AFRICAN DEVELOPMENT BANK GROUP

# Sudan:
# Enhancing Socioeconomic Transformation and Resilience

## Country Diagnostic Note

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DEMOCRATIC REPUBLIC OF THE CONGO
UGANDA
KENYA
ETHIOPIA
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SAUDI ARABIA
RED SEA
Lake Nasser
Administrative boundary
Halaib
Wadi Halfa
Selima Oasis
Semna West
Lake Nubia
Nubian Desert
Libyan Desert
Salala
Muhammad Qol
Wadi Odib
Laqiya Arba'in
Abu Hamed
Port Sudan
Suakin
Kerma
Dongola
Nukheila
El'Atrun
Karima
Nile
Tokar
Haiya
Karora
Old Dongola
Merowe
Jebel Abyad Plateau
Jebel Nagashush
Wadi el Milk
Wadi Howar
El Damar
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Halfa al Gadida
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Asmara
Miski
Umm Badr
Sodiri
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Gedaref
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Al Fasher
El Geneina
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Renk
Ed Damazin
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Ābay (Blue Nile)
Ed Da'ein
Al Fula
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Tullus
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Nuba Mts.
Kologi
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Paloich
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Kenamuke Swamps
Administrative boundary
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Nagishot
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National capital
State (wilayah) capital
Town
Major airport
International boundary
Main road
Track
Railroad
0 100 200 300 km
0 100 200 mi

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# EXECUTIVE SUMMARY

1. **Sudan, Africa's third-largest country, is strategically located along the Red Sea, at the crossroads of Sub-Saharan Africa and the Middle East.** The country is rich in natural resources, with fertile lands, abundant livestock, and extensive mineral reserves (such as oil and gold). After South Sudan's secession in 2011, Sudan's oil resources declined, but its mineral and other resource endowments remain substantial. Sudan's population is estimated at about 42 million, with two-thirds living in rural areas—20 percent of whom are largely nomadic. The population is growing relatively rapidly, at 2.1 percent a year. Because about two-thirds of the territory is exposed to desertification, the population density, though low at the national level, is high in the oasis and urban areas, notably Khartoum.

2. **The advent of the new transitional government in 2019 has accorded Sudan unprecedented opportunities for renewal after decades of conflict.** But the country's situation remains very fragile because severe economic, political, and social challenges have yet to be resolved. Since gaining political independence, Sudan has suffered from years of conflicts, poor governance, volatile security, economic and financial sanctions, and isolation from the international community. After South Sudan's secession, Sudan was downgraded from lower-middle-income to low-income status, with widespread poverty. With the COVID-19 pandemic and adverse climatic change crises, poverty is projected to continue rising, with an estimated 20 percent of the population in extreme poverty and over 9.6 million people food insecure. Furthermore, Sudan hosts nearly 2 million internally displaced persons in urgent need of humanitarian assistance. The country's human development is among the lowest in the world. But the new government is committed to rolling out economic reforms to lay the foundations for long-term inclusive and sustainable economic growth, renew the social contract, and reengage with the international community.

3. **Since independence, Sudan has not progressed beyond factor-driven economic development.** From 1956 to 1998, primary agriculture was the main source of economic growth. From 1999 to 2010, growth was driven by oil production and exports. The oil export boom allowed some investments in social and economic infrastructure, but the adverse relative price allocative effects led to a deterioration in tradable goods outside the oil sector which, coupled with weak governance, widened regional and income inequalities. The ongoing third phase was triggered by South Sudan's secession, which caused the role of oil exports in Sudan's economy to plunge—causing serious and widening macroeconomic imbalances that persist to date.

4. **Since 2011, Sudan's macroeconomic situation has been highly volatile and unsustainable.** The loss of 75 percent of oil resources unleashed profound macroeconomic instability on domestic production, trade, and the external sector, resulting in tumbling foreign direct investment from a peak of $3.5 billion in 2006 to a meager $0.6 billion after the secession. The adverse impact of near hyperinflation and high Sudanese pound depreciation on the expectations and investment decisions of domestic private investors reduced the country's investment and economic growth. Under international economic sanctions, Sudan was cut off from regular financial transactions, which contributed to the country's accumulation of external debt arears.

5. **With IMF support, in 2014 the previous government embarked on a macroeconomic program that failed to stabilize the economy.** The program focused on consolidating public finances, stabilizing inflation, and reforming the exchange rate regime. Stringent economic policy reforms achieved some economic stability. In 2015 GDP growth reached 5.3 percent and inflation fell to 17.0 percent (from 37.3 percent in 2014). But the impacts of the economic reforms proved transient.

The fiscal deficit continued to widen, reaching 8 percent of GDP in 2019, driven by huge fuel subsidies and weak fiscal revenue mobilization. The fiscal deficits were mainly financed by monetization, which resulted in substantial inflation and exchange rate depreciation. The central bank's interventions to restore macroeconomic stability were hampered by its lack of independence and poor coordination and harmonization with fiscal authorities.

6. **Since 2019 the transitional government has embarked on bold fiscal, economic, and financial policy reforms supported by the 2020 IMF Staff Monitored Program to put Sudan back on a path of inclusive, sustainable economic growth and development.** The reforms are focused on exchange rate and monetary policy, fiscal consolidation to strengthen macroeconomic stability, and competitiveness to create fiscal space for increased social spending and public wages and to respond to COVID-19. Satisfactory implementation of the policy reforms and related measures will move Sudan closer to the Heavily Indebted Poor Countries (HIPC) decision point and open opportunities for the country to access significant development financing.

7. **Sudan has lagged the average Sub-Saharan country on governance indicators.** Public financial management and procurement present serious shortcomings. For example, Sudan ranks 34th of 36 African countries on tax collection efforts, with a tax revenue gap estimated at 6.1 percent of GDP. Likewise, budget credibility is poor in all states, hampered by limited progress toward a medium-term fiscal framework for budget planning. Weak oversight of state-owned enterprises underscores transparency and corruption challenges. Sudan has fragile state institutions characterized by low administrative capacity and weak checks and balances, increasing its vulnerability to corruption and rent seeking. The country scored 16 out of 100 points for three consecutive years (2017-19) on Transparency International's Corruption Perceptions Index. The transitional government is taking steps under the IMF Staff Monitored Program to improve economic governance—notably public financial management—through better budget planning and enhanced fiscal reporting and oversight of state enterprises.

8. **Located in the fragile Sudano-Sahelian zone, Sudan is highly vulnerable to the adverse effects of climate change.** That translates into frequent droughts and floods, extremely high temperatures, and changing rainfall patterns, among others. A steady increase in human and livestock populations has put additional pressure on land and aggravated its vulnerability to climate change. Deterioration of the country's natural resources undermines agricultural productivity, the livelihoods of the poor, and the stability of the country and its institutions. The Notre Dame-Global Adaptation Index (ND-GAIN) Country Index score, at 174th of 180 countries, points to Sudan's high vulnerability and low readiness. The country's adaptation strategy is prioritizing actions to reduce vulnerabilities in agriculture, water, coastal zones, and health.

9. **Sudan has one of the world's lowest rankings on gender equality,** at 170th of 189 countries according to the 2020 Gender Equality Index. Gender inequality and exclusion have been linked to the persistence of discriminatory norms and relations and the inequitable distribution of resources, contributing to poverty and underdevelopment. The share of girls out of school is higher than boys in basic education. More than two-thirds of women—and over 75 percent in urban areas—do not participate in the labor force. Employment levels are particularly low among women ages 15-24. Youth and women are often employed in lower-productivity jobs and are constrained by limited access to productive resources, including finance and land. The April 2019 revolution marked a significant moment for Sudanese women's public participation. For young women, this participation unleashed a new sense of confidence, empowerment, and solidarity, pushed new boundaries around mobility, and invited public respect. Women felt emboldened to discuss and question taboo issues, such as women's societal roles and expectations and legal rights. Women are now entering into new political spheres in urban areas. In rural areas women's participation in community structures still varies, though some have been encouraged to engage in new spheres related to peacebuilding and community services.

**10. Understanding the political, social, cultural, and environmental drivers of fragility is essential to customizing interventions to help Sudan move on a new development trajectory and build resilience.** Conflict and political instability have prevailed since independence. The long conflict in the southern part of the country was settled by the Comprehensive Peace Agreement in 2005, which led to South Sudan's secession in 2011. But the ensuing economic crisis and relentless conflicts in Darfur, Southern Kordofan, and Blue Nile culminated in uprisings against and the toppling of the regime in 2019. The transitional government's mandate is to implement reforms to resolve long-standing internal conflicts, foster stabilization and inclusive growth, and re-engage with the international community.

**11. The private sector operates in a weak, uneven business environment because it must compete with public marketing boards, which still receive concessional advantages from the government.** Sudan has made little progress on creating an enabling environment (policy, regulatory, and administrative frameworks) and building efficient institutions. Companies face several administrative barriers including complex licensing, overlapping taxes (due to conflicts between federal, state, and local regulations), and land tenure issues. Moreover, businesses are unevenly distributed throughout the country. Small firms and informal enterprises are spread throughout the country, but most larger companies are located in Khartoum. Internal conflict has hurt large areas of Sudan, impeding business activities and trade, notably in Darfur, Kordofan and the Blue Nile states. Furthermore, few areas in Sudan offer infrastructure and factor markets necessary to support large-scale, formalized manufacturing and other business activities.

**12. Sudan faces development gaps and challenges under all of the African Development Bank's High 5 strategic priorities.** The country's energy system—one of the largest in Sub-Saharan Africa—is operating efficiently from a technical standpoint but faces many challenges and is financially unsustainable. Most of Sudan's electricity generation capacity comes from hydro and thermal sources; renewable energy potential remains largely untapped. The main challenge facing the energy sector is its financial unsustainability: the average retail tariff, the lowest in Sub-Saharan Africa, is far below the cost of supply. The shortfall is financed through a direct subsidy from the Ministry of Finance and an implicit exchange rate subsidy financed by the Central Bank. The subsidy is so large, at 13.5 percent of government spending, that it undermines macro-economic stability and the allocation of resources to other priority sectors. And since the electricity access rate stands at barely 32 percent, the government needs to increase the current connection rate sixfold to achieve universal access.

**13. Given the many opportunities that agriculture offers, it has the potential to transform the Sudanese economy—provided it overcomes many challenges.** Agriculture is the backbone of the Sudanese economy, generating one-third of GDP, accounting for 95 percent of exports, and employing more than half of workers. Sudan has long been considered one of the world's great breadbaskets and, with about 110 million heads of livestock, has the second-largest herd in Africa (after Ethiopia). Sudan's agro-ecological zones are suitable for a wide variety of crops and animal husbandry. But agriculture suffered from neglect during the years of the oil economy, causing agricultural productivity to decline as the enabling environment deteriorated due to lack of macroeconomic stability and limited investments in hard and soft infrastructure.

**14. Sudan could invest in areas that require public investment to support an enabling environment for private investment in promising value chains with great economic and development impacts.** Studies done by the AfDB, European Union, and World Bank point to promising agriculture value chains (especially cereal crops), oil seeds (sesame), hibiscus and watermelon seeds, dairy (meat and milk), cotton, horticulture, and agro-forestry food products, (gum arabic). To exploit these opportunities, the government should focus on improving the enabling environment for private investment by strengthening agricultural research, improving links between research and extension services, reforming the land tenure system, and enhancing standards and providing quality infrastructure through public-private partnerships to comply with food quality and safety measures.

**15.** **Sudan's manufacturing sector is small, and its share in the economy has been declining in terms of real value added and employment.** Most manufacturing involves processing of raw materials by small and medium-size firms. Some 70 percent of manufacturing involves food. The potential of other manufacturing activities—clothing, textiles, footwear, paper, pulp, furniture—remains largely unexploited. Industry development is hindered by input shortages, high energy costs, high costs for spare parts, and weak links between agriculture and manufacturing. Other impediments include weaknesses in trade logistics, inadequate infrastructure, limited access to finance, lack of skilled labor for industrial development, and low foreign direct investment.

**16.** **Sudan needs to develop an effective industrial policy and strategy and enhance the business environment to mitigate the private sector's main obstacles.** Key priorities include tackling infrastructural deficits, improving the regulatory environment, increasing access to finance, catering to the needs of the small and medium-size enterprises, and developing skills for agricultural and manufacturing industrial development.

**17.** **Sudan is a member of several regional trade arrangements but has not ratified some or reaped their full benefits.** Sudan's performance on regional integration is poor both within Africa and in the regional groups to which it belongs. Trade within the Common Market for Eastern and Southern Africa (COMESA), which has been modest and mostly attributable to Egypt, could be expanded. Through its membership in the Intergovernmental Authority on Development (IGAD), Sudan could benefit from projects aimed at upgrading the Port Sudan Corridor and expanding power interconnections with Ethiopia. Sudan also stands to benefit from access to a large African market and diversify its narrow range of export markets once the country ratifies the African Continental Free Trade Area (AfCFTA) treaty. Participation in the Horn of Africa Initiative could also enable Sudan to tap into resources to support its regional integration priorities.

**18.** **Sudan could herald a new era of re-integration with East Africa to take advantage of its strategic location along the Red Sea and amid seven neighboring countries to yield positive development outcomes in terms of trade (including in power), logistics services, tourism, and water management.** To reap the benefits of integration, Sudan should modernize its trade policy through targeted reforms, leverage its position as a transit hub by improving its logistics to compete with existing routes serving the same countries (Djibouti for Ethiopia, Douala for Chad, and the Central African Republic), and diversify export markets and value chains by leveraging regional trade agreements and the AfCFTA.

**19.** **Sudan remains behind in achieving universal basic education, and student learning outcome is low.** A child who starts school at age 4 can expect to complete only 7.1 years of schooling by their 18$^{th}$ birthday. Gender, regional, and socioeconomic disparities are widespread. Inequities are widening between the poorest and richest quintiles, with only 9 percent of the poorest able to proceed to secondary school versus 77 percent for richest quintile. Because of its low completion rate, Sudan has one of the largest numbers of out-of-school children among fragile countries, with an estimated 3.6 million children ages 5-13 out of school—half of whom have never attended school. Despite some slight improvement since 2014, student learning remains very low, with expected years of school dropping to about 4.3 years once learning outcomes are considered. The shortage of teaching and learning materials and the poor condition of school infrastructure increase the risk of noncompletion of primary school and poor learning outcomes. Furthermore, Sudan faces a skills mismatch, with an unbalanced workforce structure comprising many overskilled workers and underskilled workers. The "missing middle" comprises people with basic and mid-level technical skills (skilled laborers and technicians). Employers in Sudan have expressed concern over the lack of vital skills among job seekers.

**20.** **The immediate priority for the government is to reach universal basic education and improve students' learning outcomes.** Policies should aim at reducing the dropout rate and gradually bridging gender and regional gaps—with

a focus on lagging areas affected by droughts and conflicts and attention to vulnerable groups, nomads, and internally displaced persons. This will require focusing investment in disadvantaged states to expand and improve the school environment, notably classrooms and teachers training. In the short to medium run, Sudan also needs to reduce its skills gap and mismatch by reforming institutions for technical and vocational education and training (TVET) to scale up the supply of mid-level workers and equip them with relevant skills for the market.

21. **Sudan is lagging far behind the Sustainable Development Goals for water, sanitation, and hygiene.** Though open defecation had been cut 27 percentage points, only 60 percent of the population has access to an improved source of drinking water, while 36 percent have access to basic sanitation. Rural-urban disparities in access to drinking water and sanitation remain pronounced, with little to no progress made to bridge the gap. In 2017 only 53 percent of the rural population had access to safe drinking water and between 2000 and 2017 the percentage of rural households using surface water (13 percent) worsened by 2 percentage points. The government needs to urgently endorse its draft Water, Sanitation, and Hygiene Policy to progress toward providing equitable, sustainable water and sanitation services to the Sudanese people. Interventions are needed to strengthen institutional capacity (especially planning, budgeting, and monitoring), sett appropriate tariffs and regulations, and scale up investment, targeting lagging regions as well as schools and health centers.

22. **Though progress has been made in improving health outcomes, Sudan continues to grapple with a high disease burden.** Between 1990 and 2018 child mortality was halved to 60 per 1,000, but this is more than twice the Sustainable Development Goal target of 25 per 1,000. Likewise, maternal mortality ratio remains high at 295, well above the target of 70 by 2030. Malnutrition continues to be a daunting challenge. Four of every ten children under 5 are stunted, and hence at risk of cognitive and physical limitations, and two of every ten face chronic malnutrition. Noncommunicable diseases have been surging, accounting for more than half of all deaths in 2015.

23. **To improve health services, the government should focus** on developing a health financing strategy to mobilize resources and using them to achieve stated goals, designing and implementing strategic interventions to improve accessibility and distribution of primary healthcare facilities, notably to improve maternal, child, and reproductive health services including immunizations, ensuring an even distribution of the workforce in hard-to-reach rural areas to cater to poor and vulnerable populations, targeting early child development interventions, particularly to improve the nutritional status of children under 5, reducing communicable and noncommunicable diseases through prevention and control services, transforming secondary and tertiary health services to improve quality, efficiency, and equity to progress toward universal health care and foster community empowerment, and strengthening the governance systems of the decentralized health sector at all levels.

24. **Since 2012 the government has acknowledged the need for targeted social safety nets to address Sudan's high poverty and vulnerability.** In its 2012 interim Poverty Reduction Strategy Paper the government committed itself to developing a national protection strategy. But the strategic framework has remained scattered, with a multitude of policy and plans implemented by different actors with little coordination. The coverage of programs was limited, and there were many overlaps between them. Historically, the Zakat Fund—financed by the population according to Islamic Sharia law—has implemented the largest poverty-targeted program, mostly through in-kind benefits. Outside Zakat programming, direct cash transfers were introduced in 2012, though the program had some shortcomings, notably the inefficiency of the distribution mechanisms and targeting procedures used. Overall, general subsidies, notably on fuel and food, both expensive and regressive, have constituted the bulk of social programming, dwarfing the size of the Zakat Fund and other government programs.

25. **The government has introduced a large-scale cash transfer program, the Sudan Family Support Program, to cushion the short-term impact of macroeconomic and fiscal stabilization reforms and COVID-19 and transition in the medium term to a permanent, sustainable social protection system.** The cash transfer

program will help alleviate the short-term effects of subsidy removal and will fight poverty in regions too poor to benefit from policies and investments of the transitional government. The government plans to provide cash transfers to about 80 percent of the Sudanese population for 12 months. Due to funding shortages, the program will be phased both geographically and in duration.

**26.** **This report identifies six priority areas to build resilience and sustainable development under the Bank's High 5s agenda.** Setting up social protection (priority 1) will help mitigate the impacts of macroeconomic stabilization reforms on the poorest and renew a social contract with the population. Creating an enabling environment for agriculture by building environmental resilience and promoting promising agro-industrial value chains (priority 2) will foster inclusive, resilient growth and combat food insecurity. Strengthening regional integration (priority 3) will help expand and diversify trade and improve infrastructure to support more sustainable growth. Extending the reach of electricity (priority 4) and water, sanitation, and hygiene services (priority 5) will improve the livelihoods of the population, including vulnerable groups in underserved states, helping progress toward the attainment of the Sustainable Development Goals and rebuilding the social contract with marginalized groups. Improving human development (priority 6)—both quality and access, in education and health—is essential for redressing inequities in welfare and providing opportunities to all groups and vulnerable populations to build human capital and contribute to growth.

**27.** **A gender lens should be at the center of this priority agenda not just as an end to progress toward Sustainable Development Goal 5, but as critical to development effectiveness.** The analysis has underscored that Sudan has one of the world's lowest rankings on gender equality. Promoting gender is smart development policy because gender equality is central to ending extreme poverty and boosting shared prosperity in a sustainable way as well as critical to consolidating peace and security in fragile conflict-affected environments.

# CHAPTER: 1

# INTRODUCTION

**Sudan is Africa's third-largest country, strategically located on the Red Sea to the east and between the Arab world to the north and Sub-Saharan Africa to the west and south.** The Sudanese population, at about 42 million people, is culturally diverse—with more than 597 tribes and 400 dialects and languages—and dominated by young population. About two-thirds of the population lives in rural areas.

**Sudan has abundant natural resources,** including metals and oil, and substantial arable land suitable for cultivation and pastoral activities. Until South Sudan's secession in 2011, Sudan's natural resources accounted for 15 percent of GDP. After the secession, Sudan lost 75 percent of its oil revenues and natural resource rents fell to less than 5 percent of GDP (AfDB 2018a).

**Since its independence in 1956, Sudan has been plagued by ethnic strife and internal conflicts, leading to a large number of internally displaced persons.** The First Sudanese Civil War (1955-72) and Second Sudanese Civil War (1983-2005) led to South Sudan's secession. The war in Darfur (2003-13) displaced large numbers of people and resulted in many deaths and wide property destruction. Since South Sudan's secession, Sudan has experienced civil conflicts. The conflict that broke out between the government and the Sudan People's Liberation Movement-North (SPLM-N) in Southern Kordofan and Blue Nile states resulted in 1.9 million internally displaced persons. Sudan also has received more 1 million refugees from neighboring countries, mainly Ethiopia, Eritrea, Chad, the Central African Republic, and more recently, South Sudan. Armed conflict, poor transport infrastructure, and government denial of access have impeded the provision of humanitarian assistance to affected populations.

**Sudan is going through a political transition with a new transitional government.** After countrywide demonstrations fueled by the population's dissatisfaction with economic hardship, poor accountability, and weaknesses in the rule of law, the military backed civilians and in April 2019 removed the previous government from power. A transitional government, led by a military and opposition coalition, was installed in August 2019 for a transition period until public elections. The new government has been tasked with addressing Sudan's social, economic, environmental, climate change, and COVID-19 crises.

**The economy was already in recession—with a large public sector deficit and rising poverty and unemployment—when COVID-19 hit.** The resulting lockdown led to further job losses and high living costs amid rising inflation and currency depreciation. The incidence and depth of poverty are particularly high in rural areas and conflict zones, while urban poverty is on the rise. The country faces shortages of key commodities, and power outages are frequent. Furthermore, severe floods, droughts, and locust invasions have undermined agricultural production. Some states continue to have security challenges. As a result of adverse climatic conditions and insecurity, 9.6 million people are estimated to be food insecure. According to the 2020 Human Development Index, Sudan is among the countries where human development is less advanced (UNDP 2020).

**The lifting of Sudan's international economic sanctions in 2017, which isolated the country for more than two decades, opened a new chapter for its reintegration with the international community.** But the country remained on the U.S. State Sponsor of Terrorism List (SSTL), impeding full reintegration. The prolonged economic sanctions and SSTL inclusion led international financial institutions to impose additional governance and transparency rules on and avoid transacting with the country, resulting in a drastic reduction in foreign direct investment (FDI) and diaspora remittances and raising the cost of doing business in Sudan. The removal of economic sanctions and delisting from the SSTL are expected to enable Sudan to access FDI and resolve its unsustainable external debt overhang, which are necessary preconditions for restoring the country's inclusive, sustainable economic growth and development.

CHAPTER: 2

# ECONOMIC PERFORMANCE AND OUTLOOK

This chapter assesses Sudan's recent economic performance in the context of the macroeconomic and structural reforms undertaken in response to external shocks and turbulent economic growth during the past decades. It also presents a medium-term growth outlook and risks and assesses the degree of structural transformation achieved as well as the opportunities and challenges to productive employment and inclusive growth.

## 2.1 Sudan's Growth Model

### Economic and Development History

**Since independence, Sudan has not progressed beyond factor-driven economic development despite experimenting with different economic growth models.** Those models can be classified into three distinct phases.

#### *First development phase, 1956–98*

**At independence in 1956, Sudan had a predominantly agricultural economy,** which accounted for 61 percent of GDP and over 95 percent of foreign exchange earnings. Agriculture was based on traditional rainfed subsistence farming, a nomadic pastoral system of production, and a small but important modern system of irrigated agriculture driven by the public Gezira Scheme, with cotton constituting the center of its activities.

**From 1956 until 1969, Sudan adopted a market economy model supported by targeted public investments.** Public interventions were guided by the government's first Ten-Year Plan for Economic and Social Development (1961-71), which focused on investing in irrigated agriculture and manufacturing to diversify the economy and reduce growth volatility. This model had limited results on economic transformation because agricultural productivity remained low while industry suffered from capacity underutilization and inefficient supply chains.

**Economic policy and regime changes during 1970-90 triggered economic deterioration that led to accumulation of external debt and arrears.** The underlying challenge was that the heavy capital and intermediate goods import dependence of the economic model was not matched by a corresponding rise in export capacity, which resulted in weak and unsustainable economic performance. Cmpounded by the collapse of the government and Sudan's People Liberalization Movement (SPLM) peace agreement in 1983, the country's economic conditions deteriorated, with rising budget deficits and accumulation of arrears on external debt service.

**Contradictory policy orientations persisted through the 1990s.** The government initially resorted to price, import, and export controls. But, faced with administrative price regime failures, it switched to a more liberal Comprehensive National Strategy for Economic Development (1992-2002). But that

strategy had limited development impact because weak growth and prolonged internal conflict led to high poverty and a huge urban-rural poverty gap.

### *Second development phase, 1999–2010*

**Sudan had an unprecedented economic boom during its second development phase, with average annual GDP growth of 7.5 percent.** That led it to be reclassified from a low-income to a lower-middle-income country as national income per capita rose from $620 in 1998 to $1,210 in 2010. Rapid GDP growth was driven by oil production, with limited spillovers to other sectors. Consistent with the "Dutch disease" phenomenon, the jump in oil exports boom led to appreciation of the Sudanese pound against other currencies, leading to higher prices of nontraded products like housing, restaurants, and hotels, which adversely affected domestic traded goods and hence the nonoil sector.

**Still, the increased fiscal space created by oil revenues led to significant progress in developing social and economic infrastructure.** Total government revenue shot from 4.2 percent of GDP in 1998 to a peak of 10.3 percent in 2001, and spending jumped from 8 percent of GDP in 1998 to 23 percent in 2007. Key infrastructure expenditures included hydropower and telecommunications improvements.

**International and U.S. economic sanctions imposed on Sudan toward the end of phase two hit the economy hard.** The sanctions pushed Sudan to search for alternative sources of international support, largely turning to East and Gulf countries for aid, trade, and investment. Financing during this period was largely non-concessional, further aggravating the country's debt situation.

**Poverty remained high and inequality increased.** A 2009 household survey estimated that 47 percent of the population lived below the poverty line, with significant disparities between rural (58 percent) and urban (26 percent) areas. In addition, income inequality increased because of the oil boom, with the lowest 10 percent of households accounting for only 3 percent of national income while the top 10 percent accounted for 27 percent in 2009 (CIA 2013).

### *Third development phase (post-secession 2011–20)*

**South Sudan's secession in 2011 triggered a 0.9 percent contraction in Sudan's GDP growth driven by the loss of oil revenue, and its knock-on economic effects.** The oil sector, which had contributed about 16 percent of GDP and half of fiscal revenues over 1999-2010, plummeted to 2.2 percent of GDP during 2011–19 and 1.5 percent in 2020. As investment in oil-related activities fell, the decline in physical capital formation and its negative total factor productivity impact contributed to GDP growth contraction. Agriculture failed to offset the loss in oil revenue as its share dropped from 32 percent of GDP in 2011 to 20.8 percent in 2019. Subsequently, real GDP growth sharply dropped into recession resulting in Sudan's recategorization to a low-income country, with per capita GDP of $846 in 2020.

**Since 2020 the transitional government has been implementing an IMF staff monitored program to stabilize the economy and promote robust, inclusive GDP growth.** The previous government's economic programs failed to create the conditions for macroeconomic stability and inclusive growth. The new program supports the transitional government in implementing comprehensive reforms designed to foster macroeconomic stability, bolster competitiveness, and promote inclusive and sustainable growth.

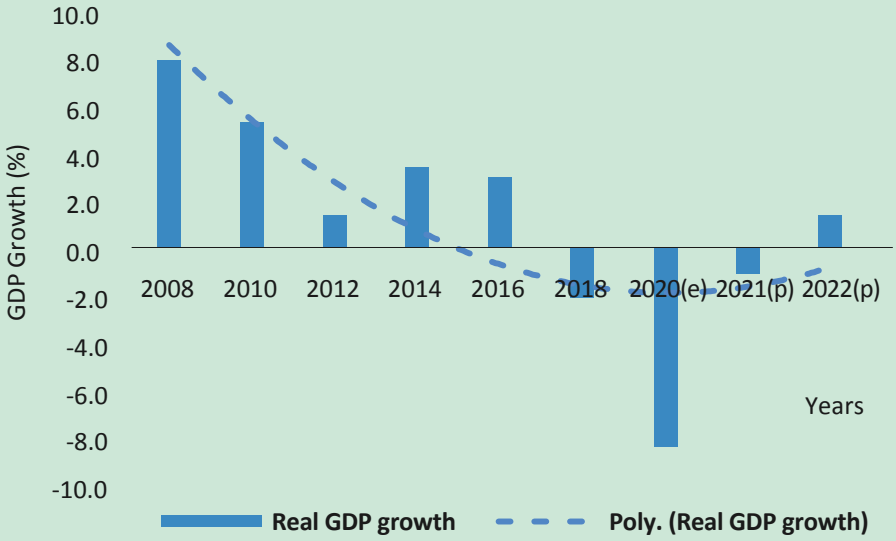
## Recent Growth Performance and Outlook

### *Recent Growth Performance*

**Sudan's economy has been in recession since 2018, and COVID-19 has exacerbated the downturn.** After secession, real GDP growth fell from the average 7.0 percent in 2008-10 to 0.9 percent in 2011 and 1.4 percent in 2012 (figure 2.1). After a short rebound with GDP growth averaging 3.5 percent during 2015-17, the economy fell back into recession with GDP growth below 2 percent, largely due to poor rainfall, the weak business environment, and social turmoil, underpinned by the previous government's failure to adjust to the 75 percent loss in oil reserves. The recession has impeded the creation of remunerative formal sector jobs for the country's growing population, particularly youth, whose unemployment rate was nearly

27 percent in 2018. In 2020 GDP growth is estimated to have contracted by -8.4 percent due to the adverse demand and supply effects of COVID-19 and related containment measures.

**Figure 2.1: GDP Growth (2008-2022)**




*Source: AfDB Statistics, Nov. 2021.*

### *Medium-Term Growth Outlook*

**Before COVID-19, Sudan's real GDP growth was projected to be negative but improving thanks to increased investor confidence in the new government and favorable prospects for reintegration with the global economy.** But with COVID, the real GDP growth rate projection for 2020 was revised downward by 2 percentage points for the base scenario and 7 percentage points for the worst-case scenario (box 2.1). Growth is projected to rebound to -1.1 percent in 2021 and 1.4 percent in 2022, provided the pandemic subsides and the anticipated reforms under the IMF program reduce macroeconomic imbalances and boost competitiveness.

### Box 2.1: How has COVID-19 affected Sudan's economy?

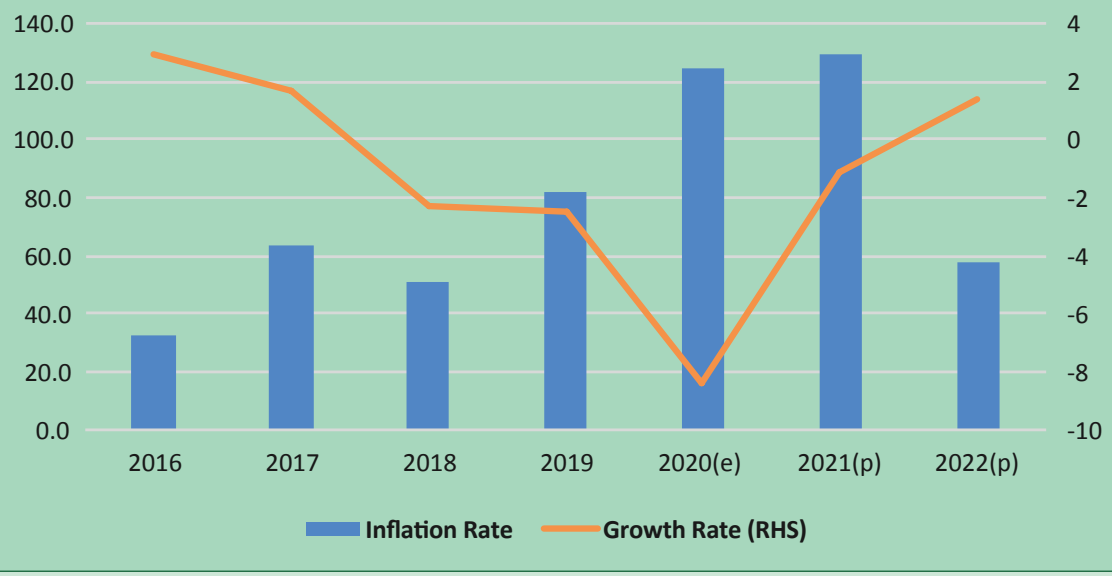
By May 20, 2021, Sudan had 35,243 confirmed COVID-19 cases, 27,940 recoveries, and 2,600 deaths. The government has responded to the pandemic by implementing measures to contain its spread, including school and business closures, bans on large gatherings, a four-month lockdown, airport screening and quarantining of arriving passengers for 21 days, and COVID-19 testing for all travelers.

Growth is plunging. Real GDP is estimated to have contracted by -8.4 percent in 2020, compared with a decline of -2.5 percent in 2019, due to the negative impacts of COVID-19 on commodity prices and trade, travel, and financial

flows. Reduced private consumption and investment as well as disruptions in global value and supply chains slowed growth in 2020 by over fivefold compared to the pre-pandemic estimate of -1.6 percent. Containment measures reduced growth-driving sectors like services and industry, which comprise 58 percent and 22 percent of GDP, respectively. Foreign direct investment also fell an estimated 30 percent in 2020, further impeding growth.

Due to the ongoing threat of COVID-19, Sudan is vulnerable to travel restrictions and fluctuations in commodity prices. The country is expected to benefit from an increase in gold prices while lower oil prices will reduce import costs (oil accounts for 16 percent of imports). Reduced demand among Sudan's major trade partners in the Gulf has lowered exports, leading to a trade deficit of 11 percent of GDP in 2020. But reduced imports helped narrow the current account deficit from 15.1 percent of GDP in 2019 to 12.6 percent in 2020, which was mainly financed by portfolio investments and external commercial borrowing. Global economic uncertainty is expected to cut FDI to $0.8 billion as investors defer major investment decisions, affecting investments in mining, oil, and manufacturing. That will exacerbate foreign exchange shortages and increase unemployment and income inequality.

**Box Figure 2.1: Real GDP Growth and Inflation, 2016-2022**




*Source: African Development Bank data ; NBS 2020; IMF 2020.*

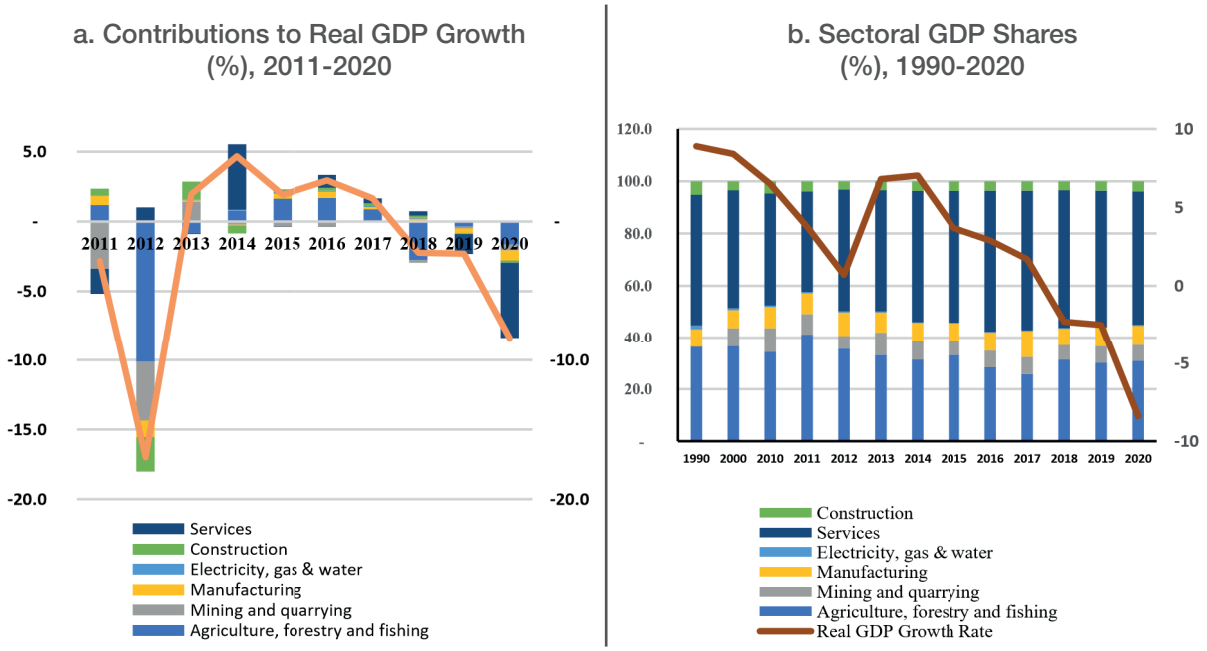
Deficits are soaring. Sudan's fiscal deficit has persisted since South Sudan's 2011 succession, which caused Sudan to lose 75 percent of its oil resources. Further, public revenues dropped substantially in 2020 amid high COVID-related spending, worsening the fiscal deficit to 12.4 percent in 2020—1.1 percentage points higher than in 2019. Revenue losses in 2020 are estimated at $1.2 billion, representing 35 percent of planned government revenues, in part due to reduced customs receipts following border closures and lower value-add tax and business profit tax collections. Despite the decline in revenues, the government maintained an expansionary fiscal stance in 2020 to mitigate the socioeconomic impacts of COVID-19, with subsidies accounting for 40 percent of total spending (5.3 percent of GDP) compared to 20 percent (3 percent of GDP) in 2019. The fiscal deficit has mainly been financed by monetization through central bank advances.

## Composition of GDP and GDP Growth

### *Supply side*

**Over 1990-2020, Sudan's economic production structure changed, with services becoming more dominant while agriculture's share halved.** Services contributed on average about half of the overall value added over 1990-2020, followed by industry with an average of 18.2 percent (figure 2.2b). Agriculture's contribution to GDP growth was undermined during the oil discovery period, when few resources were allocated to it. Limited resources—coupled with falling commodity prices, rising production costs, and poor rainfall—resulted in low productivity and a declining share of agriculture despite its high potential. There is enormous scope to expand agriculture as an important vector for poverty alleviation.

**Figure 2.2: Supply-side contribution to growth in Sudan, 1990-2020**

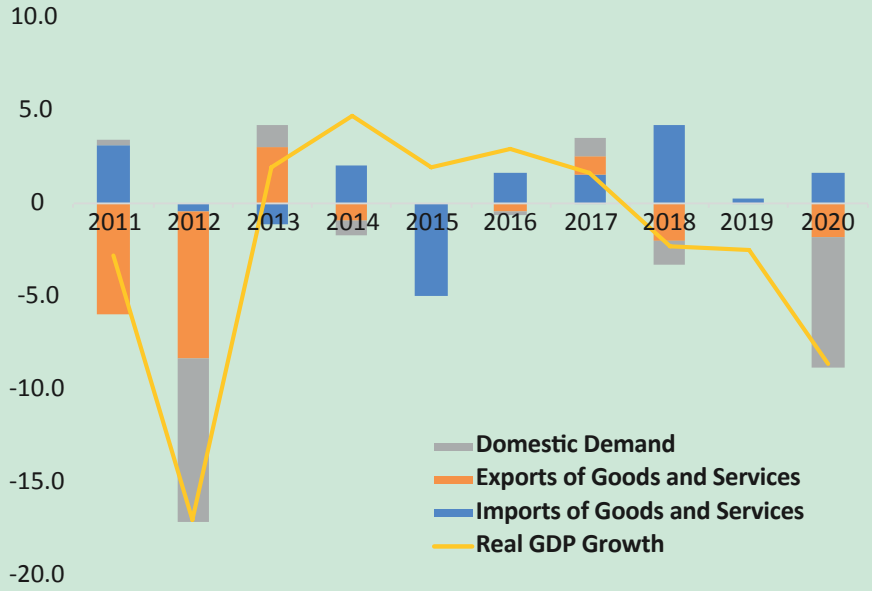



*Source: AfDB, Statistics Department.*

### *Demand side*

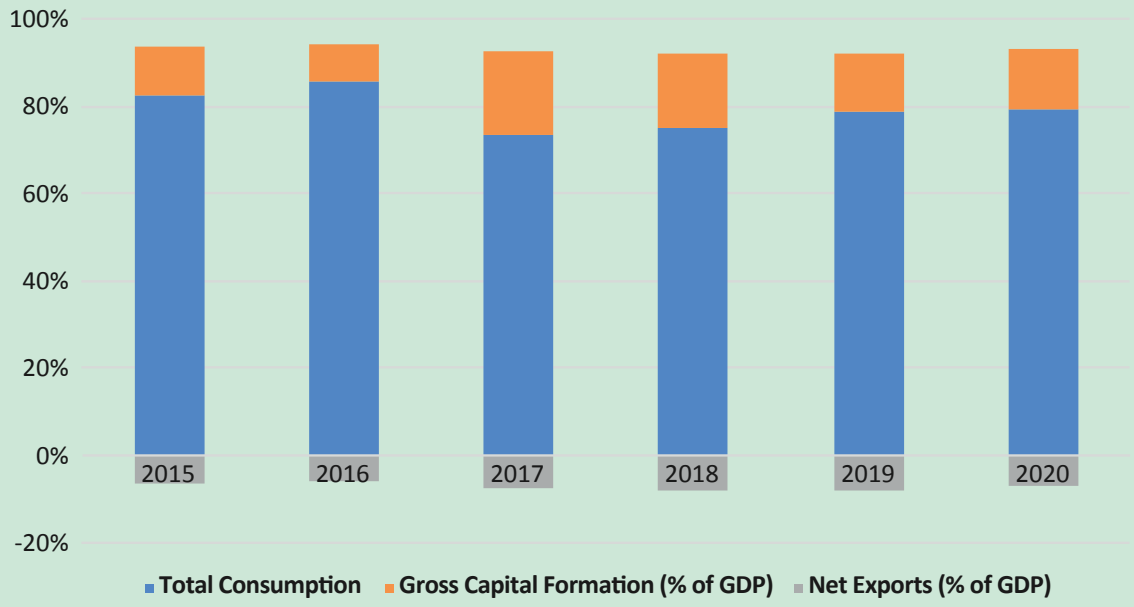
**On the demand side, private consumption has continued to dominate, public consumption has increased marginally, and investment and net exports have declined (figure 2.3).** Private consumption fell slightly to 85 percent of GDP in 2020 from 86 percent in 2000, while government consumption increased to 6.2 percent from 5.5 percent. The share of investment rose to 16.3 percent from 11.5 percent, and net exports dropped sharply to -7.9 percent from 3.3 percent over the same period. On average, over 2015-20 consumption accounted for 91.8 percent of GDP with private consumption accounting for 85.7 percent and public consumption for 6.2 percent. The oil boom that boosted the economy between 1999 and 2010 increased domestic consumption (public and private), even after the secession. The high share of consumption partly reflects the impacts of the economic and financial sanctions that isolated Sudan from the rest of the world (figure 2.4).

**Figure 2.3: Contribution of Demand Component to GDP Growth (percentage points) 2011-2020**




*Source: World Bank 2020b; Statista 2021.*

**Figure 2.4: Demand side Component (% GDP)**




*Source: World Bank 2020b; Statista 2021.*

## Spatial Distribution of Growth

**Despite strong economic growth during the oil boom, Sudan's spatial structure of output generation has remained unbalanced.** Growth poles are still concentrated in a few urban areas, leading to a population exodus from lagging areas. The uneven spatial spread in output generation has been driven by a range of factors, including lack of support for rainfed agriculture, problems with land reform, and unequal distribution of resources between urban and rural areas. Most industries are concentrated in the Khartoum growth pole because of its large market, high purchasing power, and better infrastructure. Economically backward areas such as Darfur and Eastern and Western Sudan have experienced population losses since the 1980s.

**The government's failure to promote a spatially broad-based and inclusive economic growth has fueled Sudan's prolonged conflict, exacerbating regional inequalities.** The prolonged conflict resulted in high human capital costs and production losses as well as large increases in military spending (22 percent of the government budget in 2018). High military spending crowded out economic and social spending priorities, resulting in macroeconomic imbalances and diversion of the government's attention from the country's pressing development challenges.

**Government efforts to increase social spending have not resulted in a more balanced distribution of resources.** A 2015 household survey concluded that public spending on social services, as measured by per capita federal spending, favored states with low poverty. Annual per capita social spending in poor states was a third of that in the richest states. Development indicators starkly marked the resulting inequality, with poverty ranging from 26 percent in Khartoum to 58 percent in Western Sudan.

**Another factor hindering a more balanced distribution of growth is the government's weak capacity to enforce the law and achieve security in many peripheral areas.** At the center, Sudan has institutions that enforce compliance and execute core state functions of providing security, commanding fiscal mechanisms, and delivering services. But the state's presence and effectiveness are lower outside Khartoum and outrightly contested in many peripheral areas. These factors have created significant inequalities between the center and the periphery, posing serious risks to the country's stability and social security.

## Structural Transformation and Diversification

**Sudan is still at the beginning of structural transformation.** Structural change shifts economic activities and employment from low- to high-productivity activities. In Sudan industry's share in GDP has risen, but remains low at 22 percent. In any case, manufacturing offers a negligible number of jobs. Since the share of agriculture in GDP was halved, there has been a huge movement of workers out of the sector, from 61 percent of employment in 1990 to 44 percent in 2019. The surplus labor released by agriculture has largely been absorbed by services, while employment in industry has remained flat. Moreover, the shift of labor out of agriculture did not result from an increase in agricultural productivity, but rather from a move out of agriculture to escape low-productivity yields. Yields of all major crops are very low relative to other countries. Over the past two decades the modest increase in production has come from an expansion of the areas harvested in traditional rainfed farming areas, rather than from increased yields. Except for a few firms operating in Khartoum, weak agricultural performance stems from the low adoption of available technology (seeds, good practices, fertilizers, pest control). Consequently, like other East African countries, Sudan has made inadequate progress on structural transformation.

**The windfall resource revenues also stoked the Dutch disease effects, resulting in little or no structural transformation.** The Dutch disease is especially evident in the composition of output, which has been driven by nontradable services, which account for more than 40 percent of GDP. Investments in nontradable services have discouraged investments in manufacturing to achieve the desired structural transformation. Moreover, the long oil boom years bolstered the economy and fiscal position, creating a disincentive to search for new sources of revenue and growth, and thereby shrinking public investment that could have catalyzed growth.

**The employment shift fueled the growth of informal services.** The last population census found that the urban population's share rose from 34 percent in 2000 to over 45

percent in 2015. Due to huge rural-urban migration, a large informal sector has been created in services sector.

**Structural transformation and diversification were hindered by many factors, and aggravated by conflict and fragility.** Prolonged international and U.S. economic sanctions prevented Sudan from benefiting from the productivity growth achievable in an open economy. Confronted with a fragile environment since 1990, Sudan made little progress to create an enabling business environment and build national and subnational institutions to support efficiency and innovations in industry and firms. Instead, companies confronted administrative barriers including complex licensing, overlapping taxes, and land tenure issues. In the absence of employment creation and productivity growth in the modern industrial sector (especially manufacturing), employment remains concentrated in low-productivity services. Another obstacle to structural transformation has been the seasonality, inconsistency, and insufficiency of agricultural raw materials supply. These constraints have hurt prospects for private investment in product development and processing.

**Poor infrastructure is another bottleneck to structural transformation and economic diversification, as Sudan has inadequate roads and rail transport.** Weaknesses in land ownership and user rights are another major obstacle to successful implementation of a sound program of agriculture-led diversification and transformation. Finally, facing a shortage of well-trained staff, the Ministry of Industry lacks the capacity and vision to drive structural transformation. Thus, there is much scope for facilitating structural transformation through well-designed reforms that address these challenges and foster shared prosperity.

## Productivity and Economic Complexity

**Labour productivity fell from 6.0 percent during 2007-2011 to 1.2 percent during 2012-18.** Furthermore, labor productivity has been inversely proportional to employment, with the less productive agriculture and informal services sectors employing most workers and more productive manufacturing employing less. Sector differences in labor productivity have been driven by disparities in technology absorption, labor skills, and capital utilization intensity. The high productivity of labor in manufacturing—also characterized by higher capital-labor ratios—underscores the importance of manufacturing in upgrading skills. The low productivity in agriculture and informal services is not surprising given their low adoption of technology and deficiencies in human capital.

**Labor productivity varies significantly by region and firm size.** Gezira and Khartoum have relatively high labor productivity, primarily because their large firms are more productive.

**Given the structural characteristics of its economy, Sudan lags in terms of economic complexity.** The country's export basket is narrow, mainly consisting of gold, oil seeds, cotton, and sheep and goats. Making the economy more sophisticated will require building innovation capacity (especially through skills development, R&D, and improvements in ICT infrastructure) and improving coordination between the public and private sectors.

## Inclusive Growth

**Sudan's deteriorating economic situation has affected the population's ability to cover basic needs.** An estimated 9.6 million people are in acute food insecurity. Some 1.9 million internally displaced persons need urgent assistance, and over 1 million are refugees and asylum seekers. Before COVID-19, poverty incidence was estimated at over 50 percent (a 14-point increase since 2014; World Bank 2019c). The impacts of COVID-19 further increased extreme poverty to 55.4 percent in 2020 (World Bank 2020b).

**Fostering inclusive growth is at the top of the transitional government's agenda.** Because most poor people still reside in rural areas, any poverty reduction strategy for Sudan needs to build on agro-industrial-led economic growth and economic diversification. That calls for supportive policies to enable the private sector to engage more constructively and adopt innovative technology to increase agricultural productivity and attract more workers to the sector. Moreover, the government's ambitious family support program aims to provide cash transfers to 80 percent of the population to mitigate the economic shocks caused by COVID-19 and by the adjustment policies that the government is undertaking under the IMF's staff monitored program.

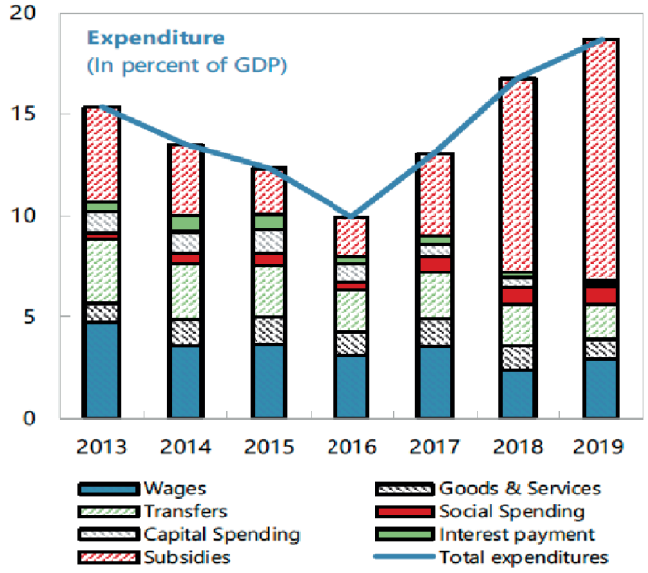
## 2.2 Fiscal Developments

### Revenue, Spending, and Budget Deficit

**Cross-country evidence suggests scope for Sudan to double its tax revenue to levels comparable to other non-resource-rich countries.** The IMF estimates that removing personal income tax exemptions could broaden the tax base by at least 55 percent. Corporate income tax (CIT) yields could also be increased by unifying the five CIT rates to at least 15 percent and broadening the tax base to include all agricultural activities. Eliminating huge exemptions on international trade taxes could add another 1.2 percent of GDP to tax revenue. Exchange rate liberalization and tax administration reform would also boost tax revenue.

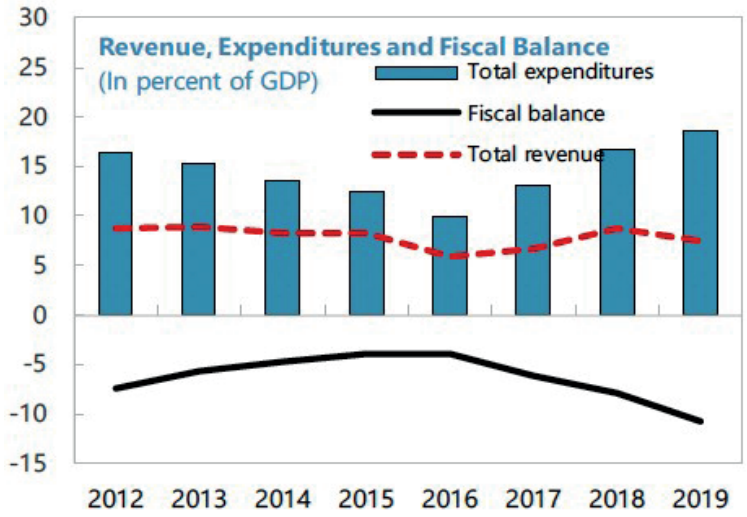
**Since 2016 the government has maintained an expansionary fiscal stance, driven by ballooning subsidies partly offset by other expenditure tightening.** Recurrent spending has taken up a disproportionately large share of public spending, leaving little room for capital and social spending (figure 2.5). In 2019 total spending rose to 19 percent of GDP due to continued increases in fuel and wheat subsidies, which accounted for 11.9 percent of GDP. Fuel subsidies rose because of higher international oil prices, exchange rate depreciation, and increased fuel consumption. To accommodate for the jump in fuel subsidies, the government made further cuts in transfers to state governments and slashed capital spending. Wages increased slightly in 2019 to offset the drop in the wage bill that occurred in 2018 because public workers did not receive a wage increase despite high inflation.

**Figure 2.5: Ballooning Subsidies**




*Source: IMF, SMP 2020.*

**Figure 2.6: Revenue, expenditure and fiscal balance (% of GDP)**



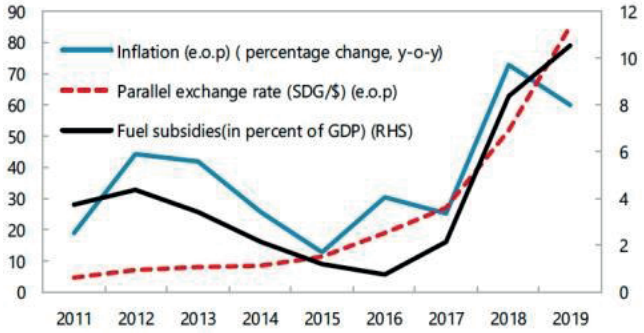

*Source: IMF, SMP 2020.*

## Box 2.2: Sudan huge energy subsidies

Sudan's domestic fuel prices are among the lowest in the world. Rising energy subsidies have dried up government resources and created a vicious cycle of inflation and exchange rate depreciation in the economy. Fuel subsidies in 2019 were estimated to be SDG 215 billion, in contrast to the SDG 52 billion in that year's budget.

| Fuel type | Current domestic prices (SDG/litre) | Current international prices (SDG/litre) 1/ |
|---|---|---|
| Gasoline | 6.4 | 44.6 |
| Diesel | 4.3 | 43.6 |
| Fuel oil | 4.3 | 32.5 |
| Kerosene | 4.1 | 40.1 |
| LPG | 5.2 | 24.9 |

1/ Evaluated at exchange rate of SDG 82/US$.




Source: Sudan Authorities and IMF staff estimates.

Most energy subsidies benefit high-income households and neighboring countries. A World Bank study found that the top 20 percent of households receive more than eight times the fuel subsidy received by the bottom 40 percent and, on average, fuel accounts for just 1.5 percent of household expenses. Most rural poor are not connected to grid electricity. Moreover, cheaper fuel prices have motivated smuggling of fuels to neighboring countries.

*Source: IMF report, selected issue, 2020.*

**Amid declining revenues and a fragile macroeconomic situation, rising public spending has led to a widening and unsustainable fiscal deficit (figure 2.6).** The fiscal deficit jumped from 6.5 percent of GDP in 2017 to 10.8 in 2019. Due to limited external financing and domestic borrowing opportunities, the fiscal deficits have been monetized—fueling high inflation and exchange rate depreciation, which have led to further deficit expansion.

### Fiscal Outlook

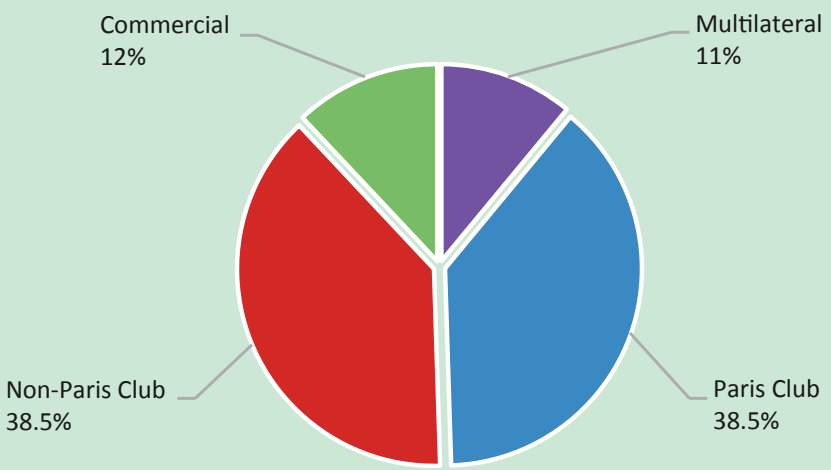
**In 2020 COVID-19 and related containment measures halted government efforts to restore macroeconomic stability.** The government embarked on austerity measures in 2019 to contain the rising fiscal deficit. But implementation of the fiscal consolidation strategy was suspended in 2020 in response to the pandemic challenges. The authorities scaled up COVID-related public spending amid declining public revenues on account of depressed economic activity. Consequently, the fiscal deficit worsened to 12.4 percent in 2020. Monetization of this high deficit and exchange rate devaluation—hitting 100 percent in 2020—resulted in inflation to shoot from 82.4 percent in 2019 to 124.9 percent in 2020 and 129.7 percent in 2021.

**Fiscal reforms raise hope of restoring macroeconomic stability, notwithstanding continued risk over the medium term.** The fiscal deficit is projected to abate to -7.3 percent of GDP in 2021 and 2.3 percent in 2022. This improvement will be induced by a reduction in international oil prices and fuel subsidies. The gradual removal of subsidies will create fiscal space to accommodate increases in public spending, notably in wages. In line with the improvement in fiscal position and the envisaged reduction in domestic demand, inflation is projected to fall to 57.5 percent in 2022. Still, weak revenue mobilization and limited donor assistance will continue to pose high risks of economic imbalances and sustained monetization of the deficit, worsening macro-economic instability.

## 2.3 Dynamics and Management of Public Debt

**Sudan is in debt distress.** According to the October 2020 World Bank/IMF Debt Sustainability Analysis (DSA), the country's public and external debt stood at 200 and 198 percent of GDP, respectively, in 2019. About 85 percent of the external debt was in arrears. The bulk of public and publicly guaranteed debt ($54.6 billion) is owed to bilateral creditors and roughly equally divided between Paris Club and non-Paris Club creditors (figure 2.7).

**Figure 2.7: Sudan's Debt Structure as at December 2019**




*Source: IMF, SMP 2020.*

**Sudan's external debt continues to build up arrears and will remain unsustainable until the country reaches the completion point of the Heavily Indebted Poor Countries (HIPC) initiative.** Much of the increase in debt arrears is due to accumulated interest arrears, as well as new, albeit small debt disbursements. The 2020 DSA indicated that all public and publicly guaranteed external debt indicators exceeded their indicative thresholds and debt solvency indicators stayed above their thresholds throughout the 20-year projection period (table 2.1). The present value of public and publicly guaranteed external debt was more than five times the 30 percent threshold for comparable weak policy performers. Similarly, in 2019 the present value of debt-to-exports was about 1,028 percent, well above the 140 percent threshold. Though debt service to exports and debt service to revenue will gradually decline over the long term under the IMF program—thanks to the removal of fuel subsidies and projected high GDP growth—Sudan's debt path remains unsustainable without debt relief. Similarly, the present value of public debt to revenue will decline from its current very high level of 3,850 percent at the end of 2020 to about 1,016 percent by 2040.

**Table 2.1: Sustainability indicators for public and publicly guaranteed external debt in Sudan. 2019-40 (percent)**

| Indicator | 2019 | 2020 | 2025 | 2030 | 2040 | Thresholds |
|---|---|---|---|---|---|---|
| Present value of debt/exports | 1 028.1 | 941.1 | 687 | 642 | 555.5 | 140 |
| Present value of debt/GDP | 164.6 | 172.9 | 170.2 | 156.5 | 130.6 | 35 |
| Debt service/exports | 8.2 | 7.1 | 3.9 | 2.0 | 0.2 | 10 |
| Debt service/revenue | 17.7 | 24.5 | 6.7 | 3.5 | .4 | 14 |

*Source: IMF 2020b.*

**International financial institutions helped Sudan achieve debt relief under the HIPC initiative.** Sudan's reduced fiscal space compressed its debt repayment capacity, leading to soaring arrears and worsening its capacity to carry debt. Since the mid-1990s the government has frozen debt repayments, but adopted no clear debt management policy apart from long-awaited debt relief from the international community. The delisting of Sudan from the U.S. State Sponsor of Terrorism List (SSTL) at the end of 2020 catalyzed progress toward debt relief under the HIPC initiative. International financial institutions worked together to help Sudan fulfill the preconditions for reaching the HIPC decision point and normalize relations with the international community. This support enabled Sudan to clear its arrears with the World Bank, African Development Bank Group, and IMF in 2021, enabling the country to reach the decision point under the HIPC initiative.

## 2.4 Monetary and Exchange Rate Policy and Inflation Dynamics

**The government used fiscal consolidation as the main policy tool for reducing reserve money growth.** Though inflation was kept in the single digits during the oil boom (2000-10), it became persistent after secession. That, despite the Central Bank of Sudan (CBoS) adopting "inflation targeting" as the key monetary policy framework for stabilizing the macroeconomy, containing labor costs, and eventually enhancing economic competitiveness. The authorities used both non-market-based (reserve money requirements) and market-based (open-market operations) instruments to tighten monetary policy as needed to control inflation. But controlling inflation requires close cooperation between an independent CBoS and the Ministry of Finance since two out of the three key determinants of inflation (money supply and exchange

rate) are under the control of the central bank, while the third (wage policy) is the responsibility of the government. This emphasizes the need to enhance the role of the CBoS by, among other measures, increasing its independence and reducing fiscal dominance in the conduct of monetary policy.

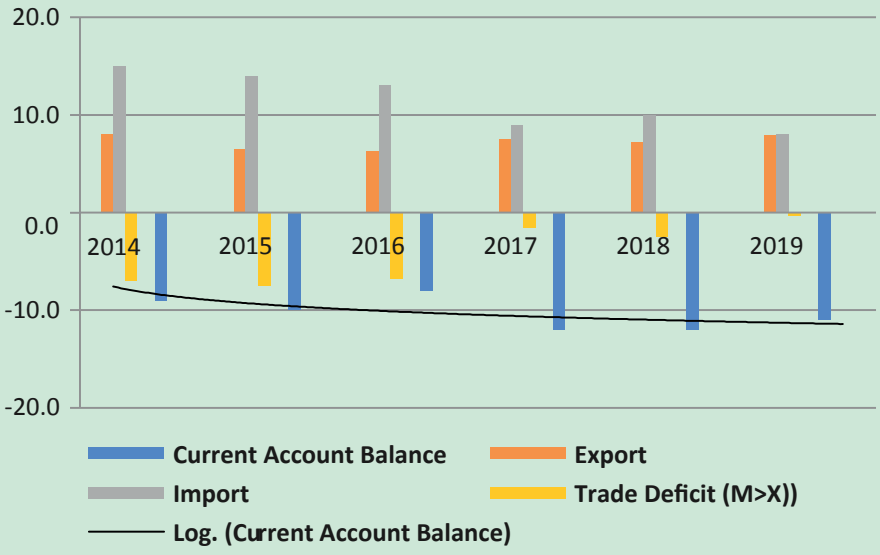
**The CBoS adopted a managed multiple foreign exchange rate policy regime comprising** four exchange rate windows to cater for different market segments: the official (interbank) rate, the bureau de change rate, gold purchase and medicine rates, and fuel and wheat import rates. But foreign exchange policy resulted in persistent market distortions, rent-seeking, and increasing vulnerabilities to corruption.

**As inflation accelerated, the central bank tightened monetary policy, but with limited effect.** Reserve money supply growth shot from 64 percent in 2017 to 171 percent in 2018 before declining to 74 percent by October 2019. In 2018 the Sudanese pound was devalued by 66 percent. Inflation continued to rise in 2019, to 57 percent, reflecting loose fiscal and monetary policies. The Sudanese pound was further devalued by almost 100 percent in 2020. So, the CBoS further tightened monetary policy to contain inflationary pressure. It raised the cash reserve ratio, prohibited financing of real estate and cars, and instituted restrictions on many listed imports deemed amenable to import substitution. In parallel, the government introduced import-substitution program to encourage the private sector to invest in certain commodities including sugar, cooking oil, drugs, and wheat to reduce demand for foreign exchange. But the private sector was slow to respond, having been seriously constrained by a lack of financing and innovation technology.

## 2.5 External Balance

**Sudan's current account deficit averaged 10 percent during 2014-19** (figure 2.8). Despite repeated nominal devaluation (in 2018), the deficit has continued to worsen due to accelerating inflation and structural characteristics of the balance of trade deficit. Although Sudan lost its oil export surplus after South Sudan's secession, nearly half of the country's merchandise exports continued to be oil and gold in 2019. This structural deficiency of the balance of trade made the Sudanese economy highly vulnerable to terms-of-trade shocks, causing sharp fluctuations in foreign exchange earnings. Exchange rate restrictions and multiple currency practices have further exacerbated economic distortions and undermined export competitiveness. Overall, the current account deficit has persisted due to strong import demand (exacerbated by Sudan's dependence on imported capital and consumer goods) and weak export performance.

**Figure 2.8: Current Account Balance, Exports and imports as percentage of GDP, 2014-2019**




*Source: AfDB statistics, 2020.*

**The current account is expected to improve somewhat over the medium term as policy adjustments under the IMF program gain traction.** With the continued impact of COVID-19, the current account is expected to widen to 12.6 percent in 2020 due to a sustained trade deficit (11 percent of GDP) and reduced services exports due to weak tourism. But the implementation of economic reforms and the removal of Sudan from the SSTL should help improve the current account balance because projected macroeconomic stability should lead growth to rebound in the medium term. The country's dependence on oil and gold reinforces the urgency and importance of moving quickly to develop a much more diverse export base, initially built around agricultural products including raw materials and processed foods. Hence the government has prioritized value addition for all exports, especially agriculture and livestock products, which have a large market—particularly among Sudan's major trade partners in the Gulf—to boost export volumes and shrink the trade deficit.

**The balance of payments deficit is projected to decline over the next five years to less than 5 percent of GDP.** The bulk of the deficit will be financed by FDI and other short- and medium-term capital, along with further increases in portfolio flows after progress is made on settling arrears and resolving outstanding debt. External donors and international financial institutions are expected to provide about $1.5 billion in financing to support the authorities' economic reforms in 2020–21. From 2021 and given the positive momentum gathered by the removal of Sudan from the SSTL, FDI is expected to rebound to contribute to financing the current account deficit. A small increase in international reserves is expected in 2021, which could reach 6 months of imports in 2022. Expected sources of foreign reserves includes future oil export revenues and transit fees from South Sudan. The government's current efforts (such as the introduction of incentives, better administrative procedures, and exchange rate unification and liberalization) are also expected to increase reserves by boosting diaspora remittances.

## 2.6 Financial Markets

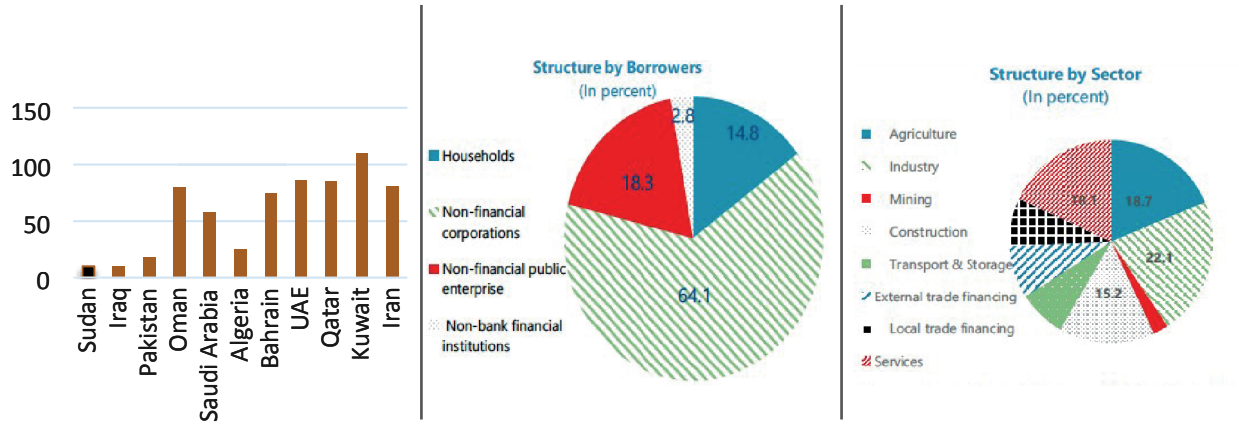
### Recent Financial Sector Developments

**Commercial banks are the backbone of the financial system.** In July 2020 there were 37 banks and several nonbank financial institutions, mainly Islamic insurance (takaful) companies and small-scale microfinance institutions. The CBoS regulates the financial system. The banking sector is highly concentrated, with the five largest banks owning 55 percent of total assets and the largest one—Bank of Khartoum—owning 17 percent of total market share. Bank operations are based on Islamic principles. The specialized state banks provide credit to targeted sectors such as agriculture and infrastructure. The seven foreign banks, with owners from Gulf states and neighboring countries, hold 23 percent of total assets. Advances in banking services has been constrained by the breakdown of correspondent bank relations since mid-2014 due to international economic sanctions and Sudan's SSTL categorization. Though U.S. economic sanctions were lifted in 2017, several correspondent banks have been slow to reactivate correspondence with Sudanese banks, citing concerns related to the SSTL, from which Sudan was removed by December 2020.

**The financial sector is underdeveloped.** Historically, the financial system was characterized by heavy government interventions and regulations, centralized lending by the CBoS to public enterprises, an absence of market-based (indirect) monetary policy instruments, lax bank regulation and supervision, and an inadequate accounting system. Furthermore, years of military repression, civil war, and political and economic instability have impeded financial sector growth. As a result, Sudan's financial sector is still small relative to GDP, especially compared with its peers in the Middle East. Financial intermediation, proxied by broad money as a percentage of GDP, is very low.

**Sudan ranks at the bottom on financial inclusion and intermediation.** The population favors cash products and transactions because of low financial awareness and literacy and the scarcity of bank notes, which has undermined confidence in the financial sector. Similarly, the ratio of credit to the private sector is among the lowest in the Middle East and North Africa (figure 2.9). Only a small share of the population has access to bank services, and enterprises face difficulties in obtaining funding from banks and nonbanks. Lending to economic sectors is quite even, while lending to households accounts for less than 15 percent of the total. High excess reserves and nonperforming loans are evidence of this poor performance. Constraints on access to finance are aggravated by the country's poor business environment.

**Figure 2.9: Banking system credit**




*Source: IMF, SMP 2020.*

**The low ratio of domestic savings to GDP is the main hindrance to financial sector development.** The domestic saving ratio amounted to just 12.1 percent of GDP in 2019. The domestic financial market is also characterized by low depth and liquidity, limited financial instruments, and under-developed financial infrastructure. To strengthen the domestic financial market, the government needs to focus its effort on accelerating the capacity of the domestic capital market to mobilize domestic savings and provide investment loans to the private sector, and developing other forms of domestic debt financing such as a corporate bond market.

**The corporate bond market is relatively illiquid, with no signs of growth.** The sovereign bond market is more liquid, reflecting the buoyancy and predictability of bond yields and guarantees of asset redemption by the federal and state governments. The government intends to develop the government securities market and broaden the central bank's monetary policy toolbox to promote domestic capital market development.

**The equity capital market has performed better despite Sudan's international isolation.** Sudan's exclusion from international financial markets has forced it to resort to regional and local equity capital markets. The Khartoum Stock Exchange grew rapidly during 2014-19, reaching 53 listed companies and an estimated market capitalization of $5 billion. But the uncertainty triggered by COVID-19 reduced market capitalization at the exchange as investors sought more stable assets such as gold. Furthermore, the sharp decline in the oil market will adversely affect the KSE since some oil investments are securitized and listed on the stock exchange. The lack of equity capital finance and limited access to long-term financing have seriously affected funding of development projects, especially for infrastructure.

## Financial Sector Stability and Risks

**Sudan's financial sector stability is at risk.** According to a financial sector assessment by the World Bank in 2018 and financial sector analysis by the IMF in 2020, banking sector risks and vulnerabilities have grown in line with weak economic performance. In particular, the devaluation of the Sudanese pound has weakened banks' capital positions and—through high inflation and low GDP growth—worsened borrowers' repayment capacity, leading to a deterioration in asset quality and returns. A significant shortage of banknotes during 2018 and 2019 forced banks to impose limits on cash withdrawals, severely undermining public confidence in the financial sector and negatively impacting livelihoods (mainly among the poor). The return on assets decreased from 4.7 percent at the end of 2014 to 1.8 percent at the end of 2019.

While the share of nonperforming loans decreased to 3.3 percent at the end of 2019 compared to 7.1 percent in 2014, currency depreciation significantly reduced the value of repaid loans, depreciating banks' capital. A 2019 cashflow-based analysis suggests that some banks were underreporting nonperforming loans, avoiding exposure to losses that would impair their solvency even further. Although banks' overall capital adequacy ratio was 15 percent at the end of 2019, about 12 banks (accounting for 25 percent of banking system capital) are estimated to have capital adequacy ratios that are below the minimum regulatory requirement of 12 percent. As of March 2020, 10 of 37 banks with more than 40 percent market share had short net foreign exchange positions, with five banks outside the regulatory limit. COVID-19 has also exacerbated the vulnerability of the banking sector since lock-downs, coupled with economic instability, have exposed banks to major risks, which may force them to reduce loans even further.

**The central bank has limited capacity to supervise and mitigate financial risk.** The central bank lacks a best-practice framework for assessing the risk profiles of banks and nonbanks. Supervision is fragmented, corrective action is ineffective, and prudential requirements are incomplete and outdated. Hence banking regulation and capacity need to be improved.

## Financial Sector Reform

**The government has embarked on an ambitious financial sector reform program to strengthen the financial sector soundness and mitigate risks through enhanced supervision of the central bank.** Reforms supported by the IMF program include:

(i) **Modernizing bank regulations and strengthening banking supervision to preserve financial stability and enhance resilience.** The CBoS will continue to modernize bank regulation in line with Islamic Financial Stability Board standards. The authorities are working on augmenting bank capitalization, reviewing options for voluntary bank mergers, and mitigating exchange rate risks. The CBoS will strengthen its supervisory capacity to ensure the compliance of banks with prudential regulations, notably limits on net foreign currency position and lending in foreign currency. The government will also conduct semiannual stress tests to identify and address bank vulnerabilities, while laying the ground for adoption of a risk-based supervisory regime. The AfDB is providing technical support to the CBoS to enhance bank supervision and relax bank prudential regulation to increase credit to the private sector.

(ii) **Strengthen the CBoS recovery and resolution framework** based on international good practice. To reduce the probability and impact of bank failures and minimize the cost to the public, the CBoS will introduce processes for monitoring recovery and resolution of weak banks with high nonperforming loans, particularly those classified as systemic by September 2021. This will include guidance on loan restructuring and risk management policies.

(iii) **Address deficiencies in the Anti-money Laundering and Countering the Financing of Terrorism (AML/CFT) framework.** The authorities plan to increase the capacity of the Financial Intelligence Unit and operationalize risk-based AML/CFT supervision. Under the IMF program, the authorities are expected to conduct thematic AML/CFT onsite inspections of the highest-risk banks.

**The authorities also plan to promote financial inclusion** by enhancing access to finance for micro, small, and medium-size enterprises while leveraging fintech and the electronic mobile payment system to extend financial coverage to remote areas. Implementation of the family support project is also expected to foster the financial inclusion of beneficiary households in remote areas, particularly among women (chapter 4).

# CHAPTER: 3

# CROSS-CUTTING ISSUES

This chapter highlights the main challenges, assesses progress, and reviews government efforts on addressing cross-cutting issues related to economic governance, climate change, gender disparities, fragility, infrastructure, and the private sector's role in the economy.

## 3.1 Economic Governance

### Public Financial Management

**Public financial management and procurement have serious shortcomings.** Though Sudan has a solid constitutional and legal foundation for public financial management, it still faces challenges. The Bank's 2021 Country Fiduciary Risk Assessment (CFRA) revealed that the overall fiduciary risk associated with the public financial management system is high (table 3.1). Weaknesses include poor budget planning and execution leading to extrabudgetary spending, misuse of funds, lack of internal controls and accountability, weak tax collection and administration systems, ineffective procurement and audit, shortage of qualified accounting and auditing staff, absence of a robust legal framework, and poor financial control systems (box 3.1). The CFRA recommended the design of a country-led public financial management reform strategy and action plan and the adoption of a multiyear program supported by international financial institutions to help the government implement public financial management reform.

**Table 3.1: Elements of Sudan's fiduciary risk**

| Element | Fiduciary risk |
|---|---|
| Budget | Substantial |
| Treasury management | High |
| Accounting, recording, and reporting | High |
| Internal control | High |
| External scrutiny | Medium |
| Procurement | High |
| Governance | High |
| Overall Fiduciary Risk | High |

*Source: AfDB 2021 Country Fiduciary Risk Assessment.*

## Box 3.1: Sudan's main challenges and key policy actions for public financial management

***Efficiency of revenue mobilization.*** The Bank's 2018 CPIA notes a lack of transparency in tax collection, characterized by multiple and overlapping taxes arising from conflicts in the implementation of federal, state, and local government regulations. Sudan has one of the lowest direct tax revenues among its peers, collecting only 0.6 percent of GDP. Of 36 African lower-middle-income countries Sudan ranked 34th on tax effort, with a tax revenue gap of 6.1 percent of GDP.

***Budget practices.*** Sudan's score on the Open Budget index fell declined from 10 to 2 out of 100 over 2016-19, with the lowest score on public consultation in the budget process (0/100) and the highest in budget oversight (31/100). Budget credibility is poor in all states and continues to be hampered by limited costing and prioritization of sector and thematic policies during budget preparation process and execution. Policies and priorities that focus on poverty reduction are not broadly reflected in the budget; extrabudgetary expenditure persists while there is little analysis of contingent liabilities. The budget classification system does provide a relatively adequate picture of general government activities, but budget monitoring and control systems are inadequate. Progress has lagged in incorporating a medium-term fiscal framework into budget planning and in strengthening the macro-fiscal unit to enhance policy formulation.

***Public procurement and market practices.*** The procurement framework has many weaknesses. Notably, the public procurement department, under the Ministry of Finance, has both operational and oversight mandate, which violates the separation of roles and independence necessary to enforce procurement. Furthermore, the procurement unit is short of proficient staff. The Ministry of Finance has launched a capacity-building program for its procurement staff, as well as to procurement practitioners in line ministries, agencies, and public corporations. Discretionary use of procurement procedures and market practices is widespread. Procurement and investment activities are performed with a closed group of companies preidentified by dedicated units of the Ministry of Finance. Hence tenders are advertised without adequate publicity to ensure open participation. The perceived lack of fairness adversely affects the development of local contracting and attraction of foreign bidders, which is harmful to competition for public contracts. The government is revising the procurement legal framework to harmonize it with the UNICITRAL model law and address these distortions.

***Treasury management.*** The budget is being implemented through cash rationing, with a large amount of unpredictability surrounding the flow of funds to spending units. Furthermore, Sudan has been experiencing significant delays in disbursement due to external factors such as U.S. sanctions. The Government has made progress in establishing a Treasury single account system, improving cash management, and forecasting and consolidating all bank accounts of ministries and public enterprises held at the central bank into a single account.

***Accounting, recording, and reporting.*** In Sudan accounting and financial reporting is the responsibility of the Chamber of Account. The 2010 PEFA noted that the entire system was manual, with monthly reporting done based on disbursement (not actual expenditure) since 40 percent of budgetary units did not submit regular reports. There was no presentation of consolidated budget outturn information at the federal and state levels. Sudan is in the process of adopting international public sector accounting standards.

***Internal and external audit.*** The Internal Audit Chamber is mandated to carry out the internal audit function. The annual report of the Auditor General points to many weaknesses in internal controls. The internal audit function is primarily involved in transaction testing and does not use modern risk-based techniques. The external audit function is well developed and respected. The National Audit Chamber (NAC) is responsible for auditing all federal and state budgetary units and public enterprises. Despite capacity and resource constraints, the chamber is fulfilling its role and submits its report to the National Assembly. The chamber's focus is on traditional transaction audits according to INTOSAI standards. It will need to progressively move to risk-based auditing and performance and value for money audits.

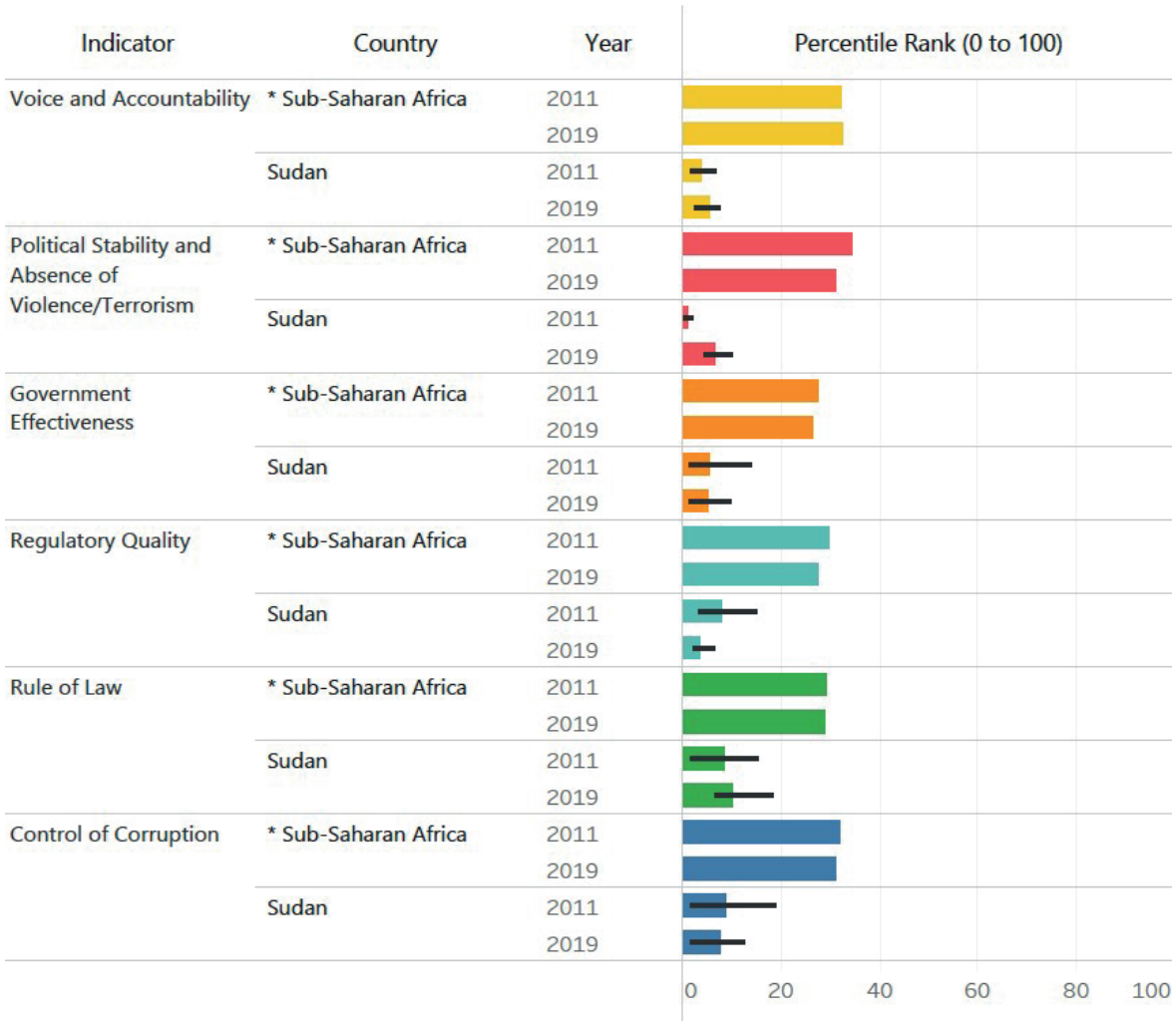
*Source: World Bank 2010; IMF 2020a; AfDB CPIA 2018.*

**Fragility and lack of transparency and accountability make Sudan's vulnerability to corruption particularly acute.** Over the past six years the country has scored low on Transparency International's Corruption Perception Index, at just 16 points (of 100) in 2017-19. Sudan also lagged the Sub-Saharan average on all dimensions of the Worldwide Governance Indicators (figure 3.1). Like many non-resource rich and conflict-torn countries, Sudan has fragile state institutions characterized by low administrative capacity and weak checks and balances. Sudan's isolation from the global economy has led to limited adoption of global anticorruption and corporate governance norms. Not surprisingly, the Mo Ibrahim Index of African Governance reported a deterioration in Sudan's scores on political participation, democratic elections, and freedom of association and assembly between 2015 and 2018. Sudan features in the bottom half of the rankings (of 54 African countries) on all these indicators. Widespread fiscal governance weaknesses have also facilitated corruption. The country's complex tax system, with many loopholes, provides occasion for corruption. The lack of transparent and accountable procedures and limited publication of fiscal information prevent the private sector and civil society from being watchdogs of institutional functioning. Furthermore, multiple currency practices and associated distortions encourage rent-seeking and increase vulnerabilities to corruption. Corrupt public procurement practices are widespread and, once contracts are signed, the lack of digitization and accessible archives prevent monitoring of ongoing projects.

## Governance of State-owned Enterprises

**Weak oversight of state enterprises underscores transparency and corruption issues.** Sudan has 450 state-owned enterprises (SOEs), representing financial, commercial, and noncommercial entities. Some fulfill regulatory functions, while others produce goods and services. Though the number of SOEs declined after liberalization started in 1992, the sector maintains a dominant position in the provision of key basic services such as transportation, energy (National Electricity Corporation), and water (Drinking Water and Sanitation Unit). Most SOEs incur losses and continue to be subsidized by the state, adding to the central government's fiscal burden. Ownership is still decentralized with relevant line ministries. Steering committees have been established for various SOEs to oversee their operations and performance and report to the Ministry of Finance on their viability. But in practice, SOEs operate under weak governance structures and no parastatal information management system is in place to track and monitor their performance.

**Figure 3.1: Worldwide Governance Indicators**




*Source: Worldwide Governance Indicators.*

## Fiscal and Monetary Reforms

**The authorities are committed to undertaking comprehensive fiscal reform aimed at ensuring medium-term fiscal sustainability under the IMF program endorsed in October 2020.** The immediate goal is to implement subsidy reforms to create space for social spending needed to alleviate adjustment pains and the impacts of COVID-19. The authorities have steadily reduced fuel subsidies since February 2020 and plan to fully eliminate subsidies on gasoline and diesel in 2021. To mitigate the impact of the reforms on vulnerable households, the government has increased public wages and plans to raise social spending by expanding the Sudan Family Support Program (SFSP) piloted in June 2020.

**To enhance revenue mobilization, the authorities plan to broaden the tax base through the rationalization of tax exemptions, while improving tax administration.** The customs exchange rate will be gradually adjusted to boost tax revenues while ameliorating associated inflationary and social impacts. At the same time, the authorities plan to reform the import tariff structure, with IMF technical assistance,

to limit the impact on prices of customs exchange rate unification. These fiscal measures, along with donor support, are expected to shrink the fiscal deficit by 3.3 percentage points of GDP in 2021. Beyond 2021, the authorities plan to accelerate fiscal consolidation to further strengthen fiscal stability (IMF 2020a).

**The government plans to strengthen public financial management through improved budget planning and enhanced fiscal reporting.** To this end, good progress has been made on establishing a treasury single account, improving cash management and forecasting, and consolidating into a single account all bank accounts of ministries and public enterprises held at the central bank. The authorities are also committed to incorporating a medium-term expenditure framework into budget planning and strengthening the macro-fiscal unit to improve fiscal policy formulation.

**The government needs to quickly adopt a set of mitigating measures to reduce corrupt behavior in procurement practices,** notably by amending all relevant laws and regulations to extend the mandate of the Ministry of Finance to all public funds; empowering internal audit functions to check all financial transactions of publicly owned entities; imposing severe punishments on fraudulent and corrupt dealings; legalizing ethical codes and generalizing them to a wide spectrum of civil service employees; and encouraging disclosure of fraudulent transactions. The government will need support from development partners through not only technical assistance but also hand-holding to revise the draft procurement bill, draft new regulations to operationalize the new public procurement law, develop, and disseminate a comprehensive public procurement manual of procedures and standard bidding documents. Furthermore, it will be important to help strengthen the function of, and cooperation among, accountability institutions in tackling fraud and corruption in public procurement.

**The government is taking steps to intensify the fight against corruption and engage with civil society for the success of the planned governance reforms.** Under the IMF program, the authorities are committed to adopting a new anticorruption law and establishing an independent Anticorruption Commission. Civil society and nongovernmental organizations have a key role to play in raising awareness of the need to prevent corruption and improve public spending efficiency, especially including delivery of public services by SOEs. Civil society organizations take collective action in Sudan through media campaigns and public awareness seminars as a means for the general public to support preventive actions (such as refraining from solicitation, offering bribes for business, favors, and duties to report any solicitations). Since the Sudanese revolution, these organizations have served as watchdogs against corruption and advocated for higher standards of government transparency and accountability. They also help spread good practice instruments for easing reform implementation.

**The government is committed to strengthening the governance of SOEs.** The IMF program supports policy measures to publish the inventories of all SOEs (excluding purely military companies), transfer to the Ministry of Finance oversight responsibilities, and introduce new corporate governance rules. Over the medium term, the government will review SOEs' strategic objectives to determine those that should remain public and those that should be privatized.

**Likewise, under the IMF program, the authorities have engaged in monetary and exchange rate reforms to stabilize the economy and improve economic governance.** The IMF recommends that a reserve money targeting framework be established first to help curb inflation and support a more stable exchange rate, with inflation targeting as an appropriate medium- to long-term objective. The government has prepared a new Central Bank Law to strengthen the independence of the CBoS and focus its mandate on achieving price and financial stability, limiting monetary financing of the government, and strengthening CBoS governance. The authorities plan to keep CBoS financing of the budget within the statutory limits while employing available monetary policy instruments to mop up excess liquidity. The CBoS is taking steps to increase the rate of required reserves to help meet reserve money targets under the IMF program. In parallel, the government has established an active treasury committee to enhance coordination between the central bank and the Ministry of Finance to improve liquidity management and forecasting to strengthen monetary control. Over the medium term, the government plans to build a strong and liquid government securities market, with active participation of banks, nonbanks, and the general public to help eliminate deficit monetization.

The government also intends to liberalize the exchange rate and enhance the central bank's capacity in financial stability management within two years. The authorities are cognizant of the distorted nature of the multiple currency practices and recognize the importance of unifying these rates to restore macroeconomic stability and strengthen competitiveness. Exchange rate unification was implemented in March 2021.

## 3.2 Climate Change

### Assessing the Extent and Manifestations of Climate Change

**Sudan is among the low-income countries most vulnerable to climate change.** The country faces environmental challenges due to its location in the fragile Sudano-Sahelian zone, where climatic conditions vary from desert and semi-desert areas in the north to arid savannah areas in the south, west, east, and center, which receive seasonal rains. Sudan's vulnerability results from short and erratic rainy seasons, arid lands, and soils with sparse vegetative cover prone to wind and water erosion. Occasional floods further impact the precarious environment. Changing climatic conditions are causing extreme and frequent droughts and floods, extremely high temperatures, changes in rainfall patterns, loss of soil moisture, increases in crop pests and diseases, rising sea levels, and warmer sea temperatures, all of which pose a great risk to the country's marine ecosystem and increase vulnerability to storm surges.

**Unsustainable use of natural resources has aggravated Sudan's vulnerability to environmental challenges.** The steady increase in human and livestock populations, exacerbated by unsustainable production practices, has put additional pressure on natural land through the expansion of mechanized and rainfed farming and overgrazing. This has amplified desertification, land degradation (with soil erosion and nutrient loss), water pollution, and a deterioration of biodiversity across large tracts of the country due to habitat destruction from deforestation and unsound farming practices. Competition for scarce water and land resources between nomadic groups and farmers has fueled conflicts and fragility. Deforestation has also increased vulnerability to climate change, including loss of vegetation, and runoff during torrential rains leads to flooding and increases soil erosion.

**Sudan faces severe localized food insecurity because of mounting environmental challenges.** Deterioration of the country's natural resources adversely impacts agricultural productivity. Food shortages have been further aggravated by civil unrest and insecurity that, coupled with an increasing influx of refugees and internally displaced persons, have restricted access to agricultural land. About 30 percent of children under five are stunted, and 16 percent suffer from acute malnutrition. More frequent droughts and loss of soil moisture compromise agricultural productivity, while lack of rainfall affects livestock production. As communities begin to migrate in search of farming land, pasture, and water resources, there is increased competition for these scarce resources, which results in conflicts.

**Unreliable and reduced rainfall also harms energy production.** Reduced rainfall and increased evapotranspiration, resulting from increased temperatures, adversely impacts the reliability of hydropower dams for electricity production. It is estimated that by 2090, there will be a 35 percent reduction in hydropower generation output for lack of adequate water resources because of reduced rainfall.

**Changing climatic conditions and extreme weather events are also affecting the health sector.** Warmer temperatures are increasing the incidence of vector-borne diseases such as malaria. With flooding, waterborne disease outbreaks such as cholera, typhoid, and diarrhea occur due to water contamination. Increases in disease outbreaks could strain tenuous healthcare systems, adversely impacting the well-being of the population. COVID-19 has shown that Sudan's healthcare systems are not adequately equipped to handle all disease outbreaks.

**Changing climatic conditions and strong demographic growth could lead to a water crisis.** Sudan has abundant water resources, with the Nile Lake Basin providing most of the country's surface water. But projections estimate that by 2090, the water flow from the Nile will have fallen 20-30 percent because of higher temperatures, rainfall variability, and increased droughts induced by climate change. With Sudan's growing population, its demand for water resources is expected to increase, leading to the possibility of a water crisis. A decline in the availability of water resources would adversely affect the livelihoods of most of the population who depend on agriculture and livestock.

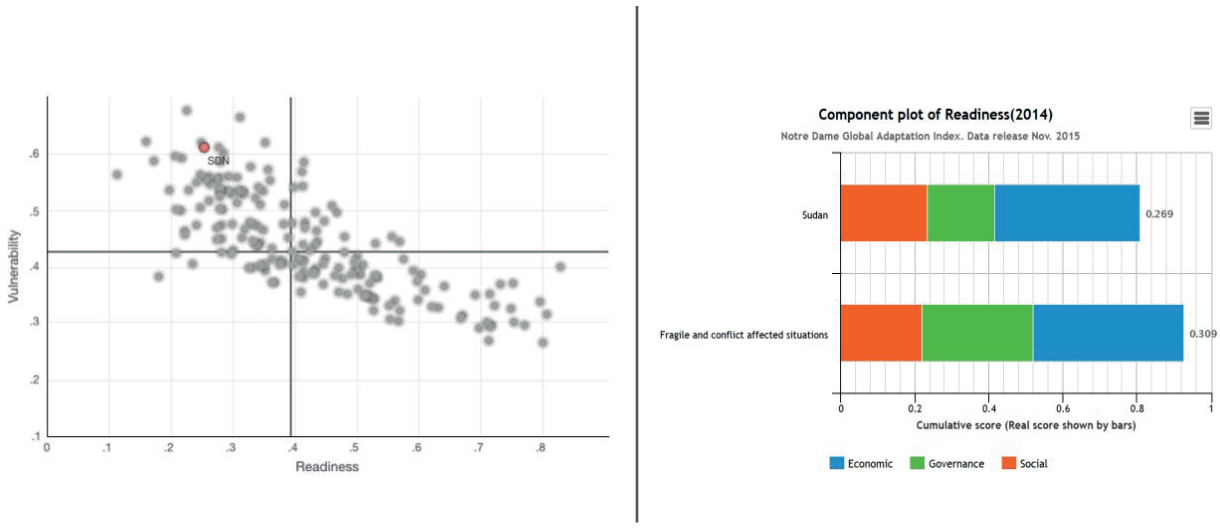
**Sudan's coastal zones also experience the impacts of climate change through rising sea levels.** Rising seas can cause flooding and increase seawater temperatures and salinity, which can trigger coral bleaching and damage salt marshes, mangroves, and seagrass beds and species (such as turtles, birds, and fish) that are important to the ecosystem. Water intrusion inland caused by rising sea temperatures could also affect coastal development plans and worsen land erosion.

## Vulnerability and Adaptation Capacity

**Sudan is poorly prepared to address its exposure to natural disasters and climate change.** The Notre Dame-Global Adaptation Index (ND-GAIN) Country Index shows a country's current vulnerability to climate disruptions and readiness to leverage private and public sector investment for adaptive actions. The high vulnerability and low readiness scores place Sudan in the upper-left quadrant of the matrix (figure 3.2). The 2018 index rank Sudan at the bottom—174th of 180 countries. Theus the country has a great need for investment and innovations to improve readiness and a great urgency for action.

**The 2014 National Action plan and 2017 Nationally Determined Contributions (NDC) affirm Sudan's commitment to support its transition to a low-carbon development pathway and implement mitigation and adaptation actions as a national priority.** Sudan's NDC estimates that energy sector emissions will increase sixfold between 2000 and 2030 period and that land degradation and waste levels will continue to increase. Sudan seeks to align its mitigation plans with national development priorities and plans to pursue low-carbon development interventions in its energy, forestry, and waste sectors.

**Figure 3.2: Vulnerability and Readiness**




*Source: https://gain.nd.edu/our-work/country-index/matrix/*

**For its adaptation strategy, Sudan is prioritizing actions to reduce vulnerabilities in agriculture, water, coastal zones, and health** (box 3.2). As Sudan is among the most vulnerable countries on the continent to the impact of climate change, adaptation is a high riding priority for its climate change actions.

### Box 3.2: Adaptation actions for sectors affected by climate change in Sudan

***Water.*** The government plans to integrate water resource management to meet current and future needs, invest in water harvesting (through construction of dams, water catchment basins, terraces, and the like), establish and rehabilitate hand pumps and construct water networks in rural areas to provide drinking water and achieve water security, research climate change impacts on the water sector, establish rain gauge stations to monitor and provide hydrological information, and introduce a revolving microcredit fund to support implementation of small water harvesting projects.

***Agriculture.*** Targeted interventions to support crop production include diversifying crops and introducing improved drought-resistant and early-maturing varieties, rehabilitating meteorological networks to enhance early warning systems, diversifying income-generating activities to increase the adaptive capacity of vulnerable farmers and achieve food security, establishing markets in vulnerable areas and increasing access to information, introducing agroforestry in areas vulnerable to climate change to enhance agriculture production, climate-proofing development projects to increase their resilience to current and future climatic changes, introducing high-value trees, and rehabilitating gum arabic gardens.

***Rangelands and livestock.*** Targeted interventions include ensuring regular surveillance of animal diseases through better monitoring, increasing resilience by establishing range enclosures/ranches, conducting research in various areas to assess climate change impacts on rangelands, establishing joint management of natural resources to consider climate change impacts, managing grazing areas and rangelands in a sustainable manner, and enhancing the enabling environment including by improving livestock marketing and markets, supplementary feeding, and increasing pastoral awareness and access to information.

***Coastal zones.*** Measures include establishing new information systems to enhance monitoring of natural and urban areas to facilitate detection of biological, physical, and chemical changes caused by climate change.

***Health.*** Adaptation options include sensitizing communities in vulnerable areas to diseases related to climate change to increase their adaptive capacities, building capacity of healthcare providers on disease surveillance and detection, and improving health services to meet the evolving and increasing challenges of climate change.

**Sudan needs to mobilize resources to finance climate change action to implement its adaptation and mitigation strategies and action plans.** International and external support will also be required in terms of capacity building, financing, and technology. Some $1.2 billion will be needed for adaptation and $11.7 billion for mitigation. The Global Environment Facility has supported Sudan in providing climate finance for the implementation of priority action plans listed in the country's National Adaptation Plan.

## 3.3 Gender Disparities

**Sudan has one of the world's lowest rankings for gender equality.** Sudan's 2019 Human Development Index value for women is 0.466 versus 0.542 for men, for a Gender Development Index of 0.860—which puts Sudan into the group of countries furthest achieving gender parity. The Gender-based Inequalities Index, which measures the loss in human development due to inequality between female and male achievement along three dimensions—reproductive health, empowerment, and economic activity—also indicates that Sudan is lagging, placing it at 138$^{th}$ of 162 countries.

**Sudan suffers from a weak normative and legislative framework on gender equality, and its plan and policies for narrowing the gender gap and empowering women economically have faced implementation challenges.** Gender rights and equality represent fundamental areas for

change as the country emerges from three decades of political oppression, in particular the suppression of women's rights. Gender inequality and exclusion have been linked to the persistence of discriminatory norms and relations, as well as the inequitable distribution of resources contributing to poverty and underdevelopment. Though the interim constitution (amended in 2017) grants equality before the law, includes equal pay provision, and obliges the state to combat harmful customs and protect the rights of the child, the national legislative framework misses basic protective rights such as the practice of male guardianship and gender-unequal divorce and custody rights.

**Gender based violence is prevalent and persistent.** Sudan's long-term conflicts have increased women's vulnerability to violence. This is reflected in high levels of sexual violence perpetrated by warring parties during conflicts. The most common forms of gender-based violence include harmful traditional norms and practices related to female genital mutilation or cutting, early and forced marriage, and physical and sexual violence. Female genital mutilation or cutting remains highly prevalent across Sudan, with an estimated 87 percent of women aged 15-49 having undergone this harmful practice (CBS and UNICEF 2016). Early or underage marriage is high, with about 34 percent of girls married before their 18th birthday and another 12 percent before their 15th (UNICEF 2017). Refugees, internally displaced persons, and host communities' women and children face heightened risk of sexual violence and exploitation. Provisions against gender-based violence in national law are too narrow and, in some cases, open to contradictory interpretation.

**Despite major barriers to achieving gender equality and inclusion—embedded in both formal and cultural institutions—an era of change may be on the horizon.** In 2020 the government outlawed female genital mutilation. The 2019 revolution also marked a significant moment for Sudanese women's public participation. There is a need for strategic institutional leadership to promote gender equality as a pathway to development, inclusion, and prosperity, including through national-level campaigns and media, improved service delivery, and civil society actions. Improving women's health, education, economic empowerment, and legal rights are priority areas. Key policy measures include gender-biased self-employment programs to ensure that women benefit from the assistance; cash transfers through the family program, with e-payment distribution measures to increase safety and enable women's access to formal financial and social security systems; support to micro, small, and medium-size enterprises, including measures to ensure women-owned businesses benefit from relief schemes; and raising awareness among civil society and the authorities to prevent domestic violence and develop coordinated responses for those experiencing it.

## 3.4 Fragility

### Political Drivers

**Since independence, Sudan has experienced crises, conflicts, and instability that have translated into coups, wars, economic decline, administrative chaos, and weak economic governance.** Three military coups set up authoritarian regimes that ruled for 48 years, while democratic periods lasted for only 15 years. Civil wars have continued since independence aside from the 17 years of peace from 1972-83 and 2005-11. The long conflict in the south was settled by the comprehensive peace agreement in 2005 that led to the secession of South Sudan in 2011. The ensuing economic crisis as Sudan lost 75 percent of its oil reserves together with the relentless conflict in Darfur, Southern Kordofan, and Blue Nile led to the uprising against the military regime in 2019.

**The transition to democratic rule and appointment of a technocratic government after the 2019 revolution offer a crucial opportunity for Sudan's economic and social renewal.** The country faced its biggest uprising in December 2018 when people protested higher commodity prices and living costs. In April 2019 the army arrested the former president and established a Transitional Military Council (TMC). In August 2019 a civilian coalition (the Forces of Freedom of Changes) signed an agreement with the TMC for a civil-military Sovereignty Council to run a 39-month transition period—headed by the military and civilians on a rotating basis—before a democratic election. The government's mandate is to carry out reforms to resolve longstanding internal conflicts, foster stabilization and inclusive growth, and reengage with the international community.

## Economic and Structural Drivers

**Sudan's fragility has economic and structural drivers.** The country's economy has been characterized by macro-economic instability and economic recession, which have been exacerbated by political uncertainly. Internal political conflicts have had dire spillover consequences on the economy. These include the cutting off of the country's trade links, weakening of the private sector, impediment of investment, destruction of livelihoods (particularly among small farmers), and interrupted nomadic movements (resulting in a large portion of the population migrating to urban cities, refugee camps, and neighboring countries and abroad). It is further estimated that political conflict has caused 25-30 percent of urban traders to go out of business. In South Darfur more than 80 percent of manufacturing firms have been closed.

A 2019 Risk and Resilience Assessment updated in July 2020 by the World Bank points to the following structural drivers of Sudan's fragility, conflict, and violence:

- ***A legacy of non-inclusive governance by elite collusion.*** Political settlement was characterized by an uneven share of political and economic power, which excluded a large part of the population in more peripheral areas in the west, east, and south. The Khartoum-based center—sustained by an extensive network of patronage and dominated by mostly Arab groups—captured both political and economic power.

- ***An elite-captured economy leading to strong inequality*** and macro-fiscal vulnerabilities. The economy was highly distorted to serve the vested interests of a narrow elite, while a costly and nontransparent security sector crowded out investment in human capital and public infrastructure. Youth exclusion and increasing demographic pressure have further amplified unemployment and social exclusion.

- ***Regional imbalances, with food insecurity and higher poverty in the south and west states.*** The lack of infrastructure such as water supply, electricity connections, tarmacked roads, equipped health care facilities, and functional schools have deprived the population of the basic services the government needs to provide.

- ***Weak public institutions to mitigate and regulate intra- and inter-communal conflicts over land, water, and natural resources.*** Conflicts in Darfur, South Kordofan, Blue Nile, and other parts of the country have fragmented social cohesion and institutions, especially at the local level, including through forced displacement.

## Social Drivers

**Cultural-religious divisions further compound Sudan's fragility.** Sudan has been dealing with conflict due to racial, ethnic, and religious differences since before independence. With roughly 536 ethnic groups and more than 400 languages and dialects, Sudan's cultural diversity is among the most complex in the world. Although some efforts have been made to resolve internal disagreements and conflicts—including the 2020 peace agreement between the transitional government and armed groups in Juba—conflicts persist because Sudanese remain divided based on family, tribe, ethnicity, race, language, and religion at the expense of national unity. Islam spread vastly in northern Sudan, where most of the population was of Arab origin, initially in the 1600s and more rapidly in the 1800s. The Sudanese of African origin in Blue Nile and Nuba mountains had been influenced by European missionaries to adopt Christianity. The exclusion of some regions and groups since independence has been an important fragility driver. Furthermore, regions that have suffered from social conflict, extreme poverty, and a recent concern for food insecurity are rich in oil and gold, so social conflicts are also driven by competition for control of these natural resources.

## Climate and Environmental Drivers

**Accelerated environmental degradation over the past 30 years has led to massive population displacement.** The main causes of environmental degradation are low rainfall, forest overcutting, overcultivation, and overgrazing. This environmental degradation, in the face of a rapidly growing population and the concomitant competition for natural resources, has undermined food security, especially in the poorest regions. Considerable environmental changes threaten the livelihoods of communities, leading to massive population displacements and movements, particularly urbanization. The latter has caused poor housing conditions and induced

related environmental problems on the outskirts of Khartoum and other urban districts.

**Competition over natural resources is expected to increase with the occurrence of more frequent and intense droughts.** Severe droughts have led to starvation and poor health for parts of the population, leading them to mostly rely on food aid because imported food remains too expensive. Droughts have also exacerbated communal challenges due to increased competition between pastoralists and farming communities for access to water, land, and pasture. Such competition is likely to become more acute in the face of climate change, as the periods between droughts get shorter and the time without rainfall gets longer.

### Pathways to Overcoming Fragility

**The AfDB's 2020 Fragility and Resilience Assessment showed how Sudan's new government is addressing fragility.** The report concluded that Sudan still has a long way to go to address the main drivers of fragility: political uncertainty, high public debt and arrears, weak capacity to handle climate change events, an underperforming economy, social and ethnic frictions, and exclusion.

**The AfDB assessment highlighted the importance of maintaining the fragile political peace to build overall resilience,** addressing shortcomings in access to financing to avoid reversing the transitional government's gains in improving economic performance and to further support capacity development, and improving human capital and institutional capacity to better handle natural resource management—especially in the face of increased catastrophic and extreme weather events.

## 3.5 Infrastructure

**This section reviews the status of and main challenges facing transport and information and communications technology (ICT) infrastructure.** Water and energy issues are covered in chapter 4.

### Transport

**Sudan's funding gap in infrastructure, and especially transport, is large relative to the size of its economy—and enormous relative to current spending.** Given the magnitude of the funding gap, concerted efforts of multilateral development banks, development partners, and private actors are required. Transport funding needs are largely driven by the need to maintain regional corridors and upgrade rural tracks to make them usable. About $1 billion is needed to provide minimum road connectivity.

#### *Roads*

**Roads are the predominant mode of transport in Sudan, but the network is unequally distributed and in poor condition.** Road transport accounts for more than 90 percent of inland transport services. Although the road network almost doubled in length between 2000 and 2020, a sizable share of the country lacks quality roads. At 1.8 kilometers per 100 square kilometers of land area, Sudan has one of the lowest road densities in Africa. Road arteries are concentrated around Khartoum. There are a few well-developed internal road corridors, but cross-border connectivity remains poor and the main internal corridors do not extend to many adjacent communities. As a result, rural connectivity is virtually nonexistent. Many regions with agricultural potential are not exploited because they are isolated from markets. Three-quarters of land with high agricultural potential is farmed at only 10- 50 percent capacity (AfDB 2016). In the Darfur region only 2 percent of the network is paved, and movements are almost impossible during the rainy season. Most roads managed by states are either gravel or earth and are in poor condition.

**Weak road maintenance results from low institutional capacity and states' funding constraints.** The management of road infrastructure is shared between the National Highways Authority (NHA) and state governments. Poor road maintenance is partly due to inadequate funding, which leads to rapid deterioration in existing roads. The low revenue collected by the NHA from tolls covers less than 200 kilometers of overlay and rehabilitation per year. Consequently, a backlog of preventive maintenance needs has accumulated to the extent that 500-1,000 kilometers of rehabilitation and overlay a year are now required. Inadequate enforcement of restrictions on axle loads has further accelerated road infrastructure deterioration.

### *Railways*

**Railway infrastructure, once the dominant mode of transport, has faced many challenges that have led to a sharp decline in passenger traffic and freight.** Rail transport used to be the preferred mode between Port Sudan and Khartoum, being particularly cost-effective to move livestock from remote areas such as Darfur to the central market in Khartoum and for export. Factors leading to the virtual collapse of railways include the deterioration of the network due to lack of funding for maintenance and renewal of railway infrastructure; intense competition from the road transport industry, notably in the central and eastern parts of the country; liberalization of the road freight industry, leading to a large fleet of trucks; damaged rail infrastructure due to civil strife; and a lack of imported spare parts due to economic sanctions.

**The government could consider institutional reforms to change the mandate of the Sudan Railways Corporation (SRC).** The company is responsible for managing infrastructure and providing rail services. A key policy issue would be to make SRC an asset management company and regulator and contract private companies to provide rail services on a concessional basis (AfDB 2016). The Bank is supporting Sudan and Ethiopia to carry out a feasibility study for a standard gauge railway line that will connect the two neighbors. This is expected to decongest traffic from the road network by 40 percent and improve regional connectivity with Ethiopia and Eritrea.

### *Ports*

**Sudan has several ports along the Red Sea that also serve nearby landlocked countries.** The Sudanese Port Authority has used its large revenues to invest in infrastructure improvements at Port Sudan. A combination of higher throughput per ton handled and large increases in throughput has led to the generation of substantial surpluses. But the increase in traffic has created serious congestion problems and delays in freight movement at Port Sudan. By 2010, Port Sudan was already operating at 80 percent of capacity, and its terminal lacked interfaces with customs and port clients, hampering port efficiency (World Bank 2011). Truck cycle times for receiving and delivering cargo are about 24 times those of global benchmarks, and crane productivity is less than a third than observed in other African nations. Though the handling charges at Port Sudan are at the lower end of what is charged in other African ports, such inefficiencies deter increased use of the port. The government needs to implement reforms to simplify documentation and procedures, shorten dwell and truck cycle times, and tackle high handling charges.

### *Air transport*

**The main challenge for Sudan's air transport is ensuring effective safety, security, and economic regulation.** Civil aviation has a key role to play in a large country with a dispersed, low-density population. Sudan has 10 main airports, and has developed a strong international gateway for air transport in Khartoum. Air traffic in the country has risen, driven by intercontinental traffic, with most routes geared toward the Middle East and Egypt. After the air transport industry was liberalized in the 1990s, several small domestic carriers, generally registered as charter airlines, have been operational. These operators may act as scheduled carriers, but do not report information to a booking or ticket sales agency. In countries with poor oversight, such operators pose an air safety problem because they often operate aircraft maintained on minimal budgets, with maintenance crew and pilots whose skills may not match international standards. Moreover, the percentage of seats flown on newer aircraft is smaller than in neighboring countries, creating additional safety risks. Sudan needs to build facilities that meet ICAO standards, which call for additional infrastructure on air safety and capacity improvements. Finally, the capacity and financial resources of the Sudan Civil Aviation Authority need to be enhanced to enable it to fulfill its mandate.

## Information and Communications Technology

**Since the early 2000s, Sudan has made remarkable progress in developing ICT.** The sector's infrastructure is strong, with three undersea cable systems that land in Port Sudan. Mobile cellular subscriptions reached 72 per 100 people in 2018. Except for Egypt (47 percent), internet use is higher in Sudan than in comparator economies like Ethiopia and Kenya. Prices for ICT services are competitive due to competition in gateways and are among the lowest in East Africa.

**Sudan's transitional government is committed to accelerating digital transformation.** Sudan's portal is delivering 80 e-services including the National Service, Sudan Certification Result, Haj system, Universities Admission System, and Civil Registration System (biometric ID). But lack of awareness and problems related to the quality of internet services limit the economic transformation benefits of these services. The government plans to embark on legal and administrative reforms to further support digital transformation. Likewise, the private sector will be a key actor in enabling that transformation.

## 3.6 Private Sector Development

**The private sector has a dual, unevenly distributed structure.** The private sector largely consists of informal and formal small and medium-size enterprises (SMEs) and large foreign corporations. Formal SMEs are structured as private limited companies (63 percent) and sole proprietorships (37 percent). Most SMEs are family-owned and account for most business activities in agriculture, manufacturing, trade, and finance, in addition to business companies in the construction industry, transport, and professional services. A small number of large private conglomerates operate in trade, industrial processing, and agriculture. Most services for oil production are supplied by foreign companies, along with some government-initiated partnerships. Chinese, Malaysian, and Indian firms have invested heavily in oil and related sectors. The oil boom of the past decade also stimulated investor interest in real estate, hotels, and restaurants. The private sector operates in a constrained business environment, and states enterprises remain engaged in many commercial activities and are heavily subsidized. Corporate businesses are weakly connected with SMEs across industrial supply chains.

**Few regions of Sudan offer the infrastructure and factor markets necessary to support large-scale, formalized manufacturing and other business activities.** Moreover, internal conflicts have adversely affected large areas, impeding business activities and trade, notably in Darfur, Kordofan, and the Blue Nile states. Consequently, most large companies are located in Khartoum and to a lesser extent El Gezira, Nyala, Port Sudan, and North Kordofan. But SMEs are spread throughout the country. Mechanized farming is spread in east, central, and western Sudan, with traders and former officials as the main participants. Although the private sector is active, it must compete with state-owned companies—including public marketing boards that receive concessional advantages from the government.

**Sudan's investment climate is not conducive to private sector development and growth.** All investment climate surveys show that Sudan's performance is low in fostering the private sector. The top three constraints on private sector development are political instability, corruption, and economic policy uncertainty. Sudan ranked 171st among 190 economies on the World Bank Group's 2020 Doing Business report, ranking in the last quintile on all but two indicators and lagging far behind on access to credit, tax issues, contract enforcement, and trade facilitation. Furthermore, economic and financial sanctions held back the emergence of Sudan's private sector through restrictions on trade and financial transactions.

**Private sector development could start with light industries—notably in agroindustry, which offers good potential provided the business environment becomes more attractive.** Light industries typically include textiles and clothing, agricultural processing, meat and fish preservation and packaging, leather goods, and woodworking. To unlock private sector potential, the government needs to make concerted efforts at reducing administrative costs and barriers in establishing and operating businesses, improving the regulatory regime and trade environment, fostering access to credit, strengthening links between large businesses SMEs, increasing market connectivity at the national, regional, and global levels, and bolstering investor protection and contract enforcement. Legal and organizational improvements to simplify and speed up processes will need to be pursued simultaneously with efforts to closely monitor the implementation of these rules and laws. In addition, there is a need for a stronger, more effective role of the state in the provision of public goods such as infrastructure, and in establishing institutions that support fair competition.

**The transitional government is committed to improving the environment for doing business through** reforms aimed at implementing a simple, flexible, and transparent

business registration regime, with no restrictions on firms' entry and exit; improving access to credit information by establishing a private credit bureau; reducing the corporate income and capital gains tax rates and abolishing the labor tax; and simplifying online customs declarations. But several administrative barriers need to be tackled, notably a complex licensing and land tenure system and a multiplicity of overlapping taxes.

CHAPTER: 4

# DEVELOPMENT GAPS BASED ON THE HIGH 5S AGENDA

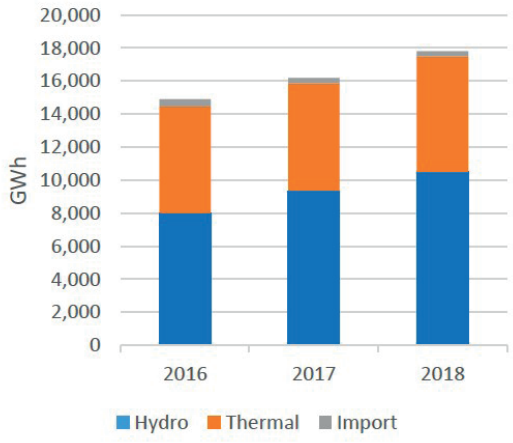
This chapter diagnoses Sudan's development gaps and challenges using the African Development Bank's High 5 strategic priorities and the reforms required to achieve them. The Bank's High 5s are Light up and Power Africa, Feed Africa, Industrialize Africa, Integrate Africa, and Improve the Quality of life of the People of Africa.

## 4.1 Energy

### Status and Performance

**Sudan has one of the largest power systems in Sub-Saharan Africa, with 3,500 megawatts of electricity generation capacity largely from hydro and thermal sources.** Most of the country's renewable energy potential remains untapped. In 2018 Sudan had 2,000 megawatts of installed hydropower capacity. The share of electricity generated from thermal power plants has reached about 38 percent (figure 4.1.) and is expected to continue rising, as most generation plants in the pipeline are thermal. Most of the fuel used to generate electricity is imported. Renewable resources, which Sudan has more of than most other Sub-Saharan countries, have yet to be exploited. The country's solar potential is almost everywhere, while wind energy potential is located along the Red Sea and in the Northern State.

**Figure 4.1: Sources of Energy Generation (in percentage)**




*Source: SEHC and World Bank Diagnostic review of the energy sector (2019).*

**During peak times, Sudan meets energy demand by importing electricity from the regional market, but the volume of trade is limited.** Sudan is part of the Eastern Africa Power Pool, with interconnecting lines with Egypt, Eritrea, and Ethiopia. Though Sudan has been importing electricity from Ethiopia since 2012, the regional power trade infrastructure is underutilized—at less than a quarter of the capacity provided in the purchasing power agreement.

**From an institutional standpoint, the energy sector is unbundled along clear technical lines, but sector companies have limited autonomy.** The Sudanese Electricity Holding Company oversees and owns four subsidiaries that manage hydropower generation and other to reaforms of renewable energy, thermal generation, electricity transmission, and electricity distribution. All sector companies are part of the Ministry of Energy, and key functions (finance, personnel, investment) remain under the control of the ministry. An electricity regulator has been in place since the 2001 Energy Act. The government aims to strengthen its legal and regulatory framework to provide greater openness to the private sector, notably in renewable energy and energy efficiency, and to clarify the regulator's role in setting tariffs.

**From a technical standpoint, the system performs well compared to other African countries** (Table 4.1). The cost of service, which is estimated at US¢20 per kWh, is close to the regional average. Transmission and distribution loss is relatively low at 20 percent. Bill collection is almost universal due to good commercial management and the installation of prepayment meters, making Sudan one of the top performers in SSA. In terms of duration and frequency of electricity interruptions, Sudan is among the top quartile in Sub-Saharan Africa, but the country suffers from regular load shedding in peak summer hours due to generation shortages. The level of staffing is efficient by regional standards. A local manufacturing base, with skilled labor, has emerged in response to sanctions imposed on the country and has contributed to sound maintenance of the energy system.

**Table 4.1: Sudan Power System Scorecard**

| Indicators | Sudan | | Regional Benchmarking |
|---|---|---|---|
| Transmission loss | 5.4% | | Relatively low compares to Sub-Saharan African average, with room for improvement. |
| Distribution loss | 15.1% | | Average for Sub-Saharan Africa, with room for improvement. |
| Collection rate | 93% | | Average for Sub-Saharan Africa standards (99.7% of residential users are prepaid - 2017). |
| SAIDI | 9.18 hours (2017) | | System duration of interruption per customer. Average by Sub-Saharan African standards, with room for improvement. |
| SAIFI | 10.14 (2017) | | Average frequency of interruption per customer. Average by Sub-Saharan African standards, with room for improvement. |
| Cost of services | US¢20/KWh (2017) | | Average by Sub-Saharan African standards. |
| Average electricty tariff | US¢1.5/KWh (2017) | | Lowest in Sub-Saharan African. Dropped to US¢0.7/KWh in 2018 due to currency depreciation. |

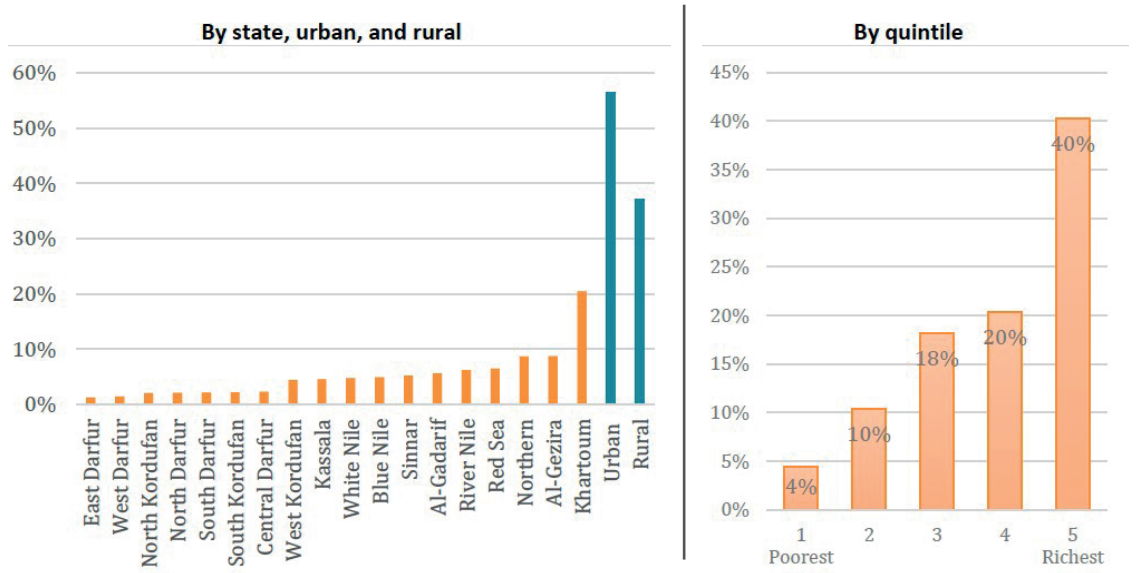
*Source: From subsidy to sustainability, World Bank, 2019.*

## Main Challenges

**The main challenge facing the energy sector is its unsustainable financial position due to uneconomical electricity tariffs.** The average retail electricity tariff is the lowest in Sub-Saharan Africa. The tariff structure includes a low lifeline tariff of $0.7 per kilowatt-hour with a generous threshold of 200 kilowatt-hours per month, which ensures that electricity is affordable to all connected households. This low tariff helps drive the high and increasing demand for electricity, notably from the top quintile. Since the average tariff is far below the cost of supply, the government is heavily subsidizing the sector by covering both fuel and capital costs. Energy supply losses are financed through a direct subsidy from the Ministry of Finance and an implicit exchange rate subsidy financed by the Central Bank of Sudan. Between 2015 and 2018 the average tariff was raised 80 percent in nominal terms. But after adjusting for inflation, the real average tariff dropped 30 percent over that period (World Bank 2019b). The scale of the subsidy is so large—13.5 percent of government spending—that it has a drastic adverse impact on macroeconomic stability and budget allocation across sectors, especially health and education budgets.

**The huge government energy subsidies are not inclusive because they mostly benefit rich residents of urban areas.** The distribution of electricity subsidies is highly regressive because most poor people cannot benefit from it since they are not connected to the electricity grid. Thus the richest income quintile is the main beneficiary. The highest-consuming 1 percent of users account for more than a quarter of electricity consumption. About 60 percent of the subsidy goes to the two richest quintiles while only 5 percent goes to the poorest (figure 4.2).

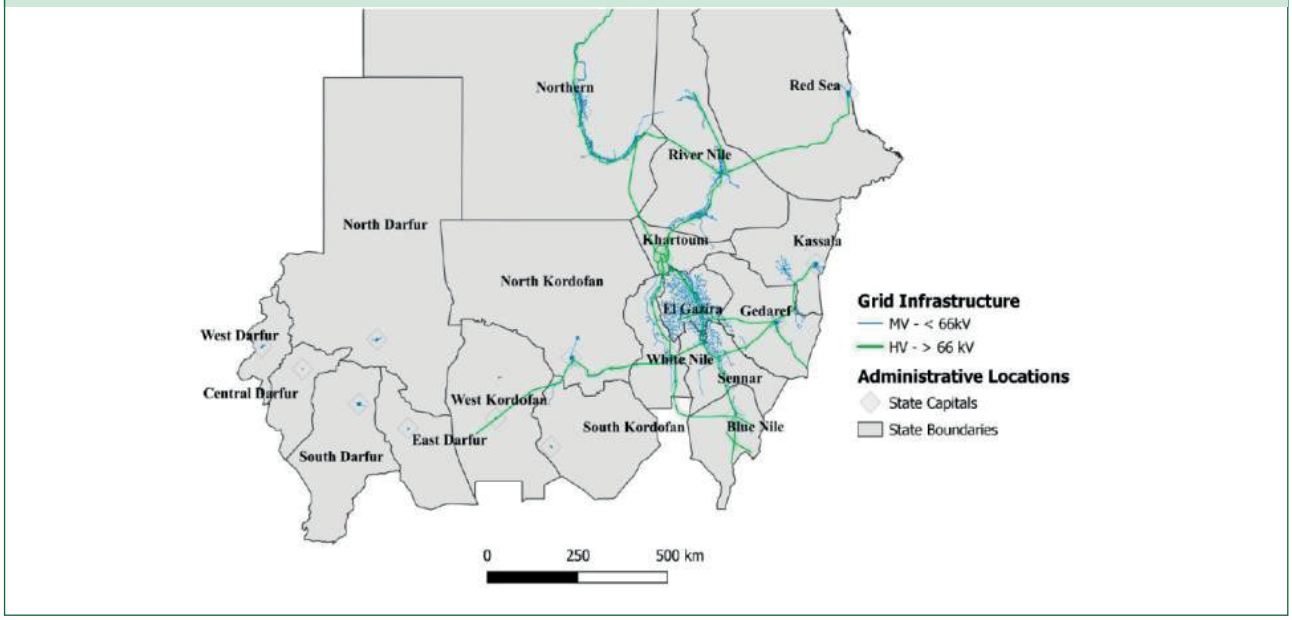
**Figure 4.2: Distribution of electricity subsidy by region and quintile**




*Source: NHHBPS 2014.*

**Moreover, Sidan's power system does not cover the entire country, with the electricity access deficit being largest for the poorest households leaving in Darfur and Kordofan regions.** The distribution network reaches predominantly the urban population of relatively wealthy states. States that are far away from Khartoum have limited or no transmission lines and rely on isolated diesel-fueled system. Progress to interconnect these systems is slow. The distribution network is heavily concentratedin Khartoum,Jazeera and along the Nile River sttes (see Fiure 4.3).

**Figure 4.3: Sudan Distribution Network**

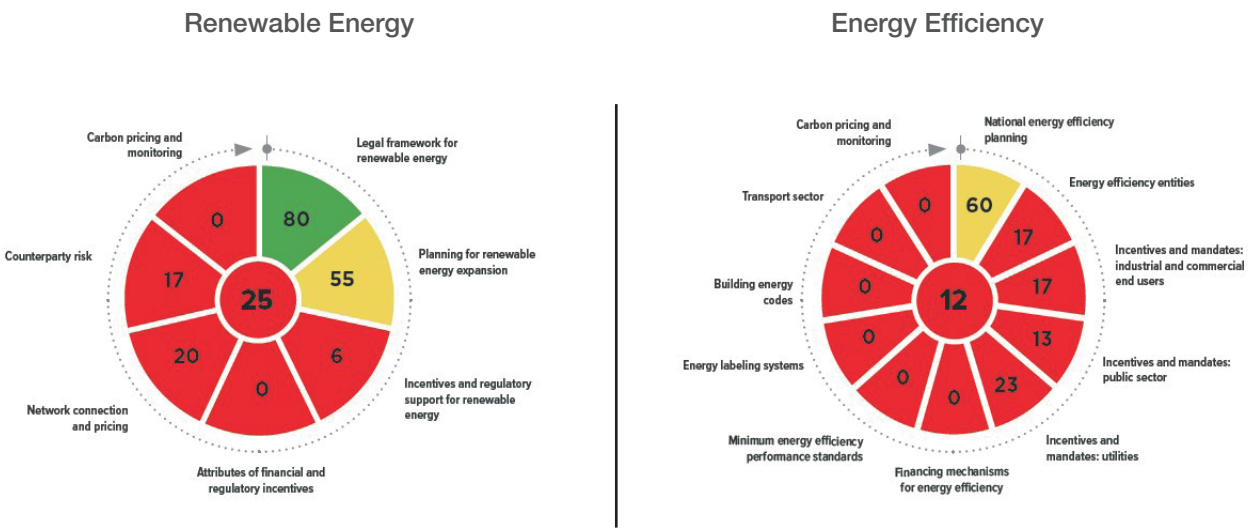



*Source: From subsidy tosustainability, World Bank; 2019.*

**With an electricity access rate standing at barely 32 percent, the government's goal of achieving universal access seems very ambitious.** The government's long-term system plan aims to connect 80 percent of households by 2031 through grid connections. For the remaining 20 percent of households, the government is exploring the potential of off-grid electrification solutions. To achieve universal access, the government will need to connect 600,000 new households a year—six times the current connection rate.

**A weak sector policy and planning framework, not guided by the lowest-cost options, is undermining the country's progress toward meeting its energy goals.** Electricity sector operations are guided by the 2015–2020 Power Sector Development Framework, which is obsolete and does not cover renewables. The government plans to focus investment on thermal power, with underutilization of existing assets, most notably the interconnection with Ethiopia. Sudan's scores on energy efficiency and renewable energy are low, largely due to the lack of incentives and financial mechanisms to support these policies (figure 4.4).

**Figure 4.4: Sudan's rankings on energy efficiency and renewable energy**




*Source: Regulatory Indicators for Sustainable Energy (RISE), 2019. World Bank and the Energy Sector Management Assistance Program (ESMAP).*

**Despite government efforts, the enabling environment has not been conducive to attract private investment in energy.** Reasons include low cost recovery and large subsidies, lack of access to guarantees from international financial institutions, nontransparent procurement, macroeconomic instability (such as high inflation), and restricted access to foreign currency.

**Without appropriate plans and policies, energy will continue to face mounting financial challenges.** Indeed, energy demand is projected to continue growing driven by the rising number of connections and increasing consumption. Hence energy operational costs will also continue rising, driven by devaluation of the Sudanese pound and increases in the use of thermal plants and related oil imports to meet this increasing demand.

## 4.2 Agriculture

**Agriculture is the backbone of the Sudanese economy, generating a third of GDP, about 5 percent of exports, and accounting for more than 50 percent of workers** (CBoS 2017). Agriculture is key to food security and poverty reduction since 70 percent of the population depends on the sector. Moreover, the sector provides most production inputs for industry, such as edible oils, sugar, and textiles. Sudan has long been regarded as one of the world's great breadbaskets because of its huge agricultural potential. About 63 percent of Sudan's land area is classified as arable, though only 25 percent is under cultivation.

**Agriculture suffered from neglect during the oil boom years.** Despite clear symptoms of the Dutch disease, no efforts were made to invest natural resource rents into economic diversification. Oil revenues were significant, but investment in agriculture did not rise even though the sector remained the main employer. Moreover, most spending on agriculture remained at the federal level. Agricultural productivity declined during those years because the enabling environment deteriorated due to macroeconomic instability, ineffective fiscal management, and lack of hard and soft infrastructure investment. Hence agriculture was essentially focused on catering to the domestic market in the 2000s. The neglect of agriculture reduced incentives for farmers and discouraged the increasingly large number of young people entering the labor force from taking up farming. It also increased demand

for food imports and raised food prices. Consequently, the trade deficit in agricultural products widened significantly during this period.

**Since South Sudan's secession, agriculture has featured prominently in the government's development agenda.** The government has adopted several initiatives signaling that agriculture should be a key driver of economic growth. The Economic Reform Program (2015-19) sought to diversify the economy away from oil dependence and set specific goals and policies for promoting agricultural development. In 2013 Sudan became the 12th member state of the Common Market for Eastern and Southern Africa (COMESA) to sign the Comprehensive Africa Agriculture Development Program (CAADP) compact. In 2014 the Ministry of agriculture adopted the Comprehensive National Food and Nutrition Security Policies. Thereafter, a series of actions were taken to formulate the Sudanese National Agricultural Investment Plan (SNAIP, 2016-20). SNAIP is a sector-wide plan for coordinating resources needed to accelerate the implementation of existing agricultural development initiatives. It envisions comprehensive national socioeconomic development led by a dynamic agriculture sector for rapid and sustainable growth, inclusive of smallholders, and with strong links to agricultural industrialization. Yet resource allocation to agriculture remains under 3 percent of government spending, far below the 10 percent committed under CAADP.

**Given the many natural endowments and opportunities that agriculture offers, the sector has the potential to be a lever for transforming the Sudanese economy.** Agriculture is paramount for sustained future economic growth, employment creation, poverty reduction, food security, and foreign exchange earnings. Evidence indicates that GDP growth originating in agriculture is at least twice as effective in reducing poverty as growth originating outside the sector (World Bank 2020d). Furthermore, agriculture has potential for improving production through expanded area and productivity and exploiting opportunities that provide higher value-added and create sustainable jobs for rural and young people. The three main agriculture subsectors in Sudan are pastoral livestock, cropping, and fish production.

**Pastoralism is the largest agricultural subsector sector, contributing 60 percent of GDP.** With about 110 million heads of livestock, Sudan has the second largest herd in Africa (after Ethiopia) and is a net exporter of livestock and meat products. But paradoxically, 70 percent of the milk consumed in the country is imported. Meat production has increased in the last decade, supported by increased animal slaughter rather than increased productivity. The traditional mixed rainfed livestock production system accounts for more than 90 percent of animal rearing in the country. This system exists in almost every state but is especially prevalent in the Kordofan Region states and the three Darfur states (Sinnar, Blue, and White Nile).

**Table 4.2: Agrarian farming systems in Sudan**

| Farming systems | Approximate area* |
|---|---|
| 1. Irrigated agriculture | 3.5 million feddans |
| 2. Semi-mechanized rainfed farming | 16 million feddans |
| 3. Traditional rainfed farming | 21.4 million feddans |
| 4. Livestock activities | 109 million heads |
| 5. Forests, woodlands, and rangelands | 670,000 sq. km |
| 6. Fisheries | 55,000 tons |

*Source: Central Bank of Sudan 2017.*

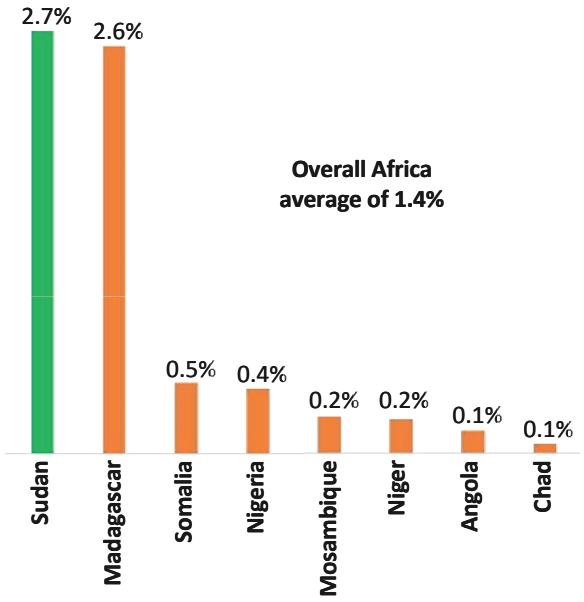
**Cropping sector, which livestock in importance, employs most workers.** There are three main cropping sector systems: traditional rainfed, semi-mechanized rainfed farming, and irrigated farming. While the irrigated system is the most important in terms of GDP, the traditional rainfed sector occupies the majority of farmland (table 4.2) and employs about two-third of the agriculture population. Major agricultural exports are cotton, sesame, arabic gum, and livestock. Grain sorghum is the principal food crop, and wheat is also grown for domestic consumption.

## Opportunities

**Sudan is richly endowed with natural resources** that include abundant fertile agricultural lands (of which the unused area is estimated at 175 million feddans), animal wealth (estimated to be over 110 million head of cattle, sheep, goats, and camels), marine and freshwater fisheries, and rich underground and surface water resources.

**Sudan's agroecological zones are suitable for a wide variety of crops and animal husbandry.** About one-third of Sudan's land area is suitable for agricultural production (World Bank 2015). Climatic diversities could enable Sudan to produce many agricultural products through almost all seasons of the year. These include cereals (wheat, sorghum, millet, corn, rice), oilseeds (sesame, groundnuts, sunflowers), pulses (beans, chickpeas, lentils), and horticultural crops such as vegetables (onions, okra, eggplant, potatoes, cucumber) and fruits (tomatoes, watermelon). Other crops like cotton, sisal, hemp, and fodder are also cultivated in many parts of the country.

**Figure 4.5: Coverage of Irrigation among peers**




*Source: World Bank; Agriculture Value Chain; Analysis (2020).*

**Sudan's strategic location—at the crossroads of Sub-Saharan Africa and the Middle East—is a key asset to support agricultural development.** The country's position could aid the marketing of agricultural and livestock commodities in regional and international markets. The country's proximity to major Gulf countries and European markets, coupled with its access to the sea, provides a critical opportunity to boost the growth of agriculture and the economy. Moreover, cultural links to important capital markets, such as the Gulf areas, can enable it to significantly increase FDI.

**Sudan also benefits from sizable irrigation potential** as it has enough water resources from rivers, rainfall, and underground aquifers to meet the requirements of livestock and the cultivation of different types of crops. Although 90 percent of Sudan's land area is arid, large, irrigated areas extending around the fertile Nile River valley enable intensive agriculture. Moreover, Sudan has the highest share of land equipped for irrigation among its peers (figure 4.5). Two-thirds of the irrigable area developed in Africa lays between Sudan, South Africa, and Madagascar. Potentially, 20 million hectares of land could be brought under irrigation.

**The agriculture sector operates below its productive potential, which means that further development opportunities lie through both vertical (productivity) and horizontal (land area) expansion.** The wide gap between actual production and that achieved on research fields and uncultivated irrigated farms represents enormous potential for increased agricultural production. Only 23 percent of arable land is under cultivation, and yields for most crops are below past performance in the country as well as productivity levels in neighboring countries. Similarly, despite recent progress, livestock yields remain well below potential. Developing facilities for agriculture, veterinary sciences, animal production, forestry, and fisheries all over the country could provide trained workers in all areas of specialization.

**Table 4.3: Productivity benchmarking in key crops and livestock**

| | Yields | Sudan | N. Africa | E. Africa |
|---|---|---|---|---|
| Livestock (kg/Animal) | Milk, whole fresh cow | 357 | 955 | 378 |
| | Milk, whole fresh goat | 62 | 59 | 66 |
| | Milk, whole fresh sheep | 23 | 30 | 41 |
| | Meat, cattle | 109 | 186 | 137 |
| | Meat, sheep | 16.3 | 16.4 | 11.4 |
| | Meat, camel | 275 | 271 | 219 |
| Crops (MT/ha) | Sorghum | 0.66 | 0.76 | 1.4 |
| | Groundnuts, with shell | 0.80 | 0.89 | 0.79 |
| | Onion, dry | 18 | 26 | 8 |
| | Millet | 0.40 | 0.40 | 1.3 |
| | Bananas | 24 | 33 | 8 |
| | Mangoes, mangosteens, guavas | 21 | 14 | 12 |
| | Tomatoes | 13.7 | 39 | 13.4 |
| | Sesame seed | 0.26 | 0.27 | 0.75 |
| | Wheat | 2.5 | 2.6 | 2.5 |

*Source: FAO Stat and World Bank value chain analysisreport (2020).*

**There is also considerable scope for increasing processing for several strategic products** (see value chain analysis below), which would create much greater value addition and jobs. Important prospects lie in gum arabic, for which the country has a natural advantage. In addition, exports of organic agricultural products point to the existence of unused potential that could be exploited.

## Challenges

**For agriculture to become a lever for Sudan's economic transformation, the government needs to boldly address a number of specific challenges** that constrain its development at each stage of the agro-value system, from production, aggregation, processing, and packaging to consumption and the enabling environment in which all stakeholders—from farmers to agribusinesses—operate.[1]

**Upstream, obstacles in accessing water, land and pasture, and inputs and in adopting innovative production practices undermine productivity.** Competition over land has long been a source of tension among pastoralists and between pastoralists and farmers. The scarcity of these resources has been aggravated by the expansion of investments in mechanized farming and the dramatic impact of climate change, which exacerbates an already fragile and challenging environment. The lack of an efficient land market to provide adequate protection for land users is a major constraint, hindering land consolidation efforts and investment. Access to affordable inputs—such as seeds, fertilizers, and pesticides for crop production—is low. The provision of technical and advisory services (such as veterinary services and feed supplements) to livestock farmers is even more constrained, as 85 percent of animal resources depend on pastoral production. Production practices remain archaic for most smallholder farmers and pastoralists, who depend on unpredictable weather conditions. Traditional farming is starved of adequate research and extension services, which are vital for improving crop production and herd management. Between 2011 and 2017 less then 5 percent of budgeted spending on R&D for ministries in charge of agriculture was used (World Bank 2020d). The absence of a veterinary control system often results in the inability to contain frequent outbreaks of infectious diseases.

**Midstream, domestic trade is unorganized and agroprocessing very limited, while postharvest handling is poor.** Wholesale markets across the country lack adequate infrastructure such as storage and packaging facilities. A World Bank (2019a) study ranked Sudan 61st of 62 countries in terms of access to markets for agricultural products. Formal agroindustry is limited to selected commodities such as sugar and flour. Private sector activities are mostly limited to primary agroprocessing. Similarly, meat processing is limited by weak services for transportation, storage and cooling, packaging, and technology.

**Downstream, distribution and marketing are hampered by the lack of storage facilities, costly transport and logistics services, and deficient capacity to control quality and food safety.** Apart from large commercial farms, most growers lack access to storage facilities that could enable them to minimize postharvest losses and wait for better prices to smooth their incomes. The lack of cold chain infrastructure impedes the development of key value chains such as meat, dairy, and horticulture. The 2014 DTIS study confirms that Sudan's inefficient marketing and transport network and regulatory restrictions undermine agricultural performance. Sudan ranks 130th of 167 countries on logistics performance (World Bank 2019a). The cost of logistics is estimated at 25-35 percent of GDP, compared with 15-20 percent for low- and lower-middle-income countries. Better infrastructure and intermodal services are needed to cut transport costs and increase the reliability of supply. Moreover, Sudan lacks expertise in quality and food safety issues, which are dominant concerns of consumers and prerequisites for developing high-value exports in developed markets.

**The business environment and economic policies are not conducive to fostering productivity and encouraging investment in agriculture.** Trade taxation policies create disincentives for exporters. Limited access to digital technology

[1] This presentation of agricultural challenges is based on World Bank (2020d).

prevents farmers from acquiring price and market information and accessing online extension services. Electricity shortages are a major obstacle to the development of agricultural value chains. Farmers and microentrepreneurs in traditional rainfed areas that produce horticulture, dairy, livestock, gum arabic, and sesame seeds lack access to credit, and most rely on local moneylenders and traders who charge high interest rates. The government has prioritized finance for selected crops in irrigated areas (sorghum, wheat, cotton), leaving the rest of the agriculture sector unserved.

## Promising Agriculture Value Chains

**Sudan has several promising agriculture value chains that could have huge economic and development impacts.** Most of these value chains were identified in recent studies by the World Bank and European Union.

### *Cereal crops*

**The best ways to foster value chains for cereal crops would be to improve productivity, storage, processing, and packaging.** Substantial efforts are needed to improve existing food recipes and develop new ones to increase the demand for these crops, particularly sorghum and millet. Direct beneficiaries are rural households and small entrepreneurs that would benefit from capacity building and access to credit.

### *Oilseeds*

**Sudan's main oilseed crops are sesame, groundnut, and sunflower.** Groundnut production, which accounts for 80 percent of oilseeds, is also the most variable. Sudan is one of the world's top five producers of peanuts, accounting for 14 percent of global production in 2014. The sesame value chain offers potential for productivity enhancement, value addition, empowerment of small-scale farmers, and employment generation. In 2015 Sudan was the second-largest exporter of sesame seeds (after India) and exported 296,000 tons of the seed to more than 50 countries—with Egypt, the Republic of Korea, Saudi Arabia, Syria, Lebanon, and China topping the list. Yet yields are relatively low and fluctuating due to inappropriate use of pesticides, lack of quality seeds, and poor agricultural practices. Though Sudan's sesame seeds are of high quality, exporters sell them at discounted prices because they fail to access premium markets—in part due to noncompliance with sanitary and phytosanitary standards. Nearly all the oil produced from these three crops is destined for the domestic market. Organic certification and branding of the sesame value chain could present long-term investment opportunities.

### *Hibiscus and watermelons*

**Hibiscus and watermelons are mainly grown in Kordofan and Darfur, and make a minor contribution to GDP.** Yet they are highly promising cash and export crops. Hibiscus is commonly used as a beverage, requires limited inputs, and generates income, especially for women farmers.

### *Cotton*

**Cotton is a pro-poor crop produced by small farmers, with sizable forward and backward links.** Nearly all cotton production comes from the irrigated sector and is produced mainly for fiber. More than 85 of the cotton lint produced is exported, though Sudan has lost much of its competitiveness in the international cotton market. The main challenges facing the cotton industry are low productivity and fluctuating production, problematic lint quality (due to pests), and improper preparation. After the breakup of the monopolized marketing of cotton by the Sudan Cotton Company, there was a remarkable recovery in cotton yields, cultivated area, and production in 2010-14.

### *Horticulture*

**Sudan's climatic conditions favor the production of a wide range of fruits,** including tropical fruits but also many temperate zone vegetable crops attractive for export to Middle Eastern and European markets. Among the main fruits and vegetables exported are mangoes, grapefruit, bananas, melons, lemons, limes, green beans, onions, and sweet peppers. Available production data indicate that productivity levels of fruits and vegetables are about twice the levels elsewhere in Sub-Saharan Africa. The main production constraints are related to land ownership (since fruit production requires long-term investment) and poor harvesting practices. Export earnings from horticulture remain modest, mainly due

to poor handling and shipping facilities. Delays in shipment, combined with inadequate storage facilities and lack of basic refrigeration at airports, render produce of low quality and unfit for export. In addition, the lack of traceability and certification systems prevent Sudan from penetrating advanced markets. This value chain presents high investment opportunities to enhance productivity and processing and to develop an export supply chain to meet increasing domestic demand and tap into export markets. This would have a multiplier effect, creating direct and indirect jobs and enhancing food security and nutritional value.

### *Agroforestry food products*

**Sustainable exploitation of agroforestry products holds significant potential for additional income for rural families, especially for women and youth.** Better preservation, processing, and marketing of agroforestry products is key to raising rural incomes and diversification. Sudan has a natural advantage in gum arabic, for which it set quality standards for the global market. Exports have grown since the closure of the parastatal monopoly in 2009 and tax cuts. Production of gum arabic involves many smallholders. The main constraints are limited R&D, lack of qualified extension workers, and inadequate technology. The gum arabic chain offers considerable potential for enhancing productivity, expanding processing and value added—notably in spray-dried powder—and increasing export earnings. This would create jobs for youth and improve the livelihoods of poor farmers. In addition, the environmentally friendly development of the gum belt could help combat desertification and climate change adaptation in one of the most vulnerable regions of Sudan.

### *Livestock*

**Sudan's livestock exports consist of live animals, meat, hides, and skins.** Such exports are small given the size of the national herd. Live sheep are the predominant live animal, and cattle and goats are very much underused for export both as live animals and as meat. Sudan's exports of raw hides and skins have been lagging far behind the export of live animals and meat in terms of both volume and value. Small traders and brokers are the main livestock supply actors. Small traders play an assembly role but many sell directly to exporters, while brokers operate throughout the value chain. The main problems facing the production of live animals include the low productivity of local breeds, degradation of rangelands (exacerbated by the conflicts over land between pastoral groups and farmers), lack of and low quality of feed, and limited veterinary services. Other obstacles along the chain include high taxes and fees, high transaction costs, limited knowledge and information, absence of coordination and links among supply chain agents, and a shortage of animal processing facilities. Given that livestock provides livelihoods to more than half of the Sudanese population (mainly pastoralist communities), addressing these challenges to develop the domestic livestock market and the meat export value chain could have a major development impact given the sizable multiplier effects on the economy.

### *Dairy*

**Dairy production contributes to the livelihoods of many Sudanese,** mostly through nomadic pastoral and semi-nomadic agropastoral systems. Such production is one of the most important activities carried out by women. Though milk production is increasing, Sudan still imports milk to meet domestic demand because milk yields are well below its peers (Egypt and Kenya) and 98 percent remains unprocessed and is sold loose. The main production constraints include the low milk yields of traditional breeds, low feed supply, low mechanization, lack of milking and cooling facilities, and lack of vaccination and disease control. Weak enforcement of compliance with food quality and safety standards have also hindered the development of the dairy sector. The dairy value chain presents good opportunities for improving dairy production and processing, which would raise the incomes of poor households, increase nutrition security, lower the dairy import bill, and create employment opportunities along the chain.

## 4.3 Industry

### Overview

**Sudan's manufacturing sector is small, and its share in the national economy in terms of real value added and employment has been declining.** The share of Sudan's industrial sector plunged from 11 percent of GDP in 2010 to

3 percent in 2016 due to internal and external shocks. Still, Sudan's performance—as measured by manufacturing value added per capita—is above the Sub-Saharan median.

**The bulk of manufacturing involves processing of raw materials, mostly by small and medium-size enterprises (SMEs).** The industry mainly relies on raw materials from food and nonfood crops, vegetables, fruits, fisheries, forestry products, and fodder crops. The food sector accounts for 70 percent of manufacturing and about 35 percent of large enterprises. The potential of the nonfood sector—clothing, textiles, footwear, paper, pulp, and furniture—remains largely unexploited.

**Various challenges have kept industry from achieving its potential production capacity.** Development of the food industry is stalled by a lack of coordination in policymaking and program implementation, inadequate infrastructure, and seasonality of raw materials and inputs (AfDB 2016). These challenges have resulted in growing imports of food products and beverages, reaching $2.4 billion in 2013 from $830 million in 2005. Meanwhile, growth in processed food and beverage exports has remained modest, at less than $50 million in 2013. Similarly, performance in the nonfood sub-sector, performance has been weak, and many firms have ceased operations due to high operating costs and failure to compete in regional and global markets (AfDB 2018a). Many local companies cannot compete with imports, which are produced at lower cost and of superior quality.

## Constraints

**Sudan's 25-year National Strategy (2007-31) prioritizes industrial development, which has been identified as one of the country's leading sectors.** But it lacks a comprehensive, detailed way to support this goal. Instead, the strategy's five-year plans list the sectors and challenges to be addressed in phases of the 25-year period. Furthermore, the five-year plan objectives are not connected to any policy measures such as taxes, skills, research, innovation, and access to finance—all of which are needed for coherent industrial development. Similarly, there is no clear implementation framework and budgetary provisions to achieve the stated industrial development objectives. To promote industrial development, the government needs to formulate a robust strategic plan that should be targeted at addressing underlying constraints on industrial development:

- **Weaknesses in business and trade logistics.** The regulatory environment is not conducive to the development of a robust industrial sector. Sudan ranked 171st of 190 countries in the World Bank's Doing Business 2020 report., with the weakest areas being trading across borders (185th), protecting minority investors (168th), paying taxes (163rd), and getting credit (161st). Likewise, at 121st, Sudan lags the lower-middle-income country average and Egypt (67th) on the logistics performance index. Hence there is a lot of room for improvement, especially in credit access, customs clearance, and timeliness of logistics services delivery.

- **Weaknesses in infrastructure development.** Sudan's infrastructure development index is low, ranking 34th of 54 countries in 2020. The country ranks 34th in transport, 21st in electricity, and 27th in water and sanitation. Despite the absence of a legal framework, Sudan has experience with financing infrastructure projects through public-private partnerships (PPPs) in various sectors. That includes ICT (Kanartel) in 2004, the Juba Port concession in 2006, water and sewerage (Omdurman water treatment Plant) in 2007, and the South Port container terminal concession at Port Sudan in 2019. In 2017 the government and the World Bank Group launched the nation's first public-private partnership initiative, which aims to develop a new PPP policy and strategy.

- **Lack of access to finance.** Sudan's financial sector is underdeveloped relative to regional peers, despite considerable growth in recent years. Financial inter-mediation remains at a nascent stage, with firms often struggling to obtain funding from banks and the capital market. This is partly due to a lack of supporting financial instruments such as collateral legislation, creditor rights, reliable information, and credit information infrastructure. These weaknesses affect SMEs more than larger firms. The cost of borrowing is also high due to high credit risks and low competition amongst banks. Sudan ranked 176th of 190 countries in terms of getting credit in Doing Business 2020. Equity and foreign exchange markets are shallow, and nonbank financial institutions are few. Lack of skilled

labor for industrial development. This problem is even more acute outside Khartoum, where educated workers are concentrated. Though there is large demand for skilled workers by both the formal and informal sectors, unemployment has remained around 15 percent for more than two decades. AfDB (2015) cites the low levels of schooling and inadequate skills acquired from technical and vocational education and training (TVET) and tertiary education as one of the main causes of unemployment among young people. Sudan has been experiencing a declining quality of education despite the growing number of university graduates since the 2000s. University graduates struggle to get jobs, suggesting a low level of job creation, a mismatch between skills and labor market demands, or both. Sudan also suffers from brain drain, as highly skilled workers migrate abroad in search of better-paying jobs. After South Sudan's secession in 2011, about 1.3 million Sudanese relocated to the Middle East and elsewhere.

- **Lack of foreign direct investment (FDI).** The share of FDI going to manufacturing has been small, accounting for 4 percent of the total in 2017. Most FDI has been gone to fossil fuels, which accounted for 65 percent; construction accounted for 3 percent. FDI has been limited by Sudan's unfavorable investment climate. Yet in 2018, FDI increased 7 percent, primarily targeting oil and gas exploration and agriculture. Small investment inflows were also witnessed in nontraditional sectors, such as the commencement of operations of a foreign ride-sharing company in Khartoum.

## 4.4 Regional Integration and Trade

**Fostering regional integration could help propel growth, promote economic diversification, and expand regional trade—**provided that critical regional infrastructure gaps are filled and "soft" policy and regulatory reforms are addressed. Furthermore, several fragilities and environmental risks with cross-border dimensions could be addressed through collective action by multiple countries.

**Sudan's strategic location could be harnessed for positive development outcomes in terms of trade, logistics services, tourism, water management, and power trade.** Sudan could position itself as a regional transit hub for four of its immediate landlocked neighbors (Central African Republic, Chad, Ethiopia, South Sudan). As Sudan borders the Red Sea, it could also rip benefits from its proximity to this strategic trade route linking Africa, the Gulf, East Asia, and Europe since 8 percent of global seaborne trade goes through this route. Regional cooperation is also key for Sudan in the management of transboundary water resources as it shares the Nile with countries such as Egypt, Ethiopia, and Uganda. Similarly, increasing the use of interconnections through the EAPP (notably with Egypt and Ethiopia) could help the country save on energy generation in the short run.

**The lifting of international economic sanctions on and delisting of Sudan from the SSTL provide a window of opportunity to end the country's two decades of isolation and herald its reintegration with the global economy and regional economies through investment and trade.** The sanctions stifled business and the country's engagement in the global and regional economies. Diaspora remittances, an important source of investment in the Horn of Africa, were also impeded as foreign-based Sudanese resorted to risky, informal, high-cost, and time-consuming physical channels for transferring cash to their families. Trade finance became prohibitively high because financial institutions shunned Sudanese transactions. Against this backdrop, the lifting of sanctions presents an opportunity for Sudan to implement reforms to strengthen competitiveness and boost the country's regional integration standing.

### Institutional Framework for Regional Integration and Trade Development

**Sudan is a member of several regional trading arrangements.** They include the Common Market for Eastern and Southern Africa (COMESA), which covers 21 countries, and Sudan is one of 15 COMESA countries implementing the free trade area initiative. Sudan is also a member of the Tripartite Free Trade Area (TTFA), by virtual of its COMESA membership, the Intergovernmental Authority on Development (IGAD), the Greater Arab Free Trade Area (GAFTA), the Community of Sahel Saharan States (CEN-SAD), and the African Continental Free Trade Area (AfCFTA). But Sudan has not ratified some of the agreements, notably the AfCFTA and TTFA.

**Sudan has not yet reaped the full benefits of its membership in COMESA.** During 2014-17 trade with COMESA

accounted for, on average, 11 percent of Sudan's exports. Most went to Egypt (7 percent of Sudan's exports) and Kenya (1.2 percent). COMESA accounted for 8 percent of Sudan's imports during the same period, most of it with Egypt and less than 1 percent with Kenya.

**Through its IGAD membership, Sudan is expected to benefit from projects aimed at upgrading the Port Sudan Corridor and expanding the power interconnection transmission line with Ethiopia.** IGAD is preparing its Regional Infrastructure Master Plan (IRIMP), which identifies priority infrastructure projects for the region. One is to transform the Port Sudan Corridor from a multimodal corridor (currently consisting of road, rail, crude oil and petroleum pipelines, as well as trans-border power and ICT connections) to a fully-fledged logistics corridor by 2024 and to establish a Corridor Management Authority. The corridor has connections to South Sudan and other landlocked neighbors and a standard gauge railway to Ethiopia, for which both countries asked the Bank in 2018 to conduct a feasibility study. IRIMP has also prioritized the Ethiopia-Sudan 500-kilovolt Power Transmission Interconnector, estimated to cost $514 million.

**Sudan's AfCFTA membership could foster trade and provide impetus for reforms that will boost productivity and job creation and reduce poverty for the country.** The World Bank estimates that, by 2035, implementing the agreement could lift an additional 30 million people from extreme poverty and 68 million people from moderate poverty. Full implementation of the agreement could raise real income by 7 percent. The AfCFTA could also provide an anchor for long-term reforms and integration. Sudan stands to benefit from access to a large African market and diversify its narrow range of export markets. But Sudan's standing in a recent assessment of commitment and readiness to reap AfCFTA benefits was dismal, ranking 45th out of 54 countries.

**Participation in the Horn of Africa Initiative could enable Sudan to tap resources to support its regional integration priorities and tackle fragility issues** once its external debt arrears are cleared. The initiative also offers a platform for high-level cooperation and coordination of the region's integration priorities, with a focus on delivery.

## Trade Flows, External Competitiveness, Infrastructure Connectivity, and Financial Integration

**Sudan's trade is focused on a small number of export and import markets, which makes the country vulnerable to market disruptions.** *Doing Business 2020* ranked Sudan 185th of 190 countries on trading across borders. Trade with African countries is particularly limited, except with Egypt. In In 2019 Egypt was among Sudan's top five trade partners, ranking third on imports (7 percent) after China (35 percent) and India (16 percent). For exports, Egypt ranked fourth (8 percent) of after China (27 percent), Saudi Arabia, (21 percent), and India (17 percent). Minerals and fuels account for a third of Sudan's exports, followed by sesame seed, live animals, cotton, and gum arabic.

**Sudan's performance on regional integration fares poorly both within Africa and inside the above-mentioned regional groupings.** The Africa Regional Integration Index (ARII) monitors and evaluates economic integration among African countries. Countries are assessed on five areas: trade integration, regional infrastructure, productive integration, free movement of people, and macroeconomic integration. Sudan's low overall score results mainly from dismal performance on movement of people (0.02 versus a regional average of 0.39) and productive integration (0.25 versus 0.33; figure 4.6b). Sudan's 2019 regional integration in COMESA is third from bottom compared to the regional average (figure 4.6a). Even on trade integration, where Sudan had its highest score (0.36), it fell short of the COMESA average (0.45). Sudan also ranks low on its integration within IGAD, with a score of 0.26 versus an average score of 0.44, and next to last in CEN-SAD.

**Sudan needs to build infrastructure to better integrate its economy with neighboring countries and the rest of the world and to grasp global value chain opportunities.** Sudan's infrastructure development has had a predominantly national focus. Sudan has a low density of transport infrastructure relative to the rest of Africa. And it ranks 34$^{th}$ of 54 countries in the 2020 Africa Infrastructure Development Index (AIDI). Still, Sudan has shown a positive trend in the AIDI score, improving steadily from 11.20 in 2012 to 17.16 in

2020. With respect to maritime transport, Sudan has a natural gateway to the sea through Port Sudan, but the port performance is dire given capacity constraints, high costs, a,d long dwell times.

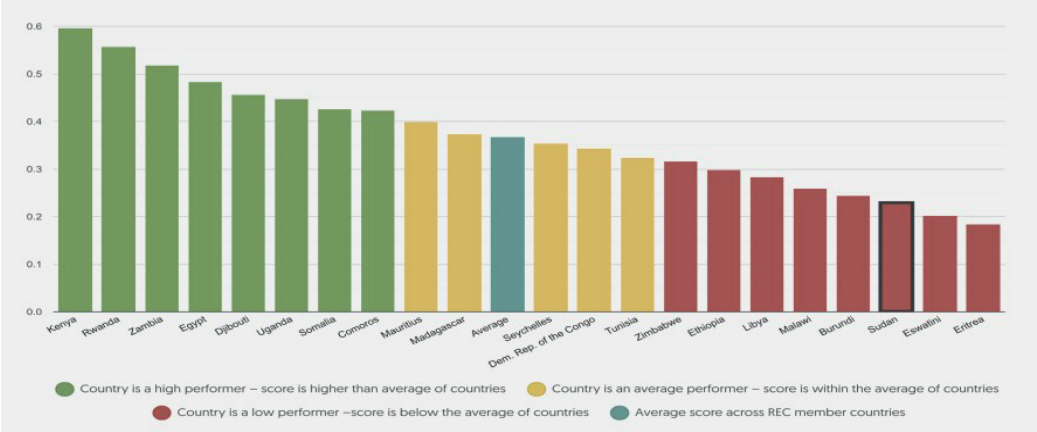
**Overall logistics performence in Sudan is low compared to peers and has even deteriorated over the last five years.** The World Bank Aggregated Logistics Performance Index (LPI) for 2012, 2014, 2016and 2018 assesses logistics performance across 167 countries. It places Sudan at position 130 (figure 4.6) with an LPI score of 2.4 which is closer to the bottom (Somalia, 2.0) han to the top (Germany, 4.19). The country's performance was weak across all LPI dimensions.

The World Bank Trade Diagnostic report recommended that Sudan complement infrastructure investments in transport with policy and regulatory interventions to better integrate logistics services. In particular, the report recommends improvements on the trade corridor between Port Sudan and Khartoum because it carries 90 percent of the cargo handled.

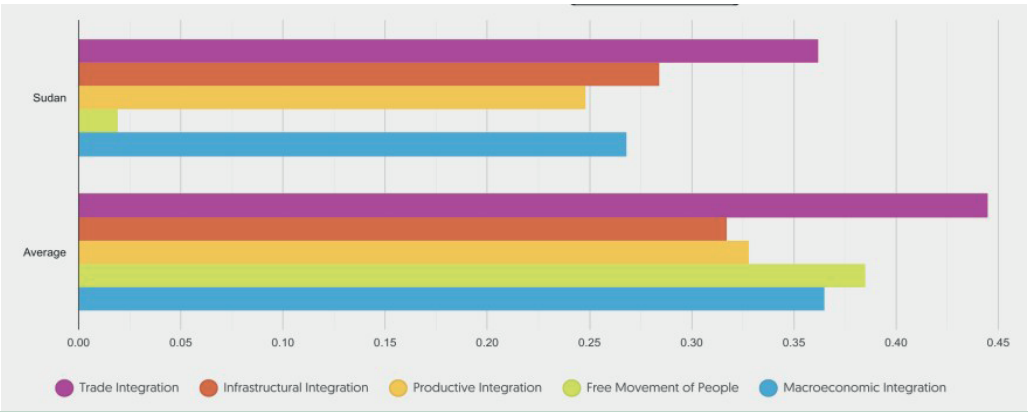
**Sudan's performance on financial integration has been constrained by the prolonged economic blockade.** As noted, international sanctions led to international and regional banks shying away from doing transactions with Sudanese entities. As a result, the cost of doing business on export and import trade financing became exceptionally high in Sudan.

**Figure 4.6: Sudan Ranking on Regional Integration within COMESA**

a. Overall




b. Along the five dimensions




*Source: https://www.integrate-africa.org/ranking/countries/Sudan/*

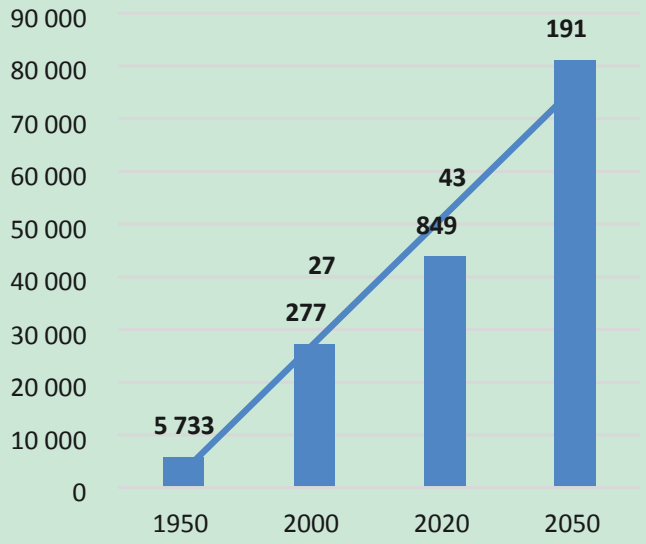
## 4.5 Social Sector

### Labor Market

**Sudan has a fast-growing population and a relatively high dependency ratio.** Sudan's population is growing by 2.4 percent a year (figure 4.7). Sudan's working-age population (15-64) represents 45 percent of the total population. The country's dependency ratio is estimated at 15.4 percent against a Sub-Saharan average of 18.3 percent.

**Sudan's labor force participation rate, at 50 percent,** is lower than the Sub-Saharan average of 61.4 percent. Thus, half of people of working age are unwilling or unable to work, discouraged by the scarcity of opportunities on the labor market. Reflecting Sudan's low ranking on gender parity, labor participation is also unequal across all age groups. There is a striking difference in gender participation, with male participation at slightly over 70 percent—more than twice that of females. This inequality partly reflects labor laws and cultural norms that prefer male workers and confine females (viewed as less productive) to domestic tasks. This pool of nonparticipant workers represents both an opportunity and a challenge for Sudan.

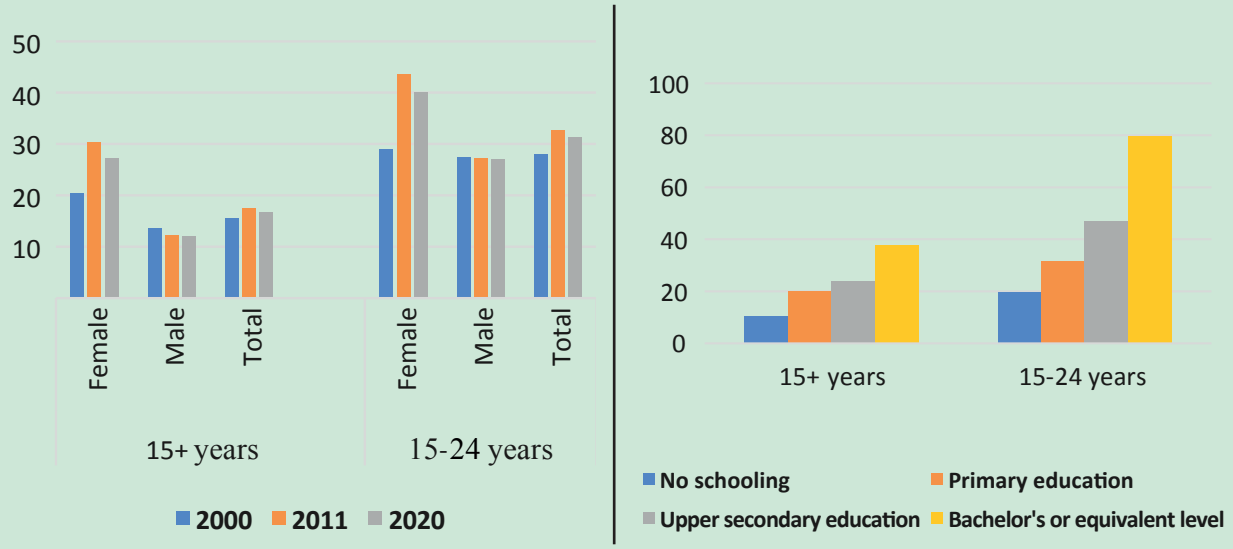
**Figure 4.7: Population growth in Sudan, 1950-2050**




*Source: World Population Prospects (various years).*

**Sudan's unemployment rate, which has been around 15 percent for more than two decades, is higher for women and youth, reflecting low job creation and labor market skills mismatches.** Unemployment is higher for women, and the gap more than doubled between 2000 and 2020, from 6.9 to 15 percentage points (figure 4.8). Youth unemployment was above 30 percent in 2020—nearly three times twice the average for Sub-Saharan Africa. At 40 percent, unemployment for young women was much higher than for young men (27 percent) in 2020. This disparity partly reflects the legacy of the oil boom years, which neglected the creation of jobs in productive sectors such as agriculture and manufacturing. The skills mismatch between young graduates and labor market demands also explains high unemployment among the young. The content of training does not match the needs of employers, and graduates cannot apply knowledge from school to the work environment.

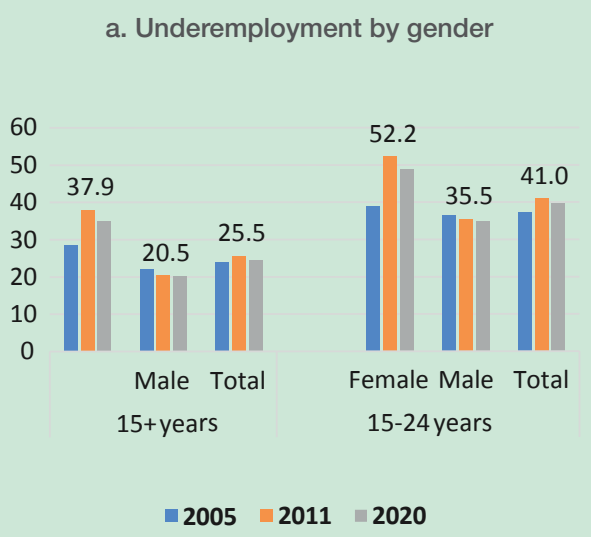
**Figure 4.8: Unemployment in Sudan by age, gender, and education level**

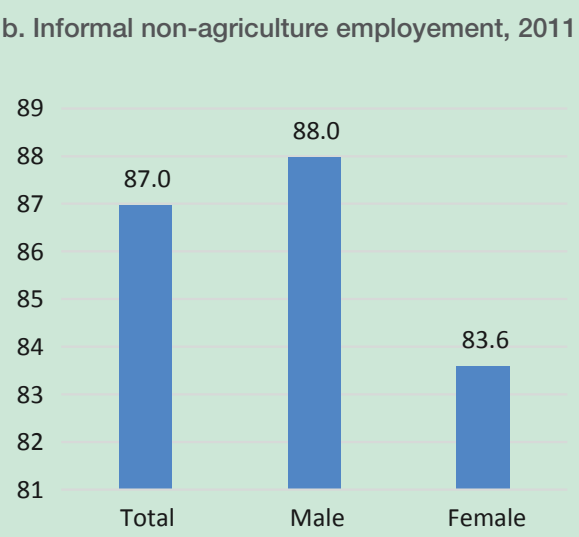



*Source: ILO stat.*

**Given the pervasive underemployment affecting a growing number of youth and women, specific labor policies are required to strengthen the capacity of the informal sector, which is absorbing a large part of the workforce.** A quarter of the population aged 15 years or more was reported as underemployed in 2020, and the situation facing youth and women is much worse, at 40 and 35 percent in 2020 (figure 4.9). As a result of the paucity of wage employment opportunities, most unemployed youth and women are primarily engaged in self-employment, household activities, street-vending, and other informal economic activities. Most young workers start working in the informal sector, and many remain trapped due to lack of opportunities in the formal economy. In 2011 the informal sector accounted for 87 percent of nonagricultural employment, and that share is only likely to have increased since then. Workers in the informal sector are more prone to poverty and vulnerability because their activities are largely less productive and more exposed to shocks. Well designed-labor market policies are needed to increase the capacity of the informal sector. One way to enhance the productivity of informal activities is to introduce digital technology that can enlarge the market, cut transaction costs, and increase effectiveness.

**Figure 4.9: Unemployment and the Informal Market**



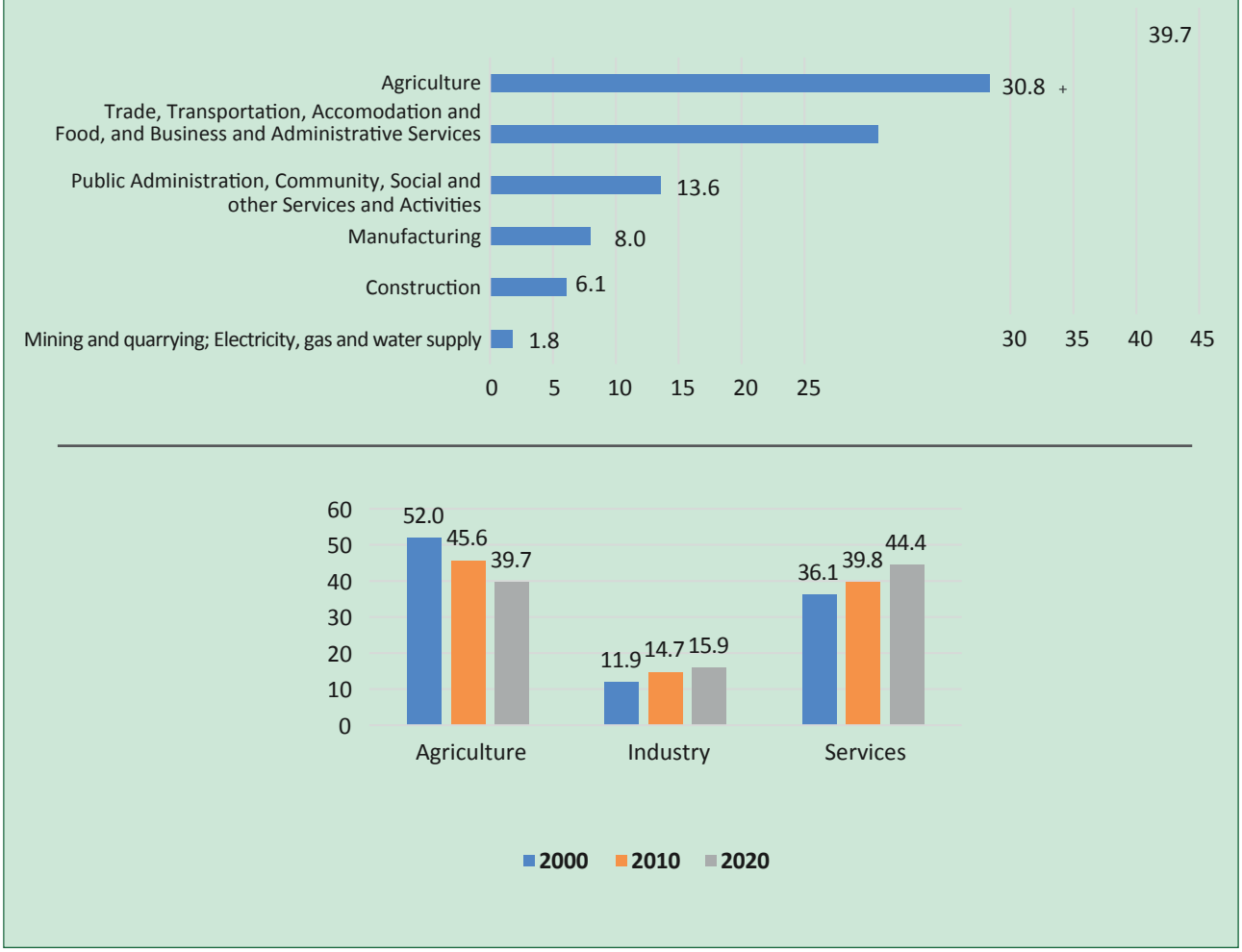




*Source: ILO stat.*

**Though agriculture remains the main source of employment in Sudan, its share has started to decrease—mostly in favor of services** (figure 4.10). Manufacturing employs only 8 percent of the working population. Structural transformation of the economy would need to direct jobs toward the productive sectors. As noted, well-designed policies and support could boost the development of agribusiness value chains where Sudan has high potential. This development implies improving the productivity of farmers and gradually moving up the value chain to create more value-added and productive jobs in industry and services.

**Though SMEs create the bulk of jobs, they often fail to grow to meet the ever-growing labor supply.** SMEs account for 92 percent of enterprises and 64 percent of jobs. The creation of new wage jobs falls far short of absorbing all labor market entrants, reflecting the weak dynamism of firms and the poor economic environment.

**Figure 4.10: Distribution of employment by sector in Sudan, 2020**




*Source: ILO stat.*

## Education

**Despite progress on basic education, including preschooling, Sudan's education system faces many challenges in terms of access and retention, quality of learning, and equity, reflecting insufficient funding and poor management.** COVID-19 has further disrupted learning, threatening the much-needed skill formation of young people, largely for lack of human and physical infrastructure to support digital learning during lockdowns.

**Sudan remains behind schedule in achieving universal basic education.** Low access and retention, combined with large disparities, undercut the country's aspiration to this Sustainable Development Goal. Sudan's effort to enable access for a larger cohort of pupils over the last decade has failed to match high population growth. As a result, the gross enrollment rate has stagnated around 73 percent, well below peer countries.

**Gender, regional, and socioeconomic disparities are widespread.** The primary gross enrollment rate remains as low as 30 percent in regions like East Darfur. The gender gap in school attendance is explained by lower attendance of girls in rural areas, where boys' enrollment is six percentage points higher than for girls. Dropouts are also a serious concern. In

2016/17 gross intake in grade 1 was 82 percent, but it dropped to 51 percent in grade 8 and to 30 percent by the third grade of secondary education. A child who starts school at age 4 can expect to complete only 7.1 years of schooling by her 18th birthday. But there are widening inequities between the poorest and richest quintiles. While 81 percent of children in the poorest quintile enroll in grade 1, only 34 percent finish primary school and 9 percent proceed to secondary. By contrast, children from the richest quintile universally enroll in grade 1, 94 percent complete primary school, and 77 percent reach secondary. As a result, Sudan has one of the highest numbers of out-of-school students among fragile countries, with an estimated 3.6 million children aged 5-13, half of whom have never attended school. According to NHBPS 2014/15, the main reasons for out-of-school children between the ages of 6 and 15 are high costs, distance to schools, the need to support the family, and cultural reasons for girls' lack of attendance in secondary schools. Education opportunities for nomads and internally displaced persons present specific challenges.

**Student learning remains very low, partly reflecting the poor learning environment.** The 2017 National Learning Assessment of grade 3 pupils indicated that 38 percent could not read at all; only 52 and 43 percent of students were able to perform single-digit addition and subtraction. Students score 380 on a scale where 625 represents advanced attainment and 300 minimum attainment. Hence, factoring in what children learn, expected years of schooling is only 4.3 years. Sudan fares poorly compared to pupils from other Arabic countries. Learning is adversely affected by a shortage of teaching and learning materials, the poor condition of school infrastructure, and lack of sanitation facilities. Incomplete primary schools increase the risk of noncompletion of primary school and poor learning.

**The small budget that Sudan allocates to education, among the lowest in Africa, contributes to the weak outcomes in access and quality.** Sudan allocated 11 percent of its budget to education in 2009-17—well below the global target of 20 percent and what its peers are spending. Despite a significant increase in funding in nominal terms, spending as a percentage of GDP halved from 2.4 percent in 2009 to 1.2 percent in 2017. More than 90 percent of spending is devoted to recurrent costs. Teacher training has fallen behind, resulting in a deterioration in the quality of teachers, with an estimated half of schoolteachers unqualified (AfDB 2016). The lack of human and financial resources at the state and local levels impedes effective decentralization in education. The federal government has more influence on salary determinations and teacher employment, the largest items in state education budgets, and localities lack fiscal autonomy.

**Hence, households face high out-of-pocket payments to cover school running costs.** Such payments averaged 16 percent of household spending in 2016/17. So, though basic education is free in principle, in practice, households contribute greatly to education costs by paying for goods and services, capital costs, and salaries of volunteer teachers. This has significant repercussions on equity in access to education since poor rural education costs represent a larger share of expenditure for poor rural households than for nonpoor rural households. Growing inflation further jeopardizes the ability of many poor households to continue to pay for education services for their children.

**TVET faces many challenges to be responsive to market needs.** The TVET system absorbs graduates from basic education, but with far lower enrollments. Enrollments in technical schools have been fall for 20 years. Graduates of basic education are 20 times more likely to enroll in academic than technical secondary schools. The institutional and governance framework for TVET is complex and needs streamlining. Two national councils have no executive power and are often overruled by the main ministries. TVET is also underfunded and faces serious physical and human infrastructure gaps. Program links with industry remain weak. urriculums, which have not been reviewed for over a decade, are not responsive to the needs of the labor market. Sudan also lacks a national qualifications framework to facilitate interlinkages and the equivalency system within and between education systems.

**The highly unregulated, undocumented informal apprenticeship also needs attention from policymakers.** A large share of apprentices are under 15 (the legal working age limit) and work long hours with no formal contract for very low pay. In the absence of regulation, training quality is uncertain and the technology level imparted is often low. Some apprentices are employed simply as cheap labor and do not end up developing the skills required.

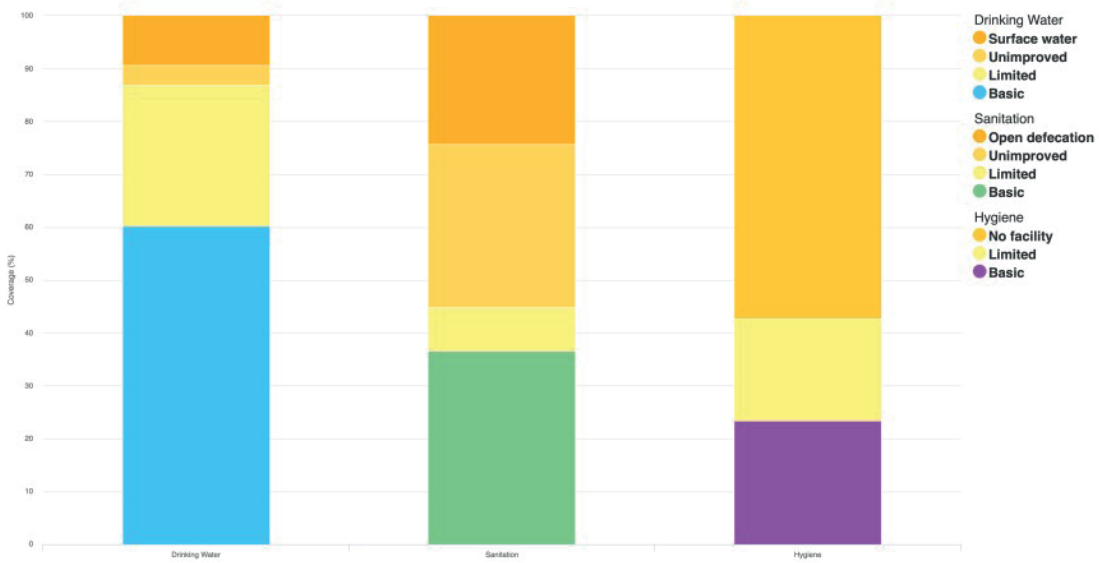
**The main challenge for Sudan's higher education is to improve its quality and relevance to respond to labor market needs.** Since the 1990s tertiary education has expanded rapidly, with the number of public universities growing from 4 to 30 in addition to six private universities. Still, Sudan lags its neighboring peers with a tertiary gross enrollment ratio estimated at 17 percent. Increases in university enrollments have not been met with equal investments in physical and human infrastructure, leading to a decline in quality. Universities in Sudan are characterized by low quality in teaching and research and an increasing unemployment of graduates, most of whom are absorbed in government and underemployed. Because public universities are underfunded, they rely on cost sharing schemes, which further exacerbate inequities as poor people cannot afford these costs.

**Sudan faces a large skills gap and demand-supply mismatch.** Sudan has an unbalanced labor force structure, with many overskilled and underskilled workers alongside few middle-skilled workers (such as skilled laborers and technicians), which TVET institutions should be to produce at scale. Since demand projections for middle-skilled workers exceeds their supply, Sudan need to scale up the supply of middle-level workers and equip them with relevant skills for the job market.

## Water and Sanitation

**Water, Sanitation and Hygiene (WASH) is critical for improved health and socio-economic outcome.** For many parts of Sudan, sustainable water and sanitation service delivery is a critical factor in avoiding inter and intra state conflicts over natural ressources between farmers and pastoralists. Water and sanitation services also contribute to greater gender equality, social cohesion, and improved social services such as increase in school attendance and reductions in water related diseases. In addition, improved water infrastructure and services are crucial for building resilient societies in the face of increasing climate risks and otherwise low adaptive capacities against them. Furthermore, global/regional economic growth, and food security demand, particularly in the Arab and Gulf countries, is leading to an increased demand for agricultural land and crop production, which contribute to tap into water resources.

**Figure 4.11: Coverage of WASH indicators in 2017**

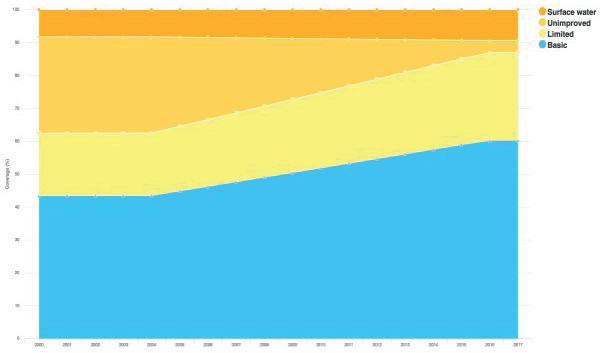



*Source: WHO/UNICEF database.*

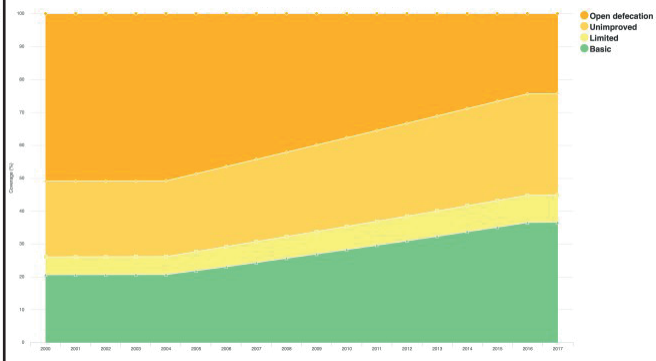
**Though Sudan has made some progress in reducing WASH deprivation, notably in lessening open defecation, the country lags far behind the Sustainable Develop Goals.** Only 60 percent of the population has access to an improved source of drinking water (74 percent in urban and 53 percent in rural areas) while 37 percent have access to basic sanitation (60 percent in urban and 24 percent in rural areas. Access to improved water supply increased 17 percentage points between 2000 and 2017 (figure 4.12a). Yet, 40 percent of the population still uses water sources beyond 30 minutes' walk or unsecured and contaminated water sources. Ending open defecation is a top priority for reducing global inequalities in WASH. Over 2000-17, Sudan reduced open defecation by 27 points (figure 4.12b). Still, only 36 percent of the population has access to basic sanitation services. Furthermore, more than 57 percent of the population has no handwashing facilities at home, placing Sudan among the 19 worst countries in the world.

**Figure 4.12: progress in Meeting WASH SDG - 2000-2017**

a. Household data - Drinking Water - Sudan - Service Levels



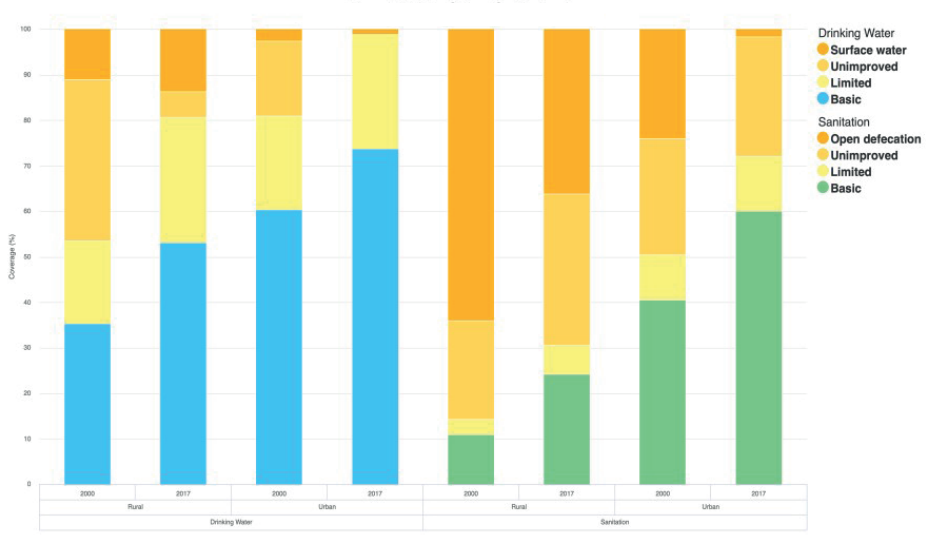

b. Household data - Sanitation - Service Levels




*Source: WHO/UNICEF database.*

**Disparities in access to drinking water and sanitation between rural and urban areas remain pronounced, with little to no progress made to bridge the gap.** Between 2000 and 2017, the gap in access to basic water services between rural and urban dwellers only slightly decreased from 25 to 20.5 percentage points while the gap in access to sanitation widen from 24 to 36 percentage points. Only half of the rural population (53 percent) have access to safe drinking water. What is even more worrisome is that the percentage of households using surface water (13 percent) has increased by 2 points in rural areas. The low access level to drinking water in the urban sector (73.7 percent) is also worrying. Only one in four rural dwellers have access to sanitation.

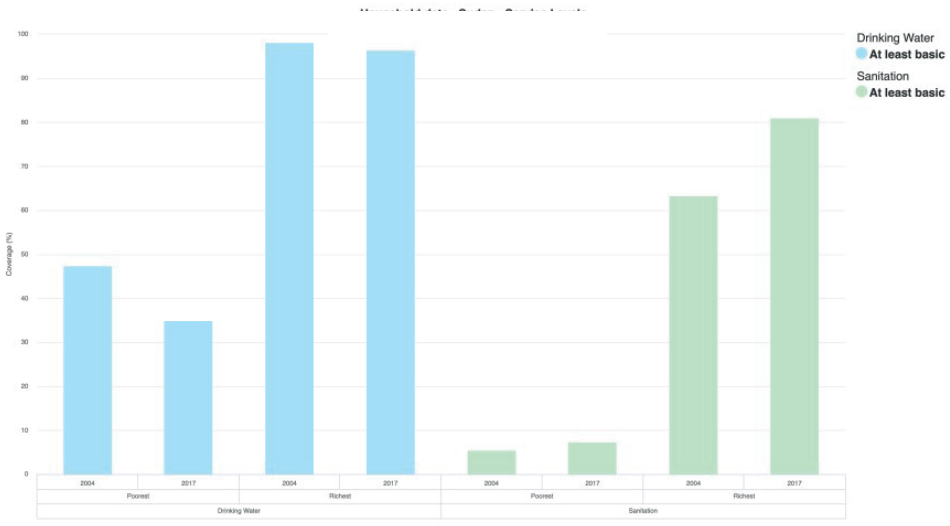
**Figure 4.13: Gaps in access to drinking water / sanitation in rural/urban areas 2000-17**




*Source: WHO/UNICEF database.*

**Disparities between consumption quintiles remain very large, and, alarmingly, the gap in basic service coverage between the richest and poorest quintiles has widened.** The gap in access to basic drinking water between the richest and poorest has increased by 10 percentage points from 51 percent to 61 percent. Water coverage among the richest quintile is almost three times as high (2.8 times) as coverage among the poorest quintiles. This is mainly due to the deterioration of access to water of the poorest. In 2017, only one out of three people among the poorest had access to safe drinking water. Regarding sanitation, the gap between the richest and poorest quintiles has also widened from 58 percentage points to 73 percentage points. Only 7.4 percent of the poorest have access to basic sanitation versus 81 percent for the richest quintile (Figure 4.14).

**Figure 4.14: Gaps in access to basic drinking water and sanitation for the poorest and richest 2004-17**




*Source: WHO/UNICEF database.*

**Access to water, sanitation, and hygiene services—including handwashing—is also vital in schools and healthcare facilities.** Schools are a place where good hygiene habits can be learned, and risk of illness mitigated if children can wash their hands. Three-quarters of Sudanese schools have no access to water for cleaning hands. In hospitals the availability of clean water for cleaning and washing hands also remains challenging. Waste management is also a big problem because most infectious hazardous waste is mixed with general waste and disposed of in municipal waste landfills.

**Efforts to improve WASH face many institutional challenges.** Institutional capacity in the water and sanitation sector is weak and varies by state. The main challenges include inadequate funding, limited implementation capacity, an absence of approved water and sanitation policies and strategies, prolonged emergency services, and unclear delineation of mandates among sector institutions.

**The government recognizes the importance of good water and sanitation, yet its efforts are lagging.** The Government Quarter Century Strategic Plan (2007-31) aims at achieving 50 liters per capita per day in rural areas and 150 liters per capita per day in urban areas, in addition to full coverage for schools and public health centers. Recently, the government aligned its ambitions with the Sustainable Development Goals. The Zero Thirst Program aimed to provides safe water supply to all Sudanese within an accessible distance by 2020. The draft WASH Policy aims to provide equitable and sustainable water and sanitation services for urban and rural areas.

## Health and Nutrition

**Although progress has been made on improving health outcomes, Sudan continues to grapple with a high disease burden.** The country has one of the lowest HIV prevalence rates (0.2 percent) in East Africa. Under-five child mortality was halved from 131 per 1,000 in 1990 to 60 per 1,000 in 2018—but that remains more than twice as the Sustainable Development Goal target of 25 per 1,000. About 78 percent of women deliver in the care of a skilled birth attendant, compared with the 55 percent average for East Africa. Still, the maternal mortality ratio, though lower than the East African average (434 per 100,000), remains high: 295 women per 100,000 die from pregnancy-related causes, far above the SDG target of 70 by 2030. The fertility rate remains high at 4.4. In 2019 only 17 percent of women used modern contraception, less than half the average for East Africa (42 percent). Malnutrition continues to be a daunting challenge. As of 2014, four out of every ten children under 5 are stunted, and hence at risk of lifelong cognitive and physical limitations, and 2 of every 10 children face chronic malnutrition. A large share of child mortality can be attributed to malnutrition.

**Noncommunicable diseases (NCDs) have been surging, representing over half of total deaths in 2015.** Sudan's epidemiological profile is typical of Sub-Saharan countries: infectious and parasitic diseases are huge causes of morbidity and mortality. Deaths from communicable diseases and maternal and nutrition conditions accounted for about one-third of total mortality. But recent data have revealed that NCDs are emerging as a public health concern due to change in socioeconomic and lifestyle conditions.

**Sudan faces large disparities in service coverage, with rural areas largely underserved and significant inequalities among states.** Only 13 percent of localities have a fully functioning health service delivery organizational structure. Moreover, the quality of care is deficient and biased toward higher-level facilities. Hence patients use secondary and tertiary health facilities as entry points instead of referral centers. Many health facilities face staff shortages, absenteeism, and drugs. The underlying challenges facing the health sector are constraining its performance.

**Decentralization has not improved the efficiency of health services.** The public health system is decentralized with three levels of governance: federal, state, and locality. Healthcare provision is devolved to states, with a share of the federal health consolidated budget transferred through block grants. Despite this reform, the federal level remains overwhelmed by implementation, while in most cases states take over responsibility for service provision with only minor involvement of localities. But states and localities receive limited budgets, which are usually not delivered on time or in full. In some states, many payments are not released to healthcare service providers.

**The sector is largely underfunded.** Only 4.7 percent of GDP is allocated to the health sector; private spending is the largest source of spending on health. Public spending on health represents only 9.8 percent of general government expenditure and 24 percent of total health expenditure, pointing to the limited fiscal space and low priority given to health in the budget. Given the sanctions imposed on Sudan, few international partners have invested in health. Hence the government has developed no clear resource mobilization strategy and guidelines for external financing. Most development partners are working using additional safeguards policies. The Global Fund and GAVI are being used as to strengthen the health system. Domestic private health spending constituted 69.3 percent of current health expenditure in 2018, while external funding represented 6.6 percent (table 4.4).

**Despite recent efforts to increase free and subsidized care for the vulnerable population, overreliance on out-of-pocket spending—the second highest in the world—hinders access to health services for poor people.** The National Health Insurance Fund (NHIF) covered two-thirds of the population in 2018, but its share of current health expenditure was only 6.7 percent. According to the 2012 Household Health Utilization and Expenditure Survey, out-of-pocket payments caused 7.8 percent of households to face catastrophic health expenditures, with 47 percent reporting adverse impacts on their income due to healthcare. The efficiency of health financing is impeded by fragmented pools; especially those of the Ministry of Health and NHIF, and an overall lack of coordination and management capacity.

**Table 4.4: Health financing in Sudan**

| Category | |
|---|---|
| Total Expenditure on Health (THE) as % of GDP | 6.1% |
| SHI (State Health Insurance) as % of GGHE | 17.6% |
| Federal GGHE as % of Federal GGE | 6.6% |
| Federal GGHE as % of GGHE | 67.8% |
| Household out-of-pocket expenditure as % of THE | 76.5% |
| Total Donors Expenditure as % of CHE | 3.6% |
| Population with catastrophic health expenditure | 7.8 (2012) |
| Population impoverished due to out-of-pocket | 2.2 (2012) |

*Source: National Health Recovery and Reform Policy & Strategic Plan.*

## Social Protection

**The government acknowledges the need for targeted social safety nets to address Sudan's high poverty and vulnerability.** Though in 2012 the government committed itself to developing a national protection strategy, the strategic framework has remained scattered and multilayered—with a multitude of policy and plans implemented by different actors including the government, semiautonomous agencies, and nongovernmental actors. The lack of data to inform policy dialogue and program design has been a key obstacle. Program coverage is limited, with many overlaps. There is a need to develop an integrated social policy with improved targeting, a unified beneficiary registry, efficient payment systems, and more transparent governance. The government aims to deepen the use of digital registration systems to prevent duplication.

**General subsidies, notably on fuel and food, constitute the bulk of social programming, dwarfing the size of the Zakat Fund and other government programs.** General subsidies aimed to help stabilize prices of consumer products, but they are very expensive and regressive, and several mostly benefit the rich.

**Historically, the Zakat Fund has implemented the largest poverty-targeted program, mostly through in-kind benefits and an extensive institutional infrastructure that reaches all the way down to the village level.** But the program faces many challenges. The Zakat Law, which is based on the five pillars of Islam and reflected in the Sharia, obliges Muslims and non-Muslims earning above a given threshold to pay a percentage of their annual income to the fund, and dictates that 61 percent of the revenue collected be transferred to the poor and needy. Hence, Zakat's budget is independent of the Ministry of Finance. Revenue in kind and in cash is collected from all over the country, administered centrally, and then redistributed through state and local administrative structures of Zakat. Through this mechanism, Zakat has four main kinds of support focused on poor households: direct in-kind or cash transfers, fee waivers for basic services by paying households' health insurance premiums and school or university fees, microcredit, and basic social services. World Bank (2014a) found many weaknesses in the program and recommended improvements in equity, adequacy, scalability, transparency and accountability, and cost-effectiveness.

**The Government has introduced a large-scale cash transfer program—the Sudanese Family Support Program (SFSP)—to cushion the short-term impact of macroeconomic and fiscal stabilization reforms and help address the economic impact of COVID-19.** This approach for an integrated social protection response was developed as part of a collaboration framework validated by the government, donors, and UN partners in January 2020. The cash transfer program will help alleviate the short-term effects of subsidy removal and fight poverty in regions too poor to benefit from policies and investments of the transitional government. The government plans to provide cash transfers of $5 a person per month to about 80 percent of Sudan's population for 12 months—or 32.5 million people for an annual cost of $1,950 million. Due to funding shortages, the program will be phased geographically and in the duration of grant delivery. The project has been piloted with the expectation of rapidly scaling up and will run until 2022, as trust fund financing becomes available.

**The objective is to transition the SFSP into a permanent, sustainable social protection system.** After a year, general transfers to families are expected to end and families most in need will move under an expanded permanent safety net. The design of the SFSP establishes the key building blocks, with a particular emphasis on registration with the development of an ID system and payment through a digital system that fosters financial inclusion. The government's capacity to manage the program will be strengthened, notably for activities such as outreach, registration and verification of beneficiaries, payments delivery, and monitoring through the setup of a management information system.



# CHAPTER: 5

# PRIORITY REFORMS

**Sudan's overarching development challenge is to overcome its deep-rooted and multifaceted fragilities and strengthen resilience.** Achieving this will require restoring political and macroeconomic stability and strengthening institutional capacities to foster the country's economic transformation to achieve inclusive, green growth. The government has embarked on an ambitious program under the IMF Staff Monitored Program to address macro and fiscal imbalances, engaging necessary reforms to build a stable environment and make progress toward obtaining HIPC debt relief and accessing international financing. The AfDB should help Sudan improve public financial management, decentralize governance and implementation, and—in coordination with other development partners—implement the HIPC completion point reforms. The AfDB could also provide support to strengthen the legal, regulatory, and institutional framework for PPPs, build the policy and technical capacity of the public and private sectors, and sensitize parliamentarians and high-level policymakers on the potential of PPPs for diversifying development financing sources.

**The analysis in chapters 2-4 point to a diverse range of constraints that reflect Sudan's political, economic, social, and environmental fragilities.** The following criteria were used to select priority areas where the AfDB should support Sudan in achieving its development goals in the context of the AfDB's High 5s agenda:

- Consultations with government and other stakeholders including development partners, private sector, and civil society representatives.
- Interventions addressing the identified macro, social, and environmental drivers of fragility.
- Estimated impacts on inclusive growth.
- Policy reforms with mutually reinforcing impacts on other interlinked priority areas.
- Feasibility to ensure actions are realistically achievable given Sudan's political and economic dynamics, governance quality, and administrative and implementation capacity.
- Relative urgency to allow the government build its credibility with its population and proceed to reach the HIPC decision point and make headway toward achieving the SDGs.

**The following policy actions all rank high in building resilience and sustainable development under the High 5s agenda.** Setting up social protection (priority 1) will help mitigate the impact of bold macro-fiscal stabilization reforms on the poorest and renew a social contract with the population. Creating an enabling environment for agriculture by building environmental resilience and promoting promising agroindustrial value chains (priority 2) will foster inclusive and resilient growth and combat food insecurity while building the resilience of Sudan's agriculture to climate shocks. Strengthening regional integration and trade (priority 3) will contribute to expanding and diversifying exports and improving infrastructure to support more sustainable growth. Extending the reach of electricity (priority 4) and WASH services (priority 5) will improve the livelihoods of the population, including vulnerable groups in underserved states, helping progress toward the SDGs and rebuilding the social contract with marginalized groups.

Investment in renewable energy and improving access to electricity will also address environmental degradation from exploitation of woodlands for fuel wood while reducing Sudan's greenhouse emissions from the energy sector. Improving human capital development (priority 6)—both quality of and access to education and health services—is essential for redressing inequities in welfare and providing opportunities to all groups and vulnerable populations to benefit from growth.

**A gender lens should be at the center of the prioritized development agenda, not just as a means to progress toward SDG5, but also as a critical pathway to sustainable development.** The analysis has underscored that Sudan has one of the world's lowest rankings for gender equality. Promoting gender is smart development policy because gender equality is central to ending extreme poverty and boosting shared prosperity in a sustainable manner as well as critical to the consolidation of peace and security in fragile conflict-affected environments. Sudanese women lag far behind in all measures of economic opportunity and voice. Along each of the above-mentioned priorities, Sudan needs to make relevant and better resourced efforts to address gender inequalities in access to jobs as well as control of ownership of productive assets (land and credit) and close gender gaps in health and education.

## 5.1 Setting Up Social Protection

**The macroeconomic stabilization reforms supported under the IMF program aim to create fiscal space by eliminating tax exemptions and regressive subsidies (which consume about 10 percent of GDP) and by increasing revenue to expand core state services, notably spending to build human capital.** To alleviate the short-term impact of these reforms and help address the economic impact of COVID-19, the government has introduced a donor-supported large-scale cash transfer program: the Sudan Family Support Program (SFSP). This is an essential part of the government strategy to support fiscal stabilization and fight poverty, particularly in regions too poor to benefit from the immediate effects of economic reforms. This cash transfer program will help put in place the building blocks of an inclusive, well-targeted social protection system to tackle persistent poverty and food insecurity, help agro-pastoralists recover from crop failure and livestock losses caused by adverse weather events, and address unemployment challenges.

**The AfDB could support this integrated social response to allow a rapid scaling up of the program,** which is critical to helping the government build its credibility and move quickly in implementing economic reforms. Furthermore, supporting the SFSP would help transition the program toward a full-fledged social protection program that targets those most in need.

## 5.2 Building Environmental Resilience

**Sudan's vulnerability to climate change and weather shocks accentuates already challenging agroclimatic conditions and fluctuations in production and productivity.** Thus, it is vital for the country to strengthen institutions and policies at the national and subnational levels to protect natural resources and improve disaster risk management in face of more catastrophic climatic events. In this regard, Sudan needs to formulate a comprehensive plan to maintain and even increase its natural capital resources, while investing in physical and human capital to achieve its economic transformation.

**Agriculture remains the central pillar of Sudan's development strategies.** Agriculture provides livelihoods to most of the rural population and many SMEs and is vital for food security and household welfare, on top of being a source of scarce foreign exchange. Sudan has developed agricultural policies and strategies to unlock its agricultural potential, but the National Agricultural Investment Plan suffers from poor implementation and the country is off track to achieving its agricultural transformation. Adequate financing is a major constraint to rolling out this plan.

**Following years of neglect during the oil boom and damage during the prolonged years of conflict, the sector suffers from many challenges.** These include production and productivity constraints, a rudimentary farming model and poor management of natural resources and lands, low-quality seeds, limited adoption and use of climate-smart agricultural inputs and technologies, limited extension services, limited access to finance, and inadequate agricultural infrastructure (poor roads and storage facilities).

These challenges have been reinforced by limited market access, weak agro value addition and limited agribusiness, food insecurity and malnutrition, weak institutions, and constrained gender and youth involvement in agricultural development.

**Yet Sudan has enormous agricultural potential that could be exploited through the development of several value chains.** Such value chain opportunities include cereal crops, oilseeds (notably sesame), horticulture, gum arabic, and livestock (meat and dairy products). Developing them could catalyze growth in the sector. But steady progress in restoring political and macroeconomic stability and addressing sector constraints need to be made to advance the development and transformation of these promising chains. In addition to the upstream measures identified above to develop climate-smart agriculture, specific midstream and downstream actions are called for to enable the development of these value chains. This would require increasing the number of smallholders participating in formal markets, expanding investment in public services (notably feeder roads and storage facilities), and creating an enabling environment that fosters private investments along these value chains.

**Based on the detailed diagnostics in section 4.2, the recommendations in box 5.1 are proposed to exploit opportunities of the above-mentioned value chains and catalyze growth in agriculture.** Given the constrained fiscal space, public interventions will need to focus on areas that require public investments to support an enabling environment for private investment in the value chains. PPPs also provide an opportunity to crowd in private investment and finance in the sector. The government could also explore funding from international environmental and climate change funds to support public and private investments in agricultural value chain development.

### Box 5.1: Recommendations for Transforming the Agriculture Sector

**Improve the technical and functional capacities for agricultural policy and project formulation, planning and M&E of policies, projects, and programs.**

**Develop capacities, institutions, and systems for uninterrupted collection of agricultural statistical data and conduct periodic census** on agriculture, livestock, fisheries, forestry, natural pasture, and water resources to enhance the capacity for designing relevant policies, programs and plans.

**Develop the technical/ functional capacities of agriculture research** in crops, livestock, fisheries and natural resources through increased public support, PPP, and technical assistance to develop the technological foundation for the transformation of agriculture. Specifically, building capacity of agricultural research institutions in crop and livestock breeding to enable them to develop more drought- and pest and disease resistant crop and livestock varieties.

**Improve the linkage between research and extension services:** developing relevant extension packages for the farming systems, livestock, and fisheries, devising effective delivery systems and building the capacity of the organizations entrusted with extension delivery, including those responsible for weather forecasts and early warning systems.

**Reform the land tenure system** to ensure fair and equitable access to land without which reducing poverty and food insecurity, will be difficult.

**Develop the institutional, human, and technical capacity for irrigation** to (i) improve efficiency of the existing irrigation system, reduce costs, and ensure equitable distribution and (ii) expand irrigation facilities through water harvesting and exploitation of underground and surface water.

**Develop the grazing system:** Allow regeneration of the pasture and forage vegetation and provide improved forage seeds to enhance the production of forage, considering the dramatic losses of access to grazing lands and water.

**Support veterinary services** and increase areas that can be declared disease free to improve quality and marketability of livestock resources.

Enhance the productivity of the farming systems, livestock, and fisheries by: (i) developing the capacity of the producers by disseminating knowledge about production technologies and support e-extension services for productivity enhancement in partnership with the private sector, (ii) helping farmers to access more productive breeds, resilient input (e.g. fertilizer, pesticides), equipment; finance and markets.

Develop infrastructure and market facilities to reduce marketing costs and increase value chains by linking producers to modern supply chains.

**Devise appropriate measures and develop the technical/ functional capacities to protect and preserve natural resources and control the environmental challenges which are aggravated by climatic changes.** Enhance standards and provide quality infrastructure through PPP to comply with food quality and safety measures.

## 5.3 Improving Regional Connectivity

**Sudan could serve as a regional transit hub with four of its landlocked neighbors if it improves its logistics efficiency** to effectively compete with existing routes serving the Central Africa Republic, Chad, Ethiopia, and South Sudan. Sudan could also leverage its membership in multiregional groupings, notably AfCFTA, to diversify its markets and grow its value chains in areas with comparative advantage.

**The analysis in section 4.3 shows that Sudan also faces significant challenges in improving its overall business environment to benefit from greater regional integration.** COVID-19 adds to these challenges. Pandemic mitigation measures such as border closures, quarantines, a national lockdown, and negative consumer and investor sentiments slowed demand, and disruptions in global value chains have reduced supply. To reap the benefits from integration, Sudan should address the recommendations presented in box 5.2. The Bank is well-positioned to help Sudan progress along all these recommendations.

### Box 5.2: Recommendations to foster regional integration

**Modernize its trade policy through well targeted reforms.** Sudan should reduce the number of imports subjected to duty rebates - this will have minimal impact on revenue losses, while making trade more transparent and efficient. The country should pursue its effort to modernize Customs according to the WTO Trade Facilitation Agreement (e.g. adoption of risk-based inspections).

**Leverage its position as a regional transit hub.** The country can serve as a regional transit hub, with four of its immediate landlocked neighbors being landlocked. To reap these benefits, Sudan needs to improve its logistics efficiency to effectively compete with existing routes serving the same countries (Djibouti for Ethiopia, Douala for Chad, and Central African Republic).

**Diversify export markets and value chains by leveraging regional trade agreements and the AfCFTA.** Sudan is indeed at a critical juncture with the removal of US sanctions; the launch of the Horn of Africa Initiative and upcoming effectiveness of the AfCFTA agreement to leverage the opportunities that these arrangements offer to ease infrastructure bottlenecks through enhanced regional connectivity, to diversify its markets and to grow its value chains.

## 5.4 Improving Access to Electricity

**Sudan's electricity access rate is growing slowly, and increasing grid connections incur financial losses.** For example, only 5 percent of poor rural households are connected. The government needs to review its energy framework to ensure that its investments are guided by a least-cost option plan with optimal use of renewable energy and existing interconnections. To progress toward universal access, the government needs to step up grid connections and intensify efforts to explore off-grid solutions to connect remote households. Sudan has embarked on a comprehensive reform of its tariff system. Under the IMF program, the government has committed to gradually remove subsidies. Likewise, a World Bank study has analyzed the sector's options for cost recovery.

### Box 5.3: Recommendations in the energy sector

*Deploying a range of policy measures to mitigate increases in sector costs.*

**Use planning tool to design cost effective interventions.** The GoS needs to carry out geospatial planning to identify the optimal balance between grid, mini-grid, and stand-alone off-grid electrification solutions. To effectively track its progress toward universal access to electricity, the government could include a multi-tier framework (MTF) in its national census. These measures will also contribute to lower emission from the energy sector. Preliminary analysis conducted suggests that approximately US$700 million could be saved between 2019 and 2023 by aligning the investment to least-cost option, notably by:

- **Exploring grid densification opportunities in high density settlements potentially suitable for mini grid in the Kordofan and Darfur regions**
- **Optimally utilizing the existing interconnection with Ethiopia and Egypt:** Increased use of these interconnections could help Sudan save US$200 million annually in the short term.
- **Redirecting available investment capital away from thermal generation to domestic solar and wind generation:** The cost of solar and wind power generation is estimated to be roughly half that of thermal generation and could result in savings of almost US$100 million annually.

**Encourage private sector participation:** The GoS could boost private participation in financing and building renewable energy projects, as well as in transmission lines by auctioning them among experienced companies. Consideration should be given to the option of attracting strategic investors to take equity in some of the companies as a way of raising capital or selling shares to the public through the KSE. The other option would be to mobilize local resources through issuance of public bonds, which could be purchased by local financial institutions.

**Adopting supply and demand side efficiency measures to curb demand growth and manage peak demand:** The demand-side energy-efficiency measures (e.g. promoting the use of energy efficient appliances, improved building design) could contribute to make savings in electricity demand including shifting demand from peak to non-peak hours. Curving the demand growth to 5 percent will reduce the sector cost by 30 percent as fuel cost and capital investment would be curtailed. These demand side measures would need to be deployed in conjunction with tariff adjustment (see below) to maximize their impact.

*Amending tariff to increase revenue*

**Reducing the social tariff threshold level:** The high threshold for social tariff (200) is very costly as it benefits many consumers with higher income. Adjusting the threshold to 100kWh could increase revenue by US$ 6 million while targeting more effectively the poor household. Over the next five years, the threshold could be gradually lowered to 50 kWh which is the current average in SSA.

**Increasing Tariff:** The Government could set interim electricity tariff targets that engender transition towards cost reflectivity. International experience shows that rising tariff through frequent and incremental increases can allow consumers to adapt to the increase more effectively. The capacity of the regulator will need to be strengthened to recommend this tariff upward adjustment and monitor the sector financial performance. It will also be critical to design a communication campaign to support this tariff increase in the public opinion.

**Policy measures should seek to cut operationg costs and increase revenue.** The diagnostic analysis presented in section 4.1 points to the immediate priority for the energy sector to reach cost recovery by gradually eliminating subsidies, which jeopardize economic stabilization. The government should focus on the areas highlighted in box 5.3, which will help increase the share of renewables in Sudan's energy mix, leading to lower costs, increased electrification, reduced consumption of fossil fuels, and reduced greenhouse gas emissions from the energy sector. Sudan could explore opportunities for co-financing of some of the proposed measures from international environmental and climate change funds such as the Green Climate Fund.

## 5.5 Improving Access to Water, Sanitation, and Hygiene

**WASH deprivation remains a major human development issue in Sudan, and access to sustainable water resource remains a crucial factor in avoiding conflict between farmers and pastoralists.** To progress towards the goals set in its strategy; the government needs to strengthen its capacity, notably by improving its planning, budgeting, and monitoring capacity, developing an appropriate tariff structure and regulatory framework, and scaling up investment targeting lagging regions as well as schools and health centers. The Bank could provide advisory services to help the government overcome these institutional challenges to operate efficiently and to progress towards the SDG goals for WASH. Potential areas of policy dialogue include supporting government ratification of the draft WASH policy; building a sector coordination platform dedicated to development (not emergency or humanitarian); setting up a robust sector M&E system; and developing an appropriate tariff structure and regulatory framework to improve the sustainability of the sector. Bank investment lending could help strengthen institutional capacity and reforms as well as co-finance water and sanitation projects in priority regions such as Darfur. Investments in water and sanitation will help improve not only the supply of water and sanitation to communities but also improve health conditions—especially by reducing outbreaks of water-borne and infectious diseases, which have become rampant due to extreme climate events.

## 5.6 Improving Education and Health Services

**For the following reasons, Sudan needs to embark on bold institutional reforms while creating fiscal space to increase budget allocations to progress toward the education and health SDGs:**

**In education the top government priority is to reach universal basic education and improve students' learning outcomes.** Policies should aim at bridging regional gaps, with a focus on lagging areas affected by droughts and conflicts, and special attention to vulnerable groups, nomads, and internally displaced persons; bridging the gender gap that persists in some rural areas in access to primary schools; and improving the literacy of those aged 15-24 through programs targeting school dropouts. Attaining these goals will require expanding primary education in disadvantaged states by building classrooms, training teachers, improving the school environment by providing every child and teacher with textbooks and school furniture, establishing boarding schools in each state for pupils from distant areas, and providing a nutritious meal for primary school students based on local conditions. Improving education will also require expanding the number and quality of teachers' training institutes. Incentives (such as compensation for housing and transport) could be given to teachers to make working in rural areas attractive.

**Sudan also needs to scale up the supply of middle-level workers and equip them with relevant skills to reduce the labor market skills gap and mismatch.** In the medium term, addressing the obstacles facing TVET and higher education could ease these labor market challenges. There is also need for a policy focus aimed at improving the quality of infrastructure in TVETs and universities (including by improving digital, blended, and distance learning); expanding TVET in states recovering from conflict such as the Darfur, Kordofan, and Blue Nile states; and enhancing the quality and relevance of training and research at the TVET and university education levels through curriculum reviews. The development of the national qualifications framework could facilitate interlinkages and the equivalency system within and between education systems.

The health sector diagnostic identifies several remedial measures as presented in Box 5.4.

### Box 5.4: Recommendations for the Health Sector

**Strengthen health financing,** Sudan needs to develop a health financing strategy to provide a framework guiding the country in equitably and sustainably mobilizing resources and efficiently utilizing them to achieve stated goals. It will provide the basis for aligning resources to the sector's priorities and creating opportunities for efficiency gains while serving also as an instrument for resource mobilization. Concomitantly, efforts need to be pursued to strengthen capacity development and accountability systems.

**Design and implement strategic interventions to improve accessibility and distribution of primary health care facilities notably to improve maternal, child and reproductive health services including immunizations.** This will go a long way in addressing the high burden of diseases in children and women who form the most vulnerable groups in the population and improve the maternal, infant and child mortality indicators.

**Ensure an even distribution of the workforce in the hard-to-reach rural areas** to cater for poor and vulnerable populations through enabling incentives and improvement of work environments.

**Target early child development interventions notably to improve nutritional status of children under five,** adolescents and pregnant women. Raising awareness of mothers regarding good nutrition and malnutrition is key in these efforts including promotion of Infant and Young Child Feeding, among mothers.

**Strengthen the country's response to reduce the burden of communicable diseases and NCDs through prevention and control services.** There is need to adopt a multi-sectoral approach to control NCDs including development of a multi-sectoral action plan for injury prevention and treatment.

**Transform secondary and tertiary level health services to improve quality,** efficiency, and equity to progress towards Universal Health Care (UHC) and foster Community Empowerment (responding to community needs and involving communities in decision making).

**Strengthen the governance systems of the decentralized health sector at all levels.** The GoS needs to revisit health system structures including the roles and responsibilities of all bodies and to build capacities. Likewise, the GoS aims to strengthen community systems to ensure active community engagement and participation adopting the "Whole of Society" approach. However, these decentralized service delivery structures need to be well funded and resourced with appropriate and adequate supervisory and technical support from the Federal authorities Training and skills development and career development opportunities should be supported. The management capacity of the decentralized health services was planned to be strengthened through state and locality teams' capacity building and integrating vertical and support systems into PHC principles.

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