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Republic of Congo: Selected Issues

INTERNATIONAL MONETARY FUND

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REPUBLIC OF CONGO

SELECTED ISSUES

October 2021

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REPUBLIC OF CONGO

SELECTED ISSUES

September 10, 2021

Approved By
Vitaliy Kramarenko (AFR)

Prepared by Alun Thomas with inputs from Seung Mo Choi, Mahamoud Islam, Akito Matsumoto, and Jiaxiong Yao and supervised by Pritha Mitra (all AFR).

CONTENTS

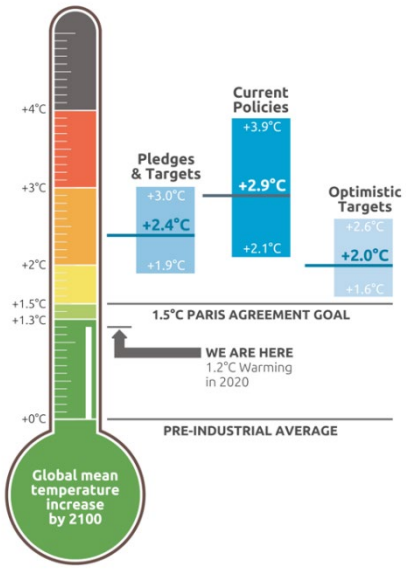
CLIMATE CHANGE ADAPTATION AND TRANSITION ISSUES IN A LOW-INCOME OIL EXPORTING COUNTRY

The Republic of Congo is among the most vulnerable countries in the world to climate change though it contributed very little to the greenhouse gas emissions. Heavy reliance on rain-fed agriculture increases Congo's humanitarian, social, and macroeconomic vulnerabilities to rising temperatures and extreme weather shocks, which most heavily affect the poorest households. At the same time, global efforts to mitigate climate change will be costly for Congo—with substantial long-term declines in oil revenues. Against this backdrop, the country would benefit from focused efforts to build resilience to climate change and economic diversification as well as explore ways to gain revenues from its role as a key global emissions absorber.

A. The Impact of Climate Change on the Republic of Congo

1. Climate change is having a deep impact. Absent remedial action, the Earth's temperature is projected to rise 3°C by 2100 (relative to 2020), after rising only 1°C over the past two centuries (Figure 1). This accelerated warming and subsequent rise in rainfall anomalies in the Republic of Congo (Congo) are hurting crop nutrient content, yields, livestock, fisheries, biodiversity, and land use. The situation is compounded by an increased frequency and intensity of flooding. Historically, Congo experienced occasional flooding but since 2019 it has become a regular phenomenon with severe consequences. For example, during 2000–18, an annual average of 7,000 people suffered but the severe flooding in 2019 and 2020 affected 100,000–160,000 people in the North. Immediate emergency assistance, mostly provided by the World Food Program, amounted to about $7.5 million (0.07 percent of GDP). The government estimates another $500 million (5 percent of GDP) is needed to help the affected families and climate-resilient reconstruction—including temporary housing, building new and more resilient housing, and relocation.

Figure 1. Republic of Congo: Global Mean Temperature Increase by 2100



Source: Climate Action Tracker, May 2021 (https://climateactiontracker.org/global/cat-thermometer/)

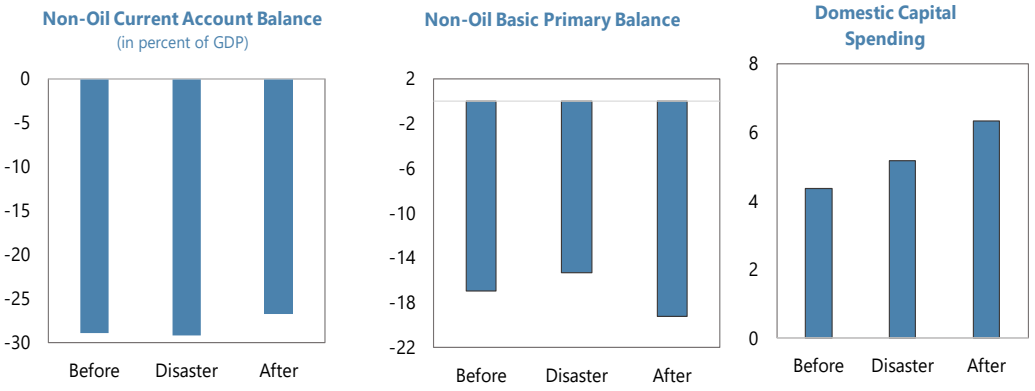
2. Poorer households, who are the least prepared, are the most adversely affected. Severe weather shocks take lives, damage homes and other physical infrastructure, and depress

productivity—beyond the immediate effects of disrupted trade and transportation routes. Moreover, deteriorated worker health (floods can spread disease by creating breeding grounds for mosquitoes and contaminating drinking water) and education can have long lasting effects. Spillovers to capital, the environment, and biodiversity hurt tourism and wholesale and retail trade (IMF SSA REO April 2020). The hardest hit are communities without resilient infrastructure, robust health, or access to immediate financial and medical assistance. Weather-related crop damage, especially for cassava (the subsistence crop), hurts subsistence farmers directly while other households face elevated food prices driven by shortages. For example, food insecurity rose from 19 percent in 2014 to 48 percent in the Likouala region of Northern Congo following the 2019–20 floods. Applying Gabon's 2017 household survey as a proxy for the region, over a third of the population suffers a major price shock (e.g., higher food or input prices) and/or irregular rainfall and flooding every year.

3. In this context, policymaking challenges are further compounded by widening fiscal deficits (Figure 2). Reduced economic activity following a major climate shock translates into subdued tax revenues while spending needs accelerate with the demands of post-disaster relief (including stepped-up social assistance) and reconstruction needs. There is also a shift of financing and focus of institutional and organizational capacity toward post-disaster programs, often crowding out other development spending. Increased imports for food and reconstruction raise current account pressures which are often offset by depressed agricultural exports. Financial system stability (e.g., non-performing loans), is generally unaffected because of poorer households' limited access to finance.

Figure 2. Republic of Congo: Current Account Balance, Fiscal Balance, and Public Capital Spending Before and After Natural Disaster

(Percent of GDP unless otherwise indicated)



Source: EM-DAT: The Emergency Events Database and IMF World Economic Outlook.

B. Implications of Global Climate Change Action

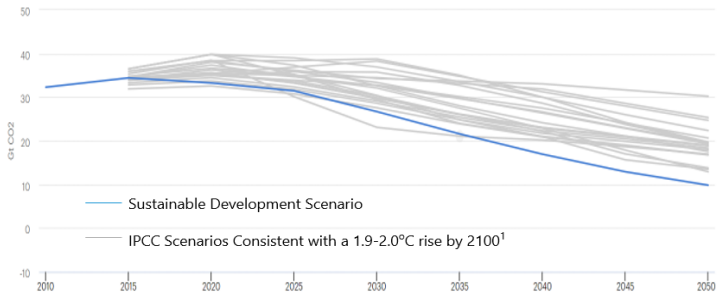
Global Developments

4. Transitioning to a low-carbon global economy can mitigate the adverse consequences of climate change for the planet.[1] Recognizing this, major carbon dioxide emitters such as China, the European Union, and the United States—emitting more than half the world's 40 billion tons of annual carbon dioxide emissions—are initiating steps to reduce emissions.[2] Combining these with the April 2021 Nationally Determined Contributions (NDCs) and other commitments under discussion in 131 countries around the world, the global temperature level would still rise by 2°C above the pre-industrial average by 2100.[3] A highly proactive approach such as the International Energy Agency's sustainable development scenario (IEA SDS) would limit global temperature increases by 2100 to less than 1.65°C above the pre-industrial average (with a 50 percent probability). This would require reducing net global carbon dioxide emissions from the energy sector from 35.8 billion tons in 2019 to 10 billion tons in 2050 and to zero by 2070 (Figure 3).

5. Reduced global oil demand is transforming global oil markets. Oil will remain an important energy source for a few decades. However, transition to a low-carbon economy is expected to permanently reduce global oil demand from around 2040.

Figure 3. Republic of Congo: Global Net CO2 Emissions from the Energy Sector and Industrial Processes

(Billions of Metric Tons CO2/Year)



Source: International Energy Agency (https://www.iea.org/reports/world-energy-model/sustainable-development-scenario)

[1] IPCC is the Intergovernmental Panel on Climate Change (https://www.ipcc.ch/)

[1] Climate change is also driven by other global greenhouse gas emissions, such as methane, nitrous oxide, and chlorofluorocarbons (CFCs). However, a sizeable reduction in carbon emissions alone is sufficient to substantially slowdown rising temperatures.

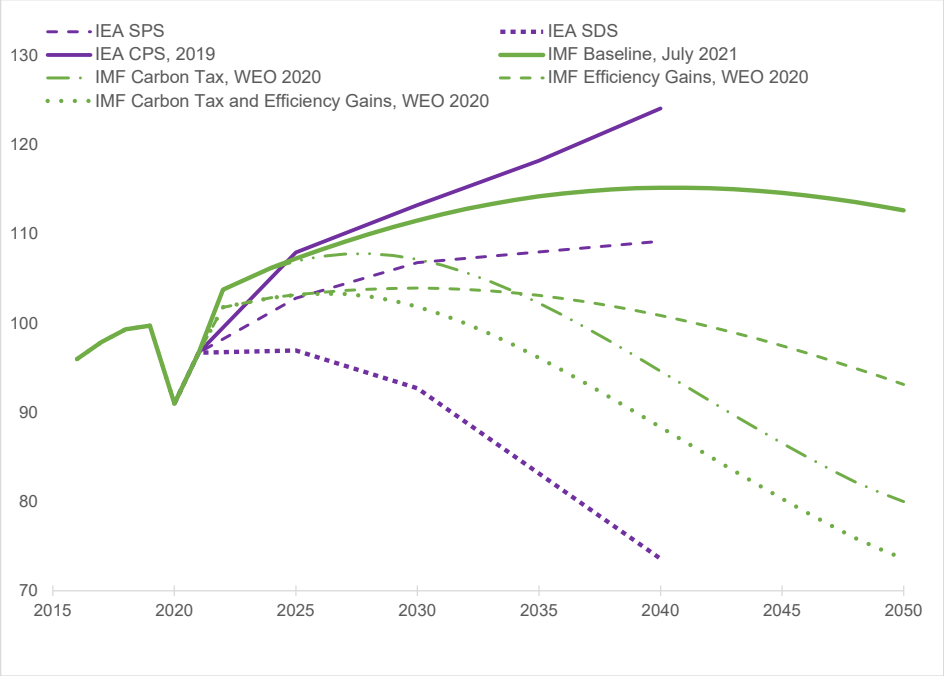
[2] The EU's "2030 Climate Target Plan" (agreed in May 2021) proposes cutting greenhouse gas emissions by at least 55 percent by 2030 and making the EU climate neutral by 2050. The United States' new Nationally Determined Contribution (submitted April 2021) aims to reduce greenhouse gas emissions by 50–52 percent from its 2005 levels by 2030. As described at the National People's Congress in May 2021, China aims at peaking its carbon emissions before 2030 and becoming carbon neutral by 2060.

[3] Climate Action Tracker https://climateactiontracker.org/global/cat-thermometer/ This scenario is broadly consistent with the International Energy Agency (IEA)'s stated policies scenario.

- Several factors make it difficult to predict the exact pace of declining oil demand (and subsequently production) and the impact on oil prices. Technological advances that have reduced renewable energy costs (e.g., solar, wind), introduced fuel-independent transportation (e.g. electric vehicles and LNG vessels), and increased energy efficiency are accelerating this process. Meanwhile, developments in carbon capture and sequestration (CCS) and carbon credit markets could play an important mitigating role.

Figure 4. Republic of Congo: Global Oil Production, 2015–2050

(Millions of barrels per day)[1, 2]



Sources: International Energy Agency (IEA) and IMF World Economic Outlook (WEO).

[1] The IEA has modeled the Current Policies Scenario (CPS), Sustainable Policies Scenario (SPS), and Sustainable Development Scenario (SDS). Details can be found at https://www.iea.org/reports/world-energy-model.

[2] The IMF Baseline scenario accounts for policies that have been implemented as of 2021; the IMF Efficiency Gains scenario reflects adoption of policies that will significantly improve efficiency, especially in energy use; and the IMF Carbon Tax scenario assumes large emitting countries introduce a carbon tax that rises quickly to $75 a ton in 2030, which would be consistent with limiting global temperature increases by 2100 to 2°C or less. Details can be found at https://www.imf.org/en/Topics/climate-change/climate-mitigation.

- At one extreme, if the IEA SDS prevails global oil production will fall from around 90 to nearly 70 million barrels per day between 2020 and 2040 (Figure 4). Under the stated policies scenario (IEA SPS, broadly consistent with the 2°C increase by 2100 described in ¶4), oil production would continue to grow before settling around 110 million barrels per day by 2040. At the other extreme, if only currently implemented policies are considered (CPS,

based on 2019 policies currently in effect), oil production would near 125 million barrels per day by 2040.

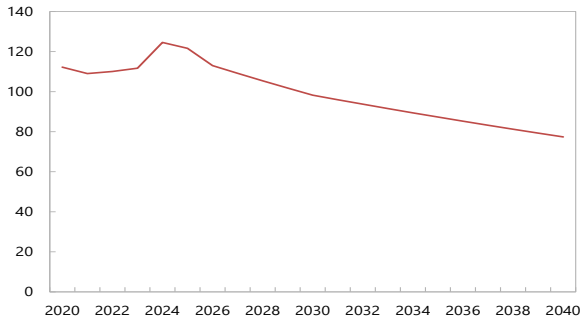
- Regardless of the pace of production developments, producers will certainly receive lower oil prices due to carbon taxation—with only low-cost oil producers (such as GCC on-shore fields and U.S. shale fields) surviving. In the interim, other producers may need to take actions to remain competitive, such as reducing the government take (e.g. royalty and tax).

Implications for the Republic of Congo

6. A low-carbon global economy may ultimately benefit Congo, but the transition will have serious consequences for the foreseeable future. Global climate actions will contain temperature increases but the warming that has already occurred will continue to drive weather anomalies for some time. Consequently, Congo will need to accelerate adaptation in the face of more frequent and intense natural disasters such as flooding. Existing challenges to financing adaptation and critical development spending will be compounded by sharply reduced oil revenues and adverse spillovers to non-oil revenues.

Figure 5. Republic of Congo: Oil Production, 2020–40

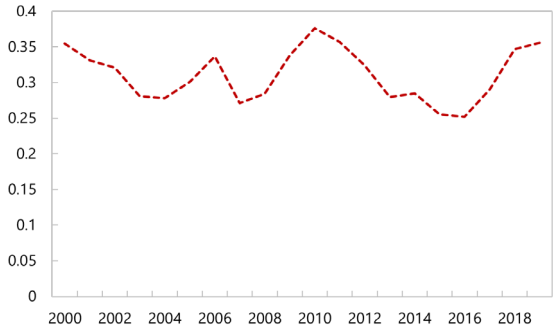
(Millions of barrels per year)



Source: National authorities and oil company estimates.

Figure 6. Republic of Congo: Market Share of Oil Production

(Percent, world oil supply)



Sources: BP annual yearbook; and IMF staff projections.

7. Lower global oil prices and reduced investment in Congo's oil fields will weigh on oil revenues and exports, where Congo relies on oil receipts for 90 percent of its export revenues and 60 percent of its fiscal revenues.

- Production is already set to peak in 2024 and then decline to a steady state in 2040 at 60 percent of peak production—driven by the depletion of oil fields and lack of profitable investment at current and prospective medium-term oil prices (Figure 5).

- The risk of stranded assets is low, but the new global oil environment may jeopardize new investments needed to maintain the production path described above. The timeline of returns on past or upcoming investments will finish before any substantial demand decline for Congo's oil, even under the IEA's SDS scenario (¶5). Current investment plans are

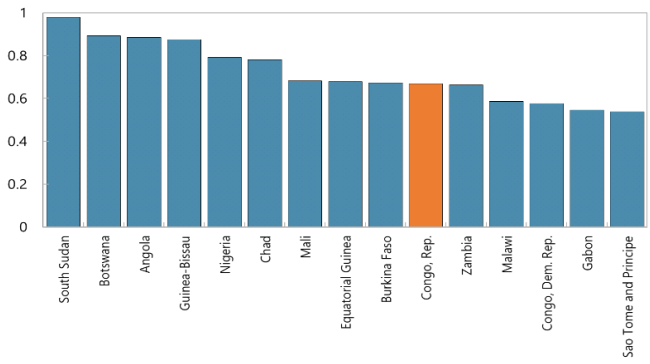
proceeding, given Congo's stable market share (Figure 6) and comparatively low production costs (except in relation to low cost GCC and U.S. shale production). New investment, however, is at risk as multinational oil companies are rapidly shifting investment towards projects with the highest oil yield relative to capital investment—especially given steadily declining financial market support for the oil industry (Barnett 2019).

- The oil demand and associated production declines that would result under active policy scenarios that are less extreme than the IEA SDS—namely the IMF's carbon tax scenario (where large emitting countries introduce a carbon tax that rises quickly to $75 a ton in 2030, which would be consistent with limiting global temperature increases by 2100 to 2°C or less) on its own and along with efficiency gains in energy use—combined with an assumption that oil prices will decline to $55 per barrel by 2040, suggest Congo's oil revenue declines could range between $25 to $30 million each year during 2022–40 and export declines between $90 and $110 million each year during 2022–40.

8. Absent economic diversification, declining oil revenues pose clear risks. The following illustrates a highly unfavorable long-term scenario should these risks be realized.

- **Economic growth is likely to suffer** from reduced oil sector activity and its spillovers to the closely linked non-oil sector, especially given Congo's high export concentration of oil (Figure 7). Depressed domestic demand and low fuel prices are likely to contain any inflationary pressures from import contraction and lower availability of goods. Financial sector conditions will deteriorate with weaker asset quality, lower profitability (because of higher provisioning), increased risk aversion, and higher interest rates.

Figure 7. Republic of Congo: Export Concentration Index (ECI)
(15 countries with the highest ECI in SSA)



Source: United Nations Conference on Trade and Development (UNCTAD).

- Large revenue declines combined with sizable outstanding domestic and external debt obligations imply **drastic reductions in fiscal spending**—where wages constitute one third of non-interest government spending. The extent to which the fiscal position can deteriorate will be limited by reduced domestic liquidity (responding to lower economic activity) and higher sovereign risk premiums (see below).

- Prospects for maintaining **debt sustainability will be jeopardized.** Lower fiscal revenues, exports, and GDP will make it difficult to service debt and deteriorate debt indicators.

Pressures to rollover existing debt at expensive rates will mount. Sovereign risk premia will be further inflated by increased contingent liabilities stemming from state-owned enterprises (SOEs)—especially from those in the oil sector with high production costs and undiversified products.

- Both the **current account and international reserves positions will erode**. Reduced exports will only be partially offset by import contraction and Congo's contribution to regional reserves would decline significantly.

- **Political and social tensions** could abruptly intensify. The population may quickly become frustrated and disillusioned with the current political regime against a backdrop of reduced incomes, higher unemployment, and worsened government services. On the other hand, weakened influence of those with large vested interests in oil could support broad structural reforms.

The Republic of Congo's Role in Reducing Net Global Carbon Emissions

9. Congo is a key carbon absorber (sequestrator). Two thirds of the country is covered by dense tropical forest which serves as a major global carbon sink. On a net basis, Congo absorbs about 1.5 percent of annual global carbon emissions—mainly through its forest. More broadly, this forest is part of the Congo basin—the world's second largest tropical forest, spread across Cameroon, the Central African Republic, the Democratic Republic of Congo, Gabon, Equatorial Guinea and the Republic of Congo—which absorbs 3 percent of global emissions. Preliminary findings of on-going studies suggest that, through immense peatlands, the Congo basin could actually be absorbing substantially more.

10. However, from the authorities' perspective, international carbon markets are not currently designed to adequately compensate Congo for the role of its forests in slowing climate change.

- International carbon credit markets are still nascent and there is no internationally determined price (Box 1). Buyers purchase carbon credits to reduce greenhouse gases (GHGs) or offset part of their emissions. Sellers generate credits through activities that increase emission absorption. In the case of forestry, actions to conserve and enhance forests and to avoid deforestation and degradation are all credit generating.

- Notably, a carbon credit is not generated for the actual amount of emissions absorbed by a seller—the logical counterpart of the emissions produced by the buyer—but the change in emissions absorbed relative to a baseline year. This asymmetry has serious implications for Congo. The authorities strongly argue that if they could sell carbon credits internationally, based on the net amount absorbed annually by Congo, the country could gain $80 to $90 billion per year, more than wiping out its external debt. Instead, it gains credits based on

activities relative to a baseline year, which is determined by the buyer. For example, relative to a 2005 baseline,[4] Congo could gain $80 million from selling carbon credits.

- The authorities view the international community's decision to define a carbon credit relative to a recent base year as gravely overlooking the great expense at which Congo has preserved its forests. Beyond the direct costs of protecting and managing the forest, Congo has foregone highly profitable logging and mining opportunities. The authorities stress that their conservation policy is in stark contrast to other countries that earned billions of dollars from cutting down their tropical forests, and are now poised to earn even more for reforesting owing to the way a carbon credit is defined.

Box 1. Carbon Credits

A "carbon credit" is a unit of measurement (in tCO2e)[1] representing efforts to remove GHGs from the atmosphere or reduce their emissions. Such efforts include switching from coal-based to renewable energy and planting trees. Carbon credits are purchased by companies, individuals, and governments to voluntarily offset their emissions or to comply with emission regulations. The sellers are often project developers, NGOs, and governments (for policy changes and improved environmental law enforcement on government land) who apply spot market or long-term delivery contracts in national or sub-national markets—an international market is still under development. Currently, sales are made through bilateral agreements, registries, or brokers. Where land use is involved, the developers have an agreement with the landowner (be it an individual, company, or government).

Carbon credits are issued and verified by both regulated and voluntary carbon crediting programs (e.g., the Verified Carbon Standard (VCS) and multilateral initiatives such as the World Bank's Forest Carbon Partnership Facility (FCPF)). Frameworks for emissions trading schemes (or offset programs) and methodologies for determining credits are usually based on the Clean Development Mechanism (CDM), the Reducing Emissions from Deforestation and Degradation and Conservation and Enhancement of Forests in Developing Countries (REDD+) mechanism under the United Nations Framework Convention on Climate Change (UNFCCC), and the Sustainable Development Mechanism (SDM) and Internationally Transferred Mitigation Outcomes (ITMOs).[2] Progress on defining rules for transacting ITMOs and much-needed fixing of a global price is expected after COP26.

Carbon credit prices in private markets are heavily disconnected from those offered by multilateral organizations or donor governments. The private market price for reduced deforestation credits, such as $50/tCO2e in May 2021 on the EU exchange trading system, is driven by supply and demand. In contrast, the World Bank Forestry Initiative offers $5/tCO2e, (partly because it relies on donor-pledged funding from 18 countries) but also often compensates families living in the affected areas for relocation costs and adverse effects on their livelihoods. Consequently, governments often prefer working with multilaterals, despite the low price. This challenge is gradually being addressed through government requirements or carbon crediting programs, where a share of all project revenues or carbon credits be allocated to the landowners such as local communities, indigenous groups, or the government.

[1] The standard unit for measuring greenhouse gases is the tCO2e (metric tons of carbon dioxide equivalent).

[2] The CDM was set up by the Kyoto Protocol for crediting reductions in industrial carbon emissions. It will soon be fully replaced by the SDM and ITMOs, which were created under Article 6 of the Paris Agreement.

[4] The 2005 baseline is determined by an average of 2000-09; thus, only policies applied since 2010, will benefit the Republic of Congo.

C. Policies

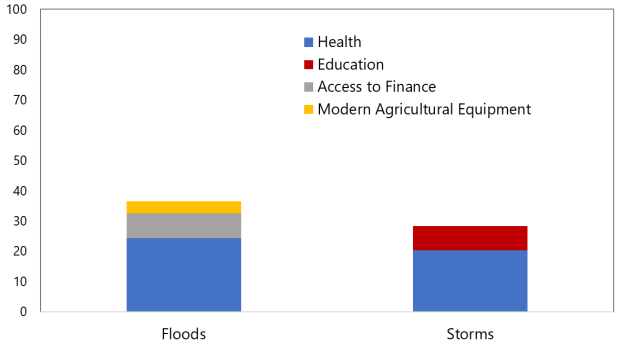
Policies supporting adaptation, mitigation, and the fallout from reduced global oil demand need to be prioritized and coordinated to complement one another and benefit economic growth and poverty reduction. The Republic of Congo's recent National Resilience Strategy (Contribution Determinée au Niveau National) and supporting documents broadly recognize these considerations, including an estimate of over $4 billion in adaptation needs (largely to build resilient infrastructure) and an emissions strategy that will be shared during COP26. However, given the large financing needs, the pace of implementation will depend on progress in domestic revenue mobilization and development partner support.

11. Building resilience to climate change is critical to improving food security and the prosperity of households and businesses. Recent research (AFR REO 2020) finds that the negative impact of floods and storms on per capita annual medium-term growth can be substantially reduced by closing gaps with average emerging markets and developing economies in healthcare, education—which improve productivity, income potential, and informed decision making—access to finance, and use of modern agricultural equipment (Figure 8). For example, these factors can raise Congo's resilience to floods by 40 percent. Additional areas that will both raise resilience and advance equitable development include:

- More robust homes and other structures that facilitate food storage significantly raise food security. This, combined with good sanitation and drainage systems, also prevents injuries and the spread of disease and facilitates access to safe drinking water.
- Better quality and coverage of irrigation systems and use of machinery can improve the resilience of agricultural production, including through consistent water flow, creation of dikes, erosion protection, and deeper seed planting. But

Figure 8. Republic of Congo: Increased Resilience to Disasters when Structural Factors Improve to EMDE Average

(Percent of GDP per capita)[1,2,3]



Source: April 2020 Regional Economic Outlook: Sub-Saharan Africa

[1] EMDE=Emerging Market and Developing Economy.

[2] Based on panel regressions of annual medium-term per capita growth on key structural areas. The bars show the impact when sub-Saharan African countries improve their structural factors to average EMDE levels relative to the adverse impact on medium-term GDP growth of one disaster. For example, in Congo, raising the level of health care to the EMDE average increases the resilience of medium-term per capita GDP growth to floods by 0.06 percent and the adverse medium-term per capita GDP growth impact from a given flood is 0.2 percent; then health care improves resilience by 24 percent (= 0.06/0.2). The exact magnitude of this analysis should be interpreted as suggestive, but the relative impact of these reform areas is a robust indication of their importance.

[3] The impacts illustrated here are separate from each structural area's impact on growth through all other channels, which are also included in the estimation. The regression estimates confirm correlation but not necessarily causality.

this requires sufficient rural electricity provision that is currently lacking in Congo as well as the associated legislation to incentivize its supply.

- The weather sensitivity of crops can be reduced through use of improved seeds, fertilizer, insecticide, and protection against erosion while keeping a close watch on possible environmental effects from the chosen inputs themselves.

- Better mobile phone coverage and availability would (i) broaden the reach of early warning systems against weather shocks; and (ii) provide farmers with the latest information on food prices and weather, which could help them optimize decisions on planting, irrigating, and fertilizing.

- More effective early warning systems and disaster responses—including greater coordination across disaster risk management sectors and better modules for disaster preparedness, response, and recovery—are needed. This would require documenting food, nutrition, and related needs during a disaster as well as devising contingency plans in all districts and high-risk zones.

- Stepped up social assistance and access to finance (Staff Report for 2021 Article IV, Annex 5) would help households and businesses implement the recommendations above and partially compensate for lost incomes and purchasing power when a climate shock hits. Insurance can serve similar objectives but its success will require reducing high risk premiums and raising financial literacy.

12. Forest management and other policies should help optimize gains from carbon markets, which will be more lucrative than deforesting for logging or mineral exploitation.

- More assertive implementation of the 2011 National Afforestation and Reforestation Program (PRONAR) will help expand carbon absorption capacity by 10 million tCO2e (equivalent to one fifth of Congo's annual emissions). The program aims to develop one million hectares of multipurpose forest and agroforestry plantations via public and private partners. However, commitments to date only cover 70,000 hectares—Total (40,000), Brazzaville plantation company (10,000), and Cofor (20,000).

- Revising government rules on donor financing—which is often scarce—for animal and tree conservation by Congolese forestry companies. Instead, the rules could allow for private financing coupled with requirements on revenue sharing with local communities (see Box 1).

- The Congolese authorities recognize that important steps need to be taken to facilitate their participation in international carbon credit markets.

    - Designing and operationalizing monitoring systems—critical for issuance of credits and payments—such as document submission to REDD+ demonstrating how required UNFCCC standards will be respected, including a Forest Reference Level and a Safeguards Report.

- Creating a registry that tracks generation, sales, and retirement of credits. While meeting international standards, the registry should be capable of managing varies types of credits (carbon, biodiversity, and other sustainable development credits) and baselines.

- The authorities wish to collaborate with other Congo basin countries to influence the design of international carbon credit markets. They are considering lobbying to (i) modify the carbon credit definition to reflect the actual amount of emissions absorbed (rather than the change relative to a baseline year); (ii) modify the system to account for past preservation efforts of Congo basin countries—e.g., apply benchmark years that are tied to just before relevant environmental laws were put in place; (iii) have higher values placed on credits related to forest preservation; and (iv) ensure the definition of carbon credit is broad enough to include use of forestry companies' waste wood products for electricity generation and the recycling of sawdust waste into briquettes used by households in place of cooking fuels.

- The authorities believe that developing a domestic carbon trading system may help accelerate access to international carbon markets. It would assign a value to Congo's carbon credits and, once a system is established, it can be linked to those of other countries in the region (Senegal, Cote d'Ivoire, and South Africa).

13. Quickly building new growth engines will minimize the adverse consequences of reduced oil revenues. Applying environmental impact assessments to each initiative will help minimize new emissions. The regional CEMAC strategy has highlighted the importance of developing agribusiness and, in Congo's case, some potential areas include:

- Capitalize on recent successes in new juice and yoghurt ventures and in traditional milling, where the number of companies have tripled. Bean yields are being supported by the EU and WFP although results to date are muted, while a new South African joint venture firm contracted to show farmers the benefits of fertilizers is scaling up its activities.

- Develop artisanal fishing, which directly benefits rural communities while having minimal environmental impact. Large-scale industrial fishing has more than doubled in recent years to meet regional demand growth. However, growth in artisanal fishing will require financial support, which has recently begun (e.g., European Union and the French Development Agency).

- Expand wood product businesses using logs from young logged forests (i.e., less than 10 years since logging)—a type of forestry allowing more light into the forest and spurring rapid growth in carbon-absorbing vegetation. Commercial sales of these types of wood products have increased by over 10 percent per year since 2014.

- Raise Congo's international visibility for nature tourism, centered around the gorillas, the pristine coastline, and the Congo river and basin—explore integration into regional tourist

routes (which often include Rwanda and Uganda). The newly established single tourism window and touristic engineering company seek to facilitate these efforts.

- Explore mining options that don't require deforestation and could leverage existing oil infrastructure (e.g., rail and port facilities). In tandem, regulations should be quickly introduced to limit environmental damage and ensure transparency (especially in the permitting process); and the tax system should be reformed to maximize revenue or profit-sharing opportunities for the government. Sapro is already poised to exploit the Mayoko mine deposit; Zanaga Iron Ore and Glencore (an oil trader) are already seeking permits for iron ore investment; Sangha Mining Development is interested in mining another iron ore deposit; and a Chinese ore processing plant— which could produce copper and zinc—is under consideration.

14. Energy sector policies play a key role in the success of adaptation and mitigation policies.

- The National Resilience Strategy's energy component should be expanded to tackle the vital issue of developing rural energy sources based on more cost-effective solar or wind power.
- Eliminating energy subsidies and eventually introducing carbon taxation will improve mitigation, support a better business environment, and create fiscal space.
    - Highly generous transfers to the oil refinery should continue to be phased out, the 2005 price-based regulatory framework for fuel prices (including a smoothing mechanism to moderate short-term price changes, IMF Country Report No. 20/27) should be implemented, and the urban electricity billing process and coverage should be reformed to reflect actual electricity consumption with a view to recovering production costs. These measures will incentive energy efficiency and significantly reduce cost. While it is mainly the wealthy who are using fuel and electricity, vulnerable groups can be protected with targeted social assistance.
    - Carbon taxation, which currently does not exist in Congo, is needed to account for the environmental externality of carbon products. It is most efficiently applied as a top-up to the excise tax applied to fuel products. First, however, the government should more actively collect VAT tax on fuel imports and locally refined fuel products by taxing the value addition from each stage of the value chain, which will require appropriate legislation and strengthened tax administration.
- Improved governance and transparency, especially in oil sector companies, will encourage energy efficiency, reduce fiscal vulnerabilities, and improve the business environment.
    - To this end, further investment by the Société Nationale des Pétroles du Congo (SNPC) in oil production that is not considered profitable by the private sector (e.g., multinationals) should be avoided for multiple reasons, including their impact on the

government's contingent liabilities. Similarly, decisions on whether the SNPC should accelerate production to make the most of declining oil demand should be based on market factors such as profitability and the company's risk profile which is related to its asset portfolio and product strategy and management.

- Unprofitable SOEs, especially in the oil sector, should be gradually wound down through disinvestment, privatization, or shutdowns.

- Transparency in the government's distribution of wealth, particularly as oil revenues become more limited, could be achieved with automatic allocation of some oil revenues (or savings from elimination of subsidies) towards social programs (health, education, targeted social assistance).

15. Effective implementation of the policies and initiatives outlined above will require upgraded public investment management. The first step will be to develop a public sector investment plan that includes a pipeline of projects that promote resilient infrastructure, forestry, and economic diversification—with a full costing of the projects, including maintenance costs—and an improvement in the efficiency and capacity of public investment management. Given the substantial spending required for these projects, they should be integrated into the core public financial management (PFM), investment, and debt management frameworks. More broadly, improved PFM and debt management practices can unlock financing from global climate funds.

16. Development partner support will be critical to advancing resilience-building, mitigation, and economic diversification. The National Resilience Strategy identifies $5.4 billion of climate-related projects, of which over $4 billion worth of projects are for raising resilience to climate change. Against the backdrop of debt sustainability considerations, domestic revenue mobilization, improved spending efficiency (supported by Fund technical assistance), carbon taxation, and reduced energy subsidies will not be enough. Greater concessional and grant financing from development partners is needed. Notably, up-front investment in resilience can yield long-term savings (measured by reduced disaster relief spending) that can be six times the up-front investment cost for floods (IMF SSA REO April 2020). Some recent examples of support for mitigation include IPAD's adaptation funds for rural farmers ($29 million); and FAO and CAFI financing ($47 million) for emission reduction by 17 million tons over the next twenty years by transforming rural slash and burn practices toward agroforestry (forest management combined with crops and livestock). Heads of States from the CEMAC, Angola, Burundi, DRC, Rwanda, Tanzania and Zambia are also aiming to launch credible projects in 2022, financed by the Blue Fund (Fonds Bleu, initiated by the President in 2017), but the creation of a unified platform is proving challenging.

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