

Overview

Human Development Report 2015

Work for Human Development



*Empowered lives.
Resilient nations.*

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Foreword

Twenty five years ago the first Human Development Report in 1990 began with a simple notion: that development is about enlarging people's choices—focusing broadly on the richness of human lives rather than narrowly on the richness of economies. Work is a major foundation for both the richness of economies and the richness of human lives but has tended to be conceptualized in economic terms rather than in human development terms. The 2015 Human Development Report goes beyond that convention in directly linking work to the richness of human lives.

This Report starts with a fundamental question—how can work enhance human development? The Report takes a broad view of work, going beyond jobs and taking into account such activities as unpaid care work, voluntary work and creative work—all of which contribute to the richness of human lives.

The Report highlights impressive progress on human development over the past quarter century. Today people are living longer, more children are in school and more people have access to clean water and basic sanitation. Per capita income in the world has gone up, and poverty has gone down, resulting in a better standard of living for many people. The digital revolution has connected people across countries and societies. Work has contributed to this progress by building people's capabilities. Decent work has provided people with a sense of dignity and an opportunity to engage fully in society.

Considerable challenges remain, from persistent poverty and grinding inequalities to climate change and environmental sustainability in general, and to conflict and instability. These all create barriers to people fully engaging in decent work, and as a result huge amounts of human potential remain untapped. This is of particular concern for young people, women, people with disabilities and others who may be marginalized. The Report argues that if the potential of all people is harnessed through appropriate strategies and proper policies, human progress would be accelerated and human development deficits would be reduced.

The Report reminds us that there is no automatic link between work and human development. The quality of work is an important dimension of ensuring that work enhances human development. Issues such as discrimination and violence, however, prevent positive links between work and human development. Some work is very damaging to human development, such as child labour, forced labour and the labour of trafficked workers, all of which constitute serious violations of human rights. In many cases workers in hazardous conditions face serious risks of abuse, insecurity and loss of freedom and autonomy.

All these issues are becoming even more critical to address as the world of work, driven by globalization and technological revolution, is undergoing rapid changes. Globalization has generated gains for some and losses for others. The digital revolution has created new opportunities, but has also given rise to new challenges, such as irregular contracts and short-term work, which are asymmetrically distributed between highly skilled and unskilled workers.

The Report makes a strong case that women are disadvantaged in the world of work—in both paid and unpaid work. In the realm of paid work, they are engaged in the workforce less than men, they earn less, their work tends to be more vulnerable and they are underrepresented in senior management and decision-making positions. In terms of unpaid work, they bear a disproportionate share of the housework and care work.

The Report identifies sustainable work, which promotes human development while reducing and eliminating negative side effects and unintended consequences, as a major building block of sustainable development. Such work would expand opportunities for the present generation without shrinking those for future ones.

The Report argues that enhancing human development through work requires policies and strategies in three broad areas—creating work opportunities, ensuring workers' well-being and developing targeted actions. The first area focuses on national employment

strategies and seizing opportunities in the changing world of work, while the second area covers such important issues as guaranteeing workers' rights and benefits, expanding social protection and addressing inequalities. Targeted actions should focus on sustainable work, addressing imbalances in paid and unpaid work and interventions for specific groups—for example, for youth and people with disabilities. Above all, there needs to be an agenda for action pursuing a New Social Contract, a Global Deal, and the Decent Work Agenda.

This year's Report is particularly timely, following shortly after the UN Sustainable Development Summit, where the new Sustainable Development Goals were adopted, including Goal 8's explicit emphasis on work: Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.

In this context there should be serious discussion about the challenges created by the ongoing changes in the world of work. Opportunities should be taken to strengthen the links between work and human development. During the past 25 years the human development concept, reports and indices have generated considerable debate, dialogue and discussions around the world on development challenges and policy issues. I expect this year's report to be no exception in its capacity to generate dialogue and debate around the concept of human development and strategies to advance it.

A handwritten signature in black ink, reading "Helen Clark". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Helen Clark

Administrator

United Nations Development Programme

Acknowledgements

The 2015 Human Development Report is the product of the Human Development Report Office (HDRO) at the United Nations Development Programme (UNDP).

The findings, analysis and policy recommendations of the Report are those of HDRO alone and cannot be attributed to UNDP or to its Executive Board. The UN General Assembly has officially recognized the Human Development Report as “an independent intellectual exercise” that has become “an important tool for raising awareness about human development around the world.”

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Selim Jahan

Director

Human Development Report Office

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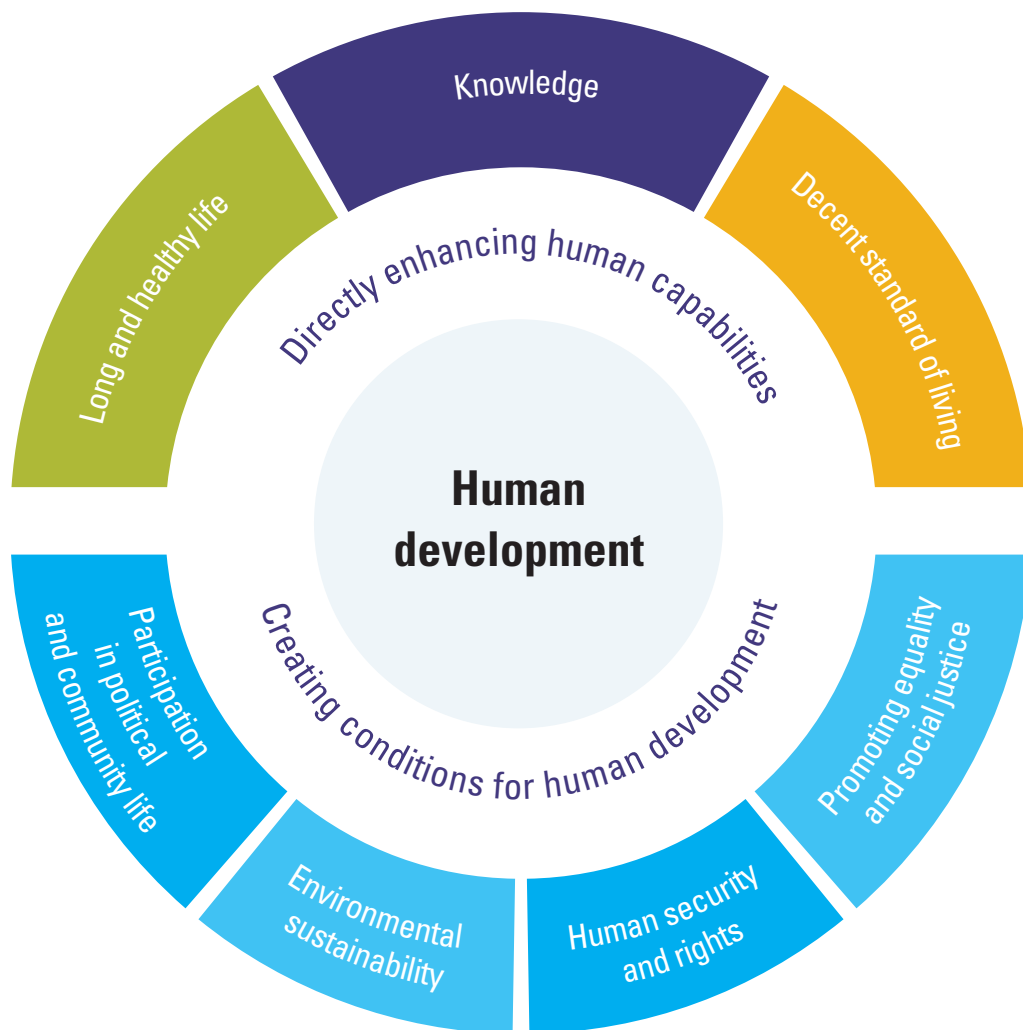
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Overview

Work for human development

Human development is about enlarging human choices—focusing on the richness of human lives rather than simply the richness of economies (see infographic). Critical to this process is work, which engages people all over the world in different ways and takes up a major part of their lives. Of the world's 7.3 billion people, 3.2 billion are in jobs, and others engage in care work, creative work, voluntary work or other kinds of work or are preparing themselves as future workers. Some of this work contributes to human development, and some does not. Some work even damages human development (figure 1).

Work enables people to earn a livelihood and be economically secure. It is critical for equitable economic growth, poverty reduction and gender equality. It also allows people to fully participate in society while affording them a sense of dignity and worth. Work can contribute to the public good, and work that involves caring for others builds cohesion and bonds within families and communities.

Work also strengthens societies. Human beings working together not only increase material well-being, they also accumulate a wide body of knowledge that is the basis for cultures and civilizations. And when all this work is environmentally friendly, the benefits extend across generations. Ultimately, work unleashes human potential, human creativity and the human spirit.

This year's Human Development Report explores how work can enhance human development, given that the world of work is changing fast and that substantial human development challenges remain. The Report takes a broad view of work, including voluntary work and creative work, thus going beyond jobs. And it examines the link between work and human development, focusing on care work as well as paid work and discussing sustainable work.

The Report also makes the points that the link between work and human development is not automatic and that some work, such as forced labour, can damage human development by violating human rights, shattering human dignity and sacrificing freedom and autonomy. And without proper policies, work's unequal opportunities and rewards can be divisive, perpetuating inequities in society.

The Report concludes that work can enhance human development when policies expand productive, remunerative and satisfying work opportunities, enhance workers' skills and potential and ensure their rights, safety and well-being. The Report also pursues an action agenda based on a New Social Contract, a Global Deal and the Decent Work Agenda.

People are the real wealth of nations, and human development focuses on enlarging people's choices

Twenty-five years ago the first Human Development Report presented the concept of human development, a simple notion with far-reaching implications. For too long, the world had been preoccupied with material opulence, pushing people to the periphery. The human development framework, taking a people-centred approach, changed the lens for viewing development needs, bringing the lives of people to the forefront.

It emphasized that the true aim of development is not only to boost incomes, but also to maximize human choices—by enhancing human rights, freedoms, capabilities and opportunities and by enabling people to lead long, healthy and creative lives (box 1).

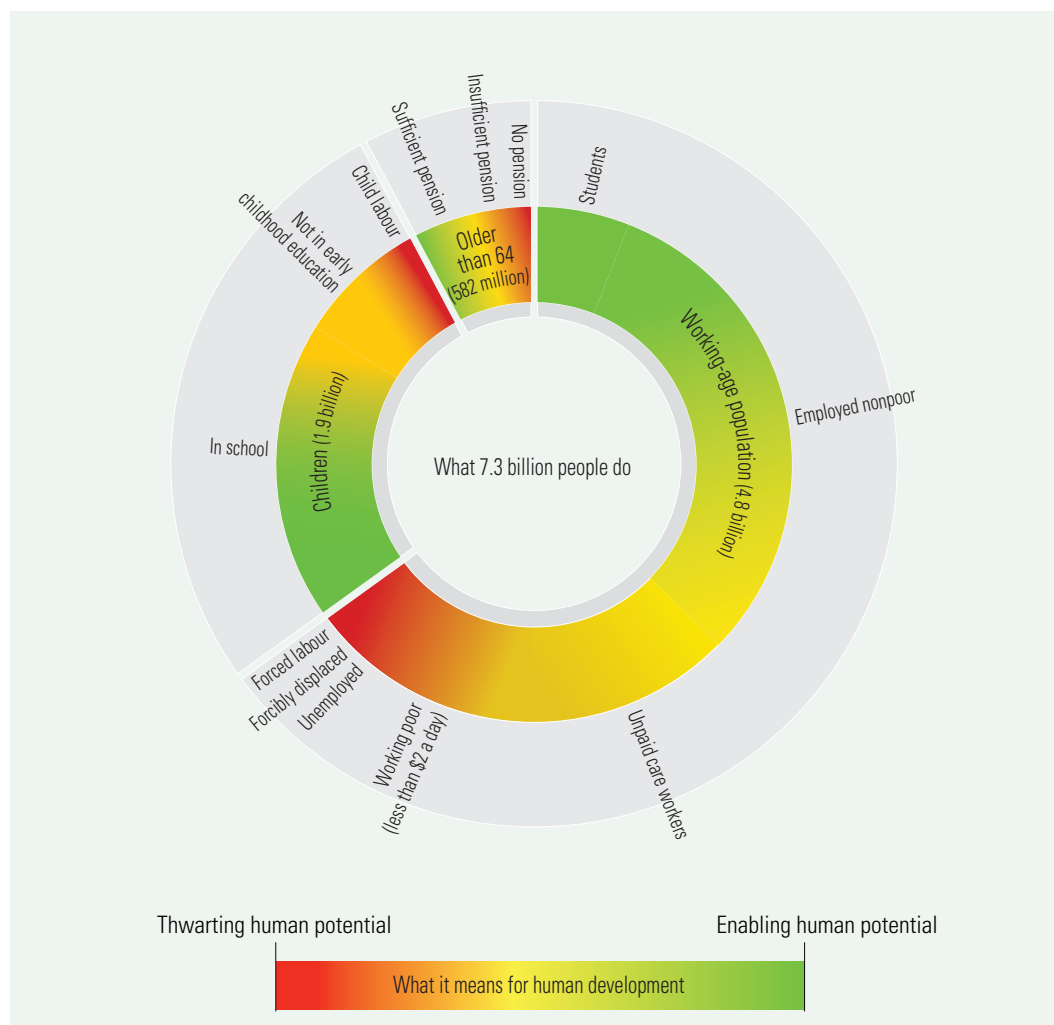
The human development concept is complemented with a measure—the Human Development Index (HDI)—that assesses human well-being from a broad perspective, going beyond income (box 2).

With this simple but powerful notion of people-centred development, nearly two

Human development focuses on the richness of human lives

FIGURE 1

Work engages people all over the world in different ways



Source: Human Development Report Office.

Work unleashes human potential, human creativity and human spirit

BOX 1

Human development—a comprehensive approach

Human development is a process of enlarging people's choices—as they acquire more capabilities and enjoy more opportunities to use those capabilities. But human development is also the objective, so it is both a process and an outcome. Human development implies that people must influence the process that shapes their lives. In all this, economic growth is an important means to human development, but not the goal.

Human development is development of the people through building human capabilities, for the people by improving their lives and by the people through active participation in the processes that shape their lives. It is broader than other approaches, such as the human resource approach, the basic needs approach and the human welfare approach.

Source: Human Development Report Office.

BOX 2

Measuring human development

The Human Development Index (HDI) is a composite index focusing on three basic dimensions of human development: to lead a long and healthy life, measured by life expectancy at birth; the ability to acquire knowledge, measured by mean years of schooling and expected years of schooling; and the ability to achieve a decent standard of living, measured by gross national income per capita. The HDI has an upper limit of 1.0.

To measure human development more comprehensively, the Human Development Report also presents four other composite indices. The Inequality-adjusted HDI discounts the HDI according to the extent of inequality. The Gender Development Index compares female and male HDI values. The Gender Inequality Index highlights women’s empowerment. And the Multidimensional Poverty Index measures nonincome dimensions of poverty.

Source: Human Development Report Office.

dozen global Human Development Reports and more than 700 national Human Development Reports have been produced over the past 25 years. They have contributed

to the development discourse, assessed development results, spurred research and innovative thinking and recommended policy options.

Work, not just jobs, contributes to human progress and enhances human development

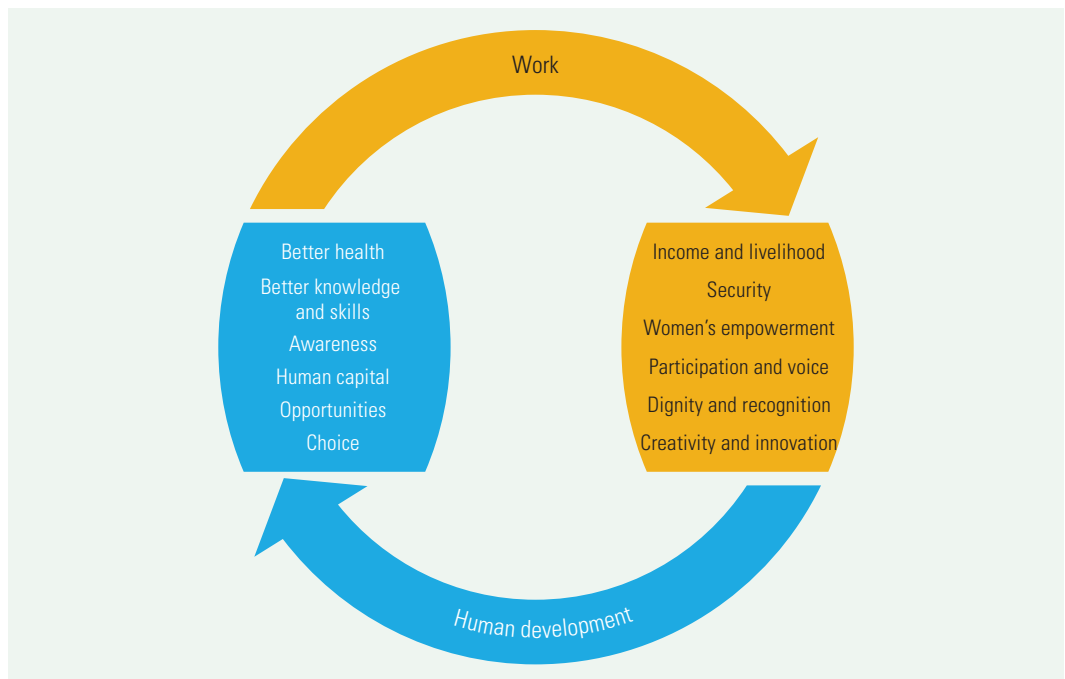
From a human development perspective, the notion of work is broader and deeper than that of jobs or employment alone. Jobs provide income and support human dignity, participation and economic security. But the jobs framework fails to capture many kinds of work that have important human development implications—as with care work, voluntary work and such creative work as writing or painting.

The link between work and human development is synergistic. Work enhances human development by providing incomes and livelihoods, by reducing poverty and by ensuring equitable growth. Human development—by enhancing health, knowledge, skills and awareness—increases human capital and broadens opportunities and choices (figure 2).

The notion of work is broader and deeper than that of jobs

FIGURE 2

Work and human development are mutually linked



Source: Human Development Report Office.

The number of people living in low human development fell by nearly 2 billion

Since 1990 the world has made major strides in human development. The global HDI value has increased by more than a quarter and that of the least developed countries by more than half. This progress has been fairly steady over time and across regions. The number of people living in low human development fell from 3 billion in 1990 to slightly more than 1 billion in 2014 (see table 8 in *Statistical annex*).

Today, people are living longer, more children are going to school and more people have access to clean water and basic sanitation. This progress goes hand in hand with rising incomes, producing the highest standards of living in human history. A digital revolution now connects people across societies and countries. Just as important, political developments are enabling more people than ever to live under democratic regimes. All are important facets of human development.

Between 1990 and 2015 income poverty in developing country regions fell by more than two-thirds. The number of extreme poor people worldwide fell from 1.9 billion to 836 million. The child mortality rate fell by more than half, and under-five deaths fell from 12.7 million to 6 million. More than 2.6 billion people gained access to an improved source of drinking water, and 2.1 billion gained access to improved sanitation facilities, even as the world's population rose from 5.3 billion to 7.3 billion.¹

Work in various forms by 7.3 billion people has contributed to this progress. Nearly a billion people who work in agriculture and more than 500 million family farms produce more than 80 percent of the world's food, improving nutrition and health.² Worldwide, 80 million workers in health and education have enhanced human capabilities.³ More than a billion workers in services have contributed to human progress. In China and India 23 million jobs in clean energy are increasing environmental sustainability.⁴

Work has a societal value that goes beyond the gains of individual workers. More than 450 million entrepreneurs are contributing to human innovation and creativity.⁵ Some 53 million paid domestic workers are addressing the care needs of people.⁶ Care work for children is preparing them for the future. Work that involves caring for older people or people with disabilities is helping them maintain their

capabilities. Work by artists, musicians and writers is enriching human lives. More than 970 million people who engage in volunteer activity each year are helping families and communities, building social networks and contributing to social cohesion.⁷

Yet human progress has been uneven, human deprivations are still widespread and much human potential remains unused

Human development has been uneven among regions, across countries and within countries. In 2014 Latin America and the Caribbean's HDI value was 0.748, compared with 0.686 in the Arab States. And the maternal mortality ratio was only 21 per 100,000 live births in Organisation for Economic Co-operation and Development countries, compared with 183 in South Asia (see table 5 in *Statistical annex*).

Globally women earn 24 percent less than men and hold only 25 percent of administrative and managerial positions in the business world—while 32 percent of businesses have no women in senior management positions.⁸ Women still hold only 22 percent of seats in single or lower houses of national parliament.

In Malaysia the richest 10 percent of the population had 32 percent of national income in 2012, the poorest 10 percent of the population had only 2 percent.⁹ In Moldova 69 percent of urban people have access to safe drinking water, compared with only 23 percent of rural people.¹⁰

Added to the uneven human development achievements are widespread human deprivations. Worldwide 795 million people suffer from chronic hunger, 11 children under age 5 die every minute and 33 mothers die every hour. About 37 million people live with HIV and 11 million with tuberculosis.¹¹

More than 660 million people use an unimproved source of drinking water, 2.4 billion people use an unimproved sanitation facility and nearly a billion people resort to open defecation.¹²

Worldwide 780 million adults and 103 million young people (ages 15–24) are illiterate. In developed countries 160 million people are functionally illiterate. Globally 250 million

children have not learned basic skills—even though 130 million of them have spent at least four years in school.¹³

One critical human deprivation is not using, misusing or underusing the deep human potential of people for human development-enhancing work. In 2015, 204 million people were out of work, including 74 million young people—based on formal unemployment data. About 830 million people in the world are working poor—living on less than \$2 a day—and more than 1.5 billion are in vulnerable employment, usually lacking decent working conditions and adequate voice and social security.¹⁴

Unleashing this potential becomes even more important when considering the emerging human development challenges.

Take the rising inequalities in income, wealth and opportunity. Today around 80 percent of the world's people have only 6 percent of the world's wealth. The share of the richest 1 percent is likely to be more than 50 percent by 2016. In the world of work, wages lag behind productivity, and workers' shares in income have been falling.¹⁵

Population growth, driven mostly by South Asia and increasingly by Sub-Saharan Africa, will have major implications for human development—for work opportunities, the care gap between care needs and care providers and the provision of social protection. Recent estimates indicate that there is a global shortage of 13.6 million care workers, causing extreme deficits in long-term care services for those over age 65.¹⁶ Greater longevity, ageing, the youth bulge and dependency ratios will all have impacts. In 2050 more than two-thirds of the world's population—or 6.2 billion people—are expected to live in urban areas, stressing the coping capacities of cities.¹⁷

Human security is under threat from many sources. At the end of 2014, 60 million people had been displaced worldwide.¹⁸ Between 2000 and 2013 the cumulative death tolls from global and national violent extremism rose more than fivefold, from 3,361 to 17,958.¹⁹ Violence against women is one of the most brutal threats to human development. One in three women has been subject to physical or sexual violence.²⁰

Human development is undermined by multiple shocks, vulnerabilities and risks—by epidemics, by emerging health risks, by economic

and financial crises and by food and energy insecurities. For example, noncommunicable (or chronic) diseases are now a global health risk, killing 38 million people each year, almost three-quarters of them (28 million) in low- and middle-income countries.²¹ Almost 30 percent (2.1 billion) of the world's people are obese, more than three-fifths of them in developing country regions.²²

Around the world communities are becoming more vulnerable to the effects of climate change, including the loss of biodiversity—the lifeline of many poor communities. Around 1.3 billion people live on fragile lands.²³ Millions are affected by natural disasters.

Work can enhance human development, but some work damages it—the link between the two is not automatic

The link between work and human development is not automatic. It depends on the quality of work, the conditions of work, the societal value of work and so on. Whether people have a job is important, as are other issues. For example: Is work safe? Are people fulfilled and satisfied by their work? Are there prospects for advancement? Does employment support a flexible work-life balance? Are there equal opportunities for women and men?

The quality of work also includes whether a job provides dignity and a sense of pride and whether it facilitates participation and interaction. To strengthen the link with human development, work also has to enhance environmental sustainability. Work strengthens its link with human development when it goes beyond individual benefits to contribute to shared social objectives, such as poverty and inequality reduction, social cohesion, culture and civilization.

Conversely, the value of work is diminished and its link with human development becomes weaker when there is discrimination and violence at work. The most observable discrimination is along gender lines—in positions, pay and treatment. In the United States female financial specialists' salaries are only 66 percent of their male counterparts.²⁴ But discrimination also occurs along lines of race, ethnicity, disability

Worldwide, 11 children under age 5 die every minute, and 33 mothers die every hour

The link between work and human development is not automatic

and sexual orientation. In Latin America the wage gap between indigenous ethnic groups and the rest of the population is estimated at 38 percent.²⁵

Workplace or occupational violence—in the form of threats and physical or verbal abuse—also weakens the work–human development link. In 2009 some 30 million EU workers experienced work-related violence, such as harassment, intimidation, bullying or physical violence—10 million in the workplace and 20 million outside it.²⁶

The link also weakens in conflict and post-conflict situations. Work under such conditions does not always have a definable content, and human development may entail simple survival.

Some work in some conditions damages human development. Many people are in work that restricts their life choices. Millions work in abusive and exploitative conditions that violate their basic human rights and destroy their dignity, such as child labourers, forced labourers and trafficked workers (figure 3). And millions of domestic, migrant, sex and hazardous-industry workers face various risks.

The world has around 168 million child labourers, almost 11 percent of the child

population, some 100 million boys and 68 million girls. Around half are engaged in hazardous work.²⁷

In 2012 about 21 million people worldwide were in forced labour, trafficked for labour and sexual exploitation or held in slavery-like conditions—14 million were subject to labour exploitation and 4.5 million to sexual exploitation. Women and girls accounted for a larger share than men and boys. Forced labour is thought to generate around \$150 billion a year in illegal profits.²⁸

After arms and drug trafficking, human trafficking is the most lucrative illicit business worldwide. Between 2007 and 2010 trafficked victims of 136 nationalities were detected in 118 countries, 55–60 percent of them women.²⁹

Trafficking of illegal migrants has recently surged. Networks of traffickers take money from desperate migrants who try to cross seas and land illegally into other countries. In 2014 some 3,500 people, maybe many more, lost their lives in the Mediterranean Sea when trafficking boats heading towards Europe, mainly from Libya, capsized or sank.³⁰

Paid domestic work is an important means of income for millions of workers, the majority

FIGURE 3

Corrosive and exploitative work shatters human development



Source: Human Development Report Office.

of whom are women. With appropriate protections in place, domestic work can empower people and help lift their families out of poverty. But abuse is common in paid domestic work, particularly for female migrant workers. Sometimes if the legal framework is inadequate or unenforced, employers use threats and coercion to pay low or even no wages. They can force paid domestic workers to work long hours—up to 18 hours a day without days off. Working conditions are often poor, with little food and no access to medical care. Paid domestic workers may also be subject to physical or sexual abuse.³¹

Mining is one of the most hazardous occupations in many countries. It accounts for only 1 percent of the global workforce (30 million workers) but is responsible for 8 percent of fatal accidents at work and for many injuries and disabling diseases, such as pneumoconiosis (black lung disease).³²

Globalization and the technological revolution are fast changing how we work and what we do

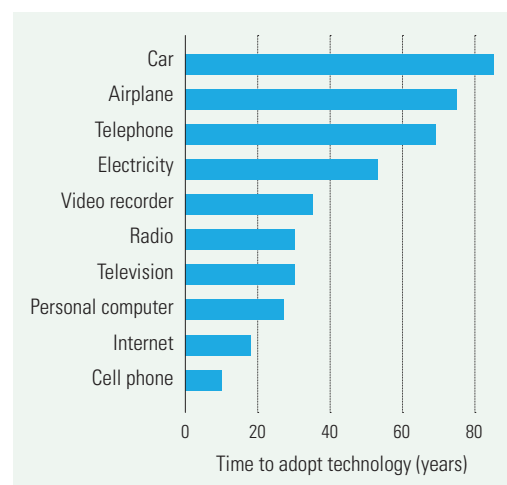
The context of work is changing, with implications for human development. Driving the transformation of work are globalization and technological revolutions, particularly the digital revolution. Globalization has fostered global interdependence, with major impacts on patterns of trade, investment, growth and job creation and destruction—as well as on networks for creative and volunteer work. We seem to be living through new and accelerated technological revolutions.

In the past 10 years global trade in goods and services almost doubled—reaching nearly \$24 trillion in 2014, up from \$13 trillion in 2005. The digital components of these flows have also been increasing.³³

The speed of adoption and penetration of digital technologies is mind-boggling. In the United States it took more than 50 years before half the population had a telephone. For cell phones it took only 10 years (figure 4). By the end of 2015 the planet will have more than 7 billion mobile subscriptions and more than 3 billion Internet users.³⁴

FIGURE 4

Speed of adoption of new technologies in the United States



Note: Adoption refers to time for penetration of 50 percent of the population.
Source: Donay 2014.

Access to the digital revolution is uneven across regions, sexes, age groups and the urban–rural divide. In 2015, 81 percent of households in developed countries had Internet access, compared with only 34 percent in developing country regions and 7 percent in the least developed countries.³⁵

Globalization brings workers and businesses together in global networks through outsourcing and global value chains. Companies relocate or subcontract (or a bit of both) some functions or noncore activities to other countries where costs are lower. For example, Apple employs only 63,000 of the more than 750,000 people around the world who design, sell, manufacture and assemble its products.³⁶

Many economic activities are now integrated in global value chains that span countries, sometimes continents. This integration goes from raw materials and subcomponents to market access and after-sales services. Production is mainly of intermediate goods and services organized in fragmented and internationally dispersed production processes, coordinated by multinational companies and cutting across industries.

In recent years knowledge has become central to production. Even in manufacturing the value of finished goods comes increasingly from embodied knowledge. In 2012 trade in knowledge-intensive goods, services and finance—worth nearly \$13 trillion—grew

The world has around 168 million child labourers and 21 million people in forced labour

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revolutions

1.3 times faster than trade in labour-intensive goods, to account for a larger proportion in total trade in goods and services.³⁷

The digital revolution has produced such new frontiers of work as the sharing economy (GrabTaxi), business process outsourcing (UpWork), crowdworking (Mechanical Turk) and flexible working. It has also revolutionized creative work and empowered small producers and artisans.

Technological advances have not only transformed work; they are also engines for new forms of creativity and innovation. Collaborative teams and visionaries have turned ideas into tangible goods and services. Innovations in computers and electronics were central to this growth: From 1990 to 2012 their share in all new patents more than doubled, from more than 25 percent to nearly 55 percent.³⁸

The digital revolution has also changed volunteering, which can now be done virtually (online or digitally). UN Volunteers' online volunteering system helped 10,887 volunteers (60 percent of them women) contribute their skills towards development work in 2014.³⁹

Some of the technologies with the highest potential to change work include cloud technology, 3D printing, advanced robotics, energy storage and the automation of knowledge work—which through intelligent software systems will transform the organization and productivity of knowledge work and enable millions to use intelligent digital assistants.

In the new world of work, workers need to be more flexible and adaptable—and be ready to retrain, relocate and renegotiate working conditions. They also need to dedicate more time to searching for new opportunities.

The people most linked to the new world of work are millennials—roughly the cohort born since 1980. This group has come of age at a time when digital technologies and advanced information and communication technologies penetrate all areas of life. They have also become adults at a time when flexibility, adaptability and unconventional work are increasingly common.

Many millennials are looking for work that goes beyond creating profits, hoping to solve environmental and social problems as part of their livelihoods.

Social entrepreneurs are also emerging as a new workforce. They are cause-driven people committed to addressing social problems, and they establish nonloss, nondividend companies (where all profits are reinvested back into the company) that aim to be financially self-sustainable and to maximize social benefits.

Globalizing work has generated gains for some and losses for others

With outsourcing, assembly jobs in developed countries began moving to export processing zones as developing countries adopted export-oriented industrialization. The impact on job creation in large developing countries such as China and Mexico, as well as smaller countries such as Costa Rica, the Dominican Republic and Sri Lanka, has been substantial and positive, often boosting local development, although the quality of the work and enforcement of labour standards have varied.

The global offshoring of service jobs started to pick up in the 1990s as advances in information and communications technology allowed many support services to be performed offsite. For example, between 2000 and 2010 the number of direct jobs in information and communications technology in India jumped from 284,000 to more than 2 million.⁴⁰ Services are also growing in the Russian Federation, Latin America and Africa, in part matching companies' interests in diversifying into different time zones to enable 24-hour service.⁴¹ But outsourcing to developing countries has not benefitted all sectors and all workers.

While outsourcing in general seems beneficial to developing country regions, it has consequences for workers in developed countries. Estimates vary, and the long-term impacts are less clear than the short-term effects, but job losses are greater in manufacturing than services. Short-term job losses due to offshoring have been found to range from 0 in some countries to almost 55 percent of all job losses in Portugal.⁴²

Today, jobs that involve administrative support, business and financial operations, and computer and mathematical tasks are most likely to be outsourced. In Australia, Canada

and the United States 20–29 percent of all jobs have the potential to be offshored, though it is unlikely that all of them will be.⁴³ Many jobs in this estimate are in medium- and high-skilled service professions that can be carried out at lower cost abroad as education levels rise and information and communications technology infrastructures improve.

So, while there may be immense benefits in access to new jobs in countries hosting offshore activities, individuals losing jobs may require training and new skills for a more competitive environment. To ease the adjustment, programmes are needed to help people find new work, enhance their skills and maintain access to a basic income. Training can also enhance the abilities of workers in developing countries to access the new jobs.

The integration of developing countries in global value chains has increased opportunities for paid work and prompted a shift in labour force participation for women (many find jobs in the garment industry). In 2013, 453 million workers (up from 296 million in 1995), including 190 million women, were involved in global value chains.⁴⁴

But such integration does not say much about the quality of work and whether workers have expanded their human capabilities. There are concerns about levels of labour protection and opportunities for skills upgrading.

The global value chain system generates winners and losers, within and across countries and industries. The footloose nature of global value chains can generate less job security and put even more pressure on governments and subcontractors to minimize costs. This in turn puts pressures on workers' wages and working conditions, particularly among the low skilled. Developing countries also face the risk of becoming locked into low value-added nodes of global value chains that limit work opportunities, skill development and technology exposure.

The transition to global value chains has introduced new complexities for workers in developed and developing countries alike. There are questions about how much workers gain by partaking in work contributing to global value chains versus work outside them. There is some evidence that productivity is higher in global value chain-oriented work but that wages are

the same for workers inside and outside global value chains,⁴⁵ raising questions about how the increases in productivity are shared between workers and capital.

Market pressures transmitted through global value chains tend to be absorbed by workers—whether in wages (driven down by global competition), in increased informalization and contractual insecurity (through multiple subcontracting chains) or in layoffs (during downturns). Multinational corporations increasingly rely on a disenfranchised workforce, using a mix of fixed-term employees, temporary workers, independent contractors, project-based workers and outsourced workers to provide production flexibility and manage costs.⁴⁶ Participation in value chains provides some with secure, decent jobs and others with more precarious work (even in the same country and sector), in a type of “labour dualism.”

Seizing the future in the digital revolution is not chance or fate—it is a matter of skill and foresight

The types of work that people do and the ways they do it are being transformed by new technologies. This change is not new, but it is reshaping the link between work and human development and the types of policies and institutions needed to foster positive outcomes for people.

The spread and penetration of digital technologies are changing the world of work everywhere, but the effects vary across countries. Some technological changes are cross-cutting, such as information and communications technologies and the spread of mobile phones and other handheld devices. Still, countries will continue to have divergent production and employment structures and different uses for digital technologies, largely reflecting the relative economic weights of agriculture, industry and services, as well as the resources invested in developing people's capabilities. Labour markets, the ratio of paid to unpaid work and the predominant types of workplaces in each country differ—so the impacts of digital technologies on work will vary, too.

The digital revolution may be associated with high-tech industries, but it is also

In recent years knowledge has become central to production

There has never
been a worse time
to be a worker with
only ordinary skills
and abilities

influencing a whole range of more informal activities from agriculture to street vending. Some may be directly related to mobile devices. In Ethiopia farmers use mobile phones to check coffee prices.⁴⁷ In Saudi Arabia farmers use wireless technology to distribute scarce irrigated water for wheat cultivation.⁴⁸ In some villages in Bangladesh, female entrepreneurs use their phones to provide paid services for neighbours.

Mobile phones now facilitate many aspects of work through a combination of voice calls, SMS and mobile applications. There are benefits for many other types of activity—formal and informal, paid and unpaid—from food vendors in Cairo to street cleaners in Senegal to care providers in London.

Internet and mobile phone access empowers people to harness their creativity and ingenuity. Much more is possible, particularly if inequalities in access between men and women and rural and urban areas are addressed. If Internet access in developing countries were the same as in developed countries, an estimated \$2.2 trillion in GDP could be generated, with more than 140 million new jobs—44 million in Africa and 65 million in India. Long-term productivity in developing countries could be boosted by up to 25 percent.⁴⁹

The digital economy has enabled many women to access work that allows them to apply their creativity and potential. In 2013 about 1.3 billion women were using the Internet.⁵⁰ Some have moved to e-trading as entrepreneurs, and some are employed through crowdworking or e-services. But this new world of work puts a high premium on workers with skills and qualifications in science and technology, workers less likely to be women.

Older workers also have new work options, as they continue to work either because they enjoy their work or because they cannot afford to retire. Most of the older and younger workers are in different labour markets (so there is no direct substitution) and the anxiety that young people will lose out because older people are encouraged to work may not be the case.

Still, there are risks and promises as yet unfilled. We may in fact be at an inflexion point, with both positive and negative impacts. The

technological revolution presents skill-biased technical change: the idea that the net effect of new technologies reduces demand for less skilled workers while increasing demand for highly skilled ones. By definition, such change favours people with higher human capital, polarizing work opportunities.

At the top will be good jobs for those with high education and skills. For example, in the automobile industry those who benefit will be the engineers who design and test new vehicles. At the bottom there will still be low-skill, low-productivity, low-wage service occupations such as office cleaning. But the middle areas will see a steady hollowing out of many jobs in office cubicles and on factory floors. The biggest losers will thus be workers with less specialized, routine-work skills (figure 5).

Many cognitively complex jobs are beyond the abilities even of people with reasonable qualifications. Some industries could thus face skill shortages, so companies willing to pay high salaries for the best talent will look to the global market. And besides being polarized nationally, workforces are being stratified internationally, with low-skilled workers coming mainly from national markets and high-skilled workers from global markets.

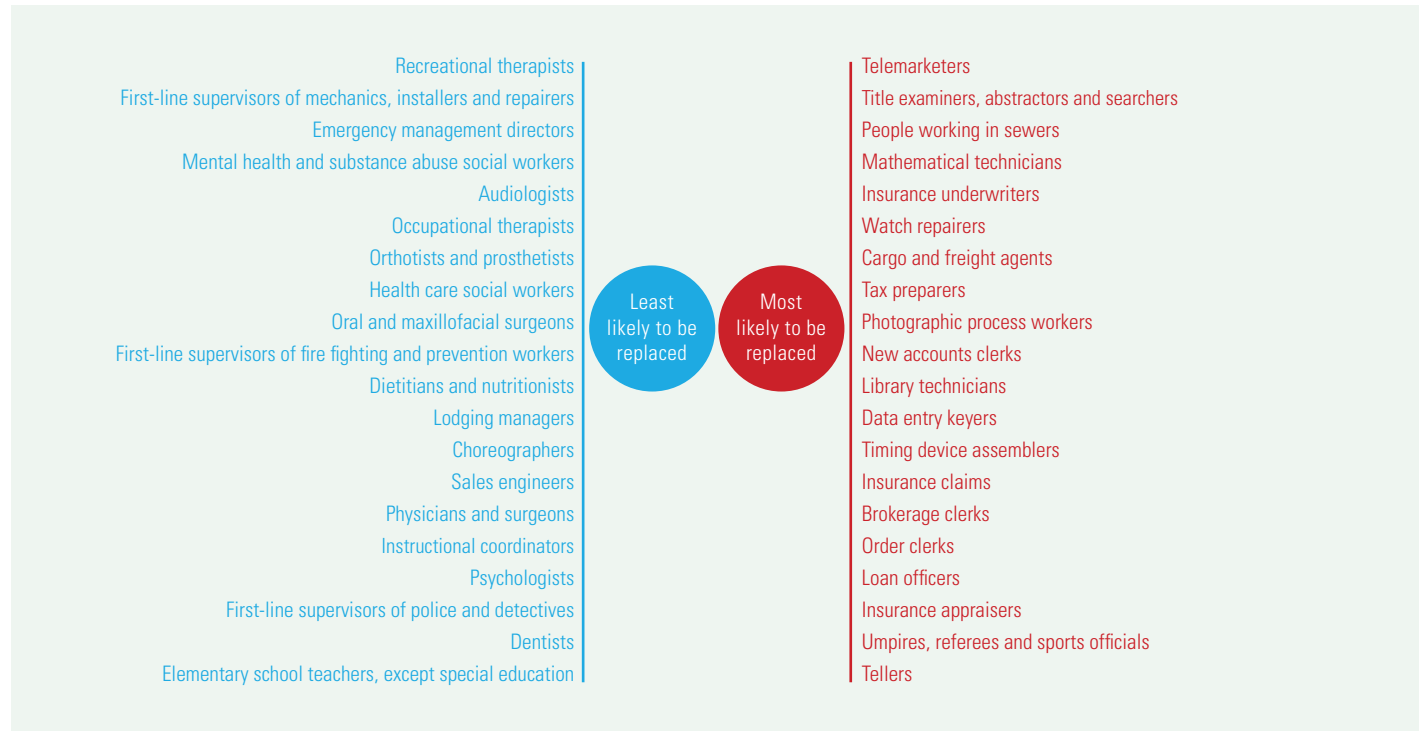
Now is the time to be a worker with special skills and the right education, because these people can use technology to create and capture value. But there has never been a worse time to be a worker with only ordinary skills and abilities, because computers, robots and other digital technologies are acquiring these skills and abilities at an extraordinary speed.

An implied promise of the digital revolution was that it would increase labour productivity and thus would lead to higher pay. This does not seem to have happened on either front: productivity has not grown at the rates expected, and few of the gains have translated into higher wages. In many economies (for example, the Netherlands) the gap between productivity and wage growth has widened over the years, and the situation is even more serious as average wages mask the fact that as real pay for most workers stagnated, income for the highest earners soared.

The technological revolution has been accompanied by rising inequality. Workers are

FIGURE 5

The 20 jobs most and least likely to be replaced by automation



Note: The figure ranks occupations according to their probability of computerization (least likely to become automated in blue and most likely to become automated in red). Occupations correspond closely to the US Department of Labor Standard Occupational Classification.
Source: Frey and Osborne 2013.

getting a smaller share of total income. Even people with better education and training who can work more productively may not receive commensurate rewards in income, stability or social recognition.

The declining share of workers' income can be seen as part of the slowdown in the growth of average real wages: As the income shares of high-skilled labour (and of capital) have been going up, the share of other labour has been going down.

The sharp increase in work compensation to top salary earners has benefited a minority, whether the top 10 percent, 1 percent or even 0.1 percent. The global elite, the world's richest 1 percent, had an average wealth of \$2.7 million per adult in 2014.⁵¹

Are workers, employers and policymakers prepared to respond to the challenges of the emerging world of work? In such a world, specific technical knowledge quickly becomes obsolete, and the policies and rules of yesterday might not serve the challenges of today or tomorrow.

Imbalances leave women at a disadvantage in the realm of work—whether paid or unpaid

In the two worlds of work—unpaid care work and paid work—there continue to be pronounced imbalances across genders, reflecting local values, social traditions and historical gender roles. Care work includes housework, such as preparing meals for the family, cleaning the house and gathering water and fuel, as well as work caring for children, older people and family members who are sick—over both the short and long term. Across most countries in all regions, women work more than men. Women are estimated to contribute 52 percent of global work, men 48 percent.⁵²

But even if women carry more than half the burden, they are disadvantaged in both realms of work—paid as well as unpaid work—in patterns that reinforce each other.

In 2015 the global labour force participation rate was 50 percent for women but 77 percent for men.⁵³ Worldwide in 2015, 72 percent of

Women are estimated to contribute 52 percent of global work, men 48 percent

Men dominate the world of paid work, women that of unpaid work

working-age (ages 15 and older) men were employed, compared with only 47 percent of women.⁵⁴ Female participation in the labour force and employment rates are affected heavily by economic, social and cultural issues and care work distributions in the home.

Of the 59 percent of work that is paid, mostly outside the home, men's share is nearly twice that of women—38 percent versus 21 percent. The picture is reversed for unpaid work, mostly within the home and encompassing a range of care responsibilities: of the 41 percent of work that is unpaid, women perform three times more than men—31 percent versus 10 percent.

Hence the imbalance—men dominate the world of paid work, women that of unpaid work. Unpaid work in the home is indispensable to the functioning of society and human well-being: yet when it falls primarily to women, it limits their choices and opportunities for other activities that could be more fulfilling to them.

Even when women are in paid work, they face disadvantages and discrimination. The evidence of the glass ceiling is just one of them. Women are underrepresented in senior business management globally: They hold only 22 percent of senior leadership positions, and 32 percent of businesses do not have any female senior managers, with regional variations (figure 6).⁵⁵ Occupational segregation has been pervasive over time and across levels of economic prosperity—in both advanced and developing countries men are

over-represented in crafts, trades, plant and machine operations, and managerial and legislative occupations; and women in mid-skill occupations such as clerks, service workers and shop and sales workers.

Even when doing similar work, women can earn less—with the wage gaps generally greatest for the highest paid professionals. Globally, women earn 24 percent less than men. In Latin America top female managers earn on average only 53 percent of top male managers' salaries.⁵⁶ Across most regions women are also more likely to be in "vulnerable employment"—working for themselves or others in informal contexts where earnings are fragile and protections and social security are minimal or absent.

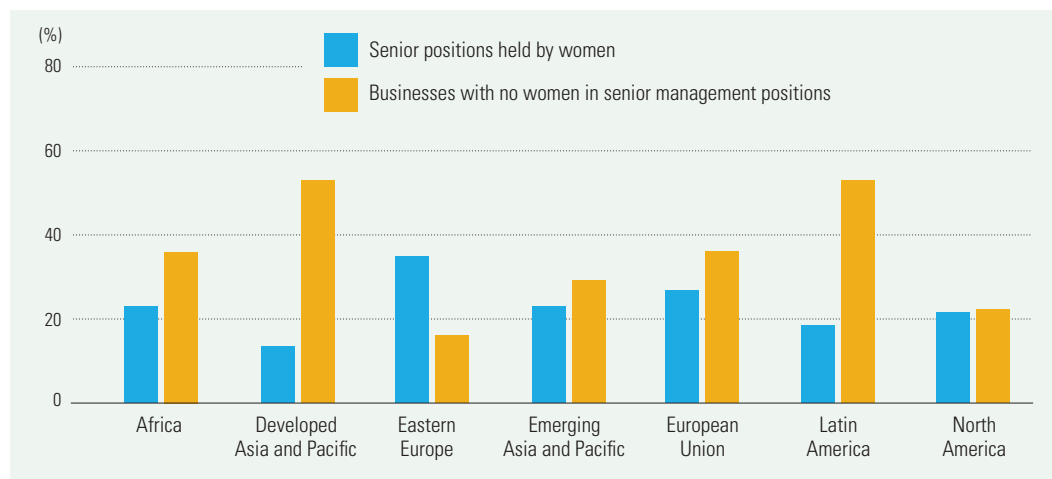
Women bear an unequal share of care work

Women worldwide undertake most of the unpaid care work, which includes mainly housework (such as preparing meals, fetching firewood, collecting water and cleaning) and care work (such as caring for children, the sick and older people) in the home and community.

Due to their disproportionate share of care work, women have less time than men for other activities, including paid work and education. This includes less discretionary free time. In a sample of 62 countries, men devoted on

FIGURE 6

Women's representation in senior management in business, by region, 2015



Source: Grant Thornton 2015.

average 4.5 hours a day to social life and leisure, and women 3.9 hours.⁵⁷ In low human development countries men spend nearly 30 percent more time on social life and leisure than women. In very high human development countries the difference is 12 percent.

Women are also disproportionately involved in paid care work. The demand for paid domestic workers has risen. Globally an estimated 53 million people ages 15 and older are in paid domestic work. Of these, 83 percent are women—some, migrant workers.⁵⁸ And so a global care work chain has emerged where migrant domestic workers undertake housework and provide care to children and others in households abroad. But they often leave their own children and parents behind in their homeland, creating a care gap often filled by grandparents, other relatives or hired local helpers.

Despite the possible abuse in domestic work—low wages, poor working conditions, no access to medical care, and physical or sexual abuse—many workers feel obliged to remain with abusive employers because they need the work.

Despite the importance for human development, care work often goes unrecognized. This is partly because, being unpaid, it is not reflected in economic indicators such as GDP. But valuing unpaid care work would highlight women's contributions in households and communities and draw attention to their material conditions and well-being, with a possible implication for policymaking. Among all countries attempting to measure the value of unpaid care work, estimates range from 20 percent to 60 percent of GDP. In India unpaid care is estimated at 39 percent of GDP, in South Africa 15 percent.⁵⁹

When women have no choice but to give priority to unpaid work and stay out of the labour force, they make large sacrifices, perhaps missing the chance to expand their capabilities in the workplace. They also lose opportunities for economic independence.

Addressing imbalances in unpaid and paid work benefits both current and future generations

Imbalances in the division of work between women and men have to be changed. Yes, many

societies are experiencing a generational shift, particularly in educated middle-class households, towards greater sharing of care work between men and women. Yet much remains to be done, and action needs to happen quickly to address deep gender inequalities. Long-standing patterns of inequalities can reinforce each other, trapping women and girls across generations in realms of limited choices and opportunities. Steps are needed along four policy axes—reducing and sharing the load of unpaid care work, expanding opportunities for women in paid work, improving outcomes in paid work and changing norms.

Time spent in unpaid care work needs to be reduced overall and shared more equally. Universal access to clean water, modern energy services for household needs, quality public services (including those related to health and care), workplace arrangements that accommodate flexible schedules without penalizing professional advancement and a shift in mindsets about gender-specific roles and responsibilities can all contribute to reducing the load of care work for families and women in particular.

Legislation and targeted policies can increase women's access to paid work. Access to quality higher education in all fields and proactive recruitment efforts can reduce barriers, particularly in fields where women are either underrepresented or where wage gaps persist.

Policies can also remove barriers to women's advancement in the workplace. Measures such as those related to workplace harassment and equal pay, mandatory parental leave, equitable opportunities to expand knowledge and expertise and measures to eliminate the attrition of human capital and expertise can help improve women's outcomes at work.

Paid parental leave is crucial. More equal and encouraged parental leave can help ensure high rates of female labour force participation, wage gap reductions and better work–life balance for women and men. Many countries now offer parental leave to be split between mothers and fathers.

Social norms also need to evolve to reflect the equal potentials of women and men. Promoting women to visible positions of seniority, responsibility and decisionmaking in both public and private spheres and

Globally, women
earn 24 percent
less than men

encouraging the engagement of men in traditionally female-dominated professions can help shift deep-seated views.

Sustainable work is a major building block for sustainable development

Sustainable work promotes human development while reducing and eliminating negative side effects and unintended consequences. It is critical not only for sustaining the planet, but also for ensuring work for future generations (figure 7).

For such work to become more common, three parallel changes are needed:

- Termination (some work will end or be reduced).
- Transformation (some work will be preserved through investment in adaptable new technologies and retraining or skill upgrading).
- Creation (some work will be new).

Some occupations can be expected to loom larger—railway technicians, for instance, as countries invest in mass transit systems. Terminated workers may predominate in sectors that draw heavily on natural resources or emit greenhouse gases or other pollutants. About 50 million people are employed globally in such sectors (7 million in coal mining, for example).

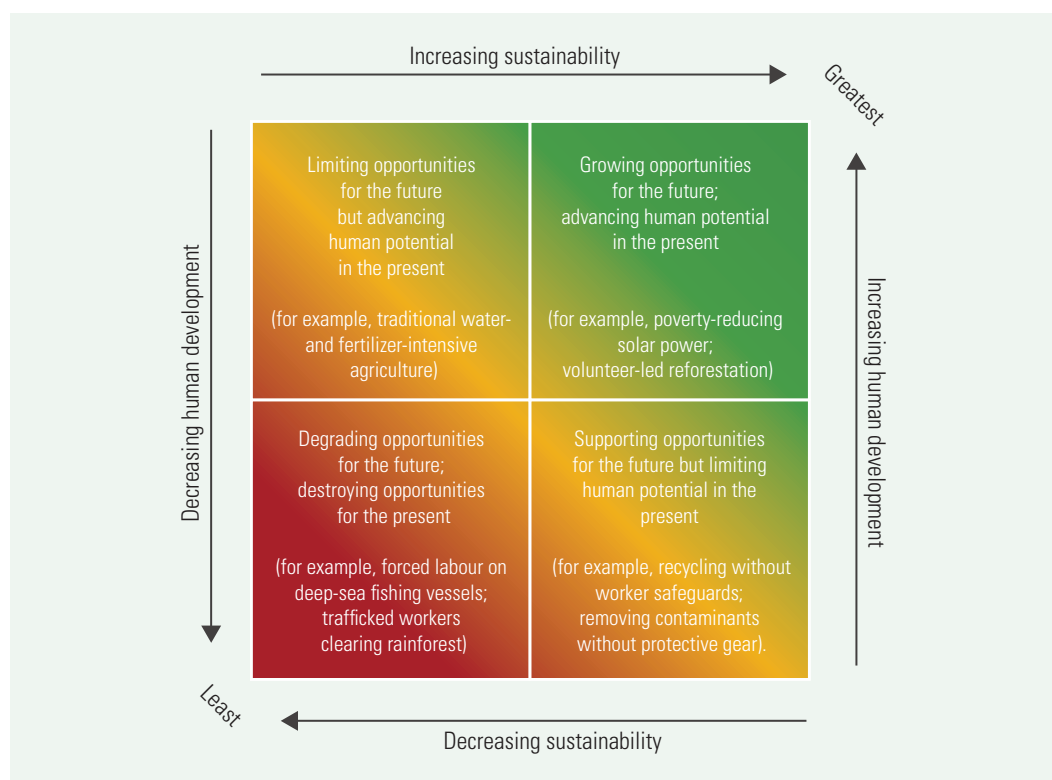
In many occupations, how output is produced also needs to change, as in ship breaking, by implementing and enforcing standards.

New areas of work include solar photovoltaic technologies, an important part of many countries' renewable energy strategies. Their potential for human development differs radically depending on whether they replace grid-based electricity generated by conventional means, as in many developed countries, or expand off-grid energy access, as in many developing countries. Renewable energy could become a key vehicle towards achieving Sustainable Development Goal 7.1 to ensure universal

Sustainable work promotes human development

FIGURE 7

The matrix of sustainable work



Source: Human Development Report Office.

access to affordable, reliable and modern energy services by 2030 (table 1).

The Sustainable Development Goals have key implications for sustainable work

The Sustainable Development Goal with the most direct implications for sustainable work is goal 8 (promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all), and its associated targets, which spell out some of the implications for sustainable work. Target 8.7 is to take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including the recruitment and use of child soldiers and by 2025 to end child labour in all its forms.

Target 8.8—to protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment—aims to strengthen the human development outcomes of workers, avoiding a race to the bottom. Target 8.9—to devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products by 2030—advocates for a particular kind of (sustainable) work.

Target 3.a—to strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate—seeks to reduce work associated with tobacco production and distribution while improving the health of workers. Target 9.4—to upgrade by 2030 infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial

Renewable energy could become a key vehicle towards achieving sustainable development

TABLE 1

Sustainable Development Goals

Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts ^a
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development

a. Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.
Source: UN 2015b.

Much of the work tied to environmental sustainability will involve infrastructure and construction

processes, with all countries taking action in accordance with their respective capabilities—implies a specific direction to upgrading skills and possibly to new areas of work.

A large number of the Sustainable Development Goal targets intend to focus on work that has negative implications for human development. Target 8.7, if reached, would improve the lives of 168 million child labourers and 21 million in forced labour.⁶⁰ Target 5.2 would assist 4.4 million sexually exploited women,⁶¹ and target 3.a would affect an estimated 100 million workers in tobacco.⁶² Active policies and programmes will be needed to support the people formerly engaged in these kinds of work.

Other goals and targets involve transforming current modes of work and introducing new approaches. Goal 2—ending hunger and achieving food security and improved nutrition and promoting sustainable agriculture—has the potential to transform how the very large number of people engaged in agriculture carry out their activities.

Work in some primary industries—such as farming, fisheries and forestry—engages more than a billion people worldwide, including most of those living on less than \$1.25 a day.⁶³ The sector is responsible for a large proportion of greenhouse gas emissions, is associated with unsustainable patterns of water and soil use, is linked to deforestation and loss of biodiversity and is especially susceptible to the disruptions of climate change.

Transforming the way farmers grow and process crops is thus crucial. Technologies and farming methods that can make a difference exist but need to be adopted faster. For example, about a third of total food production is lost or wasted, with cereals accounting for the largest share. Broad efforts are needed to expand demonstrable, immediate gains—and to create new products for industrial or artisanal manufacture.⁶⁴

Much of the work tied to a move to environmental sustainability (target 9.4) will involve infrastructure and construction. Energy projects (goal 7) can drive long- and short-term jobs, directly and indirectly, when they enable other industries to grow and flourish. In 2014 renewable energy (excluding large hydropower, which had roughly 1.5 million direct jobs)

employed an estimated 7.7 million people directly and indirectly.⁶⁵ In renewable energy the field of solar photovoltaics is the largest employer worldwide, with 2.5 million jobs.

By strengthening health and education outcomes, especially among children, the Sustainable Development Goals can set the basis for people to acquire the skills to move to occupations that involve sustainable work.

The world has changed dramatically, but the concept of human development remains as relevant as ever—if not more so

The world today is very different from the world in 1990, when the notion of human development and its measures to assess human well-being were launched. Since then, the development canvas has changed, global growth centres have shifted, important demographic transitions have materialized and a fresh wave of development challenges has emerged.

The global economy is changing. The influence of emerging economies is rising. Developed economies' share of global GDP (based on purchasing power parity dollars) fell from 54 percent in 2004 to 43 percent in 2014. Politically, the desire for freedom and voice has swept different parts of the world. The digital revolution has changed the ways we think and operate. Inequalities have gone up. Human security has become more fragile. And climate change is affecting more human lives.

So, is the notion of human development still relevant for development discourse and as a measure of human well-being? Yes—even more so in today's world.

Even with all the economic and technological advancements at the world's disposal, people do not have equitable benefits from progress, human capabilities and opportunities do not always flourish, human security is at stake, human rights and freedoms are not always protected, gender inequalities remain a challenge, and future generations' choices do not get the attention they deserve. So the notion of human development—enlarging choices, emphasizing a long, healthy and creative life and highlighting the need for expanding capabilities and creating opportunities—assumes a new

importance as a development framework, with people at the centre of development.

Similarly, as a measure of human well-being, the human development framework still provides perhaps the broadest perspective of human progress, while contributing to policymaking.

Yet after a quarter of a century, the time has come to revisit both aspects—the notion and the measures.

The notion and measures of human development should be reviewed to make them more relevant for today's challenges and tomorrow's world

The conceptual angle of human development requires a fresh look for dealing with emerging challenges in a fast-changing world, especially in dialogue with the new 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

The basic focus should be kept intact. But issues such as individual and collective choices, their probable trade-offs in conflicting situations, hierarchies among such choices and the balance between choices of present and future generations need to be looked after. Similarly, issues of human development in relation to shocks and vulnerabilities and the relationships among human development, human rights and human security will have to be revisited.

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals require fresh assessment tools for monitoring progress—measuring environmental sustainability and integrating it with overall measures for human well-being are priorities.

Three other challenges stand out. First, measures and indicators have to be identified that allow policy impacts to be more quickly captured. Second, measures are often inadequate for assessing human well-being at times of

shocks and crises and should thus be revamped to fill this need. Third, “quick guidance” policy measures should be explored.

All these efforts require robust, consistent and credible data. Taking that into account and also considering a much more ambitious international agenda, the High Level Panel on the Post-2015 Agenda convened by the UN Secretary-General in 2014 called for a data revolution. It emphasized the need to monitor progress. Three issues need highlighting:

- First, huge amounts of real-time data can provide better information on, say, the attendance of students at school. Sensors, satellites and other tools produce real-time data on people's activities. These can be harnessed to inform policymaking.
- Second, big data holds the promise of producing statistics almost instantaneously and allowing disaggregation to levels of detail hitherto undreamt of outside population censuses. Such data are expanding the understanding of causation in an increasingly complex world and enabling rapid responses in some humanitarian situations. But the data have risks—they could do harm where privacy and anonymity are not respected. Still, many researchers are identifying how this large volume of information—generated both incidentally and deliberately as billions of people go about their daily lives—can support sustainability and provide usable insights for improving lives.
- Third, it is possible to combine traditional and new methods of data collection for censuses, ranging from administrative registers to mobile devices, geospatial information systems and the Internet. Many countries have already done this.

In this changed and changing world, with a new development agenda and new development goals, the need for revisiting the notion and measures of human development is vital. Next year's Human Development Report, the 25th in the series, will be devoted to it.

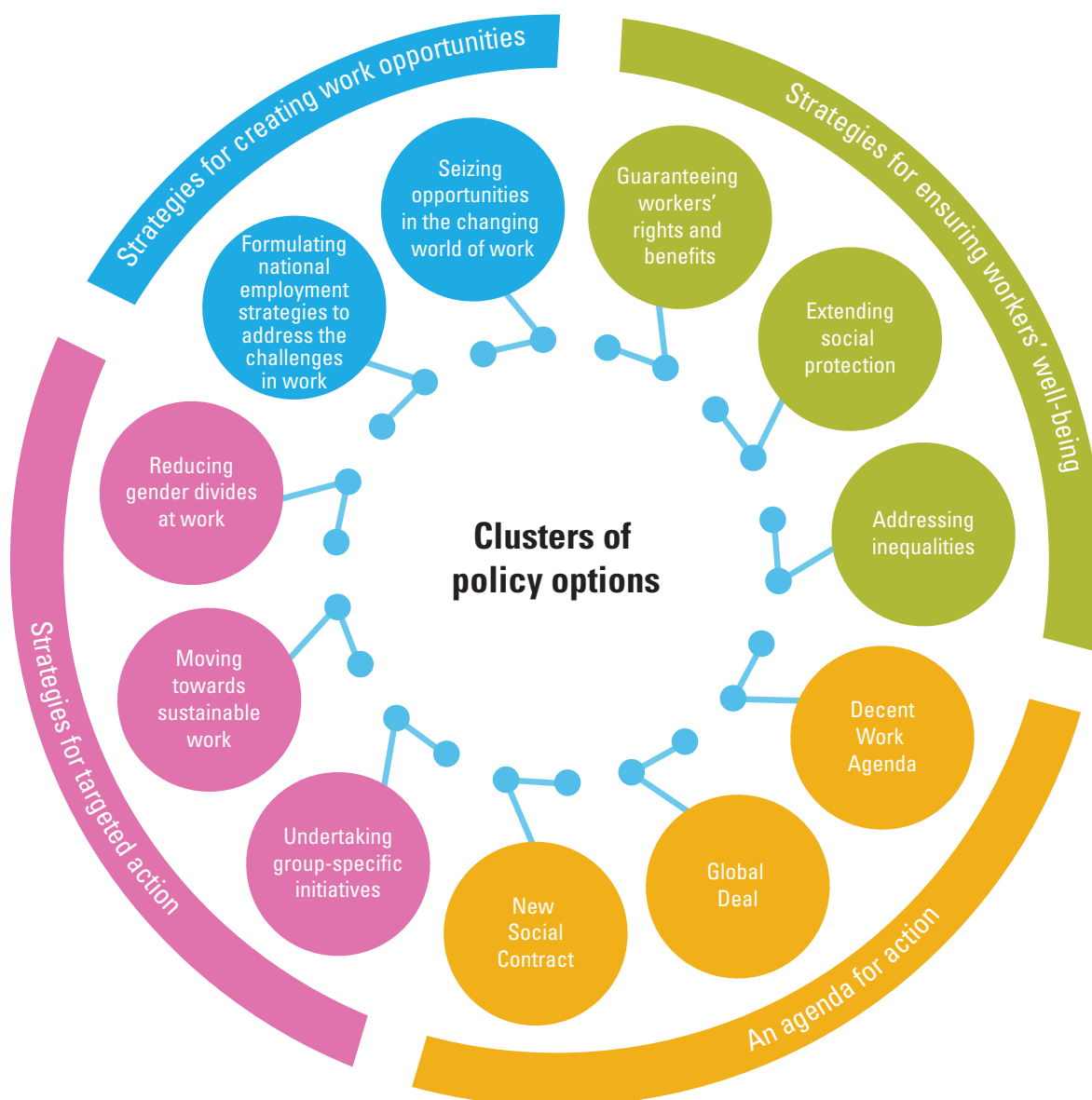
The notion of human development is still relevant for development discourse—even more so in today's world

Enhancing human development through work needs concrete policies and an agenda for action

Policy options for enhancing human development through work have to be built around three broad dimensions: creating more work opportunities to expand work choices, ensuring workers' well-being to reinforce a positive link between work and human development and targeted actions to address the challenges of specific groups and contexts. An agenda for action to build momentum for change is also needed, pursuing a three-pillar approach—a New Social Contract, a Global Deal and the Decent Work Agenda (figure 8).

FIGURE 8

Policies for enhancing human development through work



Source: Human Development Report Office.

Creating work opportunities requires well formulated employment plans as well as strategies to seize opportunities in the changing world of work

Work for human development is about more than just jobs, but human development is also about expanding people's choices and making sure that opportunities are available. This includes ensuring that adequate and quality paid work opportunities are available and accessible for those who need and want paid work. National employment strategies are needed for addressing the complex challenges in work in many countries. About 27 developing countries have adopted national employment strategies, another 18 are doing so and 5 are revisiting their policies to better respond to new employment challenges.⁶⁶ Major policy instruments of a national employment strategy might include:

- *Setting an employment target.* More than a dozen countries have employment targets (including Honduras and Indonesia). Central banks may pursue dual targeting—moving beyond a focus primarily on inflation control to emphasize employment targets. They may also consider specific monetary policy instruments (such as credit allocation mechanisms) for creating more work opportunities, as in Chile, Colombia, India, Malaysia and Singapore.
- *Formulating an employment-led growth strategy.* Employment can no longer be considered to be simply a derivative of economic growth. Some policy interventions would entail strengthening links between small and medium-sized enterprises in need of capital and large capital-intensive firms to boost employment, upgrading workers' skills over the lifecycle, focusing investments and inputs on sectors where poor people work (such as agriculture), removing barriers critical to employment-led growth (such as removing biases towards small and medium-sized enterprises in access to credit), implementing solid legal and regulatory frameworks and addressing the distribution of capital and labour in public spending to emphasize technologies that create jobs.
- *Moving to financial inclusion.* An inclusive financial system is essential for structural transformation and work creation. In developing countries the lack of access to finance

is a major hindrance to enterprise operation and growth, particularly for women. Policy options might encompass extending banking services to disadvantaged and marginalized groups (as in Ecuador),⁶⁷ steering credit towards unserved, remote areas and targeted sectors (as in Argentina, Malaysia and the Republic of Korea)⁶⁸ and lowering interest rates and providing credit guarantees and subsidized credit to small and medium-sized enterprises and export-oriented sectors.

- *Building a supportive macroeconomic framework.* Some policy instruments to reduce volatility and create secure jobs include keeping the real exchange rate stable and competitive, managing capital accounts prudently, restructuring budgets towards job-creating sectors, building fiscal space for public spending, promoting an enabling business environment, ensuring high-quality infrastructure and adopting a regulatory framework that encourages competition, enhances efficiency and ensures transparency and accountability for business.

Seizing opportunities in the changing world of work requires policy actions to help people thrive in the new work environment. Individuals can flourish if they are equipped with skills, knowledge and competencies to harness new technologies and capitalize on emerging opportunities. Some of the policy actions here would require:

- *Heading off a race to the bottom.* Given the realized and potential benefits that globalization brings to work, a race to the bottom—ever lower wages and worsening working conditions—is not the only outcome. Global attention to ensuring decent wages, maintaining workers' safety and protecting their rights can pre-empt such a race and make business more sustainable in the long run, as can fair trade, because work conditions are becoming increasingly critical in consumers' minds.
- *Providing workers with new skills and education.* Higher and specific skills will be needed for science and engineering jobs and for many other jobs, as will be an aptitude for creativity, problem solving and lifelong learning.

Employment can no longer be considered to be simply a derivative of economic growth

Strategies for ensuring workers' well-being must focus on rights, benefits, social protection and inequalities

Guaranteeing rights and benefits of workers is at the heart of strengthening the positive link between work and human development

Guaranteeing the rights and benefits of workers is at the heart of strengthening the positive link between work and human development and weakening the negative connections.

Policies could include:

- *Setting legislation and regulation.* These should be on collective bargaining, unemployment insurance, the minimum wage, protection of workers' rights and worker safety. Steps to ratify and implement the eight International Labour Organization conventions on work and to put in place legal frameworks for enforcement are also needed (figure 9).
- *Ensuring that people with disabilities can work.* Measures can induce employers to provide an appropriate working environment. States can make efforts to change norms and perceptions, enhance the capabilities of people with disabilities, ensure workplace accessibility and access to appropriate technology and adopt affirmative action policies.
- *Making workers' rights and safety a cross-border issue.* Measures may include regulatory

frameworks that extend to migrants, sub-regional remittance clearinghouses and more support to migrant source countries. These frameworks may constitute regional or sub-regional public goods.

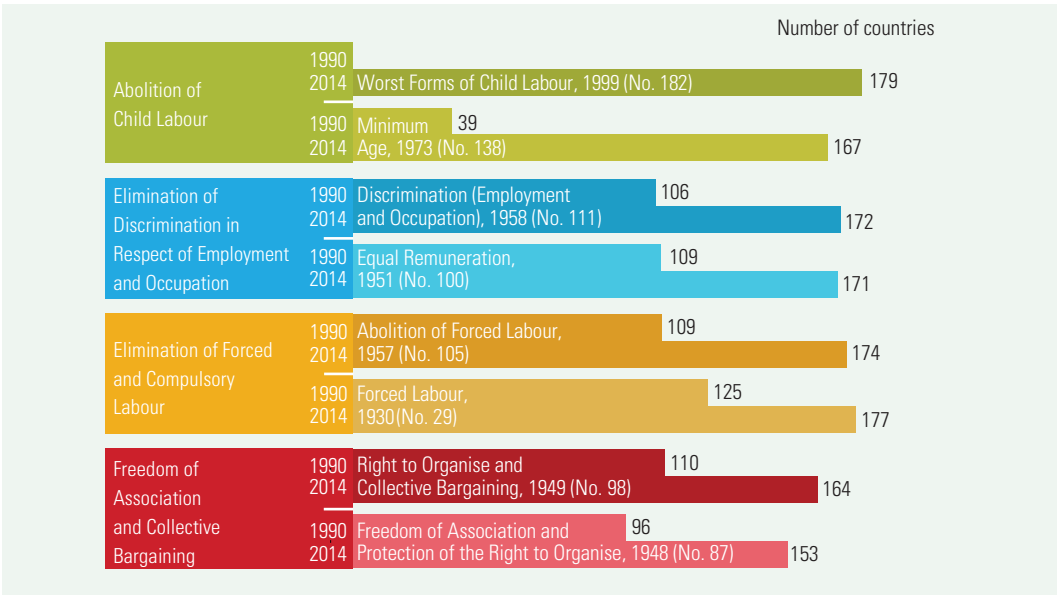
- *Promoting collective action and trade unionism.* Given globalization, the technological revolution and changes in labour markets, support is needed for emerging forms of collective action (such as the Self-Employed Women's Association in India),⁶⁹ innovative organizations for flexible workers (such as the Freelancers Union in the United States)⁷⁰ and collective bargaining, including peaceful protests and demonstrations.

Only 27 percent of the world's population is covered by comprehensive social protection, which means that the security and choices of many workers is severely limited.⁷¹ Action to extend social protection should focus on:

- *Pursuing well designed, targeted and run programmes.* A basic and modest set of social security guarantees can be provided for all

FIGURE 9

Number of countries having ratified International Labour Organization conventions, 1990 and 2014



Source: Human Development Report Office calculations based on ILO (2014c).

citizens through social transfers in cash and kind. Resources can be mobilized through, for example, progressive taxes, restructured expenditures and wider contributory schemes.

- *Combining social protection with appropriate work strategies.* Programmes would provide work to poor people while serving as a social safety net.
- *Assuring a living income.* This would be a basic minimum income for all, independent of the job market, through cash transfers. Such a policy would help make unpaid work a more feasible and secure option.
- *Tailoring successful social protection programmes to local contexts.* Programmes for cash transfers or conditional cash transfers have provided a source of social protection, particularly in Latin America (such as Bolsa Família in Brazil and Oportunidades, now called Prospera, in Mexico) and could be replicated in other parts of the world.
- *Undertaking direct employment guarantee programmes.* Countries have also pursued employment guarantees. The best known is the National Rural Employment Guarantee Scheme in India.⁷²
- *Targeting interventions for older people.* Older people's scope for choice in work is limited by access to pensions. Policy choices include expanding noncontributory basic social pensions systems and exploring fully funded contributory pension systems (as in Chile, for example).⁷³

Because workers are getting a smaller share of total income and inequalities in opportunities are still substantial, policy options should focus on:

- *Formulating and implementing pro-poor growth strategies.* This would entail creating work in sectors where most poor people work, improving poor households' access to such basic social services as health, education, safe water and sanitation and providing access to such productive resources as inputs, credit and finance. These actions can also free up time spent in unpaid care work. Subsidies, targeted expenditures and pricing mechanisms are other options.

- *Providing complementary support.* Marketing facilities, investments in physical infrastructure (particularly in rural areas), expansion of extension services and labour-intensive technologies are conducive to equalizing work opportunities. The private sector can, with the right incentives, be encouraged to play a major role in building and running physical infrastructures.
- *Democratizing education, particularly at the tertiary level, nationally and globally.* Countries place a high premium on tertiary education, but access is unequal and can perpetuate inequalities in work,⁷⁴ as seen within countries (most workers with a tertiary education come from higher income families) and between countries (countries with greater increases in tertiary education are industrial, with already high attainment in this segment).
- *Pursuing profit sharing and employee ownership.* Profit sharing with labour and giving employees shares in enterprises may help cut income inequality.⁷⁵
- *Adopting and enforcing proper distributive policies.* These could include progressive taxes on income and wealth, regulations to reduce rent extraction, stricter regulation (particularly of finance) and targeted public spending on the poor.
- *Regulating the financial sector to reduce the regressive effects of cycles.* Promoting investments in the real economy can generate secure jobs, while increases in financial investment can be less stable and produce fewer jobs.
- *Removing asymmetries between the mobility of labour and of capital.* Labour mobility does not match capital's given intrinsic differences. As a matter of policy, industrial countries promote capital mobility but discourage that of labour. Nonetheless, regulating capital movements can reduce macroeconomic instability and middle-income traps in developing countries, preventing capital from moving overseas when wages become too high. Migration policies can at a minimum reduce the risks of migration.

Profit sharing with labour and giving employees shares in enterprises may help cut income inequality

Targeted actions are needed for balancing care and paid work, making work sustainable, addressing youth unemployment, encouraging creative and voluntary work and providing work in conflict and post-conflict situations

Targeted measures for sustainable work may focus on terminating, transforming and creating work

Addressing imbalances in paid and unpaid work opportunities between women and men may benefit from the following policy measures:

- *Expanding and strengthening gender-sensitive policies for female wage employment.* Programmes should address skills development through education, particularly in math and science, training that matches market demands and access to continuing professional development.
- *Actions to increase representation of women in senior decisionmaking positions.* Representation can be enhanced in public and private sectors through policies on human resources, selection and recruitment, and incentives for retention. The criteria for moving men and women into senior positions should be identical. Mentoring and coaching can empower women in the workplace, for example, by using successful senior female managers as role models.
- *Specific interventions.* Legislative measures are needed to reduce inequalities between women and men in harassment in the workplace, discrimination in hiring, access to finance and access to technology.
- *Focusing on maternal and paternal parental leave.* Rather than pursuing a totally gender-neutral approach, if a bonus is granted to parents who share parental leave more equally, fathers may be induced to make more use of paternal leave.
- *Enlarging care options, including day-care centres, after-school programmes, senior citizens' homes and long-term care facilities.* Employers can also offer child-care onsite. Another alternative is to subsidize care work through vouchers and tickets.
- *Encouraging flexible working arrangements, including telecommuting.* There should be sufficient incentives to return to work after giving birth. These may encompass reservation of jobs for women on maternity leave for up to a year. Women could also be offered benefits and stimulus (for example, salary increases) to return to work. Telecommuting and flexible

hours can also allow women and men to address imbalances in paid and unpaid work.

- *Valuing care work.* Efforts would help raise policy awareness about the value care work brings to society and could encourage different options for rewarding such work.
- *Gathering better data on paid and unpaid work.* National statistical systems, using more female investigators and appropriate samples and questionnaires, should gather better data on the distribution of paid and unpaid work.

Targeted measures for sustainable work may focus on terminating, transforming and creating work to advance human development and environmental sustainability. Policy measures may focus on:

- *Adopting different technologies and encouraging new investments.* This would require departing from business as usual, pursuing technology transfer and quickly moving to more sustainable work.
- *Incentivizing individual action and guarding against inequality.* This requires recognizing and incentivizing the positive externalities in people's work—for example, using a social wage, which goes beyond a private wage to reward workers when their work is of value to society (for example, conservation of forests).
- *Managing trade-offs:* For example, supporting workers who lose their jobs due to an end of activities in their sector or industry (for example, mining), implementing standards (as in the ship-breaking industry), addressing intergenerational inequality and managing and facilitating change.

Additionally, a mechanism is needed to translate the desired global outcomes into country actions (box 3).

Policy options mentioned earlier, particularly for education and skills building, are especially relevant to addressing youth unemployment. But given the severity of this challenge and its multidimensional (economic, social and political) impacts, it also requires targeted interventions. Exciting work opportunities for young people should be created so that they

BOX 3

Possible measures at the country level for moving towards sustainable work

- Identify appropriate technologies and investment options, including leapfrogging opportunities.
- Set up regulatory and macroeconomic frameworks to facilitate adoption of sustainable policies.
- Ensure that the population has the appropriate skills base—combining technical and high-quality skills with core abilities for learning, employability and communicating.
- Retrain and upgrade the skills of large numbers of workers in informal sectors, such as agriculture. While some workers may be reached through the market, others will need the help of the public sector, nongovernmental organizations and others. These programmes can be a means to support women and other traditionally disadvantaged groups.
- Manage the adverse impacts of the transition by offering diversified packages of support and levelling the playing field to break the transmission of intergenerational inequality.
- Continue to build the skill base of the population. This will require a lifecycle approach that recognizes the cumulative nature of interventions that lead to learning. Large investments in the number and quality of health and education workers will be necessary, underscoring the continuing role of the public sector in transforming skills.

Source: Atkinson 2015.

can unbridle their creativity, innovation and entrepreneurship in the new world of work. Methods for doing so include:

- *Providing policy support to the sectors and entities creating new lines of work.* Such initiatives are ongoing, and new opportunities are being discovered every day, but they need policy support.
- *Investing in skills development, creativity and problem solving.* Special support should be extended to young women and men in apprenticeships, trade and vocational training, and on-the-job learning.
- *Providing supportive government policies to help young entrepreneurs.* Areas include advisory services for establishing businesses and initiatives and better instruments and channels for financing. Recently, crowdsourcing has emerged as a means of generating funds for small initiatives.⁷⁶
- *Making tertiary learning more widely available through the Internet.* Massive open online courses are linking world-renowned academic institutions and students around the world.
- *Using cash transfer programmes to provide employment for local young people and poor*

people. In India and Uganda these programmes have provided resources for funding job searches and for supporting high-quality training and skills development.⁷⁷ They have also increased access to other sources of credit for entrepreneurship.

Creative work requires an enabling work environment, including financial support, and opportunities to collaborate and cross-fertilize ideas. Some key requirements for creativity and innovation to thrive are:

- *Innovating inclusively.* Here, new goods and services are developed for or by those living on the lowest incomes or by women, extending creative opportunities to groups that may be underrepresented.
- *Assuring democratic creativity.* Workplaces and online platforms can be organized in ways that encourage innovation at all levels.
- *Funding experimentation and risk.* This entails solving intractable social and environmental problems that may require foundations and public institutions to take funding risks on less proven approaches.
- *Innovating for the public good.* Creativity and innovation can advance many objectives. Policies that direct innovation towards the

Exciting work opportunities for young people should be created

greater social good, including volunteer work, can enhance human development.

Voluntary work can be encouraged by tax rebates, subsidies and public grants to voluntary organizations. Public support to create and protect space for voluntary work can bring social benefits, particularly during emergencies like conflicts and natural disasters.

In conflict and post-conflict situations it is important to focus on productive jobs that empower people, build agency, provide access to voice, offer social status and increase respect, cohesion, trust and people's willingness to participate in civil society. Some policy options are:

- *Supporting work in the health system.* In many conflict-afflicted countries the health system has collapsed, and support for emergency

health services is critical for workers and the wounded.

- *Getting basic social services up and running.* This has social and political benefits. Communities, nongovernmental organizations and public–private partnerships can be the drivers.
- *Initiating public works programmes.* Even emergency temporary jobs, cash for work and the like can provide much needed livelihoods and contribute to the building of critical physical and social infrastructures.
- *Formulating and implementing targeted community-based programmes.* Such programmes can yield multiple benefits, including stability. Economic activities can be jumpstarted by reconnecting people, reconstructing networks and helping restore the social fabric.

Beyond the policy options, a broader agenda for action is needed

- *Developing a New Social Contract.* In the new world of work participants are less likely to have long-term ties to a single employer or to be a member of a trade union than their forebears. This world of work does not fit the traditional arrangements for protection. How does society mobilize funds to cover a widening population that is not always in work, reach those working outside the formal sector, accommodate new labour market entrants (especially migrants) and cover those unable to work? There may be a need for a New Social Contract in such circumstances involving dialogue on a much larger scale than took place during the 20th century. Denmark is making strides providing security alongside reskilling and skills upgrading in an increasingly flexible job market (box 4).
- *Pursuing a Global Deal.* In an era of global production, national policies and social contracts may not work outside of global commitments. Further, true globalization rests on the idea of sharing—we should share the responsibility for a “global working life.”

A Global Deal would require mobilizing all partners—workers, businesses and governments—around the world, respecting

workers’ rights in practice and being prepared to negotiate agreements at all levels. This will not require new institutions, merely reoriented attention in the world’s strong international forums.

A Global Deal can guide governments in implementing policies to meet the needs of their citizens. Without global agreements, national policies may respond to labour demands at home without accounting for externalities. This implies that a global–national compact is also necessary. International conventions such as the International Labour Organization Convention Concerning Decent Work for Domestic Workers, which entered into force in September 2013, was a groundbreaking agreement that stands to establish global standards for the rights of domestic workers worldwide. This kind of agreement offers guiding principles to signatories but leaves space for national governments to implement policies within national contexts to meet commitments. Motivated by global actions, national policies create real change in local communities.

- *Implementing the Decent Work Agenda.* The Decent Work Agenda has four pillars (box 5). The agenda and the human development framework are mutually reinforcing. Decent work enhances human development through each of its pillars. Employment creation and enterprise development provide income and livelihoods to people, are crucial instruments for equity, are a means for participation and facilitate self-esteem and dignity. Workers’ rights support human development by ensuring human rights, human freedom and labour standards. Social protection contributes to human development by ensuring safety nets, protecting people from risks and vulnerabilities and providing care work. And social dialogue helps human development through broad-based participation, empowerment and social cohesion.

Conversely, human development contributes to the four pillars. Expanding capabilities

Implementing the
Decent Work Agenda
will help work enhance
human development

BOX 4

Flexicurity in Denmark

The Danish labour market has a lot of what is often called “flexicurity”: coexistence of flexibility, in the form of low adjustment costs for employers and employees, and security, a by-product of Denmark’s well developed social safety net, ensuring high coverage and replacement rates.

The principal aim of flexicurity is to promote employment security over job security, meaning protection focuses on workers rather than their jobs. Consequently, employers benefit from all the advantages of a flexible labour force while employees can take comfort in a robust social safety net applied with active labour market policies.

Source: World Bank 2015b.

BOX 5

The four pillars of the Decent Work Agenda

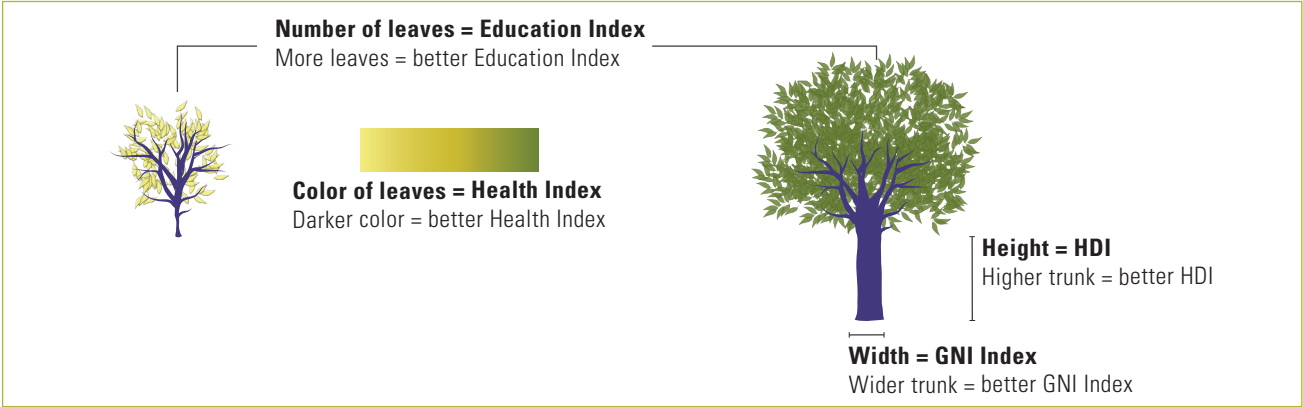
- *Employment creation and enterprise development.* This requires acknowledging that a principal route out of poverty is jobs and that the economy needs to generate opportunities for investment, entrepreneurship, job creation and sustainable livelihoods.
- *Standards and rights at work.* People need representation opportunities to participate, to voice their views in order to obtain rights and to earn respect. The International Labour Organization's normative work is key for compliance and measuring progress.
- *Social protection.* Basic social protection, such as health care and retirement security, is a foundation for participating productively in society and the economy.
- *Governance and social dialogue.* Social dialogue among governments, workers and employers can resolve important economic and social issues, encourage good governance, establish sound labour relations and boost economic and social progress.

Source: ILO 2008b.

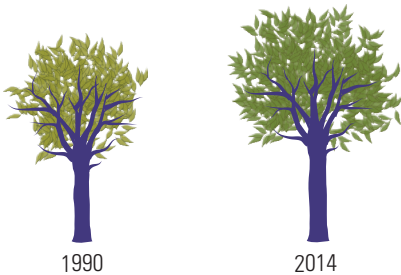
through human development enhances opportunities for employment and entrepreneurship. The participation aspect of human development helps enrich social dialogue. Human development also emphasizes the promotion

of human rights, which boosts workers' rights and enhances human security. Given all these interlinks, implementing the Decent Work Agenda will help work enhance human development.⁷⁸

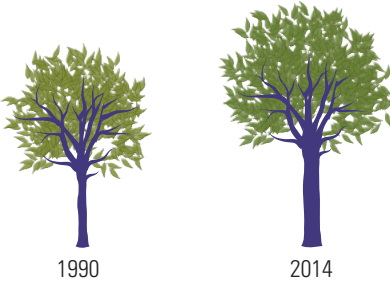
Infographic: Human Development Index tree



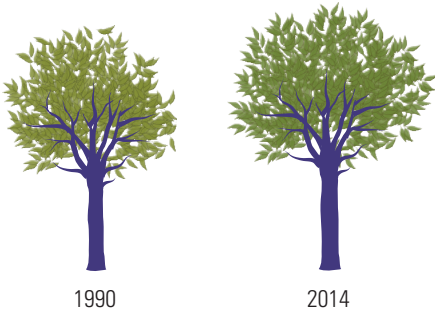
Arab States



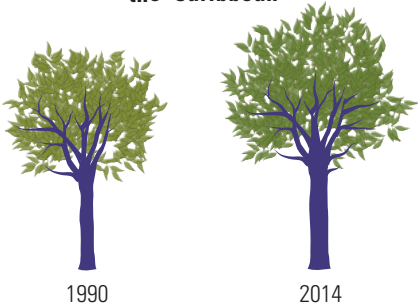
East Asia and the Pacific



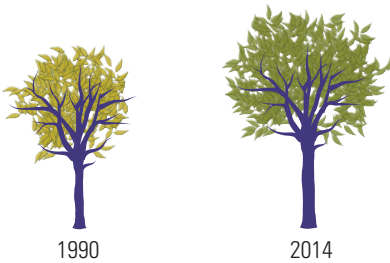
Europe and Central Asia



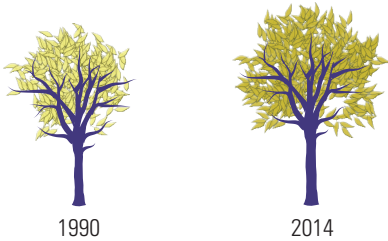
Latin America and the Caribbean



South Asia



Sub-Saharan Africa



Note: Infographic was inspired by the work of Jurjen Verhagen, the winner of the 2015 Cartagena Data Fest visualization contest.

Human development indices

HDI rank	Human Development Index	Inequality-adjusted HDI			Gender Development Index		Gender Inequality Index		Multidimensional Poverty Index ^a	
	Value	Value	Overall loss (%)	Difference from HDI rank ^b	Value	Group ^c	Value	Rank	HDRO specifications ^d	Year and survey ^e
	2014	2014	2014	2014	2014	2014	2014	2014	Value	2005–2014
VERY HIGH HUMAN DEVELOPMENT										
1 Norway	0.944	0.893	5.4	0	0.996	1	0.067	9	..	..
2 Australia	0.935	0.858	8.2	−2	0.976	1	0.110	19	..	..
3 Switzerland	0.930	0.861	7.4	0	0.950	2	0.028	2	..	..
4 Denmark	0.923	0.856	7.3	−1	0.977	1	0.048	4	..	..
5 Netherlands	0.922	0.861	6.6	3	0.947	3	0.062	7	..	..
6 Germany	0.916	0.853	6.9	0	0.963	2	0.041	3	..	..
6 Ireland	0.916	0.836	8.6	−3	0.973	2	0.113	21	..	..
8 United States	0.915	0.760	17.0	−20	0.995	1	0.280	55	..	..
9 Canada	0.913	0.832	8.8	−2	0.982	1	0.129	25	..	..
9 New Zealand	0.913	..	..	..	0.961	2	0.157	32	..	..
11 Singapore	0.912	..	..	..	0.985	1	0.088	13	..	..
12 Hong Kong, China (SAR)	0.910	..	..	..	0.958	2	..	..	..	..
13 Liechtenstein	0.908	..	..	..	..	..	..	..	..	..
14 Sweden	0.907	0.846	6.7	3	0.999	1	0.055	6	..	..
14 United Kingdom	0.907	0.829	8.6	−2	0.965	2	0.177	39	..	..
16 Iceland	0.899	0.846	5.9	4	0.975	1	0.087	12	..	..
17 Korea (Republic of)	0.898	0.751	16.4	−19	0.930	3	0.125	23	..	..
18 Israel	0.894	0.775	13.4	−9	0.971	2	0.101	18	..	..
19 Luxembourg	0.892	0.822	7.9	0	0.971	2	0.100	17	..	..
20 Japan	0.891	0.780	12.4	−5	0.961	2	0.133	26	..	..
21 Belgium	0.890	0.820	7.9	1	0.975	1	0.063	8	..	..
22 France	0.888	0.811	8.7	0	0.987	1	0.088	13	..	..
23 Austria	0.885	0.816	7.8	2	0.943	3	0.053	5	..	..
24 Finland	0.883	0.834	5.5	10	0.996	1	0.075	11	..	..
25 Slovenia	0.880	0.829	5.9	8	0.996	1	0.016	1	..	..
26 Spain	0.876	0.775	11.5	0	0.975	1	0.095	16	..	..
27 Italy	0.873	0.773	11.5	−1	0.964	2	0.068	10	..	..
28 Czech Republic	0.870	0.823	5.4	10	0.980	1	0.091	15	..	..
29 Greece	0.865	0.758	12.4	−5	0.961	2	0.146	29	..	..
30 Estonia	0.861	0.782	9.2	6	1.030	2	0.164	33	..	..
31 Brunei Darussalam	0.856	..	..	..	0.977	1	..	..	..	..
32 Cyprus	0.850	0.758	10.7	−2	0.971	2	0.124	22	..	..
32 Qatar	0.850	..	..	..	0.998	1	0.524	116	..	..
34 Andorra	0.845	..	..	..	..	..	..	..	..	..
35 Slovakia	0.844	0.791	6.2	9	0.999	1	0.164	33	..	..
36 Poland	0.843	0.760	9.8	2	1.007	1	0.138	28	..	..
37 Lithuania	0.839	0.754	10.1	−1	1.030	2	0.125	23	..	..
37 Malta	0.839	0.767	8.5	4	0.937	3	0.227	46	..	..
39 Saudi Arabia	0.837	..	..	..	0.901	4	0.284	56	..	..
40 Argentina	0.836	0.711	15.0	−8	0.982	1	0.376	75	0.015 ^f	2005 N
41 United Arab Emirates	0.835	..	..	..	0.954	2	0.232	47	..	..
42 Chile	0.832	0.672	19.3	−13	0.967	2	0.338	65	..	..
43 Portugal	0.830	0.744	10.4	1	0.985	1	0.111	20	..	..
44 Hungary	0.828	0.769	7.2	10	0.976	1	0.209	42	..	..
45 Bahrain	0.824	..	..	..	0.940	3	0.265	51	..	..
46 Latvia	0.819	0.730	10.8	0	1.029	2	0.167	36	..	..
47 Croatia	0.818	0.743	9.1	3	0.987	1	0.149	30	..	..
48 Kuwait	0.816	..	..	..	0.972	2	0.387	79	..	..
49 Montenegro	0.802	0.728	9.2	1	0.954	2	0.171	37	0.002	2013 M
HIGH HUMAN DEVELOPMENT										
50 Belarus	0.798	0.741	7.1	4	1.021	1	0.151	31	0.001	2005 M
50 Russian Federation	0.798	0.714	10.5	1	1.019	1	0.276	54	..	..
52 Oman	0.793	..	..	..	0.909	4	0.275	53	..	..
52 Romania	0.793	0.711	10.3	2	0.989	1	0.333	64	..	..
52 Uruguay	0.793	0.678	14.5	−4	1.018	1	0.313	61	..	..
55 Bahamas	0.790	..	..	..	..	..	0.298	58	..	..
56 Kazakhstan	0.788	0.694	11.9	1	1.002	1	0.267	52	0.004	2010/2011 M
57 Barbados	0.785	..	..	..	1.018	1	0.357	69	0.004 ^g	2012 M
58 Antigua and Barbuda	0.783	..	..	..	..	..	..	..	..	..

HDI rank		Human Development Index	Inequality-adjusted HDI		Gender Development Index		Gender Inequality Index		Multidimensional Poverty Index ^a		
		Value	Value	Overall loss (%)	Difference from HDI rank ^a	Value	Group ^c	Value	Rank	HDRO specifications ^d	Year and survey ^e
		2014	2014	2014	2014	2014	2014	2014	2014	Value	2005–2014
59	Bulgaria	0.782	0.699	10.5	3	0.991	1	0.212	44	..	..
60	Palau	0.780	..	..	..	..	..	..	..	..	..
60	Panama	0.780	0.604	22.5	–20	0.996	1	0.454	96	..	..
62	Malaysia	0.779	..	..	..	0.947	3	0.209	42	..	..
63	Mauritius	0.777	0.666	14.2	–2	0.950	2	0.419	88	..	..
64	Seychelles	0.772	..	..	..	..	..	..	..	..	..
64	Trinidad and Tobago	0.772	0.654	15.2	–3	0.985	1	0.371	73	0.007 ^h	2006 M
66	Serbia	0.771	0.693	10.1	5	0.966	2	0.176	38	0.002	2014 M
67	Cuba	0.769 ⁱ	..	..	..	0.954	2	0.356	68	..	..
67	Lebanon	0.769	0.609	20.8	–15	0.899	5	0.385	78	..	..
69	Costa Rica	0.766	0.613	19.9	–11	0.974	2	0.349	66	..	..
69	Iran (Islamic Republic of)	0.766	0.509	33.6	–41	0.858	5	0.515	114	..	..
71	Venezuela (Bolivarian Republic of)	0.762	0.612	19.7	–11	1.030	2	0.476	103	..	..
72	Turkey	0.761	0.641	15.8	0	0.902	4	0.359	71	..	..
73	Sri Lanka	0.757	0.669	11.6	7	0.948	3	0.370	72	..	..
74	Mexico	0.756	0.587	22.4	–12	0.943	3	0.373	74	0.024	2012 N
75	Brazil	0.755	0.557	26.3	–20	0.997	1	0.457	97	0.011 ^{h,j}	2013 N
76	Georgia	0.754	0.652	13.6	5	0.962	2	0.382	77	0.008	2005 M
77	Saint Kitts and Nevis	0.752	..	..	..	..	..	..	..	..	..
78	Azerbaijan	0.751	0.652	13.2	7	0.942	3	0.303	59	0.009	2006 D
79	Grenada	0.750	..	..	..	..	..	..	..	..	..
80	Jordan	0.748	0.625	16.5	2	0.860	5	0.473	102	0.004	2012 D
81	The former Yugoslav Republic of Macedonia	0.747	0.622	16.7	2	0.949	3	0.164	33	0.007 ^g	2011 M
81	Ukraine	0.747	0.689	7.8	16	1.003	1	0.286	57	0.001 ^h	2012 M
83	Algeria	0.736	..	..	..	0.837	5	0.413	85	..	..
84	Peru	0.734	0.563	23.4	–10	0.947	3	0.406	82	0.043	2012 D
85	Albania	0.733	0.634	13.5	8	0.948	3	0.217	45	0.005	2008/2009 D
85	Armenia	0.733	0.658	10.2	14	1.008	1	0.318	62	0.002	2010 D
85	Bosnia and Herzegovina	0.733	0.635	13.3	9	..	..	0.201	41	0.006 ^g	2011/2012 M
88	Ecuador	0.732	0.570	22.1	–4	0.980	1	0.407	83	0.015	2013/2014 N
89	Saint Lucia	0.729	0.613	15.9	5	0.991	1	..	..	0.003	2012 M
90	China	0.727	..	..	..	0.943	3	0.191	40	0.023 ^j	2012 N
90	Fiji	0.727	0.616	15.3	8	0.941	3	0.418	87	..	..
90	Mongolia	0.727	0.633	12.9	12	1.028	2	0.325	63	0.047	2010 M
93	Thailand	0.726	0.576	20.6	1	1.000	1	0.380	76	0.004	2005/2006 M
94	Dominica	0.724	..	..	..	..	..	..	..	..	..
94	Libya	0.724	..	..	..	0.950	2	0.134	27	0.005	2007 N
96	Tunisia	0.721	0.562	22.0	–2	0.894	5	0.240	48	0.006	2011/2012 M
97	Colombia	0.720	0.542	24.7	–10	0.997	1	0.429	92	0.032	2010 D
97	Saint Vincent and the Grenadines	0.720	..	..	..	..	..	..	..	..	..
99	Jamaica	0.719	0.593	17.5	7	0.995	1	0.430	93	0.014 ^{g,j}	2010 N
100	Tonga	0.717	..	..	..	0.967	2	0.666	148	..	..
101	Belize	0.715	0.553	22.6	–3	0.958	2	0.426	90	0.030	2011 M
101	Dominican Republic	0.715	0.546	23.6	–6	0.995	1	0.477	104	0.025	2013 D
103	Suriname	0.714	0.543	24.0	–5	0.975	1	0.463	100	0.033 ^g	2010 M
104	Maldives	0.706	0.531	24.9	–6	0.937	3	0.243	49	0.008	2009 D
105	Samoa	0.702	..	..	..	0.956	2	0.457	97	..	..
MEDIUM HUMAN DEVELOPMENT											
106	Botswana	0.698	0.431	38.2	–23	0.982	1	0.480	106	..	..
107	Moldova (Republic of)	0.693	0.618	10.8	20	1.003	1	0.248	50	0.004	2012 M
108	Egypt	0.690	0.524	24.0	–5	0.868	5	0.573	131	0.016 ^k	2014 D
109	Turkmenistan	0.688	..	..	..	..	..	..	..	..	..
110	Gabon	0.684	0.519	24.0	–6	..	..	0.514	113	0.073	2012 D
110	Indonesia	0.684	0.559	18.2	6	0.927	3	0.494	110	0.024 ^h	2012 D
112	Paraguay	0.679	0.529	22.1	–1	0.956	2	0.472	101	..	..
113	Palestine, State of	0.677	0.577	14.9	16	0.860	5	..	..	0.007	2010 M
114	Uzbekistan	0.675	0.569	15.8	14	0.945	3	..	..	0.013	2006 M
115	Philippines	0.668	0.547	18.1	7	0.977	1	0.420	89	0.033 ^{h,j}	2013 D
116	El Salvador	0.666	0.488	26.7	–6	0.965	2	0.427	91	..	..
116	South Africa	0.666	0.428	35.7	–15	0.948	3	0.407	83	0.041	2012 N

HDI rank	Human Development Index		Inequality-adjusted HDI		Gender Development Index		Gender Inequality Index		Multidimensional Poverty Index ^a	
	Value	Value	Overall loss (%)	Difference from HDI rank ^b	Value	Group ^c	Value	Rank	HDRO specifications ^d	Year and survey ^e
	2014	2014	2014	2014	2014	2014	2014	2014	Value	2005–2014
116 Viet Nam	0.666	0.549	17.5	9	..	..	0.308	60	0.026	2010/2011 M
119 Bolivia (Plurinational State of)	0.662	0.472	28.7	–5	0.931	3	0.444	94	0.097	2008 D
120 Kyrgyzstan	0.655	0.560	14.5	17	0.961	2	0.353	67	0.006	2012 D
121 Iraq	0.654	0.512	21.8	2	0.787	5	0.539	123	0.052	2011 M
122 Cabo Verde	0.646	0.519	19.7	5	..	..	..	..	..	..
123 Micronesia (Federated States of)	0.640	..	..	..	..	..	..	..	..	..
124 Guyana	0.636	0.520	18.3	8	0.984	1	0.515	114	0.031	2009 D
125 Nicaragua	0.631	0.480	24.0	1	0.960	2	0.449	95	0.088	2011/2012 D
126 Morocco	0.628	0.441	29.7	–2	0.828	5	0.525	117	0.069	2011 N
126 Namibia	0.628	0.354	43.6	–25	0.981	1	0.401	81	0.205	2013 D
128 Guatemala	0.627	0.443	29.4	1	0.949	3	0.533	119	..	..
129 Tajikistan	0.624	0.515	17.5	10	0.926	3	0.357	69	0.031	2012 D
130 India	0.609	0.435	28.6	1	0.795	5	0.563	130	0.282	2005/2006 D
131 Honduras	0.606	0.412	32.1	–7	0.944	3	0.480	106	0.098 ^m	2011/2012 D
132 Bhutan	0.605	0.425	29.8	–2	0.897	5	0.457	97	0.128	2010 M
133 Timor-Leste	0.595	0.412	30.7	–4	0.868	5	..	..	0.322	2009/2010 D
134 Syrian Arab Republic	0.594	0.468	21.2	8	0.834	5	0.533	119	0.028	2009 N
134 Vanuatu	0.594	0.492	17.2	12	0.903	4	..	..	0.135	2007 M
136 Congo	0.591	0.434	26.6	6	0.922	4	0.593	137	0.192	2011/2012 D
137 Kiribati	0.590	0.405	31.5	–2	..	..	..	..	..	..
138 Equatorial Guinea	0.587	..	..	..	..	..	..	..	..	..
139 Zambia	0.586	0.384	34.4	–6	0.917	4	0.587	132	0.264	2013/2014 D
140 Ghana	0.579	0.387	33.1	–3	0.885	5	0.554	127	0.144	2011 M
141 Lao People's Democratic Republic	0.575	0.428	25.6	7	0.896	5	..	..	0.186	2011/2012 M
142 Bangladesh	0.570	0.403	29.4	1	0.917	4	0.503	111	0.237	2011 D
143 Cambodia	0.555	0.418	24.7	7	0.890	5	0.477	104	0.211	2010 D
143 Sao Tome and Principe	0.555	0.418	24.7	6	0.891	5	..	..	0.217	2008/2009 D
LOW HUMAN DEVELOPMENT										
145 Kenya	0.548	0.377	31.3	–3	0.913	4	0.552	126	0.226	2008/2009 D
145 Nepal	0.548	0.401	26.8	3	0.908	4	0.489	108	0.197	2011 D
147 Pakistan	0.538	0.377	29.9	0	0.726	5	0.536	121	0.237	2012/2013 D
148 Myanmar	0.536	..	..	..	..	..	0.413	85	..	..
149 Angola	0.532	0.335	37.0	–8	..	..	..	..	..	..
150 Swaziland	0.531	0.354	33.3	–2	0.879	5	0.557	128	0.113	2010 M
151 Tanzania (United Republic of)	0.521	0.379	27.3	4	0.938	3	0.547	125	0.335	2010 D
152 Nigeria	0.514	0.320	37.8	–9	0.841	5	..	..	0.279	2013 D
153 Cameroon	0.512	0.344	32.8	–1	0.879	5	0.587	132	0.260	2011 D
154 Madagascar	0.510	0.372	27.0	4	0.945	3	..	..	0.420	2008/2009 D
155 Zimbabwe	0.509	0.371	27.0	4	0.922	4	0.504	112	0.128	2014 M
156 Mauritania	0.506	0.337	33.4	1	0.816	5	0.610	139	0.291	2011 M
156 Solomon Islands	0.506	0.385	23.8	11	..	..	..	..	..	..
158 Papua New Guinea	0.505	..	..	..	..	..	0.611	140	..	..
159 Comoros	0.503	0.268	46.7	–18	0.813	5	..	..	0.165	2012 D/M
160 Yemen	0.498	0.329	34.0	0	0.739	5	0.744	155	0.200	2013 D
161 Lesotho	0.497	0.320	35.6	–2	0.953	2	0.541	124	0.227	2009 D
162 Togo	0.484	0.322	33.4	1	0.831	5	0.588	134	0.242	2013/2014 D
163 Haiti	0.483	0.296	38.8	–7	..	..	0.603	138	0.242	2012 D
163 Rwanda	0.483	0.330	31.6	4	0.957	2	0.400	80	0.352	2010 D
163 Uganda	0.483	0.337	30.2	6	0.886	5	0.538	122	0.359	2011 D
166 Benin	0.480	0.300	37.4	–2	0.823	5	0.614	142	0.343	2011/2012 D
167 Sudan	0.479	..	..	..	0.830	5	0.591	135	0.290	2010 M
168 Djibouti	0.470	0.308	34.6	1	..	..	..	..	0.127	2006 M
169 South Sudan	0.467	..	..	..	..	..	..	..	0.551	2010 M
170 Senegal	0.466	0.305	34.4	1	0.883	5	0.528	118	0.278	2014 D
171 Afghanistan	0.465	0.319	31.4	5	0.600	5	0.693	152	0.293 ⁿ	2010/2011 M
172 Côte d'Ivoire	0.462	0.287	38.0	–1	0.810	5	0.679	151	0.307	2011/2012 D
173 Malawi	0.445	0.299	32.9	2	0.907	4	0.611	140	0.332	2010 D
174 Ethiopia	0.442	0.312	29.4	7	0.840	5	0.558	129	0.537	2011 D
175 Gambia	0.441	..	..	..	0.889	5	0.622	143	0.289	2013 D
176 Congo (Democratic Republic of the)	0.433	0.276	36.2	0	0.833	5	0.673	149	0.369	2013/2014 D

	Human Development Index	Inequality-adjusted HDI		Gender Development Index		Gender Inequality Index		Multidimensional Poverty Index ^a	
	Value	Value	Overall loss (%)	Difference from HDI rank ^b	Value	Group ^c	Value	Rank	HDRO specifications ^d Year and survey ^e
HDI rank	2014	2014	2014	2014	2014	2014	2014	2014	Value 2005–2014
177 Liberia	0.430	0.280	34.8	2	0.789	5	0.651	146	0.356 2013 D
178 Guinea-Bissau	0.420	0.254	39.6	–5	..	..	..	..	0.495 2006 M
179 Mali	0.419	0.270	35.7	1	0.776	5	0.677	150	0.456 2012/2013 D
180 Mozambique	0.416	0.273	34.3	3	0.881	5	0.591	135	0.390 2011 D
181 Sierra Leone	0.413	0.241	41.7	–4	0.814	5	0.650	145	0.411 2013 D
182 Guinea	0.411	0.261	36.5	0	0.778	5	..	..	0.425 2012 D/M
183 Burkina Faso	0.402	0.261	35.0	2	0.881	5	0.631	144	0.508 2010 D
184 Burundi	0.400	0.269	32.6	5	0.911	4	0.492	109	0.442 2010 D
185 Chad	0.392	0.236	39.9	–1	0.768	5	0.706	153	0.545 2010 M
186 Eritrea	0.391	..	..	..	..	..	..	..	.. ..
187 Central African Republic	0.350	0.198	43.5	–1	0.773	5	0.655	147	0.424 2010 M
188 Niger	0.348	0.246	29.2	3	0.729	5	0.713	154	0.584 2012 D
OTHER COUNTRIES OR TERRITORIES									
Korea (Democratic People's Rep. of)	..	..	..	..	..	..	..	..	.. ..
Marshall Islands	..	..	..	..	..	..	..	..	.. ..
Monaco	..	..	..	..	..	..	..	..	.. ..
Nauru	..	..	..	..	..	..	..	..	.. ..
San Marino	..	..	..	..	..	..	..	..	.. ..
Somalia	..	..	..	..	..	..	..	..	0.500 2006 M
Tuvalu	..	..	..	..	..	..	..	..	.. ..
Human Development Index groups									
Very high human development	0.896	0.788	12.1	—	0.978	—	0.199	—	— —
High human development	0.744	0.600	19.4	—	0.954	—	0.310	—	— —
Medium human development	0.630	0.468	25.8	—	0.861	—	0.506	—	— —
Low human development	0.505	0.343	32.0	—	0.830	—	0.583	—	— —
Developing countries	0.660	0.490	25.7	—	0.899	—	0.478	—	— —
Regions									
Arab States	0.686	0.512	25.4	—	0.849	—	0.537	—	— —
East Asia and the Pacific	0.710	0.572	19.4	—	0.948	—	0.328	—	— —
Europe and Central Asia	0.748	0.651	13.0	—	0.945	—	0.300	—	— —
Latin America and the Caribbean	0.748	0.570	23.7	—	0.976	—	0.415	—	— —
South Asia	0.607	0.433	28.7	—	0.801	—	0.536	—	— —
Sub-Saharan Africa	0.518	0.345	33.3	—	0.872	—	0.575	—	— —
Least developed countries	0.502	0.347	30.9	—	0.866	—	0.566	—	— —
Small island developing states	0.660	0.493	25.3	—	..	—	0.474	—	— —
Organisation for Economic Co-operation and Development	0.880	0.763	13.3	—	0.973	—	0.231	—	— —
World	0.711	0.548	22.8	—	0.924	—	0.449	—	— —

NOTES

- a** Not all indicators were available for all countries, so caution should be used in cross-country comparisons. Where an indicator is missing, weights of available indicators are adjusted to total 100%. See *Technical note 5* at <http://hdr.undp.org> for details.
- b** Based on countries for which the Inequality-adjusted Human Development Index is calculated.
- c** Countries are divided into five groups by absolute deviation from gender parity in HDI values.
- d** The HDRO specifications refer to somewhat modified definitions of deprivations in some indicators compared to the 2010 specifications. See Kovacevic and Calderon (2014) for details.
- e** *D* indicates data from Demographic and Health Surveys, *M* indicates data from Multiple Indicator Cluster Surveys and *N* indicates data from

national surveys (see <http://hdr.undp.org> for the list of national surveys).

- f** Refers to urban areas only.
- g** Missing indicator on child mortality.
- h** Missing indicators on nutrition.
- i** The 2013 HDI value published in the 2014 *Human Development Report* was based on miscalculated gross national income per capita in 2011 purchasing power parity dollars, as published in World Bank (2014). A more realistic value, based on the model developed by HDRO and verified and accepted by Cuba's National Statistics Office, is \$7,222. The corresponding 2013 HDI value is 0.759 and the rank is 69th.
- j** Missing indicator on type of floor.
- k** Missing indicator on cooking fuel.
- l** Missing indicator on school attendance.
- m** Missing indicator on electricity.

SOURCES

- Column 1:** HDRO calculations based on data from UNDESA (2015), UNESCO Institute for Statistics (2015a), United Nations Statistics Division (2015), World Bank (2015), Barro and Lee (2014) and IMF (2015).
- Column 2:** HDRO calculations based on data in column 1 and inequalities in distributions of expected length of life, years of schooling, and income or consumption as explained in *Technical note 2* (available at <http://hdr.undp.org>).
- Column 3:** Calculated based on data in columns 1 and 2.
- Column 4:** Calculated based on data in column 2 and recalculated HDI ranks for countries for which the Inequality-adjusted HDI is calculated.

Column 5: HDRO calculations based on data from UNDESA (2015), UNESCO Institute for Statistics (2015), Barro and Lee (2014), World Bank (2015a), ILO (2015a) and IMF (2015).

Column 6: Calculated based on data in column 5.

Column 7: HDRO calculations based on data from UN Maternal Mortality Estimation Group (2014), UNDESA (2013a), IPU (2015), UNESCO Institute for Statistics (2015) and ILO (2015a).

Column 8: Calculated based on data in column 7.

Columns 9 and 10: Calculated from ICF Macro Demographic and Health Surveys, United Nations Children's Fund Multiple Indicator Cluster Surveys and in some cases from national household surveys based on either Demographic and Health Surveys or Multiple Indicator Cluster Surveys methodology.

Notes

- 1 UN 2015a.
- 2 FAO 2014.
- 3 UNESCO 2014; WHO 2014; World Bank 2015c.
- 4 Pollin 2015.
- 5 Calculation based on GERA (2015).
- 6 ILO 2013.
- 7 Salamon, Sokolowski and Haddock 2011.
- 8 UN 2015a; Grant Thornton 2015.
- 9 UNDP 2012.
- 10 UNDP 2014.
- 11 UN 2015a; UNAIDS 2015.
- 12 UN 2015a.
- 13 UNESCO 2013; UNESCO Institute for Statistics 2015.
- 14 UN 2015a.
- 15 Oxfam 2015.
- 16 Scheil-Adlung 2015.
- 17 WEF 2015.
- 18 UN 2015a.
- 19 IEP 2014.
- 20 WHO 2013.
- 21 WHO 2015.
- 22 World Bank 2015a.
- 23 World Bank 2002.
- 24 Miller 2014.
- 25 IADB 2012.
- 26 ILO 2009.
- 27 World Bank 2011.
- 28 ILO 2014b.
- 29 UNODC 2012.
- 30 Euronews 2015.
- 31 Human Rights Watch 2014a, 2014b.
- 32 ILO 2015b.
- 33 Human Development Report Office calculations based on data from UNCTAD (2015) and Cisco (2015).
- 34 ITU 2015.
- 35 ITU 2013, 2015.
- 36 Luce and others 2014.
- 37 McKinsey Global Institute 2014.
- 38 USPTO 2015.
- 39 UN Volunteers 2014.
- 40 Bardhan, Jaffee and Kroll 2013.
- 41 UNCTAD 2014.
- 42 OECD 2007.
- 43 Lippoldt 2012.
- 44 ILO 2015c.
- 45 ILO 2015c.
- 46 OECD 2014.
- 47 Gabre-Madhin 2012.
- 48 Atta, Boutraa and Akhkha 2011.
- 49 Deloitte 2014.
- 50 ITU 2013.
- 51 Oxfam 2015.
- 52 Human Development Report Office calculation based on Charmes (2015).
- 53 UN 2015a.
- 54 UN 2015a.
- 55 Grant Thornton 2015.
- 56 IADB 2012.
- 57 Human Development Report Office compilation from Charmes (2015). These values are adult population-weighted average by sex.
- 58 ILO 2013.
- 59 Budlender 2010.
- 60 ILO 2012.
- 61 Human Development Report Office calculation based on ILO (2014b) and UN Women (2015).
- 62 ILO 2003.
- 63 FAO 2015.
- 64 Fuglie and Nin-Pratt 2012.
- 65 IRENA 2015. The 10 countries with the largest renewable energy employment were China, Brazil, the United States, India, Germany, Indonesia, Japan, France, Bangladesh and Colombia.
- 66 ILO 2015a.
- 67 Banco Central de Ecuador 2012.
- 68 Epstein 2007.
- 69 Chen, Bonner and Carré 2015.
- 70 Jacobs 2015.
- 71 ILO 2014d.
- 72 Zepeda and others 2013.
- 73 Bosch, Melguizo and Pages 2013; Uthoff 2015.
- 74 Montenegro and Patrinos 2014.
- 75 Blasi, Freeman and Krauss 2014.
- 76 Hazelhurst 2015.
- 77 Innovation for Poverty Action 2015.
- 78 ILO 2008a.

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Global Human Development Reports: The 2015 Human Development Report is the latest in the series of global Human Development Reports published by UNDP since 1990 as independent, empirically grounded analyses of major development issues, trends, and policies.

Additional resources related to the 2015 Human Development Report can be found online at hdr.undp.org, including complete editions or summaries of the Report in more than 20 languages; a selected collection of Human Development Background Papers commissioned for the 2015 Report; interactive maps and databases of national human development indicators; full explanations of the sources and methodologies employed in the Report's human development indices; country profiles; and other background materials. Previous global, regional and national Human Development Reports (HDRs) are also available at hdr.undp.org.

Regional Human Development Reports: Over the past two decades, regionally focused HDRs have also been produced in all major areas of the developing world, with support from UNDP's regional bureaus. With provocative analyses and clear policy recommendations, regional HDRs have examined such critical issues as political empowerment in the Arab states, food security in Africa, climate change in Asia, treatment of ethnic minorities in Central Europe and challenges of inequality and citizens' security in Latin America and the Caribbean.

National Human Development Reports: Since the release of the first national HDR in 1992, national HDRs have been produced in 140 countries by local editorial teams with UNDP support. These reports—some 700 to date—bring a human development perspective to national policy concerns through local consultations and research. National HDRs have covered many key development issues, from climate change to youth employment to inequalities driven by gender or ethnicity.

Human Development Reports 1990–2015

1990	Concept and Measurement of Human Development
1991	Financing Human Development
1992	Global Dimensions of Human Development
1993	People's Participation
1994	New Dimensions of Human Security
1995	Gender and Human Development
1996	Economic Growth and Human Development
1997	Human Development to Eradicate Poverty
1998	Consumption for Human Development
1999	Globalization with a Human Face
2000	Human Rights and Human Development
2001	Making New Technologies Work for Human Development
2002	Deepening Democracy in a Fragmented World
2003	Millennium Development Goals: A Compact among Nations to End Human Poverty
2004	Cultural Liberty in Today's Diverse World
2005	International Cooperation at a Crossroads: Aid, Trade and Security in an Unequal World
2006	Beyond Scarcity: Power, Poverty and the Global Water Crisis
2007/2008	Fighting Climate Change: Human Solidarity in a Divided World
2009	Overcoming Barriers: Human Mobility and Development
2010	The Real Wealth of Nations: Pathways to Human Development
2011	Sustainability and Equity: A Better Future for All
2013	The Rise of the South: Human Progress in a Diverse World
2014	Sustaining Human Progress: Reducing Vulnerability and Building Resilience
2015	Work for Human Development

Key to HDI countries and ranks, 2014

Afghanistan	171	Germany	6	Pakistan	147
Albania	85	Ghana	140	Palau	60
Algeria	83	Greece	29	Palestine, State of	113
Andorra	34	Grenada	79	Panama	60
Angola	149	Guatemala	128	Papua New Guinea	158
Antigua and Barbuda	58	Guinea	182	Paraguay	112
Argentina	40	Guinea-Bissau	178	Peru	84
Armenia	85	Guyana	124	Philippines	115
Australia	2	Haiti	163	Poland	36
Austria	23	Honduras	131	Portugal	43
Azerbaijan	78	Hong Kong, China (SAR)	12	Qatar	32
Bahamas	55	Hungary	44	Romania	52
Bahrain	45	Iceland	16	Russian Federation	50
Bangladesh	142	India	130	Rwanda	163
Barbados	57	Indonesia	110	Saint Kitts and Nevis	77
Belarus	50	Iran (Islamic Republic of)	69	Saint Lucia	89
Belgium	21	Iraq	121	Saint Vincent and the Grenadines	97
Belize	101	Ireland	6	Samoa	105
Benin	166	Israel	18	Sao Tome and Principe	143
Bhutan	132	Italy	27	Saudi Arabia	39
Bolivia (Plurinational State of)	119	Jamaica	99	Senegal	170
Bosnia and Herzegovina	85	Japan	20	Serbia	66
Botswana	106	Jordan	80	Seychelles	64
Brazil	75	Kazakhstan	56	Sierra Leone	181
Brunei Darussalam	31	Kenya	145	Singapore	11
Bulgaria	59	Kiribati	137	Slovakia	35
Burkina Faso	183	Korea (Republic of)	17	Slovenia	25
Burundi	184	Kuwait	48	Solomon Islands	156
Cabo Verde	122	Kyrgyzstan	120	South Africa	116
Cambodia	143	Lao People's Democratic Republic	141	South Sudan	169
Cameroon	153	Latvia	46	Spain	26
Canada	9	Lebanon	67	Sri Lanka	73
Central African Republic	187	Lesotho	161	Sudan	167
Chad	185	Liberia	177	Suriname	103
Chile	42	Libya	94	Swaziland	150
China	90	Liechtenstein	13	Sweden	14
Colombia	97	Lithuania	37	Switzerland	3
Comoros	159	Luxembourg	19	Syrian Arab Republic	134
Congo	136	Madagascar	154	Tajikistan	129
Congo (Democratic Republic of the)	176	Malawi	173	Tanzania (United Republic of)	151
Costa Rica	69	Malaysia	62	Thailand	93
Côte d'Ivoire	172	Maldives	104	The former Yugoslav Republic of Macedonia	81
Croatia	47	Mali	179	Timor-Leste	133
Cuba	67	Malta	37	Togo	162
Cyprus	32	Mauritania	156	Tonga	100
Czech Republic	28	Mauritius	63	Trinidad and Tobago	64
Denmark	4	Mexico	74	Tunisia	96
Djibouti	168	Micronesia (Federated States of)	123	Turkey	72
Dominica	94	Moldova (Republic of)	107	Turkmenistan	109
Dominican Republic	101	Mongolia	90	Uganda	163
Ecuador	88	Montenegro	49	Ukraine	81
Egypt	108	Morocco	126	United Arab Emirates	41
El Salvador	116	Mozambique	180	United Kingdom	14
Equatorial Guinea	138	Myanmar	148	United States	8
Eritrea	186	Namibia	126	Uruguay	52
Estonia	30	Nepal	145	Uzbekistan	114
Ethiopia	174	Netherlands	5	Vanuatu	134
Fiji	90	New Zealand	9	Venezuela (Bolivarian Republic of)	71
Finland	24	Nicaragua	125	Viet Nam	116
France	22	Niger	188	Yemen	160
Gabon	110	Nigeria	152	Zambia	139
Gambia	175	Norway	1	Zimbabwe	155
Georgia	76	Oman	52		