Country Focus Report 2023

SEYCHELLES

Mobilizing Private Sector Financing for Climate and Green Growth









AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

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LIST OF ABBREVIATIONS

AfDB	African Development Bank
AEO	The African Economic Outlook
AIDI	Africa Infrastructure Development Index
Basel	Basel Committee on Banking Supervision.
CBS	Central Bank of Seychelles
CDN	Country Diagnostic Note
CFR	Country Focused Report
CI	Confidence Interval
COP 15	COP 15
COVID-19	Coronavirus Disease 2019
CREWS	Climate Risk for Early Warning System
CSP	Country Strategy Paper
CSR	Corporate Social Responsibility
DFIs	Development Finance Institutions
DPs	Development Partners
ECCE	Country Economics Department, AfDB
EEZ	Economic Exclusive Zone
EFF	Extended Fund Facility
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FinTech	Financial Technology
GCM	Global Climate Models
GDP	Gross Domestic Product
GGI	The Green Growth Index
GNI	Gross National Income
GoS	Government of Seychelles
GWh	Gigawatt hour
HDI	Human Development Index
ICT	Information Communication Technology
IUU	Illegal, unreported, and unregulated
ISO	International Organization for Standardization
IMF	International Monetary Fund
LNG	Liquefied Natural Gas
IPPs	Independent Power Producers
IRENA	International Renewable Energy Agency
IUU	Illegal, Unregulated and Unreported Fishing
M&E	Monitoring and Evaluation
MDBs	Multilateral Development Banks
MDI	Multidimensional Poverty Index
MIC TAF	Middle-Income Countries Technical Assistance Fund

MoFBE	Ministry of Fisheries and Blue Economy
MoFTI&EP	Ministry of Finance, Trade, Investment and Economic Planning
MPA	Marine Protected Area
MPI	Multidimensional Poverty Index
MSMEs	Micro, Small, and Medium Enterprises
MTR	Mid-Term Review
MSW	Municipal Solid Waste
MW	Megawatts
NbS	Nature-based Solutions
NCCS	National Climate Change Strategy
NDC	Nationally Determined Contribution
NDS	National Development Strategy
NPP	Net Primary Production
NSOs	Non-Sovereign Operations
PPP	Public-Private Partnership
PSIP	Public-Sector Investment Program
PUC	Public Utility Corporation
RBS	Risk-Based Supervision framework
RDGE	East Africa Regional Development and Business Delivery Office
RSF	Resilience and Sustainability Facility
SSA	Sub Saharan Africa
SCR	Seychelles Rupees
SDG	Sustainable Development Goal
SeyCCAT	Seychelles Conservation and Climate Adaptation Trust
SFA	Seychelles Fishing Authority
SID	Small Island Developing States
SMA	Seychelles Meteorological Authority
SPTC	Seychelles Public Transport Corporation
SSDS	Seychelles Sustainable Development Strategy
TNC	The Nature Conservancy
UK	United Kingdom
UNDP	United Nations Development Program
UNSDCF	United Nations Sustainable Development Cooperation Framework
UNSPF	United Nations Strategic Partnership Framework
USD	United States Dollar
WDI	World Development Indicators
WEF	World Economic Forum

Seychelles

KEY MESSAGES

1. **Recent Macro economic performance has been encouraging.** GDP rebounded by 7.9% and 9.5% in 2021 and 2022, exceeding East African averages of 4.7% and 4.4% and compared with the GDP contraction by 8.6% in 2020 amid the COVID-19 pandemic, driven on the supply side by tourism and fisheries. Monetary policy remained accommodative with a decline in inflation to 2.8% in 2022 from 9.8% in 2021 as supply disruptions eased but remained higher than the pre-COVID period amid Russia's invasion of Ukraine. The fiscal deficit narrowed in 2022 to 3.6% from 6.8% in 2021 as revenue collections improved while the current account deficit also narrowed to 7.0% of GDP in 2022 from 10.8% in 2021 with a buoyant tourism performance. The outlook is positive, though growth is projected to slow to 5.1% and 4.2% in 2023 and 2024 amid global supply chain disruptions due to Russia's invasion of Ukraine. Tourism and fisheries remain key growth drivers, but opportunities in knowledge-intensive services such as digital finance are untapped. Monetary policy will remain accommodative, and inflation is projected to rise to 4.3% and 4.4% in 2023 and 2024 with slowing growth and higher import prices. Fiscal deficit is projected to decline to 1.6% and 0.4% of GDP in 2023 and 2024, driven by recovery in tourism and increased revenue, while the current account is projected to narrow to 5.4% and 4.9% in 2023 and 2024, amid buoyant tourism.

2. **There is a strong political commitment towards green growth and climate resilience in Seychelles but there are challenges to be addressed.** The government of the Seychelles has several initiatives and instruments to ensure a climate resilient economy, for which it is partnering with its development partners. Partnerships include innovative climate financing and public investments. The country has also been a pioneer in terms of climate change innovative financing, and climate resilience and actions have been at the centrepiece of its long-term development strategies and sector strategies. However, due to its geographical location as small island state, Seychelles remains too vulnerable to climate-related shocks. A continued effort to mobilize internal and external resources for climate resilience financing is crucial, as the economic loss of climate-related risks are very high. Additional efforts to mobilize private sector financing for climate-change resilience and sustainable green growth remain vital. This can be achieved through addressing the key barriers to enhanced private sector participation in climate finance and job creation. These barriers include access to capital, particularly for MSMEs that could participate in green growth investment, insufficient availability of skilled labor, particularly for emerging and knowledge-intensive sectors such as the blue economy and digital finance and technology, and a small domestic market that does not allow scale economies for production, and the high cost of infrastructure connectivity and high cost of electricity, as the country is fully dependent on imported fossil fuel.

3. **Enhancing private sector financing for green growth and climate-change resilience remains an opportunity that can be unleashed in Seychelles:** The country is ranked first in Sub-Saharan Africa and 32nd out of 180 countries in the Environmental Performance Index (June 2022) that tracks 32 performance indicators across environmental health and ecosystem vitality. Private sector financing can therefore contribute significantly, given the country's commitment to climate resilience and its prior experiences so far in innovative financing for climate change. The country's commitment to climate financing mobilization, including the recent approval of the investors map, will enhance information transparency and availability regarding the country's priority investment needs, which in turn enhances investor confidence to come forward and participate in the identified priority areas. Moreover, addressing economic and environmental vulnerability remains at the forefront of the country's strategic orientation for better diversification and climate change resilience. As a result, Seychelles has very recently been selected as the second African country to access the new Resilience and Sustainability Facility (RSF) from the IMF to advance structural reforms, including climate adaptation and mitigation,

4. **Compared with other peers in Africa, the Seychelles climate financing gaps are not as much as the other countries.** The country's climate financing gap as a percentage of GDP is 0.6% (with an upper bound of 0.8% and lower bound of 0.2%) compared with 65% of GDP average for Sub-Saharan Africa. This may be due to its high GDP per capita compared with its peers. However, given the size of the country, its small population and vulnerability due to its geographical location, it is important to ensure that this financing gap is closed as quickly as possible to ensure the country's climate resilience and sustainable growth. In addition, The Upfront Private Investment Potential to Adapt to Droughts and Floods (percentage of GDP) for Seychelles is just 1.8 which is also relatively low compared with some countries such as Malawi (21), Mozambique (5.0), or Comoros (3.1), although better than others such as Cape Verde (0.8) or Tunisia (0.7).

5. **There are some key sectors with opportunities for private sector financing in Seychelles.** Prioritizing such sectors with the right incentives and creating climate resilience and sustainable growth are needed. These sectors of potential opportunities include renewable energy, solid waste management, and transport. In addition to being relatively low-hanging fruits to reduce carbon emissions, these sectors are also priority areas that have been identified by the country's development and sector strategies, by this means potential government facilities and incentives can be explored by investors in these areas.

6. **Key recommendations** to enhance private sector financing for climate resilience include: continue to strengthen public sector financing to complement and incentivize private sector financing, particularly in the renewable energy, solid waste management and transport sectors; create awareness of investment opportunities in these sectors and the associated incentives, including the opportunities for IPPs (Independent Power Producers). Development partners including the African Development Bank should also explore opportunities for financing from their private sector windows - Non-Sovereign Operations (NSOs).

7. **Recommendations on the sustainable use of natural capital.** The country must first comprehensively assess its full potential in natural capital and prepare a road map and strategy towards sustainable use of the different components of its natural capital. Finally, for both private sector financing and sustainable use of its natural capital, Seychelles needs to identify its critical institutional and human capital gaps, and work towards closing these critical gaps, in coordination with its development partners.

I INTRODUCTION

1.1 Seychelles is an archipelago of 115 islands in the Indian Ocean with a population of about 100,000, a small land mass (455 sq. km), and a vast exclusive economic zone (1,374,000 sq. km). The country became a high-income economy in 2015. Its GNI per capita reached US$16,400 in 2019, up from US$11,130 in 2008, and it has a low Multidimensional Poverty Index (MPI) estimated at 0.04 (2019). Despite such positive evolution, the country faces unique development challenges related to its small domestic market, geographical remoteness, and insufficient diversification - challenges that led to the country's significant vulnerability to external economic and environmental shocks. The country is currently recovering from a recession (with a GDP contraction by 8.6% in 2020 compared to 2019) due to the COVID-19 global pandemic but being an import-dependent small economy (importing 97% of food locally consumed), it is now facing new challenges amid new supply chain disruptions caused by Russia's invasion of Ukraine.

1.2. This Country-Focused Report (CFR) for Seychelles is prepared as part of the Annual African Economic Outlook (2023) and the Regional Economic Outlook (REO) 2023 for Eastern Africa. The African Economic Outlook (AEO) is a flagship report of the African Development Bank (AfDB), aiming to fill a knowledge gap on the diverse socio-economic conditions and outlook of African economies, and providing analysis on socio-economic challenges and progresses on key macroeconomic indicators for all the 54 African countries. The REOs and CFRs provide detailed analysis at the regional and country levels. The policy implications and strategic solutions that are provided enable the AfDB to better inform the design of development policies and future projects and programs at the regional and country levels in Africa.

1.3. This 2023 edition of the CFR for Seychelles has five sections. Section two discusses the Seychelles' economic performance and outlook, Section three discusses private sector financing for climate and green growth in Seychelles, Section four discusses the natural capital and green growth in Seychelles. Section five concludes and provides recommendations.

II SEYCHELLES' ECONOMIC PERFORMANCE AND OUTLOOK

2.1. Economic structure:

Seychelles' economic transformation has been low, and the economy remains vulnerable to external shocks. The continued economic dependence on natural resource endowment (fisheries, pristine beaches, and natural beauty, that drive tourism activities) with little attention given to the development of manufacturing and agriculture sectors has led to minimal structural transformation over the past decades. The services sector continued to dominate with its nominal GDP share averaging 83.0% over the 2010-2022 period, while those of the agriculture and industrial sectors averaged only 2.7% and 15.1% over the same period, respectively.

2.2. Recent growth performance:

Seychelles' GDP growth was robust over the 2016-2019 period. GDP contracted by 8.6% in 2020 due to COVID-19 but rebounded by 7.9% and 9.6% in 2021 and 2022, exceeding Eastern African averages of 5.1% and 4.2% (Table 1 and Annex 1). On the supply side, GDP growth is driven by the services sector, notably tourism which has contributed the lion's share to growth every year since 2010. As a result, the -8.6% contraction of GDP in 2020 due to COVID-19 was almost entirely attributable to the services sector contraction (-7.4%), reflecting its predominance in the economy.

2.3. Fiscal policy:

Seychelles had a fiscal expansion amid the Covid-19 pandemic, resulting in a huge fiscal deficit from a modest fiscal surplus before the pandemic. The country had a modest fiscal surplus of between 0.2% and 0.9% of GDP between 2014-2019. In 2020, the budget balance deteriorated to an overall fiscal deficit of -18.5% of GDP resulting in an increase in public debt from 59$ in 2019 to 89.5% in 2020. Owing to the fall in economic activity, tax collections declined by 15% leading to a tax-to-GDP ratio of 27%, compared to an average of 32% over the previous five years, while public spending rose to almost 50% of GDP in 2020. The fiscal deficit narrowed to 6.8% in 2021 and to 3.6% in 2022 owing to improvements in revenue collections under a growing economy. The deficit is projected to decline to 1.6% and 0.4% of GDP in 2023 and 2024, driven mainly by the tourism recovery (Table 1 and Annex 1).

2.4. Monetary policy:

The Central Bank of Seychelles (CBS) maintained an accommodative monetary policy to reduce the cost of credit and in turn boost economic activity. Because of the delayed transition of price changes from commodities imported by the publicly owned Seychelles Trading Company (STC), whose core business is imports, storage, and distribution of essential and basic foods, the inflation rate in 2020 declined to 1.2% from 1.8% in 2019. Government fiscal and social protection measures also contributed to this. However, inflation significantly rose to 9.8% in 2021 due to global supply chain disruptions amid the pandemic in 2020. Inflation declined in 2022 to 2.8% as supply chain disruptions eased but remained higher than in the pre-COVID period. Inflation is projected to increase again to 4.3% and 4.4% in 2023 and 2024 amid the effects of Russian invasion of Ukraine and continued global uncertainty (Table 1 and Annex 1).

Seychelles' GDP growth was robust over the 2016-2019 period. GDP contracted by 8.6% in 2020 due to COVID-19 but rebounded by 7.9% and 9.6% in 2021 and 2022, exceeding Eastern African averages of 5.1% and 4.2%.

Table 1: Macroeconomic Indicators

Variables	2018	2019	2020	2021	2022(e)	2023 (p)	2024 (p)
Real GDP Growth	3.7	4.9	-8.6	7.9	9.5	5.1	4.2
Real GDP Growth per Capita	2.4	3.7	-9.7	7.0	8.9	4.6	3.7
Inflation	3.7	1.8	1.2	9.8	2.8	4.3	4.4
Overall Fiscal Balance, Including Grants (% GDP)	-0.2	0.2	-18.5	-6.8	-3.6	-1.6	-0.4
Current Account (% GDP)	-2.6	-3.2	-14.6	-10.8	-7.0	-5.4	-4.9

Source: AfDB statistics

2.5. External sector:

Being an import-dependent Small Island State, Seychelles' current account continues to register large deficits, implying its high vulnerability to external shocks. The current account deficit deteriorated to 14.6% in 2020 (from 3.2% in 2019), before narrowing to 10.8% in 2021 and 7.0% in 2022 amid a continued improvement of tourism performance. The current account is projected to narrow to 5.4% and 4.9% in 2023 and 2024, as tourism earnings remain buoyant and global energy prices stabilize (Table 1 and Annex 1). Gross international reserves stood at around 4.1 months of imports in 2021 and 2022, in line with the authorities' target.

The current account deficit deteriorated to 14.6% in 2020 (from 3.2% in 2019), before narrowing to 10.8% in 2021 and 7.0% in 2022 amid a continued improvement of tourism performance.

2.6. Private sector:

Seychelles' private sector significantly contributes to GDP and employment, but is constrained by cumbersome licensing and regulatory frameworks, high labour costs, shortages of skilled labour and low productivity, all of which impact the business environment. The sector also faces poor access to credit with financial institutions becoming increasingly risk-averse post COVID-19. The private sector accounts for 60% of the country's GDP and approximately 65% of formal employment, domestic revenue, and foreign currency generation. The main economic activities are tourism, fishing, farming, oil drilling, manufacturing, financial services, and information and communications technology (ICT). The energy sector is dependent on fossil fuels to generate 99% of energy needs. This points to the potential for private investment through the new PPP regulatory framework in clean power, green energy, and low-carbon solutions. . Alternative energy sources, including liquid natural gas (LNG) are under active consideration and various independent power producer (IPP) arrangements are currently being evaluated.

2.7. Financial sector:

Seychelles' National Development Strategy (NDS) 2019-2023 prioritizes the financial services sector as a key pillar for growth. Seychelles' financial sector plays a crucial role in supporting the country's economy; it has experienced steady growth and is well capitalized and resilient. The government has taken steps to strengthen the sector's stability. The authorities have tried to modernize the financial services sector to enable it to provide more innovative and diversified products and to create new growth opportunities. According to

NDS 2019-2023 Seychelles "aspires to become a potential financial technology (FinTech) hub" that will spur growth in FinTech start-ups, and in line with this goal, regulatory frameworks are being developed. Seychelles' financial sector is reasonably well developed and capitalized. The banking system is well regulated and has weathered the COVID-19 crisis well, although risks remain. No significant COVID-19 impact on loan portfolios has yet materialized, but there are downside risks from forbearance measures making active monitoring of asset quality imperative to reflect the true state of the banking system. Seychelles has nine commercial banks and five non-bank financial institutions with the banking sector being highly concentrated, with the country's three largest banks holding approximately 80% of the sector assets, deposits, and loans. To enhance financial stability, the CBS continues to strengthen its regulatory and supervisory framework. Work is being finalized to calibrate the risk scores of the banks under a risk-based supervision (RBS) framework that integrates Basel II Pillar 2 requirements.

2.8. Short-term growth outlook and risks:

Seychelles' medium-term growth outlook remains positive, but in the short-term will be impacted by the post-Covid economic dynamics and the impact of the Russian invasion of Ukraine. The pandemic affected Seychelles' economy heavily through a contraction in tourism activity, exports, and foreign direct investments. When global lockdowns were lifted,tourism activities resumed and growth rebounded. Real GDP growth is projected to slow to 5.1% and 4.2% in 2023 and 2024 due to the persistence of global supply chain disruptions. Tourism and fisheries will remain key growth drivers, but knowledge-intensive services such as digital finance and ICT are also expected to contribute.

III. PRIVATE SECTOR FINANCING FOR CLIMATE AND GREEN GROWTH

3.1 The imperative for green growth and the role of private sector financing

As a small island state, the Seychelles is prone to climate risks and impacts. The country has witnessed several changes in its climatic conditions and weather patterns. It warmed by 0.33o C between 1977 and 2007 while annual rainfall anomaly trends on Mahe Island for the period 1972 to 2006 were upward by 13.7 mm per year, indicating an increasingly wetter climate. Projects show that the country will continue to witness increased wetter periods and increasing temperatures (AfDB, AEO 2022). Individual Global Climate Models (GCM) projections show a maximum increase in rainfall of +5.9%in 2025; +9.3% in 2050 and +12.4% in 2100. Temperatures, on the other hand, are predicted to increase by +0.6, +1.1 and +2.1oC for the years 2025, 2050 and 2100, respectively. The observed changes have had adverse impacts, including extreme weather events such as flooding, landslides, and extended periods of drought; increase in sea temperatures, resulting in further coral bleaching; changes in acidity and damage to marine ecosystems; and increases in storms and storm surges and sea level rises. These events result in the destruction of assets, livelihoods, and affect economic activities such as tourism and fisheries. The Seychelles, however, emits insignificant amounts of greenhouse gases (GHGs), responsible for only 0.003% of global emissions, and per capita emissions are estimated at 5.38 tons of CO2 per person annually over the last decades. However, the per capita CO2 emission in metric tons has increased from 3.6 in 2000 to 6.3 in 2019 (World Bank, WDI). Most of the emissions in Seychelles (95%) come from electricity generation and transport. This has clear implications for the priorities of project and climate financing for a sustainable development trajectory.

Continued focus on green growth remains key to sustainable growth in Seychelles. The AEO 2023 thematic note has shown that green growth (defined by the African Development Bank as “the promotion and maximization of opportunities from economic growth through building resilience, managing natural assets efficiently and sustainably, including enhancing agricultural productivity, and promoting sustainable infrastructure”) positively correlates with economic growth, climate resilience, low carbon development and readiness in Africa. The report provides clear evidence that green growth pathways ensure that the complementarities in benefits from economic growth, climate action and development are achieved. The report articulates further that green growth pathways therefore pursue economic growth but they also identify and address social and environmental externalities and market failures that emerge from pursuing economic growth and climate action, for example, through material and energy efficiency.

Consequently, countries that perform well on green growth also do well on other economic development and climate resilience indicators. The AEO 2023 report, using a plotted chart (fitted with 95% CI) indicates that for Seychelles a real GDP growth of 3.97% is associated with a vulnerability index of 47.2, a readiness index of 43.1 and a resilience index of 45.5 (AfDB statistics, AEO 2023).

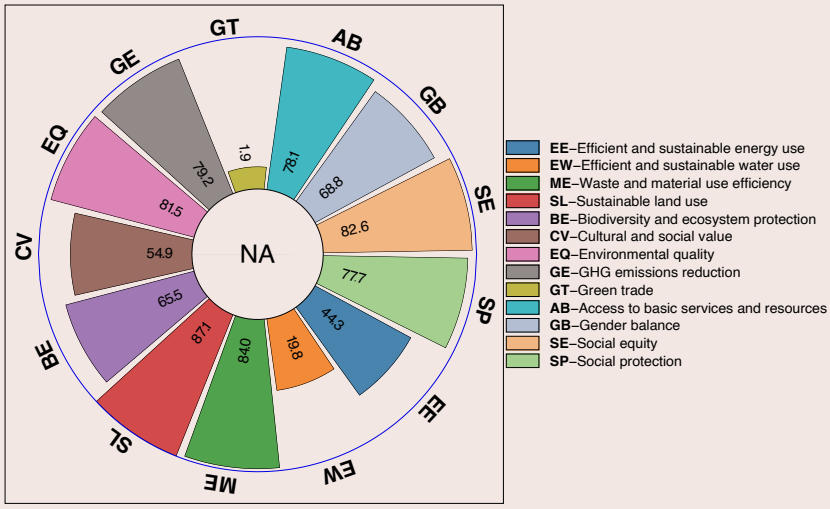
Enhancing private sector financing for green growth and climate resilience remains an opportunity that can be unleashed in Seychelles, given the country's commitment and its prior experiences so far in innovative financing for climate change. As an island state, Seychelles is vulnerable to the adverse impacts of climate change. Aware of this, the country has put the sustainable and green growth agenda as the centerpiece of its development strategies. Generally, while Seychelles has made remarkable progress in socio-economic development to the extent of attaining the status of a high-income country, challenges persist. Among the most salient pressures are climate-change impacts, environmental degradation, inadequate technical and human capacity, particularly lack of skilled manpower in the areas of climate-change financing, green growth exacerbated by the lingering impacts of COVID-19, and the current global uncertainty and the hitherto limited economic diversification away from tourism.

Enhancing private sector financing for green growth and climate resilience remains an opportunity that can be unleashed in Seychelles, given the country's commitment and its prior experiences so far in innovative financing for climate change.

Progress towards green growth in Seychelles has generally been positive, as the government has continued to place emphasis on the sustainability of the country's development and environmental resilience. In terms of social inclusion, Africa has improved over the past decade, from a score of 44.3 in 2010 to 47.2 in 2021, largely due to improvements in access to basic services and resources (AB) such as water, sanitation, electricity, and clean fuels, increasing gender balance (GB) and social equity (SE) (AEO 2023). However, Seychelles has performed even much better than the rest of Africa. For example, Seychelles' score in access to basic services and resources (AB) stands at 78.1 compared with an African average of 38.9; in terms of gender balance (GB) it scored 68.8 compared with the African average of 61.2. Similarly, in terms of social equity (SE) and social protection schemes (SP), Seychelles also recorded far better scores at 82.6 and 77.7, respectively, compared with African averages of 62.8 and 36.4. Seychelles also performed better in some of the other dimensions of green growth compared with the rest of Africa including in terms of waste and material use efficiency (ME) at a score of 84.0 compared with the African average of 76.0 and in sustainable land use (SL) at a score of 87.1 compared with African average of 72.9.

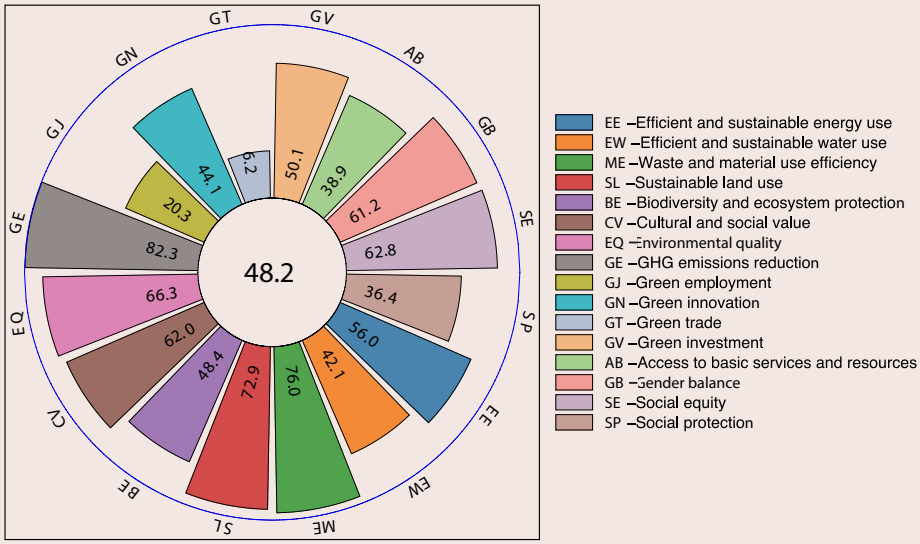
On the other hand, Seychelles lags relatively in some dimensions. For instance, on efficient and sustainable resource use, Seychelles' score is low, with an average score for efficient and sustainable energy (EE) of 44.3 over 2010-2021 compared with an average score of 56.0 for Africa over the same period. It also lags in green trade (GT) at 1.9 compared with Africa's 6.2 average; GHG emissions reduction (GE) at 79.2 compared with Africa's average of 82.3 and in efficient and sustainable water use (EW) at a score of 19.8 compared with Africa's average of 32.1 (see figures 3.1a and 3.1b).

Figure 3.1a: Distance to targets of green growth indicators in Seychelles, average 2010–2021



Source: Staff computations based on the Global Green Growth Institute database

Figure 3.1b: Distance to targets of green growth indicators in Africa, average 2010–2021

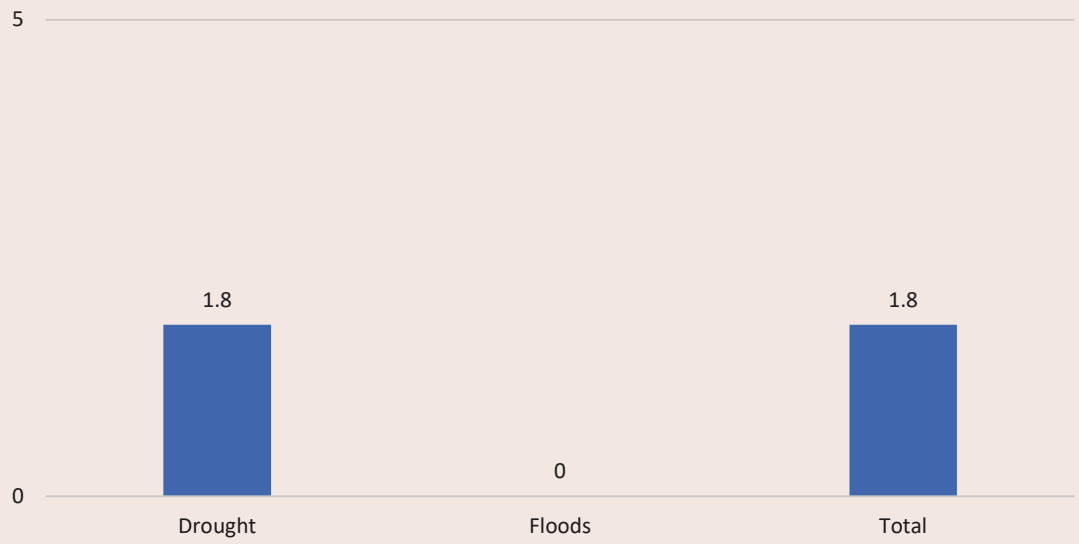


Source: Staff computations based on the Global Green Growth Institute database

Private sector participation can be mobilized and scaled up to complement and to support Seychelles achieve its green growth and climate action ambitions.

Meeting green growth and climate action ambitions in Seychelles will require modest investments. According to the AEO 2023 assessments, simply adapting to the effects of floods and droughts in Seychelles (which can be taken as upfront private investment opportunities) will require less than 2% of the country's GDP (Figure 3.2).

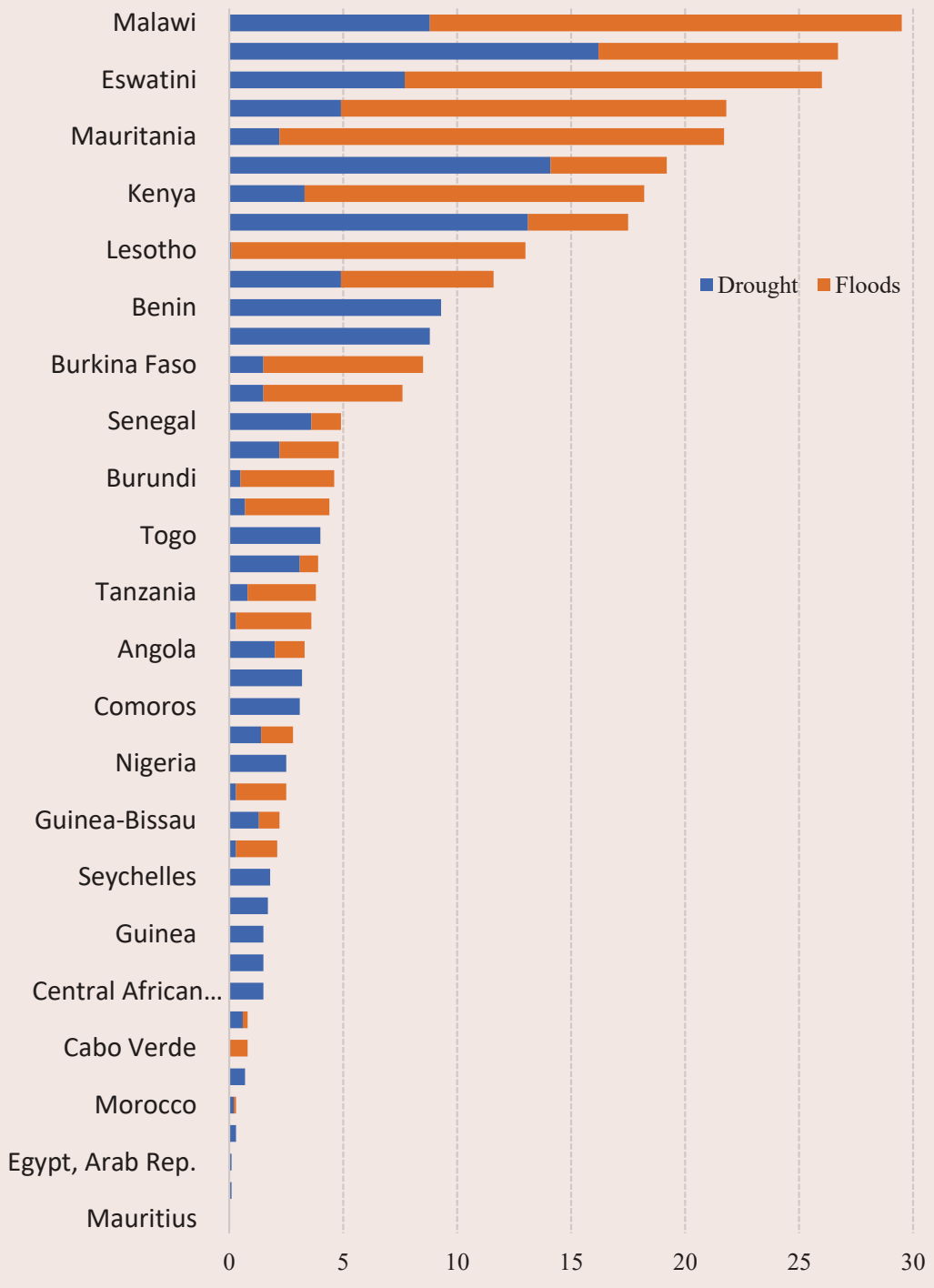
Figure 3.2: Upfront private investment opportunities to adapt to droughts and floods in Seychelles between 2021 and 2040 (% of GDP)



Note: Figures are expressed as a percent of GDP in 2021. Source: Bari and Dessus (2022)

Comparative assessment shows that the upfront private investment opportunities to adapt to droughts and floods in Seychelles is lower than those in most African countries. The upfront private investment opportunity in Seychelles for the period between 2021 and 2040 (% of GDP) is lower when compared with that from other similar countries in Africa (Figure 3.2). The chart shows that the Upfront Private Investment Potential to Adapt to Droughts and Floods for Seychelles is just 1.8% of the country's GDP, which is relatively low compared with countries such as Malawi (21%), Mozambique (5%), or Comoros (3.1%) though it is relatively higher than others such as Cabo Verde (0.8%) or Tunisia (0.7%) (Figure 3.3).

Figure 3.3: Upfront Private Investment Potential to Adapt to Droughts and Floods (% of GDP) by country



Source: AfDB staff computations based on AEO (2023)

Seychelles is ranked first in Sub-Saharan Africa and 32nd out of 180 countries in the Environmental Performance Index (June 2022) that tracks 32 performance indicators on environmental health and ecosystem vitality. Individual General Circulation Model projections show a maximum increase in rainfall of 5.9% (19 mm), 9.3% (25.4 mm), 12.4% (38.6 mm), for the years 2025, 2050, and 2100, respectively. Like other small island states, waste management and plastic pollution is a major issue.

To address this, the Government is seeking to improve the existing waste management system in line with best practices and the country's National Waste Policy 2018-2023 and Solid Waste Master Plan 2020-2035. The National Development Strategy (NDS 2019-2023), the new National Development Strategy (2023-2027) and the country's Vision 2033 aim at a creating a resilient and transforming economy. The NDS 2019-2023 is based on six pillars, namely: (i) Good governance, transparency, and accountability; (ii) People at the centre of development; (iii) Social cohesion; (iv) Innovative economy; (v) Economic transformation; and (vi) Environmental sustainability.

The government of Seychelles has several initiatives and instruments to ensure a climate-resilient economy. In the energy and transport sectors, it seeks collaborative financing to achieve its specific targets of switching 30%of vehicles from fossil fuel to electricity use by 2030; increasing the use of solar energy; and conversion of power generation to liquefied natural gas (LNG). Among specific adaptation measures are also the planned construction of the Grand Anse Dam (as it optimizes spillway operations and water use); and the implementation of the Coastal Management Plan 2019-2023, with an investment financing requirement amounting to USD 15.8 million (AEO 2022 Seychelles CFR).

The Government plans to adopt a climate finance strategy and roadmap to incentivize domestic investments and to direct funding from international public and private sources. It plans to identify financing mechanisms to support its NDC implementation e.g., multilateral and bilateral funds, insurance products, debt-for-nature swaps, the Blue Bond, private investment, blue carbon credits and bonds, and other innovative conservation financing mechanisms. These different financing mechanisms, interestingly, also complemented and leveraged each other. For example, the debt-swap was made possible by private funders, including the Leonardo DiCaprio Foundation, Oak Foundation, Oceans 5, and the Waitt Foundation, among others. Seychelles seeks to proactively develop a climate-resilient blue economy by strengthening the management of fisheries and marine ecosystems and expanding coverage of its marine-protected areas. Through a combination of internal and external financing instruments, including the two innovative financing mechanisms it is known for (debt-for-adaptation restructuring and the blue bond), the country expects to cover its financing needs for fisheries management until 2023 while paying only a fraction of the costs related to the expansion of the protected areas network. The Seychelles is among the countries that are experienced in using blended instruments for climate change resilience and green growth in Africa. The Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) is a public institution that strategically invests in ocean stakeholders to generate new learning and take bold actions related to green growth and environment conservation or climate resilience, and strives to increase the availability of financing for the development of the Seychelles' blue economy. The Government spends more than 4% of its budget on the environment and climate change sector, and to complement this it introduced the sustainable environment levy for visitors from April 2023 (Budget speech 2023). While Seychelles aims to address the bulk of its climate resilience through concessionary financing, the private sector can complement these efforts, given: (i) Seychelles' clear strategies and climate resilience commitments; (ii) a PPP law that can facilitate investment in green energy and eco-friendly transport; (iii) its well developed and capitalized financial sector, capable of facilitating investment in eco-friendly energy and transport. Seychelles should capitalize on its globally recognized brand of natural beauty to attract private investment into high-end and eco-tourism activities to complement government-sponsored investments in similar areas. Together with other Small Island States, Seychelles is also promoting the adoption of a multidimensional vulnerability index (MVI) as a vital tool to help themselves gain access to

concessional financing needed to respond to climate disasters, to improve their long-term national planning, service their debts, and sign up to insurance and compensation schemes. Most Small Island States rely on external financing to help prepare and recover from global economic and environmental crises. However, their relative middle-to-high income status makes them ineligible for cheaper financing arrangements that are set aside for low income countries. The index seeks to increase eligibility for SIDS to receive greater financing to address their unique vulnerabilities due to their proximity to and reliance on ocean activities.

The Government has developed policies and strategies to address climate change. These include a National Climate Change Policy (2020), the Nationally Determined Contribution (2015, updated in 2021), and the Public Sector Investment Program (PSIP). Overall, the national policy and strategies outline priority investments to transition the country to a low-carbon economy while meeting its target of having 15% of its energy coming from renewable sources by 2030. The PSIP lists the targeted climate change mitigation and adaptation projects with a financing envelope of about USD 60 million. The country works with its development partners to finance climate-related activities. The "Blue Bond" raised USD 15 million and was backed by a guarantee by the World Bank. The Seychelles has also secured grant resources from the Abu Dhabi Development Fund and the government of India which are financing solar PV energy plants. The country aims to finance its climate resilience infrastructure through concessionary financing, and it has faced challenges in translating these ideas into bankable projects'. The importance of green growth policies is clear for every country these days. Therefore, an integrated approach to adhering to key international frameworks for climate change and development is vital for Seychelles to support its climate resilience financing. These international frameworks include the RIO+20 United Nations Conference on Sustainable Development in 2012, the Sustainable Development Goals adopted in 2015, the Addis Ababa Declaration in 2015 for Financing for Development, the Paris Agreement, and the Sendai Framework for Disaster Risk Reduction.

Climate-change resilience through private sector participation can therefore present a complementary and successful showcase in Seychelles, given the country's commitment in this area and its experience of taking proactive measures. Addressing economic and environmental vulnerability remains at the forefront of the country's strategic orientation for better diversification and climate-change resilience. In line with this, the current African Development Bank Group Country Strategy Paper (CSP) 2021-2025 rightly emphasizes that Seychelles' overarching development challenge remains how "to achieve structural transformation to sustain growth and overcome vulnerability to climate change". Accordingly, to address this key challenge, the current CSP's main objective is "to enhance the country's economic resilience in support of its structural transformation agenda" and is centered on a single Priority Area —fostering resilience for economic and environmental sustainability. A recently concluded dialogue mission by the Bank Group team has found that this CSP key objective and the single priority area of the strategic thrust remains valid and consistent with the current reality and the new NDS now being finalized.

Cognizant of the utmost need for the country's climate change and environmental resilience, Seychelles has recently been selected as the second African country to reach a staff-level agreement to access the new Resilience and Sustainability Facility (RSF) which, in addition to a new 36 months' Extended Fund Facility (EFF), is meant to support the Seychellois authorities' efforts to maintain macroeconomic stability, advance structural reforms, including climate adaptation and mitigation, and insure against downside

risks, and where Seychelles will have access to a total of USD 103 million (USD 56.96 million under the EFF and USD 46.19 million under the RSF). According to the IMF press release, the "RSF-supported reforms will help the authorities' advance measures to integrate climate-related considerations in the design of macroeconomic policies and frameworks, enhance climate-related risk management for financial institutions, strengthen the disaster risk reduction and management framework, and address adaptation and mitigation needs". (IMF, March 29, 2023). While Seychelles has a well advanced climate agenda, it needs to further strengthen its institutions to deliver and monitor its ambitious climate objectives and to mobilize additional resources to achieve them. Such a support under a new RSF and the selection of the country as the second country in Sub-Saharan Africa (SSA) is expected to provide additional confidence and incentive for private sector financing for climate change resilience in the country.

3.2 Private sector finance flows, gaps and needs for green growth and climate action

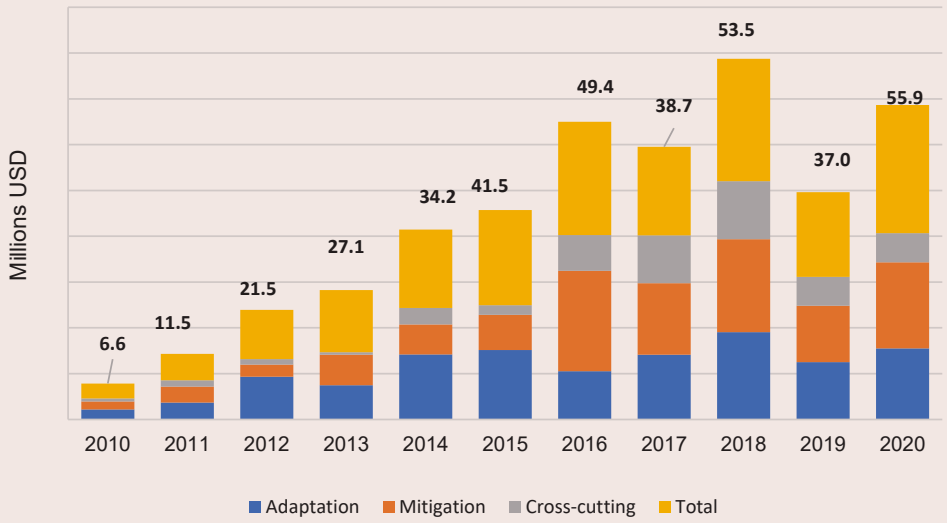
3.2.1 The climate finance needs:

Using the latest submitted NDCs, the Bank estimates that Seychelles' financing needs to respond adequately to climate change are about $1.25 billion cumulatively up to 2030 (with a lower bound of $1.12 billion and upper bound of $1.38 billion), distributed as follows: 26% mitigation (compared with 42% for all Africa), 31% adaptation (compared with 44% for all Africa), and 42% for loss and damage (as compared with 13% for all Africa). This indicates that the climate-financing needs for Seychelles are more for loss and damages than for adaptation and mitigation needs than the needs for the whole Africa, indicating the unique challenges and types of needs for Seychelles compared with the average in the continent. The cumulative needs, on annual bases, translates into $113.6 million on average per year (with a lower bound of $101.4 and an upper bound of $125.6 million). These updated figures for financing needs for Seychelles are much higher than those reported in the AEO 2022 published last year. In the AEO 2022, it was reported that the estimated cumulative financing needs for the Seychelles to respond adequately to climate change range from about $543 million to $873 million, averaging $708 million over the period 2020–2030. Put annually, this comes to about $ 64 million, with lower and upper bound amounts of $50 million and $80 million, respectively. Adaptation costs were estimated at around 21% of Seychelles' total needs, and the report in 2022 suggested that the adaptation needs were most likely to be underestimated due to a lack of data and technical expertise to estimate the true cost of adaptation measures, including the uncertainty of future carbon emissions and how these will influence adaptation needs, while mitigation was estimated to account for 30% of the estimated needs over the same 2020-2030 period. Key messages from comparison of the new updated estimates and the AEO 2022 estimates are: The previous estimates were very much underestimated, by more than 40% compared with the new AEO 2023 estimates. Moreover, as suggested in the AEO 2022 report, the adaptation needs are now higher by 31% compared with the previous estimates.

3.2.2 The current climate finance flows including their sources (public/ private).

As shown in figure 3.4, Seychelles received a total of $376.6 million of climate finance over the 2010-2020 period mobilized from development finance institutions and other development partner, averaging $34.3 million per year. Climate finance inflows have increased annually by about 30% on average over the same period, ranging from $6.6 million in 2010 to $55.9 million in 2020. Over 2010-15, the country received $142.4 million of climate finance (or $23.7 million annually), compared to $234.5 million for the period 2016-2020 (or $46.9 million per year). Out of the $376.6 million the country received over the period 2010-2020, a total of $247.9 million was allocated to adaptation finance while mitigation actions received $235.2 million in total. Cross-cutting finance, which covered both climate adaptation

Figure 3.4: Climate finance inflows to Seychelles, constant 2020 million USD



Note: The total amount of climate finance inflows corresponds to the sum of the values of mitigation and of adaptation, minus the cross-cutting value. Source: AEO 2022, Staff computations based on OECD data

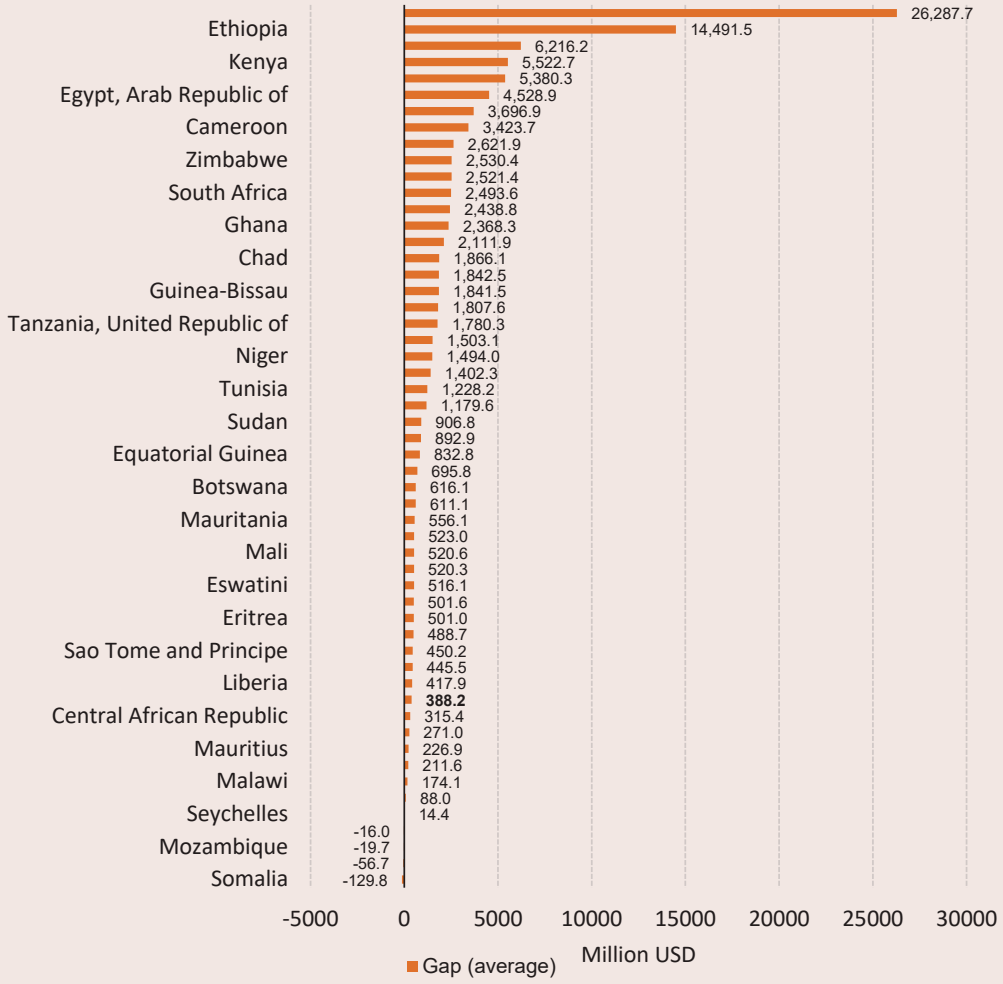
and mitigation actions amounted to $106 million over the 2010-2020 period.

3.2.3 The climate finance gaps that the private sector can help close.

The climate financing gap for Seychelles is relatively modest. Under current trends, private climate finance inflows to most countries in Africa do not keep up with countries' climate needs, risking the continent's climate action. This is also true for Seychelles. However, when compared with the other comparator countries in East Africa, the climate financing gap is in fact among the lowest in Seychelles. Based on the assumption that the Seychelles continues to receive the same annual amount of climate finance as it received over 2016-2020 ($46.9 million per year), the resulting financing gap would amount to an average of $14.4 million a year in 2020–2030, which is relatively low compared with others (Figure 3.5).

The most recent data from the AEO 2023 also confirms that overall financing gap for climate change adaptation and mitigation is also relatively modest for Seychelles. To close the existing climate finance gap, private climate finance flows to Africa would need to increase annually by up to 36% during the NDC implementation period (2020-2030) under the assumption that public climate finance recorded in 2019-2020 remains constant until 2030 and that the private sector covers the entire residual finance needs (AEO 2023). This required annual growth rate drops to 21.2%, 28.1% and 32% if the private sector's contribution is reduced to 25%, 50% and 75%, respectively. In this regard, the estimated cumulative financing needs for the Seychelles to respond adequately to climate change range from about $1.12 billion to $1.38 billion, averaging $1.25 billion, in 2020–2030. Annually, this comes to about $124.9 million, with lower and upper amounts of $111.7million and $139 million, respectively, for the whole decade. The AEO 2023 report also indicates that the climate-financing gap in different African countries varies significantly, and that of Seychelles is only 0.6% of its GDP compared with an average of 65% for Sub Saharan Africa. The report further shows that East Africa has the second highest private sector climate-finance gap in the continent (next to South Africa) with Djibouti and Kenya being among the countries with the highest private financing gaps. The figure for Seychelles is the lowest among the countries in East Africa (Figure 3.6).

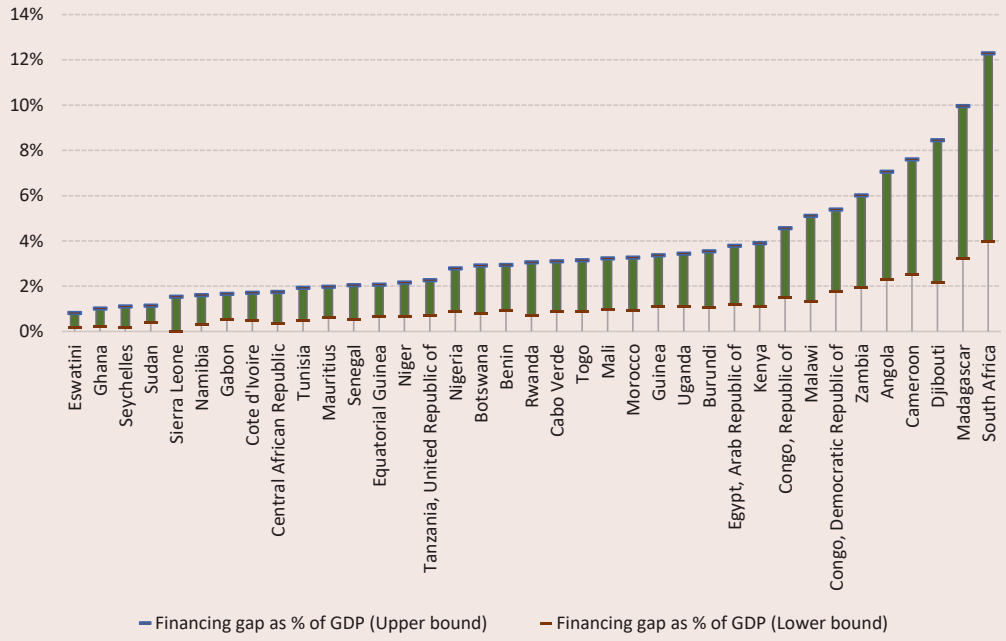
Figure 3.5: Annual climate finance gap, Average 2020-2030, million USD



Source: Staff computations based on AEO (2022), Africa NDC Hub, Integral Consult and OECD data.

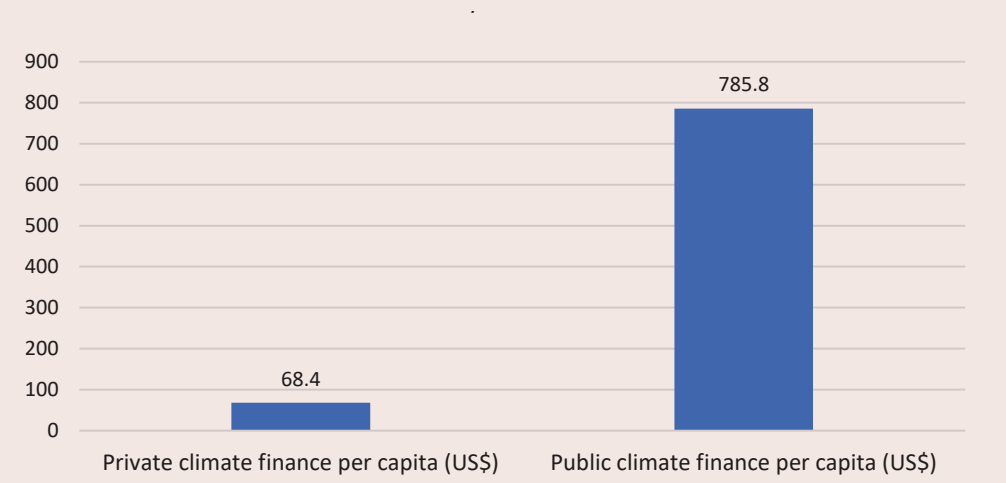
Another interesting observation is that in Seychelles, compared with the other comparator countries, the levels of public and private sector climate financing are relatively high. The public sector finance and private sector climate finance investments (proxied respectively by public climate finance per capita and private sector finance per capita) are significantly correlated (AEO 2023). This is also true for Seychelles. The data used for the complementarity analysis of private and public sector climate financing in the AEO 2023 report indicate that Seychelles has mobilized both the highest private and public sector climate finance compared to the other East African countries. The total private climate finance per capita for Seychelles amounted to $68.4 million while public climate finance per capita amounted to $785.8 million (Figure 3.8). This is mainly because the government has been focusing boldly on climate resilience and green growth initiatives as part of its development and sector strategies. In fact, comparative data shows that both per capita private climate finance and per capita public finance are the highest in Seychelles compared with other countries in Africa (Figures 3.7 and 3.8).

Figure 3.6: Breakdown of estimated annual private climate finance gap for African countries as a share of GDP, both lower bound and upper bound



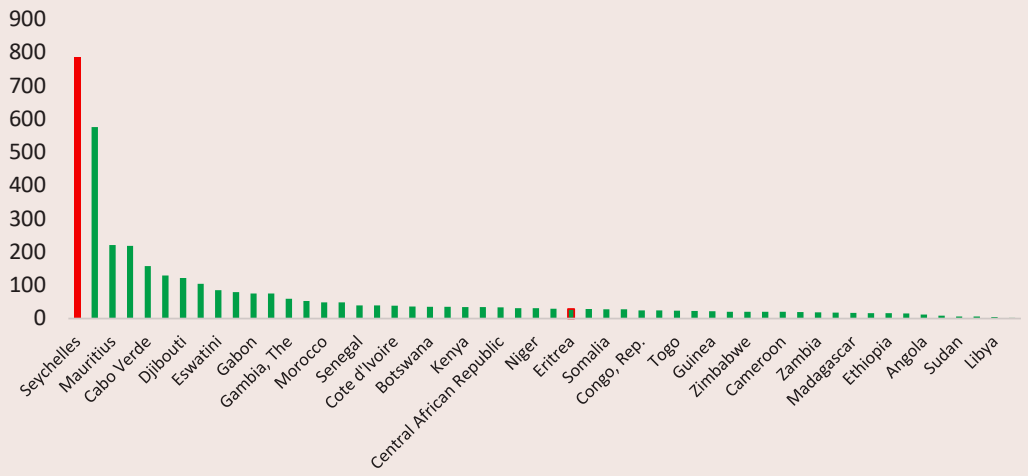
Note: Values truncated for Eritrea (13%-40%) Ethiopia (8%-23%), Mauritania (12%-35%), Somalia (17%-51%), South Sudan (53%-159%). Source: AEO 2023, Staff computation using submitted NDCs, CPI's Landscape of Climate Finance in Africa database and World Bank data

Figure 3.7. Complementarity between public and private finance in Seychelles



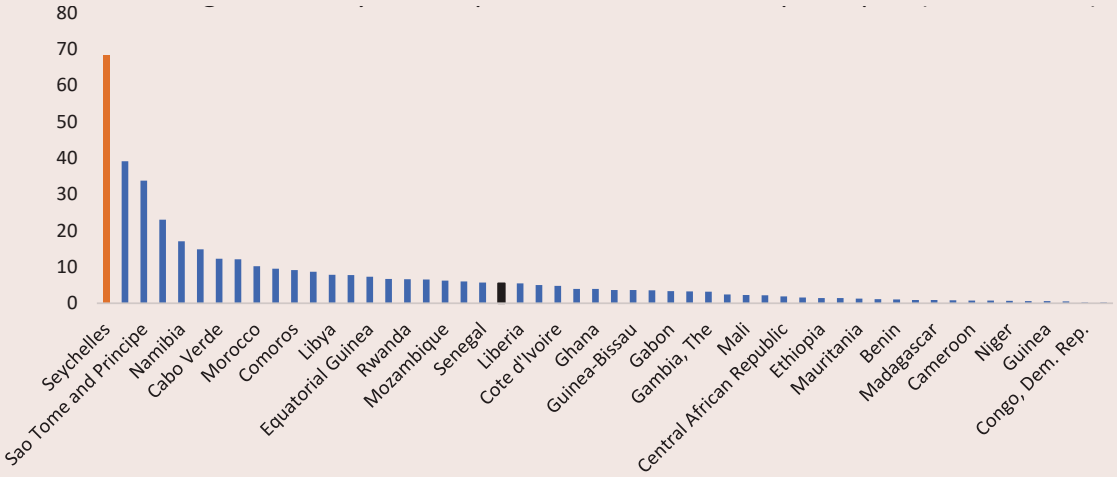
Source: AfDB statistics, AEO 2023

Figure 3.8: Seychelles' public climate finance per capita (US$, millions)



Source: AfDB statistics, AEO 2023

Figure 3.9: Seychelles' private climate finance per capita (US$ millions)



Source: AfDB statistics, AEO 2023

Obviously, the fact that private climate financing in Seychelles as shown above (Figure 3.9) is the highest implies that the private sector financing gap is the lowest in the East Africa region as shown earlier (Figure 3.6).

3.2.4. Emerging innovative private sector financing mechanisms for green growth and climate action:

There are encouraging results in terms of new and innovative instruments for mobilising private sector finance towards green growth and climate action in Seychelles that need to be scaled up.

Mobilisation of private sector finance for green growth and climate action in Seychelles has been very encouraging. As discussed earlier, the country has been committed to ensure that climate resilience is part of its development strategies. In this regard, as articulated earlier in this section, Seychelles has adopted several innovative financing instruments such as debt-for-nature swaps, the Blue Bond, private investment, blue carbon credits and bonds, and other innovative conservation financing mechanisms. Some of the innovative financing mechanisms used to generate finance for green growth and climate action in Seychelles are summarised in table 3.1 below (see AEO 2023 for definitions of these instruments).

Seychelles continues its efforts to mobilize green investments for sustainable growth. Most recently (May 2023), the Government of Seychelles' cabinet approved the Seychelles Investor Map document. The map indicates areas that the Seychelles government has identified as investment priorities: green power production, eco-tourism development, and agricultural export, along with four other venture possibilities, as investment priorities open to local and foreign investors. The government indicates that the idea behind the map is to have all investors understand clearly which domains the government sees as a priority today and to allow investors to gear their investment towards these sectors according to the country's objectives. Within the green power production sector, the government has identified three types of investments that will bring benefit to the country: The installation of photovoltaic systems on rooftops; setting up off-grid photovoltaic systems; and building floating photovoltaic systems. In the tourism sector, investments are needed in the field of eco-tourism and value chains. In these areas the government is looking for investors to help establishments make better use of renewable energy, collect and make use of rainwater, as well as install smart systems that will help to conserve electricity. According to the government, another priority area in the tourism sector relates to cultural activities and with tourists seeking more cultural experiences, and the government is calling on investors to set up businesses that will provide such products and activities. Moreover, in the fisheries sector, which remains the country's second top economic pillar, investors are encouraged to invest in fish processing, cold storage, and a tracing system for fish products. For such investors, when they bring their fish product into a shop, they will be able to establish, through the system, developed by the investor map, where the fish is from and other relevant information on how it was caught. This will help with ISO standards. The map also identifies potential for the export of certain agricultural products such as vanilla and cinnamon.

Table 2: Innovative instruments used to mobilise private sector finance in Seychelles

Type of instruments	Green and sustainable finance e.g., Sustainable bonds, sustainability-linked loans/bonds, social bonds	Blended financing instruments e.g. guarantees, first loss	Private equity and venture capital	Carbon markets
Current performance	Seychelles is among the pioneers in mobilizing reasonably good amounts of financing using such resources. It mobilized a $15 million Blue Bond for climate resilience through a guarantee from the World Bank. The Government of Seychelles engaged in a debt-for-nature buy-back from its external creditors. They included the governments of Belgium, France, Italy, the Republic of South Africa, and the United Kingdom of Great Britain and Northern Ireland. The debt was bought back with approximately $21.6 million mobilised by the Nature Conservancy	Seychelles is among the countries that are experienced in using blended instruments for climate change resilience and green growth. The Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) is a public institution that strategically invests in ocean stakeholders to generate new learning and take bold actions related to green growth and environment conservation or climate resilience. SeyCCAT strives to increase the availability of financing for the development of the Seychelles' blue economy.	Private equity and venture capital investments are recent occurrences but can be considered significant given the country's small market size, among others. There are currently 113 founders with an average founded date of 4 November 2013 and acquired percentage of just 2% and a total of just 35 for-profit companies. The government approved an investor map (May 2023) that clearly identifies priority areas of the investment needed in the country for all local and foreign investors.	Recently (in 2022) a roadmap to capitalize on blue carbon opportunities.

Contextual challenges to scaling up in Seychelles	Insufficient economic diversification due to business environment regulatory policy Insufficient availability of skilled manpower in relevant areas. Weak and insufficiently staffed institutions. Smaller market size Limited technical capacity.	Insufficient general capacity of the institutions and potential investors, particularly the MSMEs The limited technical capacity for blending of financial products and investment instruments	Limited access to finance from the banking sector and domestic financial market for the majority of the MSMEs in the country Limited technical and managerial capacity of the investment players in the private sector	Limited skills and institutional capacity, despite the country's commitment and experience
Key factors enabling successful use of instrument	A good size of national wealth held and administered by the local private sector which contributes significantly to employment and GDP that can be tapped through better access to finance. Authorities' focus and priority climate change and resilience and climate change in their development strategies and long-term vision.	A government commitment to financing climate action using public sector domestic finance Presence of strong public finance management systems that track public finance allocation and spending	A government strategic orientation that encourages innovation towards diversification Presence of various incentives and special financial products by the government for private sector innovative players	A global trend in carbon pricing and increased awareness about the pivotal role it can play in reduction of carbon emissions A significant potential for emission reductions and emission removals in Seychelles from a 100% renewable electricity generation and transport sector efficiency.

3.3. Opportunities and barriers for mobilising private sector finance for green growth and climate action

3.3.1 Opportunities: There are a few key areas of the economy where opportunities exist for sector investments in green growth and climate action in Seychelles.

(a) Renewable Energy: One area where the private sector can be mobilized for climate-change resilience is towards increasing the part of renewable energy such as solar PV and wind energy in the country energy mix. Seychelles has almost universal access to electricity but with limited renewable energy in the mix. Approximately 99.5% of the population in Seychelles have access to electricity and generation. Installed capacity is currently around 134 MW. However, actual generation capacity of 71 MW (53%) is largely attributable to several old generators nearing the end of their lifespan. Total energy generation is 95% from fossil fuels and 5% from renewable energy sources (wind and solar PV). The country's energy demand is growing moderately and reached to 514.5 GWh in the year 2020. The electricity generated from fossil fuels in the same year was 490.9 GWh, which accounted for 95% of the total generated energy. As per the projection, the electricity production in Seychelles will reach 604 GWh by 2025. In addition, the country has registered a high level of per capita energy consumption 6,467.5 kwh, which is much higher than the Sub-Saharan African average of 180 kwh (excluding South Africa).

Seychelles has set clear targets to diversify its energy mix and increase the share of renewable energy in the energy supply to 5% and 15% in 2020 and 2030, respectively. In terms of energy production, Seychelles has stepped up efforts over the previous years by accelerating the transition to renewable sources of power through the introduction of renewables (wind and solar) and energy efficiency schemes for domestic homes and the commercial sector, and more recently the adoption of

the renewable energy policy. The recently approved Energy Regulatory Bill 2022 and Electricity Bill 2022 will enhance the mandate of the SEC as an energy regulator and establish clear demarcation of the electricity generation, transmission, and distribution activities. This sector, despite its small size for big companies in terms of investment, can attract private sector players through IPP mechanisms. Enhancing the renewable sources of energy generation can play a pivotal role in reducing gas emissions and would support sustainable growth outcomes and environmental resilience in Seychelles.

(b). Waste management, notably solid waste management, is another area with opportunities for private sector participation and job creation. Waste management and plastic pollution are major issues. Seychelles generates about 95,000 tons per year of solid waste at a growth rate of 6% per year. With the country's high economic growth performance in recent decades, its per capita municipal solid waste (MSW) generation is about 2.45 kg/day, far higher than the global average and is a large source of methane, a powerful GHG that is particularly harmful. Seychelles Municipal Solid Waste (MSW) management infrastructure in place, notably the landfill at Providence whose lifespan is until 2024, and other landfills in Praslin and La Digue, are inadequate and in the context of the increases in rainfall, sea level rise, and storm surges, are poised to over-spill debris and leachate into the ocean and the surrounding land.

This is because, like other small island states, Seychelles' waste management infrastructure is constrained by the unavailability of land for landfills. Despite that, however, for the island of Mahé, waste stands at 2.4kg per person which is relatively high compared to a global average of 1.2kg per person. Also, being a small island developing state there is no centralized storage facility that can receive and safely store hazardous waste. Currently hazardous waste is sent to the municipal landfill which poses significant challenges for the country. For marine ecosystems and the communities that depend on the ocean for food, tourism, and other economic activities, plastic pollution poses a serious threat. A recent study by the University of Oxford shows that the primary source of plastic debris washing up on the shores of Seychelles' beaches originates from Indonesia, India, Sri Lanka, and Philippines. The research also found that the shipping and fishing industries are responsible for the majority of the plastic waste in Seychelles. This demonstrates that most of the plastic debris accumulating at these remote islands comes from distant sources but leaves the islands severely disadvantaged.

To address the issue of waste, the government is seeking to improve the existing waste management system by implementing several initiatives. These include waste reduction and recovery strategies, constructing new infrastructure, and upgrading waste frameworks in line with best practices and the country's National Waste Policy 2018-2023 and Solid Waste Master Plan 2020-2035. The government is finalizing plans for a solid waste-to-energy plant in Mahe, through which approximately 50,000 tonnes of waste will be used for energy recovery. The project will also reduce the amount of solid waste going to landfill in the archipelago by 80%. The government is also prioritizing circular economy projects through the recovery of solid waste into secondary raw materials by small and medium-sized enterprises (SMEs), and help create jobs for women and youth, while boosting the national economy.

(c). Transport: Currently all the transport systems use solely fossil fuel to run transport vehicles, except for very few hybrid cars that use a combination of fossil fuel, and an internally generated electric power that improves gas consumption per weight and distance. Infrastructure connectivity in Seychelles is relatively good, but the environmental consequences of the current transport system is very damaging to the sustainability of growth.

In fact, Seychelles ranks among the top five countries in the Africa Infrastructure Development Index (AIDI), most recently updated in 2018. However, overall transport services in the country are not sufficiently diversified in modes of transport.

Seychelles' road networks comprise primary, secondary, feeder and estate roads. It has approximately 508 km of roads, out of which over 96% are surfaced. The road interconnection is good, but in some cases, roads are ageing and need attention. The road quality indicator for Seychelles (one of the components of the Global Competitiveness Index of the World Economic Forum (WEF) based on data from the WEF Executive Opinion Survey of business leaders in 144 countries) is relatively good at 4.0 in 2019 (in a scale of 1=low to 7=high) compared with global average of 4.07. Key roads linking Port of Victoria to other points, especially in Mahe including the airport, are facing high traffic levels thereby reducing the levels of services and thus affecting movement. The road pavement condition is being affected by the damage caused by breaks in water and sewer pipes running beneath the roads. However, against all these, public transportation in Seychelles is managed by a parastatal corporation, the Seychelles Public Transport Corporation (SPTC), providing services primarily in Mahé and Praslin. This arrangement and the currently almost full dependence of transport systems on fossil fuel makes the service delivery very inefficient, highly costly and continues to put pressure on the government's fiscal position. Therefore, allowing well-regulated private operators to participate in the sector has been considered but no decision has been made to date. The buses are serving as many as 60,000 people daily, averaging almost 1.5 million passengers monthly. They currently run at a deficit which is covered by grants. Capital expenditure is usually covered the government. The limitation of roadway expansion places public transit into a more prominent role in the transport, especially with a growing population that will lead to increased travel demands.

3.3.2. Barriers to private sector investments in Seychelles

(a) Low capacity of business support institutions: Business support institutions, including chambers of commerce and industrial associations, do not have sufficient institutional and human capacity, and they are faced with few staff and funding, thereby reducing their services to the private sector to inadequate levels. The capacity of key support institutions needs to be strengthened. There is also a need for better coordination, networking, and information sharing.

(b) Cost of infrastructure access: Overall cost of electricity is very high, as power generation is almost entirely based on fossil fuel, thereby making electricity costly, rendering private sector uncompetitive. The ongoing efforts to diversify energy mix and develop renewable energies. Transport and port infrastructure are relatively well-performing, but ageing.

(c) Access to finance and costs of funding is challenging. Local loans are expensive, and FIs in Seychelles are becoming increasingly risk-averse and more selective. Product offerings within Seychelles' FS sector are described as "very basic". Scope exists to leverage Seychelles' on-going financial and capital markets reforms to: (i) encourage greater competition; (ii) promote the use of alternative and innovative financing; and (iii) make better use of sovereign capital, to support productive, private sector directed lending.

(d) Limited availability of skilled labor: Despite a higher ranking and score in the Human Development Index (HDI), Seychelles' private sector is constrained by insufficiently skilled manpower. It is indicated that the vocational training available is insufficient to address the skills gap, while there are limited university—industry linkages.

3.4. Pathways to mobilising private sector finance for green growth and climate action in Seychelles:

There are several pathways that Seychelles can use to unlock private sector finance for green growth and climate action. These are discussed below.

a. Strengthen the capacity of business development support institutions in the country, for example through the Seychelles Chamber of Commerce and Industry, and capacity building institutions.

b. Continue to enhance investment in infrastructure, notably in diversifying the energy sources, encourage private sector investment through IPPs and PPPs.

c. Address unavailability of skilled manpower through investment in TVET and education curriculum development by creating better linkages between training institutions and private sector employers.

d. Enhancing stakeholder collaboration: Collaborations across different stakeholders, particularly between governments and the domestic and international private sector to identify and address primary risks to investments in green growth and climate action.

e. Scale up the experience of blending of finance across sectors using relevant and clearly defined policy frameworks and incentives that are supportive of blending in these sectors depending on the specific challenges and contexts of each sector, for example for the renewable energy and transport sectors.

IV NATURAL CAPITAL FOR CLIMATE FINANCE AND GREEN GROWTH

4.1. Introduction

The AEO 2023 indicates that Africa has significant shares of renewable and non-renewable natural resources, including 30% of the world's mineral resources and 65% of the world's arable land. It also has a huge stock of fertile agricultural land and some of the world's most productive forests both in timber and carbon retention resources. At the same time, the continent is blessed with ample solar, wind, and hydropower. However, the returns from these resources are well below their potential. While the amount of agricultural and forest land in sub-Saharan Africa amounts to 19% of the world's total, the value of these resources, which reflects the use to which they are put, is only 10% of the world's stock of renewable natural capital. Also, Africa has below-average agricultural land productivity and has developed its solar energy only to a very limited extent. The trend over the past quarter century also shows a decline in the value of per-capita natural capital—a strong indicator that development has not been sustainable. Although the average natural capital sustainability is not encouraging, not all indicators show a lack of progress. Some countries have indeed increased the value and efficiency of utilizing renewable and non-renewable resources.

Natural wealth is that part of nature that generates well-being for people. In economic terms, natural wealth is referred to as natural capital. The United Kingdom (UK) Natural Capital Committee defines natural capital as that part of nature which directly or indirectly underpins value to people, including ecosystems, species, freshwater, soils, minerals, the air, and oceans, as well as natural processes and functions. The Convention on Biological Diversity defines the term as the stock of natural assets, which include geology, soil, air, water, and all living things. Natural capital is part of a country's wealth, which includes other forms of capital—physical, human, and social. The World Bank defines the value of a particular natural capital asset as the discounted sum of the value of the rents generated over its lifetime.

4.2. The Evolution of Natural Capital in Seychelles

Seychelles remains too vulnerable to external economic and environmental shocks due mainly to its size and geographic location. It is also vulnerable to global supply chain disruptions as it is import dependent for almost anything, for example, almost 97% of its food consumption is imported. Given its geographical remoteness, it is faced with high transport costs and logistics impacts. Its small size means that its productive sectors do not have sufficient local markets to expand and use scale economies, and its dependence on imported fossil fuel for almost 99% of electricity generation makes it vulnerable to global fuel prices volatility. Its vulnerability is therefore multi-dimensional. However, it has also amazingly high natural capital that, if used efficiently, could contribute to its sustainable development aspirations.

Natural capital is generally tracked in three groups. These are: (a) renewable capital, consisting of forest timber, forest non-timber, mangroves, fisheries, protected areas, cropland, and pastureland; (b) non-renewable assets, separated into oil, natural gas, coal, and minerals; and (c) non-measured forms

of natural wealth, such as renewable energy potential from solar, wind and hydro-resources, landscapes, and marine assets. Out of these categories, the natural capital in Seychelles is estimated to be huge in (a) and (c) categories, while in category (b), non-renewable resources, the country is not as endowed. Using data for (a) and (b) from the World Bank, covering the period 1995-2018, the AEO 2023 indicated key findings for East Africa (of which Seychelles is a part). These findings including the following: (a) In total natural capital East Africa is the fourth richest region of the five on the continent – after North Africa, West Africa, Southern Africa and ahead of Central Africa. The renewable assets have increased 3% in total value over the period 1995-2018, which is a little less than that for all of Africa (6%). Only Burundi had a decline in total renewable capital among the countries in the region. In per capita terms the fall in renewable natural capita in East Africa is very similar to that for all of Africa – around 43%. In the sub-region this is mainly the result of declines in almost all categories except mangroves. The largest fall is in the per capita value of cropland; and (b) East Africa is much less endowed with non-renewable capital than the continent as a whole. It had only $168 of such capital per capita in 2018 compared with $1,084 for the whole of Africa; (c) To be sure, there has been a large percentage increase in non-renewable assets (primarily metals and minerals) in the sub-region but that has come from a very low base. In this regard, an indicator of sustainable growth proposed in the AEO report is to have an increase in natural capital in per capita terms. In this respect, the region has not met that. It had a decline over the period 1995-2018 of 42%. Hence it has done much worse than the continent which experienced an overall decline in per capita natural wealth of 21%.

Sustainable and efficient use of natural capital is key to promote green and sustainable development, and Seychelles has shown strategic commitments to achieve this. The government has developed the Seychelles Sustainable Development Strategy (SSDS 2012 -2020) as a nationwide multisectoral document aiming at improving the sustainable development management in Seychelles to achieve a delicate balance between its small-island ecosystems and economic growth. The SSDS incorporates national priorities for sustainable development and lays out a roadmap for the implementation of those priorities, with the aim to derive more from its natural capital including tourism, fisheries, fresh water supply, agriculture, and recreational activities that ae aligned with the country's natural capital endowments. The strategy seeks to contribute to the realization of the nation's economic, social, and cultural potential through an innovative, knowledge-led approach, while being mindful of the need to conserve the integrity of the Seychelles natural environment and heritage for present and future generations. The strategy is the result of the passage from the previous environmental management plans into a national strategy for development due to the need to shift from being seen as exclusively an environmental matter to become a matter of prime national importance through extensive multi-stakeholder consultations. Among the issues it aims to address are (i) population growth; (ii) agriculture; (iii) land use; (iv) coastal management; (v) fisheries; and (vi) addressing climate-change adaptation and mitigation. It is composed of an institutional document (Volume 1) and a detailed Action Plan (Volume 2)

Natural resources as an asset class predominantly suffer from inadequate awareness of the economic benefits that can flow from protecting and restoring natural capital. As such, environmental risk and opportunities are inadequately factored into investment decisions. Consequently, in 2021, Seychelles in partnership with Nature Conservancy protected 30% of the EEZ for conservation under the debt-for-nature swap initiative. Additionally, a vehicle was established to ensure a funding source for climate-specific projects. This ensures that Seychelles achieves its macroeconomic aims of debt reduction while advancing its conservation and sustainable

development goals and unlocking vital innovative and sustainable climate financing for the country. Total natural resources rents (% of GDP) for Seychelles increased from zero in 1980 to just 0.1% in 2020 (World Bank, 2021) with manifold opportunities for further increases. For example, opportunities exist for developing the timber industry of Seychelles, which currently suffers from huge trade deficits for primary, secondary, and tertiary wood products valued at $97.83 million, $130.96 million and $21.57 million respectively between 2010 and 2019 (ANRC 2021).

It is important to note here that, despite some key impediments to Seychelles' efficient use of its vast natural capital, it has an institutional and strategic commitment to green growth as a guiding principle. Such a strategic commitment is an opportunity and strength that needs to be complemented by leveraging resources and capacity support from development partners. One key strength that needs to be scaled up, for example, is the country's efficient "Early Warning Systems for Climate Risk". It should be recalled that in 2021, tropical cyclone Jobo hit the Seychelles and the government reported that due to early warning and better preparation measures, the damages caused were significantly less than when Cyclone Fantala hit in 2016, causing damages worth $4.5 million. Some of the measures put in place included additional weather monitoring stations and cyclone-proofing of buildings. The country is also putting in place measures to adapt, build resilience and minimize vulnerability to the impacts of climate change by strengthening its capacity to better forecast extreme weather events and implement appropriate measures. Through the Climate Risk for Early Warning System (CREWS) programme, the Seychelles Meteorological Authority (SMA) aims to establish early warning systems that will benefit the island nation. Working with the Indian Ocean Commission, the aim is to become more resilient to extreme weather and climate change impacts through better early warning mechanisms and regulatory frameworks that link early warnings to emergency plans.

As a further step to strengthen the governance of natural capital, the Seychelles' government ratified the Global Biodiversity Framework at COP15 in Montreal. Target 15 of the framework empowers governments to legislate standards and regulations for transnational companies and financial institutions to monitor, assess, and transparently disclose risks and impacts on biodiversity through their operations, portfolios, supply and value chains.
Through this initiative, business incentives could be redirected toward the mobilization of private capital for the sustainable exploitation of natural resources.

In the case of Seychelles, the categories of natural capital evaluated do not cover all sources of such capital. Like most African countries, Seychelles benefits particularly from sunshine and wind that can generate clean energy. The climate, together with the landscape, fauna and flora form a strong basis for tourism. The contribution of natural capital to the flows of goods and services from all these sources of natural wealth, however, is not estimated, which underestimates their contribution to the economy. In Seychelles, like many countries in East Africa, the role of tourism is particularly important. The contribution of tourism in Seychelles to GDP is more than 69%. In 2019, the industry accounted for about 7% of Africa's GDP and contributed $169 billion to its economy—about the size of Côte d'Ivoire's and Kenya's combined GDP. The amount varies with travel and other restrictions and was particularly affected by the COVID outbreak but there is no denying the significance of natural capital in generating this contribution although that share has not been estimated. Furthermore, given the countries' exceptional landscapes, fauna and flora, an increase in the share of GDP from tourism, particularly high scale value addition including eco-tourism can be unleashed significantly.

Other contributions of natural wealth for Seychelles, such as solar or wind in generating electricity have not formally been credited either. This is something that should be done as a matter of urgency. An important component of the natural capital for Seychelles, like other East African countries such as Kenya and Tanzania, is its marine wealth, which has not been covered in the wealth accounts prepared so far. As the AEO 2023 notes capture fishery provides protein, minerals, and micronutrients for over 400 million people on the continent and employs around 13 million people. There is concern, however, about the over-exploitation of wild stocks, which are decreasing. Key factors contributing to overfishing in Africa are overcapacity; illegal, unreported, and unregulated (IUU) fishing activities; poor resource governance; and insufficient knowledge and misperception. Such massive opportunity of marine resources and fishing also applies to Seychelles, as an island state, and indeed there has been a worsening trend of IUU recently. A composite index that measured the state of IUU fishing practices, insusceptibility and vulnerability in global coastal African countries (on a score ranging from 1 to 5, where one is the best and five is the worst) has found an improvement in some countries between 2019 and 2021 but a decline in others. In East Africa, countries with significant declines (signifying improvements) in IUU scores include Kenya (from 2.18 to 2.02) and Tanzania (from 2.65 to 2.22). For Seychelles the overall IUU score in 2019 is shown to have slightly worsened from its score of 2.13 in 2019 to 2.34 in 2021. The main reason for this deterioration was linked to the presence of tuna vessels flying the flag of third countries which may be involved in IUU fishing activities. This situation has clearly been rectified, since in December 2022 Seychelles published an exhaustive list of vessels cleared to fish in its EEZ, including under private agreements. However, it remains imperative for the authorities to maintain their focus and stay alert, with support from global partners, to prevent IUU fishing to ensure that the situation does not get worse. A full report of the country profile for Seychelles' IUU and components can be accessed at the relevant weblink.

4.3. Opportunities for Enhancing the Contribution of Natural Capital in Seychelles

As a Small Island State, Seychelles is inherently vulnerable to the impacts and risks associated with climate change, and thus gives high priority to climate adaptation strategies that will improve its resilience and promote energy and water security. Proposed adaptation measures in the NDC include coastal planning and infrastructure to be regulated at the national and local levels to prioritize the consideration of "blue" Nature-based Solutions (NbS) for climate resilience and protection of blue carbon ecosystems, i.e., at least 50% of seagrass and mangrove ecosystems by 2025, and 100% of seagrass and mangrove ecosystems by 2030; and enhancing climate change and risk forecasting. However, many of the adaptation and mitigation measures are yet to be implemented due to lack of resources, and the country is looking to international partners and agencies for funding. To address these climate change-related challenges, the government in 2009 developed the National Climate Change Strategy (NCCS), Climate Change Policy (2020), and the Nationally Determined Contribution (NDC) in 2015 (updated in 2021). These strategies outline priority investments that will enable Seychelles transition to a low-carbon economy while meeting its target of 15% energy from renewable sources by 2030 and undertaking reforms in its energy, refrigeration and air conditioning, transport, and waste sectors. Seychelles also seeks to reduce its heavy dependence on imported fossil fuels while preserving its natural environment.

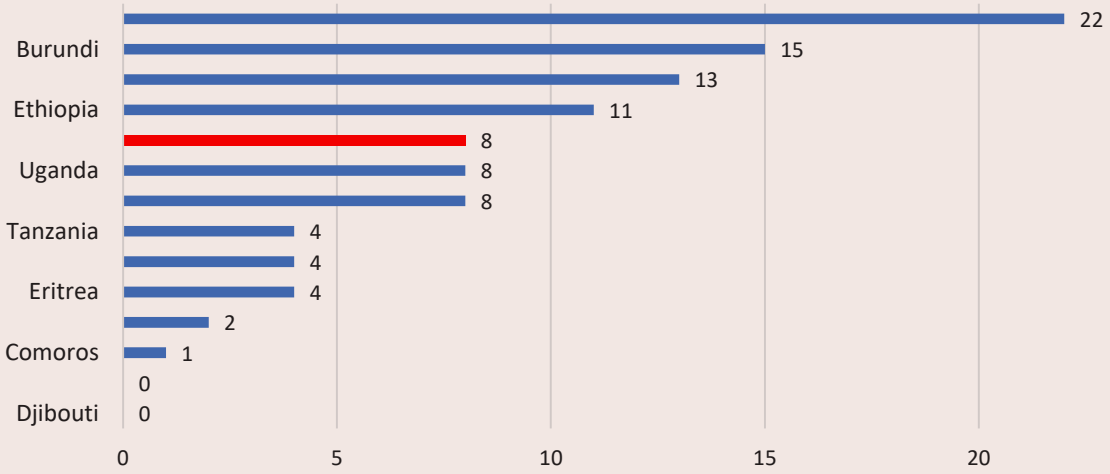
4.4. Non-Renewable Resources

Non-renewable resources are those resources that are found inside the earth and are a fixed amount. When they are being extracted, they are being used at a faster rate

than they can be replenished and, therefore, they are termed non-renewable because they cannot be renewed. These resources include fossil fuels, which consist of oil, natural gas and coal, and other minerals in the extractive industries sector. The AEO 2023 report notes that revenues from the extractive sector contribute a lot to the private and public finances of many African countries. At the same time, these countries need to ensure that they receive a fair share of resource rents from these resources and effectively manage the revenues; the negotiated royalty rates for example are often too low. However, obtaining a "fair share" of the revenue from non-renewable resources does not guarantee economic development if the revenues are not well spent. There are issues of corruption and weak institutions in mineral-rich countries so that such countries in Africa and elsewhere in the developing world experience low growth and high poverty rates. In East Africa, these issues are less important than for other regions on the continent, where the value of the stocks of such assets is much larger. None of the countries in East Africa could be considered rich in extractive resources, except for South Sudan, which, on the estimates for 2018, has $42 billion in oil reserves, making up 47% of all its natural capital.

Seychelles is not endowed with non-renewable natural capital and ad a result did not benefit from resources rent of any kind. For example, there has not been any extraction and trade of minerals from Seychelles. So far. Therefore, Seychelles must continue to prioritize an efficient use of its available renewable resources and eco-tourism for sustainable development and climate resilience.

Figure 4.1: East African Countries' average share of natural resource rent to GDP between 2002 to 2020



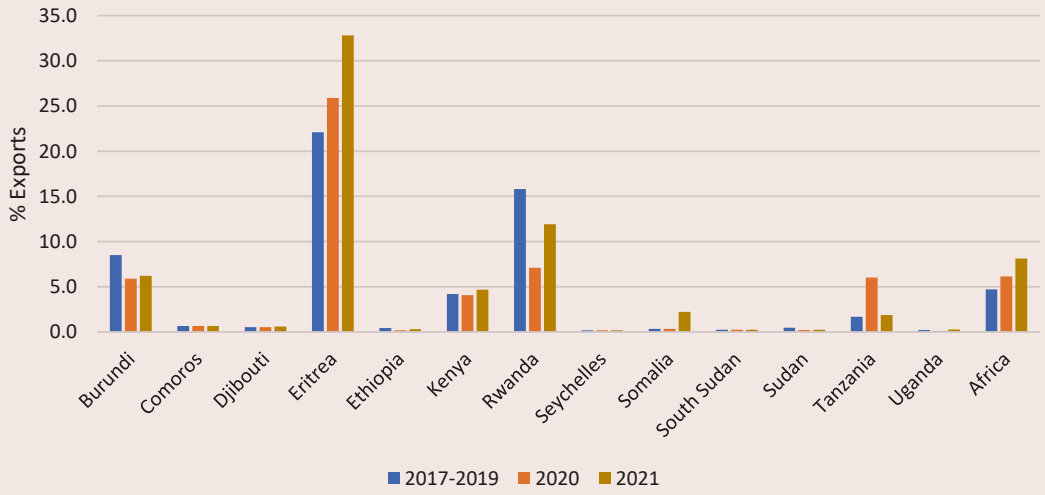
Source: AfDB statistics, AEO 2023

4.5. Renewable Resources

Renewable resources are those that can be renewed at a rate equal to or faster than they are being used. In the energy sector, for example, the major types of renewable energy sources include biomass (wood, wood waste, and municipal solid waste, landfill gas, biogas, and biofuels), hydropower, geothermal, wind, and solar. Such resources are at the heart of sustainable development in most East African countries including Seychelles. In Seychelles, there are opportunities in almost all these renewable resources except hydropower. However, the many ways in which they can be exploited more effectively and sustainably have not yet been sufficiently assessed.

With a vast Exclusive Economic Zone (EEZ) of 1.37 million km2, the second largest in

Figure 4.2: Export of metalliferous ores and metal scrap (AEO 2023 data)



Source: AfDB statistics, AEO 2023

Africa, Seychelles has a great potential in non-measured forms of natural capital. Under this huge ocean territory are a potentially vast fishery sector, and natural beauty and clean beaches of a globally recognized brand that can generate substantial income from better value addition in the fish industry, and high-end eco-tourism activities. The country wishes to maximize the full potential of this vast resource related to its ocean territory through the development of the blue economy. In 2014, the government launched the Seychelles Blue Economy Vision to promote ocean-based sustainable and resilient development as a pathway to Seychelles' shared prosperity. The government has embraced the "Blue Economy" concept as an organizing principle to drive growth further, while not only preserving but also building the natural endowment. A National Blue Economy Roadmap is under preparation and it will aim to protect and recover ocean ecosystems and biodiversity; ensure that existing ocean industries (e.g. shipping and bunkering) cause minimal environmental impact and meet the highest sustainable practice standards; integrate cross-sectoral spatial planning and implement coastal zone management; increase sustainable use of bio resources (biotechnology, marine ecosystems services); plan for natural disasters and adapt to climate change; increase surveillance of offshore waters; brand Seychelles as a "blue tourism" destination; and, foster knowledge development. These goals are fully aligned with the UN Sustainable Development Goal 14: "Conserve and sustainably use the oceans, seas and marine resources for sustainable development". The review has shown that natural capital has declined rather sharply in East Africa in per capita terms over the last quarter of a century; more so than for Africa as a whole. Measures to reverse this trend are divided into those pertaining to non-renewable natural capital and those pertaining to renewable natural capital.

The fish processing industry, however, is an important natural capital-related asset that should be strengthened by diversification efforts, whether towards the valorisation of the by-products of tuna canneries, the creation of new high value-added products or the pursuit of certification with internationally recognized labels. Seychelles is endowed with large continental shelves covering nearly 55,000 km², making its maritime resources well placed to contribute to the country's sustainable development. Seychelles has a very wide range of marine and coastal habitats including 1,690 km² of coral

reefs (239 species of building corals), seagrass beds (more than 40 species), mangroves (7 species on 2,900 ha) seaweed fields (nearly 500 species) and underwater mounts and canyons that are home to some of the richest animal biodiversity in the region, with more than 1,150 species of fish and hundreds of species of invertebrates (crustaceans, molluscs, echinoderms, sponges), some of which are yet to be described. The main fishery resource is tuna and associated species (swordfishes, sharks) whose populations migrate throughout the southwest Indian Ocean. These resources, including oceanic sharks, are managed by the Indian Ocean Tuna Commission (IOTC), which confirmed in 2021 that yellowfin, bigeye, longtail and albacore tuna are overfished, as well as blue and striped marlin. For coastal resources exploited by artisanal fisheries, several species of demersal fish and sea cucumbers are considered overfished, but this status does not apply to lobsters, industrial, artisanal/semi-industrial fishing, and recreational fishing..

Industrial Fishery is dominated by national and foreign fishing vessels targeting tuna and tuna-like species. In 2020, the total number of tuna vessels cleared to fish in Seychelles waters was 167, plus 13 reefers. This fleet was made up of 123 longliners (44 Seychellois) and 45 purse seine (13 Seychellois). The catches of these fleets must be broken down between the EEZs of Seychelles on the one hand, and the EEZs of other countries in the SWIO region and international waters on the other. Catches in the Seychelles EEZ amounted to 97 000 tonnes in 2020. About 333,000 tonnes of tuna were recorded in Victoria Harbor, of which 53,000 tonnes were landed and 279,000 tonnes were transhipped to reefers for landing in different ports (Madagascar, Kenya, Mauritius and Korea).

Artisanal and semi-industrial fisheries target coastal resources mostly on the Mahe and Amirantes plateau. In 2020, the artisanal fleet consisted of 466 motorized pirogues, using nets and lines, as well as traps. This artisanal fishery employs around 1,100 fishers and catches around 4,500 tonnes in 2019. Hand-line fishing accounts for more than 73% of the total catch. Other fishing gears are traps, gillnets, and fishing on foot which targets species such as sea cucumbers, octopus, crabs and molluscs. The catches meet the demand of the local market, notably hotels and restaurants, and some species such as groupers and snappers are destined for the fresh export market by air. In 2000, the semi-industrial fleet consisted of 55 boats of 14 to 23 m in length, targeting pelagic resources with longlines and carrying 5 to 6 sailors each, with catches varying between 1,500 and 2,000 tonnes over the last two years. Finally, there is an important recreational fishing sector targeting large pelagics (tuna, billfish, kingfish, etc.) mainly for international tourists.

It is estimated that more than 50 vessels are engaged in this activity. It therefore has potential for expansion, provided that better collaboration is established between the departments responsible for tourism and fisheries respectively, particularly for data collection. As for aquaculture, production is insignificant and limited to a few tonnes of sea cucumber and attempts at pearl oyster and ornamental fish culture. Black tiger shrimp production ceased in 2009 after peaking at 1,175 tonnes in 2004 (Figure 1).

A mariculture master plan, first financed by the Bank in 2012, was updated in 2019. This provides extensive technical details on the feasibility of farming food and ornamental fish, sea cucumbers, pearl oysters, sea urchins and shellfish. It is estimated that around 80% of the total tuna catch in the Western Indian Ocean (WIO) is transacted through Port Victoria for transhipment and 20% landed at Indian Ocean Tuna Limited (IOT), one of the largest canneries in the world and partly owned by Thai Union (60%) and the Government of Seychelles (40%). IOT processes about 80,000 tons of tuna and produces 300 million cans per year. Since mid-2022, the IOT plant has been powered by solar energy for 30% of its cold production needs. Fisheries' products account for 92% of national exports. It is estimated that the fisheries

sector, including ancillary activities, generates more than 6,000 jobs, or about 8% of total employment. In terms of income generation, the contribution of the fisheries sector to GDP is estimated at between 10 and 20%.

Consumption of fisheries' products is generally estimated at 60 kg/year per capita, based on the availability of artisanal fisheries landings. However, a significant proportion of artisanal and semi-industrial production is directed towards tourism establishments, as Seychelles recorded 360,000 visitors in 2017 and plans to increase this figure to 500,000.

Over the past five years, Seychelles has adopted a set of strategies aimed at ensuring the long-term sustainable use of its natural resources, particularly marine resources. The strategy under Vision 2033 states that Seychellois live in harmony with nature and derive the conditions for good health, education, and prosperity from their environment. This vision is translated at the sectoral level in the Ministry's strategy which calls for a resilient and sustainable fisheries, forestry and agriculture sector that enhances food and nutrition security, contributes to socio-economic development, and respects the natural environment.

Finally, this vision is reflected in the Fisheries Sector Policy and Strategy document adopted in 2019 which aims to develop fisheries to their full potential while safeguarding the marine environment and resource base for sustainability. This strategy was adopted shortly after the adoption of the Blue Economy Strategic Policy Framework and Roadmap 2018-2030, approved in January 2018, which emphasized the economic potential of Seychelles' vast EEZ for inclusive growth. This "strategic framework and roadmap for the Seychelles Blue Economy: Charting the future 2018-2030" promotes sustainable ocean-based development in line with the 2030 SDGs, the Convention on Biological Diversity, and the Paris Agreement on Climate Change. The vision under this strategy is to develop a blue economy as a means of realizing the nation's development potential through innovation, a knowledge-led approach, being mindful of the need to conserve the integrity of the Seychelles marine environment and heritage for present and future generations. It is implemented around four key pillars: i) Economic diversification and resilience; ii) Creation of high value jobs and local investment opportunities; iii) Food security and well-being and iv) Integrity of habitats and ecosystem services, sustainable use, and climate resilience.

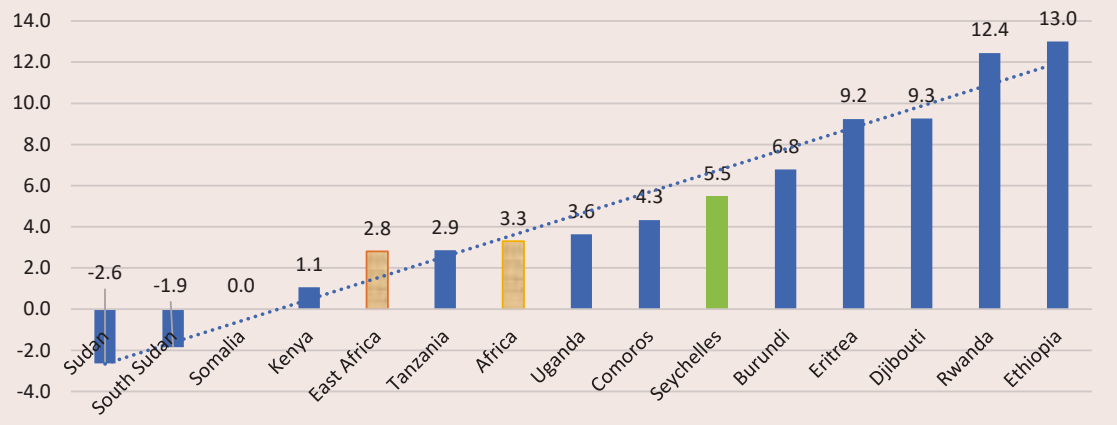
The policy and strategy document for the fisheries sector includes ten policies related to good governance and institutional strengthening, sustainable fisheries management, climate resilience, infrastructure support, value chain development, improving industry efficiency, employment, training, and human resource development, strengthening monitoring, control and surveillance, and research and innovation in the fisheries and aquaculture sector. It is worth noting the importance of transparency that is referred to repeatedly in this policy, as Seychelles committed during the same year of 2019 to the Fisheries Transparency Initiative (FiTI), headquartered in Mahe since 2020, and became the very first country in the world to be compliant with FiTI's standards and requirements, which comprise 12 categories relating to the state of fisheries resources, the performance of commercial and industrial fisheries, beneficial ownership and the revenue generated by the sector. To date, Seychelles has published three FiTI reports for the years 2019, 2020 and 2021.

In general, the fisheries sector showed great resilience during the COVID-19 pandemic, and, thanks to appropriate support measures, fisheries were able to compensate for the economic losses suffered by the tourism sector, at least partially. Seychelles has also an integrated approach to its development through the adoption of coherent and aligned strategies, as well as the establishment of several coordination and consultation frameworks between stakeholders. The blue

economy development strategy integrates the human capital dimension by aiming to build skills in several sectors. Seychelles has played a pioneering role in the global Fisheries Transparency Initiative (FiTI). There have been several interventions of financial partners in the fisheries sector in Seychelles including: (i) An ongoing third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish3) financed by the World Bank ($5 million); (ii) The Project for Construction of Artisanal Fisheries Facilities in Mahe Island (Phase 2) financed by the JICA ($12 million) completed in 2021; (iii) The Sectoral Support Fund of EUR 2,800,000 per year for the period 2020-2026 provided by the EU to complement the fisheries agreement for the implementation of the Seychelles sectoral policy. Finally, (iv) Since 2021, the African Development Bank has been providing technical assistance grants of UA 0.59 million (equivalent to $0.77 million) in support of MSMEs in the Seychelles' blue economy sector, in particular for the development of biotechnology.

Seychelles' abundant endowment with fish and other marine natural resources can be harnessed for better economic diversification and better value addition. As the second main contributor to growth and income as well as employment, the fishery sector has been playing an important role in the country's economy. However, as most of the catch is exported without much value addition (60% of production is exported as raw), the sustainability of the sector is at risk. A better use of the sector through improved value addition is therefore key. The average growth rate of fishing in Seychelles has been significant over recent years, at a rate of 5.5% between 2003 and 2020 (Figure 4.3).

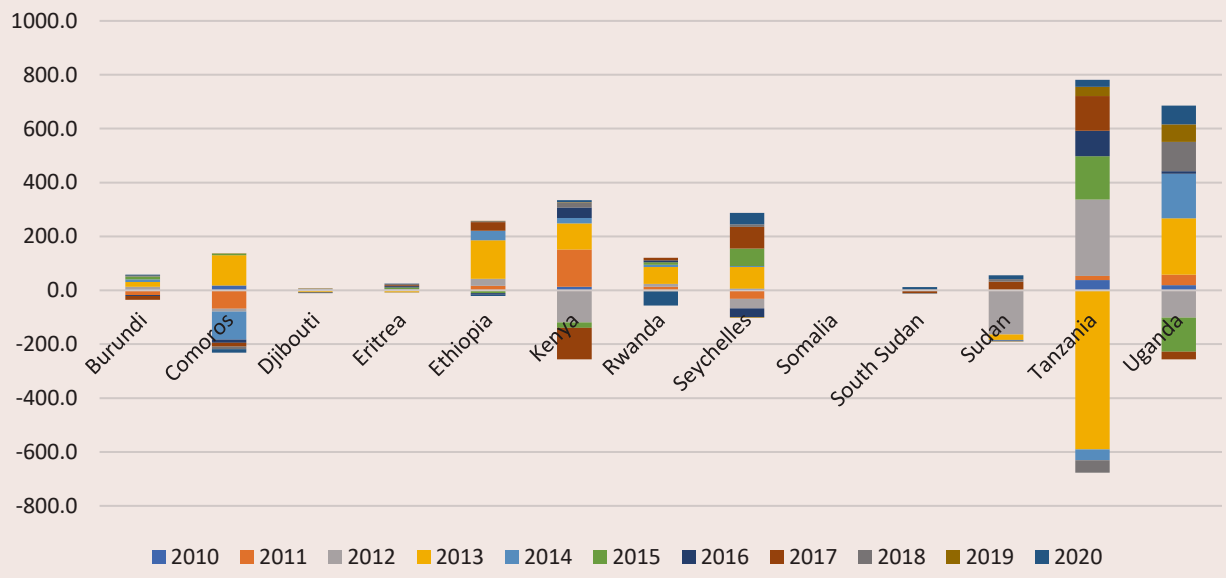
Figure 4.3: Seychelles' and East Africa countries' average growth rate of fish production, 2003-2020



Source: AfDB statistics, AEO 2023

The fishery sector has also played an important role in creating better economic resilience during the shock periods when the tourism sector is hardest hit, such as during the recent COVID-19 pandemic which resulted in a GDP contraction of 8.6% in 2020. Fish production grew significantly during that period, thereby contributing to both economic resilience and food security in the country.

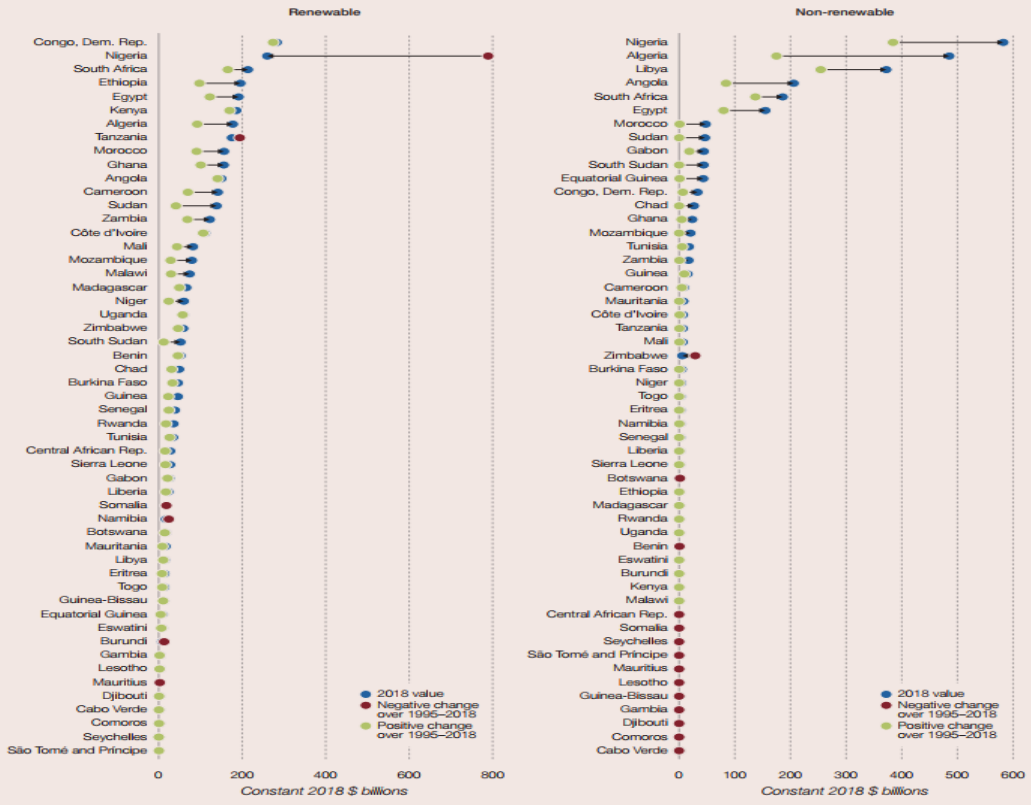
Figure 4.4: Contribution to growth rate of fish production in East Africa



Source: AfDB statistics, AEO 2023

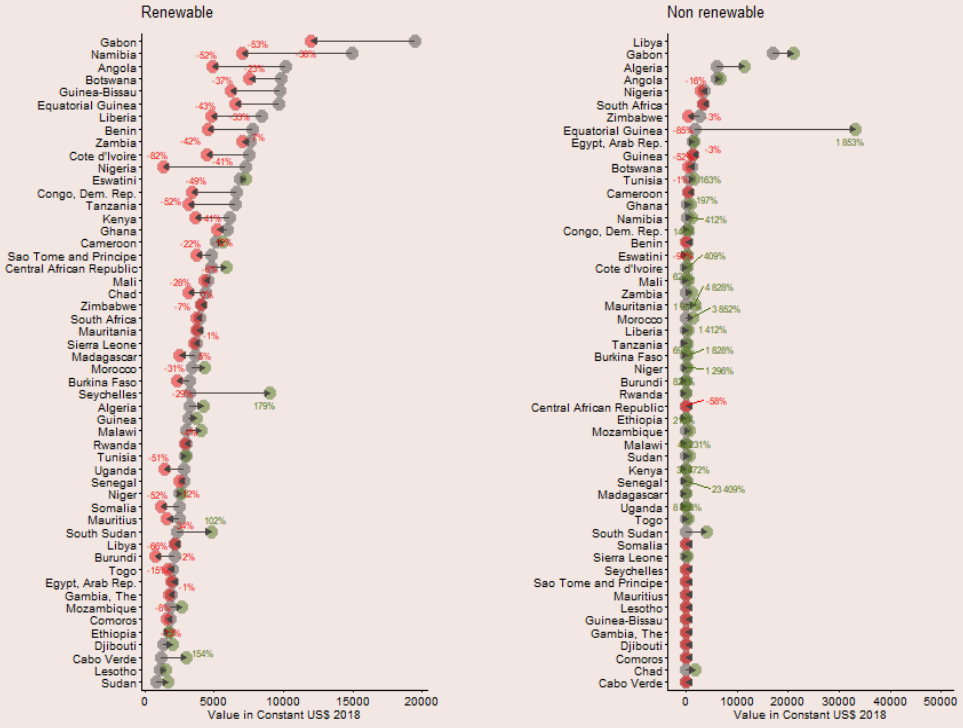
Despite having a relatively vast natural resources capital (mainly renewables), that has not yet been put to full use, the values of such natural capital/natural resources in Seychelles have not increased significantly over the years between 1995-2018. The figures below indicate that the change in the values of renewable resources in Seychelles has been the smallest among those assessed by the AEO 2023 report, except for that for Sao Tome and Principe, while the values of the non-renewable resources, despite still being among the lowest in the continent, have increased at a rate higher than those of few other countries in Africa, such as Cabo Verde, Comoros, Djibouti, Gambia, Lesotho, and Sao Tome and Principe. The main reason is that the types of natural capital in the country are mainly non-movable and directly non-tradable, and thus have not been subjected to global commodity price fluctuations like other natural resources such as petroleum and minerals. On the other hand, the values of these resources have increased at a faster rate on a per capita basis over the same period ((Figure 4.2). The main reason for such a relatively larger rate of change is the small population size which makes the measure in per capita terms larger than the changes in the total values. Moreover, it is important to note that the changes in per capita values between 1993 and 2018 (at about 180%) are much bigger than those for the renewable natural resources (which remained almost the same in 2018 compared with 1995).

Figure 4. 5: Changes in the Value of Natural Capital for African Countries, 1995-2018



Source: AEO 2023

Figure 4.6: Changes in Per Capita Value of Natural Capital for African Countries, 1995-2018



Source: AEO 2023

4.6. Non-measured forms of natural wealth

Under this category, Seychelles has significant natural resources, which provide a solid base for development, including those related to climate change issues. The country's primary resources include a moderate climate, attractive land, and seascapes, extensive areas of high ecological value, a rich history, robust democratic governance, a well-educated and healthy population, and significant natural resources such as beaches, agricultural lands, forests and fish stocks. The country's natural resources are of primary economic importance and have led to a thriving tourism industry, which is now economically significant but also makes the country even more susceptible to economic shocks resulting from the impacts of climate change that damage tourism. The forest-covered areas are parts of the natural beauty.

The size of forest areas in Seychelles remained unaffected, though agricultural land has been shrinking. According to FAO estimates, the total land area of Seychelles is about 460 sq. km out of which the forest area remained at 337 sq. km constantly since 1990, while the size of its agricultural land (percentage of land area) has been fluctuating. It remained constant at 10.9% from 1971 to 1981, then increased over time to 13% in 1987 before declining again to around 8.7% in 1990 and remained at that level until around 2006. It has been declining further since then to just around 3.3% in 2020 compared with a global average of 37%. In actual size, the agricultural land shrank from around 50 to around 15 sq. km, a significant reduction. Out of this, the share of agricultural irrigated land (as a percentage of total agricultural land) is about 5%. This is mainly due to the neglect of the agricultural sector in general and increased construction mainly related to the hospitality industry and the continued dominance of the services sector. This has made the country more dependent on imported food (97% of food consumed in the country is imported) and too insecure in terms of food supply. The economic diversification strategy therefore needs to take this food insecurity into account and encourage investment in smart agriculture that can increase productivity in the sector and compensate for the loss in agricultural land.

Seychelles also has a significant potential in solar PV and wind energy generation that it seeks to develop and improve its energy mix away from almost full dependence on fossil fuels. Despite almost universal access to electricity, the bulk of total energy generation in Seychelles (95%) comes from fossil fuels and only 5% is generated from renewable energy sources (wind & solar PV). However, a country profile report by the International Renewable Energy Agency (IRENA) suggests that Seychelles has a significant natural wealth in both solar and wind energy generation potentials. The solar energy potential for Seychelles for an annual generation per installed PV capacity of 16-18 range kWh/kWp/yr, as a proportion of total land area stands at almost 100%, compared with a global average of just around 20%. This shows a significant potential that can be exploited to reduce or even eliminate the dependence on costly and climate-unfriendly dependence on fossil oil. Similarly, the wind power generation capacity measured by wind power density of 260-420 per 100m height (W/m2) is higher in Seychelles at around 43% of total land area compared with just around 20% of the global average. The report further indicates that even in terms of potential biomass production as an alternative source of energy, the country's potential capacity is enormous compared with the global average. The net primary production (NPP), which refers to the amount of carbon fixed by plants and accumulated as biomass each year (which is a basic measure of biomass productivity) stands at around 6-7 tC/ha/yr, compared to the global average NPP of 3-4 tons of carbon.

Aware of this potential, the GoS is encouraging investment in solar PV. For example, in December 2022, the country inaugurated its

second energy project from clean sources – a 5MW solar PV plant with battery storage for the main island of Mahe. It is reported that the system will increase resilience of the Seychelles' national grid and will save an estimated 2 million litres of fossil fuel annually, offsetting 6,000 tons of Co2. This is substantial as the country depends on electricity generated from fossil fuel which accounts for about 20% of the country's total imports.

The extreme dependence on fossil fuels and the high expenditures for fuel imports raises the economic rationale for a 100% transition towards renewable energy (RE) deployment in Seychelles by exploiting the vast solar and wind energy generation potential. The benefits of increased deployment of renewable energy would be manifold: climate change mitigation, a decrease in the trade balance deficit, less exposure to volatile fuel prices, more self-reliant electricity supply, lower imports of fossil fuels and associated environmental risks. Therefore, overcoming the reliance on fossil fuels can increase both resilience and economic competitiveness of the country.

V CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusion

Green growth and climate action in Seychelles can be complemented by private sector financing by scaling up the experiences to date in climate finance strategies of the government. Actions in this regard should be taken to leverage the opportunities for private sector investments in identified priority sectors as well as mitigation of climate change are key, but they should also be accompanied by actions for addressing the barriers to private sector investments in the economy. This should include actions for unleashing emerging innovative private sector financing mechanisms for green growth and climate action.

Natural capital and its optimal use can play a key role in climate finance mobilization from all possible sources. Renewable natural capital in Seychelles can in this case contribute significantly to the country's sustainable development trajectory. The estimated value of natural capital, however, is more likely to have been underestimated for Seychelles because data collected for the valuation cover primarily major categories of assets but not the value of renewable energy sources such as sunshine and wind as well as that of the country's unique landscapes and biodiversity. The share of forest land covered in Seychelles remained constant and significant at over 50% forest cover. However, the share of agricultural land has been dwindling over time as the sector has been relatively overlooked. For fisheries, Seychelles must do more to stop IUU fishing, This must be done in collaboration with other countries of similar concern and development partners to ensure environmental sustainability. The following paragraphs provide some recommendations for different stakeholders with indications of the proposed time frame for implementation (short term [S], medium term [M] or long term [L].

5.2. Policy Recommendations relating to macroeconomic performance and outlook

5.2.1. National Government

-[S] continue to focus on macroeconomic stability and resilience to address the current challenges of global supply chain disruptions.

-[M, L] Continue the reforms that have been launched to create a stable and sustainable growth, continue to rationalize public expenditure in most critical areas such as infrastructure development and economic diversification, by also incentivizing the private sector to play a larger role in economic activities. These focus areas should include addressing the impediments to access to finance to the private sector, particularly to the MSMEs.

-[M, L] Always be ready to quickly identify and adjust policy priorities and remedies for short term shocks due to global economic and environmental crisis; be on the alert to ensure the country's debt is sustainable and continue the currently effective debt management strategy and its implementation, and identify potent areas of support from development partners in all these areas.

5.2.2. MDBs and DFIs

-[S] Support the government of Seychelles in identifying short-term shocks arising from unexpected global and local shocks, and be ready to partner with the country in addressing or minimizing the impacts of such shocks. This resonates with the experience shown during the COVID-19 period.

-[M, L] Scale up the support for the country's sustainable economic development agenda and its efforts to create a more diversified and resilient economic structure.

5.2.3 Domestic and international private sector

-[M, L] Collaborate with the national government in ensuring macroeconomic stability by adhering to the national private sector, development guidelines, and business environment regulations; continue to adhere to the rules of law to keep inflation low by not deliberately disrupting the supply chains.

5.3.3 Developed country governments.

-[S,M] Developed country governments can leverage their share ownerships and decision-making power in MDBs and IFIs to facilitate access to the needed development financing by being flexible in the terms and conditions of the support to ensure that the high income status of the country does not fully preclude it from concessionary financing from such institutions.

-[S,M] Developed country governments can also scale up their bilateral support to the country in supporting its macroeconomic resilience and stability.

5.3 Policy recommendations for private sector financing for climate change and green growth in Seychelles

5.3.1. National Government

-[S] Identify and clearly map out the different national level institutions that have direct and indirect mandates of green growth and climate action frameworks and clarify the working relationships and areas of institution level responsibilities.

-[S] Expedite and facilitate the implementation of the recently approved investor maps by creating awareness to potential investors on the available facilities and incentives and ensure the alignment of the NDS under finalization with the priorities articulated in the investor map. Explore further collaboration opportunities with the development partners on how to leverage their assistance to the country in a way that attracts private sector resources for climate finance.

-[M] undertake a comprehensive assessment of the progress made in the use of the Blue Bond-related private sector financing to date, identify key constraints to the portfolio implementation and propose immediate and medium-term actions that can ensure an increased efficiency of use by the private sector. Also do the same comprehensive assessment of the debt-to-nature swap portfolio performance. Lessons learned from these assessments will improve the efficiency of these financing mechanisms, but also will inform the effective mobilization of new innovative financing for climate change.

-[M, L] Undertake a comprehensive assessment of the skills gap in each of the relevant institutions, and ensure targeted skills development is undertaken for each of the identified gaps. Given the country's small population and wide mismatch of skills in the emerging climate finance related sectors, the assessment should result in a time-bound set of action plans to fill the skills gaps identified. Unleashing potential collaboration with development partners remains key in this regard.

[L,M] Develop clearly articulated and implementable incentives for priority sectors of potential private finance investment. For example, availability of bankable projects for private sector funding in the energy sector through an IPP, and other incentives for renewable energy in the sector are needed. Similarly, for the transport sector's resilience to environment and to reduce greenhouse emissions, the government should re-instate its attempts to allow private sector operators to invest in the transport sector, mainly in long term

infrastructure development investment and on the importation and provision of transport vehicles that run using more environmentally friendly sources such as electricity and LNG.

-[M] Ensure the availability of clearly defined and understood multistakeholder platforms that link domestic stakeholders including the government, CSOs, and the domestic private sector with other external factors such as MDBs, DFIs and the international private sector.

-[L] In the long run, there is a need to articulate a vision for green and climate-smart development strategy that comprises a list of continuous action plans to mobilize private climate financing including through green investment, equity and capacity building assistance. This can be complemented by a clearly defined Corporate Social Responsibility (CSR) engagement of the private sector. Information in the current investor map should also continuously be updated, taking into account the evolving needs of the country for private sector financing.

5.3.2. MDBs and DFIs

-[S] Support the government of Seychelles in its comprehensive assessment of the private sector opportunities for sector specific climate finance, assessment of the green growth skills gap and the setting up of a time-bound set of action plans.

-[S,M] Scale up complementary climate change financing that can leverage and attract private sector financing towards green growth. This scaling up can consider lessons and design approaches of the IMF's new RSF and the Blue Bond and debt-to-nature swap operations. Provision of new affordable capital for green growth and climate change investments that can be on-lent to private investors at affordable terms and conditions can complement this approach.

-[M, L] Facilitate innovative financing instruments that are aligned with the country's priorities, such as energy from renewable sources, solid waste management and environment-friendly transport sector services. This can be done using the current instruments provided by the MDBs and DFIs, but these development partners should also become innovative in the provision of new effective instruments. In Seychelles, for example, they can create a platform to exchange information and ideas on how effectively support the country in its quest for green financing, as the country does not currently have a donors group because most of the development partners do not have a physical presence in the country.

5.3.3. Domestic and international private sector

-[M, L] Collaborate with the national government, MDBs, DFIs and other private sector actors to identify key risks to investments and propose ways of addressing these investment risks.

5.3.4. Developed country governments.

-[S] Developed country governments can leverage their share ownership and decision power in MDBs and IFIs to facilitate access to climate finance-related activities that complement green growth. As green and climate-resilient growth will have a spill-over positive global effect, it is important that the developed country governments become more flexible for financial access by countries like Seychelles and be mindful of the special needs of such countries given their geographic location as a small island states.

5.4. Policy recommendations for increasing the contribution of natural capital to climate finance and green growth

5.4.1. National government.

-[S] Start to undertake a comprehensive stock taking and valuation exercise of the country's natural capital to determine the medium-to-long term strategic policy frameworks that will ensure sustainable and optimal use of the country's

natural capital. Identify collaborations and partnership opportunities with development partners and other national governments with a similar experience. The exercise should ensure the inclusion of its unique landscape to support value addition into the tourism sector by developing ecotourism opportunities.

-[S] Strengthen institutional capacity in identifying climate change financing impediments and develop a short-to-medium term roadmap to fill the capacity gaps. The roadmap should clearly include financing needs for implementation and the sources of such financing including those to be mobilized from development partners. The roadmap needs also be aligned with the country's overall human development strategy and its vision 2033 to ensure effective implementation, as well as a coordination of climate financing from development partners and global stakeholders supporting climate-change mitigation and adaptation in a way that attract and complement private sources. Seychelles needs to ensure that sustainable use of its natural capital is among the utmost priorities in its long and medium-term national development strategies, sectoral strategies, and overall budgeting processes.

-[S,M] Create better incentives for climate smart agricultural and power generation technologies and waste management. Better access to farming technologies for climate smart agriculture will increase the net returns to investment for farmers including small scale and household farming. Building resilience also requires transformative changes with support from the public sector in creating an enabling environment for innovation and private sector participation through, among others, making climate information and early warning services easily available.

-[S, M] Promote and implement clear yet stricter policies and regulations that continue to protect forest coverage at the current level, promote value addition to primary products and preventing illegal fishing activities to reverse the deteriorating trends of the IUUs in Seychelles.

-[M] Continue climate change adaptation efforts through strengthening disaster preparedness, early-warning systems, and coastal management is key for building resilience to climatic and environmental hazards. These proposals are aligned with the African Development Bank Group Strategy for Addressing Fragility and Building Resilience in Africa (2022-2026), particularly its emphasis on early warning mechanisms, building community resilience and promoting private sector development. They are also aligned with the pillars of Seychelles' Vision 2033, including good governance, people at the center of development, innovative economy, economic transformation, and environmental sustainability and resilience.

-[M,L] Identify effective mechanisms to improve food security in a sustainable manner and ensure green climate friendly agriculture. In this regard, Seychelles must encourage investment in smart agriculture that enhances agricultural productivity, while keeping the country's natural capital at a sustainable and optimal level. This is one key mechanism that can compensate for dwindling agricultural land, while contributing to better economic diversification and low vulnerability to global supply chain disruptions in food and other imported commodities.

-[M, L] Expedite its transition from energy supply based on imported fossil fuels to a system with a full share of renewable sources. This will obviously lead to an improved overall efficiency of the energy sector, reduced energy cost, and enhanced competitiveness of the country. It will also increase energy security and reliable electricity supply at stable and affordable costs for businesses and individuals.

The economic benefit of reduced fossil fuel imports will save hard currency. An increased private sector participation in renewable energy is therefore beneficial in multiple ways. Transition towards a fully renewable energy power supply, enhancing efficiency of the transport sector (electricity or LNG powered

vehicles), efficient and environmentally sustainable solid waste management, and sustainable use of the country's natural capital all require a clear and achievable national-level strategic approach. Clear, well-articulated and time-bound roadmaps are needed, and should be designed in a way that support the planning and monitoring of implementation progress. The roadmaps need also define the necessary policy measures, technology requirements, capacity development costs and financing needs.

5.4.2. MDBs and DFIs:

-[S, M] Work with the national government and other stakeholders to identify and lay out clearly the existing and emerging international agreements that Seychelles can unleash. These can include the creation of a single market for emissions credits trade (under Article 6 of the Paris International Agreement) to raise the price of carbon credits in the forests; and increase the participation of all partners and stakeholders in the voluntary market. Such a platform will create new opportunities for partnerships for sustainable natural capital through the Post-2020 Global Biodiversity Framework.

-[M] Explore opportunities for partnerships to increase Seychelles' continuous participation in carbon sequestration related to nature-based solutions linked to forestry and land use, agriculture, and blue carbon trading options, as part of its blue economy priority. MDBs need also to support the national government through joint innovative financing and grant resources for sustainable private climate finance. This can include further strengthening green and climate-financing mechanisms and investments in priority sectors that are key to create overall resilience such as the blue economy, coastal infrastructure development, and renewable energy development of solid waste management, including landfills.

-[S,M] Explore policy and strategic options to facilitate resource mobilization from private investors, development partners and capital markets for green investment to improve the current energy generation mix more towards renewable sources such as wind and solar PV options. This should be complemented by supportive regulatory frameworks that will facilitate climate-smart agriculture and transport sector strategies.

5.4.3. Domestic and international private sector

-[M, L] Collaborate with national government, MDBs and DFIs and other private sector actors to identify opportunities for investment in a sustainable use of natural capital. One such mechanism could be how natural capital can be part of a long-term growth strategy for the private sector.

5.4.4. Developed country governments.

-[S] Support projects and initiatives in MDBs and IFIs that facilitate optimal and sustainable use of the country's natural capital. Optimal use of natural capital will have a positive spill-over effect on countries and regions outside Seychelles because the flora and fauna, landscape, and oceanic resources in and around Seychelles are global public goods. It is important that the developed country governments become more flexible and adaptive to facilitate financial access by countries like Seychelles that are keen for sustainable use of their natural capital by being more mindful of the special needs of such countries given their low institutional and human capacities.

REFERENCES

1. AAI (2022). State of Adaptation in Africa Report 2022: Summary of the key finding. Available here.

2. ACMI (2022). The Africa Carbon Market Initiative (ACMI) Roadmap Report: Harnessing carbon markets in Africa. Available here.

3. Acosta, L.A., I. Nzimenyera, R. Sabado Jr., R.M. Munezero, A. Nantulya, K. Shula, S.G.L. Quiñones, H.G.H. Luchtenbelt, T. Czvetkó, S. Lee, and G.P. Adams, (2022). Green Growth Index 2022 –Measuring performance in achieving SDG targets, GGGI Technical Report No. 27, Green Growth Performance Measurement Program, Global Green Growth Institute (GGGI), Seoul, South Korea.

4. Adenle, A. (2022). "Climate finance for Africa: the key challenges and what needs to be done about them", in The Conversation. Accessed on March 7, 2023 from here.

5. Adrian, T., P. Bolton, and A.M. Kleinnijenhuis (2022). "The Great Carbon Arbitrage", International Monetary Fund Working Paper No. 2022/107. Available at here.

6. African Development Bank 2023. African Economic Outlook 2022. "Supporting Climate Resilience and a Just Energy Transition". Abidjan

7. African Development Bank (AfDB) (2021). NDC implementation in Africa through green investments by private sector: A Scoping study, Abidjan: The African Development Bank Group.

8. African Development Bank (AfDB) (2022a). African Economic Outlook 2022: Supporting Climate Resilience and A Just Energy Transition in Africa, Abidjan: The African Development Bank Group.

9. African Development Bank (AfDB) (2022b). East Africa Economic Outlook 2022: Supporting Climate Resilience and A Just Energy Transition, Abidjan: The African Development Bank Group. African Natural Resources Centre (ANRC). 2021. Performance of the forestry sector in the Southern African Development Community. African Development Bank. Abidjan, Côte d'Ivoire.

10. Eongo, D. Bandara, A. Murugraiyan, A. Bristol, U. Nancy K. Sinon, S (2022). Risk perceptions, vulnerability, and adaptation to climate change at farm level across agricultural Zones in Seychelles, World Development Sustainability.

11. Government of Seychelles 2009. The Seychelles National Climate Change Strategy. (2009).

12. Government of Seychelles 2020. Seychelles' National Climate Change Policy: "Making Seychelles climate resilient". Republic of Seychelles.

13. IMF 2023. Seychelles: Press release on staff report on new EFF and RSF, May 2023, International Monetary Fund Washington DC, USA.

14. Government of Seychelles 2021. Seychelles' Updated Nationally Determined Contribution.

15. IMF 2017. Seychelles selected issues, IMF Country Report No 17/161, International Monetary Fund Washington DC, USA.

16. International Renewable Energy Agency (IRENA), Seychelles country energy profile, 2022, Abu Dhabi, United Arab Emirates

17. Mitchell, I., L. Robinson, and A. Tahmasebi. 2021. "Valuing Climate Liability." CGD Notes, Center for Global Development, Washington, DC.

18. Xie, D., Rice, H., Rolf, B., & Rumschlag, J., 2019. Evaluating the Impacts of Sea Level Rise and Storm Surges on Seychelles' Critical Infrastructure.

ANNEX 1: SEYCHELLES SELECTED INDICATORS

Indicators	Unit	2010	2015	2018	2019	2020	2021	2022 (e)	2023 (p)	2024 (p)
National Accounts										
GNI at Current Prices	Million US $	942	1,404	1,620	1,712	1,482	1,548	...	...	...
GNI per Capita	US$	10,190	14,150	15,710	16,400	14,040	14,540	...	...	...
GDP at Current Prices	Million US $	970	1,391	1,581	1,644	1,185	1,289	1,985	2,235	2,462
GDP at 2010 Constant prices	Million US $	970	1,223	1,371	1,438	1,314	1,418	1,553	1,632	1,701
Real GDP Growth Rate	%	5.9	4.2	3.7	4.9	-8.6	7.9	9.5	5.1	4.2
Real per Capita GDP Growth Rate	%	4.4	2.9	2.4	3.6	-9.6	7.0	8.8	4.6	3.7
Value Added: Mining and quarrying	Million US $	...	...	...	...	...	...	...	...	...
Value Added: Mining and quarrying	% GDP	...	...	...	...	...	...	...	...	...
Value Added: Fishing	Million US $	8	15	25	27	15	15	29	...	...
Value Added: Fishing	% GDP	0.9	1.0	1.5	1.6	1.2	1.1	1.3	...	...
Prices and Money										
Inflation (CPI)	%	-2.4	4.0	3.7	1.8	1.2	9.8	2.8	4.3	4.4
Exchange Rate (Annual Average)	local currency/US$	12.1	13.3	14.0	14.0	17.6	16.9	14.2	13.9	13.7
Government Finance										
Total Revenue and Grants	% GDP	33.2	34.3	38.4	36.5	35.1	38.4	37.9	37.6	36.9
Total Expenditure and Net Lending	% GDP	30.9	31.9	38.6	36.3	53.6	45.2	41.5	39.2	37.2
Overall Deficit (-) / Surplus (+)	% GDP	2.3	2.4	-0.2	0.2	-18.5	-6.8	-3.6	-1.6	-0.4
External Sector										
Terms of Trade Growth	%	-10.8	-11.7	3.8	-6.5	-9.6	5.3	9.2	-1.8	-6.0
Current Account Balance	Million US $	-186	-272	-42	-53	-173	-139	-139	-121	-121
Current Account Balance	% GDP	-19.1	-19.6	-2.6	-3.2	-14.6	-10.8	-7.0	-5.4	-4.9
Debt and Financial Flows										
Debt Service	% exports	8.5	6.1	3.5	5.8	6.3	3.2	2.9	3.3	3.3
External Debt	% GDP	171.0	294.8	287.4	290.3	400.1	361.1	280.8	287.4	278.2
Net Total Financial Flows	Million US $	210	-112	...	...	...	...	...	...	...
Net Official Development Assistance	Million US $	54	7	...	...	...	...	...	...	...
Net Foreign Direct Investment	Million US $	211	195	120	144	122	157	...	...	...
Demography										
Total Population	Millions	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Population Growth Rate	%	1.5	1.3	1.3	1.2	1.1	0.9	0.6	0.5	0.6
Urban population	% of total	52.8	52.3	52.4	52.4	52.4	52.5	52.7	53.0	53.2
Life Expectancy at Birth	Years	73.0	73.7	74.0	74.2	73.5	71.3	71.7	75.0	75.2
Fertility Rate	births per woman	2.2	2.3	2.5	2.4	2.4	2.3	2.3	2.3	2.3
Poverty and Income Distribution										
Pop. living below national poverty line	% of total population	...	...	25.3	...	...	...	...	...	...
Population living below $2.15 a day	% of total population	...	...	0.5	...	...	...	...	...	...
Gini Index	%	...	...	32.1	...	...	...	...	...	...
Labor Indicators										
Labor Force participation (total)	%	...	...	...	...	...	...	...	...	...
Labour Force participation (youth)	%	...	...	...	...	...	...	...	...	...
Unemployment rate (total)	%	...	...	...	...	...	...	...	...	...
Unemployment rate (youth)	%	...	...	...	...	...	...	...	...	...
Natural Resources rents										
Total natural resources rents	% GDP	0.1	0.1	0.1	0.1	0.2	...	...	...	...
Oil rents	% GDP	...	...	...	...	...	...	...	...	...
Natural gas rents	% GDP	...	...	...	...	...	...	...	...	...
Mineral rents	% GDP	...	...	...	...	...	...	...	...	...
Forest rents	% GDP	0.1	0.1	0.1	0.1	0.2	...	...	...	...
Coal rents	% GDP	...	...	...	...	...	...	...	...	...
Natural Capital Renewable Resources										
Arable land	1000 hectare	0.9	0.2	0.2	0.2	0.2	...	...	...	...
Agricultural land	1000 hectare	2.4	1.6	1.6	1.6	1.6	...	...	...	...
Other land	1000 hectare	9.9	10.8	10.8	10.8	10.8	...	...	...	...
Forest land	1000 hectare	33.7	33.7	33.7	33.7	33.7	...	...	...	...
Planted Forest	1000 hectare	4.9	4.9	4.9	4.9	4.9	...	...	...	...
Annual freshwater withdrawals, total	% of internal resources	...	...	...	...	...	...	...	...	...
Total Fisheries Production	metric tons	87,111.0	105,353.3	146,623.5	142,167.3	132,415.9	...	...	...	...
Climate Finance and Green Growth										
Total Climate Finance*	Million US $	...	...	...	...	78.5	...	...	...	...

Source : AfDB Statistics Department: African; IMF: World Economic Outlook,April 2023 and International Financial Statistics, April 2023; AfDB Statistics Department: Development Data Portal Database, April 2023. United Nations: OECD, Reporting System Division.Notes: … Data Not Available (e) Estimations (p) ProjectionsLast Update: June 2023 Source: Climate Policy Initiative (www.climatepolicyinitiative.org)**Source: Global Green Growth Institute (GGGI). The scores for the Green Growth Index range from 1 to 100, with 1 having the lowest or very low performance and 100 having*

ANNEX 2: IMPACT OF RUSSIA'S INVASION OF UKRAINE ON SEYCHELLES

The Russia's invasion of Ukraine is yet another significant economic shock to Seychelles in recent years. Seychelles is a net importer of food for consumption, including manufactured food products and grain. Seychelles' food security also depends on imports as more than 77 percent of the country's food consumption is imported. Seychelles' main imports also include petroleum products (equivalent to almost 25 percent of the country's total exports). Moreover, as indicated earlier, Tourism is the mainstay of the economy, and any disruptions of tourist arrivals and tourism activities affect the country's external trade and fiscal positions.

The war has three channels through which it affects the Seychelles' economic and social developments. The first direct impact is through a potentially significant reduction of tourist arrivals from the two countries. According to the Seychelles' National Bureau of Statistics, Russia has recently been Seychelles' leading tourism market where, in 2021, around 32,000 tourists to Seychelles arrived from. The significant number of tourist arrivals from Russia in 2021 was boosted by the return (in April 2021) of once per week Aeroflot flights between Moscow and Seychelles after 17 years of absence. The flight frequency was expended to four flights per week in early 2022. Tourist arrivals from Russia therefore reached 1498 in the week ending January 13, 2022, before the invasion. However, following the outbreak of the war Aeroflot cancelled its flights to Seychelles on March 9, 2022, after the Aeroflot issued a press statement saying that all international flights, except those with Minsk in Belarus, would be suspended. This resulted into a significant drop of tourist arrivals from Russia to just 281 on the week of March 27th. The drop in tourist arrivals from Russia to Seychelles picked up towards the end of 2022, however, as Aeroflot, resumed its direct flight services to Seychelles on October 8, 2022 and this resulted into a record of 30 573 tourists from Russia, which is only slightly less than the 2021 record of around 32,000. During the same year, Ukraine was also a significant source of tourists ranking as the fourth leading source of tourists to Seychelles. The war therefore has directly affected Seychelles' tourism performance by reducing tourist arrivals from these countries compared with what would have been the case compared with the situation without the war. It is worth noting that just a few weeks after the Russian Invasion of Ukraine, the authorities in Seychelles indicated a grave concern that the country "f foresees an economic crisis worse than the one brought by the COVID-19 pandemic with the impact of the Russia and Ukraine conflict on its eastern European tourism markets" (statement by the Minister for Tourism, March 5, 2022).

The second channel through which the war impacts Seychelles' economy is the disruption of trade flows between Seychelles Russia and Ukraine. The major trading partners of Seychelles are the Eurozone and the Middle East, and the direct trade flows between Seychelles and the two warring countries is relatively limited. However, there are reasonable amounts of re-exports of some commodities such as cereals and edible oils from Russia and Ukraine through other countries to Seychelles. According to Trademap statistics (2022) and Trading Economics (2023), the values of imports to Seychelles from Russia in 2021 amounted to more than a $1.8 million, while imports from Ukraine to Seychelles for the same period amounted to around $400 thousand.

There are also additional channels through which the war impacts the Seychelles' economy indirectly. It is important to recall that following the invasion, there have been significant rises in international prices of fuel and commodities, while global interest rates increased, and international trade and supply chains were disrupted. In this regard, as a net importer of food, fuel and manufactured products, the country's external sector position is seriously impacted. The increased global interest rates also constrain the country's access and cost of borrowing. Particularly the fact that the war started not long after the recessionary impact of the COVID-19 pandemic, the war has exacerbated the already weaker economy as the country was still navigating recovery from the global pandemic.

In a normal year, fuel import alone accounts for not less than 18% of the import bills. The Russian invasion of Ukraine has had multifaceted impact on the Kenyan economy. On the supply side, increases in energy, transport, and fertilizer prices contributed to the surge in the producer price index (PPI). These shocks caused increases in food and energy inflation, which together accounted for the lion's share of the weight in the Consumer Price Index (CPI). The cost-push factors slowed down activities across all sectors of the economy while the demand-pull factors, through decreasing per capita income, contributed to a decline in household consumption. Output growth decelerated to 5.5% from 7.5% in 2021. On the fiscal policy front, fuel, energy, food, and fertilizer subsidies were introduced to minimize the socioeconomic impact of the shocks. However, they had to be scrapped in the same year on the grounds that they would derail the fiscal targets of the ongoing fiscal consolidation program. On the monetary policy front, the CBK shifted its monetary policy stance by raising the policy rate by 125 basis points to 8.25%. The CBK also applied open market operations to mop up excess liquidity in the system and sold foreign exchange to minimize exchange rate fluctuations which also limited the passthrough effect of exchange rate depreciation to domestic inflation.

ENDNOTES

1. Agreed wording at the African Development Bank Annual Meetings 2022 in Ghana - Algeria, China, Egypt, Eswatini, Namibia, Nigeria and South Africa entered a reservation and proposed “Russia-Ukraine Conflict”.

2. The MPI ranges from 0 to 1, and higher values imply higher multidimensional poverty.

3. Following the reopening of borders in March 2021, tourism in Seychelles gradually picked up, with the country registering a total of 182,849 tourist arrivals for the January to December 2021 period, compared to 114,858 visitors for the same period in 2020 and 384,224 visitors in 2019.

4. Climate projections are obtained by running numerical models of Earth’s climate, which may cover either the entire globe or a specific region. These models are referred to as Global Climate Models (GCMs) – also known as General Circulation Models – or Regional Climate Models (RCMs), respectively.

5. de Serres et al. (2010)

6. OECD (2013)

7. Note: The climate resilience index averaged over 2010-2019, and climate vulnerability and readiness indices averaged over 2010-2020. Source: Staff calculations based on African Development Bank Statistics, Notre Dame Global Adaptation Initiative and Global Green Growth Institute databases.

8. Actual comparison of the country’s position in terms of green growth is not currently possible as there is no country level data on the Green Growth Index (GGI) for Seychelles.

9. The Government of Seychelles engaged in a debt-for-nature buy-back from its external creditors. They included the governments of Belgium, France, Italy, the Republic of South Africa, and the United Kingdom of Great Britain and Northern Ireland. The debt was bought back with approximately $21.6 million mobilised by The Nature Conservancy (TNC)

10. The government issued a $15 million Blue Bond with the support of the World Bank to finance Seychelles’ blue economy objectives of environmental sustainability and economic diversification. The GEF Non-Grant Instrument Pilot will be used alongside an IBRD guarantee to lower the cost of this Blue Bond, ideally down to the 3% range.

11. OECD Report COVID-19 pandemic: Towards a blue recovery in small island developing states

12. Other collaborators on the initiative include, United Nations Development Programme, Global Environment Facility, and Global Island Partnership.

13. The country will have access to approximately $500,000 per year until 2023 to finance the expansion of the protected areas network and is currently undertaking an assessment of the related budgetary needs. Balmford et al. (2003) found that the annual cost of running a marine-protected area network ranges from $4 to nearly

14. $30 million per km2 (median, $2,698 per km2). For Seychelles, which pledged to protect 420,000 km2, and using the minimum value, this would translate into a minimum annual cost of $1.7 million. IMF (2017) The SeyCCAT Board of Trustees is comprised of nine members with representation from across the government and non-government sectors. They include Minister of Environment, Energy and Climate Change Minister of Finance, Trade, Investment and Economy, Principal Secretary responsible for fisheries, representative of The Nature Conservancy, Chairperson for Seychelles Chamber of Commerce and Industry, Chief Executive Officer, Island Development Company, Chief Executive Officer, Citizens Engagements’ Platform Seychelles, representative of Seychelles Hospitality and Tourism Association and a representative of the Fishers’ and Boatowners’ Association.

15. UNDP Report https://www.undp.org/publications/towards-multidimensional-vulnerability-index

16. UN (2012)

17. UN (2015a)

18. UNFCCC (2015)

19. UN (2015b)

20. In his speech at the recent the 5th United Nations Conference on the Least Developed Countries (LDC5 presently being held in Doha, Qatar (March 5, 2023), the Seychelles President, Mr. Ramkalawan laid emphasis on the importance of collective approach required to attain set goals and targets to address vulnerability, and emphasized the need for the global adoption of a Multidimensional Vulnerability Index which offers a targeted approach that will not only complement but improve the efficacy of development cooperation, permitting countries in vulnerable situations to access concessional financing and address their needs

21. The Investor Map is developed by the Ministry of Investment, Entrepreneurship and Industry and the United Nations Development Programme (UNDP) and identifies the various existing Investment Opportunity Areas (IOAs) and Emerging Investment Opportunity Areas (EIOAs), but it does not cover information on financing sources for such projects but rather just provides the framework, relevant information, and tools. The Map will be hosted on the UNDP website and be linked with other local websites.

22. The Nature Conservancy (TNC) is a US-based non-governmental organisation. This transaction means a portion of Seychelles' debt repayments to TNC will now fund innovative marine protection and climate adaptation projects.

23. https://seyccat.org/

24. https://www.crunchbase.com/hub/investors-active-in-seychelles

25. Oxford University study https://www.nature.com/articles/s41598-020-71444-6

26. UNDP report https://www.undp.org/mauritius-seychelles/publications/circular-economy-optimising-private-sector-investment-mauritius

27. In a recent meeting (March 6, 2023 in Victoria) participants aimed to establish the United Nations Sustainable Development Cooperation Framework (UNSDCF). The authorities have articulated that the main priorities that Seychelles is focusing on in its millennium development plans are a modern public service, a healthy nation, modern education aligned with future needs, as well as law and order and environmental sustainability. The authorities at the meeting emphasized that the UN's framework will complement the Seychelles National Development Plan, which is currently being drafted.

28. World Bank 2021. The study covers 146 countries. It excludes those with no data, mainly small island states. In Africa Djibouti is excluded from the list.

29. Ministry of Agriculture, Climate Change and Environment - Seychelles Sustainable Development Strategy

30. The debt restructuring supported by The Nature Conservancy in 2016 reduces the cost of part of the debt Seychelles owes to its Paris Club creditors. In turn, it allows Seychelles to fund marine conservation and climate adaptation with the cost difference. These funds are channeled through a sinking fund, for immediate measures, and through an endowment fund that will ensure a sustainable financing stream in the future. https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/reinventing-africa-tourism

31. The IUU Fishing Index comprises a suite of 40 indicators, with each indicator relating to both a 'responsibility' and a 'type'. Coastal responsibilities relate to a state's management of its exclusive economic zone. Flag responsibilities relate to duties states should honour in managing their fleets. Port responsibilities relate to state control of fishing activity in ports. 'General' indicators are those that address responsibilities shared by all state types. Types of indicators relate to: 'vulnerability' – elements that increase the risk of IUU fishing occurring; 'prevalence' – where

IUU fishing is known or suspected to take place; and 'response' – measures taken by a state to combat IUU fishing. Data for the indicators are derived from primary (survey) and secondary (published) sources and elicited expert opinion.

32. www.iuufishingindex.net

33. https://www.iuufishingindex.net/reports/iuu-fishing-index-country-profile-2021-seychelles.pdf

34. Barbier 2011.

35. Seychelles defines the blue economy as the economic activities that directly or indirectly take place in the ocean and coastal areas and/or use outputs from the ocean, and the contribution of those activities to economic growth, social, cultural, and environmental wellbeing.

36. Government of the Republic of Seychelles and the United Nations Strategic Partnership Framework (SPF) 2019 - 2023

37. On the occasion of the World Ocean Day (8th June 2023), the country's president reiterated the vital role of for all of humanity, and in particular for Seychellois people saying that "Our oceans are not merely vast bodies of water; they are the lifeblood of our nation, providing sustenance, livelihoods, and inspiration. They are a source of beauty and wonder, and they connect us to the rest of the world" and the celebration is also to …acknowledge the collective action required to ensure its sustainable use and preservation".

38. IMF Seychelles Country Report No. 17/161, 2017

39. https://www.fiti.global/Seychelles

40. https://data.worldbank.org/indicator/AG.LND.FRST.K2?locations=SC

41. https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?locations=SC

42. https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical_Profiles/Africa/Seychelles_Africa_RE_SP.pdf

43. Solar PV resource potential is divided into seven classes, each representing a range of annual PV output per unit of capacity (kWh/kWp/yr). The seven classes of ranges for kWh/kWp/yr are: <1.2, 1.2 - 1.4, 1.4 - 1.6, 1.6 - 1.8, 1.8 - 1.9, 1.9 - 2.0, and >2.0. A bar chart in the country profile by IRENA from where the figures in this section are extracted from shows the proportion of a country's land area in each of these classes and the global distribution of land area across the classes (for comparison).



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