Inclusive Budgeting and Financing for Climate Change in Africa

Potential implications of Covid-19 for climate-change expenditure

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Acronyms and abbreviations

CFAF	CFA franc
CVE	Cape Verdean escudo
DAC	Development Assistance Committee
DSSI	Debt Service Suspension Initiative
FAO	Food and Agriculture Organisation
GDP	gross domestic product
GFC	Green Climate Fund
GNI	gross national income
IBFCCA	Inclusive Budgeting and Financing for Climate Change in Africa
ODA	official development assistance
SOE	state-owned enterprise
SSA	sub-Saharan Africa

The Covid-19 pandemic has required governments across Africa to take unprecedented fiscal policy action in order to protect their populations and economies

Introduction

The Covid-19 pandemic has required governments across Africa to take unprecedented fiscal policy action in order to protect their populations and economies. Debt levels have soared while domestic budgets have been reconfigured on a large scale in order to provide much-needed funding to the health sector, businesses and households. The huge cost of the pandemic will impact budgets across Africa for years to come, with most countries expecting what limited fiscal space was available pre-pandemic to significantly dry up across the medium term. This is important when considering the climate-change agenda, where financing gaps were already substantial prior to the pandemic. While it is too early to tell how the fiscal squeeze will impact on climate change priorities in the long term, this paper aims to provide an early insight into how climate change expenditure across the continent may be affected by the pandemic. Within the constraints of a fast-changing environment, it is important to try to address the question at this early stage, in order to track how governments across Africa are perceiving the climate-change agenda, using climate-relevant expenditure as a proxy.

For the purpose of this paper, 'climate change' is defined as the long-term alteration of temperature and typical weather patterns. Climate change may cause weather patterns to be less predictable. These unexpected weather patterns can make it difficult to maintain and grow crops in regions that rely on farming, because expected temperature and rainfall levels can no longer be relied on. Climate change has also been connected with other damaging weather events, such as more frequent and more intense hurricanes, floods and drought.[1]

In order to reach this aim, the approach adopted in this case study is two-fold: (i) a macro analysis, comparing pre-Covid macro-fiscal forecasts with those produced since Covid, in order to understand the fiscal space constraints across the continent; and (ii) a micro-level analysis, comparing pre-Covid plans and budgets with those produced after the advent of the crisis in South Africa, Cabo Verde and Kenya, in order to understand how climate-relevant sectors have been affected by evolving expenditure needs and declining revenues.

Initial findings suggest that, at least in the short term, the crisis has forced most governments to divert spending away from non-pandemic-related areas, including some climate-related expenditure. In South Africa, Covid-19 has limited the availability of public finances for climate action and other key priorities. Cabo Verde's climate-relevant expenditure has been protected to an extent, partially by donor funding. In Kenya, the picture is similar, with some key climate-relevant expenditure continuing, facilitated by urgent need (namely, the prevention of the infestation and spread of desert locusts) and by donor financing. The medium-term prospects for climate-relevant expenditure are less clear, as government efforts remain focused on life-saving response measures and less so on medium-term planning. Given the prediction of shrinking fiscal space for the years ahead, it is likely that African countries will face extremely constrained policy environments. Difficult trade-offs will probably be required between addressing Covid-19 related health and poverty implications, and meeting longer-term development needs, including those related to climate change.

The findings of this paper are based on high-level analysis, largely utilising publicly available budget data, where climate relevance is only inferred due to the limits of such data. For a more in-depth analysis, access to government budget-tagging results would be required. Furthermore, governments' medium-term forecasts are likely to adjust over the coming months, once the real impacts of the pandemic become clearer; these future changes may affect the findings of the case study and demonstrate the importance of continuing to monitor the impact on climate-relevant expenditure.

Section 2 of the case study seeks to unpick how macro-fiscal environments have evolved following the onset of the pandemic, and discusses the medium-term outlook. Section 3 provides some early insights into how Covid-19 has shifted expenditure patterns across South Africa, Cabo Verde and Kenya, while Section 4 explores the feasibility of some financing sources with potential to grow fiscal space over the medium term.

This paper was developed for the CABRI Policy Dialogue on the Integration of Climate Change into Budgeting and Finance in Africa. This is part of the Inclusive Budgeting and Financing for Climate Change in Africa (IBFCCA) programme. IBFCCA aims to promote climate resilience in Africa and support the transition to a net-zero carbon future by strengthening the link between climate change policy and the budget process. The peer learning and exchange event provides a platform for officials from the ministry of finance, budget, planning and environment, to share experience on the integration of climate change into public financial management systems.

> ***"The Inclusive Budgeting and Financing for Climate Change in Africa (IBFCCA) programme aims to promote climate resilience in Africa and support the transition to a net-zero carbon future by strengthening the link between climate change policy and the budget process"***

Setting the scene: the macro-fiscal impacts of Covid-19 in Africa

Prior to the pandemic, 2020 was already set to be a bit of a mixed year for sub-Saharan Africa (SSA) due to a more challenging external environment, with downside risks emanating from climate shocks, fiscal slippages and the intensification of security challenges across the region. SSA's reliance on agriculture and other climate-sensitive sectors for production, as well as the limited capacity to respond to climate-related shocks, exposes the region to the effects of climate change. 2019 saw the region suffer from severe drought caused by El Niño, as well as cyclones Idai and Kenneth, impacting livelihoods, causing food insecurity, inflation, migration and substantial fiscal pressure.[2] The security challenges in the region act as an additional substantial downside risk, often associated with sizeable fiscal impacts. In October 2019, sub-Saharan Africa was expected to grow by 3.6 percent in 2020; growth was expected to remain strong in non-resource-intensive countries, while the resource-intensive countries were set for a tougher year, particularly South Africa, Nigeria and Angola. Twenty-two economies in the region, accounting for 52 percent of the SSA population and 34 percent of the region's GDP (less than 1 percent of global GDP) were forecast to be growing faster than 5 percent in 2020, before the effects of the pandemic took hold.[3]

2.1 Economic implications of the pandemic

Since those forecasts were made, more than 1.9 million lives[4] globally have been lost to the COVID-19 pandemic, with economies around the globe rocked by what is predicted to be the worst economic downturn since the Great Depression. Global economic growth is projected at 4.4 in 2020 before rebounding to 5.2 percent in 2021. Across the two years, global growth is predicted to suffer a cumulative loss of 6.2 percentage points (pp) relative to pre-crisis forecasts. Regional differences remain stark, as shown in Figure 1. Latin America and the Caribbean are forecast to suffer the largest cumulative hit to GDP growth (-8.8 pp), closely followed by SSA (-7.2 pp) and the Middle East and Central Asia (-7.1 pp) over 2020/21.[5]

Key facts

The pandemic is projected to severely damage economies across the globe, with forecasters predicting that global growth will suffer a cumulative loss of 6.2 percentage points (pp) relative to pre-crisis forecasts across 2020/2021. In sub-Saharan Africa (SSA), this number increases to a cumulative loss of 7.2 pp.[6]

As a result, per capita income levels in the region are forecast to return to those seen in 2012, with significant implications for poverty levels and vulnerable groups.[7]

Across SSA, it is expected that 90 percent of countries will experience increased poverty levels in 2020; estimates suggest that anywhere between an additional 25 to 40 million people will be pushed into extreme poverty in 2020.[8]

Evidence is mounting that the economic impacts of Covid-19 are hitting women harder than men, with mitigation measures impacting the sectors where women work more.[9]

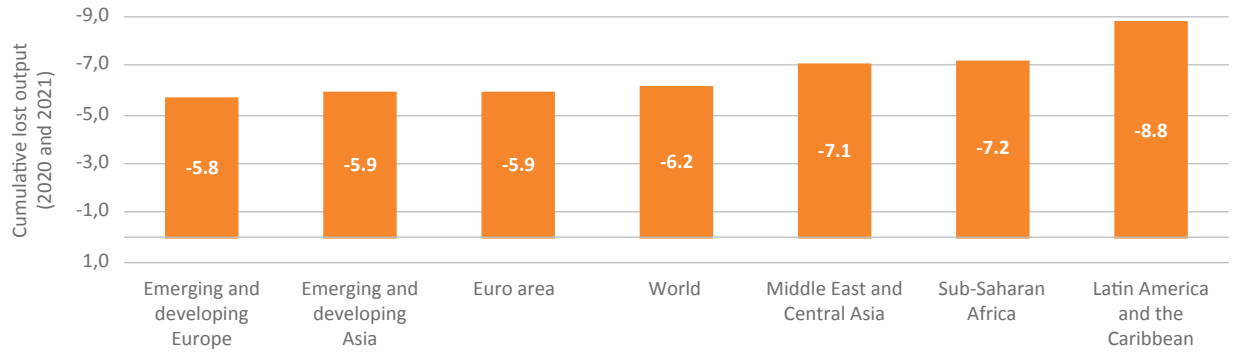
Sub-Saharan Africa entered the Covid-19 pandemic more fiscally constrained than most other regions in the world leaving them with little ammunition to protect their economies and vulnerable populations; the average Covid-19 fiscal package across African countries amounted to only 2.3 percent of GDP.[10]

Now forecast to be 22 percent lower than pre-crisis estimates,[11] fiscal space is shrinking substantially as revenues across SSA tumble.

As a result, many countries in SSA are taking on substantial increases in debt; over the medium term, the high fraction of tax revenue absorbed by debt service will necessarily mean that there is less revenue left over for priority areas, including investment in climate change adaptation and mitigation.

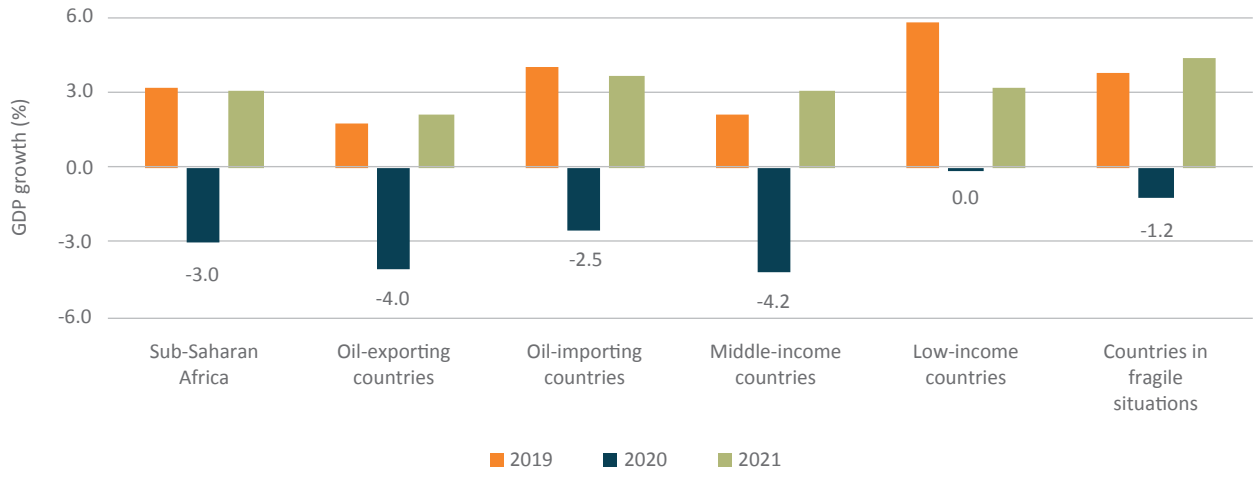
Due to the combination of domestic lockdowns and spill-overs from the global recession, SSA was set to contract by 3 percent in 2020, the worst growth performance for the region on record and 6.6 percentage points below pre-crisis forecasts. On a per capita basis, this equates to a real drop of 5.6 percent, returning per capita income levels to those seen in 2012, with significant implications for poverty levels and vulnerable groups (as discussed in section 2.3). In addition, the indirect effects of the policy measures that were put in place to stop the spread of the pandemic were particularly challenging for women in developing countries, predominately working in the informal sector in jobs that often require social interaction.[12] As shown in Figure 2, forecasts suggest the region will recover modestly in 2021, growing at 3.1 percent, a smaller expansion than expected in much of the rest of the world due to SSA's limited fiscal space. There are, of course, downside risks to these projections, notably regarding the evolution of the Covid-19 pandemic, which continues to remain unclear, the resilience of the region's health systems, and the availability of external financing. Africa also continues to be subject to climate-related shocks, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement and stress on water resources. In addition, further floods, drought and desert-locust invasions could derail a recovery.[13] The region, as a whole, is not expected to return to 2019 output levels until 2022, key exceptions being Nigeria, South Africa and the Seychelles, where real GDP is not forecast to return to pre-crisis levels until 2023 or 2024.[14]

Figure 1: Cumulative lost output across the globe is stark



Source: IMF, 2019[15] and 2020[16]

Figure 2: All countries across the region have been negatively impacted by the crisis, with regional GDP declining by 3% this year



Source: IMF, 2020[17]

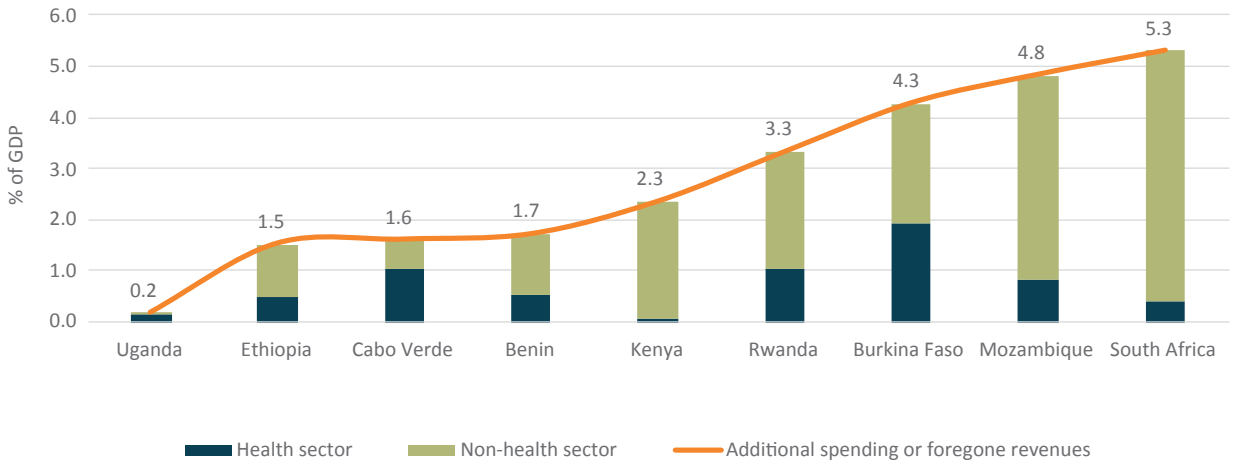
2.2 COVID-19 and the fiscal implications

Sub-Saharan Africa entered the Covid-19 pandemic more fiscally constrained than most other regions in the world. Prior to the pandemic, large parts of SSA were already experiencing falling revenues and increasing spending pressures, particularly as a result of climate change. Cyclones Idai and Kenneth are estimated to have caused total damages across Malawi, Zambia and Zimbabwe amounting to at least US$2 billion[18] – approximately 4 percent of the three countries' combined GDP. Estimates suggest the economic costs of climate change in Africa are significantly higher in relative terms than in many other regions around the globe, and will be equivalent to 1.5–3 percent of GDP each year by 2030.[19] Sixteen SSA countries were at high risk of debt distress, or already in debt distress before the pandemic, and although the level of indebtedness of the region as a whole remained lower than levels before debt forgiveness programmes, the risk profile of public debt has increased sharply.[20] These factors place SSA in a vulnerable position in respect of financing the crisis. Once the pandemic hit, money was required to control the virus, and cushion the blow to the economy. However, limited fiscal space due to the aforementioned reasons has led to varied responses across the region, in both size and duration.

Most SSA countries have been able to muster some form of fiscal stimulus in response to the pandemic – Figure 3 highlights a selection from across the region. Based on IMF data, the region as a whole has announced fiscal measures totalling US$37.7 billion, representing 0.6 percent of the US$5 953 billion global effort (while contributing 2 percent of global income). On a country level, this amounts to an average fiscal package of around 2.3 percent of GDP, compared to packages averaging 7.4 percent of GDP in advanced nations and 3.8 percent of GDP in emerging markets. The countries that have announced the largest packages in the region (as a share of GDP) include Lesotho (10.2 percent of GDP), Seychelles (5.8 percent), Chad (5.7 percent) and South Africa (5.3 percent). For countries with better fiscal policy space going into the crisis, or access to external financing, efforts have been made within these packages to increase social protection expenditure in an effort to cushion the poorest households during the lockdowns (notably South Africa, Kenya and Nigeria). Evidence does suggest, however, that the generosity of social protection schemes in SSA is limited – equivalent to US$10 per capita, compared to the global average of US$176.

Partly the result of substantial time pressure, stimulus packages have had a short-term focus, with limited discussion on the potential implications of measures being rolled out, and appear to have little to no inclusion of a gender lens, with a handful of exceptions. Burkina Faso is one example of informal-sector workers having been prioritised in their cash-transfer programmes, where women are the larger recipient group, while Togo has launched a new social safety net, in terms of which women receive larger monthly payments than men.[21]

Figure 3: Fiscal stimulus measures have varied substantially across the region, impacted by both affordability and the severity of the pandemic

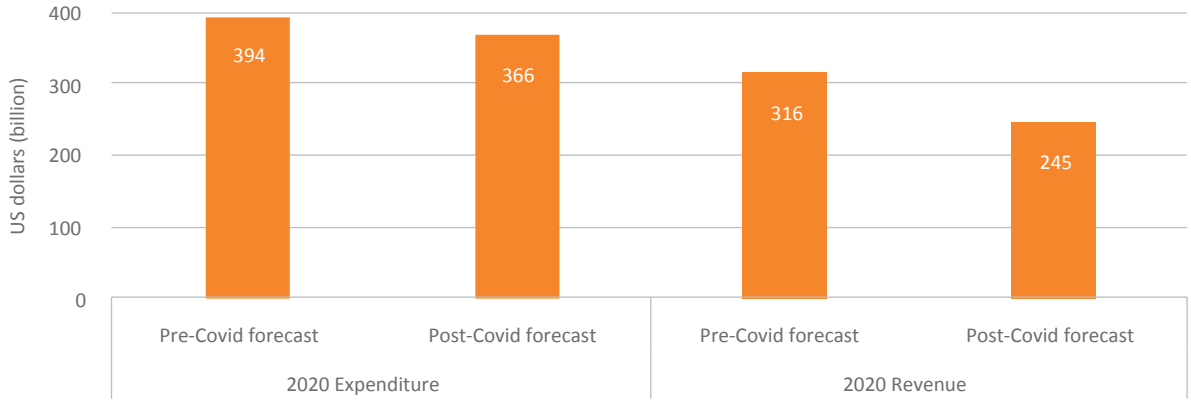


Source: IMF, 2020.[22] IMF, 2019 and 2020.[23]

While expenditure needs were expanding, revenues across the region tumbled – from an already low baseline – as economic output fell and policy measures provided tax relief. From a regional perspective, government revenues as a share of GDP declined from 16.8 percent in 2019 to 14.5 percent in 2020. Compared to pre-crisis forecasts, 2020 revenues for the region are now expected to be 22 percent lower, as shown in Figure 4. The revenue hit has been experienced across the region, with the oil exporters facing the worst of it (-23 percent reduction on 2019) in early 2020 due to the decline in oil prices.[24]

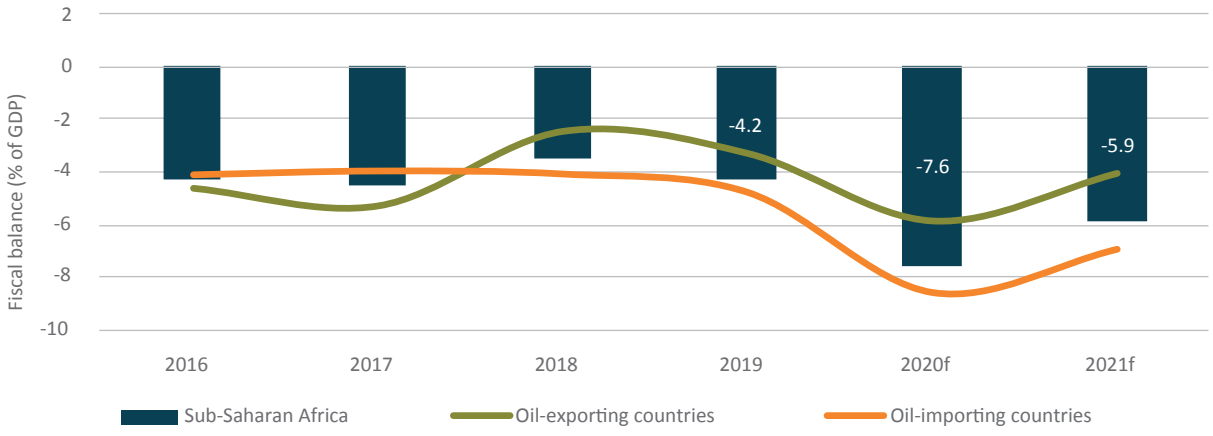
Increased spending pressures and low revenue combined to worsen fiscal balances (see Figure 5). Across the region, the fiscal deficit was projected to increase from -4.2 percent of GDP in 2019 to -7.6 percent in 2020, before declining to -5.9 percent in 2021. While figures vary across the region, all countries (bar Zambia) foresee an increased fiscal deficit in 2020; the average increase across the region equates to 3.3 percentage points, and some, mostly those affected by the collapse in tourism (Cabo Verde, Ghana, Mauritius, Seychelles and South Africa), are now experiencing double-digit deficits. For the oil-exporting countries, the fiscal deficit was projected to widen on average from -3.3 percent of GDP in 2019 to -5.6 percent in 2020.[25] Fiscal deficits across the region are forecast to decrease in size in 2021 and relatively soon to return to pre-crisis levels. This is a worrying trend since revenues are not forecast to rebound as quickly, indicating the need to slash budgets and de-prioritise discretionary spending in order to balance the books. Government perspectives risk a shift to the short term to try and repair the public balance sheet, placing issues that might not bite until the longer term, like the climate agenda, on the back burner.

Figure 4: Fiscal space is shrinking. Revenues across SSA are now forecast to be 22% lower than pre-crisis estimates



Source: IMF, 2020.[26] IMF, 2019 and 2020.[27]

Figure 5: As a result, fiscal deficits across the region have increased, forecast to increase by 3.4 percentage points between 2019 and 2020

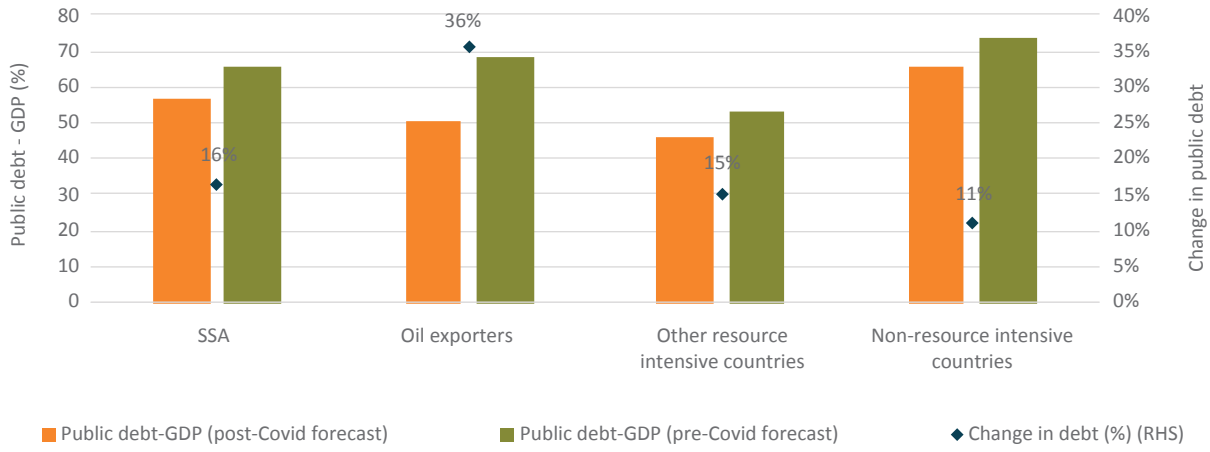


Source: IMF, 2020[28]

The Covid-19 pandemic is accelerating an already substantial build-up of debt accumulation in SSA.[29] Public debt in the region was projected to increase to 66 percent of GDP by the end of 2020 (see Figure 6), almost 10 pp higher than pre-crisis levels. The largest increases are in oil-exporting countries, where debt-service-to-revenue ratios are high at 76.3 percent (153 percent higher than pre-Covid forecasts – see Figure 7). Evidently, the pandemic has amplified debt vulnerabilities in the region; five countries[30] are in debt distress, and 13[31] are classified at high risk of debt distress. Across the medium term, the high fraction of tax revenue absorbed by debt service will necessarily mean that there is less revenue left over for priority areas, including investment in climate-change adaptation and mitigation. Yet needs will be elevated after the crisis period to address rising poverty, tackle growing inequality, and correct setbacks to human capital accumulation.

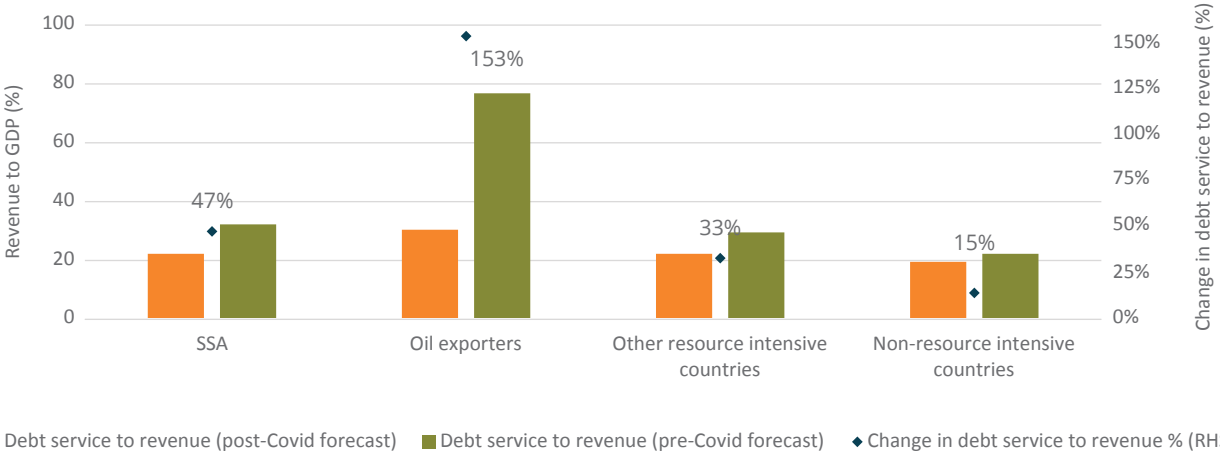
External development finance has played an important role in providing countries with rapid liquidity to weather the crisis; however, levels are increasingly insufficient. Thirty-one African countries received financial support through the IMF's Rapid Credit Facility and Rapid Financing Instrument (designed specifically for quick release of funds during shocks).[32]

Figure 6: 2020 public debt to GDP levels are 16% higher than pre-crisis forecasts, 36% higher for oil exporters



Source: IMF, 2020[33]

Figure 7: Debt-service to revenue ratios are climbing across the region, but have increased significantly for oil exporters



Source: IMF, 2020[34]

The Debt Service Suspension Initiative (DSSI) by G20 members to grant debt service suspension has also offered some respite for 28 countries in the region. However, only small savings have been accrued to date, due to limited participation by creditors; it is estimated that the DSSI has so far covered only 1.66 percent of debt payments due in 2020 by all developing countries.[35]

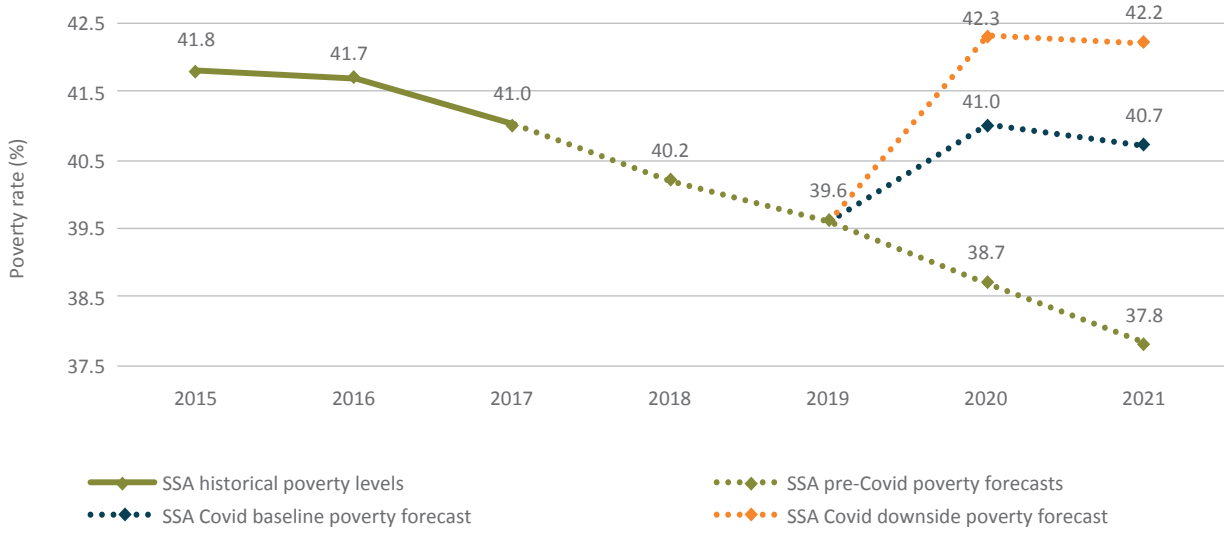
The IMF forecast SSA's potential external financing needs to be about US$890 billion over the period 2020–2023, equivalent to about 55 percent of 2020 regional GDP.[36] Yet, how development finance will evolve across the medium term is to a certain extent a question of political will. While many countries have signalled political commitment in support of a global sustainable recovery, few economies will come out of the crisis unscathed, with potential implications for aid budgets.[37] Several aid commitments have also been brought forward and diverted for humanitarian Covid-19 response; how this affects the aid pipeline, and what happens to those projects initially intended to receive aid remains unclear. Central forecasts suggest a sizeable financing gap of US$290 billion, but it remains largely in the hands of governments to determine in which sectors or policy areas those gaps will be most visible.

2.3 COVID-19: poverty, food security and gender implications

Despite response efforts, the resources available within the region have still been far from sufficient to offset the social impact of the crisis. Current estimates suggest that the pandemic is reversing hard won economic and development gains in the region, with much of the impact falling disproportionately on the most vulnerable segments of the population. World Bank baseline estimates suggest that poverty levels (measured as the number of people living on less than US$1.90 per day) in 2020 will be 1.4 percentage points higher than in 2019, pushing an additional 25 million people into extreme poverty, as shown in Figure 8. This number increases to 40 million in the downside scenario.[38]

Across the region, it is expected that 90 percent of countries[39] will experience higher poverty levels in 2020 than in 2019. The recovery is not expected to be quick. By 2022, 62 percent of the countries within SSA are projected to have poverty levels higher than in 2019 levels.[40] Rising food prices are a further concern. The pandemic has resulted in disruptions to local and imported food supply chains, pushing up food prices in many countries, raising concerns over food insecurity. In SSA as a whole, inflation[41] increased to 10.6 percent in 2020, from 8.5 percent in 2019; in Angola, Ethiopia, South Sudan and Zimbabwe, inflation sits above 20 percent.[42] Food security remains a concern in Angola, Burkina Faso, Central African Republic, Ethiopia and Nigeria. In East Africa, food security concerns have been compounded by the desert-locust upsurge. High frequency surveys by the World Bank suggest that at least 45 percent of households within the region reported having been worried about running out of food in the previous 30 days; in the DRC, the number reached 84 percent.[43]

Figure 8: Poverty is expected to spike, with an additional 25–40 million falling into poverty in SSA as a result of the pandemic



Source: World Bank, 2020[44]

Both Covid-19 and the climate crisis have exposed the fact that the poorest and most marginalised people in society are always the most vulnerable to shocks. Evidence is mounting that the economic impact of Covid-19 is hitting women harder than men, with Covid-19 mitigation measures being rolled out across Africa impacting the sectors where women are more likely to work.

Eighty-nine percent of women in Africa are engaged in the informal economy.[45] Women are also overrepresented in the service, tourism and hospitality industry, and comprise much of the subsistence farming sector.[46] As countries locked down, many of these jobs quickly disappeared, with limited legal and social protection in place. During the 2013–2016 Ebola outbreak in Liberia, women endured higher levels of unemployment than men and it subsequently took considerably longer for them to re-enter the workforce.[47] In Kenya, women account for 60 percent of job losses since the beginning of the pandemic.[48] Women also face fewer options for coping strategies, with limited access to financing. A Facebook survey revealed more women-owned firms reporting temporary closure than male-owned firms in both Ghana and Nigeria.[49] School closures have also resulted in increases in (largely) women's unpaid labour demands, while their access to paid work diminishes. According to the Population Council study in Nairobi, women are more likely to report doing more of the cooking (49 percent vs. 24 percent of men), cleaning (61 percent vs. 25 percent of men) and childcare (67 percent vs. 36 percent of men) since the outbreak.[50]

2.4 The bumpy path ahead

Covid-19 is likely to weigh on growth in SSA for years to come, with the majority of countries not expecting to quickly return to pre-crisis GDP levels. GDP per capita in the region is not forecast to return to 2019 levels until 2025, undoing seven years of hard won gains, potentially pushing up to 40 million people into extreme poverty.[51] Fiscal deficits across the region subsequently ballooned to meet increasing health and pandemic related spending needs while revenues fell, neither of which are predicted to dissipate in the near future. Government debt has been the necessary go-to for governments trying to finance growing deficits; associated interested payments are expected to further weigh on budget deficits for years to come. Together, these facts paint a worrying picture for SSA's path out of the pandemic. What was limited fiscal space for many countries before the pandemic, is now an extremely constrained policy environment. Countries will face very tough decisions across the medium term, with high debt burdens likely to limit the ability of many to fund much-needed development and climate spending.

"GDP per capita in the region is not forecast to return to 2019 levels until 2025, undoing seven years of hard won gains, potentially pushing up to 40 million people into extreme poverty"

Implications of Covid-19 for climate-relevant budgets and expenditures

3.1 Climate change during the pandemic

While the world continues to fight the pandemic, the climate change crisis rages on, in many cases compounding the impact of Covid-19. 2020 brought one of the worst desert-locust[52] invasions for Kenya, Somalia, Sudan and Ethiopia, while southern Africa suffered its worst drought in 25 years.[53] Since the start of 2020, Sudan, for example, faced desert-locust invasions and severe flooding on top of Covid-19, leaving 9.6 million people facing acute food insecurity – the highest level ever recorded in the country.[54] In many cases, the pandemic is increasing the needs of people suffering from climate-related disasters, exacerbating the vulnerabilities they face and hampering their recovery.[55]

Although global lockdowns introduced some hope to the climate change agenda, with an overall 8.8 percent decrease in global CO2 emissions recorded in the first half of 2020,[56] this change is expected to be temporary if a post-crisis world returns to business as usual. How countries choose to exit the crisis, and what paths they choose to chart across the medium term will be key to preserving and repeating such gains year after year to reach net-zero emissions by 2050. However, with the huge financial burden that the pandemic has imposed, the majority of countries in Africa will be looking carefully at their budgets, considering how to go about repairing their public finances across the medium term. Monitoring how countries choose to treat climate-relevant expenditure within this process will be telling for the likely repercussions on the climate-change agenda.

3.2 Covid-19 and climate-relevant expenditure

Although countries across the continent are increasingly recognising the importance of climate change as a macro-fiscal priority, devising national climate-change strategies or action plans, the feat remains costly. Estimates vary, but evidence suggest that the amount of financing needed to adapt ranges from US$5–30 billion a year for the period 2010–2015, rising to US$20–60 billion a year by the period 2020–30.[57] For fiscally constrained countries with multiple developmental needs, there are significant financing gaps. A study on adaptation spending in Africa in 2016 estimated the continent-wide adaptation gap (that is, the share of climate-change impact that is not avoided by planned levels of adaptation spending) to be in the region of 80 percent, meaning that the 2016 level of adaptation expenditure will reduce the potential economic impact of climate change by about 20 percent.[58]

Since those estimates were produced, costs are likely to have been increasing,[59] the pandemic has placed significant downward pressure on revenue while debt levels are substantially higher.[60] Thus, we can infer that the adaptation gap is likely to increase, in part as a result of the pandemic's impact on fiscal space.

While it is too early to identify the ultimate impact of Covid-19 on climate-relevant expenditures across Africa as the pandemic continues to unfold globally and policy responses remain ever-changing, this paper offers a glimpse (as of January 2021) into three countries' Covid-19 experiences and how these are likely to impact upon climate-relevant spending. This section will review short-term budget decisions, examining the budget reallocations introduced through supplementary budgets, by sector and the type of spending (recurrent versus capital spending). In emergencies, countries often use the capital budget as a buffer; it is generally easier to opt not to build a road, for example, than to choose to cut the public sector salary bill. Since different aspects of climate-relevant expenditure come from different sides of the budget (e.g. the recurrent budget will fund water supply, agriculture extension programmes or salaries, while the capital budget will focus on projects), it is important to monitor the changing composition of budgets. Furthermore, if necessary budget adjustments continue to fall on the capital side of the budget, there will be potential long-term growth implications that will impact on future fiscal space.

Of course, short-term actions in the midst of a global pandemic are not necessarily indicative of the potential longer-term responses and implications for the climate-

change agenda. As such, where possible, analysis will look to the medium term to determine if the required fiscal consolidation efforts are likely to bite for climate-relevant programmes; however, analysis is merely indicative. Only with access to government budget-tagging results, or by conducting a Climate Public Expenditures and Institutional Review would it be possible to say with certainty how climate spending is projected to fare over the medium term.[61] For many countries, the difficult trade-off between implementing measures to support near-term growth and avoiding a further build-up of debt that will be hard to service down the road, considering the crisis's hit to potential output, will continue to be faced across the medium term.

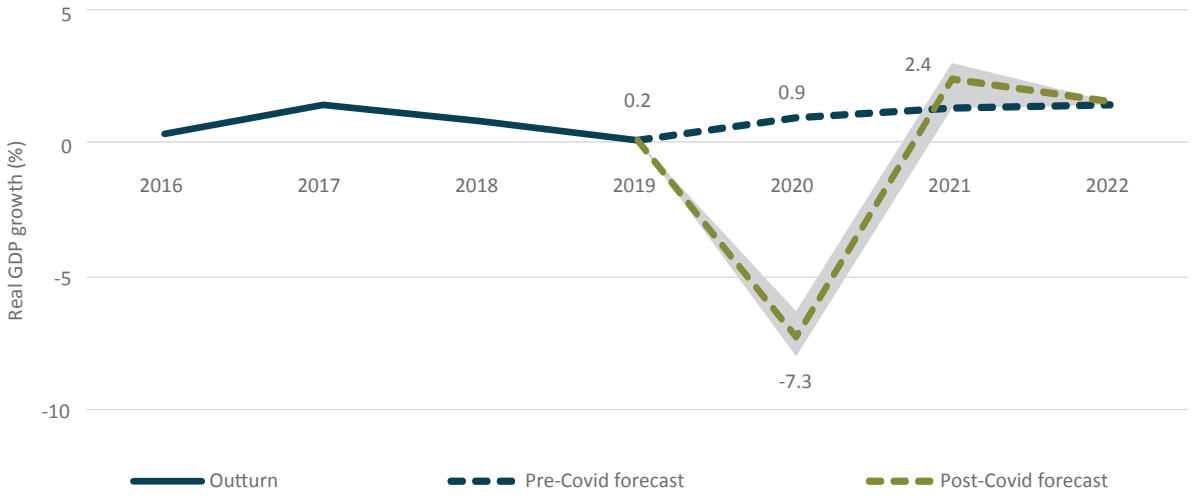
3.3 South Africa

South Africa faces a twin climate challenge in the context of high inequality, being both highly vulnerable to climate impacts and the 14th highest greenhouse gas (GHG) emitter in the world. In its Intended Nationally Determined Contributions, submitted to the United Nations Framework Convention on Climate Change in 2016, the government sets out its commitment to peak, plateau and diminish the country's GHG emissions by expanding infrastructure and technology for clean energy sources and adopting cost-effective standards to reduce electricity consumption by buildings and industry. Given the impact this is likely to have on communities and households that are dependent on the coal and other high-emission industries, South Africa has set out a 'just transition' approach to climate change, which seeks to provide better jobs, social protection, more training opportunities for all workers affected by global warming and climate change policies. The 2011 National Climate Change Response Policy White Paper establishes the government's commitment to 'mainstream climate change response into the fiscal budgetary process and so integrate the climate change response programmes at national, provincial and local government and at development finance institutions and state-owned entities.' Key measures introduced to date include a carbon tax (initiated in 2019), as well as a renewable energy state procurement programme (since 2010), and directives pertaining to climate-sensitive public expenditure in the Medium-Term Expenditure Framework submission guidelines. A climate budget tagging system has also been under design, since last year.

3.3.1 Macro-fiscal context

The pandemic hit South Africa at a time of significant fiscal constraint: GDP growth had declined from 3.3 percent in 2011 to just 0.2 percent in 2019, while per capita real GDP growth had been contracting since 2014.[62] Public debt had increased from just over 40 percent of GDP in 2012 to 63 percent of GDP by 2019. With its vulnerable position pre-pandemic, battling the most cases in the region and a very strict lockdown bringing the economy to a standstill, South Africa has been hard hit by Covid-19. Growth was projected to contract by 7.3 percent in 2020 before rebounding moderately in 2021 to around 2.4 percent (see Figure 9),

Figure 9: Prior to the pandemic, South Africa's economy was already performing poorly. With the onset of the pandemic, 2020 GDP is expected to fall by 7.3%



Source: IMF, 2020. World Bank, 2020. AfDB, 2020.[63]

where pre-existing structural constraints, such as electricity shortages, will be becoming binding again.[64] The Covid-19 crisis has had a terrible impact on unemployment and poverty. Surveys show that 40 percent of employed South African workers were not working in April 2020 and 3 million people are estimated to have been pushed into poverty.[65]

Prior to the pandemic, the 2020 Budget strived to restore South Africa's public finances to a healthier position, proposing a net decrease in spending of US$10.5 billion (R156.1 billion) over the 2020/21–2022/23 period compared to the 2019 Budget.[66] Covid-19 altered these plans following additional expenditure demands and reducing revenues. The government of South Africa subsequently proposed a significantly higher deficit through a revised budget, together with significant reprioritisation within the baseline to accommodate the impact of Covid-19. Forecasters expect the fiscal deficit to bulge to anywhere between-14 percent[67] and-16.2 percent[68] of GDP in 2020, compared to 6.4 percent of GDP in 2019.[69] Future plans suggest deeper cuts will follow in the outer two years to rein the deficit in. Expenditure is expected to be cut by an additional 7 percent of the original budgets for 2021/22 and 2022/23.[70]

3.3.2 Budgetary response to the pandemic in 2020

In 2020/21, the government of South Africa financed its Covid-19 response of US$9.9 billion (R145 billion) through the supplementary budget, of which US$2.5 billion (R36 billion) was financed through additional debt, and the remainder through reprioritisation of the budget. As a result of the combined impact of pre-Covid fiscal constraints and Covid-19, many departments and programmes funded by the main South African budget faced expenditure cuts.

As illustrated in Figure 10, the main 'losers' within the supplementary budget were the learning and culture cluster and economic development cluster, the budgets of which were cut by 13.2 percent and 7.5 percent against the original 2020 budget plans. The social development sector was the main winner, with the supplementary budget increasing the sector's budget by 25.3 percent to finance the Unemployment Insurance Fund for workers facing distress, and other mechanisms to protect low-income workers and the most vulnerable families.[71]

While it is not possible at this early stage to determine the proportion of climate-relevant expenditure that was impacted by the pandemic, as our analysis is limited to budget data, and climate-change relevance measures are not available, we can make some inferences regarding the direction of movement by looking at the programmes and ministries under which climate-change expenditure would generally sit, and how the supplementary budget changes these allocations.[72] The Department of Environment, Forestry and Fisheries (DEFF), a key ministry for climate-related spending, witnessed a 9 percent reduction in recurrent expenditure compared to the original budget. As demonstrated in Table 1, the suspension of activities with recurrent costs due to Covid-19 resulted in climate-change sub-programmes in DEFF losing about a third of their allocations for 2020/21.The worst hit sub-programmes include climate change, air quality and sustainable development management (-51 percent) and climate change mitigation (-44 percent).

In the Department of Agriculture, Rural Development and Land Reform, where the overall budget was reduced by 12 percent, the national budget allocations in support of agricultural research, disaster management, farmer development, extension services and food security were reduced by 13 percent on average. The food security sub-programme, however, lost almost half of its allocation: the explanation from the National Treasury was 'fewer farmers supported due to restrictions on economic activity'. It should be noted however, that most agricultural infrastructure development and support services are financed at the provincial level, and it is not clear how these programmes were affected or what the combined impact on future food security would be. Furthermore, there were additional payments of US$1.7 billion (R25.4 billion) to households to support food security at household level.

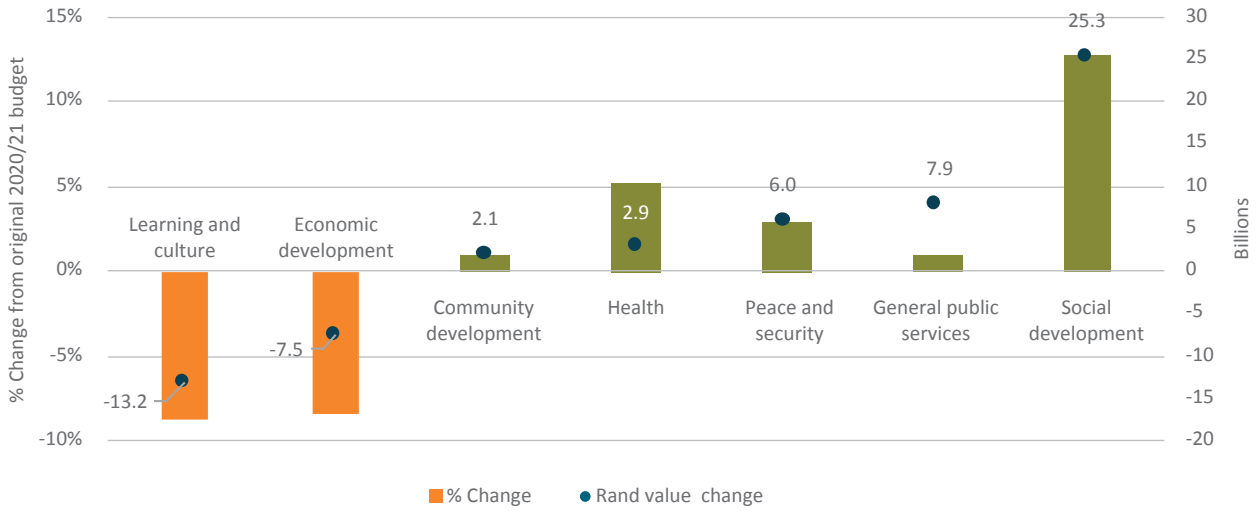
For the national programme supporting energy innovation, green energy and energy efficiency projects, reductions equated to 5 percent on average. In allocations to water management, cuts were made to the water sector regulation and water planning budgets. Yet, transfers for water infrastructure development did not change, although the supplementary budget review noted that projects would be delayed.

3.3.3 Possible implications for the medium-term response

Covid-19 has meant that many departments and programmes funded by the main South African budget are facing expenditure cuts, limiting the availability of public finances for climate action. This is evident in the immediate wake of the crisis. However, the supplementary budget did not highlight where the outer-year cuts might occur and, therefore, it is unclear what the medium-term implications might be for climate-relevant expenditure in South Africa.[73] It is likely, however, that South Africa will be moving ahead with some form of fiscal consolidation from 2021 onwards to rein in its sizable deficit. Given that 2020 was set to be a year of fiscal consolidation for South Africa prior to the pandemic, looking back to see how the government of South Africa treated climate-relevant expenditure during the 2020 fiscal consolidation process might shed some light on what might happen post-Covid-19. This is speculative, of course, and there are reasons to believe that the pandemic may have affected South Africa's budget priorities, with the consequence that the past might not be a good indicator of future trends.

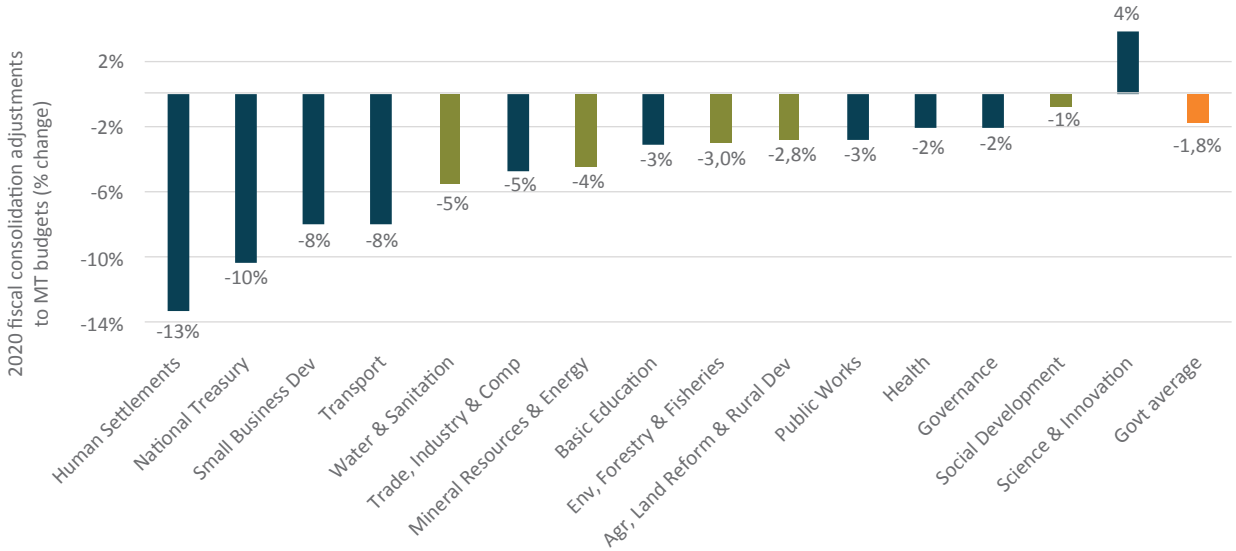
During the original 2020 fiscal consolidation effort in South Africa (pre-Covid-19), the average revision to medium-term allocations was -1.8 percent. Figure 11 demonstrates the changes experienced by departments that typically incur some climate-relevant expenditure. As can be seen, some of the key climate-relevant departments, such as the DEFF and the Department of Agriculture, Land Reform and Rural Development, received greater cuts than the average, at 3 percent and 2.8 percent respectively. In February 2021, the government of South Africa will publish the executive budget proposal for 2021/22–2023/24; this will provide an indication of how Covid-19 has affected the priorities of South Africa across the medium term. The addition of an 'inclusive, digital, green and sustainable' pillar in South Africa's high-level economic recovery strategy could imply greater priority for climate action over the medium term (see discussion in section 4.1).

Figure 10: The economic development and learning and culture sectors were the most negatively affected by the Covid-19 2020/21 budget adjustments



Source: National Treasury (RSA), 2020

Figure 11: Previous fiscal consolidation efforts have hit sectors across the board in South Africa, but some with more of a climate relevant spending have previously faced more sizeable than average cuts



Source: National Treasury (RSA), 2019 and 2020

Table 1: Covid-19 budget adjustments that are likely to affect climate-relevant expenditures

	US$ (000s) change	% change on original budget
In environmental affairs	**-1,020**	**-31% on average**
Climate-change adaptation	-34	-5%
Climate-change mitigation	-398	-44%
Air quality and sustainable development management	-350	-51%
International climate change relations and reporting	-238	-23%
In agriculture	**-77,497**	**-13% on average**
Agricultural production, health, food safety, natural resources, and disaster management	-12,891	-6%
Farmer support & development	0	0%
Food security	-64,054	-46%
National extension services and sector capacity development	-553	-1%
In social development	**1,736,809**	**14%**
Social assistance	1,736,809	14%
Energy innovation, green energy and energy efficiency projects	**-9,394**	**-5% on average**
Minerals and energy efficiency and green energy programmes	-2,153	-5% on average
Energy and innovation programmes	-7,240	-5% on average
Water management	**-10,975**	**-7%**
Water infrastructure development	0	0%
Water sector regulation	-1,965	-7%
Water planning and information management	-9,010	-13%

Source: National Treasury (RSA), 2020[74]

3.4 Cabo Verde

According to the World Economic Forum's Global Risk Report 2020, Cabo Verde is the African country most exposed to climate risk, including sea-level rise, rainfall variability and drought. The government responds to this raft of policies and planning documents that set out priorities for climate adaptation and disaster risk management. While these policy documents do not come with associated public finance commitments, the government budget nonetheless finances substantial programmes to support agroforestry, water supply and drought resilience, as well as a programme for managing disasters. The Ministry of Finance created an Inter-ministerial Commission for Climate Finance in 2019; however, its progress in pushing climate-budget integration reforms has stalled as a result of the COVID-19 pandemic. Early discussions have been had around climate-budget tagging, the possibility of conducting a climate Public Expenditure and Financial Accountability (PEFA) assessment, and additionally developing a strategy for climate finance mobilisation.

3.4.1 Macro-fiscal context

Prior to the pandemic, Cabo Verde's economy was accelerating (5.7 percent growth in 2019) on the back of strong growth in the tourism industry, despite weathering the continued effects of the 2017 drought, which resulted in a 40 percent contraction of the agriculture sector between 2016 and 2018.[75] As a result of this dependency, with 40 percent of overall economic performance linked to tourism and travel-related industries, Cabo Verde's exposure to the indirect effects of Covid-19 was high.[76] GDP growth in 2020 is expected to have the largest contraction on record, with forecasters predicting a real decline of 6.1 percent, on average (Figure 12). The slowdown in economic activity stems from a steep decline in tourism receipts (expected to drop by 60–70 percent compared to 2019), revenue losses from fish exports and stagnant activity in manufacturing, transport and logistics following the disruptions in global supply chains.[77] As a result, the World Bank expects the unemployment rate to double to 19.2 percent and an additional 40,000 people to fall into poverty in 2020.[78]

Despite entering the pandemic in a strong fiscal position, with a small deficit of 1.9 percent of GDP following fiscal consolidation and state-owned enterprise (SOE) reform efforts, 2020 was expected to see a substantial widening of the fiscal deficit. Forecasts suggested that the deficit would climb to 11.3 percent of GDP in 2020 (from original plans of 1.7 percent of GDP) following the loss in tourism revenue and increased spending pressures. Cabo Verde launched a stimulus package amounting to 1.6 percent, largely channelled towards income support aimed at preserving the livelihoods of the most vulnerable. Although much of Cabo Verde's response efforts were financed through reallocations and external support, public debt levels are expected to climb from an already very high level of 125 percent of GDP in 2019, to 139.4 percent of GDP in 2020.[79] The risk of debt distress in Cabo Verde remains high; a return to sustained fiscal consolidation will be required to reduce debt levels in the post-pandemic period. Debt service costs remain modest due to Cabo Verde's access to concessional loans.[80]

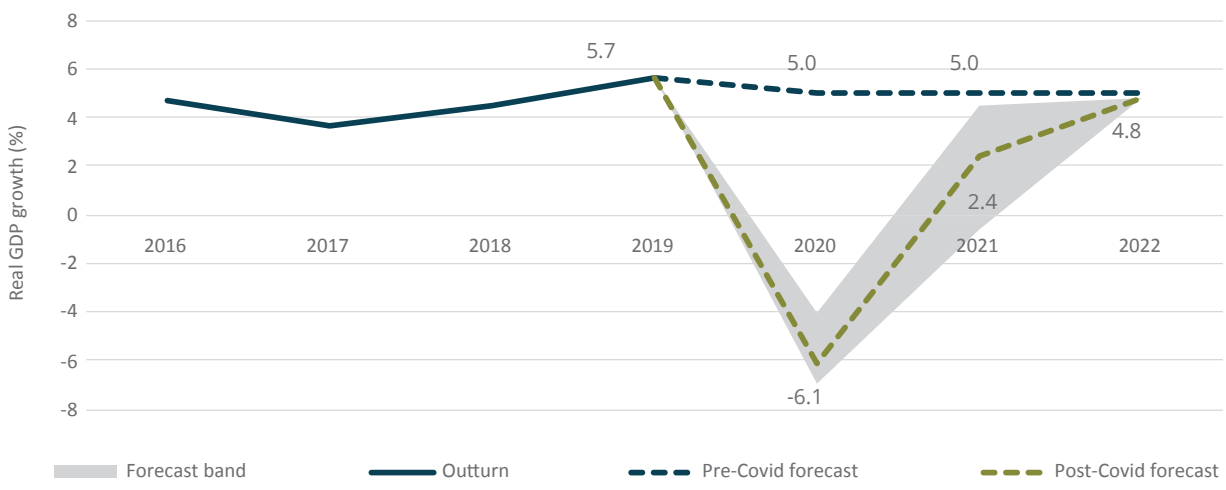
3.4.2 Budgetary response to the pandemic in 2020

Cabo Verde approved a supplementary budget in August 2020,[81] increasing the original budget by 2.6 percent, with a new focus on protecting human lives, relaunching the economy and mitigating the economic and social impacts of the pandemic. This overall increase in the budget ceiling was largely financed through external resources (+78.5 percent), while internal financing was reduced following lower revenue collections (-17.5 percent), as shown in Table 2. The budget introduced a number of reallocations across programmes as priorities were revised. Based on Cabo Verde's four pillars of expenditure (economy, social, public administration, sovereignty), it was the economy and social pillars that were the main beneficiaries of the supplementary budget, with their respective ceilings increasing by 4.6 percent and 12.0 percent, compared to the original 2020 budget. The public administration and sovereignty pillars experienced substantial cuts, particularly to operational expenses.

As with South Africa, from the budget data we are unable to see how climate-relevant expenditure has been affected by the pandemic. Therefore, instead, we will focus on programmes where climate-change expenditure would generally be located and make some inferences therefrom. In Cabo Verde, climate-relevant expenditure largely sits under the economic pillar across five programmes: (i) water and sanitation; (ii) conservation of biodiversity and environmental quality; (iii) energy sustainability; (iv) agriculture transformation; and (v) management of climatic and geological environmental risks.

While the overall pillar under which climate-relevant expenditure sits – the economic pillar – fared well in the supplementary budget (increasing by 4.6 percent). There was substantial variation in programmes under the economic pillar (see Figure 13); programmes where climate-relevant expenditure is most likely to be found have been affected to varying degrees. The water and sanitation budget was reduced by 8 percent (-414 million CVE (US$4.6 million)) in the 2020 supplementary budget, fairing much worse than the average programme under the economic pillar. However, zooming in on the projects, most received an increase in allocation through the supplementary budget. The overall decrease was driven by one water production and distribution project; the budget cites this reallocation as being the result of reprogramming of external financing, where needs were greater elsewhere. In 2021, the budget for water and sanitation has been more than replenished, although this trend is driven by the same project, with elements being pushed back into 2021. Indeed, many smaller programmes appear to have been deferred to later years.[82]

Figure 12: The pandemic is expected to give rise to Cabo Verde's largest contraction on record, with 2020 GDP forecast to shrink by between 4%–7%



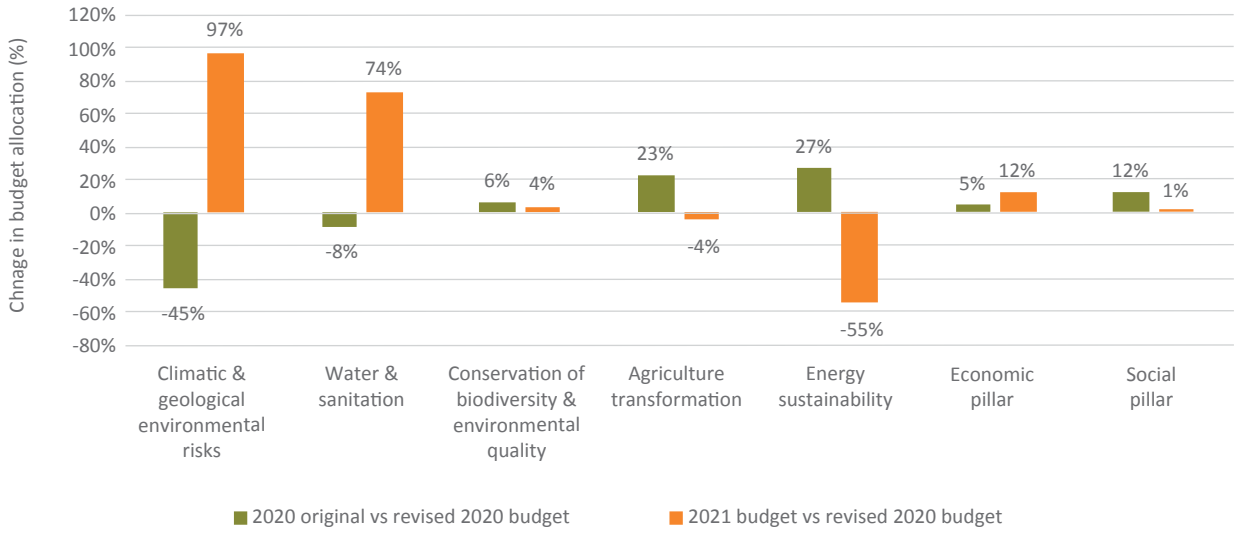
Source: IMF, 2020. World Bank, 2020. AfDB, 2020.[83]

Table 2: 2020 supplementary budget in Cabo Verde, financing sources

	Original 2020 budget (US$ mn)	Supplementary 2020 budget (US$ mn)	Change (%)
Internal	**648**	**534**	**-17.5**
Treasury	639	525	-17.8
Other national funds	8	9	5.7
External	**172**	**307**	**78.5**
Donations	57	87	52.6
Loans	112	216	92.3
Food aid	2	3	43.4
Total expenditure	**820**	**841**	**2.6**

Source: Ministry of Finance (Cabo Verde), 2020

Figure 13: Budgets where climate-relevant programmes are most likely to sit have been affected by the pandemic to varying degrees, with reductions often replenished by 2021



Source: Ministry of Finance (Cabo Verde), 2020[84] and 2021[85]

The programme covering climatic and geological environmental risks, which has the objective of providing institutions with information, data and technology to survey the state of the weather, ocean and climate, at first appears to be one of the hardest hit in the economic pillar; the 2020 supplementary budget cut the programme by 45 percent (-177 million CVE (US$2 million)). However, this reduction in appearance simply reflects the transfer of funds from the National Emergency Fund (NEF, a fund established to manage shocks from national disasters) to Covid-19 response. This recently established fund acts as a contingency budget for disasters and the decrease is, therefore, to be expected and demonstrates that the fund was able to function effectively during a disaster – protecting other vital expenditure through *ex ante* financing arrangements. However, the sheer scale of the particular disaster has meant that contingency budgets, such as the NEF, are simply too small, and require other complementary financing to avoid deep cuts to vital expenditure. In 2021, the budget of the NEF has been fully replenished, alongside what appears to be a standard allocation for operational costs, demonstrating the government of Cabo Verde's commitment to essential *ex ante* financing arrangements. Cabo Verde's largely donor-funded atmospheric observatory, which measures atmospheric conditions, has continued to receive increased budget allocations during the pandemic.[86]

The agriculture transformation programme saw its 2020 budget increase by 23 percent through the supplementary budget process. This move reflects the government's continued ambitions to protect the rural population from the adverse effects of drought, following the consequences of several years of drought. In order to strengthen household resilience, the emergency programme to mitigate drought was reinforced with US$1.9 million (172 million CVE). However, this was largely financed by external sources, predominantly the FAO. In 2021, the budget allocation has fallen as this external financing support has been removed, while the expectation is that 2021 will be a good year for agriculture.

While the sustainable energy programme received a 27 percent increase in budget, the focus appears to be more on improving power quality, while areas such as promoting energy efficiency have received budget cuts of 8 percent. Although the government reinforces its commitment to renewable energy, the budget notes that both targets and timelines will be pushed back in response to declining economic activity, without providing additional detail. Pre-pandemic plans demonstrate a commitment to reach a penetration rate for renewable energy of 54 percent by 2030.[87] The 2021 budget allocation for the programme is 55 percent less than the 2020 allocation, primarily the result of a reduction in donor funding and reduction in revenues from the Tourism Fund.[88]

Within the conservation of biodiversity and environment quality programme, the large majority of projects received additional budget allocations in 2020. However, the project 'environmental impact mitigation' was cut by 14 percent, substantially more than the overall programme, which witnessed a 6 percent increase. The budget for the 'reinforcement of adaptive capacity and resilience of the forest sector in cape verde' is set for a 50 percent increase in 2021.

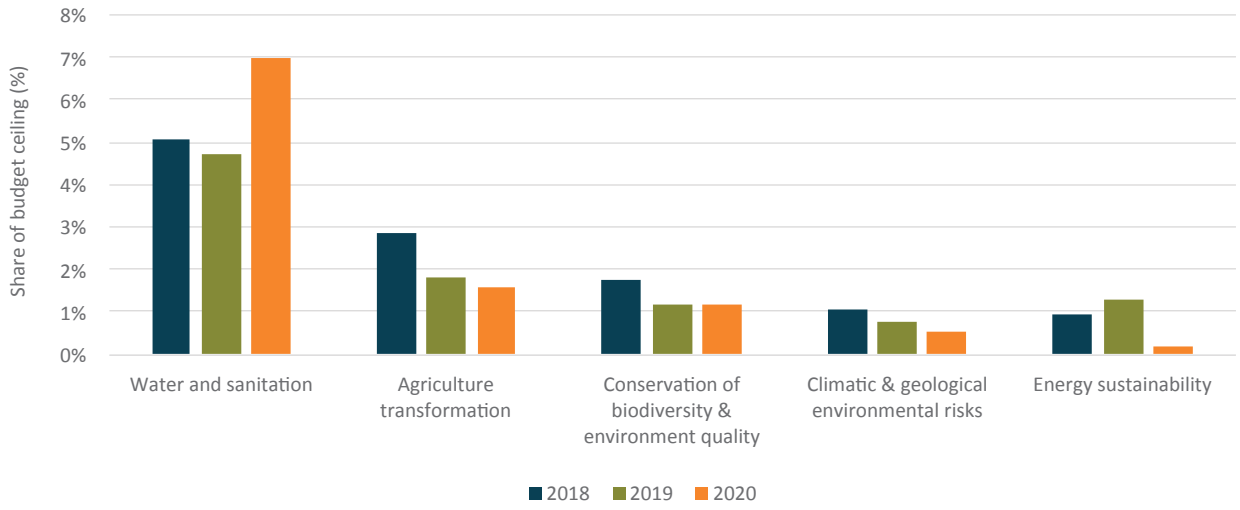
3.4.3 Possible implications for the medium-term response

As with South Africa, looking back over the last few years of fiscal consolidation might shed some light on how the government of Cabo Verde may make budgetary decisions in a post-Covid-19 world. Prior to the pandemic, the government of Cabo Verde had been following the path of fiscal consolidation in order to bring down its substantial level of public debt; the government had successfully managed to reduce the fiscal deficit to 1.8 percent of GDP in 2019, from a high of 10 percent in 2012.[89] The government of Cabo Verde has restated its commitment to return to fiscal consolidation once the impacts of the pandemic ease, in order to generate budgetary, medium- and long-term savings to repay the debt contracted during the pandemic period and rebalance the public accounts. Although data on climate-relevant projects is unavailable, making it difficult to assess how the past few years of fiscal consolidation have directly impacted on climate-relevant budgets, we can look instead at the overall programme budget shares to determine how they have been adjusted in recent years. As demonstrated in Figure 14, a number of the programmes under which climate-change expenditure would generally be found have seen their share of the overall budget decrease over the past few years, with the exception of the water and sanitation programme. This programme is the largest and appears to have retained its status as a priority area during previous fiscal consolidation efforts. We can see the early signs of this in 2021, where the programme received a substantial increase in budget allocations (74 percent). The picture remains less clear for the other programmes.

Although Cabo Verde has produced medium-term budget forecasts, these are incomplete and, therefore, present a mixed picture of how climate-relevant expenditure might be affected by the pandemic across the medium term. Data for the water and sanitation sector appear most complete and, in line with historic trends, medium-term forecasts to 2023 suggest that the water and sanitation sector will continue to see its budget increase, driven by investment in the water production and distribution system in Santiago (the largest island in the archipelago). Current forecasts suggest the budget will double between 2020 and 2022. The climatic and geological environmental risks programme is set to maintain its budget share across the medium term, yet remains dwarfed by the NEF which consistently absorbs around 75 percent of the programme's budget, leaving little space for other risk-management projects.

Across the other programmes, several large projects appear to end in 2021, reducing the overall forecasts for the programmes; this is likely to be more a reflection of incomplete medium-term forecasting, as opposed to an indication of declining priority. In fact, the election and a new strategic vision (2021–2026), planned for 2021, are likely to play into the gaps in medium-term forecasts and will perform a key role in driving the climate change agenda forward. The new Strategic Vision 2021–2026 integrates the National Strategic Agenda for Climate Resilience 2020_2030, aiming to promote: (i) the integration of climate change into policies, plans and strategies at all levels; and (ii) the integration and monitoring of the climate change adaptation component ('mainstreaming') into public and sectoral policies. This suggests that climate adaptation and mitigation projects will remain a priority for Cabo Verde for the medium term, particularly as a consequence of Cabo Verde's exposure to the impacts of climate change. Yet, with fiscal consolidation on the cards to avoid falling into debt distress, some climate-relevant expenditure is likely to be delayed. Donor projects remain key in the small island state.

Figure 14: Previous fiscal consolidation efforts have reduced the share of programmes which contain climate-relevant expenditure, with the exception of water and sanitation which appears to be of growing importance



Source: Ministry of Finance[90]

3.5 Kenya

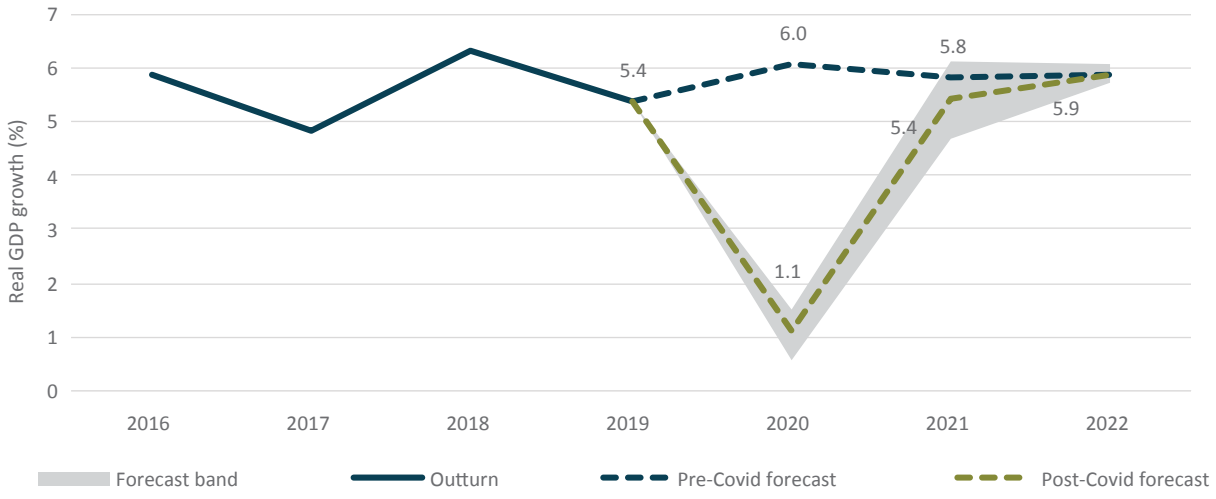
Kenya experiences climate-related risks including droughts, floods, rising sea levels, land- and mud-slides, as well declining glaciers. The direct and indirect costs of climate disasters have led Kenya to recognise climate change in many of its guiding plans and policies. This includes the National Development Framework Kenya Vision 2030, which acknowledges climate change as a risk that could slow the country's development. The National Adaptation Plan (2015–2030) and the National Climate Change Action Plan (2018–2022) further detail the government's climate-change ambitions, and the National Climate Change Framework Policy (2018) provides an explicit commitment to ensure the integration of climate change considerations into planning, budgeting, implementation and decision-making at the national and county levels and across all sectors. It provides a roadmap for the government of Kenya to integrate climate change into its PFM systems, which to date has included referencing climate in the budget guidelines, a fully operational budget-tagging system, a disaster-risk-financing strategy and exploration of sovereign insurance for drought, as well as a domestic climate fund.

3.5.1 Macro-fiscal context

The Covid-19 pandemic has hit the Kenyan economy hard, sharply reducing economic activity across the board; real GDP growth was forecast to dip to 1.1 percent (on average) in 2020, against previous forecasts of 6 percent. In response, the government deployed a set of policy measures to support the healthcare system, protect vulnerable households, and support businesses, equivalent to around 2.3 percent of GDP.[91] Together, these policy actions, alongside a gradual reopening of the economy, are predicted to lead to a modest recovery in 2021, with forecasters expecting growth of around 4.7–6.1 percent (see Figure 15).[92] Unemployment has almost doubled compared to its pre-Covid level. The pandemic has also pushed many adult Kenyans out of the labour force, with the labour force participation rate decreasing from 75 percent in the last quarter of 2019 to 61 percent from mid-May to early July 2020. Wage workers – and especially women – who are still employed face a reduction in working hours and earnings. Almost 1 in 3 household-run businesses are not operating currently, with revenues decreasing across all sectors.[93]

Efforts to shield the economy and population from the effects of the pandemic reversed the government's previously planned fiscal consolidation efforts, required after maintaining an unsustainable fiscal deficit of 8 percent of GDP for the past 5 years. The fiscal deficit in 2019/20 reached 7.8 percent of GDP, compared with the original budget target of 6.0 percent.[94] With the revenue to GDP ratio on a declining trend even before the pandemic hit due to numerous and generous tax incentives, which eroded the tax base (falling from 23 percent of GDP in 2011/12, to just 18 percent in 2018/19) 95, the government of Kenya turned to debt to finance the deficit. Public debt levels reached 66.7 percent of GDP at the end of 2019/20, with forecasts for 2021 suggesting a climb to 69.1 percent of GDP. The IMF subsequently moved to classify Kenya as being at high risk of debt distress as the pandemic exposed Kenya's vulnerabilities. Debt interest stands at a substantial 4.3 percent of GDP, consuming 25 percent of total revenue.[96]

Figure 15: Forecasters expected a substantial dip in Kenya's GDP in 2020, with a modest recovery for 2021



Source: IMF, 2020. World Bank, 2020. AfDB, 2020.[97]

3.5.2 Budgetary response to the pandemic

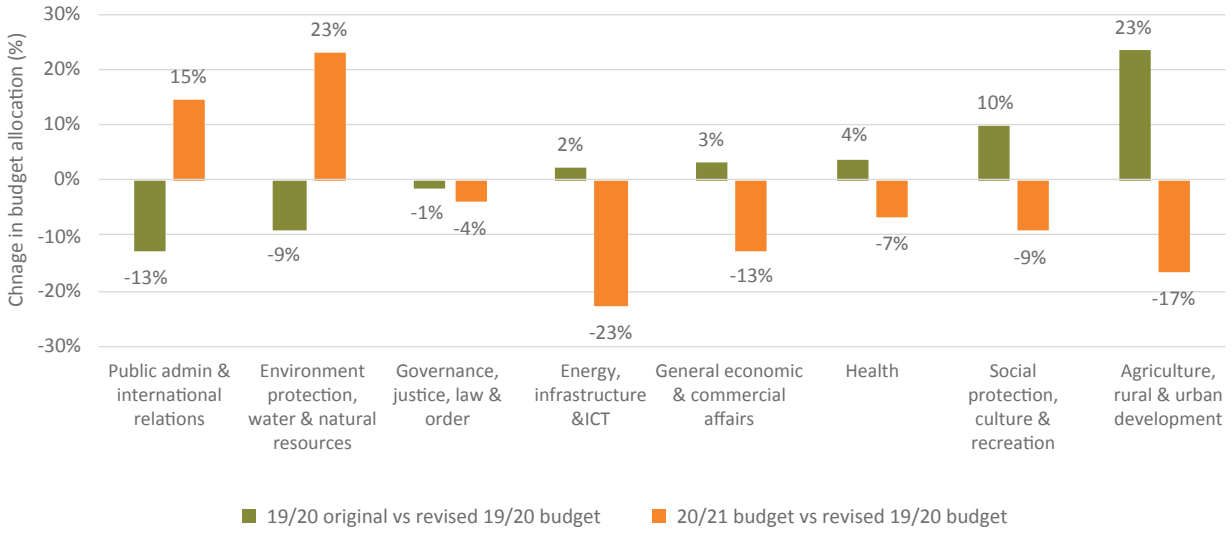
Given Kenya's already limited fiscal space, a rationalisation of existing allocations was required to finance the response to the pandemic, demanding two supplementary budgets in 2019/20 at the national level.[98] The final supplementary budget of the year resulted in an overall decrease in the 2019/20 budget ceiling by -0.4 percent, compared to the first supplementary budget (which occurred prior to the pandemic), as a result of revenue shortfalls. Funds were reallocated from within the capital budget (-6.6 percent) in order to finance Covid-19 related response measures and to mitigate the effect of floods. The 2020/21 budget, which came into effect in July 2020, also included provisions to respond to the pandemic, yet the overall budget ceiling for 2020/21 was-4.6 percent below the pre-Covid-19 2019/20 budget due to the government of Kenya's determination to return the deficit to a more sustainable level. Existing forecasts put the 2020/21 fiscal deficit at 7.3 percent, 0.5 percentage points below the 2019/20 deficit, but 2.4 percentage points above pre-Covid plans.[99]

On a sectoral basis, the 2019/20 final supplementary budget resulted in a 2 percent average increase in allocations compared to the pre-Covid budget. As illustrated in Figure 16, the greatest beneficiary in the supplementary budget was the agriculture, rural, and urban development sector with a 23 percent increase in budget allocation. The social protection, culture and recreation sector followed, gaining a 10 percent increase in allocation. The net losers of the supplementary budget were the public administration and international relations sector (with a budget cut of 13 percent) and the environmental protection, water and natural resources sector, which experienced cuts of 9 percent.[100]

As with South Africa, from the available budget data we are unable to see how climate-relevant expenditure has been affected by the pandemic. Instead, we will focus on the sectors under which climate-change expenditure would generally fall, in order to make some inferences in this regard. In Kenya, climate-relevant expenditure is to be found largely under three sectors: (i) agriculture, rural and urban development; (ii) environmental protection, water and national resources; and (iii) energy, infrastructure, and information and communication technology.

The agriculture, rural and urban development sector benefited from the supplementary budget in 2019/20, receiving the largest increase across the sectors (23 percent). The majority of this increase is the result of a 65 percent increase in the Department for Crop Development, which includes work on climate-smart agriculture and drought resilience. According to the budget, the additional recurrent funds were allocated for combating the infestation and spread of desert locusts as well as providing additional funds for the Strategic Food Reserve. The increase in capital expenditure was the result of additional donor funds for implementation of the Kenya Climate-Smart Agriculture Project and the National Agricultural and Rural Inclusive Growth Project. The budget for irrigation was preserved, although funding for agricultural research was cut slightly (-4 percent) as part of the expenditure rationalisation process.

Figure 16: Both the 2019/20 supplementary budget and the 2020/21 budget have resulted in large compositional shifts in budget allocations across all sectors linked to Covid-19 needs and the desire to maintain fiscal consolidation efforts



Source: National Treasury (Kenya), 2020[101]

Moving to the 2020/21 budget, the agriculture, rural and urban development sector allocation is 17 percent lower than the final budget of 2019/20, and more akin to the allocation in the original 2019/20 budget. This appears to be due to the shift in the irrigation programme from agriculture to environment; taking into account this shift, the reduction amounts to an estimated -7 percent, more than the average sectoral decrease of 4 percent.[102]

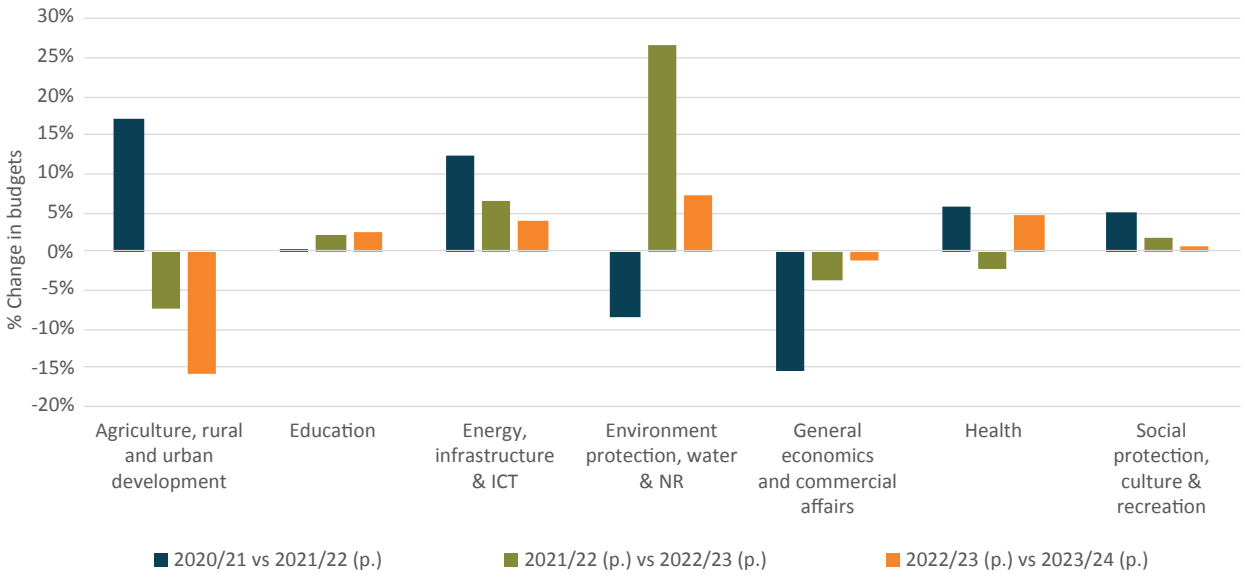
The environmental protection, water and natural resources sector did not fare well in the supplementary budget in 2019/20, facing a budget reduction of 9 percent. All ministries under this sector, with the exception of the State Department for Wildlife, faced budget cuts. The largest reductions were borne by the programmes 'forests and water towers conservation' and 'water and sewerage infrastructure development' where budgets cuts predominately came from the capital budget. The National Treasury highlighted that these reductions were the result of rationalised donor expenditure. In the 2020/21 budget the sector's budget increased by 23 percent, which in large part appears to be the result of the shift in the irrigation programme to the environment sector, rather than agriculture. Taking this into account, the sector recorded an estimated increase of 9 percent. The irrigation and land reclamation programme received a 56 percent increase in its allocation in the 2020/21 budget, demonstrating that the commitment to improving total acreage under irrigation will be increased by 247 279 acres.[103]

The energy, infrastructure and ICT sector received the average sectoral increase in allocation in the 2019/20 supplementary budget of 2 percent. Within the sector though, the Ministry of Energy received a 24 percent reduction in its budget. While the alternative energy technology programme was cut (by 15 percent), the bulk of the reduction occurred in the power transmission and distribution programme (the largest programme under the Ministry of Energy) due to expenditure requirements elsewhere.[104]

3.5.3 Possible implications for the medium-term response

Over the past few years, Kenya has announced fiscal consolidation as a stated priority, but has struggled to implement the policy in practice, retaining a high fiscal deficit. However, the increase in debt taken on as a result of the pandemic, and resultant growing debt-servicing needs (already reaching 4.3 percent of GDP in 2019[105]) imply that fiscal consolidation is a requirement for the government of Kenya. Post-Covid medium-term forecasts for Kenya demonstrate this, with budget ceilings set to remain fairly stagnant until 2023/24. If implemented according to plan, sector shares will remain reasonably consistent across the medium term. Looking at the changes in nominal terms (as shown in Figure 17), there are no large-scale reprioritisations either to or away from climate-relevant sectors over the medium term, yet there are some smaller shifts. While

Figure 17: Changes to Kenya's medium-term budget allocations are varied across programmes, with agriculture, rural and urban development set to see the largest reduction



Source: National Treasury(Kenya), 2020[106]

tthe allocations for both the energy, infrastructure and ICT sector and the environment protection, water and natural resources sector are forecast to increase until 2024, the agriculture, rural and urban development sector's budget allocations are set to decline.

Zooming in on the programme-level data, within the agriculture, rural and urban development sector, there are substantial variations in programmes that appear to be highly climate relevant. The 'crop development and management' programme, which includes work on climate-smart agriculture and drought resilience, is expected to see its funding decline by 55 percent between 2020/21 and 2023/24, undoing some of the short-term gains made during the pandemic period. While it is difficult to determine the driver of this trend with the information available, given that donors typically fund a large proportion of this programme, medium-term projections from such sources are unlikely to have been built in at this stage. Other programmes with climate-relevant expenditure, including fisheries development and management (+35 percent) and agriculture research and development (+17 percent), are expected to witness increases in allocations across 2020/21 and 2023/24.

In the environmental protection, water and natural resources sector, the 'wildlife conservation and management' programme, which includes investments in biodiversity protection, is the main climate-relevant programme expected to see a decrease in its allocation; projections suggest a 17 percent decline in funding from 2020/21 to 2023/24. Other highly relevant programmes expected to receive growing allocations within this sector, including the 'environment management and protection' programme, which addresses the government's work around climate-change policy development and accessing climate finance. This programme is projected to see its budget grow by 25 percent between 2020/21 and 2023/24. Additionally, forest- and water-conservation spending is expected to grow by 34 percent.

In the energy, infrastructure and ICT sector, investments in renewable energy under the 'alternative energy technologies' programme are set to fall by 60 percent, while funding to the 'power generation' programme, which focuses on coal, is set to grow by 174 percent over the same period, demonstrating a worrying trend. Some positive trends within this sector include investments in coastline infrastructure development, which includes flood defence, for which allocations are projected to double. Meanwhile, there is a commitment to climate-proofing transport projects under the 'Road Transport Services' programme.

Overall, medium-term plans suggest that the government of Kenya does not intend to adjust sectoral shares significantly, with most sectors bearing the burden of fiscal consolidation, yet some climate-relevant programmes are set to see comparatively larger budget cuts than other programmes. As with Cabo Verde, however, medium-term budgets are likely to have substantial data gaps, and are not always a good reflection of future expenditure patterns (particularly in Kenya); therefore, this may be one explanatory factor for some of the declines we are witnessing in the data, especially in the 'agriculture, rural and urban development' programme. As with Cabo Verde, for some key programmes, the presence of donor financial support will play an important role in determining whether spending levels on climate-relevant projects are maintained.

> ***"For some key programmes, the presence of donor financial support will play an important role in determining whether spending levels on climate-relevant projects are maintained"***

Consequences for the climate-change agenda and potential routes forward

4.1 Medium-term prospects

The pandemic has seen governments across the globe reconfiguring budgets at huge scale in order to identify funds for much needed response efforts. With many African countries already facing tough budget constraints prior to the pandemic, the need to protect their populations from the health and subsequent economic crises has forced governments to divert spending away from non-pandemic-related areas, climate-related expenditure included, at least for 2020/21. Moreover, we have to wait until the pandemic is over and detailed expenditure information is published to determine the scale of these shifts and the longer-term implications, but it is clear that over the medium term, and within any post-pandemic recovery packages, governments will continue to face tough decisions on what to prioritise, weighing up the impacts of the pandemic, particularly on poverty levels and food security, with longer-term development needs, including climate change.

With many countries continuing to battle the pandemic, the jury is still out on whether green policies will be a key part of any medium-term recovery plans. While the pandemic has demonstrated the ability of natural forces to thoroughly shock the economy, consequently giving gravitas to the climate change agenda, the dire fiscal position of most countries could result in green packages being squeezed out, with other policy areas being prioritised, particularly those with a short-term focus on reversing poverty trends associated with the pandemic.

African ministers of the environment recently committed to support a green Covid-19 recovery plan, but it is unclear whether this commitment will be realised across the continent.[107] South Africa and Nigeria are examples of Covid-19 recovery packages having been launched with some green measures. In Nigeria, the recovery package sets out US$619 million to provide five million households and 25 million individuals currently without power with access to solar and mini-grids. It also contains plans for a gas expansion programme, with the goal of promoting the domestic use of cleaner fuels. They also took advantage of low oil prices and scrapped expensive fossil fuel subsidies earlier in 2020.[108]

In South Africa, the post-Covid-19 recovery plan states that a 'large-scale "green stimulus" has the potential to drive economic growth in the aftermath of the Covid-19 pandemic, and provides a unique opportunity to foster a green and just recovery'. As a first commitment in this regard, the plan identifies South Africa's power shortages as a significant impediment to growth, and signals the intent to implement the Integrated Resource Plan 2019 commitments to increase renewable energy in the energy supply mix by 2030. It also promises to relax the regulatory environment for self-generation of power, which could swing the energy mix further to renewables. The plan further prioritises green projects for investment via a new social employment fund, and sets out a series of initiatives to stimulate the green economy, including by expanding the programme to retrofit public and private buildings and improve energy and water efficiency, and support for small-grower farmers through public-private partnerships in forestry (including in state plantations). It also prioritises investment in digital infrastructure, which could contribute to sustaining lowered daily commuting by some classes of workers, easing emissions.[109] However, the Greenness of Stimulus Index, developed by Vivid Economics to evaluate the effectiveness of Covid-19 stimulus packages through a green lens, finds that South Africa's stimulus package performs poorly. They report that South Africa has scaled back renewable energy in response to the drop in energy demand, and deferred carbon tax payments and relaxed environmental regulations.[110] In Rwanda, plans are underway to ensure the economic recovery plan is green and climate resilient.[111] In Kenya, the post-Covid-19 economic recovery strategy mention a green and resilient recovery, but plans have not been further elaborated to date.[112]

One of the binding constraints for most countries across the continent remains lack of financing, which was the case even before the pandemic hit. However, with fiscal consolidation

on the cards for the majority of countries for years to come following the ramp-up of public debt to meet additional spending pressures induced by the pandemic, recovery packages may be on the light side, unless countries can increase their access to finance.

4.2 Routes out of the fiscal squeeze: financing public investment in climate change

As discussed throughout this paper, medium-term prospects for fiscal space across the region are not looking promising. It will be challenging, therefore, for countries to mobilise the scale of public finance necessary to fund medium-term plans that can drive countries towards net-zero emissions and accelerate climate resilience. This section sets out the viability of some of the potential financing sources as we move out (of at least the first wave) of the Covid-19 pandemic.

4.2.1 Domestic revenue

In line with past trends,[113] domestic revenue will probably remain the key financing source for investment in climate adaptation and mitigation in most countries across the continent. While Covid-19 continues to inflict a sizeable dent in revenue collection,[114] this is likely to lead to renewed impetus for revenue reform. Nevertheless, this impetus will need to be managed carefully to avoid an emphasis on 'easy to generate revenue' but often regressive taxation policies. This is especially the case for policies that might affect those hardest hit by the pandemic, particularly women. As has been the case in Nigeria, and following the fall in demand stemming from global lockdowns, lower fuel prices have created space for governments to explore green tax reform opportunities, such as through fossil fuel subsidy reforms and/or the introduction of environmental taxes, such as carbon taxation.

Carbon taxes reduce the incentives for the consumption and production of carbon by attaching a price to it. Depending on how they are designed, such taxes may have a revenue potential estimated to be between 1 and 2 percent of GDP in major developing countries, which could be key to plugging the climate finance funding gap.[115] In addition to carbon taxation, removing/reforming fossil fuel subsidies to eliminate *inefficiencies* in fossil fuel consumption (i.e. those which reduce the price of energy to consumers) and fossil fuel production (i.e. directly or indirectly reduce the cost of production) may also contribute towards generating more revenue. These subsidies often take the form of (inefficient) tax exemptions or reduced tax rates on consumer prices. Reforming these policies could help governments prevent loss of revenue and reduce incentives for the consumption or production of fossil fuels.

Despite their benefits, the introduction of carbon taxes or other innovative new taxes, and/or the reform of fossil fuel subsides will require, in many cases, improved domestic revenue mobilisation capacity, plus political impetus. Furthermore, at least in the short-term they may require associated compensation mechanisms (e.g. direct cash transfers) to protect poorer households and women, for whom energy subsidies might represent a higher portion of total income. In times of reduced capacity due to the diversion of resources, and tight fiscal and political space, policies such as these may be less attractive, and countries may opt to revert to those 'easy to generate revenue' reforms, such as hikes in excise tax or VAT.

4.2.2 Official development assistance

Official development assistance (ODA) has been an important source of funding for investment in climate adaptation and mitigation across Africa. In a climate of extremely challenging fiscal pressures, many countries are likely to look more to aid to finance priorities. However, the question of how the pandemic will change the overall size of the ODA pot remains unclear. On the one hand, many countries have signalled political commitment in support of a globally sustainable recovery, with the pandemic revealing the interdependence of countries across the globe. At the early stages of the pandemic, Development Assistance Committee (DAC) members expressed their desire to protect ODA budgets.[116] Increased solidarity could result in overall increased ODA levels moving forward. On the other hand, however, donor countries too are facing extremely tight budget constraints, also embarking on large-scale budget reallocations and seeking out additional financing options to fund their response. Advanced economies are plunging into recession, resulting in falling gross national income (GNI) in the short and medium term. For countries where aid commitments are made as a share of GNI, reductions are implied. The OECD estimated that if DAC members kept the same ODA to GNI ratios as in 2019, total ODA could decline by US$11–14 billion in 2020. Given we are already witnessing countries such as the UK reduce their ODA commitment (from 0.7 percent of GNI to 0.5 percent of GNI), there is some cause for concern over future flows.[117]

Regardless of the direction of overall ODA funds across the medium term, there is some evidence that the share allocated to climate change action could increase. Prior to the pandemic, total volumes of climate finance were on the increase. Over the period of 2016–2018, climate finance grew by 35 percent (from US$58.6 billion to US$78.9 billion).[118] Although Covid-19 has negatively impacted public finances across the globe since then, countries like the UK have recently reiterated its commitment to double the UK's contribution to international climate finance between 2021 and 2025.[119] Meanwhile, the change in administration in the US is likely to lead to the largest provider of ODA re-joining the

Paris Agreement, under which developed countries commit to providing climate-change support to developing countries. As such, this move is expected to increase the contribution of US ODA with a climate focus. Currently, only 3 percent of the US's total aid portfolio has a climate focus, making the US the fourth smallest DAC donor to climate action as a share of its ODA portfolio.[120]

International climate finance, in particular, does offer the potential to boost fiscal space for developing countries, particularly in a post-Covid world. The $78.9 billion of climate aid to developing countries mentioned above was recorded in 2018,[121] with a commitment under the Paris Agreement to augment this amount to US$100 billion a year. However, there are reasons to be cautious about the prospects of international climate finance stopping fiscal gaps to any considerable extent. Firstly, only 25 percent of climate-related ODA went to Africa in 2018. Furthermore, the vast majority of funds are provided for mitigation (70 percent of flows in 2018), when Africa's investment needs are primarily in terms of adaptation. Additionally, a growing proportion of climate-ODA is in the form of loans, which is a concern for the growing number of African nations facing debt sustainability challenges (see section 2.2, above).

Various international climate funds have been set up to facilitate the flow of climate finance to where it is most needed; these include the Green Climate Fund (GCF), the Adaptation Fund and the Least Developed Countries Fund. However, some of these have been plagued with challenges around slow disbursement, related to slow accreditation of implementation agencies (with many developing country governments unable to meet the requirements for direct access) as well as restrictive criteria for project eligibility. For example, Ethiopia had a GCF proposal rejected on the grounds that the investments were too development oriented and not sufficiently climate focused.[122] Furthermore, climate finance continues to be offered almost exclusively through project modalities, which cannot provide the sort of deficit financing support that many African countries need. Cases of climate-related general budget support are few and far between (with Mozambique and Ethiopia being the only countries on the continent that currently receive any). Without a significant shift in how the international community provides climate finance, on what basis and for what purposes, it is unlikely to make a real contribution to solving Africa's fiscal challenges in a post-Covid world when it is needed most.

4.2.3 Green & blue bonds

Green (or climate) bonds are debt instruments that are specifically earmarked to raise money for climate and environmental projects. Similarly, blue bonds are used to raise capital to finance marine and ocean-based projects that have positive environmental, economic and climate benefits.[123] Issuing green or blue bonds could act as an important financial mechanism to support a green economic recovery a cross the medium term. While the associated infrastructure and capabilities are needed to access this type of financing, options remain open for countries across the continent that are already issuing green and blue bonds, like South Africa, Nigeria and Seychelles. Following the shock of Covid-19, the government of Mauritius opted to include the development of green and blue bond frameworks in the 2020/21 budget.[124]

4.2.4 Debt swaps

Traditionally, debt swaps represent an exchange of the existing debt contract with a new one, where the previous contract is normally 'written down', or discounted. Applying this concept to climate relies on a creditor allowing debt to be reduced — either by conversion to local currency and/or paid at a lower interest rate or some form of debt write-off — and the money saved is used to invest in climate adaptation and mitigation programmes.[125] Such instruments were utilised on a small scale in the Seychelles in 2018. The government partnered with the National Conservancy, Global Environment Facility and UNDP to develop a debt-for-climate swap for US$27 million of public debt, to set up vast areas of protected marine parks for climate resilience, fishery management, biodiversity conservation and ecotourism.[126]

In an environment of mounting debt, with post-Covid-19 economic recovery costs likely to deplete the financial resources needed to address the climate crisis and environmental degradation, swapping debt for nature and/or climate protection offers one solution to tackle both challenges at once. Of course, to generate much needed fiscal space, payment objectives must be set lower than original debt-service payments and swaps will need to target entire programmes, rather than smaller-scale projects, in order to reach critical mass. Of course, facilitating swaps on a large scale will require complex international co-ordination, given that debt is generally held by many actors.[127] However, the DSSI has demonstrated that co-ordination is possible, particularly if tied to Covid-19 recovery efforts. In a recent speech, the President of Namibia expressed interest in exploring financing measures that address climate and sustainable development goals, highlighting debt-for-climate swaps, as well as green and blue bonds.[128]

4.3 Medium-term prospects

Whether countries opt to prioritise a green recovery will depend on a multitude of factors, but access to finance for climate adaptation and mitigation is likely to play a key role. Across the continent, not all countries will attract the same financing opportunities, not always correlating with need or vulnerability to the impacts of climate change. Some routes will require substantial political buy-in, as well as improved implementation capacity (such as carbon taxes or green bonds); others will require complex international co-operation (e.g. debt swaps).

Conclusion

With the climate crisis looming, what the Covid-19 pandemic has demonstrated is that governments can act at extra-ordinary scale and pace to intervene in crises once the scale of the emergency is clear. Vast sums of money have been raised at rapid pace to fight the pandemic and save lives, plunging the globe into record levels of debt. The ability of natural forces to swiftly bring economies to the brink of collapse, adds gravitas to the need for climate action and the importance of preparation, mitigation and adaptation.

Yet, many countries have not weathered the storm and lack the means to finance a recovery, let alone undertake critically needed investments in climate adaptation and mitigation in hope of avoiding a climate crisis. The implications of Covid-19 for climate-relevant expenditure will inevitably take time to materialise as the focus of governments remains on response efforts and being watchful of second and third waves of the pandemic. What is clear is that while many countries struggle to get their finances back on track, the Covid-19 pandemic is likely to have lasting effects on both the size and composition of budgets. At least in the short term, the potential for increasing the priority given to climate action may be limited, with climate-change adaptation and mitigation competing with other sectoral and cross sectoral priorities, namely safeguarding health systems and manoeuvring poverty trends back in the right direction, following the devastating effects of the pandemic, particularly on women and vulnerable groups. What this means for the long term is less clear. How future growth paths evolve and the availability of financing will play key roles, as will a country's exposure to climatic shocks. As demonstrated above, countries such as Cabo Verde and Kenya have, throughout the pandemic, continued to prioritise some key climate change projects (drought in Cabo Verde, and flooding and desert-locust infestations in Kenya) due to the potential negative impacts of not prioritising these areas. Their increased exposure to climate change provides some guarantee that such funding will continue to be prioritised, regardless of fiscal space constraints. Furthermore, donor priorities appear to be playing a key role in maintaining climate-relevant projects, when governments' attentions are temporarily required elsewhere.

Although the jury is still out on whether countries will move forward with commitments to – and find fiscal space for – greener recoveries, early analysis has demonstrated that green stimulus packages, particularly where rural support scheme spending is included, can offer strong returns on investment for government spending, and are likely to be more inclusive.[129] Governments across Africa are, however, more likely to be persuaded by these arguments if international partners are able to support such opportunities through the provision of additional financing.

> ***"The ability of natural forces to swiftly bring economies to the brink of collapse, adds gravitas to the need for climate action"***

Endnotes

1 National Geographic Resource Library | Encyclopedic entry, *Climate Change,* link.

2 Alagidede P., G. Adu, and P. B. Frimpong, 2014. *The Effect of Climate Change on Economic Growth: Evidence from Sub-Saharan Africa,* WIDER Working Paper 2014/017, link. IMF, 2019. *World Economic Outlook October 2019*, link.

3 IMF, 2019. *World Economic Outlook October 2019*, link.

4 John Hopkins University, 2020. *COVID-19 Dashboard*, link. [Accessed 10/01/2021]

5 IMF, 2019. *World Economic Outlook October 2019*, link. IMF, 2020. *World Economic Outlook October 2020*, link.

6 IMF, 2019. *World Economic Outlook October 2019*, link. IMF, 2020. *World Economic Outlook October 2020*, link.

7 IMF, 2020. *World Economic Outlook October 2020*, link.

8 World Bank, 2020. *Poverty and Shared Prosperity 2020*, link. World Bank, 2020. *Macro Poverty Outlook 2020*, link.

9 See, for example: OCHA, 2020. *Possible Actions – Women's Rights and COVID-19*, link. Burki. T., 2020. *The Indirect Impact of COVID-19 on Women*, link. UN Women, 2020. *The Private Sector's Role in Mitigating the Impact of COVID-19 on Vulnerable Women and Girls in Nigeria*, link. World Bank, 2020. *COVID-19 Pandemic Through a Gender Lens*, link.

10 IMF, 2020. *Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, link.

11 IMF, 2020. *World Economic Outlook October 2020*, link.

12 UN Women, 2020. *The Impact of COVID-19 on Women*, link.

13 UN Climate Change, 2020. *Climate Change is an Increasing Threat to Africa*, link.

14 IMF, 2020. *World Economic Outlook October 2020*, link. IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

15 IMF, 2019. *World Economic Outlook October 2019*, link.

16 IMF, 2020. *World Economic Outlook October 2020*, link.

17 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

18 World Economic Forum, 2020. *The Sub-Saharan Africa Risks Landscape*, link.

19 UNEP, 2010. *ADAPT Cost Project: Analysis of the Economic Costs of Climate Change Adaptation in Africa*, link.

20 Calderón, C., and A. Zeufack, 2020. *Borrow with Sorrow? The Changing Risk Profile of Sub-Saharan Africa's Debt*, link.

21 Gentilini, U., M. Almenfi, and P. Dale, 2020. *Social Protection and Jobs Responses to COVID-19:A Real-Time Review of Country Measures*, link.

22 IMF, 2020. *Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, link.

23 IMF, 2020. *World Economic Outlook October 2020*, link. IMF, 2019. *World Economic Outlook October 2019*, link.

24 IMF, 2020. *World Economic Outlook October 2020*, link.

25 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

26 IMF, 2020. *Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, link.

27 IMF, 2020. *World Economic Outlook October 2020*, link. IMF, 2019. *World Economic Outlook October 2019*, link.

28 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

29 World Bank, 2020. *Latest Publicly Available Debt Sustainability Analyses Under the Joint Bank-Fund Debt Sustainability Framework for Low Income Countries (LIC-DSF)*, link.

30 Republic of Congo, Mozambique, South Sudan, São Tomé and Príncipe, Zimbabwe

31 Cabo Verde, Cameroon, Central African Republic, Chad, Ethiopia, The Gambia, Ghana, Kenya, Liberia, Malawi, Sierra Leone, Togo, Zambia

32 IMF, 2020. *Review of Enhanced Access Limits Under the Rapid Credit Facility and Rapid Financing Instrument*, link.

33 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

34 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

35 Eurodad, 2020. *The G20 Debt Service Suspension Initiative: Draining Out the Titanic With a Bucket?* Link.

36 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

37 OECD, 2020. *The Impact of the Coronavirus (COVID-19) Crisis on Development Finance*, link.

38 World Bank, 2020. *Poverty and Shared Prosperity 2020*, link.

39 Out of 42 countries within SSA; poverty estimates are not available for Equatorial Guinea, Eritrea and Uganda.

40 World Bank, 2020. *Macro Poverty Outlook 2020*, link. Covid-19 implications are not isolated.

41 Consumer Price Index, annual average.

42 IMF, 2020. *World Economic Outlook October 2020*, link.

43 World Bank, 2020. *COVID-19 High-Frequency Monitoring Dashboard*, link.

44 World Bank, 2020. *Poverty and Shared Prosperity 2020*, link.

45 UN Women, 2015. *Progress of the World's Women 2015-2016*, link.

46 OCHA, 2020. *Possible Actions – Women's rights and COVID-19*, link.

47 Burki. T., 2020. *The Indirect Impact of COVID-19 on Women*, link.

48 UN Women, 2020. *The Private Sector's Role in Mitigating the Impact of COVID-19 on Vulnerable Women and Girls in Nigeria*, link.

49 World Bank, 2020. *COVID-19 Pandemic Through a Gender Lens*, link.

50 Population Council, 2020. *Kenya: COVID-19 Perceptions, Prevention Practices, and Impact—Responses from Third Round of Data Collection in Five Nairobi Informal Settlements (Kibera, Huruma, Kariobangi, Dandora, and Mathare)*, link.

51 IMF, 2020. *World Economic Outlook October 2020*, link. World Bank, 2020. *Poverty and Shared Prosperity 2020*, link.

52 Although the evidence is not conclusive on the relationship between climate change and desert locust invasions, studies have linked a hotter climate to more damaging locust swarms, on top of wet weather which favours multiplication of locusts.

53 Action Aid, 2020. *Food Crisis in East Africa 2017–2020*, link.

54 FAO, 2020. *Sudan: 2020 Flood Response Overview*. Geneva: Food and Agricultural Organization of the United Nations, link.

55 Walton, D. and M. van Aalst, 2020. *Climate-Related Extreme Weather Events and Covid-19: A First Look at the Number of People Affected by Intersecting Disasters*, link.

56 Compared to the same period in 2019. Nature, 2020. *Near-real-time Monitoring of Global CO_2 Emissions Reveals the Effects of the COVID-19 Pandemic*, link.

57 UNEP, 2010. *ADAPTCost Project: Analysis of the Economic Costs of Climate Change Adaptation in Africa*, link.

58 Climate Scrutiny and Mokoro, 2017. *Africa's Public Expenditure on Adaptation*.

59 UNEP, 2010. *ADAPTCost Project: Analysis of the Economic Costs of Climate Change Adaptation in Africa*, link.

60 In 2016, forecasts of sub-Saharan Africa's 2021 revenue to GDP levels were a fairly substantial 3.3 percentage points above what we now expect to see. Alongside this, debt levels have shot up; 2016 forecasts estimated sub-Saharan Africa's 2021 gross debt at 42.5 percent of GDP, where in practice we are looking at levels of almost 58 percent of GDP in 2021. IMF, 2020. *World Economic Outlook Database: October 2020*, link. IMF, 2016. *World Economic Outlook Database: October 2016,* link.

61 Of course, increased expenditure does not guarantee increased effectiveness. However, due to limited data, we can focus here only on monetary values.

62 World Bank, 2020. *Macro Poverty Outlook: South Africa*, link.

63 World Bank, 2020. *Macro Poverty Outlook: South Africa*, link. World Bank, 2020. *Global Economic Prospects: Slow Growth, Policy Challenges (January 2020)*, link. IMF, 2020. *World Economic Outlook October 2020*, link. *AfDB, 2020. African Economic Outlook 2020 – Supplement*, link.

64 World Bank, 2020. *Macro Poverty Outlook: South Africa*, link. World Bank, 2020. *Global Economic Prospects: Slow Growth, Policy Challenges (January 2020)*, link. IMF, 2020. *World Economic Outlook October 2020*, link. AfDB, 2020. African Economic Outlook 2020 – Supplement, link.

65 Jain, R., J. Budlender, R. Zizzamia and R. Bassier, 2020. *The Labour Market and Poverty Impacts of Covid-19 In South Africa*, Link

66 National Treasury, 2013 and 2020. *Budget Review*, link.

67 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

68 World Bank, 2020. *Macro Poverty Outlook: South Africa*, link.

69 *Ibid.*

70 National Treasury, 2020, *Supplementary Budget Review*, link.

71 IMF, 2021. *Policy Tracker: Policy Responses to Covid-19*, link.

72 The national budget, however, provides only a partial view on public expenditure on climate mitigation and adaptation actions in South Africa, as a significant share of expenditure occurs through provincial and local government budgets, as well as the budgets of public agencies (such as the roads agency and the water boards) and enterprises (such as Eskom, which has an almost complete monopoly on electricity supply in South Africa).

73 This will become clear in the February 2021 executive budget proposal for 2021/22–2023/24

74 National Treasury Supplementary Budget Review, June 2020. The Budget refers to allocations to national departments, including conditional grants to subnational government, and the equitable share transfers to provinces and local governments.

75 World Bank, 2019. *Cabo Verde Disaster Risk Management Development Policy Financing with Cat DDO (P160628)* , link.

76 World Bank, 2020. *Country Overview: Cabo Verde*, link.

77 AfDB, 2020. *African Economic Outlook 2020 – Supplement*, link.

78 World Bank, 2020. *Macro Poverty Outlook: Cabo Verde*, link.

79 *Ibid.*

80 IMF, 2020. *IMF Country Report No. 20/297. Second Review Under the Policy Co-ordination Instrument and Request for Modification of Target*, link.

81 Although some measures were applied retrospectively from April.

82 Ministry of Finance, 2020. *2021 Proposta do Orcamento do Estado*, link.

83 World Bank, 2020. *Macro Poverty Outlook: Cabo Verde*, link. World Bank, 2020. *Global Economic Prospects: Slow Growth, Policy Challenges (January 2020)*, link. IMF, 2020. *World Economic Outlook October 2020*, link. AfDB, 2020. *African Economic Outlook 2020 – Supplement*, link.

84 Ministry of Finance, 2020. 2020 Proposta Orcamento Retificativo, link.

85 Ministry of Finance, 2020. 2021 Proposta do Orcamento do Estado, link.

86 Ministry of Finance, 2020. Data requested from Ministry of Finance (10/01/2021)

87 Government of Cabo Verde, 2018. *Energy Sector*, link.

88 Ministry of Finance, 2020. *2020 Proposta Orcamento Retificativo*, link. Ministry of Finance, 2020. Data requested from Ministry of Finance (10/01/2021)

89 World Bank, 2020. *Macro Poverty Outlook: Cabo Verde*, link.

90 Ministry of Finance, 2018, 2019 and 2020 budget books.

91 IMF, 2020. *Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, link.

92 Forecasts are averages utilising data from the IMF, World Bank and the African Development Bank. See graph for full reference.

93 World Bank, 2020. *Kenya Economic Update: Navigating the pandemic*, link.

94 World Bank, 2020. *Macro Poverty Outlook: Kenya*, link.

95 World Bank, 2020. *Kenya Public Expenditure Review – Options for Fiscal Consolidation after the COVID-19 Crisis* – link.

96 IMF, 2020. *Staff Report Following the Request for Rapid Credit,* link.

97 World Bank, 2020. *Macro Poverty Outlook: Kenya*, link. World Bank, 2020. *Global Economic Prospects: Slow Growth, Policy Challenges (January 2020)*, link. IMF, 2020. *World Economic Outlook October 2020*, link. AfDB, 2020. *African Economic Outlook 2020 – Supplement*, link.

98 Expenditures and budgets of counties are not included.

99 Parliamentary Budget Office, 2020. *Unpacking the Estimates of Revenue and Expenditure for 2020/2021 and the Medium Term*, link.

100 National Treasury, 2020. *2019/20 Supplementary Estimates II Programmed Based Budget*, link. National Treasury, 2020. *2019/20 Supplementary Estimates III Programmed Based Budget*, link.

101 National Treasury, 2020. *2019/20 Supplementary Estimates II Programmed Based Budget*, link. National Treasury, 2020. *2019/20 Supplementary Estimates III Programmed Based Budget*, link. National Treasury, 2020. *2020/21 Programme Based Budget*, link.

102 There are other programmes too that may have shifted; therefore, this estimate is simply an approximation.

103 National Treasury, 2020. *2019/20 Supplementary Estimates II Programmed Based Budget*, link. National Treasury, 2020. *2019/20 Supplementary Estimates III Programmed Based Budget*, link. National Treasury, 2020. *2020/21 Programme Based Budget*, link.

104 *Ibid*.

105 World Bank, 2020. *Macro Poverty Outlook: Kenya*, link.

106 National Treasury, 2020. *Sector MTEFs 2021/22*. link

107 UN Environment, 2020. African Ministers of the Environment commit to support a green COVID-19 recovery plan, link.

108 Carbon Brief, 2020. *Coronavirus: Tracking how the world's 'green recovery' plans aim to cut emissions*, link. Nigeria Investment Promotion Commission, 2020. *Bouncing Back: Nigeria Economic Sustainability Plan*, link.

109 GoSA, 2020. *Building a New Economy: Highlights of South Africa's Reconstruction and Recovery Plan,* link.

110 Vivid Economics, 2020. *Greenness of Stimulus Index: An Assessment of COVID-19 Stimulus by G20 Countries and Other Major Economies in Relation to Climate Action and Biodiversity Goals*, link.

111 FONERWA, 2020. *Rwanda commits to a green recovery on World Environment Day*, link.

112 National Treasury, 2020. *Presentation on Post-Covid-19 Economic Recovery Strategy*, link.

113 Allan, A., V. Bahadur, S. Venkatramani, and V. Soundarajan, 2019. *The Role of Domestic Budgets in Financing Climate Change Adaptation*, link.

114 IMF, 2020. *Regional Economic Outlook Sub-Saharan Africa – A Difficult Road to Recovery*, link.

115 IMF, 2019. *The Economics of Climate*: *Finance and Development*, link.

116 OECD, 2020. *Covid-19 Global Pandemic: Joint Statement by the OECD Development Assistance Committee on the Covid-19 Crisis*, link.

117 OECD, 2020. *The Impact of the Coronavirus (COVID-19) Crisis on Development Finance*, link.

118 OECD, 2020. *Climate Finance Provided and Mobilised by Developed Countries since 2013–18*, link.

119 COP26 Presidency, 2021. *Priorities for Public Climate Finance in the Year Ahead*, link.

120 Donor Tracker, 2020. *Financing for the Future: Climate Finance and the Role of ODA*, link.

121 OECD, 2020. *Climate finance for developing countries rose to USD 78.9 billion in 2018*, link.

122 Climate Home News, 2019. Rich Countries oppose bid to drought-proof Ethiopian communities, link.

123 World Bank, 2018. *Sovereign Blue Bond Issuance: Frequently Asked Questions*, link.

124 Government of Mauritius, 2020. *Budget Speech 2020/21: Our New Normal, the Economy of Life*, link.

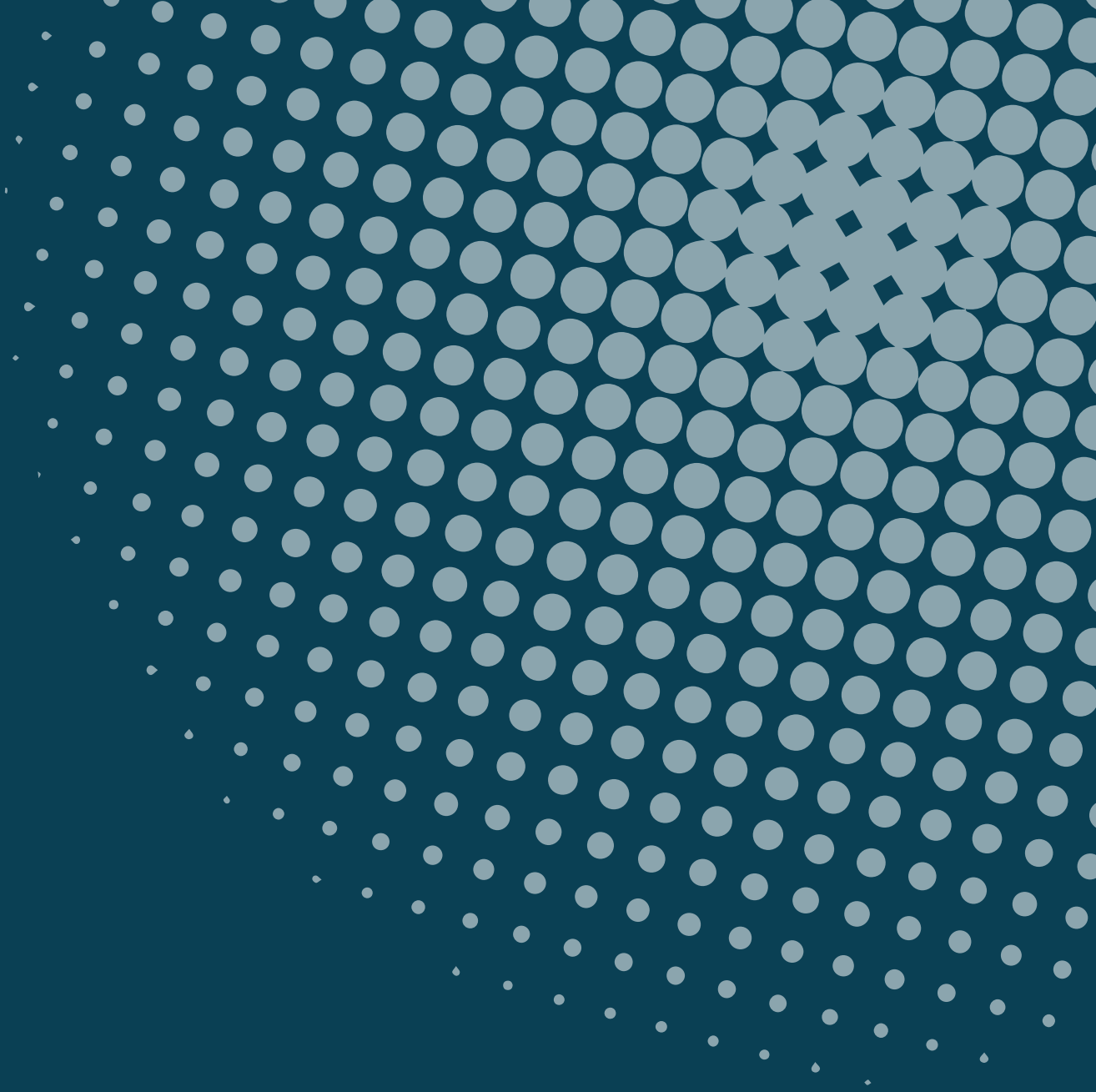
125 IISD, 2020. Using debt swaps to tackle debt climate and nature loss, link.

126 World Economic Forum, 2020. *How debt for climate swaps could spur a green recovery*, link.

127 Steele, P. and S. Patel., 2020. *Tackling the Triple Crisis: Using Debt Swaps to Address Debt,Climate and Nature Loss Post-COVID-19:* IIED, link.

128 President Hage G. Geingob's Statement at the High-Level Event on Financing for Development in the Era of Covid-19 and Beyond, 29 September 2020, link.

129 Hepburn, C., B. O'Callaghan, N., Stern, J., Stiglitz, and D. Zenghelis, 2020. *Will COVID-19 Fiscal Recovery Packages Accelerate or Retard Progress on Climate Change?*, link.



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