Key findings of the 2018 Africa Sustainable Development Report

I. Overview

1. The 2018 Africa Sustainable Development Report, a joint publication of the Economic Commission for Africa (ECA), the African Development Bank, the African Union Commission, and the Regional Bureau for Africa of the United Nations Development Programme (UNDP), reviews African performance on five goals and related targets and indicators of the 2030 Agenda for Sustainable Development, also taking into account their alignment with Agenda 2063 of the African Union. The report uses the latest data from international sources to track performance and highlight lessons learned in the implementation of the two agendas. In line with the theme of the 2018 meeting of the high level political forum on sustainable development, the 2018 report has as its theme “Transformation towards sustainable and resilient societies” and it focuses on Goals 6, 7, 11, 12 and 15 of the Sustainable Development Goals. In addition, the report examines trends in science, technology and innovation in Africa and the role of science, technology and innovation in advancing implementation of the Sustainable Development Goals in the continent. The key findings, policy recommendations and emerging issues from report are summarized below.

II. Key findings

1. Access to safe drinking water and improved sanitation

2. Key finding 1 states that access to safe drinking water and improved sanitation is improving but remains very low in Africa despite increasing official development assistance (ODA) for the sector. Access to safe drinking water in Africa is generally low by global standards and characterized by wide disparities between and within countries. Overall, access is higher in North Africa compared to the rest of the continent. In 2015, the proportion of people with access to safely managed sources of drinking water in Africa excluding North Africa, was 23.7 per cent; barely one third of the global average of 71 per cent. Coverage varies widely between countries: thus, access ranges from 100 per cent in Mauritius to 19 per cent in Eritrea. Access is
uneven within countries too and rural-urban disparities persist in most parts of Africa. Thus, in 2015, approximately 82 per cent of the urban population of Africa excluding North Africa had access to basic drinking water services, compared to only 43 per cent of the rural population.

3. Emerging challenges including climate change, droughts, floods and water management further impede access to safe drinking water in Africa. Around the world, North Africa, Central Asia and Western Asia in particular are experiencing water stress\(^2\) levels above 60 per cent, which indicates the strong probability of future water scarcity. Tackling these challenges requires better governance of water resources, infrastructure investments, access to appropriate technology and policies to improve management of water scarcity.

4. Where sanitation is concerned, access to safely managed services is improving but remains low in Africa and at the global level in general. At the global level, only 39 per cent of the population – in other words, fewer than 4 out of 10 individuals – have access to safely managed sanitation services. Precise data for this indicator are lacking for most of Africa, but in North Africa, for which data are available, the proportion of people with access to safely managed sanitation services was 25.1 per cent in 2015, up from 18.1 per cent in 2005.

5. These trends notwithstanding, Africa excluding North Africa receives the largest amount of ODA for water supply and sanitation. Funding for this purpose has been rising in all regions except in Eastern Asia and, for Africa, doubled between 2000 and 2015.

2. Access to electricity

6. Key finding 2 states that access to electricity in Africa is increasing, albeit at a pace slower than that of population growth. Access to electricity is vital for all aspects of social and economic development. For most of Africa, however, the transformative power of electricity remains unharnessed because of limited production and access. The continent has experienced a slow but steady increase in access to electricity, rising from 39.7 per cent in 2008 to 45.9 per cent in 2014 (covering some 560 million people). Despite this progress, access remains much lower than the global average and the figures for Africa are less than half those for East Asia and the Pacific. Moreover, rural-urban disparities in access are particularly stark in Africa excluding North Africa, where the electrification rate in rural areas averaged 17 per cent in 2014, compared to 70 per cent in urban areas.

3. Renewable energy potential

7. Key finding 3 states that the continent’s renewable energy potential remains largely untapped. Africa has abundant renewable energy resources. Meanwhile, demand is growing and technology costs are falling. Hydropower generation, a renewable source of energy, is the single largest source of electricity in Africa, accounting for slightly more than 60 per cent of the continent’s supply. Despite its strong potential, however, solar power remains largely untapped. Furthermore, although rapid progress has been achieved in a few African countries, such as Morocco, Egypt and South Africa, the share of renewable energy in total energy consumption has fallen in recent years, declining slightly from 63 per cent in 2010 to 62 per cent in 2014.

4. Efficiency in energy use

8. Key finding 4 states that efficiency in energy use is improving but reliance on biomass poses a challenge to progress. Decreases in energy intensity are a sign of improvement in the efficiency of a national economy’s consumption of energy or a

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\(^2\) Defined as the ratio of total freshwater withdrawn to total renewable freshwater resources above a threshold of 25 per cent.
shift to less energy-intensive sectors such as services. Energy-intensity levels in Africa decreased between 2004 and 2014 at an annual rate of 1.6 per cent, thanks to the significant progress in this area made by Burundi, Ethiopia, Mali, Seychelles, Sierra Leone and Uganda. That said, however, intensity levels are still significantly higher than the world average.

9. Efficiency in energy use varies between subregions, in particular in Africa excluding North Africa, where energy intensity in 2014 was estimated to be 72 per cent higher than the global average of 4.7 mJ per unit of output. Overall, North Africa has the lowest energy-intensity levels, thanks to its adoption of energy efficiency strategies with ambitious goals and targets, regulatory frameworks and specific programmes supported by incentive measures. By contrast, East Africa is the most energy-intensive subregion, at 10.4 mJ per unit of output, followed by Southern Africa (9.7 mJ per unit of output), West Africa (8.6 mJ per unit of output), and Central Africa (7.5 mJ per unit of output). The average level of energy intensity in East Africa is particularly skewed by Ethiopia and Somalia, which largely rely on traditional biomass for their energy needs and have inadequate transmission and distribution infrastructure.

10. Energy inefficiency can mostly be attributed to inadequate infrastructure, poorly designed buildings, lack of enforceable policy on energy-efficient appliances and technologies (i.e. persistent use of incandescent lightbulbs or inefficient cooking stoves), and inefficient generation and transmission processes. Cooking, in particular, consumes approximately 80 per cent of residential energy in Africa excluding North Africa. Indeed, the absolute number of people without access to energy-efficient cooking stoves continues to rise in Africa, with around 780 million people cooking with solid biomass.

11. Ambitious regional grid integration projects such as the East and Southern Africa Clean Energy Corridor have the potential significantly to transform the African energy landscape.

5. Urbanization

12. According to key finding 5, Africa is the world’s fastest urbanizing region, but the potential benefits of this process have yet to be fully exploited. The urban transition of Africa is unprecedented in terms of scale and speed. The continent is 40 per cent urban today but, by 2040, will become predominantly urban at 51.5 per cent, with a total urban population five times larger than that of 2010. Africa is also urbanizing faster than any other world region, with an urban growth rate projected at 3.42 per cent for the period 2015–2020. By 2030, all the continent’s subregions except East Africa will have more than half of their populations living in urban areas. Much of the urbanization currently unfolding in Africa is unplanned, however, and poorly managed. Many African cities are characterized by informality, severe service and infrastructure deficits, social and spatial segregation and limited opportunities for employment in productive sectors of manufacturing and modern services.

13. The region’s cities have also made limited progress on the issues prioritized in Sustainable Development Goal 11, namely, access to public transport, urban sprawl, loss and damage from disasters; air pollution and solid waste collection, thereby constraining efforts to achieve inclusive growth. The proliferation of slums in African cities is perhaps the most significant manifestation of the externalities associated with rapid and unplanned urbanization. Africa continues to have a much higher proportion of slum dwellers compared to other regions of the world. Between 2010 and 2014, the proportion of slum dwellers in Africa declined from 66 to 56 per cent but still accounted for almost one fourth (24 per cent) of the world’s total slum population.

14. For these reasons, the potential of Africa’s rapidly growing cities and urban settlements to drive broad-based economic growth and social inclusion has not been fully tapped. Historical experience demonstrates that urbanization is closely associated with and can drive economic growth. Yet, in Africa, urban growth has been delinked from economic growth, and has not been accompanied by a commensurate
increase in jobs in productive sectors of industry and modern services, with the bulk of urban employment remaining informal.

15. African cities need to be well planned and managed if they are to make significant progress in reducing poverty and inequality and to foster job-rich growth and transformation. It is therefore critical for national Governments and urban authorities to focus their attention and investments on surmounting essential barriers to urban development, including infrastructure and service deficits, and also weak and poorly functioning institutions and capacities for planning, legislation and governance.

6. National disaster strategies

16. Key finding 6 observes that implementing national disaster strategies reduces the vulnerability of cities to the impact of disasters. Cities are becoming increasingly vulnerable to the impact of disasters. With the growing concentration of Africa’s population in cities, this vulnerability will rise. In response to the threat posed by natural disasters, an increasing number of African countries are adopting and implementing national disaster strategies. Thus, in 2016, 30 African countries had adopted or were implementing national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, endorsed by the General Assembly in June 2015, more than double the number of countries that had adopted or were implementing similar strategies in 2013.

7. Air quality

17. Key finding 7 notes that the air quality in most African cities is poor and poses health risks in particular for children. Most African cities and countries do not meet the minimum air quality standards established by the World Health Organization. Thus, at the country level, of the 52 African countries with data for 2012, only one – Liberia – and, of all the towns and cities in the relevant database, only 8 per cent meet the required standards. Pollution is linked to the use of solid fuel for cooking with long-term consequences of acute respiratory infections among children under the age of 5.

8. Food production

18. Key finding 8 determines that Africa excluding North Africa wastes over 30 per cent of its approximately 230 million tons of annual food production (equivalent to more than some $4 billion), because of poor post-harvest handling. Rapid population growth, rapid urbanization, a growing middle class and resource-intensive production patterns are the key factors driving increased global resource use. At the global level, material extraction has increased significantly, owing largely to the extraction of industrial and construction minerals.

19. In terms of per capita consumption, despite the declining trends between 2000 and 2017, developed regions required at least 25–40 tons of materials per capita per annum, a level which is both too high and unsustainable.

20. The levels of domestic material consumption for growth in Africa remain low. Unlike in developed countries, however, where food losses and waste occur at the level of consumption, in Africa the bulk of such losses occur at the level of production

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3 The Sendai Framework is a voluntary agreement that underscores the primary role of the State, working with other stakeholders including local governments and the private sector, in reducing disaster risk. The framework sets seven targets, including the need, on the one hand, to reduce mortality, the number of people affected, economic losses and damage to infrastructure, among other consequences, from disaster; and, on the other, to increase the number of national and local disaster risk reduction strategies; to boost international cooperation with developing countries, and to improve the availability of and access to multi-hazard early warning systems and disaster risk information.

4 Material extraction, sometimes referred to as the “material footprint”, refers to the amount of raw materials extracted globally to meet the domestic final consumption demand of a country.
and are largely due to post-harvest losses, equivalent, according to estimates by the World Food Programme, to more than $4 billion. Given its rapid population increase and rising incomes and changing consumption patterns, Africa requires technology improvements and awareness-raising campaigns to reduce resource-intensive production and to limit food waste.

9. Mountain resources

21. As observed in key finding 9, Africa outperforms most of the world’s regions in the conservation and sustainable use of its mountain resources. Mountain ecosystems are important reservoirs of biological diversity, in particular for endemic plants and animals, but they are rapidly changing and under threat of habitat degradation. In response to this threat, all regions are increasing the coverage of protected mountain resources. Africa excluding North Africa has a score on the Mountain Green Cover Index5 of 90 per cent, well above the global average of 76 per cent and only outperformed by Oceania and South East Asia, with scores of 96 and 98 per cent, respectively.

10. Forest cover

22. Key finding 10 indicates that Africa is losing forest cover at a rate much higher than the global average. Globally, forest area as a proportion of total land area has been declining over the past two and a half decades, with the fastest decline registered in Africa excluding North Africa and in the least developed countries. Over the period 2000–2015, Africa excluding North Africa was one of the two global regions to record a decline of at least 2 percentage points in relative forest cover. The rapid rate of deforestation in the region may be attributed, in part, to increased exploitation of forest resources for commercial purposes, encroachment of forest land by local communities for agricultural activities and a dearth of long-term management plans for most of the region’s forests. For instance, in 2010, the total forest area with long-term management plans in Africa excluding North Africa amounted to 15.3 per cent (23 per cent for North Africa), which is far below the global average of 52.6 per cent and the figure for Europe of 95 per cent. A few countries, including Ghana and the Gambia, have been successful, however, in increasing forest cover as a percentage of their land area.

23. In addition to the decline in its forest cover, like other regions of the world Africa faces the risk of extinction of major animal species.

11. Science, technology and innovation

24. Key finding 15 points out that a robust science, technology and innovation system requires a sound infrastructure that connects the science community and researchers to the private sector and the Government. The development of science, technology and innovation is vital for the achievement of the Sustainable Development Goals and Agenda 2063. The African infrastructure for science, technology and innovation, as measured by the continent’s Internet access and access to electricity, is improving but relatively weak.

25. Furthermore, the institutional architecture for science, technology and innovation is also generally weak in Africa and characterized by low investments in research and development and fragmented innovation systems. Thus, most of the entities responsible for policymaking in relation to science, technology and innovation have operated in isolation from other policy agencies with weak links to the private sector and universities. Moreover, investments in research and development average a mere 0.5 per cent of gross domestic product (GDP), well below the 1 per cent of GDP stipulated in Agenda 2063. Consequently, the benefits of technological

5 The Mountain Green Cover index is an indicator of the extent to which mountains are efficiently managed, taking into consideration the delicate balance between conservation and sustainable use of resources.
innovation have not accrued to large segments of society and there are wide disparities in the development of science, technology and innovation across the continent.

26. Countries such as Kenya, Morocco, South Africa and Tunisia, which rank high on science, technology and innovation indicators in Africa, invest a relatively higher share of their GDP in research and development and also provide incentives for private sector involvement in the funding and carrying out of such research and development. These countries also effectively implement strategies to strengthen their innovation systems by establishing dedicated agencies specifically for that purpose.

27. The operationalization by the United Nations in September 2017 of the Technology Bank for Least Developed Countries is a step in the right direction and will help to revitalize science, technology and innovation in least developed African countries. The Bank aims to support efforts by least developed countries to build science, technology and innovation capacities, systems and regulatory frameworks that can harness the benefits of new technologies by attracting outside technology and facilitating technology transfer on voluntary and mutually agreed terms; supporting homegrown innovation and research; and bringing imported and indigenous technologies into the market. Africa accounts for the majority of least developed countries, hence stands to benefit most from the establishment of the Bank.

III. Policy recommendations

28. The report identifies the following priorities for policymakers, recommending that they should:

(a) Prioritize investments in water and sanitation to improve access, enhance health outcomes and leverage the productive capacities of the population;

(b) Strengthen capacities for urban planning and management to unleash the transformative potential of African cities to drive inclusive and sustainable economic prosperity;

(c) Integrate urbanization in national development planning, ensure policy coherence between urban, spatial, sectoral and macroeconomic policies, develop more data on urban trends in social, economic and environmental areas. The role that urbanization could play in addressing other Sustainable Development Goals could also be the subject of further research by member States and the United Nations system;

(d) Invest in technologies and infrastructure that reduce post-harvest losses;

(e) Improve rural access to energy to address rural urban disparities;

(f) Provide incentives to drive investments in renewable energy, to improve access to electricity and to boost economic activity and growth;

(g) Improve access to energy-efficient cooking stoves to enhance energy efficiency, reduce pollution and improve health outcomes;

(h) Strengthen the science, technology and innovation system and leverage investments in research and development by developing institutions that bring together Governments, the private sector and the science community.