

Chapter 2

Megatrends affecting Africa's integration into the global economy

This chapter presents five megatrends that will shape Africa's development dynamics in the coming decade. The first megatrend corresponds to the stronger role of emerging countries in the global economy (also referred to as "shifting wealth"). The second is the new production revolution brought about by technological change and digitalisation. The third megatrend relates to the continent's demographic growth, which could bring "demographic dividends" if countries implement the right policies. The fourth megatrend is rapid urbanisation, which impacts the economic structure of many countries, living conditions and multi-level governance. The fifth megatrend is climate change, which calls for innovative and sustainable "green growth" strategies. For each of these megatrends, the chapter assesses the main risks, opportunities and policy implications for African countries.

BRIEF IN

Five main megatrends pose challenges and bring new opportunities for Africa's development dynamics. How policy makers respond will significantly impact growth, job creation and inequalities.

The increasingly important role of emerging economies – known as “**shifting wealth**” – is bringing opportunities to diversify the continent's investment and trade flows. It may also affect Africa's value chain upgrading through greater international competition.

A **new industrial revolution**, brought about by technological change and digitalisation, may reshape countries' comparative advantages and industrialisation potential. African entrepreneurs can now access new modes of production and global markets. However, automation could hinder job creation in manufacturing. Investing in technological infrastructure, supporting innovation systems, and enhancing workers' skills can help countries harness this potential.

Africa's rapid demographic growth could bring “**demographic dividends**” if countries implement the right policies. Demographic growth has many implications, including migration within and outside Africa. Reaping the demographic dividends depends on creating more and better jobs, investing in human and physical capital, and increasing savings in the formal financial sector.

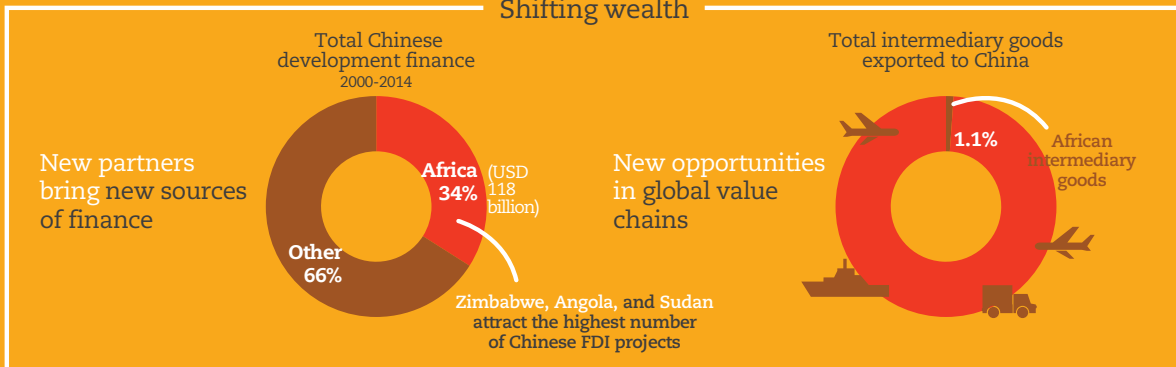
Africa's rapid **urban transition** brings many opportunities for industrialisation, increased productivity and well-being – through innovation, bigger regional markets, and more demand for higher value-added goods. Benefitting both rural and urban economies will require, among many policies, improving urban infrastructure and public goods provision, land management, and multi-level governance.

Although the continent contributes less than 4% to global greenhouse gas emissions, **climate change** is a big risk which African policies must address. Many African countries are now transitioning into the middle-income stage demanding more energy, often generated through fossil fuels. Policies accelerating the transition to “green growth” will make growth more sustainable and create more jobs.

Megatrends affecting Africa's integration into the global economy

How Africa responds to megatrends will affect growth, job creation and equality

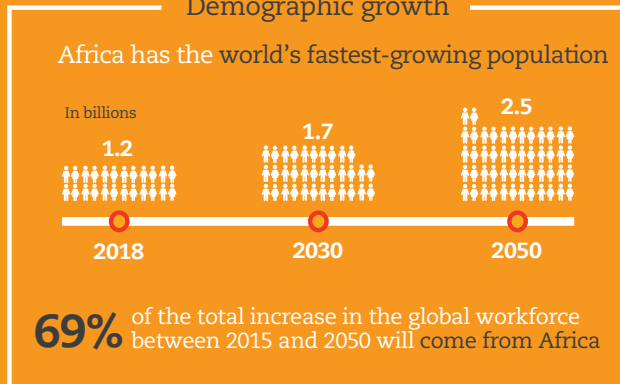
Shifting wealth



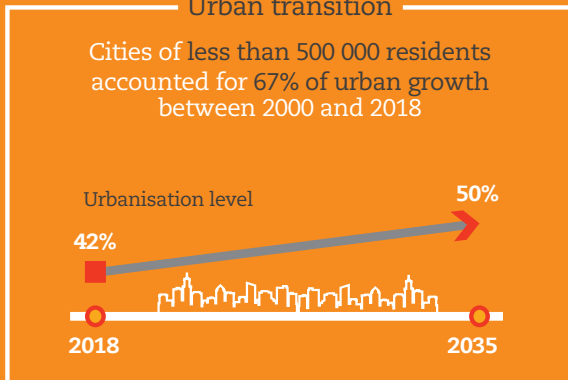
New production revolution



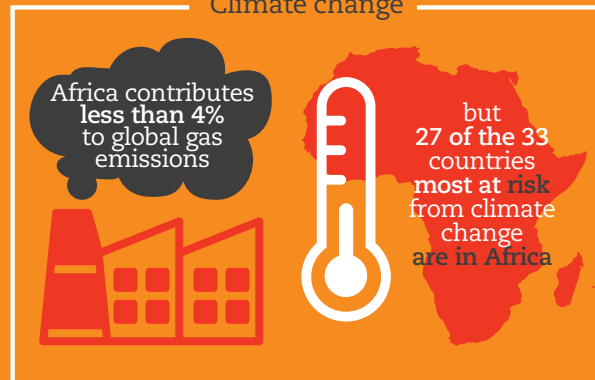
Demographic growth



Urban transition



Climate change



Five megatrends for Africa's future development

At least five megatrends will shape the future of Africa's integration into the global economy in the coming decade. The way Africa deals with them will have significant impacts on growth, job creation and equality. These megatrends include the following:

1. The rising share of emerging countries in the global economy – referred to as “shifting wealth” – will offer African countries the opportunity to diversify, upgrade in global value chains (GVCs) and find new sources of finance for development.
2. Technological change and digitalisation will bring about challenges and prospects for a new production revolution in Africa.
3. Africa's rapid demographic growth can create “demographic dividends” by expanding the labour force and increasing savings and investments.
4. Africa's rapid transition towards urbanisation will continue to increase the domestic market and the necessary scale economies to provide public goods, boost competitiveness and meet SDG targets.
5. Though climate change presents many risks for vulnerable African countries, in responding to it they can become greener by capitalising on the continent's immense natural assets.

While these megatrends promise new opportunities, they also pose challenges that should guide policies. Table 2.1 summarises the main risks, opportunities and possible policy implications to harness these megatrends. Chapter 8 will propose ten important policy areas for action.

Table 2.1. Megatrends affecting Africa: Main risks, opportunities and policy implications

Megatrend	Main risks	Main opportunities	Possible policy implications
Shifting wealth	<ul style="list-style-type: none"> • Competition from other emerging markets • Creating one-dollar jobs • New “scramble for Africa” • Environmental degradation 	<ul style="list-style-type: none"> • New markets for Africa's export products • Reallocate low-skill manufacturing from Asia to Africa • Africa's increased attractiveness for foreign direct investment (FDI) • Improved access to development finance • Access to new technologies • Transfer of skills 	<ul style="list-style-type: none"> • Strategically engage with Africa's partners • Harmonise standards for labour rights and environment preservation • Promote FDI linkages to the local economy and knowledge transfer • Target export diversification and GVC upgrading • Help entrepreneurs upgrade their products to meet new demand
New production revolution	<ul style="list-style-type: none"> • Automation • Re-shoring manufacturing to advanced economies • Vulnerable technological infrastructure • Cybersecurity • Environmental degradation • Illicit financial flows 	<ul style="list-style-type: none"> • Increase small firms' access to GVCs • Simplify economies of scale • Reduce trade costs • Create new niches and markets • Offer new off-shoring activities to “African clusters of excellence” • Use new technologies to improve access to public services, make policies more efficient and improve transparency 	<ul style="list-style-type: none"> • Deliver quality skills for science, technology, engineering and mathematics and for technical, entrepreneurial and vocational education and training • Support new technology-based small and medium-sized enterprises (SMEs) through financing • Encourage investment in research and development, technology, and data • Promote technology-oriented clusters • Adapt fiscal policies

Table 2.1. Megatrends affecting Africa: Main risks, opportunities and policy implications (cont.)

Megatrend	Main risks	Main opportunities	Possible policy implications
Demographic dividends	<ul style="list-style-type: none"> • High youth unemployment and higher informal sector employment • More pressure on environmental resources • Increased demand for services and social protection, potentially lowering the quality of public services • Increased income inequality • Migration and "brain drain" • Increased social tensions and political demands 	<ul style="list-style-type: none"> • Increase Africa's workforce • Allow the working-age population to surpass that of the dependency-age population • Increasing domestic savings, consumption and gross domestic product (GDP) growth due to higher labour supply and wealth creation • Rising middle class • Collect more fiscal revenues • Encourage the diaspora "brain gain", and remittances for private investment 	<ul style="list-style-type: none"> • Improve the quality of education and skills to match labour market demands • Deepen the domestic financial sector by creating incentives for long-term domestic savings • Lower birth rates by improving healthcare and family planning • Promote high-potential entrepreneurship
Urban transition	<ul style="list-style-type: none"> • Slum urbanisation • Higher urban poverty and inequality • Inequality between rural and urban areas • Urban sprawl • Urban congestion • More air pollution and inefficient use of water and other natural resources 	<ul style="list-style-type: none"> • Generate economies of scale and social innovation • Increase demand for high value-added goods, food and urban infrastructure • Match and share resources and knowledge among firms and citizens • Increase productivity through business clusters • Rising urban middle class 	<ul style="list-style-type: none"> • Clarify land rights • Strengthen rural-urban linkages and develop intermediary cities • Provide public goods to business clusters • Develop mass transportation systems • Upgrade informal settlements • Apply multi-level governance reforms (capacity building, empowerment, transparency and accountability of various government levels) • Ensure citizens' participation in spatial planning
Climate change and transition to a green economy	<ul style="list-style-type: none"> • Increased natural disasters and droughts • Endangered ecosystems and species • Erosion of coastal zones and infrastructure damage • Loss of livelihoods and economic activities • Health hazards caused by environmental risks • Climate-induced displacement and migration 	<ul style="list-style-type: none"> • Enjoy GDP growth due to investments in renewable energy • Gain in welfare by cutting fossil fuel (oil and coal) subsidies • Expand green sectors • Create more jobs in green sectors • Use natural resources more sustainably by efficiently sharing infrastructure in high density areas 	<ul style="list-style-type: none"> • Invest in resilient infrastructure, including early warning systems • Develop mass transportation and reduce its costs • Implement national adaptation programmes of action and environmental regulations • Develop climate-related insurance mechanisms

Megatrend 1: Shifting wealth

The shifting wealth process – the gradual re-balancing of global wealth from OECD to non-OECD countries – entered its third phase in 2009. In 2008, the weight of emerging countries in the global economy surpassed the 50% mark (OECD, 2010). The 2008-09 global financial crisis and China's rebalancing led to a slump in oil and metals prices, burdening commodity exporters while stimulating growth in commodity-importing countries. This has created waves of changes in the global development landscape. India is forecasted to continue growing fast and contribute almost 10% to global growth. This country could become a second driver of the shifting wealth process in the coming years (see OECD, forthcoming). Other emerging economies, like the Gulf States and Turkey, may continue to grow while increasing their relations with Africa.

During its two first phases (1990-2000 and 2001-08) the shifting wealth process increased output linkages between emerging economies and developing countries. This affected the relative prices for goods, services and wages. It also changed the terms of trade and brought new sources of development finance. This process accelerated Africa's integration into the global economy, notably by diversifying its global partnerships.

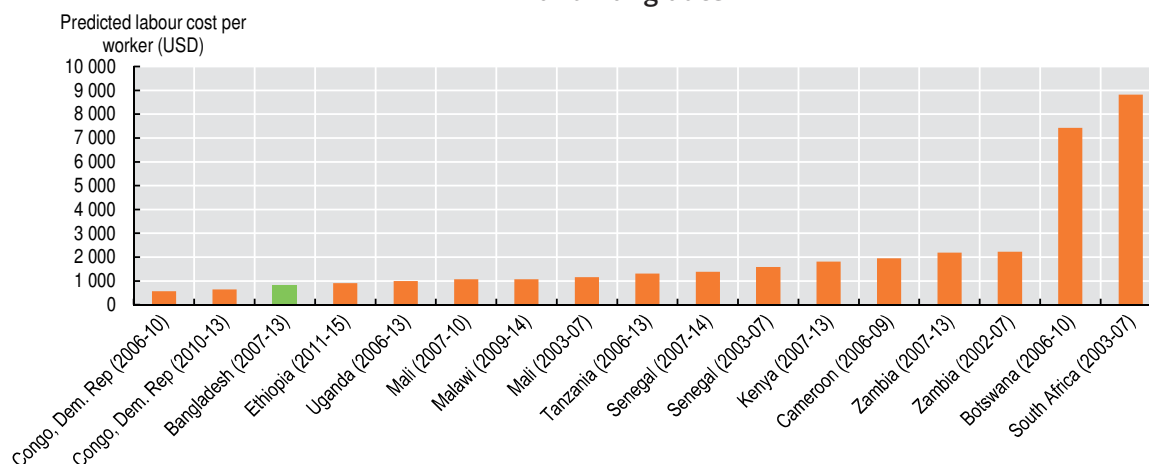
Looking forward, shifting wealth offers several new opportunities to Africa. First, Africa can use its emerging partners to diversify its export basket. Several African countries can export higher value-added goods and services, such as agricultural products and tourism, to new markets as the middle class emerges.

Second, shifting wealth can allow Africa to upgrade in GVCs following China's rebalancing. China's real manufacturing wages increased about 14-fold from 1980 to 2015 (Wei and Zhang, 2017). Eastern Africa has in part benefited from this change by growing at 3.5% per year in real GDP per capita between 2013-16. With the right policies, African countries can attract labour-intensive manufacturing firms to create more jobs for the continent's upcoming youth bulge.


Third, shifting wealth brings new development finance and innovation to Africa. For example, China committed USD 118 billion, or 34% of its total development finance, to Africa during the 2000-14 period (Dreher et al., 2017). Zimbabwe, Angola, Sudan, Tanzania, Ghana, Kenya and Ethiopia (in that order) are the African countries attracting the highest number of Chinese FDI projects. Different emerging countries offer novel expertise to finance development. These include Brazil in agriculture and agro-processing, China in infrastructure, and India in affordable generics, as well as in skills and services in information communications and technology (ITC) and agriculture. Many emerging countries, especially in the Gulf States, have become attractive for African skilled workforce, which could lead to an increase in South-South knowledge transfer.

At the same time, shifting wealth brings new challenges to Africa's policy makers. African economies must boost their productivity to compete with other emerging actors. For example, countries from the Association of Southeast Asian Nations enjoy several advantages over Africa in attracting Chinese FDI. These include established global production networks, physical and cultural proximity to China, and better competitiveness especially in infrastructure and human capital. High labour costs and low productivity prevent many African countries from attracting low-skill industries (Gelb et al., 2017). At similar competitiveness ratings, countries such as the Democratic Republic of the Congo and Ethiopia have a labour cost per manufacturing worker that is comparable to that of Bangladesh (Figure 2.1). Reducing bottlenecks to private sector growth is imperative (see Chapter 8).

Figure 2.1. Median predicted labour cost per worker in selected African countries and Bangladesh

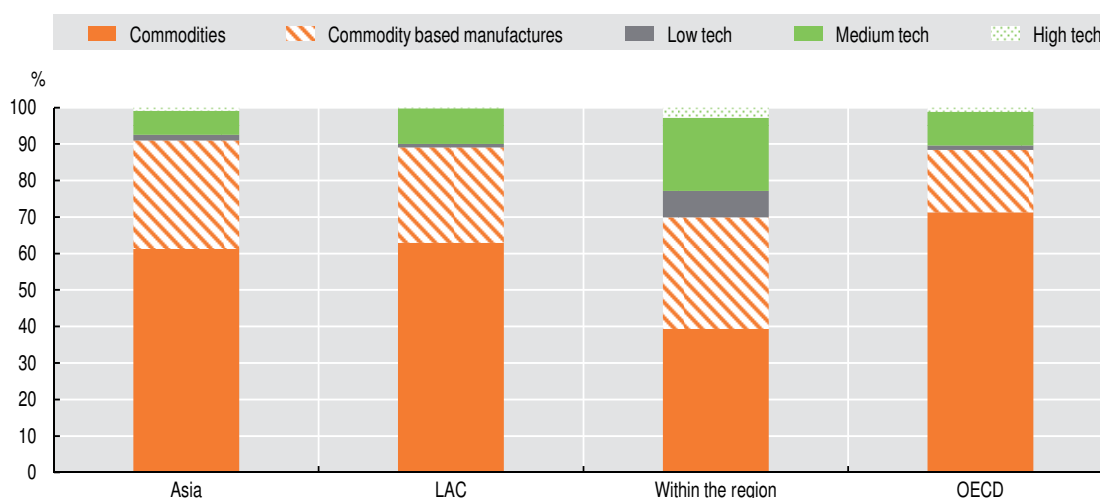


Note: Labour cost per worker is estimated after controlling for a number of firms' characteristics (including capital cost per worker, ownership, human capital and size) and the country's GDP per capita to ensure comparability.

Source: Gelb et al. (2017), "Can Africa be a manufacturing destination? Labor costs in comparative perspective".
StatLink  <http://dx.doi.org/10.1787/888933782867>

African countries have much room to improve their levels of integration into GVCs with other emerging economies. Overall, African intermediary goods represent 1.1% of total intermediary goods exported to China. This level is significantly lower than most of China's other GVC partners. The majority of Africa's exports to Asia consist in commodities (Figure 2.2).

Figure 2.2. Africa's exports by commodities and level of technology (shares for regional destinations), 2014



Source: Author's calculations based on UN Statistics Division (2017), UN COMTRADE (database).
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Several policy objectives could help African governments better tap shifting wealth:

- Enhanced co-ordination can give African governments stronger bargaining power in the new global economic order, especially in trade discussions that face mounting protectionist sentiments. Pan-African organisations can play this co-ordinating role. They are already strengthening co-operation programmes with emerging partners, such as student exchanges to promote skill transfers in technical disciplines.
- By co-ordinating and harmonising regulations, African governments can avoid a “race to the bottom” in undercutting fiscal, labour and environmental regulations when attracting FDI. For instance, joining international efforts to prevent base erosion and profit shifting could make tax systems more transparent and effective.
- African countries will need to deploy strategies to diversify their export products to emerging partners. To upgrade their inputs in GVCs requires boosting competitiveness, encouraging foreign firms to create linkages with local economies and to transfer knowledge, and supporting the development of producer services such as design, marketing and branding.

Megatrend 2: The new production revolution

Over the next 15 years, the ongoing production revolution is likely to impact African economies through the following:

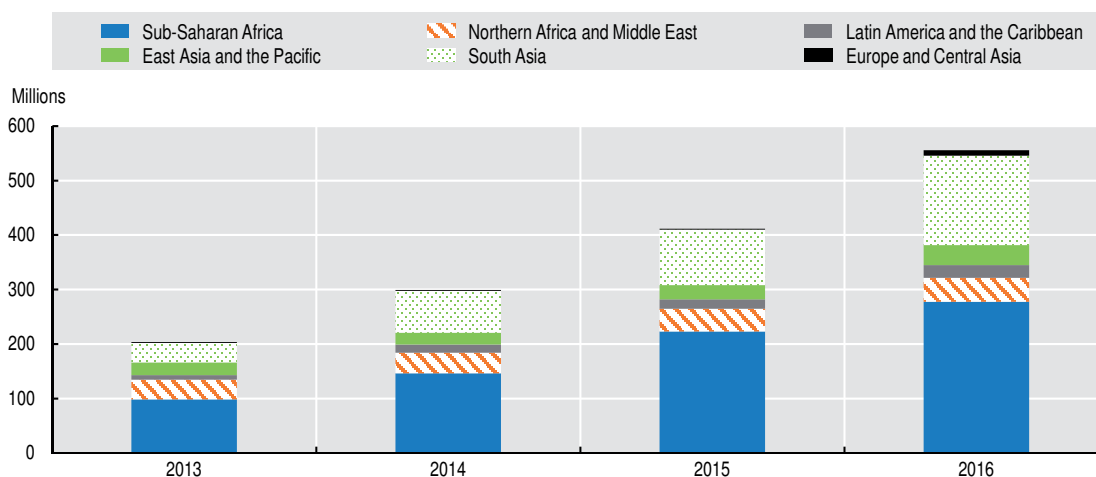
- New technologies (the Internet of Things, big-data analytics, cloud computing and 3D printing)
- New materials (nano- and bio-based technologies)
- New processes (artificial intelligence and data-driven production).


Digitalisation and new manufacturing technologies may reshape countries' comparative advantage in global production networks. At least 40 technologies will be key for the decades to come (OECD, 2016: 79). Taken collectively, these technological innovations can revolutionise global production networks. In this new production revolution – sometimes called “Industry 4.0” – international trade will be largely in services and data, such as bundled services and information flows through digital means.

This production revolution presents opportunities for African countries to find new development paths. First, African entrepreneurs and SMEs can enjoy better access to new modes of production and to global networks, which they could not access before. Investments in activities using digital technologies can generate economies of scale at unprecedented levels compared to traditional manufacturing. With lower equipment costs, digitalisation promises greater control and flexibility in production while reducing operational costs. Paperless trading, on-line collection of information, e-certification and on-line payment of customs duties can reduce trade costs and speed up border clearances. New technologies can enable firms to complete transactions, deliver services, and make payments faster, more efficient and more affordable. Digital communication can facilitate cross-border e-commerce and smaller firms' participation in global markets.

Second, trade in services and new technologies can largely remove logistical bottlenecks and customs barriers. Physical constraints like inadequate road networks may play a less significant role for applying these new production methods. African countries have demonstrated an impressive ability to adapt to ICT technologies. For instance, Africa uses more mobile banking than all other developing regions put together (Figure 2.3). Africa's trade in services expanded from about USD 138 billion in 2005 to almost USD 260 billion in 2015.

Figure 2.3. Registered mobile money accounts in world regions, 2013-16



Source: GSMA (2017), 2017 State of the Industry Report on Mobile Money.
StatLink  <http://dx.doi.org/10.1787/888933782905>

Third, the new production revolution may bring about new niche markets, which African business clusters could tap. New technologies can boost firms' abilities to access new markets and find niches in GVCs. Within GVCs, mass production is likely to shift to mass customisation, or “manufacturing on-demand” (De Backer and Flaig, 2017). African firms could integrate into new markets with higher value added, for example hand-made products, ethical value chains or design services. Cape Town, Lagos, Nairobi, Sfax and Tangiers are emerging hubs for start-ups selling services on global markets, especially in financial technology, ICT, movies, logistics and renewable energies.

The new production revolution entails several risks for African development:

- Many low-skilled jobs in manufacturing could be automated, reducing Africa's attractiveness as a destination for manufacturing investment. Sixty-six percent of all jobs in developing countries are potentially at risk (Frey, Osborne and Holmes, 2016: 19). The risk is even higher in Ethiopia, where 85% of current jobs are in sectors susceptible to automation. In countries such as Angola, Mauritius, Nigeria, Seychelles and South Africa, more than half of current jobs are also at high risk of computerisation. In a recent survey of Chinese manufacturing firms, most said they would respond to labour shortages by investing more in capital equipment rather than by moving production out of China (Standard Chartered Research, 2017: 17).
- The less advanced African countries may not be able to provide the necessary levels of infrastructure, capital, skills and human capital to benefit from the new production revolution. In this scenario, African firms risk lagging further behind the global productivity level.
- New innovations can give rise to winner-takes-all markets that exacerbate income inequality. Rents from digital innovation are often shared among shareholders of the most successful firms, top executives and a few key employees (Guellec and Paunov, 2017).
- The increasing importance of ICT brings new risks to security (cybersecurity), data ownership and privacy, which many African countries are not prepared to face. Many countries do not yet have the legal infrastructure to protect consumer and business rights.
- New environmental risks are also appearing. For example, dumping heavy metals from electronic waste has posed an environmental threat in Ghana and Nigeria (Nnorom and Osibanjo, 2008).

The gains from the new production revolution are not automatic but call for specific policy objectives. The first is to ensure quality skills for the labour force to meet the market needs of a digital economy. Education policies should prioritise quality education with a focus on science, technology, engineering and mathematics. Technical, entrepreneurial and vocational education and training (TEVET) can be included in school curricula. Governments should encourage TEVET institutions to deliver targeted quality training with private sector engagement (e.g. through on-the-job training, apprenticeships and internships that provide certified skills).

Secondly, policies should make business clusters attractive for foreign companies and African start-ups investing in new production schemes. Providing public goods to business clusters can ensure that African firms benefit from conditions that help them grow. Business associations in clusters can facilitate knowledge transfer. Fostering linkages between industrial parks or special economic zones and the rest of the economy (through sub-contracting) is also key to facilitate productivity growth beyond clusters and reduce spatial inequalities.

Thirdly, policies should encourage knowledge transfer to African private and public companies. Agencies promoting FDI can entice foreign investors to transfer knowledge to local companies by employing the local labour force, conducting training courses and subcontracting local companies. Research and development can be scaled up in sectors where the countries have both comparative advantages and the potential to apply new technologies.

Fourthly, policies should give broader access to financing to SMEs that have growth potential. Regulatory frameworks should enable lending institutions to lower the costs and risks associated with financing SME projects while protecting macroeconomic stability.

Instruments such as credit guarantee schemes can diffuse the risks of financing SMEs by associating third party institutions. Dedicated SME authorities and business associations can facilitate connections between SMEs and credit providers. Leasing and factoring can also be used to manage risks (OECD, 2017a; AfDB/OECD/UNDP, 2017).

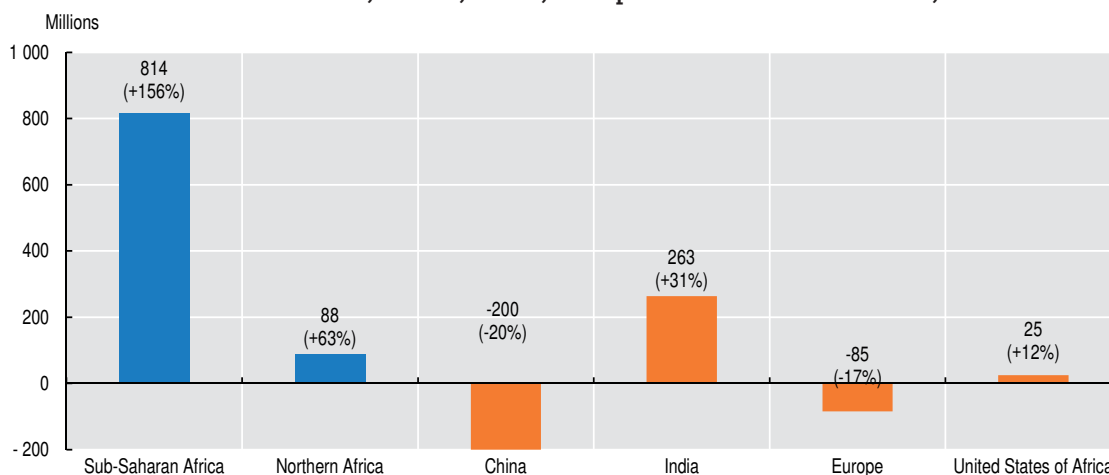
Finally, governments should invest in substantially upgrading backhaul infrastructure, the fixed lines that connect mobile towers to core networks for data transmission. Africa has made remarkable progress in providing mobile connectivity, but the 2G connectivity for traditional voice and text messages limits access to data services. Mobile broadband (3G, 4G and 5G) requires significant upgrading of fixed infrastructure, including power and access to high-speed broadband fibre, for transmitting data. A 2017 survey suggested that more than two-thirds of Africa's mobile connections are 2G, while 4G connections represent only 2% of the market (Connecting Africa, 2017). The choice between different business and regulatory models, the scope of public funding, the requirements for open access and wholesale service provision have significant implications for investors and the effective deployment of faster telecommunication networks (OECD, 2014). African authorities should assess those implications and design regulatory frameworks that incorporate good practices and are appropriate to their local contexts.

Megatrend 3: Demographic dividends

Africa has the world's fastest-growing population. From 2000 to 2015, Africa's population increased from 814 million to almost 1.2 billion. According to United Nations projections (medium scenario), the population will reach 1.7 billion in 2030 and 2.5 billion in 2050. Africa's share of the world population is predicted to increase from currently around 16% to almost 20% in 2030 and above 25% in 2050 (AfDB/OECD/UNDP, 2016).

Due to rapid population growth, Africa has the second largest workforce in the world after Asia, and its workforce will continue to grow. Between 2015 and 2050, Africa's working age population (defined as 15-64 year olds) will increase by 902 million people, about 69% of the total increase across the world (Figure 2.4). This growth exceeds that of India (263 million). In Europe, the figure should drop by 85 million and in China by 200 million. By 2075, Africa's population between 15 and 24 years old will reach 586 million people, exceeding that of Asia at 584 million.

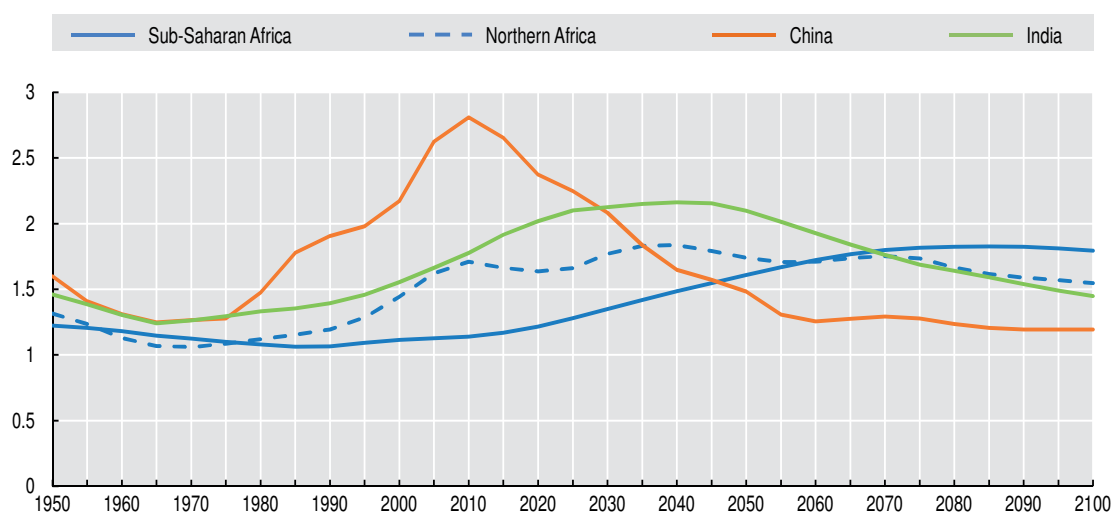
Figure 2.4. Projected workforce growth in sub-Saharan Africa, Northern Africa, China, India, Europe and the United States, 2015-50



Source: Authors' calculations based on data from UNDESA (2017a), *World Population Prospects: The 2017 Revision*.
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The rise in the working-age population can boost growth by increasing the effective labour supply. Activity ratios reveal that Africa has a larger working-age population than dependency-age population (defined as the population younger than 15 and older than 65) (Figure 2.5). In the 1990s, one person was economically-active for each economically-inactive person. Thanks to declining birth rates, the average activity ratio will steadily rise and continue well beyond 2050. By that time, it should reach 1.6 active people per inactive person in sub-Saharan Africa. By 2030, the increase in labour supply could create a first “demographic dividend” and boost Africa’s annual growth of GDP per capita by up to half a percentage point, assuming constant output per worker (AfDB/OECD/UNDP, 2016). This demographic dividend could contribute 10-15% of Africa’s gross GDP volume growth by 2030 (Ahmed et al., 2014).

Figure 2.5. Activity ratios in sub-Saharan Africa, Northern Africa, China and India, 1950-2100



Note: Aggregate ratios are population weighted. The activity ratio is the ratio between the working-age population (ages 15-64) and the dependent-age population (under 15 and over 65). Projections are modelled using the medium fertility variant.

Source: Authors' calculations based on data from UNDESA (2017a), *World Population Prospects: The 2017 Revision*.
StatLink  <http://dx.doi.org/10.1787/888933782943>

Africa may enjoy a second demographic dividend by accumulating savings and investing more in physical and human capital, particularly children’s health and education. As activity ratios increase, families and governments have more resources available per child to provide better education and healthcare, which may strengthen productivity over time. With relatively more people of working age, the savings rate could increase and raise productivity through more investment. When the financial system works efficiently, these savings can accumulate and create a “savings glut” for re-investment into the economy.

However, these two demographic dividends depend on jobs and investment. The positive effect of labour supply on growth will only materialise if enough jobs are created. On average between today and 2030, 29 million additional young people turn 16 years old every year. This number of working-age youth is unprecedented. If not enough jobs are created, the youth may be either discouraged from actively looking for a job, causing the labour market participation rate to fall, or unable to find a job, causing unemployment and informality to rise. Rapid population growth could create high pressure on local environmental resources if resource consumption per capita grows as rapidly as in the more advanced economies (AfDB/OECD/UNDP, 2016: 41).

Even though Africa has made great strides in increasing education levels, skills mismatch remains an important challenge. The quality of education systems in Africa still requires improvements. Many African youth lack the technical and managerial skills to succeed in the labour market. Only 10.5% of secondary students are enrolled in vocational programmes, and these are often underfunded.

Reaping these demographic dividends requires fundamental policy changes. In the past, Africa has failed to create enough good jobs despite high economic growth. Policies need to achieve several objectives:

- reduce bottlenecks that still constrain demand for labour, for instance by promoting private-sector activity, including high-potential entrepreneurship, and by helping young people to obtain the skills needed to obtain decent jobs
- speed up the demographic transition towards lower birth rates by improving healthcare, universal education, family planning and women's empowerment
- deepen the domestic financial sector to facilitate savings, improve financial intermediation and attract more investment into the national economies
- create incentives for workers to save their income early on in anticipation of aging (AfDB/OECD/UNDP, 2016: 41).

Box 2.1. Policies can help maximise migration's contribution to African development

Emigration from Africa is at an all-time high: 36.3 million individuals born in Africa were not living in their country of birth in 2017. This is a sharp rise from the 20.3 million in 1990. However, emigration as a percentage of the total population fell from 3.2% in 1990 to 2.9% in 2017, because Africa's population is growing faster than its emigration. The causes of this absolute increase in emigration range from internal strife to a rise in income which makes migration more affordable, especially among a handful of populous countries such as the Democratic Republic of the Congo, Egypt, Morocco, Somalia and Sudan (UNDESA, 2017b). Similarly, refugee flows from Africa are highly concentrated in a small number of countries. South Sudan and Somalia alone accounted for 40% of refugees from Africa in 2016.

In terms of immigration, African migration also remains largely intra-regional. In 2017, 79% of the 24.7 million immigrants living on the continent were born in another African country. In absolute terms, South Africa hosts the most immigrants, with more than 4 million. But several other countries boast more than 1 million immigrants, including Côte d'Ivoire (2.2 million), Uganda (1.7 million), Nigeria (1.2 million), Ethiopia (1.2 million) and Kenya (1.1 million).

Migration from Africa is expected to increase due to the demands for better job prospects and living standards. Between 2015 and 2050, 69% of the increase in the global workforce will come from Africa (see Figure 2.4). A lack of good jobs and basic infrastructure locally causes increasing numbers of young men and women to migrate to find better jobs and an urban lifestyle. The divergence in economic growth across African countries also mean that growth poles, such as Morocco, South Africa and the entire Gulf of Guinea seaboard, are attracting more African job seekers. While most emigrants from Africa continue to reside on the continent, the share has actually fallen, from 66% in 1990 to 53% in 2017.

Africa increasingly sees migration in positive terms. Migrants often send home money, for instance. Remittances were estimated at 2.8% of GDP on average between 2009 and 2016 (see Chapter 1). Remittances can help reduce poverty, and they tend to increase during economic downturns.

Box 2.1. Policies can help maximise migration's contribution to African development (cont.)

Several African countries, such as Burkina Faso, Morocco and Zimbabwe, have instituted policies or strategies to link emigration to development objectives. To increase the impact of emigration on development, policies can i) provide support to families who stay behind, ii) lower remittance costs and channel them towards productive investment, iii) encourage and integrate return migrants, and iv) bring diasporas into development initiatives. Beyond migration and development policy initiatives, more generalised public policies, such as those for labour, education, agriculture and social protection, can also help gain more from migration for better development outcomes (OECD, 2017b).

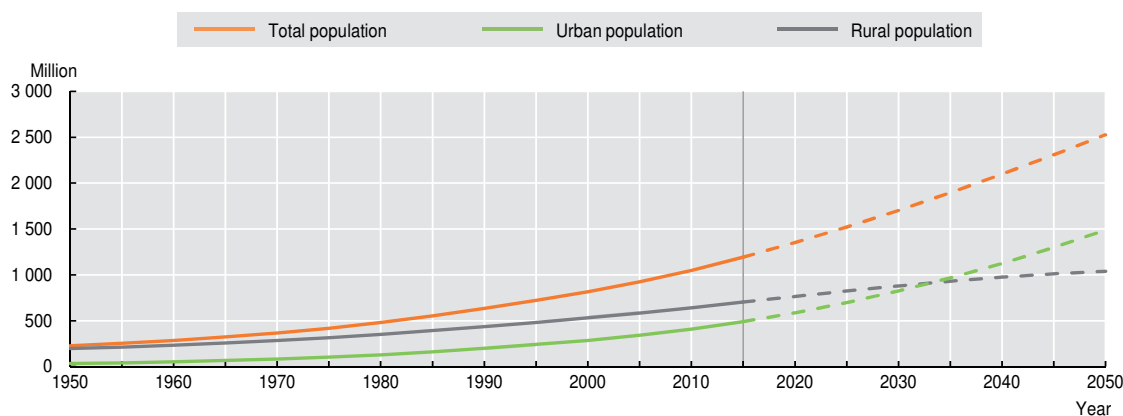
African countries can maximise the positive impact of immigration by adopting coherent policies to better manage and integrate immigrants. Among ten countries in a recent OECD-ILO report,¹ the estimated contribution of immigrants to GDP averages 7%, ranging from about 1% in Ghana to 19% in Côte d'Ivoire (OECD/ILO, 2018). Integrating immigrants into developing countries comes with different sets of challenges than those in developed countries, particularly in the context of high informality, porous borders and limited budgets (Gagnon and Khoudour-Castéras, 2012). Policy options include providing better access to basic services, ensuring the rights of immigrant workers and integrating them into the labour market so that they can invest in and contribute to the economy where they work and live.

Enhanced co-operation between origin and destination countries would lead to better managed and mutually beneficial migration. The 2030 Agenda for Sustainable Development included migration as a means for development for the first time on an international policy agenda: four Sustainable Development Goals explicitly mention migration or remittances. The current efforts towards a Global Compact for Safe, Orderly and Regular Migration can also help strengthen the global governance of international migration, which is currently limited.

Megatrend 4: The urban transition


Africa is the second fastest urbanising region after Asia. The rate of urbanisation increased from 14% in 1950 to 42% at present; by 2035, 50% of Africans are expected to reside in urban areas (Figure 2.6). The speed of this process is unmatched. Africa's urbanisation is mainly taking place in intermediate cities and towns. Cities and towns with less than 500 000 residents accounted for 67% of urban growth between 2000 and 2018.

Figure 2.6. Growth trends in Africa's urban, rural and total populations, 1950-2050



Note: Forecasts start from 2015, based on UNDESA's medium fertility scenario.

Source: UNDESA (2018), *World Urbanization Prospects: The 2018 Revision*.

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Africa's urbanisation is expanding domestic markets in rural and urban areas. It is increasing demand for higher value-added goods and changing diets. The middle class, defined as those spending USD 5-20 a day, increased from 108 million people in 1990 to 247 million in 2013. The urban sector accounts for 40% of the total population but 50% of total food consumption and 60% of the food market (Reardon et al., 2013). West Africa's food economy is estimated at USD 178 billion for 2010 – 36% of the regional GDP–, over two-thirds of which were traded in markets (Allen and Heinrigs, 2016). In that region, the average distance between cities dropped from 111 kilometres to 28 between 1950 and 2010 (Moriconi-Ebrard, Harre and Heinrigs, 2016). Similarly, urban demand for goods and services in construction and supporting industries is rising.

FDI to tap African urban markets has been rising. According to Wall (2016), “Relative to GDP, sub-Saharan African cities featured in the top 10% attractors of greenfield FDI between 2002 and 2012, as often as cities in the East Asia and Pacific region. [...] Among all the jobs directly created by FDI in Africa between 2003 and 2014, 83% were located in cities”.

When the enabling conditions are present, economic agglomerations and urban firm clusters across African countries can increase productivity gains. Three positive effects characterise agglomeration economies: matched inputs, shared resources and innovation through learning. For example, the entry of each new firm in an Ethiopian cluster increases their competitors' productivity by 0.91% (Siba et al, 2012). In Arusha, Dar es Salaam and Mbeya (Tanzania) and Kampala (Uganda), a 10% increase of firms in the same industry and area reduces their costs by an average of 0.3-0.4% (Iimi, Humphrey and Melibaeva, 2015).

However, many binding constraints are hindering the potential of Africa's rapid urbanisation. The high rate of urbanisation so far has not created employment outside the informal sectors or low value-added services. The informal economy accounts for 61% of urban employment and is the source of 93% of newly created jobs (Kessides, 2005). Due to gender-based discrimination and lack of opportunities, female workers are disproportionately over-represented in informal sectors, especially services.

African urbanisation takes place mostly through spatial urban expansion, without generating the benefits of densely populated areas. Between 2000 and 2010, the populations of 12 African cities rapidly expanded but into adjacent rural areas: Their density remained low at 81 inhabitants/km². Kampala's urban expansion at 10.6% per year was faster than its population growth at 4.6% per year, reducing its density level. Low density largely impedes cities' productivity. For instance, some estimate that a viable public transport system requires at least 15 000 inhabitants per km².

Africa has higher rates of urban poverty than any other region, and about 62% of urban residents live in informal settlements. Due to rapid urban population growth, many African cities face the challenge of tripling their slum populations by 2050 (UN-Habitat, 2008). People living in informal settlements often have low mobility rates, as high transportation costs can account for at least 20% of low-income households' disposable incomes.

African urban areas are exposed to high environmental risks. Mortality from air pollution costs Africa an estimated USD 447 billion in 2013, a third of its GDP. Climate change presents high risks of flooding in low coastal cities, heat extremes and changing rain patterns, threatening the livelihoods of many Africans (Roy, 2016).

Africa's intermediary cities are not yet equipped to face the rapidly-growing population (Minsat, forthcoming). Over 1 081 million Africans, 81% of the continent's population, live in a rural-urban interface defined by a continuum of rural areas, villages, towns and cities of fewer than 500 000 inhabitants. Intermediary cities would increase wealth in rural areas and strengthen rural-urban linkages: intermediary cities can create a demand pool

for rural economic activities and provide services and goods in their catchment areas. However, the demand for basic services outstrips the supply. In nine African countries, the governments of intermediary cities spend on average less than USD 1 per capita per year in total (AfDB/OECD/UNDP, 2016).

Tackling these challenges and reaping the opportunities created by rapid urbanisation call for holistic development strategies and targeted policy action. While each country is unique, many countries should give priority to the following objectives for policy action:

- Continuing to upgrade urban infrastructure remains a key priority for all countries. Two-thirds of urban investments are scheduled between now and 2050. Investing in urban infrastructure adapted to the most pessimistic climate change scenarios (called the “no regrets” approach) and planning urban development would bring many benefits.
- Ensuring land rights and clarifying land ownership, including for people living in informal settlements, are essential to provide a stable environment for investment and business.
- Strengthening rural-urban linkages and linkages within the urban network can facilitate a smoother transition from a rural to an urban economy. Several countries, such as Ethiopia and Rwanda, aim to strengthen the pivotal function of intermediary cities between rural areas and primary cities.
- Governments can deliver public goods to existing business clusters in African cities more effectively. Many local companies have gathered in urban areas, forming clusters. But public goods such as a reliable electricity supply often lack in those clusters, hindering productivity growth.
- Developing mass transportation systems can help reduce pollution while positively contributing to the economy. For example, the Lagos Bus Rapid Transit system has provided 2 000 direct and 500 000 indirect jobs and has reduced the cost of public transportation by 30%.
- Multi-level governance reforms can help implement policies and better adapt them to local territories. The new rural-urban dynamics require governance structures that go beyond cities’ administrative boundaries and take into account the economic functions of human settlements. Clarifying the responsibilities of different government levels and establishing co-ordinating structures are key. Multi-level governance reforms require accountability, transparency and capacity building, particularly at subnational levels.

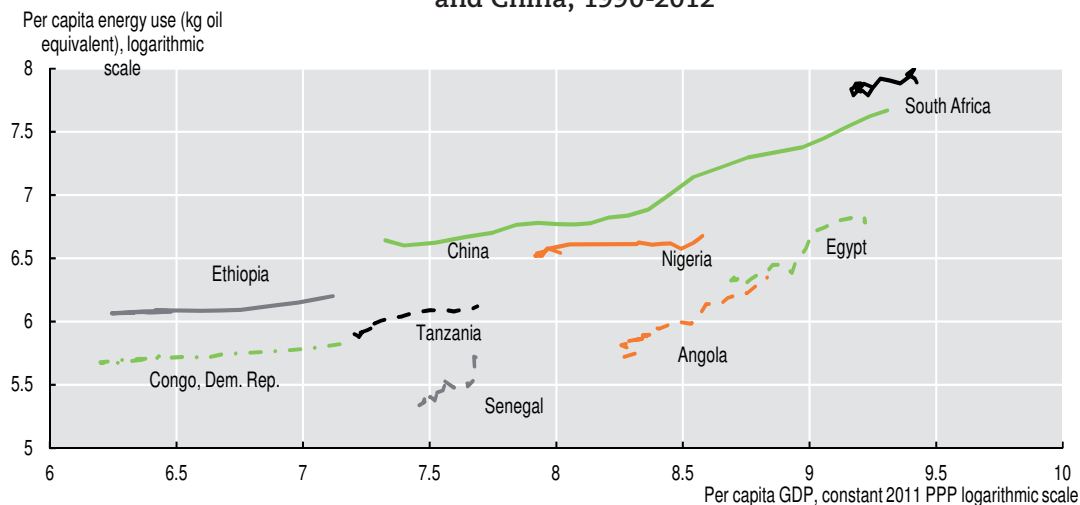
Megatrend 5: Climate change and the transition to a green economy

Climate change represents a significant challenge for Africa’s development. Increased greenhouse gas levels in the atmosphere, rising sea levels, hotter temperatures and other changing weather patterns bring concrete risks for Africa’s economies and societies. Africa is more vulnerable to climate change than other world regions, although is less responsible for creating this global challenge. The continent contributes less than 4% to global greenhouse gas emissions, but 27 of the 33 countries most at risk from climate change are in Africa (FAO, 2008; Maplecroft, 2016).

Many African countries are now transitioning into the middle-income stage demanding more energy. The shift to modern energy often means a rapid reliance on electricity generated from fossil fuels, resulting in higher CO₂ emissions and other types of harmful air pollutants. As Africa’s population will increase to 25.8% of the world’s population in 2050 and approximately 40% in 2100, without an environmental transition towards greener growth its ecological footprint will also drastically increase.

Patterns of energy use vary among African countries. Countries such as the Democratic Republic of the Congo with low levels of energy consumption should aim for continuing on a path of sustainable energy use as their income grows (see Figure 2.7). Countries like South Africa with higher energy consumption may have to consider greener models.

Figure 2.7. GDP and energy use per capita for selected African countries and China, 1990-2012



Source: Brambhath, Haddaoui and Page (2017), "Green industrialisation and entrepreneurship in Africa".
StatLink <http://dx.doi.org/10.1787/888933782981>

Floods from rising sea levels can be costly. Half of African settlements with 1-5 million inhabitants lie in low elevation coastal zones and are vulnerable to flooding (Kamal-Chaoui and Robert, 2009). Egypt's coastal zone contains 40% of the country's total population; in addition to human displacement and other adverse consequences, every metre of sea level rise would decrease GDP by 6.4%. For Nigeria, estimates lay at a 0.3% GDP loss and for Senegal at 12-17% (Brown, Kebede and Nicholls, 2011).

A lack of rain, desertification and hotter temperatures seriously affect Africa. Recent droughts have had negative impacts on the agricultural sector in Eastern and Southern Africa. Global warming beyond 2°C could lead to a 40% decrease in precipitation in Southern Africa (Granoff et al., 2015). Desertification already affects two-thirds of Africa's land and 65% of its population. It contributes to rural-urban migration since African agriculture depends heavily on rainfall. A 1% decrease in precipitation could increase sub-Saharan Africa's urbanisation rate by 0.45%. Rising temperatures are already increasing the incidences of malaria in Eastern Africa's highlands (Endo, Yamana and Eltahir, 2017).

Africa faces significant costs to avoid the consequences of climate change. Present interventions to adapt to climate change will cost USD 7-15 billion a year by 2020 (Schaeffer et al., 2013). In a "below 2°C scenario", adaptation costs could reach USD 35 billion by 2050 and USD 200 billion by 2070 (Granoff et al., 2015). Adapting infrastructure projects to climate change would raise investment costs by about 15% (ICA, 2016). Retrofitting environment-unfriendly infrastructure exceeds the cost of initially investing in environment-friendly infrastructure.

African countries can mitigate the effects of climate change by targeting specific policy objectives:

- Policies should accelerate the energy transition. Africa has enormous potential for renewable energy which can help address its energy shortage (AfDB, 2017). Half of sub-Saharan Africa's growth in electricity generation will likely come from

renewable energy by 2040 (OECD/IEA, 2014). The costs of renewable energy are decreasing rapidly. That of solar energy declined by 80% between 2008 and 2015. For sub-Saharan Africa in particular, “decentralised systems, led by solar photovoltaic in off-grid systems and mini-grids, are the least-cost solution for three-quarters of the additional connections needed” (OECD/IEA, 2017).

- Policies should develop green sectors. African countries can capitalise on their rich biodiversity by becoming eco-tourism destinations. Tourism already accounted for 30% of Africa’s services exports in 2016 (ITC, 2016). Improving recycling and waste collection can create many jobs for low-skilled workers (AfDB/OECD/UNDP, 2016).
- Finally, policies should reduce the costs resulting from air pollution. Phasing out coal and oil subsidies would reduce deaths from air pollution by at least 50% (Coady et al., 2015: 25). Eliminating energy subsidies across six countries in East and Southern Africa would generate savings ranging from an estimated 1.5% of GDP in Uganda to 8.3% of GDP in Zambia (OECD, 2017c).

Note

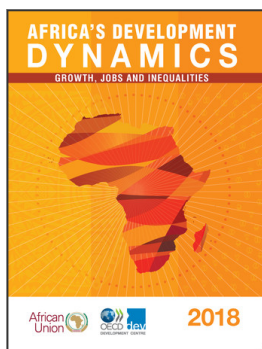
1. These countries include Argentina, Costa Rica, Côte d’Ivoire, the Dominican Republic, Ghana, Kyrgyzstan, Nepal, Rwanda, South Africa and Thailand.

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