively well-placed spouses for their daughters. Migration officials say that when migration is seen as the only option, family members may turn to smugglers for help or are lured by traffickers.

Sasu Nina Tesfamariam, who runs shelters for elderly women in Addis Ababa, also gives refuge to girls who have been smuggled out of the country and returned, destitute, to Ethiopia. The young women seek work as house maids, primarily in Saudi Arabia, but also in Yemen, Dubai, Kuwait and Syria, Sasu Nina said.

Demographer Assefa
Hailemariam, of Addis
Ababa University.
©UNFPA/
Antonio Fiorente



Many are caught and deported from countries where they are working, and may have nowhere to go when they return to Ethiopia.

Sasu Nina introduced Halima, a very shy 19-year-old in her care. Unlike many young women who have been smuggled to other countries, Halima's passage to Dubai was arranged legally by a relative; she travelled on a valid passport. But as a family servant in Dubai she was routinely abused, never paid and kept as a virtual prisoner in her employer's home, she said. Forbidden to use the telephone, she could not reach her family or anyone else to

tell them about her harrowing situation.

After nearly three years, as she was making plans to leave, her employer pushed her off a third-floor balcony, she said. She suffered multiple jaw fractures, and her face was badly disfigured (she hides the worst parts behind her hands as she talks). A court in Dubai sent her back to Ethiopia, where a cousin took her to a hospital run by South Koreans in Addis Ababa. Plastic surgeons there have begun to treat her injuries. Her case was made a high priority after a chance meeting in the hospital with Yoo Soon-taek, the wife of United Nations Secretary-General Ban Ki-moon, when the couple was on an official visit to Ethiopia.

Advocates for migrants say that it is difficult to determine exactly how many Ethiopians leave the country for work abroad, since many go without documentation or the knowledge of officials. Ethiopian news reports quoting a spokesperson for the Ministry of Labour and Social Affairs reported early in 2011 that there are 78 employment agencies licensed to send migrant workers to Djibouti, Kuwait and Saudi Arabia, and that since

September 2009, more than 26,000 people left Ethiopia legally for jobs abroad.

Cross-border transport of immigrants by smugglers and traffickers is extensive, an unfortunate reflection of how lucrative this criminal enterprise has become. And it occurs all over the world. Thousands of women from Nigeria and other West African countries, for example, are exploited annually by smugglers who charge sometimes more than \$50,000 for an illegal passage into countries such as Italy and the Netherlands, according to the United Nations Office on Drugs and Crime.

In addition, a new academic work by Aderanti Adepoju and Arievan Der Weil on the subject, Seeking Greener Pastures Abroad: A Migration Profile of Nigeria, says that an International Labour Organization survey in Nigeria concluded that about 8 million children are at risk of being trafficked into forced labour as domestic workers, market vendors, farm labour or deckhands the fishing industry, within the country or the wider West African region.

Remittances a lifeline for those back home

The amount of money that international migrants send back to their countries of origin worldwide dipped sharply but briefly during the economic crisis in 2008-2010, but recovered quickly, according to a May 2011 report from the World Bank, Outlook for Remittance Flows 2011-13. The report, which covers only officially recorded remittances to developing countries, said that the flow of money to Latin America and the Caribbean had made the best recovery because of the stabilization of the United States economy. Remittances from migrants in Europe have been adversely



Sasu Nina Tesfamariam (right) and journalist at the Agar home for elderly women.

affected by high European unemployment rates, cutbacks in public spending, financial crises in several European Union countries, tightening of immigration controls and negative attitudes towards migrants.

"Remittance flows from Russia and the GCC [Gulf Cooperation Council] countries have been strong due to high oil prices," the report said. "However, weak job markets in Western Europe are creating pressures to reduce migration." Globally, remittances are expected to continue to grow, though more slowly, to reach \$404 billion by 2013, the World Bank predicts. Officially recorded remittances totalled \$325 billion in 2010.

The report notes that some countries have begun to issue "diaspora bonds" backed by remittances to raise money for development projects. Ethiopia, Greece and India are among the countries that have begun or are thinking about instituting this innovation. Migrant diasporas are huge and their potential contributions significant. The World Bank report estimates that 161.5 million people are in the combined diasporas from developing countries, with Latin America and the Caribbean, South Asia, sub-Saharan Africa and East Asia and the Pacific having the largest numbers living abroad.

Nigeria, Africa's most populous country, has a long history of international migration dating back into pre-colonial times. "In the years since Nigeria achieved independence in 1960, Nigerians have continued to travel abroad, firstly to neighbouring African countries, but also increasingly to Europe and the United States, for education and employment opportunities," say Adepoju and Der Weil in *Seeking Greener Pastures*.

The number of Nigerian women migrating has increased in recent years, often as individuals looking for jobs and not following their husbands or other family members. The trend is to some degree a measure of the cosmopolitanism and adaptability of Nigerians, who comprise the largest groups of African immigrants in the United Kingdom, the former colonial power, and also are a presence in other member countries of the Organisation for Economic Co-operation and Development.

Migrating within a country

While the IOM calls international immigration a defining global issue of the 21st century, many individual countries are more focused on patterns of *internal* migration and the social and economic effects of hundreds of thousands of people moving in search of livelihoods, not always following the familiar rural-to-urban route.

In India, for example, Ram B. Bhagat, professor and chair of migration and urban studies at the Institute for Population Sciences in Mumbai, has argued for years that demographers should be doing more research on internal population shifts, which he describes as "an important phenomenon from economic, political and public health points of view." He sees two important recent changes.

"Internal migration in India is witnessing a significant departure with increased mobility from urban-to-urban areas," he says. "Also, rural-to-urban migration is being increasingly undertaken by more educated and higher income groups because of their rising aspirations and lack of better opportunities in rural areas." Bhagat has been calling attention to the fact that poorer Indians have not been the main beneficiaries of migration.

Bhagat, looking at 2011 census data, which was emerging at this writing, highlighted another trend. "The preliminary results available from the 2011 census show a phenomenal decline in the growth rates of some of big cities like Mumbai, Delhi and Chandigarh," he wrote in an email. "In Mumbai for example, the decadal growth rate has declined from 20 per cent in 1991–2001 to 4.7 per cent in 2001–2011."

He is not convinced that these figures necessarily indicate that the rate of rural-to-urban migration has fallen. "It is possible that the absolute number of rural to urban migrants might not have declined," he wrote, saying that there will be a better understanding of the issue as more census data emerges, allowing demographers to extract commuting patterns in metropolitan areas and the effects of the central Government's Mahatma Gandhi Rural Employment Guarantee Scheme, which provides income for 110 days a year for rural families to help them stay on the land.

In China, internal migration is now the subject of intense analysis and debate because of rapid growth and social issues arising as numbers continue to climb. In 1982, according to Government of China statistics, there were 6.6 million domestic migrants in the country's "floating population." By 2010 the number had reached 260 million, according to the latest census. It is projected to reach 350 million in 2050, according to the China Population and Development Research Centre.

The majority of migrants have been heading to the cities of the southeast coastal areas—including the provinces of Guangdong, Jiangsu, Zhejiang, Shandong and Fujian, and the cities of Beijing and Shanghai. The hope of Government planners is that the development of cities in China's north and central-western regions will begin to serve as alternate attractions to workers, especially local people who might prefer to work closer to home.

The latest wave of internal migrants, what China calls "second generation migrants," is posing new challenges. In a lengthy and revealing cover story in the China Weekly in August 2010, the writer Yuan Ye described a "disparate group of 100 million or so young people" beginning to assert themselves in radically new ways.

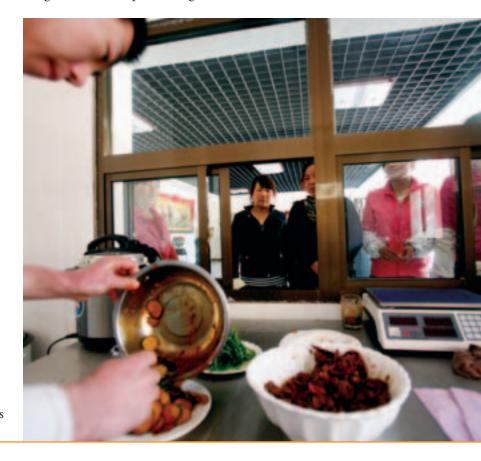
"Born in the late 1980s and early 1990s, a time that coincided with a surge in China's economy," the author wrote, "these young migrants are now replacing hundreds of millions of first generation migrant workers who rushed to the cities to make a living in the manufacturing, service and construction industries."

Unlike that first generation, the new migrant labourers are no longer rural peasant farmers unfamiliar with urban life. They are better educated and much better informed by new and traditional media and are more politically engaged.

China Weekly's coverage gave human faces to these second-generation migrants in a series of feature articles on the lives of individual young men and women as they spend time in Internet cafés or pool halls, try to make space for themselves in crowded factory dormitories and struggle to be accepted as the sophisticated urbanites they hope they are becoming. Many of them say they have no intention of returning to rural areas to settle, even in distant future retirement, as older migrants tend to do.

The wide debate about the fate of young internal migrants is directly related to discussions about China's household registration system, the hukou, which ties a citizen to his or her original place of residence, even when a person or family has moved elsewhere in the country and set up a permanent home. Among China's migrants, there are different categories based on place of registration and/

In a restaurant run by local farmers in Geng Xi Village, Shaanxi Province, China, patrons wait for their ©UNFPA/Guo Tieliu



or residence, a system that leaves many rootless. In April, the director of China's National Bureau of Statistics, Ma Jiantang, said the sheer scale of the floating population was a challenge to development and social stability, and President Hu Jintao acknowledged that there would have to be improvements in social services for migrants, according to a report in the *China Daily*.

Under the current system, for example, even if a highly skilled person from a distant province secures a good job in Beijing or another large city, that person cannot usually expect to have his or her household registration changed, and remains a bureaucratic outsider, barred from social services and benefits in the new place of residence. Children of such residents are usually denied access to public education and health care. An elderly person living away from the place of household registration cannot collect ben-

In Xia Liang, Shaanxi province, China, a woman runs a small grocery store with her fiancé." ©UNFPA/Guo Tieliu



efits without returning to that original home. There are scores of similar stories.

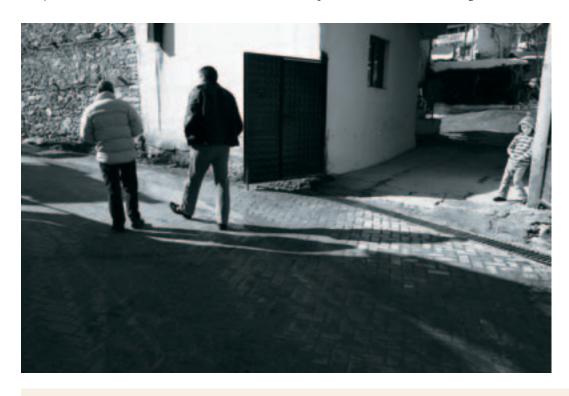
Meetings with young migrants in Shaanxi province revealed that at least some of them work around the system effectively by treating migration for work as a temporary situation or rite of passage, to be tapped into for raising money to invest closer to their homes or as learning experiences to gain new skills and urban savvy. Some move to a nearby inland city for similar reasons, and do not join the trek to the coast. In the town of Xialiang, a few hours by road east of Xi'an in a forested rural area of ecological interest that is being developed as a nature reserve, a group of returned migrants in their 20s talked about their coming of age in factory work and other assorted jobs.

Hua Gongmei, age 24, a high school graduate like all of the others, started her working life packing goods for a local company, but soon decided to move to Shandong Province in search of a factory job. There had been 10 suicides of young people in the factory where she settled, she said, but Hua did not find her job stressful. She quit after a year with enough money to return to Xialiang and open a minimarket near the entrance to the nature reserve. Zhang Li, 29, had worked on an electronic goods assembly line in Fujian Province, and then in a food-processing plant in Shandong, where she met her husband. "My experience made me more mature, and freer," she said. The mother of a six-year-old boy, she is content to be back home working in a tofu factory. Dang Meng, 21, said he migrated out last year to work for a professional hairdresser so that he could return to Xialiang and open his own salon.

All the young migrants interviewed for this report had advice to offer. They knew about the constant threat of burglary, common when vulnerable young people live in crowded conditions away from a familiar environment, and about factory accidents and other hazards. They knew about the homesickness,

loneliness and depression that some young migrants face.

"If you are homesick, make phone calls," Zhang said. "Look after your safety at work," said Zhu Qibo, 21. Zhu had a friend who was drugged and robbed, and the event taught him an everlasting lesson, he said: "Don't ever accept food or drink from strangers."



Residents on the streets of Skopje, the former Yugoslav Republic of Macedonia. ©VII/Antonin Kratochvil

MAXIMIZING THE BENEFITS OF MIGRATION

With 214 million people now living outside their country of origin, international migration has the potential to be an important force for development. Migrants may help meet the growing demand for labour in industrialized countries that have experienced declines in fertility and in the size of their national workingage populations. Policymakers should therefore view migration as a development tool and an important source

of capital, rather than a failure of development.

In the 21st century, the movement of people will become even more significant as a result of continued globalization and economic liberalization, according to the International Organization for Migration, the IOM. "The trade and investment climate has sustained the flow of migrants," states the IOM. "Higher demand for labour in the developed economies and

availability of labour in underdeveloped economies has set global labour migration in motion."

There is growing recognition that migration is an essential—and inevitable—component of the economic and social life of every State, the IOM says, adding that "orderly and properly managed migration can be beneficial for both individuals and societies."



CHAPTER SIX

Planning ahead for the growth of cities

In this world of 7 billion people, the global rural-urban balance of populations has tipped irreversibly in favour of cities. But what, exactly, is a "city" in 2011? Hania Zlotnik, the director of the Population Division of the United Nations Department of Economic and Social Affairs cautions against assuming too easy a definition because governments and urban areas themselves define "city" in numerous ways and their boundaries can shift, sometimes for political,

demographic or economic reasons. Metropolitan areas spreading over large territory are absorbing or overtaking compact cities, sometimes merging with other metros along heavily populated corridors. Urban populations may also be counted in different ways from country to country or city to city.

The Population Division's World Urbanization Prospects: The 2009 Revision calls these huge population centres "urban agglomerations." Tokyo emerges as the world's largest urban area under this definition, with 36.7 million people, which is more than a quarter of the national population. Tokyo is followed by Delhi, with 22 million; São Paulo, 20 million; Mumbai, 20 million; Mexico City, 19.5 million; New York-Newark, 19.4 million; Shanghai, 16.6 million; Kolkata (Calcutta), 15.5 million, Dhaka, 14.7 million, and Karachi, 13 million. Each of these cities reflects a different pattern or path of planning and governance and a different composition of affluence and poverty.

Without planning, cities can grow absent-mindedly, spread over every available empty space and overrun the ability of public services, where they exist, to meet demands or cope with the growth of slums. Property developers, corporations, migrant workers, government bureaucracies, and public institutions seeking room to expand all play roles in the growth, reshaping or, lately in a number of countries, contraction of cities. While many cities face overwhelming challenges, others have the potential to bring the benefits of urban life to their residents.

Advocacy organizations, civic associations and bolder, better informed residents demand to be heard. In China, where in the past Government decisions on urban development projects were not easily challenged, a spirit of participation is arising, most recently over where to put waste incinerators in the Beijing area, a United Nations official working on environmental issues said.

◀ Young Egyptians congregate on the Qasr al-Nil bridge overlooking the Nile River in central Cairo. ©UNFPA/Matthew Cassel How planners and politicians deal with urbanization in three sample countries, India, Nigeria and Mexico, demonstrates some differing policies and programmes for coping with rapid urban growth, or how to rectify mistakes that allowed it to happen without good planning or preparation. But though cities may have different histories and challenges, the aims of city officials almost everywhere are similar. They say they want to create better and more secure environments, with acceptable levels of public services and infrastructure and meet the explosion of motor and pedestrian traffic.

Perspectives on urbanization

In recent years, there has been a debate about whether more urban living is to be deplored for the mushrooming of slums where sanitation is nonexistent, epidemic diseases can thrive, exploitation is rampant and physical dangers lurk where law is absent and order may be left to criminal gangs, or to be welcomed for the opportunities city life offers—jobs, access to health services, family planning, schools and more economic openings for women. Boosting the opportunities while minimizing the dangers and difficulties are the main challenges of development in the today's urban transitions.

Urban trends are not uniform, however. In India, for example, traditional city centre populations are shrinking as peripheral areas grow, statistics show. Mumbai is often cited as a prime example. New figures from the 2011 census show that in the state of Maharashtra, the centuries-old city of Thane, formerly a middle class satellite suburb 43 kilometres northeast of Mumbai, has swelled with a soaring slum population. Thane now

has 9.84 per cent of the state's people—11 million in numerical terms. That is a jump of almost 36 per cent growth in a decade. Mumbai city proper, with 3.14 million people, recorded a negative growth rate of 5.75 per cent during the same period.

Amitabh Kundu, a professor of economics at the Centre for the Study of Regional Development and dean of the School of Social Sciences at Jawaharlal Nehru University in New Delhi says that some of India's major cities are experiencing what he calls "degenerative peripheralization"—where the people are driven out by the high cost of living and the scarcity of jobs that pay a decent wage to live in ad hoc settlements on the periphery of metropolitan areas. In those peripheral settlements, people have lost the advantages of both urban and rural life. Kundu says recent efforts to clean up and beautify cities in India, applauded by many, are changing the cities' characters, not necessarily for the better.

Kundu sees international economic considerations driving the change. "Fast developing countries, especially in Asia, are trying to get access to the global capital market, and the only way they can do that is through their big cities," Kundu says. As foreign investment and capital rise, so do prices, and city life becomes more expensive. Many of the improvements to India's cities are mainly benefiting the middle class, he adds.

"Big cities are losing the poor because they can't afford to live there," Kundu said. "Earlier, people would pick up something like 1,000 rupees [about \$22] and come to Delhi and look for a job for a month. Now with 1,000 rupees you can't stay for a week. So the percentage of the poor in Delhi has

gone down from about 55 per cent in three decades to 7 per cent."

The result? "We are sanitizing our cities," Kundu says. "Sanitization means making the environment clean,...clearing the slums, pushing out the low-income colonies." And in the process, cities' miss out on any opportunity to transform the urban poor into drivers of growth and development and instead perceive illiterate, unskilled workers only as liabilities to health, hygiene and law and order, he argues.

Altering the social balance of cities in India is an important subject for study by demographers and economists because 410 million of the country's 1.2 billion people already live below the poverty line. That represents one-third of all the world's poor, according to the World Bank, which also notes that Indian income gaps are widening.

"In Mumbai—the central district—the growth has come down dramatically," he said. "Same thing with Chennai, with Hyderabad, with Kolkata—all the major cities, all the urban central districts. Earlier, somebody would come from the rural areas and start polishing shoes or pushing a cart. Those jobs are diminishing as rural-to-urban migration is going down, Kundu said. He and other demographers say that India needs to develop small and medium-sized cities, which may be more accessible to the poor and have the potential to provide jobs.

Faujdar Ram, director of the Indian Institute for Population Sciences, a degreegranting, university-level institution, said that even though people on marginal or even middle class incomes have been pushed out of Mumbai city, they still want to work there. He said there are commuters coming into the city from numerous outlying areas, including Pune, 163 kilometres to the southeast of Mumbai, where population growth has also been rapid. Pune is now connected to Mumbai by a six-lane motorway that cuts travel time for those with cars or money for intercity buses. "Why are people coming from Pune?" Ram asks. "Pune needs jobs there." Meanwhile, public commuter transportation handling ever larger numbers of passengers needs improvement, he said. Mumbai's commuter trains are notorious for their overcrowding, slow service and sexual harassment of female passengers.

New opportunities for women

For many women, there is a positive side to the evolution of central Mumbai, says Sajana Jayraj, writing for Media Matters, a nongovernmental organization which works in development communications and studies women in urban settings. Expanding service industries and the technology sector bring many more women into the city to work and advance their education and skills. What she calls "a growing tribe of young women, working and studying at the same time" make a daily journey of two hours or more from the inner and outer suburbs of Mumbai. They are a different kind of urban migrant, well-educated and leading middle class lives, frequently balancing careers and families. "Women peeling vegetables in the train back home is a common sight," Jayraj wrote.

The pattern of peripheral low-income growth is evident in Thane, where about 30 per cent of the population now live in slums. In Bhim Nagar, one of those settlements, there are 10 to 15 people living in each small (often one-room) house, residents say. Many

if not most of the men are unemployed or can find only casual labour at that distance from Mumbai. Women do better because they are able to work as domestic servants, but those jobs also do not carry any long-term security or benefits. Survival from day to day is the goal of most families. No one is certain if or when they could be evicted from their homes crowded together along muddy lanes.

"Slums are complex," said Ram at the Indian Institute for Population Sciences in Mumbai. "Most people are renters, and the owners are local leaders, elected politicians." In Indian cities, politicians use slum settlements and shantytowns as "vote banks" in their electoral districts. It is in their interest to keep the poor there in sizeable numbers. But slumlords are coming into competition with property developers who see unincorporated territory with uncertain ownership as prime targets for private development, Ram said. When property developers have powerful backers, a slum can be bulldozed out of the way with little warning, and its families scattered. Only rarely are private developers

required to provide a portion of low-income housing, Ram said.

Although rural-to-urban migration is declining, the state of Maharashtra will continue to attract unskilled migrants looking for work because language barriers are not insurmountable in the polyglot Mumbai area, Ram said. But language may be a barrier for Hindi-speaking northerners, for example, who seek to fill jobs in cities in other regions, such as Kerala, Tamil Nadu, and Karnataka, where labour shortages are occurring.

The allure of jobs

Farther to the northeast, about 60 kilometres from Mumbai but still considered part of its greater metropolitan area, the city of Bhiwandi is a case study in the meeting of Indian industrialization and urbanization. For many years, Bhiwandi was a small town known for its handloom weavers. Then with electrification and the introduction of power looms, it became the "Manchester of India," with the largest number of textile mills in the country, eclipsing the traditional work of farmers, fishing people, merchants and spice traders.

The looms of Bhiwandi employ a major part of the city's workforce, but the textile factories, running around the clock, always need more labour and so a large number of migrants from other Indian states have become a fixture of the population. In Bhiwandi, young men continue to arrive from the poor states of northern India, Uttar Pradesh in particular, to work in factories that look like a picture of 19th century England.

Bhiwandi might be a good example of an economically sustainable and self-contained

Local residents perform daily chores at the Bengali Colony Slums in East Kidwai Nagar area in Delhi, India. @Sanjit Das/Panos



small city if life were updated to make the environment more congenial and healthier. The jobs are dirty, hot and dangerous. Huge, squalid, stifling sheds packed with looms often have no running water or toilets. But migrants, virtually all men and boys, stay here for years or decades, in essence becoming residents, because life here is better than at home and their earnings keep distant families and villages afloat.

In sweat-drenched tank tops and cheap trousers, wearing only flip-flops or sandals on their feet, they sit at clattering looms running at ear-splitting noise levels, with scant protective devices to protect them from the huge machinery's moving parts. Workers say they suffer industrial accidents and health problems: electric shocks, injuries from flying shuttles, skin infections and tuberculosis. Their windowless living quarters appear like concrete cartons stacked on several floors. where up to 10 workers may sleep in shifts in one room. Scores of them share a communal toilet and water tap.

Workers who have spent years in the mills were eager to tell their stories for this report. Nagendra Tiwari, age 42, from Gorakhpur in Uttar Pradesh, came to Bhiwandi in 1988 when his father, a poor farmer, could not afford to find husbands for his five daughters and Nagendra was forced to migrate in search of money for his sisters' dowries. He had to leave behind a wife and four children.

As a high school graduate with management skills, he moved from mill to mill, but the work was never easy. "We worked in 12-hour shifts, and were paid every 15 days. There were no days off." Tiwari earned less than the equivalent of \$20 a month, based on piece work, and paid 250 rupees (about



\$5.60) a month in rent for a room he shared with three other men. When he finally found a mill owner who allowed him to go to weekly lectures on HIV prevention run by the local branch of the Family Planning Association of India, he threw himself into the safe-sex campaign with enthusiasm and vigor.

"For six months, I waited eagerly for Fridays," he said. "I lost a cousin to AIDS in my village and I wanted to go back and talk to the villagers, who know nothing about AIDS." Because of the large number of men living without families in Bhiwandi, the sex industry flourishes.

Impressed with his dedication and communications skills, the local Family Planning Association, FPA, made him a peer group educator, and then a staff member, but Tiwari says he still lives with the loom workers, most from his home state. About 20,000 single migrant workers (out of 400,000 in the area) are covered by the local Family Planning Association's HIV/AIDS awareness, prevention and testing projects, which also teach workers about other sexually transmitted diseases and general reproductive health issues. Workers say they have benefited from this urban experience, and they carry the information back home on annual breaks to educate others.

Narendra Tiwari at the loom unit in Bhiwandi, India. He migrated 10 years ago, and his entire famliy back home depends on his salarv. ©Atul Loke/Panos



▲ Lagos commissioner for physical planning, Francisco Bolaji Abosede, during an interview with UNFPA officials in his office in Ikeja, Lagos, Nigeria. ©UNFPA/Akintunde Akinleye

Despite the hardships and dangers of their daily work, the men insist there is no alternative, no future, in their home villages and towns. Only one, Shyam Narayan Prajapati, a 45-year-old university graduate who is now also on the local FPA staff, said that though he worked in the textile mills for more than 20 years, he still has hopes of going home to Uttar Pradesh. He wants to enter politics to help fight corruption and poor economic performance in his state.

The workers know that the city and the industry need them, and that is their insurance policy. Santlal Bind, who returns north to see his family as often as he can and admits to being too exhausted to do much more in Bhiwandi than work, eat and sleep, nevertheless does not worry about his future or about losing a mill job because of the skills he has learned as a weaver. "If I go home," he said, "I can always find a job in any loom when I return."

The planned and the spontaneous

In Lagos, Nigeria's business and financial capital as well as one of Africa's major ports, Francisco Bolaji Abosede, who was commissioner for planning for Lagos State from 2007 until 2011, said that the first thing he did after taking office was to look at a 1980 master plan and ask, "Where did we go wrong?"

Successive governments had abandoned the plan, and the concept of city planning, Abosede said, and the great Lagos metropolitan area had expanded immensely and urban life had deteriorated because of inadequate planning.

"Lagos had grown," he said. "People were attracted by the lifestyle. Crime was high. There was a social malaise." After analysing the city-state's situation, Abosede said, he knew that he could not wait four years to begin to act. "So what can we do? We picked up pieces of the master plan here and there, and then we were ready to go. We divided Lagos into nine areas with common features, assessed their strengths and weaknesses to find what each area needed."

Abosede was born in Lagos, and was educated in town and country planning at Ibadan Polytechnic before going to the Centre for Urban and Regional Planning at the University of Strathclyde in Scotland, and working for a British company doing town planning. "I learned about local people," he said. "Local people are very local. You sit down with them and ask them what will benefit them." He has held many planning posts in Nigeria.

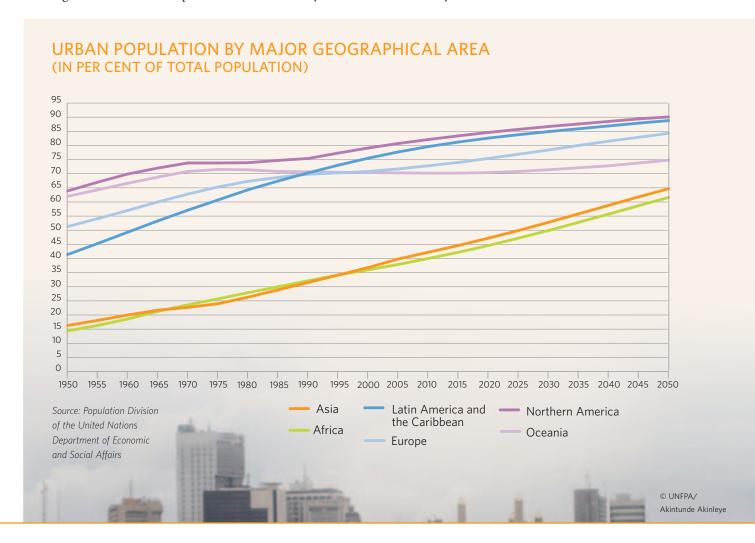
As commissioner of planning in Lagos, Abosede made one of his first projects the redevelopment of Lagos Island, the oldest part of the urban area, which became a British protectorate in 1861. It was in a sense the birthplace of modern Nigeria. Lagos Island was—and still is—congested. This part of the city, according to Abosede and others, was notorious for illicit activities. The Government began to build new roads and to clear some of the most crime-ridden streets to build a commercial centre, flats and a multi-story shopping mall.

Reviving a historic town

Lagos Island is still a work in progress. The shopping mall was largely empty early this year because rents were too steep for former sidewalk vendors, local residents said. Many merchants seemed to be clinging to their informal street stalls. Some old colonial-era buildings on the island, which is connected to mainland Lagos by causeways and bridges, have been restored.

The oldest still-standing buildings offer hints of how picturesque the area could be, with winding streets and unique architecture. But aides to the commissioner said that only buildings of real historical importance would be preserved. The decision echoed that of Singapore, where decades ago the Government began razing old areas of Chinatown, only to find that the city's character, and tourists, were being lost. Some of the neighbourhood has subsequently been recreated.

Other projects on the drawing board in Lagos include the development of the Lekki area into a free-trade and industrial zone where companies can operate under offshore tax and duty regulations, shielded from bureaucracy. The hope is that companies will bring manufacturing jobs to the city. "People will live there and work there," Abosede said optimistically. "It will be a model city of about three



to four million. It will have the new Lagos airport. That airport is going to be about five times the size of the current airport."

Another ambitious project is under way off nearby Victoria Island, another component of the Lagos metropolitan area. This is Eko Atlantic, a reclamation site being built on sand pumped from the ocean floor that will, its developers say, become a mixed residential-business city big enough to house at least 250,000 people and provide offices for 150,000 workers. The project is being constructed by a corporation specifically created for the task and funded entirely by banks and private investors.

Abosede says he does not see the need for building many more new towns for a metropolitan area that he thinks will eventually accommodate 40 million people. His aim is to revive neighbourhoods and areas of the city that already exist. "We will reduce travel time, get people to live and work and use social services in same place," he said. "How do I reduce the travel time? How do I make you walk from your house to work and to social centres?" Life can be healthier and longer in self-contained urban sectors with

denser housing that opens spaces for greenery, he said.

There are also no plans in Lagos to build larger public transportation systems than those already in existing project proposals because, Abosede said, the goal is to get people to work and engage in leisure activities close to home. He added, however, that he is looking at the potential for water transportation around the large lagoon on one edge of the city. He has looked at boats in Singapore and Malaysia, and talked to the Netherlands ambassador about how the system works there. Lagos is now prepared to grant concessions to private operators of ferries, he said.

One of the planning decisions that has aroused considerable concern among advocates for poorer residents of Lagos is the Government's preference for allowing private property developers and construction companies to build housing and new neighbourhood centres and sell them to the state. which would in turn offer them for sale with mortgages to residents. "We want people to adopt a mortgage culture," Abosede said. Too many transactions are made only in cash, which bars low-income people from buying property, officials say.

The Social and Economic Rights Action Centre, known as SERAC, is a prominent Nigerian non-governmental organization based in Lagos that works through community action, legal assistance and advocacy to promote economic, social and cultural rights. Felix Morka, the organization's executive director, said he thinks the Government's plans may benefit the middle class but will not help the city's poor.

"Lagos is short of five million or more houses," he said. "The Government is put-

A woman paddles a canoe in the Makoko community in Nigeria's commercial capital Lagos. ©UNFPA/Akintunde Akinleye



ting money into middle-class housing priced out of the reach of many. There is no real answer to arresting the growth of slums." Morka said that fewer than 12 per cent of the residents of Lagos own their homes.

His organization questions the sectorby-sector approach of city officials. Morak says that the lack of a public transportation network is a reflection of a lack of holistic planning. The whole city also needs better health and education services, he said. Many young people are unemployed, or poorly trained for jobs that are available. He said that he can get 500 applications for jobs in his organization and find only two of the applicants good enough to consider hiring.

Makoko is one of the marginalized areas in which SERAC works. It is a community of tens of thousands of people who over many years have migrated from coastal areas of Nigeria, Benin, Togo and Ghana. Part of Makoko is on land and part is a very large fishing village built on stilts offshore in the Lagos lagoon. On the land side, small-scale merchants and workers in the informal sector say they have endured mass evictions over a number of years, the last in December 2010. Other moves to dislodge them were made before the current Government came to power in Lagos state in 2007, but all of the disruption appears to be viewed collectively as an assault in local people's eyes.

City dwellers mobilizing

Residents and former residents are well organized in Makoko, and have formed a rights group, the Lagos Marginalized Communities Forum, which has been challenging the Government in court since 1990 with help from groups like SERAC. On a now-empty



Social and Economic Rights Action Centre chief executive officer, Felix Morka in his office in the Ojodu neighbourhood of Lagos, Nigeria. ©UNFPA/Akintunde Akinleye

lot on the land side, behind a row of small shops, former residents pointed out where about 500 one-room huts once stood. Only 3,000 residents from the area have been resettled, out of a number evicted that is many times that size, residents said. One local leader put the figure at 300,000 evictions over the years.

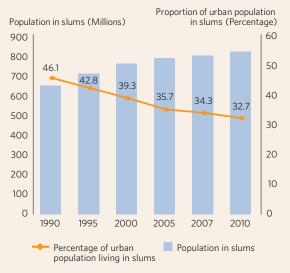
Questions about how to deal with the part of Makoko built over the lagoon illustrate the paralyzing complexity in the kind of standoff that can take place in many developing countries when a government, wanting to modernize and redevelop, runs into a fiercely independent community that resists change, even if that means festering decay. Words cannot adequately describe life in Makoko fishing village where, apart from fishing the only other industries are timber sawmills and smokehouses where the daily catch is smoked for market.

The fishing village—really a city on stilts with a population that has been estimated to be 50,000 or more—is without public services of any kind. There is no fresh water. Electricity is tapped illegally from municipal power lines. The only transportation inside the village is by handmade canoe, of which there are hundreds, if not thousands, that plow through water thick with waste.

A local chief, claiming that the population was now about 200,000 living in a community that had been here for more than 100 years, said that there were no schools except for a small one run by a charity and no modern medicine, only a clinic run by a traditional doctor. There is no

SLUM IMPROVEMENTS, THOUGH CONSIDERABLE, ARE FAILING TO KEEP PACE WITH THE GROWING RANKS OF THE URBAN POOR

Population living in slums and proportion of urban population living in slums, developing regions, 1990-2010



Over the past 10 years, the share of the urban population living in slums in the developing world has declined from 39 per cent in 2000 to 33 per cent in 2010. The fact that more than 200 million slum-dwellers have gained access to either improved water, sanitation or durable and less crowded housing shows that countries and municipal governments have made serious attempts to improve slum conditions, thereby enhancing the prospects of millions of people to escape poverty, disease and illiteracy. However, in absolute terms, the number of slum-dwellers in the developing world is actually growing, and will continue to rise in the near future. In the developing world, the number of urban residents living in slum conditions is now estimated at some 828 million.

Source: The Millennium Development Goals Report 2010.

family planning service. The chief said that the community had never asked to have the fetid swamp on which they live cleaned, or tried to dislodge the accumulated waste themselves. He blamed the mainland across the lagoon for the pollution and said that there were outbreaks of typhoid and malaria, both preventable diseases.

The Makoko fishing community is polygamous, the chief said, though men are limited to two wives. Families have 10 to 20 children. For the most part, they share one-room wooden structures with small landings where canoes can dock and be moored. The majority of people speak the Egun language, which is by most scholarly accounts related to the Yoruba language that dominates southwestern Nigeria. Nonetheless, there is a sense of ethnic separation, based on history and outlook on both sides. When asked about why the people of Makoko rejected Government assistance even when they lived in an unhealthy environment, one state official characterized the local attitude as "an ethnic thing" and speculated that the deteriorated environment was somehow a badge of rebellion.

But stilt villages built over bays and lagoons need not be viewed solely as targets of demolition. In Southeast Asia there are many where people have adapted to changing times without losing their traditional ways of living on water. The best known of these communities is Kampong Ayer in Bandar Seri Begawan, the capital of Brunei Darussalam, a country like Nigeria that is rich in oil income.

Residents of Kampong Ayer, which means "water village," fought off efforts in the past to move them. The Government eventually changed course and modernized the settlement instead, adding a sewage system, electricity and clean water piped above the level of the Brunei River over which the houses are built and into the homes of 30,000 people. In addition to being a better place to live, Kampong Ayer is now a tourist attraction.

Cities grow—and shrink

In Mexico, a 2010 national census showed a total population of 112 million, 4 million more than earlier projections had suggested. That led to more thinking about how and why this happened, and how population growth is related to the culture and history of Mexico's cities and regions. "Some cities in Mexico are losing people, others are growing at rapid rates," said Sara Topelson Fridman, vice minister of urban and territorial development at the Ministry of Social Development.

"Many reasons lead to the growth and many reasons lead to the diminishing of population," Topelson said. "In Mexico, most of it means migration, either to some other state or some other city or another country, most of all the United States." Her department has been collecting documentation analysing population growth in Mexican cities and the

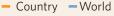
strains on their resources. In the process, she has found that there are significant differences between long-established urban areas and relatively newer population centres.

The need to think about how cities grow is urgent, Topelson says. "Let's say we have 800,000 people in a city," she said. "That could grow three times, which is enormous, or anywhere from five to ten times. We are very influenced by American models of housing and growth—and that means sprawl. So cities have sprawled—and when a city starts growing, many interests are linked to sprawl."

She pulls out maps illustrating population growth in a number of Mexican cities and focuses on two: Acapulco, a resort on the west coast, and Guadalajara, in the centre of the country, about 460 kilometres northwest of Mexico City. The coastal metropolitan area of Acapulco was originally a small city on a Pacific Ocean bay that swelled rapidly through a tourist boom in the last century. Hotels and condominiums define the prime tourist sites, but there is much more to Acapulco, the neighbourhoods where the year-round population of about 1 million live.

The municipality can no longer handle the maintenance of this territory, Topelson

PERCENTAGE OF POPULATION RESIDING IN URBAN AREAS 1950-2010





- 1. For statistical purposes, the data for China do not include Hong Kong and Macao, Special Administrative Regions (SAR) of China.
- 2. Including Åland Islands.
- 3. The former Yugoslav Republic of Macedonia

Source: United Nations, Department of Economic and Social Affairs, Population Division (2010). World Urbanization Prospects: The 2009 Revision.

said, drawing attention to the scale of the sprawl in Acapulco and the issues that confront public services and security operations. "Of course tourist areas are different. They have a lot of condos of high standard that are only occupied between two and four months a year. Nevertheless, the municipality has to pick up the garbage, has to clean the streets, has to pay the public lighting, has to check all the infrastructure—wires, sewers, energy." The level of security suffers when city budgets are overstretched.

"Guadalajara is a different story," Topelson said. In Guadalajara, history and geography played large parts in preventing urban sprawl. The old city centre of Guadalajara, with its landmark cathedral and surrounding plazas, continues to attract residents and serve as a strong focal point for city life. "An enormous ravine to the northeast of the city blocked development there," Topelson said. Other settlements were scattered in a pinwheel shape around the old city centre.

In nearly three decades, Guadalajara's population nearly doubled and the city's

Young residents wait for

a subway in Mexico City.

©UNFPA/Ricardo

Ramirez Arriola

physical size more than tripled. During the same period, Acapulco's population also nearly doubled—a slightly lower rate than Guadalajara, but its surface area had expanded nearly 10 times.

"One of the challenges," Topelson said, "is not to grow the urban area any more but to grow inside [the existing area of] a city. There are vacant lots, there are vacant areas. There are industries that left. Look inside." At the edges, green belts can be used to draw lines around growth, Topelson said.

Informal settlements

The rise of informal settlements, often slums, has been a part of urban growth for years in Mexico, and more widely in Latin America—symbolized most starkly by the favelas of Rio de Janeiro and other cities in Brazil. Topelson does not want to see this kind of growth continue in Mexico. Informal communities sooner or later demand public services, she added. Residential projects built by private developers also take a toll on urban budgets. "Even if the development is private, connectivity is never private," Topelson said. "Connecting with the city, connecting with the highway, with the schools, with the hospitals" all cost city governments large amounts of money.

The self-governing Mexico Federal District, the national capital, is the heart of the larger Mexico City metropolitan zone that also includes parts of the neighbouring states of Mexico (a separate political entity) and Hidalgo. Throughout the Mexico City metropolitan zone, with a population of about 20 million people, and other cities around the country, emphasis and money are going into maintaining public spaces.

At the federal level, public parks and recreation areas are being created or restored. Topelson said that 3,400 public parks around the country have been recovered and enhanced in the last four years to improve community life and reduce crime. Residents of communities have been asked about what they want in their parks, and their requests have led to the construction of ramps for skateboarders, computer rooms, sewing spaces, bicycle trails and walking paths. The private sector has been urged to join "adopt-a-park" programmes, guaranteeing upkeep of open spaces and recreational centres for five or 10 years.

The Government of the Mexico Federal District has introduced more pedestrianonly streets in several neighbourhoods (and free wheelchairs for the handicapped that can be borrowed in scattered kiosks). The federal capital, and its constituent local administrations—operating as small towns or neighbourhoods within the larger city—are opening up spaces around historical buildings and other landmarks, adding trees and water fountains. The Zócalo, the historic centre of the city since Aztec times and one of the world's largest city squares, has been renewed. Main avenues in the city have been widened, with room for greenery and flowers along the median strips or sidewalks.

A centrepiece of recent development is the light rail system that cuts across the city at street level, linking to subway and bus stops. Bicycles called *ecobici* are widely distributed around city neighbourhoods for use by anyone who buys a yearly subscription to the bikesharing plan. Officials in the city's Ministry of Urban Development and Housing say that 37 per cent of greenhouse gas emissions have been cut by these and other projects. Mexico

City, once notorious for its polluted air, has become a different place.

In Mexico State, which borders the Federal District on three sides, the state capital of Toluca has also embarked on ambitious plans to create or expand parks. "There is a large demand for urban spaces," said Patricia Chemor Ruiz, technical secretary of the State Population Council. Two large parks have been completed in Toluca, a growing international corporate centre, and other projects are planned. Mexico State's advisory boards include members of civil society, Chemor said.

At a former military barracks area, 12 hectares have been turned into a green space for running, bicycling and skateboarding on new ramps. Another, bigger park has athletic facilities and a "please touch" children's museum. To bring both projects to reality, the city planners successfully fought off Government bids to requisition the properties for new office buildings.

URBANIZATION

Excerpts from The International Conference on Population and Development's Programme of Action

Governments should increase the capacity and competence of city and municipal authorities to manage urban development, to safeguard the environment, to respond to the need of all citizens, including urban squatters, for personal safety, basic infrastructure and services, to eliminate health and social problems, including problems of drugs and criminality, and problems resulting from overcrowding and disasters, and to provide people with alternatives to living in areas prone to natural and man-made disasters. ... Governments are urged to promote the integration of migrants from rural areas into urban areas and to develop and improve their income-earning capability by facilitating their access to employment, credit, production, marketing opportunities, basic education, health services, vocational training and transportation, with special attention to the situation of women workers and women heads of households...

Toluca and Mexico State in general are magnets for migrants from other parts of the country. In an effort to prevent more urban or peripheral slums from developing or more people moving into flood-prone areas, Chemor said, officials are working with private contractors to build selfcontained new towns with homes priced for sale to low-income families. One of these projects, called Bonanza, is sited well

out of town and without access to public transportation. Officials say that private bus owners have already filled that need, reflecting a trend in Mexico to require the private sector to contribute more to development. "Construction companies are obligated to build services like schools and hospitals," Chemor said of the state's low-income housing projects. "That isn't done in many other places."

LIFE IN AN INDIAN SLUM: THE WOMEN SPEAK

The wisdom of poor women may not be factored into the plans of governments, international institutions and research organizations, yet they live their daily precarious lives on the frontlines of the world of 7 billion people. Statistically, women in the poorest villages and neighbourhoods of developing nations are, or will be, the mothers of most of the people added to the world in this century and, even if barely educated or illiterate, they want to share their experiences, their thinking and their advice.

Bhim Nagar is one of numerous slums thrown together on once-open spaces at Thane, a middle class satellite of Mumbai, India's financial and entertainment capital. It is estimated that 30 per cent of Thane's population now live in such fast-growing settlements. But Bhim Nagar, to those who live there, is a neighbourhood of vitality and ingenuity, despite shared deprivation and pervasive domestic violence. At its core there are hardworking women holding large families together at great odds.

An afternoon spent in Bhim Nagar with a few dozen women sitting on the ground by their small, mostly windowless homes, provides a glimpse of the innate good sense of so many of the world's unschooled women as they reflect on the social and economic forces that have brought them here. Mirroring the concerns and hopes of women in other developing societies, the women of Bhim Nagar talked about not only their own daily lives but also larger issues: rising food prices, educational opportunities and standards, gaps in health care, tooearly marriages and the threat of domestic



Women residents of Bhim Nagar slums who are all originally from western Maharashtra, India. All of them work as domestic servants in nearby residential areas. © Atul Loke/Panos

abuse that prevents them from using available family planning services. Wideeved children watched and listened.

All of the women—most of them from Maharashtra state, where Mumbai is located-migrated here with husbands, and found shelter in these dingy rows of houses owned by landlords who could evict them at any time. All of these women were married as adolescents. Child marriage is illegal in India, where a 1978 law set the marriage age for girls at 18. The law, however, is almost universally disregarded, especially in rural areas. One woman remarked that she didn't even know that she had been married when her parents handed her over to a man in a deal arranged by both families. There was no way out.

The women of Bhim Nagar, working as domestic servants or sometimes scavengers of recyclable trash and garbage, are often the only income earners in their families and pay most of the bills, including rent of about \$38 a month, out of monthly wages rarely exceeding \$50. Their husbands, they said, were day labourers who only occasionally found work.

Alcoholism and violence are problems in many families. "I work all day, come home and cook, and don't even get to eat before I get beaten by my husband," a woman in early middle age said through an interpreter. He looks for excuses to abuse her. "The food is cold, or it is tasteless, or too salty," she said of his complaints. Bruised women

The growth of cities everywhere poses real challenges for governments and the people who live in them. But urbanization can be a positive driver for sustainable economic, environmental and social development, according to a 2011 UNFPA report, Population Dynamics in the Least Developed Countries: Challenges and Opportunities for Development and Poverty Reduction. As populations are growing, it makes economic

and environmental sense for people to move closer together in urban areas, the report adds. Urbanization creates jobs and enables countries to provide essential services at lower costs per capita. It can also reduce energy consumption, especially in transportation and housing, and it can ease population pressures in rural areas.

say they cannot take days off from their housecleaning and cooking work to let injuries heal because they fear losing jobs to competitors. Families have no social security, pensions or insurance.

Women in Bhim Nagar said they had borne between four and seven children each. They know about family planning and where to get it, but are forbidden to use it, they said. "Men are so demanding," one said as her neighbours nodded. "They just want sons. And they have the power." Asked to suggest what the ideal family size would be, they agreed on two children—uncannily close to the globally recognized replacement fertility level of 2.1 children, which would stabilize population in their corner of India.

In Bhim Nagar there are only 10 latrines—five for men and five for women, shared by thousands of people, residents said. The women's latrines are cleaned only sporadically. There is no running water in the settlement. The landlord, who turns on taps for a few hours on most (but not all) days, charges families 100 rupees, about \$2.50, to fill their household pots. Electricity is also sold to them, at 100 rupees a month for each socket or outlet. Most houses are dark or very dimly lit inside.

Finding enough food for their families is a constant preoccupation and source of tremendous mental stress and tension for these women. They know they should qualify for public assistance programmes that provide reduced prices for staple foods and kerosene. But, they said, the food is diverted to the black market before it reaches them and even if they have ration cards, they are useless when women are forced to buy at market prices.

Through all of this, the women of Bhim Nagar are astonishingly resilient. Many have sent their children to informal or local state schools in the hope that their lives will be different. Some of those children have gone on to vocational training or higher education. For the girls, however. life can be more difficult. Some in the neighbourhood are already domestic servants, pulled out of school to help families in need, destined to repeat their mothers' lives. Others are married young—that afternoon a girl of 14 was going through a betrothal ceremony—and may be doomed to another generation of domestic abuse.

In this neighbourhood and a few others in the area, women have a place to go to ask for advice and help. A small nearby branch of the Bhartiya Mahila Federation, which got start-up assistance

from UNFPA, helps women get counselling, some legal help or a place in a shelter (and foster care or boarding school for the children) if the crisis is extremely dangerous. Volunteers, including teachers, social workers and a professional psychiatrist, give their time to the centre the organization operates in Thane. A street theatre group has formed to bring messages to poor communities. One big hit, with over 2,500 performances, was titled "Save the Girls and Save the Country." The troupe has attracted wide attention, and has been invited to perform in Germany.

Prabha Rathor, one of the women from the slums, told the story of how the women's centre had helped her out of a violent marriage, into which she was forced at the age of 14. She was a withdrawn and terrified young woman for years, she said, but has since become a self-confident adult making a good living cooking and selling the Indian "tiffin box" lunches for which the Mumbai area is especially famous. Still living in the slums, she helps abandoned or severely deprived children to survive. Sadly, she had to give up her own two sons to win a divorce. "Now I say that I did not have only two children," she said, "I have a thousand in the community."



CHAPTER **SEVEN**

Sharing and sustaining Earth's resources

The global economic growth since the 1992 Earth Summit that lifted millions of people out poverty also came "with a price tag," a cost "that is increasingly born by the poor and the vulnerable on this planet including in many of the least developed countries, United Nations Environment Programme Executive Director Achim Steiner said in May 2011 at a United Nations conference.

The past two decades have witnessed "remarkable but also sobering changes economically, socially and environmentally in many parts of the globe," Steiner said.

From climate change, to the loss of biodiversity, and from rising land degradation to increasing scarcity of freshwaters, environmental change is translating into escalating social and economic impacts and scarcities, he said.

"We know that we need to grow our economies in order to lift more people out of poverty and find decent jobs for...young people underemployed or unemployed-especially in the developing and, in particular, in the least developed countries," Steiner said. "But that growth needs to become far more intelligent" in a world of 7 billion people. "If not, the risks, shocks and unpredictability of food, fuel and other commodity prices witnessed over the past two to three years are likely to become ever more extreme and socially challenging."

Steiner called for the development of a "green economy" that would not only

forge economic growth but would also help eradicate poverty. "It is possible to catalyze growth and employment while keeping humanity's footprint within ecological boundaries."

Humanity's ecological footprint is already large, according to the Global Footprint Network, a California-based environmental think tank: Since the 1970s, humanity has been in "ecological overshoot" with annual demand on resources exceeding what Earth can regenerate in 365 days. "It now takes the Earth one year and six months to regenerate what we use in a year."

The footprint measures how much land and water area a human population requires to produce the resources it consumes and to absorb its carbon dioxide emissions, using prevailing technology.

Half of the global footprint in 2007 was attributable to 10 countries, with the United States and China using, respectively, 21 per cent and 24 per cent of the earth's "biocapacity."

 A boy sells bottled water in Lagos, Nigeria. ©UNFPA/Akintunde



A young man sits on the Qasr al-Nil bridge, overlooking the Nile River in central Cairo. @UNFPA/Matthew Cassel

Sustaining the life of the average American takes 9.5 hectares of the earth's space, compared to 2.7 hectares for the average person worldwide, and only about one hectare for the average person in India and most of Africa. "If everyone lived the lifestyle of the average American, we would need five planets," the Global Footprint Network states.

Environmental journalist Fred Pearce echoes the view that a small proportion of the world's population takes the majority of resources and produces the majority of its pollution.

The world's richest half billion people—about 7 per cent of the global population—are responsible for about 50 per cent of the world's carbon dioxide emissions, a surrogate measure of fossil fuel consumption. Meanwhile, the poorest 50 per cent are responsible for just 7 per cent of emissions, Pearce wrote in an article for Yale University's "Environment 360" website. "It's overconsumption, not population growth, that is the fundamental problem," Pearce argued, referring to Oregon State University research by Paul Murtaugh that accounted for the "intergenerational legacy" of today's children. An

extra child born today in the United States, would, down the generations, produce an eventual carbon footprint seven times that of an extra child in China, 55 times that of an Indian child or 86 times that of a Nigerian child, Murtaugh's research showed.

Population growth and climate change

A growing body of evidence shows that recent climate change is primarily the result of human activity, according to the State of World Population 2009, "Facing a Changing World: Women, Population and Climate." But the influence of human activity on climate change is complex and non-linear, the report cautioned. "Climate change is about what we consume, the types of energy we produce and use, whether we live in a city or on a farm, whether we live in a rich or poor country, whether we are young or old, what we eat, and even the extent to which women and men enjoy equal rights and opportunities," according to the UNFPA report. "Climate change's influence on people is also complex, spurring migration, destroying livelihoods, disrupting economies, undermining development and exacerbating inequities between the sexes."

Because of greater poverty, lesser power over their own lives, less recognition of their economic productivity and their disproportionate burden in reproduction and child-raising, women face additional challenges as climate changes.

"Women are the hardest hit by environmental problems, including climate change," says Aminata Toure, chief of UNFPA's Gender, Human Rights and Culture Branch. "Because women in

developing countries are in charge of growing the food and feeding the family, they are the first ones to feel the effects of environmental problems like droughts or floods."

Climate change has the potential to reverse the hard-earned development gains of the past decades and the progress towards achieving the Millennium Development Goals, according to the World Bank. Setbacks will result from water scarcities, intense tropical storms and storm surges, floods, loss of glacial meltwater for irrigated agriculture, food shortages and health crises. Climate change threatens to worsen poverty or burden marginalized and vulnerable groups with additional hardships.

In Southeast Asia, for example, about 221 million people already live below the \$2-aday poverty line. Many of the region's poor live in coastal areas and in low-lying deltas, and many of these poor people are small holder farmers or people who earn their living from the seas. Poor households are especially vulnerable to climate change because their marginal income provides little or no access to health services or other safety nets to protect against the threats from changing conditions and because they lack the resources to relocate when crises strike.

Population dynamics are especially relevant to the debate about coping with—or adapting to—climate change. Some poor countries with rapid population growth may not have the capacity to adapt through, for example, migration from low-lying coastal areas to urban areas because services, housing and employment opportunities for the new residents may be inadequate.

At the Conference of Parties to the United Nations Framework Convention on Climate Change, in Cancùn in 2010, negotiators for

the first time included language about the need for governments to take demographic data and population trends into account when formulating climate adaptation strategies.

Also in 2010, representatives from 20 non-governmental organizations and UNFPA mobilized in New York to build partnerships that would advocate for the inclusion of population issues into the agendas of upcoming international environmental events, especially 'Rio+20', a 20-year follow-up conference to the 1992 Earth Summit to take place in June 2012.

Some experts are already quantifying the links between a range of population dynamics and environmental trends, such as climate change. For example, in a 2010 paper published in Proceedings of the National Academy of Sciences in the United States of America, Brian C. O'Neill, a climate change scientist at the National Center for Atmospheric Research in Boulder, Colorado, and a team of international experts described the findings of what they describe as "the first comprehensive assessment

A power plant with a vineyard behind it in a suburb of Xi'an, China. ©UNFPA/Guo Tieliu





▲ Felismina Bacela and her husband Silvestre Celestino Uele work their garden, where they grow cabbages, potatoes, and other produce to sell at a market in Maputo. ©UNFPA/Pedro Sá da Bandeira

of the implications of demographic change for global emissions of carbon dioxide."

The findings in the paper, Global Demographic Trends and Future Carbon Emissions, came from a new energy-economic growth model that takes into account a range of demographic factors. "[W]e show that slowing population growth could provide 16 per cent to 19 per cent of the [carbon] emissions reductions suggested to be necessary by 2050 to avoid dangerous climate change," O'Neill said.

One of the findings of the report, using data from 34 countries representing 61 per cent of the global population, is that ageing will reduce emissions in the long term by up to 20 per cent. Ageing is now a factor mostly in the industrialized countries where emissions are high. "In the model, ageing populations are associated with lower labour productivity or labour force participation rates at older ages, which," other things being equal, "leads to slower economic growth," the

report says. The finding illuminates another dimension to the debate over the costs and benefits of an ageing population.

Still, even if zero population growth were achieved, that would barely touch the climate problem—where we would need to cut emissions by 50 per cent to 80 per cent by mid-century, Fred Pearce argued in his Yale University article. "Given existing income inequalities, it is inescapable that overconsumption by the rich few is the key problem, rather than overpopulation of the poor many."

In China, the work of Professor Cai Lin of the Centre for Population and Development Studies at Renmin University, reflects the growing sense in many places that many factors are by necessity part of discussions of population and development, and all must be weighed. He said that China has been working towards a comprehensive, holistic view of the relations between population, the environment and climate change that involves not only population policies but also reorganization of industries, improvements in the energy sector, agriculture, animal husbandry and forestry.

A National Appraisal Report on Climate Change in China was published in 2006, followed in 2008 by a national plan of action. Concrete efforts have since been made to reduce industrial pollution, clear the air in cities and develop systems for disposing of urban waste. Trees and shrubs are being planted along urban avenues and at the sides of motorways that stretch across the countryside. Studies are being made of offshore pollution in the sea caused by industrial waste and untreated sewage.

China, now the world's largest emitter of fossil-fuel carbon dioxide, has both domestic and regional concerns about environmental and climate changes, positioned as it is between melting glaciers in the Himalaya and severe tropical storms emanating in the Pacific. In China's 12th five-year plan approved in March 2011, officials promised more attention to environmental developments.

The plan won favourable comment around the world for its recognition of the need for new directions. Hundreds of billions of dollars have been set aside for "clean and green" development by the central Government, and Chinese officials and scholars have been working with the United Nations on such areas as clean coal technology and water management. Development in its broadest sense is being weighed in discussions of population size, say Chinese officials and scholars.

The World Bank has been helping China to continue increasing its renewable energy generation; the country is already among

the global leaders in clean power. The Bank says that in the last decade 90 per cent of its energy investments in China have been in this field. These developments not only help clear the air in some notoriously polluted cities and industrial zones but also help insure that a more affluent population will have the electrical power to run their newly acquired appliances and lighting. Industries of all kinds need reliable energy supplies to grow.

Globally, the World Bank and United Nations agencies have encouraged developing nations to make more use of clean energy for their own use as well as for export. Specialists in solar power, for example, say that African nations could be selling enough solar power to meet much of Europe's need. Egypt, regrouping after its 2010 revolution, has turned attention to developing more solar energy from its desert areas, which are not productive agriculturally.

Climate change and rapid population growth are among the many factors contributing to the current drought and famine in the Horn of Africa, which has affected

Ageing populations are associated with lower carbon emissions. ©UNFPA/Antonio Fiorente



more than 12 million people, according to the Food and Agriculture Organization of the United Nations, the FAO. "With rapid population growth, reduced arable land by subsistence farmers and migration to marginal lands, the deepening effects of climate change and continued economic marginalization of Horn of Africa economies in the global economy, pressure is being sustained on the Horn's relatively scarce resources."

The crisis in the Horn Africa underscores the need for an integrated approach to climate change that includes actions to help people adapt to drought and other weatherrelated conditions in places where the land struggles to support human life, UNFPA Executive Director Babatunde Osotimehin told Reuters news service in August. "We need to improve food production...and to work with Member States to ensure women and particularly young girls have access to education, including sexuality education, and access to health services and reproductive health services including family planning. Emphasizing the voluntary nature of the family planning policies supported by his agency,

A bus in a dedicated lane rides alongside traffic in Mexico City. ©UNFPA/Ricardo

Ramirez Arriola



Osotimehin said the aim for the longer term was to help women "to have children when they want to have them and choose a number which they can afford within their own context," Reuters reported.

Water

Dwindling water supplies is the environmental issue most often raised in developing countries, both because of the necessity of keeping agricultural land productive to meet the vital food needs of growing populations and the critical reduction of health risks to people crowded into urban areas where public water—and sanitation—services have not kept up with growth.

A World Economic Forum report in 2010 said that the demand for water is expected to increase, and analysis suggests that the world will face a 40 per cent global shortfall between forecast demand and available supply by 2030.

Egypt is one of the many countries facing potentially severe water deficits, and demographers in Cairo like Hisham Makhlouf, chairman of the Egyptian Demographers' Association, want greater attention devoted to this potential crisis.

Egypt's fresh water security has been studied by Lester R. Brown, founder and president of the Earth Policy Institute in Washington and author of *World on the Edge*, who links uncertainty over water supplies in Egypt to the recent acquisition of African agricultural land in Sudan (including the new South Sudan) and Ethiopia by nations in other regions—Republic of Korea, China, India and Saudi Arabia among them.

In a paper titled "When the Nile Runs Dry," Brown said that the 1959 Nile Waters Agreement gave Egypt the right to use 75 per cent of the river's flow, after it has passed through Ethiopia, South Sudan and Sudan, where its two branches join. "The situation is changing abruptly as wealthy foreign governments and international agribusiness firms snatch up large swathes of arable land in the upper basin," he wrote in a recent paper. The richer developed and developing nations from outside Africa are in effect creating food banks against future shortages at home by acquiring the agricultural land of poorer countries.

"Now, when competing for Nile water, Cairo must deal with several governments and commercial interests that were not party to the 1959 agreement." Land acquisitions are also water acquisitions, Brown says, and downstream Egypt needs the water to grow the staple wheat crops on which its stillgrowing population lives.

When Ghada Barsoum, assistant professor in the department of public policy and administration at the American University in Cairo, discovered how little interest or concern there was among her students when she introduced in the classroom issues of Egypt's population growth, she took them on a field trip. They didn't go into the desert. They went to hear a presentation by Michael Wadleigh, which the Oscar-winning documentary maker had titled, The Future of Humanity: The Future of Egyptians.

The young people Barsoum meets in the School of Global Affairs and Public Policy are studying in one of the world's most selective and competitive universities, and many of them will go on to hold influential policymaking jobs in Government or the private sector.

THE ENVIRONMENT

Excerpts from The International Conference on Population and Development's Programme of Action

Meeting the basic human needs of growing populations is dependent on a healthy environment. Demographic factors, combined with poverty and lack of access to resources in some areas, and excessive consumption and wasteful production patterns in others, cause or exacerbate problems of environmental degradation and resource depletion and thus inhibit sustainable development.

Wadleigh is best known for his 1970 film Woodstock, which chronicled an earlier generation of youth and won him an Academy Award for best documentary. Recently, he has turned his attention to documenting the dangers of consumer cultures everywhere, and has been lecturing at universities and to civic organizations. He came to Cairo armed with data from the 2010 Egypt Human Development Report, Youth in Egypt: Building Our Future.

Barsoum, who in 2010 had made a survey with UNFPA technical support of Egyptian youth while formerly manager of the Population Council's poverty, gender and youth programme for West Asia and North Africa, said that Wadleigh's presentation made an impact on her students at the university who previously had not thought much about population as a policy issue. But when they linked population growth and pressures on the environment, especially the country's water resources, her students suddenly became interested.



EIGHT

The way ahead: finishing the Cairo Agenda

As our world reaches a population of 7 billion people, with nearly 2 billion adolescents and youth among them, the agenda of the 1994 International Conference on Population and Development, ICPD, remains more relevant now than ever, said Babatunde Osotimehin, executive director of the United Nations Population Fund, UNFPA.

The milestone on 31 October of a world of 7 billion presents "a great opportunity and a great challenge," said Osotimehin, a physician and former Nigerian Minister of Health, who brought to the post he took up in January extensive experience from sub-Saharan Africa, where fertility rates are high and poverty is widespread. He also brought with him a wealth of lessons learned about how to move more expeditiously to meet the promises of the ICPD, which set in motion a 20-year Programme of Action that reflected an awareness that population trends or "dynamics," reproductive health, poverty, patterns of production and consumption and the environment are so closely interconnected that none can be adequately addressed in isolation.

"Because our departure point is the milestone of 7 billion, there are many things that we need to take into consideration," he said, focusing on a global agenda. "The first is that I want to see this milestone as an entry point that enables us to look at the issues of population, development, reproductive

health, reproductive rights, services—including family planning—and the issues of young people." And in all these issues, universal rights are paramount. "For me, the rights issue is what drives everything," he said in an interview outlining his approach.

"Evolving population dynamics—such as ageing in developed and middle income countries, large youth populations in developing nations, migration and urbanization—affect sustainable development for all," Osotimehin said.

At UNFPA, which has the leading role at the United Nations on population and development issues, Osotimehin now hopes to turn the focus of the agency, donors, civil society and the governments of the countries served by UNFPA to practical, workable measures that hasten progress towards ICPD objectives, as well as the Millennium Development Goals, particularly Target 5-b, to achieve universal access to reproductive health by 2015.

"And we know that to meet development goals, we need to pay greater attention to

 Young women at Addis Ababa Youth Centre Commission. ©UNFPA/Antonio Fiorente.

adolescents and youth," said Osotimehin, noting there are more than 1.2 billion adolescents between the ages of 10 and 19, about nine in 10 of them living in developing countries.

In his thinking about policies for UNFPA and its partners for the future, Osotimehin divides the world into three sets of countries with different levels of development, different challenges and therefore different needs: The developing countries, particularly those that are poor and sometimes with high population growth rates, the middle-income countries where populations have already stabilized but are experiencing other dynamics such as migration, and the high-income countries including a growing number where populations are shrinking and ageing.

Challenges in developing countries

In the developing countries, Osotimehin said, "Member States have expressed concern about the growth of their populations, and we at UNFPA need to engage in terms of policies and programmes that reinforce the Cairo [ICPD] agenda, in which the rights of women would be primary, and choices they would make be central." In such countries, reproductive health services should be available to everybody "up to the last mile," he said. "And given the work we at UNFPA always pride ourselves in, we must make sure that every pregnancy is wanted and that every child is born with care, and in dignity."

Part of that effort must include helping countries meet the unmet demand for family planning. "There are 215 million women who want family planning, and they're not getting it," he said. "It is very important that UNFPA should be the leader driving

that process. But it has to be within the core construct of reproductive health and reproductive rights to be meaningful."

But an integrated approach to reproductive health and rights means that family planning cannot be provided in a vacuum, Osotimehin said. Not only must family planning be part and parcel of a broader effort to improve reproductive health services, but sexual and reproductive health should also be integrated into overall health care systems.

"Let me give you an example: In a situation where you would provide services at primary care level for HIV testing and counselling, [there could be] antenatal services for women and health education that talk to issues of prevention. Then go on to make sure that you have family planning well integrated there. These and other services can be coordinated and delivered at low cost," he said, "and we're already beginning to see examples of where this is happening."

The integrated approach not only yields better results, but it also makes good economic sense. Duplication or overlap of services can be avoided, scarce resources can be used more effectively and the risk of some services being built up at the expense of others can be reduced.

Osotimehin, who ran Nigeria's HIV/ AIDS programme for 10 years, said he thought the efforts to deal with the epidemic might have been more effective if they had been coordinated with efforts to improve sexual, reproductive and maternal health. "Why didn't we then take on reproductive health and maternal mortality? Twenty per cent of maternal mortality in Africa is related to HIV. Why didn't we look at the

issues of prevention of mother-to-child transmission more actively? That's where I'm coming from now. And that's why every time I think of what we should do now, I think let's try and work out something which is a more inclusive, which insures that with those very things that we can accomplish with little resources. We can go that extra mile."

One way to coordinate these actions is to encourage countries to integrate services in their national budgets and administration. He says he plans to work particularly hard with members of national legislatures because they are not only beholden to their constituents but also often control public spending. "They decide where the money goes," he said.

Osotimehin says that he also plans to advocate the integrated approach among ministries of finance and planning as well as health officials in countries where UNFPA works. "There's a major issue with many developing countries' systems," he said. "Health and social policy do not have the priority they deserve."

Governments must build sexual and reproductive health services, including family planning, into their regular budgets, otherwise they risk being treated as optional items that can be easily cut whenever donor funds targeted to specific activities dry up. "You must put in a budget line for them—and for all other reproductive health services—on a yearly basis. Domestic resources ought to be made available for these things. Donors can supplement them but they should not be the major source. I think we at UNFPA have the responsibility to speak to Member States and the donors who support them and say, 'You have to put this on your agenda.""



"UNFPA remains committed to nationally led and owned development and the strengthening of national systems."

Worldwide, but especially in sub-Saharan Africa, resources for sexual and reproductive health, including family planning, came under pressure as the HIV/AIDS crisis worsened. Donors and developing countries alike boosted the share of their resources towards HIV testing and treatment while funding for sexual and reproductive health stagnated.

"And that is just not money," he said. "It's also that people who had been trained to offer reproductive health services were drafted. Providers of family planning got jobs as counsellors for HIV testing. We just moved everybody. That's why when I look back, I think we all should have said, 'Yes, we have this problem and we're going to fix it.

UNFPA Executive Director Babatunde Osotimehin (right) in Bangladesh. ©UNFPA/William Ryan

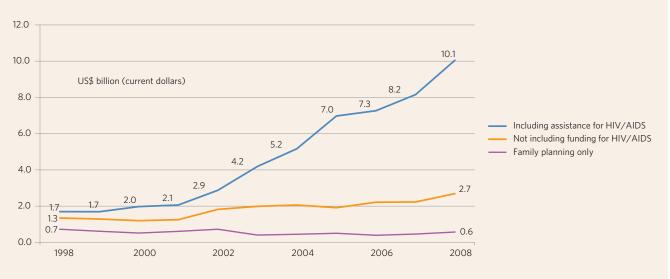
But the work people are already doing is so related. So why don't you just expand what we're all doing?' It should not be a matter of choosing one activity or the other; it should be both." Condoms, for example, should not be perceived either as a method of family planning or a means to prevent HIV. They can serve both purposes, so it makes little sense to compartmentalize them or to pay for them from separate budgets. Condoms, Osotimehin said, are in most places today associated with a tool for preventing HIV infections, and most people seem to have forgotten that they were originally a tool for family planning.

Some governments have not always made family planning a priority, Osotimehin says. And the rights of women have therefore not been honored in some places. But some countries, like Bangladesh, have made major strides in meeting the unmet demand for services.

T. Paul Schultz, an economist at the Yale University economics department's Economic Growth Centre, studied Bangladesh's experimental voluntary family planning and outreach programme in the country's Matlab district. Bangladesh, which has seen declining fertility rates, has also made great progress in educating girls and in meeting other targets within the Millennium Development Goals. Shultz's study, whose results were published in 2009, was titled *How Does Family Planning Promote Development?*: Evidence from a Social Experiment in Matlab, Bangladesh, 1977-1996.

The Matlab programme, in which locally recruited health workers traveled to villages and offered married women a variety of contraceptive choices and information about their use and safety, led over two decades to a 10 per cent to 15 per cent reduction in fertility and an increase in women's wages

POPULATION ASSISTANCE, 1998-2008



Source: Financial Resource Flows for Population Activities in 2008. UNFPA (2010).

by a third, Schultz found. Child survival and schooling as well as the health of mothers and daughters also improved, while the assets that households possessed—such as financial savings, jewelry, consumer goods, housing, orchards and ponds—were 25 per cent higher in the programme villages compared with similar villages that were not part of the experiment.

"Future analyses should address how these interventions have improved outcomes critical to enabling future generations to escape poverty, such as decreased fertility, increased wage opportunities for women, changes in private household savings rates, changes in the composition of household wealth, and finally improvements in early childhood survival, health, nutrition and schooling," he wrote.

Geeta Rao Gupta, former president of the International Center for Research on Women and senior fellow for global development at the Bill and Melinda Gates Foundation, who is now deputy executive director of UNICEF, the United Nations Children's Fund, argues that women must have access to the services that would allow them to be at the center in decisions and choices about family size.

"It's a woman's decision," she said. "If you make available to her the information and the contraceptives that are out there, then she will choose to use them the way that she thinks best for herself and for her family. Yes, they may have to take on cultural norms. They may have to negotiate within their families to be able to meet those needs. But that's the challenge they face. ... Our responsibility is to insure that when they are able to meet those challenges, we can provide them with

the quality services that they need. That's all we can do."

Challenges in middle- and high-income countries

In the middle-income countries where fertility rates have dropped below replacement level and reproductive health services, including family planning, may be well established, Osotimehin said, issues such as migration are taking centre stage. There are also problems of inequitable distribution of wealth, violence against women or denial of their rights and the exclusion of indigenous people.

"In the second group of countries we will be doing a lot more upstream engagement," he said, "It will be about social policies," and it will be about helping countries monitor and evaluate their programmes to determine whether they reach marginalized or vulnerable people and empower women and young people. In the middle-income countries, UNFPA can also help with good quality data collection and analysis for better understanding of trends, and with advising government policymakers.

Mexico illustrates some of the issues confronting middle-income countries today, Osotimehin said. "The population is stable. They have a very high contraceptive prevalence rate." But the country is also experiencing large movements of people—from rural to urban areas, from urban to periurban areas, and to other countries. So a large component of UNFPA's work in Mexico concentrates on helping the Government manage migration, especially into cities, to make sure that the transition makes life better for people and does not exacerbate inequalities. "How do we insure that Mexico City,

Irma Guevara
and children,
Metlatónoc, Mexico.
Guevara is a na
savi, a former
migrant to the USA.
©UNFPA/Ricardo
Ramirez Arriola



as it grows, is able to cater to everybody in terms of access to reproductive services and in terms of being able to make choices we expect that every individual should be able to make? How do we reduce the prevalence of gender-based violence? How do we make sure that young women still have access to education and can realize their potential when they move to the city?"

The third group of countries—the high-income ones—are also experiencing and trying to manage migration, but generally of people moving into the country. Most of these countries are also confronting the increasingly important issue of ageing populations and devising policies to meet the needs of older people while keeping them engaged in their communities. "Each society, each community, must prepare and put in place structures that can accommodate older people and treat with dignity those who have earned their age," Osotimehin says.

Beyond 2014

The Programme of Action of the ICPD is set to expire in 2014, with many of the objectives

still out of reach in many countries. "Fortunately there is a General Assembly resolution that tells us we can extend the ICPD in 2014 and continue, because there is so much still to do," Osotimehin said. But that is not the case for the Millennium Development Goals, which must be achieved by 2015. UNFPA's work contributes to the achievement of several of the goals, dealing with poverty, gender, maternal health and the special target for universal access to reproductive health. "We don't have, as we speak, an actual committed position on what the development agenda is going to be after the Millennium Development Goals." But regardless of what happens in the run-up to 2015 and well into the future, "there have to be more voices from the global South, and many of them should be those of young people," Osotimehin said. "Those voices, young or old, should be heard at every level from the national to the regional and international," he added.

Lola Dare, executive secretary of the African Council for Sustainable Health Development and chief executive officer of the Center for Health Sciences, training and Research, registered in Nigeria and the United Kingdom, is an advocate for more active participation by civil society as well as governments of developing nations to influence opinion on a global stage. "It's a failure of advocacy from the South" that funds for reproductive health can be so easily cut, she said. In donor nations, "people don't hear us," she said. "They've seen a few fliers of malnourished children but [know little] about the reality of our lives. We need to say, 'These issues are important to us.' It's not about building space. The space is there. Our southern voices ought to fill the space with their own perspective."

Osotimehin is already looking ahead to a series of major United Nations conferences, such as 20th anniversary of the "Earth Summit" in 2012 and the 20th anniversary of the ICPD in 2014, as opportunities to focus on the huge global youth population so that young people can be "part of the conversation."

The need now is for the global community to engage young people, to guarantee that they can have the appropriate education, not just education in the traditional sense, but education that makes a difference to their lives—and "that must include age-appropriate sexuality education, so they can make choices about their lives, decide when they want to have children, how many—if any—they want to have and how much spacing between pregnancies." Osotimehin said the organization will help empower young people to make these decisions and increase access to the services they need. "Young people are one of the determinants of tomorrow. They are the ones who will determine the momentum of growth in the future."

Speaking of the reproductive health and sexuality of young people, girls in particular, Dare said that in her opinion the message of Cairo was often interpreted as "just say no," and that there was much more attention needed to help the young through their self-discovery. A five-year study in Nigeria, in which Osotimehin was involved, found that people have absorbed a lot of information about reproductive health, Dare said, "but young girls say that this tells me when to say no to sex; it doesn't tell me when, and how, to say yes."

The study concluded that "youth" was too broad a category and that separate agerelated communications strategies should be created to reach categories of young people with messages appropriate to them, whether the sexuality education is a formal part of a school curriculum or taking place in a variety of more informal settings, among them youth groups, youth-friendly family planning centres or reproductive health clinics. The youngest adolescents may not have reached a sexually active stage, she said.

At the age of 15 your body makes you ask when and why you might say yes, Dare said. From ages 18 to 22, she added young people may say, "I would like to have sex. I need to know what my options are." Young adults, already sexually active, need information too. Dare said that in sexuality education there has to be "a continuum of sexuality from adolescence to adulthood. That really empowers, and not only provides information." These age-appropriate strategies—for girls and boys as well as men and women—"help guide them through personally tumultuous years and prepare them to make good choices as they establish their place in society," she said.

In order for girls and women to fulfill their potential and make the life choices envisioned by the international community at the ICPD, Rao Gupta of UNICEF said, "they need education, they need protection from violence, and all the other things that make for quality living.... The Cairo agenda acknowledged that family planning was one piece of women's rights, and that we are creating the conditions to fulfill women's rights and to insure that they are not discriminated against in any way."

A report of the Secretary-General on the amount of money needed to implement the Cairo Programme of Action says that about \$68 billion would be needed in 2011 alone to cover the costs of sexual and reproductive health initiatives, including family planning, HIV-prevention and AIDS treatment, and research and data gathering.

Of that amount, countries themselves are expected to contribute \$34 billion. International and bilateral donors are together expected to provide \$10.8 billion, leaving a nearly \$25 billion gap. The report warns that without a firm commitment to population, reproductive health and gender issues, "it is unlikely that the goals and targets of the

International Conference on Population and Development and the Millennium Summit will be met."

"Investments that empower individuals to make their own decisions" will have the greatest impact on demographic trends such as population growth, Osotimehin said at a meeting of the Commission for Population and Development in April 2011. "In the end, it is the choices and opportunities enjoyed by individuals that determine population dynamics."

"Population is about people, supporting rights and human dignity and creating conditions for each one of us to live on a healthy planet and reach our full potential," he said.

UNFPA AT WORK

UNFPA has been the leading provider of United Nations assistance in the population field since it became operational in 1969. The world's largest international source of population assistance, UNFPA works with developing countries, countries with economies in transition and other countries at their request to help them address reproductive health and population issues. It raises awareness of these issues in all countries.

UNFPA's main tasks are to help ensure universal access to reproductive health, including family planning and sexual health, to all couples and individuals; to support population and development strategies that enable capacity-building in programming; to promote awareness of population and development issues; and to advocate for the mobilization of the resources and political will needed to accomplish its work. UNFPA is guided by, and

promotes, the principles of the 1994 International Conference on Population and Development Programme of Action. The ICPD goals, especially those pertaining to reproductive health and reproductive rights, gender equality, women's empowerment and girls' education, are an integral part of efforts to improve quality of life and achieve sustainable social and economic development.

In 2010, UNFPA provided support to 123 developing countries, areas and territories: 45 in sub-Saharan Africa, 14 in the Arab States, 20 in Eastern Europe and Central Asia, 21 in Latin America and the Caribbean, and 23 in Asia and the Pacific. Sub-Saharan Africa received the largest percentage of UNFPA regular resources at \$135.9 million, followed by Asia and the Pacific at \$96 million, Latin America and the Caribbean at \$38.8 million, the Arab States at \$27.3 million, and Eastern Europe and Central

Asia at \$16.9 million. Of the total regular resourced expenditures, UNFPA provided \$174.1 million in assistance for reproductive health, \$76.6 million for population and development, \$43.5 million for gender equality and women's empowerment and \$72.1 million for programme coordination and assistance.

As the lead United Nations organization for the follow-up and implementation of the International Conference on Population and Development's Programme of Action, UNFPA is fully committed to working in partnership with Governments, the United Nations system, development banks, bilateral aid agencies, nongovernmental organizations and civil society to ensure that the ICPD goals and objectives are met.



HIV activists and peer educators at Gerção Biz (left to right): Katarina Muzima, Celeste Alberto, Ancha Daniel, Adriano Andrade, Lina Tivane, Maria Salomé. Maputo, Mozambique ©UNFPA/Pedro Sá da Bandeira

Osotimehin said UNFPA's goal is to promote sexual and reproductive health and reproductive rights, reduce maternal mortality, and accelerate progress on the ICPD agenda and Millennium Development Goal 5, the one where the least progress has been made. "We need to empower and improve the lives of underserved populations, especially women, youth and adolescents," and the organization's actions must be "enabled by our understanding of population dynamics, human rights and gender equality."

"As long as girls continue to be married off as child brides and get pregnant before their minds and bodies are ready, as long as women and couples cannot plan and space their births as they desire, as long as women suffer from fistula or die from complications during pregnancy and delivery, as long as young people remain at high risk and lack

appropriate health information and services, as long as people continue to be newly infected with HIV, UNFPA will champion the rights of every individual to sexual and reproductive health. We will promote universal access to reproductive health by 2015. We will support countries in collecting, analyzing and using population data to guide policies, programmes and budgets. "The future depends on the choices that we make now."

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Brazil 20.6 58 56 97 96 94 78 85 97 99 80 77 6 Brunei Darussalam 6.7 21 26 99 97 97 88 91 100 100 Bulgaria 10.0 13 42 99 97 98 85 82 97 97 63 40 30 15 17 <0.1	Bosnia and Herzegovin	a 14.4	9	15	100					100	99	36	11			44		
Brunei Darussalam 6.7 21 26 99 97 97 88 91 100 100 Bulgaria 10.0 13 42 99 97 98 85 82 97 97 63 40 30 15 17 <0.1 <0.1 Burkina Faso 166.4 560 131 54 68 61 18 14 47 33 17 13 29 23 19 0.5 0.8 Burundi 166.3 970 30 34 91 89 10 8 77 75 9 8 29 30 1.0 2.1 Cambodia 87.5 290 52 44 90 87 36 32 89 86 40 27 25 45 50 0.1 0.1 Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 72 0.1 0.1 Cape Verde 27.5 94 92 78 86 84 97 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.2 0.1	Botswana	56.9	190	51	94	88	91	56	64	94	96	44	42		33	40	5.2	11.8
Bulgaria 10.0 13 42 99 97 98 85 82 97 97 63 40 30 15 17 <0.1 <0.1 Burkina Faso 166.4 560 131 54 68 61 18 14 47 33 17 13 29 23 19 0.5 0.8 Burundi 166.3 970 30 34 91 89 10 8 77 75 9 8 29 30 1.0 2.1 Cambodia 87.5 290 52 44 90 87 36 32 89 86 40 27 25 45 50 0.1 0.1 Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 72 74 72 74 72 77 75 </td <td>Brazil</td> <td>20.6</td> <td>58</td> <td>56</td> <td>97</td> <td>96</td> <td>94</td> <td>78</td> <td>85</td> <td>97</td> <td>99</td> <td>80</td> <td>77</td> <td>6</td> <td></td> <td></td> <td></td> <td></td>	Brazil	20.6	58	56	97	96	94	78	85	97	99	80	77	6				
Burkina Faso 166.4 560 131 54 68 61 18 14 47 33 17 13 29 23 19 0.5 0.8 Burundi 166.3 970 30 34 91 89 10 8 77 75 9 8 29 30 1.0 2.1 Cambodia 87.5 290 52 44 90 87 36 32 89 86 40 27 25 45 50 0.1 0.1 Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 0.1 0.1 Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57	Brunei Darussalam	6.7	21	26	99	97	97	88	91	100	100							
Burundi 166.3 970 30 34 91 89 10 8 77 75 9 8 29 30 1.0 2.1 Cambodia 87.5 290 52 44 90 87 36 32 89 86 40 27 25 45 50 0.1 0.1 Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 0.1 0.1 Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Bulgaria	10.0	13	42	99	97	98	85	82	97	97	63	40	30	15	17	<0.1	<0.1
Cambodia 87.5 290 52 44 90 87 36 32 89 86 40 27 25 45 50 0.1 0.1 Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 20 34 32 1.6 3.9 Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100	Burkina Faso	166.4	560	131	54	68	61	18	14	47	33	17	13	29	23	19	0.5	8.0
Cameroon, Republic of 154.3 600 141 63 94 82 88 84 29 12 20 34 32 1.6 3.9 Canada 6.1 12 14 98 99 100 74 72 0.1 0.1 0.1 Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Burundi	166.3	970	30	34	91	89	10	8	77	75	9	8	29		30	1.0	2.1
Canada 6.1 12 14 98 99 100 74 72 0.1 0.1 0.1 Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 20 8 1.0 2.5	Cambodia	87.5	290	52	44	90	87	36	32	89	86	40	27	25	45	50	0.1	0.1
Cape Verde 27.5 94 92 78 86 84 97 99 61 57 17 36 36 Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Cameroon, Republic of	154.3	600	141	63	94	82			88	84	29	12	20	34	32	1.6	3.9
Central African Republic 170.8 850 133 53 77 57 13 8 72 56 19 9 16 26 17 1.0 2.2 Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Canada	6.1	12	14	98	99	100					74	72				0.1	0.1
Chad 209.0 1200 193 14 72 50 16 5 54 37 3 2 21 20 8 1.0 2.5 Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Cape Verde	27.5	94	92	78	86	84			97	99	61	57	17	36	36		
Chile 8.5 26 51 100 95 94 83 86 99 99 64 58 0.2 0.1	Central African Republi	c 170.8	850	133	53	77	57	13	8	72	56	19	9	16	26	17	1.0	2.2
	Chad	209.0	1200	193	14	72	50	16	5	54	37	3	2	21	20	8	1.0	2.5
China 19.1 38 5 98 99 99 85 84 2	Chile	8.5	26	51	100	95	94	83	86	99	99	64	58				0.2	0.1
	China	19.1	38	5	98					99	99	85	84	2				

	Matom	al and No	whove Hee	lth	Ed	restien					Sowet	and Donued	ustive Her	l+b -			
Country, territory or other area	Matern Under age 5 mortality rate, per 1,000 live births, 2009	Maternal mortality ratio, per 100,000 live births, 2008	Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008*	Births attended by skilled health personnel, per cent, 1992/2009*		cent ool- ildren,	Second	age n,	populat	tion aged per cent,		Contraceptive prevalence rate, women aged 15-49, modern method, 1990/2010*		Populati 15-24 w comprel correct of HIV//		aged 15 per cen	nce pulation
Colombia	18.9	85	96	96	94	94	71	77	98	98	78	68	6	male	iemaie	0.2	0.1
Comoros	104.0	340	95	62	79	67			86	84	26	19	35		10	<0.1	<0.1
Congo, Democratic Republic of the ²	198.6	670	127	74	34	32			69	62	21	6	24	21	15		
Congo, Republic of the	128.2	580	132	83	66	62			87	78	44	13	16	22	10	1.2	2.6
Costa Rica	10.6	44	69	99	87	88	44	49	98	99	80	72	5			0.2	0.1
Côte d'Ivoire	118.5	470	111	57	64	51			72	60	13	8	28	28	18	0.7	1.5
Croatia	5.4	14	14	100	98	100	87	89	100	100						<0.1	<0.1
Cuba	5.8	53	44	100	100	99	82	83	100	100	73	72			52	0.1	0.1
Cyprus	3.5	10	5	100	99	99	95	97	100	100							
Czech Republic	3.5	8	12	100	88	91					72	63	11			<0.1	<0.1
Denmark	4.0	5	6		95	97	88	92								0.1	0.1
Djibouti	93.5	300	27	61	51	44	28	20			18	17		22	18	0.8	1.9
Dominica	9.8		47	94	72	80	88	91									
Dominican Republic	31.9	100	98	98	82	83	58	65	95	97	73	70	11	34	41	0.3	0.7
Ecuador	24.2	140	100	99	98	100	59	60	95	96	73	59	7			0.2	0.2
Egypt	21.0	82	50	79	97	93	73	69	88	82	60	58	9	18	5	<0.1	<0.1
El Salvador	16.6	110	68	92	95	97	54	56	95	97	73	66	9		27	0.4	0.3
Equatorial Guinea	145.1	280	128	65	72	65			98	98	10	6			4	1.9	5.0
Eritrea	55.2	280	85	28	43	37	32	23	91	84	8	5	27		37	0.2	0.4
Estonia	5.5	12	25	100	96	97	88	91	100	100	70	56				0.3	0.2
Ethiopia	104.4	470	109	6	82	76	17	11	62	39	15	14	34	33	21		
Fiji	17.6	26	30	99	90	89	76	83								0.1	0.1
Finland	3.2	8	9	100	96	96	96	97								0.1	<0.1
France	3.9	8	11	99	99	99	98	99			77	75	2			0.2	0.1
Gabon	68.9	260	144	86	82	81			98	96	33	12	28	22	24	1.4	3.5
Gambia	102.8	400	104	57	69	74	43	42	70	58	18	13			39	0.9	2.4
Georgia	29.1	48	44	98	96	93	82	79	100	100	47	27	16		15	<0.1	<0.1
Germany	4.2	7	10		99	99					70	66				0.1	<0.1
Ghana	68.5	350	70	57	77	78	48	44	81	78	24	17	35	34	28	0.5	1.3
Greece	3.4	2	11		99	100	91	91	99	99	76	46				0.1	0.1
Grenada	14.5		54	99	98	99	93	85			54	52					
Guatemala	39.8	110	92	41	98	95	41	39	89	84	43	34	28			0.5	0.3
Guinea	141.5	680	153	46	77	67	36	22	67	51	9	4	21	23	17	0.4	0.9
Guinea-Bissau	192.6	1000	170	39	61	44	12	7	78	62	10	6			18	0.8	2.0
Guyana	35.3	270	90	83	99	99					43	40		47	50	0.6	0.8
Haiti	86.7	300	69	26	21	22					32	24	38	40	34	0.6	1.3
Honduras	29.7	110	108	67	96	98			93	95	65	56	17		30	0.3	0.2
Hungary	6.3	13	19	100	96	95	91	91	98	99	81	71	7			<0.1	<0.1
Iceland	3.0	5	15		98	98	89	91								0.1	0.1
India	65.6	230	45	47	97	94			88	74	56	49	13	36	20	0.1	0.1

	Matern	al and Ne	wborn Hea	lth	Edi	ucation					Sexual a	nd Reprod	uctive Hea	lth			
Country, territory or other area	Under age 5 mortality rate, per 1,000 live births, 2009	Maternal mortality ratio, per 100,000 live births, 2008	Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008*	Births attended by skilled health personnel, per cent, 1992/2009*	Primary enrolm net per of scho age chi 1991/2 male	cent ool- ildren,	Seconda enrolme per cent school-a children, 1999/20 male	of age		tion aged per cent,	Contraceptive prevalence rate, women aged 15-49, any method, 1990/2010*	Contraceptive prevalence rate, women aged 15-49, modern method, 1990/2010*	Unmet need for family planning, per cent, 1992/2009*	15-24 w comprel correct of HIV//	ith	aged 15	nce opulation
Indonesia	38.9	240	52	79			69	68	97	96	61	57	9	15	10	0.1	<0.1
Iran (Islamic Republic (of) 30.9	30	31	97	95	92			97	96	73	59				<0.1	<0.1
Iraq	43.5	75	68	80	93	81	48	38	85	80	50	33			3		
Ireland	4.2	3	17	100	96	98	86	90			65	61				0.1	0.1
Israel	4.4	7	15		97	98	85	88								0.1	<0.1
Italy	4.0	5	7		100	99	94	95	100	100	63	41	12			<0.1	<0.1
Jamaica	30.9	89	60	97	82	79	75	78	92	98	69	66	12		60	1.0	0.7
Japan	3.3	6	5	100			98	98			54	44				<0.1	<0.1
Jordan	25.3	59	28	99	93	94	80	84	99	99	59	41	12		13		
Kazakhstan	28.7	45	31	100	99	100	90	91	100	100	51	49	9		22	0.1	0.2
Kenya	84.0	530	103	44	82	83	51	48	92	93	46	39	26	47	34	1.8	4.1
Kiribati	46.2		39	63			64	71			36	31					
Korea, Democratic People's Republic of	33.3	250	1	97					100	100	69	58					
Korea, Republic of	4.9	18	2	100	100	98	97	94			80	70				<0.1	<0.1
Kuwait	9.9	9	13	98	94	93	77	80	98	99	52	39					
Kyrgyzstan	36.6	81	29	98	91	91	79	80	100	100	48	46	12		20	0.1	0.1
Lao People's Democratic Republic	58.6	580	110	20	84	81	39	33	89	79	38	29	27			0.1	0.2
Latvia	8.0	20	18	100	99	98			100	100	68	56	17			0.2	0.1
Lebanon	12.4	26	18	98	92	90	71	79	98	99	58	34				0.1	<0.1
Lesotho	83.5	530	98	55	71	75	22	36	86	98	47	46	31	18	26	5.4	14.2
Liberia	112.0	990	177	46	85	66	25	14	70	80	11	10	36	27	21	0.3	0.7
Libyan Arab Jamahiriya	a 18.5	64	4	94					100	100	45	26					
Lithuania	6.2	13	19	100	96	96	91	92	100	100	51	33	18			<0.1	<0.1
Luxembourg	2.6	17	10	100	97	98	82	85								0.1	0.1
Madagascar	57.7	440	148	51	99	100	23	24	73	68	40	28	19	16	19	0.1	0.1
Malawi	110.0	510	177	54	89	94	26	24	87	85	41	38	28	42	42	3.1	6.8
Malaysia	6.1	31	12	98	96	96	66	71	98	99	55	30				0.1	<0.1
Maldives	12.7	37	14	84	97	95	47	54	99	99	35	27				<0.1	<0.1
Mali	191.1	830	190	49	84	70	37	23	47	31	8	6	31	22	18	0.2	0.5
Malta	6.7	8	17	98	91	92	79	82	98	99	86	46				<0.1	<0.1
Martinique			21														
Mauritania	117.1	550	88	61	74	79	17	15	71	63	9	8	32	14	5	0.4	0.3
Mauritius³	17.0	36	35	98	93	95	79	81	95	97	76	39	4			0.3	0.2
Melanesia ⁴	57.7	222	66	58	83	82	55	57	67	70	36	21	11		15	0.3	0.7
Mexico	16.8	85	90	93	99	100	71	74	98	98	71	67	12			0.2	0.1
Micronesia⁵	29.9		51	80	73	72	59	65	-	-	52	46	8	39	27		
Moldova, Republic of	16.7	32	26	100	91	90	79	80	99	100	68	43	7	39	42	0.1	0.1
Mongolia	28.8	65	19	99	99	99	79	85	93	97	66	61	5		31	<0.1	<0.1
Montenegro	9.0	15	17	99							39	17			30		

	Matern	al and Ne	ewborn Hea	lth	Ed	ucation					Sexual a	ınd Reprod	uctive Hea	lth			
Country, territory or other area	Under age 5 mortality rate, per 1,000 live births, 2009	Maternal mortality ratio, per 100,000 live births, 2008	Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008*	Births attended by skilled health personnel, per cent, 1992/2009*	Primar enrolm net pe of scho age ch 1991/2 male	r cent ool- ildren,		-age n,	populat	tion aged per cent,	Contraceptive prevalence rate, women aged 15-49, any method, 1990/2010*	Contraceptive prevalence rate, women aged 15-49, modern method, 1990/2010*	Unmet need for family planning, per cent, 1992/2009*	15-24 w compre correct of HIV/	ion aged vith hensive knowledge AIDS, per 000/2008 female	aged 1: per cer	
Morocco	37.5	110	18	63	92	88	37	32	85	68	63	52	10		12	0.1	0.1
Mozambique	141.9	550	185	55	82	77	17	15	78	62	17	12	18	33	14	3.1	8.6
Myanmar	71.2	240	17	57			49	50	96	95	41	38	19			0.3	0.3
Namibia	47.5	180	74	81	88	93	49	60	91	95	55	54	21	62	65	2.3	5.8
Nepal	48.2	380	106	19	81	66			86	75	48	44	25	44	28	0.2	0.1
Netherlands	4.4	9	4	100	99	99	88	89			69	67				0.1	<0.1
New Zealand	6.2	14	32	100	99	100	90	92			75	72				<0.1	<0.1
Nicaragua	25.6	100	109	74	93	94	42	48	85	89	72	69	8		22	0.1	0.1
Niger	160.3	820	199	33	60	48	11	7	52	23	11	5	16	16	13	0.2	0.5
Nigeria	137.9	840	123	39	66	60	29	22	78	65	15	8	20	33	22	1.2	2.9
Norway	3.3	7	9		99	99	96	96			88	82				<0.1	<0.1
Occupied Palestinian Territory	29.5		60	99	77	78	82	87	99	99	50	39					
Oman	12.0	20	8	99	71	73	83	81	98	98	32	25				<0.1	<0.1
Pakistan	87.0	260	20	39	72	60	36	29	79	59	27	19	25		3	0.1	<0.1
Panama	22.9	71	83	92	99	99	63	69	97	96						0.4	0.3
Papua New Guinea	68.3	250	70	53					65	69	36	20				0.3	8.0
Paraguay	22.6	95	65	82	91	91	57	62	99	99	79	70	5			0.2	0.1
Peru	21.3	98	59	71	97	98	75	75	98	97	73	50	7		19	0.2	0.1
Philippines	33.1	94	53	62	91	93	55	66	94	96	51	34	22	18	12	<0.1	<0.1
Poland	6.7	6	14	100	95	96	93	95	100	100	73	28				<0.1	<0.1
Polynesia ⁶	20.5		26	98	95	94	62	73	99	100	30	28	35				
Portugal	3.7	7	17	100	99	99	84	92	100	100	87	83				0.3	0.2
Qatar	10.8	8	16	99	99	98	65	96	99	99	43	32				<0.1	<0.1
Romania	11.9	27	36	98	96	97	74	72	97	98	70	38	12	1	3	0.1	<0.1
Russian Federation	12.4	39	29	100					100	100	80	65				0.2	0.3
Rwanda	110.8	540	43	52	95	97			77	77	36	26	38	54	51	1.3	1.9
Samoa	25.3		29	100	94	94	60	68	99	100	29	27	46				
Sao Tome and Principe	77.8		91	82	88	87	30	35	95	96	38	33	37		44		
Saudi Arabia	21.0	24	7	91	85	84	70	76	98	96	24	29					
Senegal	92.8	410	96	52	75	76	24	18	58	45	12	10	32	24	19	0.3	0.7
Serbia	7.1	8	22	99	96	96	89	91	99	99	41	19			42	0.1	0.1
Seychelles	12.4		59		94	96	95	99	99	99							
Sierra Leone	192.3	970	143	42			30	20	66	46	8	6	28	28	17	0.6	1.5
Singapore	2.8	9	5	100					100	100	62	55				<0.1	<0.1
Slovakia	6.9	6	21	100							80	66				<0.1	<0.1
Slovenia	3.0	18	5	100	98	97	91	92	100	100	79	63	9			<0.1	< 0.1
Solomon Islands	35.8	100	70	70	67	67	32	29	90	80	35	27	11				
Somalia	180.0	1200	123	33							15	1			4	0.4	0.6
South Africa	61.9	410	54	91	92	94	59	65	96	98	60	60	14			4.5	13.6
Spain	4.1	6	13		100	100	93	97	100	100	66	62	12			0.2	0.1

	Matern	al and Ne	wborn Hea	lth	Edi	ucation					Sexual a	nd Reprodi	uctive Hea	lth			
Country, territory or other area	Under age 5 mortality rate, per 1,000 live births, 2009	Maternal mortality ratio, per 100,000 live births, 2008	Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008*	Births attended by skilled health personnel, per cent, 1992/2009*	Primary enrolm net per of scho age chi 1991/2 male	cent ol- ldren,		age 1,	populat	ion aged per cent,	Contraceptive prevalence rate, women aged 15-49, any method, 1990/2010*	Contraceptive prevalence rate, women aged 15-49, modern method, 1990/2010*	Unmet need for family planning, per cent, 1992/2009*	of HIV/	ith	aged 15 per cen	nce pulation
Sri Lanka	14.7	39	28	99	99	100			97	99	68	53	7			<0.1	<0.1
St. Kitts and Nevis	14.9		67	100	93	98	85	92									
St. Vincent and the Grenadines	12.4		72	100	100	97	85	95									
St. Lucia	19.8		50	98	94	93	77	82									
Sudan ⁷	108.2	750	72	49	46	38			89	82	8	6	26			0.5	1.3
Suriname	26.3	100	66	90	91	90	55	74	96	95	46	45			41	0.6	0.4
Swaziland	73.0	420	111	69	82	84	31	26	92	95	51	47	24	52	52	6.5	15.6
Sweden	2.8	5	6		95	94	99	99			75	65				<0.1	<0.1
Switzerland	4.4	10	4		99	100	87	83			82	78				0.2	0.1
Syrian Arab Republic	16.2	46	75	93	99	93	70	69	96	93	58	43			7		
Tajikistan	61.2	64	27	88	99	96	88	77	100	100	37	32			2	<0.1	<0.1
Tanzania, the United Republic of	107.9	790	139	43	96	95			79	76	34	26	22	42	39	1.7	3.9
Thailand	13.5	48	43	97	91	89	68	76	98	98	81	80	3		46		
The former Yugoslav Republic of Macedon	nia 10.5	9	21	99	92	92	82	81	99	99	14	10			27		
Timor-Leste, Democratic Republic	of 56.4	370	59	18	79	76					22	21	4				
Togo	97.5	350	89	62	98	89	30	15	87	80	17	11	32		15	0.9	2.2
Trinidad and Tobago	35.3	55	33	98	96	95	72	77	100	100	43	38			54	1.0	0.7
Tunisia	20.7	60	6	95	99	100	67	76	98	96	60	52	12			<0.1	<0.1
Turkey	20.3	23	51	91	96	94	77	70	99	94	73	46	6			<0.1	<0.1
Turkmenistan	45.3	77	21	100					100	100	62	45	10		5		
Tuvalu	35.1		23	98							31	22	24				
Uganda	127.5	430	159	42	96	99	16	15	89	86	24	18	41	38	32	2.3	4.8
Ukraine	15.1	26	30	99	89	90	84	85	100	100	67	48	10	43	45	0.2	0.3
United Arab Emirates	7.4	10	22	99	99	99	82	84	94	97	28	24					
United Kingdom	5.5	12	26	99	100	100	92	95			84	84				0.2	0.1
United States of Ameri	ca 7.8	24	41	99	93	94	88	89			79	73	7			0.3	0.2
Uruguay	13.4	27	60	100	98	98	66	73	99	99	77	75				0.3	0.2
Uzbekistan	36.1	30	26	100	92	90	93	91	100	100	65	59	14	7	31	<0.1	< 0.1
Vanuatu	16.3		92	74	99	97	41	35	94	94	38	37			15		
Venezuela (Bolivarian Republic o	of) 17.5	68	101	95	92	93	67	75	98	99	70	62	19				
Viet Nam	23.6	56	35	88	97	92			97	96	80	69	5	50	44	0.1	0.1
Yemen	66.4	210	80	36	80	66	49	26	95	70	28	19	39		2		
Zambia	141.3	470	151	47	96	97			82	68	41	27	27	37	34	4.2	8.9
Zimbabwe	89.5	790	101	80	90	91			98	99	60	58	13	46	44	3.3	6.9

	Matern	al and Ne	wborn Hea	lth	Edι	ıcation					Sexual a	nd Reprodu	ıctive Hea	lth			
World and regional data	Under age 5 mortality rate, per 1,000 live births, 2009	Maternal mortality ratio, per 100,000 live births, 2008	Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008*	Births attended by skilled health personnel, per cent, 1992/2009*	Primary enrolment per of scho age chi 1991/20 male	ent, cent ol- Idren,	Seconda enrolme per cen school- childrer 1999/2 male	t of age ı,		tion aged per cent,	Contraceptive prevalence rate, women aged 15-49, any method, 1990/2010*	Contraceptive prevalence rate, women aged 15-49, modern method, 1990/2010*	Unmet need for family planning, per cent, 1992/2009*	15-24 w compre correct of HIV/		HIV/AID prevalen rate, pop aged 15 per cent male	oulation to 24,
World Total	61.7	265	49	66	89	86	61	61	91	86	63	56	22	31	19	0.4	0.7
More Developed Regions ⁸	7.1	18	24	99	96	96	90	91	99	100	72	62	12	29	32	0.2	0.1
Less Developed Regions ⁹	66.9	293	53	63	88	85	53	53	90	84	61	55	23	31	19	0.4	0.8
Least Developed Countries ¹⁰	122.4	597	120	39	76	73	31	24	75	65	30	24	27	28	20	0.8	1.7
Arab States ¹¹	50.7	247	45	72	86	80	63	59	91	84	47	39	21	18	7	0.2	0.3
Asia and the Pacific ¹²	50.0	193	34	64	93	89	22	56	93	86	67	61	21	32	18	0.1	0.1
Eastern Europe and Central Asia ¹³	19.7	30	31	97	94	94	85	83	99	99	70	50	13	20	26	0.1	0.2
Latin America and the Caribbean ¹⁴	22.4	85	74	89	94	94	72	76	97	98	73	67	17	34	30	0.3	0.2
Sub-Saharan Africa ¹⁵	130.1	638	122	47	76	72	30	25	76	67	25	19	26	32	25	1.6	4.0

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Afghanistan	32.4	16.7	15.6	3.1	23	6.0	49	49	37	
Albania	3.2	1.6	1.6	0.3	52	1.5	74	80	98	2
Algeria	36.0	18.2	17.8	1.4	66	2.1	72	75	95	7
Angola	19.6	9.7	9.9	2.7	59	5.1	50	53	57	54
Antigua Barbuda	0.0	0.0	0.0	1.0	30				95	
Argentina	40.8	19.9	20.8	0.9	92	2.2	72	80	90	3
Armenia	3.1	1.4	1.7	0.3	64	1.7	71	77	90	4
Australia ¹	22.6	11.3	11.3	1.3	89	1.9	80	84	100	
Austria	8.4	4.1	4.3	0.2	68	1.3	78	84	100	
Azerbaijan	9.3	4.6	4.7	1.2	52	2.1	68	74	45	2
Bahamas	0.3	0.2	0.2	1.1	84	1.9	73	79	100	
Bahrain	1.3	0.8	0.5	2.1	89	2.4	75	76		
Bangladesh	150.5	76.2	74.3	1.3	28	2.2	69	70	53	50
Barbados	0.3	0.1	0.1	0.2	44	1.6	74	80	100	
Belarus	9.6	4.4	5.1	-0.3	75	1.5	65	76	93	2
Belgium	10.8	5.3	5.5	0.3	97	1.8	77	83	100	
Belize	0.3	0.2	0.2	2.0	52	2.7	75	78	90	13
Benin	9.1	4.5	4.6	2.7	42	5.1	55	59	12	47
Bhutan	0.7	0.4	0.3	1.5	35	2.3	66	70	65	26
Bolivia (Plurinational State of)	10.1	5.0	5.1	1.6	67	3.2	65	69	25	12
Bosnia and Herzegovina	3.8	1.8	1.9	-0.2	49	1.1	73	78	95	2
Botswana	2.0	1.0	1.0	1.1	61	2.6	54	51	60	31
Brazil	196.7	96.7	99.9	0.8	87	1.8	71	77	80	5
Brunei Darussalam	0.4	0.2	0.2	1.7	76	2.0	76	81		
Bulgaria	7.4	3.6	3.8	-0.7	71	1.5	70	77	100	2
Burkina Faso	17.0	8.4	8.5	3.0	26	5.8	55	57	11	57
Burundi	8.6	4.2	4.4	1.9	11	4.1	50	53	46	81
Cambodia	14.3	7.0	7.3	1.2	20	2.4	62	65	29	26
Cameroon, Republic of	20.0	10.0	10.0	2.1	58	4.3	51	54	47	33
Canada	34.3	17.0	17.3	0.9	81	1.7	79	83	100	
Cape Verde	0.5	0.2	0.3	0.9	61	2.3	71	78	54	21
Central African Republic	4.5	2.2	2.3	2.0	39	4.4	48	51	34	62
Chad	11.5	5.7	5.8	2.6	28	5.7	49	52	9	62
Chile	17.3	8.5	8.7	0.9	89	1.8	76	82	96	2
China	1347.6	699.6	647.9	0.4	47	1.6	72	76	55	16
Colombia	46.9	23.1	23.8	1.3	75	2.3	70	78	74	16

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Comoros	0.8	0.4	0.4	2.5	28	4.7	60	63	36	46
Congo, Democratic Republic of the ²	67.8	33.7	34.1	2.6	35	5.5	47	51	23	59
Congo, Republic of the	4.1	2.1	2.1	2.2	62	4.4	57	59	30	54
Costa Rica	4.7	2.4	2.3	1.4	64	1.8	77	82	95	2
Côte d'Ivoire	20.2	10.3	9.9	2.2	51	4.2	55	58	23	23
Croatia	4.4	2.1	2.3	-0.2	58	1.5	73	80	99	2
Cuba	11.3	5.7	5.6	0.0	75	1.5	77	81	91	
Cyprus	1.1	0.6	0.5	1.1	70	1.5	78	82	100	
Czech Republic	10.5	5.2	5.4	0.3	74	1.5	75	81	98	2
Denmark	5.6	2.8	2.8	0.3	87	1.9	77	81	100	
Djibouti	0.9	0.5	0.5	1.9	76	3.6	57	60	56	19
Dominica	0.0	0.0	0.0	0.0	67				81	
Dominican Republic	10.1	5.0	5.0	1.2	69	2.5	71	77	83	4
Ecuador	14.7	7.3	7.3	1.3	67	2.4	73	79	92	5
Egypt	82.5	41.4	41.1	1.7	43	2.6	72	76	94	2
El Salvador	6.2	3.0	3.3	0.6	64	2.2	68	77	87	6
Equatorial Guinea	0.7	0.4	0.4	2.7	40	5.0	50	53	51	
Eritrea	5.4	2.7	2.7	2.9	22	4.2	60	64	14	
Estonia	1.3	0.6	0.7	-0.1	69	1.7	70	80	95	2
Ethiopia	84.7	42.2	42.6	2.1	17	3.8	58	62	12	39
Fiji	0.9	0.4	0.4	0.8	52	2.6	67	72		
Finland	5.4	2.6	2.7	0.3	85	1.9	77	83	100	
France	63.1	30.7	32.4	0.5	85	2.0	78	85	100	
Gabon	1.5	0.8	0.8	1.9	86	3.2	62	64	33	5
Gambia	1.8	0.9	0.9	2.7	58	4.7	58	60	67	34
Georgia	4.3	2.0	2.3	-0.6	53	1.5	71	77	95	13
Germany	82.2	40.3	41.9	-0.2	74	1.5	78	83	100	
Ghana	25.0	12.7	12.3	2.3	51	4.0	64	66	13	30
Greece	11.4	5.6	5.8	0.2	61	1.5	78	83	98	
Grenada	0.1	0.1	0.1	0.4	39	2.2	74	78	97	
Guatemala	14.8	7.2	7.6	2.5	49	3.8	68	75	81	12
Guinea	10.2	5.2	5.1	2.5	35	5.0	53	56	19	70
Guinea-Bissau	1.5	0.8	0.8	2.1	30	4.9	47	50	21	49
Guyana	0.8	0.4	0.4	0.2	29	2.2	67	73	81	8
Haiti	10.1	5.0	5.1	1.3	52	3.2	61	64	17	55
Honduras	7.8	3.9	3.9	2.0	52	3.0	71	76	71	18
Hungary	10.0	4.7	5.2	-0.2	68	1.4	71	78	100	2
Iceland	0.3	0.2	0.2	1.2	93	2.1	80	84	100	
India	1241.5	641.0	600.5	1.3	30	2.5	64	68	31	42
Indonesia	242.3	120.8	121.5	1.0	44	2.1	68	72	52	29

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Iran (Islamic Republic of)	74.8	37.9	36.9	1.0	71	1.6	72	75	83	2
Iraq	32.7	16.4	16.3	3.1	66	4.5	68	73	73	
Ireland	4.5	2.3	2.3	1.1	62	2.1	78	83	99	
Israel	7.6	3.7	3.8	1.7	92	2.9	80	84	100	
Italy	60.8	29.8	31.0	0.2	68	1.5	79	85		
Jamaica	2.8	1.4	1.4	0.4	52	2.3	71	76	83	2
Japan	126.5	61.6	64.9	-0.1	67	1.4	80	87	100	
Jordan	6.3	3.3	3.1	1.9	79	2.9	72	75	98	2
Kazakhstan	16.2	7.8	8.4	1.0	59	2.5	62	73	97	2
Kenya	41.6	20.8	20.8	2.7	22	4.6	57	59	31	20
Kiribati	0.0	0.0	0.0	1.5	44				35	
Korea, Democratic People's Republic of	24.5	12.0	12.5	0.4	60	2.0	66	72	59	
Korea, Republic of	48.4	24.1	24.3	0.4	83	1.4	77	84	100	
Kuwait	2.8	1.7	1.1	2.4	98	2.3	74	76	100	
Kyrgyzstan	5.4	2.7	2.7	1.1	35	2.6	64	72	93	3
Lao People's Democratic Republic	6.3	3.1	3.1	1.3	33	2.5	66	69	53	44
Latvia	2.2	1.0	1.2	-0.4	68	1.5	69	79	78	2
Lebanon	4.3	2.1	2.2	0.7	87	1.8	71	75	98	
Lesotho	2.2	1.1	1.1	1.0	27	3.1	50	48	29	43
Liberia	4.1	2.1	2.1	2.6	48	5.0	56	59	17	84
Libyan Arab Jamahiriya	6.4	3.2	3.2	0.8	78	2.4	73	78	97	
Lithuania	3.3	1.5	1.8	-0.4	67	1.5	67	78		2
Luxembourg	0.5	0.3	0.3	1.4	85	1.7	78	83	100	
Madagascar	21.3	10.6	10.7	2.8	30	4.5	65	69	11	68
Malawi	15.4	7.7	7.7	3.2	20	6.0	55	55	56	74
Malaysia	28.9	14.6	14.2	1.6	72	2.6	73	77	96	2
Maldives	0.3	0.2	0.2	1.3	40	1.7	76	79	98	
Mali	15.8	7.9	7.9	3.0	36	6.1	51	53	36	51
Malta	0.4	0.2	0.2	0.3	95	1.3	78	82	100	
Martinique	0.4	0.2	0.2	0.3	89	1.8	77	84		
Mauritania	3.5	1.8	1.8	2.2	41	4.4	57	61	26	21
Mauritius ³	1.3	0.6	0.7	0.5	42	1.6	70	77	91	
Melanesia ⁴	8.9	4.6	4.4	2.1	18	3.7	63	67	44	36
Mexico	114.8	56.6	58.2	1.1	78	2.2	75	80	85	4
Micronesia ⁵	0.5	0.3	0.3	1.1	67	2.7	72	76	65	
Moldova, Republic of	3.5	1.7	1.9	-0.7	47	1.5	66	73	79	2
Mongolia	2.8	1.4	1.4	1.5	62	2.4	65	73	50	2
Montenegro	0.6	0.3	0.3	0.1	61	1.6	73	77	92	2
Morocco	32.3	15.8	16.5	1.0	58	2.2	70	75	69	3
Mozambique	23.9	11.7	12.3	2.2	38	4.7	50	52	17	75

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Myanmar	48.3	23.8	24.5	0.8	34	1.9	64	68	81	
Namibia	2.3	1.2	1.2	1.7	38	3.1	62	63	33	49
Nepal	30.5	15.1	15.4	1.7	19	2.6	68	70	31	55
Netherlands	16.7	8.3	8.4	0.3	83	1.8	79	83	100	
New Zealand	4.4	2.2	2.2	1.0	86	2.1	79	83		
Nicaragua	5.9	2.9	3.0	1.4	57	2.5	71	77	52	16
Niger	16.1	8.1	8.0	3.5	17	6.9	55	56	9	66
Nigeria	162.5	82.3	80.2	2.5	50	5.4	52	53	32	64
Norway	4.9	2.5	2.5	0.7	79	1.9	79	83	100	
Occupied Palestinian Territory	4.2	2.1	2.0	2.8	74	4.3	72	75	89	
Oman	2.8	1.7	1.2	1.9	73	2.1	71	76	87	
Pakistan	176.7	89.8	86.9	1.8	36	3.2	65	67	45	23
Panama	3.6	1.8	1.8	1.5	75	2.4	74	79	69	10
Papua New Guinea	7.0	3.6	3.4	2.2	13	3.8	61	66	45	36
Paraguay	6.6	3.3	3.3	1.7	61	2.9	71	75	70	7
Peru	29.4	14.7	14.7	1.1	77	2.4	72	77	68	8
Philippines	94.9	47.6	47.3	1.7	49	3.1	66	73	76	23
Poland	38.3	18.5	19.8	0.0	61	1.4	72	81	90	2
Polynesia ⁶	0.7	0.3	0.3	0.7	22	2.9	70	76	98	
Portugal	10.7	5.2	5.5	0.0	61	1.3	77	83	100	
Qatar	1.9	1.4	0.5	2.9	96	2.2	79	78	100	
Romania	21.4	10.4	11.0	-0.2	57	1.4	71	78	72	2
Russian Federation	142.8	66.1	76.8	-0.1	73	1.5	63	75	87	2
Rwanda	10.9	5.4	5.6	2.9	19	5.3	54	57	54	77
Samoa	0.2	0.1	0.1	0.5	20	3.8	70	76	100	
Sao Tome and Principe	0.2	0.1	0.1	2.0	62	3.5	64	66	26	28
Saudi Arabia	28.1	15.5	12.6	2.1	82	2.6	73	76		
Senegal	12.8	6.3	6.4	2.6	42	4.6	59	61	51	34
Serbia	9.9	4.9	5.0	-0.1	56	1.6	72	77	92	2
Seychelles	0.0	0.0	0.0	0.3	55					2
Sierra Leone	6.0	2.9	3.1	2.1	38	4.7	48	49	13	53
Singapore	5.2	2.6	2.6	1.1	100	1.4	79	84	100	
Slovakia	5.5	2.7	2.8	0.2	55	1.4	72	80	100	2
Slovenia	2.0	1.0	1.0	0.2	50	1.5	76	83	100	2
Solomon Islands	0.6	0.3	0.3	2.5	19	4.0	67	70	32	
Somalia	9.6	4.7	4.8	2.6	37	6.3	50	53	23	
South Africa	50.5	25.0	25.5	0.5	62	2.4	53	54	77	26
Spain	46.5	22.9	23.5	0.6	77	1.5	79	85	100	
Sri Lanka	21.0	10.4	10.7	0.8	14	2.2	72	78	91	14
St. Kitts and Nevis	0.0	0.0	0.0	1.2	32				96	

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St. Vincent and the Grenadines	0.1	0.1	0.1	0.0	49	2.0	70	75		
St. Lucia	0.2	0.1	0.1	1.0	28	1.9	72	78	89	21
Sudan ⁷	44.6	22.5	22.1	2.4	40	4.2	60	64	34	
Suriname	0.5	0.3	0.3	0.9	69	2.3	68	74	84	16
Swaziland	1.2	0.6	0.6	1.4	21	3.2	50	49	55	63
Sweden	9.4	4.7	4.7	0.6	85	1.9	80	84	100	
Switzerland	7.7	3.8	3.9	0.4	74	1.5	80	85	100	
Syrian Arab Republic	20.8	10.5	10.3	1.7	56	2.8	74	78	96	
Tajikistan	7.0	3.4	3.5	1.5	26	3.2	65	71	94	22
Tanzania, the United Republic of	46.2	23.1	23.1	3.1	26	5.5	58	60	24	89
Thailand	69.5	34.2	35.4	0.5	34	1.5	71	78	96	2
The former Yugoslav Republic of Macedonia	2.1	1.0	1.0	0.1	59	1.4	73	77	89	2
Timor-Leste, Democratic Republic of	1.2	0.6	0.6	2.9	28	5.9	62	64	50	37
Togo	6.2	3.0	3.1	2.0	43	3.9	56	59	12	39
Trinidad and Tobago	1.3	0.7	0.7	0.3	14	1.6	67	74	92	4
Tunisia	10.6	5.3	5.3	1.0	67	1.9	73	77	85	3
Turkey	73.6	36.7	36.9	1.1	70	2.0	72	77	90	3
Turkmenistan	5.1	2.5	2.6	1.2	50	2.3	61	69	98	25
Tuvalu	0.0	0.0	0.0	0.2	50				84	
Uganda	34.5	17.3	17.3	3.1	13	5.9	54	55	48	52
Ukraine	45.2	20.8	24.4	-0.5	69	1.5	64	75	95	2
United Arab Emirates	7.9	5.5	2.4	2.2	84	1.7	76	78	97	
United Kingdom	62.4	30.7	31.7	0.6	80	1.9	78	82	100	
United States of America	313.1	154.6	158.5	0.9	82	2.1	76	81	100	
Uruguay	3.4	1.6	1.7	0.3	92	2.0	74	81	100	2
Uzbekistan	27.8	13.8	14.0	1.1	36	2.3	66	72	100	46
Vanuatu	0.2	0.1	0.1	2.4	26	3.8	70	74	52	
Venezuela (Bolivarian Republic of)	29.4	14.8	14.7	1.5	93	2.4	72	78	91	4
Viet Nam	88.8	43.9	44.9	1.0	30	1.8	73	77	75	22
Yemen	24.8	12.5	12.3	3.0	32	4.9	65	68	52	18
Zambia	13.5	6.8	6.7	3.0	36	6.3	49	50	49	64
Zimbabwe	12.8	6.3	6.5	2.2	38	3.1	54	53	44	

World and regional data ¹⁶	Total population in millions, 2011**	Populat millions male		Population growth rate, per cent, 2010-2015	Urban population, per cent, 2010	Total fertility rate, per woman aged 15-49, 2010-2015	Life expecta 2010-2015 male	ancy at birth, female	Population using an improved sanitation facility, per cent, 2000/2008*	Population living below \$1.25 (PPP) per day, per cent, 1992/2008*
World Total	6974.0	3517.3	3456.8	1.1	50	2.5	68	72	61	26
More Developed Regions ⁸	1240.4	603.1	637.3	0.4	75	1.7	75	82	97	1
Less Developed Regions ⁹	5733.7	2914.2	2819.5	1.3	45	2.6	67	70	53	27
Least Developed Countries ¹⁰	851.1	425.4	425.7	2.2	29	4.2	57	59	36	54
Arab States ¹¹	360.7	185.0	175.7	2.0	56	3.1	69	73	76	5
Asia and the Pacific ¹²	3924.2	2008.0	1916.2	0.9	41	2.1	69	72	52	27
Eastern Europe and Central Asia ¹³	473.7	226.6	247.0	0.3	65	1.8	68	76	90	5
Latin America and the Caribbean ¹⁴	591.4	292.1	299.3	1.1	79	2.2	72	78	80	7
Sub-Saharan Africa ¹⁵	821.3	410.5	410.8	2.4	37	4.8	54	56	31	53

Notes for indicators

- * Most recent data available. Years separated by "/" reflect the earliest and latest years sourced for this column of data.
- ** Total population calculated by adding male and female totals. Totals may not add up due to rounding
- 1 Including Christmas Island, Cocos (Keeling) Islands and Norfolk Island.
- 2 Formerly Zaire.
- 3 Including Agalesa, Rodrigues and St. Brandon.
- 4 Comprising Fiji, New Caledonia, Papua New Guinea, Solomon Islands, and Vanuatu.
- Comprising Federated States of Micronesia. Guam, Kiribati, Marshall Islands, Nauru, Northern Mariana Islands, and Pacific Islands (Palau).
- 6 Comprising American Samoa, Cook Islands, Johnston Island, Pitcairn, Samoa, Tokelau, Tonga, Midway Islands, Tuvalu, and Wallis and Futuna Islands.
- 7 Figure includes what is now South Sudan.
- 8 More-developed regions comprise North America, Japan, Europe and Australia-New Zealand.
- 9 Less-developed regions comprise all regions of Africa, Latin America and Caribbean, Asia (excluding Japan), and Melanesia, Micronesia and Polynesia.

- 10 Least-developed countries according to standard United Nations designation.
- 11 Comprising Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Occupied Palestinian Territory, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.
- 12 Includes only UNFPA programme countries, territories or other areas: Afghanistan, Bangladesh, Bhutan, Cambodia, China, Cook Islands, Democratic People's Republic of Korea, Fiji, India, Indonesia, Iran (Islamic Republic of), Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, Niue, Pakistan, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tokelau, Tonga, Tuvalu, Vanuatu, Viet Nam.
- 13 Includes only UNFPA programme countries, territories or other areas: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Romania, Russian Federation, Serbia, Tajikistan, the former Yugoslav Republic of Macedonia, Turkmenistan, Ukraine, Uzbekistan,
- 14 Includes only UNFPA programme countries, territories or other areas: Anguilla, Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize,

- Bermuda, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos, Uruguay, Venezuela (Bolivarian Republic of).
- 15 Includes only UNFPA programme countries, territories or other areas: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.
- 16 Regional aggregations are weighted averages based on countries with available data.

Technical notes: Data sources and definitions

Monitoring ICPD goals

Maternal and Newborn Health

Under age 5 mortality rate, per 1,000 live births, 2009 Source: Millennium Development Goals Indicators website (http://mdgs. un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Under age 5 mortality is the probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of five if subject to current age-specific mortality rates.

Maternal mortality ratio, per 100,000 live births, 2008

Source: Millennium Development Goals Indicators website (http:// mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Maternal mortality ratio is the annual number of deaths of women from pregnancy-related causes, when pregnant or within 42 days of termination of pregnancy, per 100,000 live births.

Adolescent birth rate, per 1,000 women aged 15-19, 1996/2008 Source: Millennium Development Goals Indicators website (http:// mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Adolescent birth rate is the annual number of births per 1,000 women aged 15-19. It is also referred to as the age-specific fertility rate for women aged 15-19.

Births attended by skilled health personnel, per cent, 1992/2009 Source: Millennium Development Goals Indicators website (http:// mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Births attended by skilled health personnel is the percentage of deliveries attended by personnel trained in providing life saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and the postpartum period; conducting deliveries on their own; and caring for newborns. Traditional birth attendants, even if they receive a short training course, are not included.

Education

Primary school enrolment, net per cent of school-age children, male/female, 1991/2009 Source: Millennium Development Goals Indicators website (http://mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Primary school enrolment is the number of children of official primary school age according to International Standard Classification of Education (ISCED97) who are enrolled in primary education as a percentage of the total children of the official school age population. Total net primary enrolment rate also includes children of primary school age enrolled in secondary education. Where more than one system of primary education exists within the country the most widespread or common structure is used for determining the official school age group. Secondary school enrolment, net per cent of school-age children, male/female, 1999/2010 Source: UNESCO Institute for Statistics Data Centre website (http://stats.uis.unesco.org/unesco/TableViewer/ document.aspx?ReportId=143&IF_Language=eng), UNESCO Institute for Statistics. Secondary school enrolment is the number of children

of official secondary school age according to International Standard Classification of Education (ISCED97) who are enrolled in secondary education as a percentage of the total children of the official school age population. Where more than one system of primary education exists within the country the most widespread or common structure is used for determining the official school age group.

Literacy rate, population aged 15-24, per cent, male/female, 1991/2008 Source: Millennium Development Goals Indicators website (http://mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Literacy rate is the percentage of the population aged 15-24 who can both read and write with understanding a short simple statement on everyday life.

Sexual and Reproductive Health

Contraceptive prevalence rate, women aged 15-49, any/modern method, 1990/2010 Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Contraceptive Use 2010. New York: UN. Contraceptive prevalence rate is the percentage of married women (including women in consensual unions) currently using any method or a modern method of contraception. Modern methods include male and female sterilization, IUD, contraceptive pills, injectables, hormonal implants, condoms and female barrier methods. These rates are roughly, but not completely comparable across countries due to variation in ages of the population surveyed (15 to 49-year-old women being most common), in the timing of the surveys, and in the details of the questions.

Unmet need for family planning, per cent, 1992/2009

Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Contraceptive Use 2010. New York: UN. These indicators are reported here for women who are married or in union. Women with an unmet need for family planning include all pregnant women whose pregnancies were unwanted at the time of conception; all postpartum amenorrheic women who are not using family planning and whose last birth was unwanted or mistimed; and all fecund women who are neither pregnant nor amenorrheic and who either do not want any more children (want to limit family size), who wish to postpone the birth of a child for at least two years, or who do not know when or if they want another child (want to space births) but are not using contraception. Women who became pregnant unintentionally due to contraceptive failure are not included as women with an unmet need for family planning.

Population aged 15-24 with comprehensive correct knowledge of HIV/AIDS, per cent, male/female, 2000/2008 Source: Millennium Development Goals Indicators website (http://mdgs.un.org/unsd/ mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. This indicator measures the percentage of population aged 15-24 who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission, and who know that a healthy-looking person can transmit HIV.

HIV/AIDS prevalence rate, population aged 15 to 24, per cent, male/ female, 2009 Source: UNAIDS, 2010. Global report: UNAIDS report on the global AIDS epidemic 2010. Geneva: UNAIDS. HIV/AIDS prevalence

rate is the estimated percentage of men and women aged 15-24 who are living with HIV.

Demographic, social and economic indicators

Population in millions, total and male/female, 2011 Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision. New York: UN. Population in millions is the de facto population in millions in a country, area, or region as of 1 July of the year indicated. It is based on a medium variant projection.

Population growth rate, per cent, 2010-2015 Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision. New York: UN. Population growth rate is the average exponential rate of growth of the population over a given period. It is based on a medium variant projection.

Urban population, per cent, 2010 Source: United Nations, Department of Economic and Social Affairs, Population Division (2010). World Urbanization Prospects: The 2009 Revision. New York: UN. The percentage of the national population living in areas termed 'urban' by that country. Typically, the population living in towns of 2,000 or more or within national or provincial capitals is classified 'urban.'

Total fertility rate, per woman aged 15-49, 2010-2015

Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision. New York: UN. Total fertility rate is the average number of children a woman would bear in her lifetime assuming that agespecific fertility rates remain constant throughout her childbearing years. It is based on a medium variant projection.

Life expectancy at birth, male/female, 2010-2015 Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision. New York: UN. Life expectancy at birth is the average number of years a newborn infant would be expected to live if health and living conditions at the time of birth remained the same throughout his/her lifespan.

Population using an improved sanitation facility, per cent, 2000/2008 Source: Millennium Development Goals Indicators website (http://mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Population using an improved sanitation facility is the percentage of the population with access to facilities that hygienically separate human excreta from human contact.

Population living below \$1.25 (PPP) per day, per cent, 1992/2008 Source: Millennium Development Goals Indicators website (http:// mdgs.un.org/unsd/mdg/), United Nations, Department of Economic and Social Affairs, Statistics Division. Population living below \$1.25 (PPP) per day is the percentage of the population living on less than \$1.25 a day, measured at 2005 international prices, adjusted for purchasing power parity (PPP). The indicator is also referred to as "proportion of population below \$1 (PPP) per day."

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Seven Opportunities for a World of 7 Billion

- Reducing poverty and inequality can slow population growth.
- 2 Unleashing the power of women and girls can accelerate progress on all fronts.
- Energetic and open to new technologies, young people can transform global politics and culture.
- 4 Ensuring that every child is wanted and every childbirth safe can lead to smaller and stronger families.
- Each of us depends on a healthy planet, so we must all help protect the environment.
- Promoting the health and productivity of the world's older people can mitigate the challenges faced by ageing societies.
- The next 2 billion people will live in cities, so we must plan for them now.



United Nations Population Fund 605 Third Avenue New York, NY 10158 USA Tel. +1-212 297-5000 www.unfpa.org ©UNFPA 2011

USD \$24.00 ISBN 978-0-89714-990-7 sales no. E.11.III.H.1 E/11,000/2011





