



Environment and Renewable Natural Resources in Angola - Opportunities to Diversify the National Economy, Generate Income for local communities, enhance environmental management capacity and build resilience to climate change

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**March 27, 2019**

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## List of Acronyms

ACADIR	<i>Associação de Conservação do Ambiente e Desenvolvimento Integrado Rural</i>
ADDP	<i>Ajuda a Desenvolvimento de Povo para Povo</i>
ADRA	<i>Acção para o Desenvolvimento Rural e Ambiente</i>
ANAGERO	National Agency for the Management of the Okavango Region
ANIMA	National Association of Wood Industries ( <i>Associação Nacional dos Industriais e Madeiros de Angola</i> )
BAU	Business-as-Usual
CACS	Councils for Civic Engagement ( <i>Conselhos de Auscultação e Concertação Social</i> )
CBO	Community-based Organization
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMACS	Municipal Council for Social Consultation ( <i>Conselho Municipal de Auscultação e Concertação Social</i> )
CPF	Country Partnership Framework
COCS	Councils for Civic Engagement ( <i>Conselhos de Auscultação e Concertação Social</i> )
COREP	Regional Commission of Fisheries of Gulf of Guinea ( <i>Commission Régionale des Pêches du Golfe de Guinée</i> )
CPACS	Provincial Council for Social Consultation ( <i>Conselho Provincial de Auscultação e Concertação Social</i> )
CRESMAC	Regional Center for Maritime Safety in Central Africa
CSO	Civil Society Organization
ECCAS	Economic Community of Central African States
EEZ	Exclusive Economic Zone
EFL	Environment Framework Law
ENA	National Environmental Strategy ( <i>Estratégia Nacional do Ambiente</i> )
ERS	Electronic Reporting System
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FGRM	Feedback and Grievance Redress Mechanism
FiTI	Fisheries Transparency Initiative
GBV	Gender-based Violence
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GHG	Greenhouse Gas
GIS	Geographic Information System
GIZ	German Development Cooperation ( <i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> )
GRM	Grievance Redress Mechanism

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IBRD	International Bank for Reconstruction and Development
ICCAT	International Commission for the Conservation of Atlantic Tunas
IDF	Institute for Forestry Development
IFC	International Finance Corporation
INBAC	National Institute for Biodiversity and Conservation Areas ( <i>Instituto Nacional de Biodiversidade e Áreas de Conservação</i> )
iNDC	Intended Nationally Determined Contribution
ITTO	International Tropical Timber Organization
IUU	Illegal, Unreported, and Unregulated
MCC	Multinational Coordination Center
MCS	Monitoring Control and Surveillance
MIKE	Monitoring of Illegal Killing of Elephants
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MRV	Measurement, Reporting, and Verification
MSY	Maximum Sustainable Yield
NAFC	<i>Núcleo Ambiental da Faculdade de Ciências</i>
NAPA	National Adaptation Plan of Action
NBSAP	National Biodiversity Strategy and Action Plan
NDPEIA	National Directorate for Prevention and Environmental Impact Assessment
NGO	Nongovernmental Organization
NGOWP	National Geographic Okavango Wilderness Project
OHS	Occupational Health and Safety
PESAP	Strategic Plan for the Protected Areas System ( <i>Plano Estratégico para o Sistema de Áreas Protegidas</i> )
PLENARCA	Plan for the Expansion of the Network of Protected Areas ( <i>Plano de expansão da rede de Áreas de Conservação</i> )
PND	2018–2022 National Development Plan ( <i>Plano Nacional de Desenvolvimento</i> )
PNGA	National Environmental Management Program ( <i>Programa Nacional de Gestão Ambiental</i> )
POPA	Fisheries and Aquaculture Master Plan ( <i>Plano de Ordenamento das Pescas e Aquicultura</i> )
PPP	Public-Private Partnership
PRODESI	Program to Support Production, Exports Diversification, and Import Replacement ( <i>Programa de Apoio a Produção, Diversificação das Exportações e Substituição das Importações</i> )
PSMA	Port State Measures Agreement
RAS	Reimbursable Advisory Services
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SADC	Southern African Development Community
SCD	Systematic Country Diagnostic
SESA	Strategic Environmental and Social Assessment
SOE	State of Environment Report
TAC	Total Allowable Catch

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TF	Trust Fund
TFCA	Transfrontier Conservation Area
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	World Tourism Organization
USAID	United States Agency for International Development
UV	Ultraviolet
VMS	Vessel Monitoring System
WTTC	World Travel and Tourism Council

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## Executive Summary

**Renewable natural resources can contribute to Angola’s economic diversification and to improving the well-being and livelihoods of rural communities, who are among the poorest in the country.** Sustainable management of renewable natural resources<sup>1</sup>, particularly forests through commercial forest plantations and sustainable forest management, wildlife through nature-based tourism<sup>2</sup> and sustainable wildlife use, and fisheries (and the broader blue economy<sup>3</sup>) can lead to job creation and to income generation at the national and local levels.

**Angola hosts one of the most productive fisheries in the world, an important source of food security and livelihoods, and operates a vibrant marine fisheries industry.** The sector contributed to around 3.5 percent of gross domestic product (GDP) and 11 percent of non-oil exports in 2015, although significant share of the national fish demand is still imported. Improving the sector’s management, further processing fisheries products nationally and enabling artisanal fisheries to access better technology to reduce post-harvest losses and to access higher-paying markets for their catches (including international markets) would enhance fisheries’ contribution to the economy.

**Forests and wildlife are the source of livelihood for a significant share of the rural population and can contribute to long-term economic growth when properly managed.** Around 80 percent of Angola’s population depends on forest resources for their livelihoods. Commercial forest exploitation, currently an underdeveloped sector, could contribute significantly to economic growth, job creation and exports<sup>4</sup>. Wildlife and nature-based tourism, whose main product is wildlife and landscapes in protected areas, holds tremendous potential for growth in Angola’s tourism sector, if the conditions for private investments are improved. Regional trends as experienced in neighboring countries (for example, Botswana and Namibia) show annual growth of over 10 percent in nature-based tourism.

**Angola hosts globally significant environmental assets – such as the ‘Water Towers’<sup>5</sup> of the Kavango watershed, the biodiversity-rich Namib desert, the marine resources of the Benguela current, and the extensive miombo woodlands of Angola’s central plateau – and can extract value from those, as well as promote further regional integration.** These environmental assets provide ecosystem services of importance to the global community, such as habitat for biodiversity protection, carbon storage in forests to mitigate climate change, and grounds for international fisheries spawning. Angola can benefit economically from these assets, including through nature-based tourism, grant financing from international financial organizations (such as the Global Environmental Facility [GEF]) and the private sector (philanthropists), and emerging schemes to pay countries for ecosystem services, such as Reducing Emissions from Deforestation and Forest Degradation (REDD+). These renewable natural resources move

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<sup>1</sup> Renewable natural resources are natural resources that, after exploitation, can return to their previous stock levels by natural processes of growth or replenishment (OECD 2001).

<sup>2</sup> Nature-based tourism refers to all categories of tourism in natural settings that contribute to poverty reduction and promote environmental sustainability (World Bank 2018a).

<sup>3</sup> Blue economy refers to the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health (World Bank 2017).

<sup>4</sup> In a favorable situation, it is estimated that the wood sector – the manufacture of wood, wood products and furniture – could reach an export value of US\$240 million by 2028 (up to 1.5 percent of the export balance) (IBF, 2018).

<sup>5</sup> A water tower, in this context, is a high-altitude, high-rainfall, forested watershed with high water storage capacity.

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across boundaries, and their management can be significantly enhanced through regional management – such as through Regional Fisheries Bodies (RFBs) or Transfrontier Conservation Areas (TFCAs) to manage wildlife and biodiversity – thus contributing to regional integration.

**Renewable natural resources in Angola are under threat, and increasingly being degraded.** Angola's wealth composition is similar to Sub-Saharan African countries, although it relies more on natural capital<sup>6</sup> (38 percent versus 36 percent), and the country lags behind in human capital relative to the region (41 percent versus 50 percent). Comparing Angola to its neighboring countries in terms of income, Angola's performance is poorer. Lower-middle-income and upper-middle-income countries rely much less on natural resources (27 percent and 17 percent, respectively) compensating with considerably higher human capital shares (51 percent and 58 percent, respectively). The economic growth Angola has experienced has been driven mainly by capital accumulation rather than increases in productivity. In addition, this growth of capital was outstripped by the depletion of natural resource wealth.

**Angola is rapidly losing forest cover, wildlife, and fishery resources are under increased stress.** Angola ranks among top deforesting countries in Africa and has been losing 520,000 ha of forests every year (from 2000 to 2015), contributing to climate change and with significant impacts on soil erosion and water loss, which negatively affect agriculture. Desertification is advancing, particularly in the Namib and Kalahari deserts in southern Namibia. Angola is losing large mammals and 'charismatic species' of value – such as elephants, lions, and antelopes – to illegal commercial trade syndicates. Many fish species important for food security and exports are fully exploited or overexploited or showing reductions in overall biomass.

**In addition, climate change poses a serious threat to Angola's economy and its population.** The adverse effects of climate change include higher mean temperatures, modified rainfall patterns, sea level rise, alterations of oceanic acidity and temperature, and shifts in the habitat ranges of plants and animals. Climatic shocks such as droughts and floods have become more frequent. These effects pose serious threats to its natural resources and to economic sectors such as agriculture and fisheries which are also important for food security. Vulnerable communities, including indigenous people, who depend on natural resources will be hit hardest. Building resilience to climate disaster events and enhancing the country's adaptive capacity are therefore urgently needed to avoid devastating catastrophes in the future.

**If these trends are not reversed, Angola would lose important opportunities for diversifying its economy through the sustainable management of renewable natural resources.** Local communities will lose access to resources their livelihoods depend on, such as forest products and fisheries, which will further exacerbate poverty. In addition, environmental degradation, particularly of land and soils, has important impacts on agriculture and water flows, again with significant impacts on the overall economy.

**Angola is developing infrastructures at a rapid pace and risks irreversible damage to the environment if proper environmental and social management is not ensured.** Concern for better management of the environmental impacts of large-scale infrastructure projects has been growing, but this interest has not yet been matched by an increase in resources for strengthening environmental management capability. There is limited human and institutional capacity coupled with a lack of basic equipment to properly carry out environmental management activities. This poses a risk to the World Bank from potential

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<sup>6</sup> Natural capital in this context represents a metric to measure natural resources such as land, oceans, and subsoil resources. These statistics are based on data from 2014.



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noncompliance with the World Bank's environmental and social standards. This points to the need to build national- and provincial-level capacity on environmental management and strengthen the legal and regulatory framework for environmental assessment.

**The current political context, the recent sectoral reforms passed by the government and the increased global attention to Angola's unique environment provide a window of opportunity for the World Bank and other development partners to discuss potential engagements with the Government of Angola on these critical issues.** A new forest law has significantly changed how natural forests are managed in the country, introducing the concept of forest concessions for the first time in the history of the country, allowing for a more rational use of forest resources. Recognizing the potential of the blue economy, the government has expanded the mandate of the Ministry of Fisheries to cover issues of the sea, launched a marine spatial plan to address conflicting uses of marine resources, and is planning to set up the first marine protected area in the country. In addition, the government has started the preparation of guidelines to regulate private concessions in protected areas, as an effort to attract private investments in nature-based tourism, and has also established the Kavango Agency to ensure further multi-sectoral coordination in the management of the high-sensitive Kavango watershed.

**Financial resources and technical assistance to the Government of Angola, coupled with continued political will, could unlock the economic potential of renewable natural resources.** In addition to sound policies, law enforcement, and incentives government action is needed to improve the business environment to attract private investors (including devolving rights to land and to natural resources to local communities). Significant financial resources are needed to manage these resources (such as protected areas, priority fisheries, and natural forests), promote value chains based on natural resources, including nature-based tourism. Government institutions' capacity to manage, regulate, and monitor renewable natural resources needs strengthening (for example, forest cover monitoring, inventories, fish stock assessments, vessel monitoring system, wildlife counting, and quota setting); local communities need strengthened capacity for collective action, including to manage collective assets such as forests, fisheries, and wildlife; and the domestic private sector needs strengthened capacity to engage in value chains linked to natural resources.

**The World Bank has expertise to support the agenda through technical assistance (TA), analytical work, and access to finance. TA is critical to:** (a) support the implementation of the ongoing regulatory changes in the fisheries, forests, wildlife conservation, and tourism sectors; and (b) strengthen institutional capacity of key government institutions at national and local levels to manage environmental impacts from development projects and renewable natural resources. One institution with particular potential is the Environmental Fund, which could serve as a financial mechanism to support the implementation of environmental priorities, such as protected areas management and environmental management capacity building at the national level. TA could potentially be delivered through ongoing and new investment projects or through new Reimbursable Advisory Services (RAS).

**Analytical work is needed to address knowledge gaps,** including: (a) assessing financial needs and available resources for protected areas management; (b) evaluating the potential domestic and international demand for renewable natural resources products, such as miombo wood, planted wood, fisheries products, nature-based products, and trophy hunting; and (c) designing policy and instruments to engage local communities in natural resources management (including decentralizing management

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rights) and to incentivize local investments in natural resources, including from the domestic private sector. These could be conducted with financing from new projects, trust funds (TFs), or RAS.

**Significant additional financial resources are needed to implement this ambitious agenda.** Some of these sectors require significant additional financing, particularly wildlife conservation, as the protected areas are in dire needs of financing and fisheries require infrastructure. Developing value chains requires providing local entrepreneurs with access to finance. Potential international sources of finance that could be explored include the GEF<sup>7</sup> and the International Bank for Reconstruction and Development (IBRD). Finance from the International Finance Corporation (IFC) to private actors, such as tourism and forests operators, could also be a possibility to be explored in the future.

**Finally, these sectors also offer great potential to engage the private sector and maximize finance for development.** At present, the country has 134,000 ha of planted forests that are currently underexploited, and several plans from the private sector to establish additional commercial plantations are awaiting financing. A large potential exists to develop marine aquaculture (mariculture) and the national salt industry, which could be led by the private sector to meet the current demand of the domestic market which is in part satisfied by imports. The further processing of fisheries products also offers opportunities to engage the private sector. Finally, establishing a clear and stable regulatory framework for public-private partnerships (PPPs) in public parks offers great potential to attract private sector investment and participation into nature-based tourism.

The World Bank Group has several instruments through which it supports countries, including investments and technical assistance. As this would be a new sector of engagement for the Bank, a gradual approach could be explored, where investments could initially be financed through trust funds (such as the GEF). Any potential engagement would need to be discussed between the Bank and the Government of Angola within the context of the Country Partnership Framework (CPF) and other strategic guidelines. The potential of financing by IBRD could be explored in the future depending on results, the size of available financing and government willingness to borrow for the sector. More sophisticated instruments, such as PforRs and DPOs could also be potentially considered in the future.

**In terms of sectoral prioritization, protected areas and wildlife offer short-term opportunities, given the Government of Angola's interest in partnering with the Bank and the Bank's comparative advantage in the sector.** The GoA has expressed interest in having the Bank support the implementation of GEF 7 funds to target some of the TFCAs with most potential for wildlife conservation and where climate resilience of surrounding local communities, particularly in agriculture, can be strengthened. Fisheries also offer significant opportunities in the short-term as the sector counts with a sound policy and institutional framework and a relatively well-developed private sector. Forests, with its relatively new legal framework, weak institutional capacity and a private sector with weak capacity and lacking financing offers opportunities for the medium to long-term.

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<sup>7</sup> The Global Environmental Facility is a financial mechanism that provides grants and concessional funds to recipient countries for projects and activities to protect the global environment (on biodiversity, land degradation, and climate change). Financing is made available to countries through four-year allocation cycles and is channeled through implementing agencies. GEF is in its seventh financing cycle, and Angola has benefited from the previous three cycles.

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## 1. Introduction

This report presents the economic potential of renewable natural resources (forests, wildlife and fisheries), and identifies opportunities for enhancing the sectors' contribution to both the national and local economies in Angola (Section 2). Given the strong focus of the ongoing CPF on economic diversification, the report focuses on these selected sectors whose sustainable use offers opportunities for diversifying the economy, creating jobs and improving local livelihoods. In light of the implementation of the World Bank's new Environmental and Social Framework (ESF), the report assesses the current national legislation and policy framework for assessing and mitigating potential environmental and social risks and impacts caused by investment projects and proposes opportunities which can support in strengthening the national capacity in order to facilitate project design and implementation following the World Bank's due diligence (Section 3). The report then assesses the current policy and institutional framework for addressing climate change in Angola and proposes opportunities to support these (Section 4). Finally, the report concludes by proposing opportunities for World Bank engagement in the sectors selected (forests, wildlife and fisheries), as well as in enhancing environmental management capacity and building resilience to climate change.

A World Bank mission was organized to Angola in October 2018, and collected data relevant to the study and discussed with government officials, development partners, CSOs, and other relevant stakeholders the status, priorities, and potential opportunities for each of the sectors considered.<sup>8</sup> This report uses data and information collected during the mission and shared by government institutions and other stakeholders, as well as data and literature that are publicly available. The report also uses information collected as part of the World Bank report on Central African Coastal Fisheries (which assessed the fisheries sector of countries within the Regional Commission of Fisheries of Gulf of Guinea [*Commission Régionale des Pêches du Golfe de Guinée*, COREP]—of which Angola is a part), and for which a World Bank mission was organized in May 2018.

### Context

**The Republic of Angola is the third-largest economy in Sub-Saharan Africa.** The country has a population of about 26 million, with over 27 percent living in the Luanda Province, home to Angola's capital city. About 37 percent of the population lives in rural areas. With a GDP of US\$ 124 billion (2017), Angola is classified as a lower-middle income country; however, poverty remains high at 28 percent (2014) with this being more pronounced in rural areas. Moreover, growth has significantly slowed in the last few years and is currently almost stagnant.

**Angola's colonial history excluded much of the population from the benefits of growth.** Independence was gained 1975, but the country fell back into civil conflict soon after. The MPLA-led government embraced a command-economy inducing rapid and large-scale nationalization, amid a large exodus of most skilled workers. The cost of the civil conflict was immense, with the country's infrastructure and

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<sup>8</sup> Institutions met during the mission include the Ministry of Environment; the Ministry of Tourism; the Ministry of Fisheries and the Sea; the Ministry of Agriculture and Forests; the Ministry of Health; and the Ministry of Public Administration, Labor, and Social Security, as well as development partners, civil society, and private actors active in the relevant sectors.

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institutions left in shatters. With the end of war in 2002, Angola experienced sustained economic growth in most years until 2014 when a drop in international oil prices triggered large macro-economic imbalances due to Angola's oil-dependency.

In 2017, the 27-year presidency of José Eduardo dos Santos ended, allowing a new government under the leadership of João Lourenço to tackle the country's imminent development challenges. The new president has displayed commitment to tackling corruption and delivering long-promised economic reforms, creating widespread optimism about Angola's future. Angola's historic oil dependence has created large macro-economic and fiscal imbalances and has limited the diversification of its economy. Poverty reduction and employment growth have not been responsive to economic growth as most value-added growth has come from rising oil exports, and the rural poor have especially been excluded. Currently, Angola has the worst disinvestment rate of any Sub-Saharan African country, is lacking human capital, and has a weak business climate which hinders private investment. This creates the need of a growth paradigm that is centered around improving governance and diversifying the economy, as well as creating jobs and assets for the poor.

**Angola's 2018–2022 National Development Plan (*Plano Nacional de Desenvolvimento*, PND) operationalizes its Vision 2025 and aims at improving the life quality of all Angolans, reducing hunger and extreme poverty, expanding youth employment, and diversifying the economy.** The plan underlines the role of the private sector as a driver of economic growth and the need to better use Angola's abundant human and natural resources. Various policies are outlined to facilitate access to credit, assist emerging economic activities, support the informal economy, and encourage companies to integrate themselves into business clusters. Industries based on renewable natural resources, particularly forests (sustainable logging and forest plantations), fisheries (industrial and artisanal), and tourism (based on wildlife and landscapes) are key to fulfilling Angola's Vision 2025.

## 2. Renewable Natural Resources - Challenges and Opportunities

**Angola is rich in renewable natural resources (particularly fisheries, forests, and wildlife).** In addition to non-renewable natural resources<sup>9</sup>, Angola has major productive potential for renewable natural resources, including fisheries, forests and wildlife. The country hosts some of the richest biodiversity in the continent, including several endangered species such as the giant sable, and has a diversity of ecosystems. The extent of protected areas has been increasing and now covers 13 percent of the country (equivalent to 156,909 km<sup>2</sup>). Angola also has immense forest resources, which cover 60 percent of the country (or 700,000 km<sup>2</sup>), including the miombo woodlands and the Mayombe forest, part of the Congolese tropical forests—the second largest forest area in the world after the Amazon rainforest. Finally, Angola benefits from highly productive fisheries resources owing to its long coastline (1,600 km), a large Exclusive Economic Zone (EEZ) (497,800 km<sup>2</sup>), and its strategic position between two large marine ecosystems that benefit from ocean upwellings (the Benguela current system in the south—one of the most productive ecosystems in the world—and the Guinea current system in the north).

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<sup>9</sup> Angola is the second largest oil producer in Africa, after Nigeria, and owns substantial diamond deposits.

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**With around 37 percent of the population living in rural areas, renewable natural resources are key assets to sustain livelihoods of a significant portion of the population,** given their reliance on these resources for food (particularly in times of environmental stress, such as droughts or floods), fuelwood, and medicinal plants, among others. Renewable natural resources also contribute significantly to the national economy, through the exports of products from fisheries, forests and nature-based tourism. Renewable natural resources provide important global public goods, such as carbon storage to mitigate climate change, water supply to some of the critical watersheds of Africa (such as the Zambezia and Kavango), and habitat for endangered species.

## 2.1. Forests

**The forestry sector, including both the sustainable management of natural forests and commercial forest plantations, has the potential to become a considerable source of revenue for Angola.** The forest sector contributes about US\$600 billion annually to global gross domestic product (GDP) and provides employment to over 50 million people (FAO 2015). Aware of this potential, the government has recently passed a series of regulations aiming to better manage forests, which has revived the private sector's interest after the sector's historical marginalization. However, several challenges remain to realize this potential, particularly lack of information on the sector and its contribution to the economy, lack of capacity within the government to regulate, and lack of financing to enable private investments and commercial activity through the value chain. In addition, this resource is under threat as forests in Angola are being depleted at an alarming rate—deforestation is estimated at 0.8 percent from 2000 to 2015, representing an annual loss of approximately 520,000 ha of forest, making Angola one of the top deforesting countries in Africa (MINAGRIF/IDF, 2017)

### 2.1.1. Forests' Contribution at Local, National, and Global Levels

**Angola has immense forest resources, with about 60 percent of Angola's total land area covered with native forests (equivalent to 70 million ha) (MINAGRIF/IDF, 2017).** About 80 percent of the population—mostly the rural and peri-urban—depend on forest resources for their livelihoods (FAO, 2003). This is due to the multiple functions derived from forests such as wood products, non-timber forest products (leaves, roots, and fruits used as food and medicine supply), wood-based fuels and biomass energy, crop production, and grazing. In addition, forests are the source of employment for a significant proportion of the rural population of Angola, mostly through informal and temporary jobs.

**Traditional fuelwood and charcoal are the main energy sources for nearly 80 percent of the population (IEA 2006), in particular rural and peri-urban households, and represent a significant source of income for rural dwellers who sell these in nearby towns or in major cities.** Charcoal is the main source of energy in the peri-urban areas of Luanda and Benguela. Population growth and increasing energy demand have triggered charcoal production in the interior of Angola, where it often represents the only opportunity to generate cash income. It is estimated that around 100,000 people are involved in the activity of wood collection and charcoal production (UNDP 2016).

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**The contribution of forests to Angola’s economy is not well documented due to lack of data.** In 2016, rents from forestry<sup>10</sup> were estimated to account for 0.54 percent of GDP (Lange, Wodon, and Carey 2018), and timber was estimated to account for 0.21 percent of the country's exports, or US\$30 million (IBF International Consulting 2018). However, this does not capture the range of products and services derived from the sector. A recent study developed for the Ministry of Commerce to inform the diversification of the economy and the increase of non-oil exports estimates that, in a favorable situation, the wood sector<sup>11</sup> could reach an export value of US\$240 million by 2028 (up to 1.5 percent of the export balance). Moreover, the production of wood products nationally could also help reduce imports while generating employment and stimulating domestic industry. In several countries of central and southern Africa, the timber market has been increasing with new international private operators recently entering these markets. Timber rents make an important contribution to the GDP of several of these countries (table 1).

**Table 1. Contribution of timber rents to GDP of selected African countries (2016).**

Country	Contribution of timber rents to GDP (%)
Angola	0.5
Botswana	0.4
Cameroon	4.1
Democratic Republic of Congo	19.1
Gabon	2.8
Mozambique	13.7
Namibia	0.9
Republic of Congo	5.3
South Africa	0.7
Zambia	4.2

Source: Lange, et al. 2018.

**Forests also support other economic sectors important for the development of Angola, such as, agriculture and energy,** through the provision of environmental services such as water regulation and supply, nutrient cycling, and pollution control. In addition, forests help prevent erosion, control floods, stabilize slopes, and protect coastal areas.

**Forests provide significant ecosystem services to neighboring countries.** The southeastern region of Angola, for example, is host to the sources of the Okavango, Zambezi, and Kwanza rivers. Practically cut off from Angola and the rest of the world for over three decades due to civil war, these unexplored remote areas of Angola are the water tower of the Okavango and Zambezi river basins. The waters of the Okavango Delta flow from the southeastern highlands of Angola through Namibia’s Zambezi region (formerly, Caprivi Strip) providing sustenance to unique ecosystems and to about a million people along the way. It is reported that on average 2.5 trillion gallons of water flows into Botswana from Angola every year (National Geographic Society 2018). Hydroelectric dams, irrigation projects, pollution, and increasing local demand for water in Angola and the surrounding region could compromise the Okavango Delta’s

<sup>10</sup> This estimate is limited to the volume of roundwood harvest times the product of regional prices and a regional rental rate.

<sup>11</sup> Defined as the manufacture of wood and wood products and furniture manufacture.



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future. Efforts are ongoing to protect the area, including through its inclusion into the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA).

**Forests also provide important services of global value**, namely climate regulation through the sequestration of carbon and biodiversity protection, which are quite significant given the extent of forest cover in Angola. It is estimated that 77 million tCO<sub>2</sub>eq (World Bank, 2018c) are emitted every year from forest loss, which shows the importance of the carbon stocks in remaining forests. The country is host to part of an important forest area (mayombe), shared with the Democratic Republic of Congo, Gabon, and the Republic of Congo, which is very rich in biodiversity and the second largest forest area in the world after the Amazon rainforest.

### 2.1.2. Forests in Angola - Status and Trends

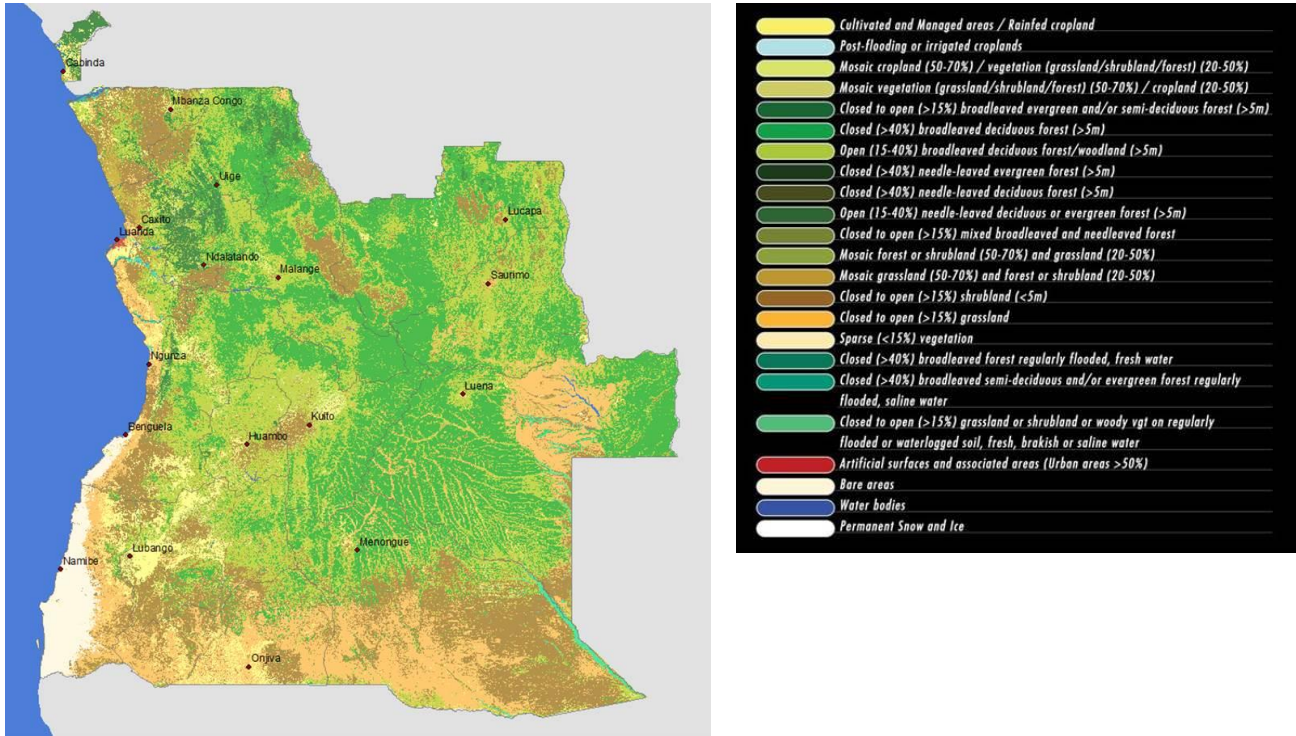
**Native forests represent about 60 percent of Angola's total land area (equivalent to 70 million ha)**, followed by permanent pasture land, mountains and shrubland, and arable land (MINAGRIF/IDF, 2017). The main forest type is the miombo woodlands of the central plateau, followed by the western Congolian forest-savanna mosaics in the north. Other important but less widespread forest types include the Atlantic Equatorial coastal forests in Cabinda, the mopane woodlands, and the Namibian savanna woodlands in the southwest.

**In addition to natural forests, Angola has around 134,000 ha of planted forests (mainly of Eucalyptus and Pinus species)**, mostly located in the central plateau, which are underexploited. These plantations were established by the private sector during colonial times and have the potential to provide valuable raw materials for different products, such as furniture, poles and wood chips. This is an opportunity to substitute imports and satisfy demand from the country's furniture sector. However, while these plantations currently offer a commercial stock of approximately 26 million m<sup>3</sup> and a potential for an annual exploitation of at least 330,000 m<sup>3</sup>, what is exploited is estimated at 85,000 m<sup>3</sup> (Government of Angola 2015), or less than 25 percent of their potential, even though in 2017, exploitation licenses were issued for a production of 230,000 m<sup>3</sup>. The provinces of Uíge, Cabinda, Moxico, and Kuando Kubango are the ones that currently exploit their forests the most. There are currently little efforts to establish new commercial plantations at scale (though several initiatives are planned).

**While data on forestry resources in Angola have historically been inexistent or obsolete, constraining economic activity of the sector, the recent completion of the first phase of the national forest inventory provides the most comprehensive information on the state and value of forest resources in Angola.** Supported by the Food and Agriculture Organization of the United Nations (FAO) and led by the Ministry of Agriculture and Forests, biophysical, socioeconomic, and environmental data on forest resources from 2008 to 2015 were collected by the inventory. Important initial results are available (such as the extent of forest cover, rate of deforestation, and use of forest resources); however, the inventory was not undertaken in all the provinces and as such its representativeness needs to be improved to provide definitive results. Finalizing the inventory would enable the government to better guide investments in the sector, for example, by defining forest areas to be allocated as concessions for exploitation and areas with potential for reforestation.

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**Figure 1. Angola Land Cover Map (2015)**



Source: World Bank, 2018c.

#### 2.1.4. Institutional, Legal, and Policy Framework for Forest Management

**The forest sector is under the authority of the Ministry of Agriculture and Forests.** Within this ministry, the Institute for Forestry Development (IDF), fully represented in all 18 administrative provinces of the country, is responsible for implementing and enforcing national forest policies and regulations. Specifically, IDF is responsible for the issuance of permits, control, monitoring, and supervision of activities in the sector. IDF has been institutionally fragile over the past 10 years in terms of human, financial, and operational resources.

**Recent policy reforms are considered positive by various stakeholders and have revived the interest of the private sector in forest exploitation after the historical marginalization of the sector.** The National Forest, Wildlife, and Conservation Areas Policy (2010) and the new Forest and Wildlife Act (2017) provide an updated policy and legal framework for the sector.

**The 2010 policy sets the state’s strategic vision for the sustainable use of forest resources in the context of fighting poverty, increasing productivity and competitiveness, and preserving biodiversity.** The policy places emphasis on recovering and exploiting existing forest plantations as well as promoting new industrial plantations with fast-growing species to supply the national and export industries. To this effect, the National Afforestation and Reforestation Strategy (2011), one of the priority actions of the policy, foresees the plantation of 50 million ha by both the state and private actors. However, it has not been implemented due to lack of resources.



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**The policy also recommended the development and updating of regulations and laws necessary to improving the management of the sector.** This resulted in (a) the Forest and Wildlife Act (2017), which outlines the general bases for forest exploitation activities with a vision of sustainability (modalities for licenses, transportation, and export of wood products), and (b) a suite of forest regulations approved by Presidential Decree (2018), which better define forest licensing rules and establish more control for forest exploitation.

**The Forest and Wildlife Act (2017) aims to progressively replace the forest exploitation regime with one that requires operators to implement management plans to ensure sustainability.** Whereas previously operating licenses were issued on an annual basis only, the act provides for forest concessions for a maximum duration of 25 years. These concessions are authorized by the Minister of Agriculture and Forests for areas of up to 10,000 ha and by the President for areas exceeding 10,000 ha. While this new forest exploitation regime provides more certainty for the private sector, research shows that areas below 10,000 ha are not economically feasible to exploit in the Miombo woodlands (Unique Forestry and Land Use 2016). Other provisions in the act relate to the regulation of wood trade and wood export, aimed at ensuring that export requirements are met and at addressing illegal trade. Other foreseen reforms are pending implementation, namely on law enforcement and hunting. The definition of a minimum price for export, based on the International Tropical Timber Organization (ITTO) Tropical Timber Market reports, is also envisioned with the aim of improving transparency of timber exports. With respect to charcoal production, improvements in regulation require commercial charcoal producers to be licensed by IDF, but enforcement mechanisms are still weak.

**Albeit in the right direction, the reforms are recent, and several challenges remain for their effective implementation.** The policy recognizes the need to reinforce capacities within the government for the formulation of policies and for the planning, implementation, and monitoring of programs in the sector. In addition, it envisions a significant reform of the institutions responsible for managing forest resources. In terms of capacity from the government to regulate, the new legislation requires a significant increase in the number of law enforcement agents—both at the municipal and central levels—as well as proper incentives to implement the law. These measures would need to be funded by IDF’s own resources (such as through forest exploitation licenses and fees), but activity in the sector is currently not enough to ensure self-sufficiency of its management. In addition, the hiring of new public sector officials at IDF has been stagnant for years; most officials are serving lifelong careers, and there is a lack of financial resources for new hiring. There is also a need to strengthen the capacity of current IDF public sector officials throughout the institution—from the municipal to the central level—and on different areas, including management.

**While the policy provides an important role for the private sector in the management and use of forest resources, private sector activity is close to stagnant due to a lack of human, technical, and financial resources.** Investing in the forest sector is capital intensive and requires expertise in planning, management, and exploitation. Technicians on wood exploitation, for example, are in short supply, and this is one of the requirements for the issuance of exploitation licenses. A lot of companies also operate without a forest management plan. On the other hand, Angola’s financial sector does not provide financing to the sector because of risk perception. Lacking the resources, national companies often establish partnerships with foreign firms. Presently, with the recent legislative reforms that are considered positive, there is revised interest in investment by the private sector, both in natural forests management

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and planted forests. For example, the National Association of Wood Industries (*Associação Nacional dos Industriais e Madeiros de Angola*, ANIMA) has developed a strategy to establish 500,000 ha of plantations per year and has bankable projects waiting to be financed. It estimates that this initiative could create up to 1 million jobs throughout the entire value chain (*personal communication*).

**Similarly, the policy envisions an important role for local communities.** Current regulations provide for the issuance of licenses for commercial activities undertaken by local communities (local communities enjoy access rights to forest resources for subsistence activities, but not for commercial). The exploitation of non-timber forest products and their value chains (such as leaves, roots, and fruits used as food and medicine supply) are also important in this context. However, though these are reported to have simple requirements, a lack of resources and conflicting land tenures discourage investments. While the legal framework establishes ownership of land and forest resources to the state, prevailing customary law creates uncertainties for land tenure. The Land Law provides the opportunity to transform customary land holdings into formal rights; however, government institutions lack the capacity to implement the law in a transparent and accountable manner. In addition, local communities and entrepreneurs will need significant support to development value chains based on forest products, such as technical assistance, access to finance and to markets.

#### 2.1.5. Forests in Angola - Opportunities

##### *Deforestation and Forest Degradation*

**Deforestation is estimated by the national forest inventory at 0.8 percent annually from 2000 to 2015, representing an annual loss of approximately 520,000 ha of forest, which makes Angola one of the top deforesting countries in Africa.** This rate is much higher than the one identified between 1990–2000 (0.2 percent) (IBF International Consulting 2018) and 10 times higher than the global deforestation rate of 0.08 percent for 2010–2015 (FAO, 2015). Forest cover loss is concentrated in the middle and north of the country (Figure 12). The provinces of Huambo and Huila recorded alarming rates of forest cover loss for 2000–2012.

**Angola is on the cusp of change, and deforestation rates are likely to keep increasing as the national economy continues to develop.** An alarming and unprecedented increase in deforestation can be observed over the last five years in certain provinces: Bié, Uige, Cuanza Sul, Cuanza Norte, and Bengo (World Bank 2018c). These are probably due to commercial investments such as large-scale agriculture, extractives (including illegal mining), and urban expansion. The resettlement of internally displaced people affected by the former long civil conflict<sup>12</sup> continues to put pressure on forests in the northern part of the country, mainly due to small-scale slash-and-burn or shifting agriculture.

**Growing charcoal demand and extremely inefficient charcoal production and utilization methods contribute to forest degradation at a significant scale.** The major part of Angola's population is

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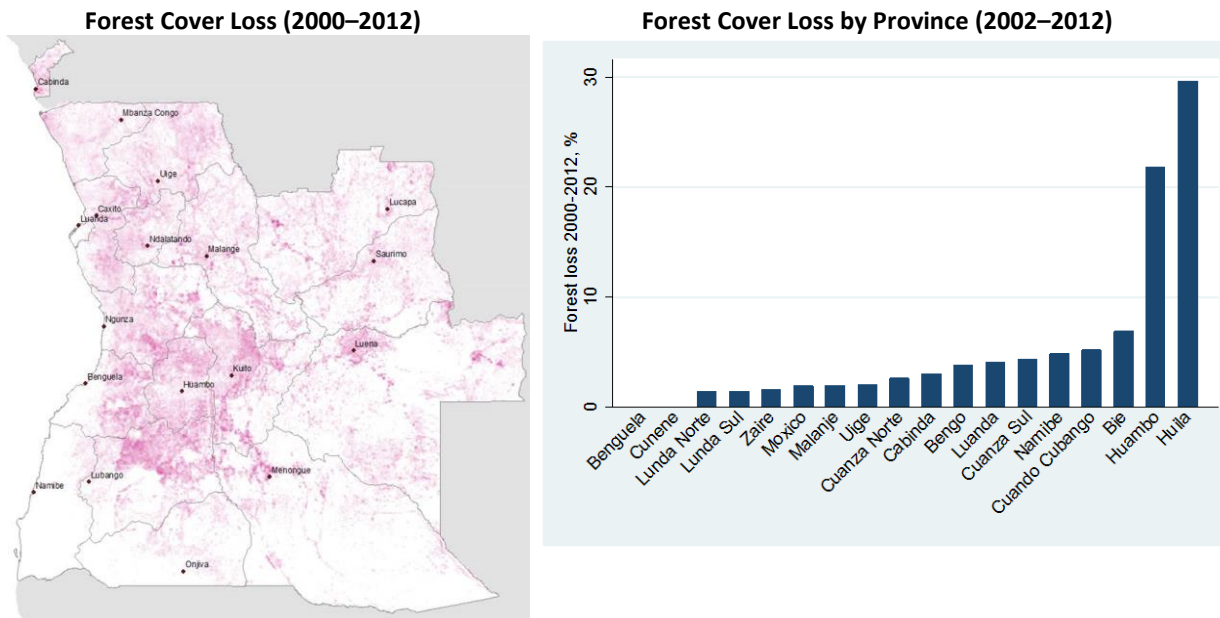
<sup>12</sup> The cost of the civil conflict was immense for Angola, with the country's infrastructure and institutions left in shatters. Between half a million and a million people were killed, with uncounted numbers of wounded and maimed. An estimated 3.7 million people became refugees or were internally displaced, often migrating to the cities (World Bank, 2018e).

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concentrated along the coastal zone, where there is a general scarcity of vegetation cover. The pressure put on forests is intense and extensive as people satisfy their basic needs: forests constitute the main source of income for many families living in rural areas, specially undertaking charcoal production activities. The degradation caused by urban inhabitants for energy supply and to some extent for agriculture is significant around the country’s main cities and towns. Most charcoal is harvested by rural dwellers and then sold in nearby towns or in the regions’ capitals, especially Luanda and Benguela. Severe degradation has already moved charcoal production several hundred kilometers away from Luanda to the central plateau, the main charcoal production area where charcoal demand is having a particularly adverse impact on the natural Miombo woodlands, particularly of the Huambo and Huila provinces.

**Illegal logging of valuable timber also leads to forest degradation**, and though considered isolated and not significant, there is currently no information on the extent of this problem.

**Figure 2. Forest Cover Loss by Area and Province**



Source: World Bank 2018c.

Source: World Bank 2018c.

**Deforestation leads to soil erosion and water loss, with negative impacts on soil fertility.** The long-term consequences are a complete loss of ecosystem function and productivity, increasing the vulnerability of settlements to floods and droughts and affecting rural livelihoods. These add to the land degradation being experienced in Angola because of unsustainable agricultural practices; overfertilization; overgrazing; and mismanagement of water, mining, and infrastructure development.

**Deforestation is also a significant contributor to climate change.** Though there are no officially reported figures, based on satellite imagery and proxy values for Angola, greenhouse gas (GHG) emissions from deforestation in 2017 could be estimated at 77 million tCO<sub>2</sub>e (World Bank 2018c). Forests is one of two sectors through which Angola has committed to reduce its GHG emissions, as submitted to the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC). On the other hand, the adverse impacts of climate change exacerbate the degradation of forests because of increasing

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temperatures and changing fire regimes, especially in areas where summer rainfall is projected to decrease. Moreover, climate change exacerbates environmental degradation by making floods, droughts, and wildfires more frequent.

#### 2.1.6. Forests in Angola - Opportunities

**The potential of the forest sector in Angola has not yet been realized.** However, the recent legislative reforms and a renewed interest provide important opportunities for supporting growth in the sector. The following opportunities could be explored to support the endeavors of the government, the private sector, and other actors:

##### **Technical Assistance and Building the Sector's Knowledge Base**

- To inform actions in the sector and to better mobilize support, it would be important to assess the forest sector's contribution to the national economy (contribution to GDP, employment, and trade) as well as to other economic sectors (for example, agriculture and energy). In addition, it would be important to assess the sector's contribution to livelihoods and its potential to address poverty, where the role of non-timber forest products—a significant contributor—should also be measured.
- To complete the information on the status of forest resources nationally, it would be important to support the finalization of the subsequent phases of the national forest inventory. This would provide definitive information necessary to guide private investment (definition of areas that could be allocated to forest concessions) and inform other important management decisions (such as the conservation and sustainable management of areas considered to be of value in terms of biodiversity, for example). The first phase of the inventory built important capacity within the administration, which should be sustained and reinforced.
- The first national forest inventory provides the basis to develop a national forest monitoring system that could be designed to continuously produce high-quality and reliable data on the status of forests. Within this system, subsequent forest inventories should be conducted in addition to satellite land monitoring to support the monitoring and regulation of activities in the sector.
- Forests is one of two sectors through which Angola has committed to reduce its GHG emissions. The government is open to accessing international funding mechanisms that support these efforts (such as Reducing Emissions from Deforestation and Forest Degradation [REDD+]<sup>13</sup> and carbon markets). Technical assistance would be important to enable Angola to prepare and access these financial mechanisms.

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<sup>13</sup> Reduced Emissions from Deforestation and Degradation (REDD+), an international scheme within the UNFCCC to pay countries for carbon conserved in forests.

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### **Institutional Strengthening**

- The sustainable management of forests and the strengthening of the timber value chain to supply the national and export markets can only be ensured through a strong and active IDF. To this end, it would be important to undertake a viability analysis of the potential of IDF to operate self-sufficiently through forest exploitation licensing and other fees (including possibly from investments of other sectors that may have an impact on forests, such as mining).
- Similarly, it would be important to strengthen the technical capacity of IDF staff—both within the central administration and in the field—to enable the implementation of government programs and the enforcement of regulation. Adequate incentives to implement the law should also be considered.

### **Investments**

- Several initiatives to establish commercial plantations have been planned but currently lack access to finance. Private sector's commercial aspirations could be supported through fiscal incentives or access to financing. In addition, the government envisions several large-scale afforestation initiatives<sup>14</sup> that could be enabled in similar ways.
- Similarly, efforts to enhance the domestic value chain and incentivize the processing of forest products could be supported, particularly for local consumption where there is demonstrated demand (as is the case for construction and furniture), thereby reducing imports.
- The international timber market is dynamic and could represent a significant opportunity to generate revenues. It is estimated that, in a favorable situation, the wood sector<sup>15</sup> could reach an export value of US\$240 million by 2028 (up to 1.5 percent of the export balance). The main destinations could be the European Union (EU), Asia, and the United States. These different markets have different requirements, and changes in the international timber trade (through the establishment of bans on illegal timber) increase the level of requirements for Angola's products. To enable access to these markets, the implementation of a forest certification scheme could be explored.
- Similarly, the potential of non-timber forest products (which are important for the rural economy) has not been explored. The resource is underutilized, and its value has not been quantified. A study on the value chain and valorization of these products could help promote their sustainable use in the benefit of rural communities, which often do not benefit from timber rents. Promoting access to finance and markets, and technical assistance for business development is key to stimulate rural entrepreneurship and forest-based small businesses.

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<sup>14</sup> These include 50,000 ha to be planted in 10 years, 140,000 ha of eucalyptus to be planted in Huila province, 60,000 ha of eucalyptus to be planted in Kuando-Cubango province, and 25,000 ha to be planted in Malange province in the next five years.

<sup>15</sup> Defined as the manufacture of wood and wood products and furniture manufacture.

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## 2.2. Wildlife and Protected Areas

**Angola has one of the richest biodiversity and diversity of ecosystems in Africa.** These range from the Namib desert in the southwest and the Okavango and Zambezi basin in the southeast, to the tropical forest in the Congo basin in the northeast. There are 15 biogeographic units in Angola, of which the most widespread are the miombo woodlands of the central plateau and the western Congolian forest-savanna mosaics in the north.

### 2.2.1. Wildlife and Protected Areas Contribution at Local, National, and Global Levels

**Wildlife and protected areas play an important role in Angola,** though their contribution to the economy is not well documented. Although hunting and trade of bushmeat are illegal in Angola, bushmeat represents an important source of protein and income for about 60 percent of the population, mostly rural dwellers (Government of Angola, 2014).

**Wildlife can also be an important driver of tourism and economic growth in Angola.** In Africa, it is estimated that 110 protected areas that harbor elephants received 2 million visitors a year. Further, the tourism value of a single living elephant to travel companies, airlines, and local economies is estimated to be US\$1.6 million over its lifetime (David Sheldrick Wildlife Trust, 2013).

**Angolan wildlife and protected areas are receiving increasing attention by the government as they are considered important resources to support people's livelihoods and the diversification of economy through nature-based tourism – a key sector identified for economic development.** In recent years, the Government of Angola has enhanced the management of the country's protected areas and developed the policy and legal framework to rehabilitate the national system of protected areas and unlock the potential for nature-based tourism, and engaged in international agreements to foster regional collaboration on these issues.

### 2.2.2. Wildlife and Protected Areas - Status and Trends

#### *Wildlife*

**Angola is the second richest country in Africa in endemic species.** Habitats such as the Mayombe forests, the Namib desert, and the Kavango Zambezi floodplains are a repository of an enormous and rich variety of animal and plant species. Angola has around 8,000 plant species, of which 1,260 are endemic. It also has 275 recorded mammal species, the most famous of which is the endemic giant sable, the national symbol. Moreover, Angola has over 900 species of birds and harbors 92 percent of southern Africa's avifauna. In addition, Angola is rich in aquatic species and ecosystems (marine, coastal and inland) and hosts one of the most productive fisheries in the world. More than 420 fish species and 655 crustaceous species, as well as whales, dolphins, and turtles, have been identified in Angolan waters. Wide estuaries such as those of the Congo, Dande, Cuanza, and Cunene rivers are the basis for the intrinsic network of species and support important food chains that are essential to people's livelihoods, including those of neighboring countries. Mangroves can be found along the Angolan coastline and constitute transition



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ecosystems of biological and ecological importance, as they provide harbor and nurseries for crustaceans and fish of economic and touristic importance (Government of Angola, 2009), in addition to coastline protection.

**Various mammal species have and continue to face decline due to pressure from human activities.** 50 of the 275 mammal species identified in Angola are recognized by the government as facing risks (Government of Angola, 2014). Though there has been no survey to determine the status of rhinos in Angola since independence, it is probable that both black and white rhinos are extinct (Brett, 2018). Mostly killed during the civil war, the current population of elephants in Angola is estimated at 3,396 ± 1,562 individuals that mainly concentrate in the southeast corner of the country (Thouless *et al.*, 2016). The giant sable antelope, Angola’s national symbol, is reported to currently have a population of no more than 150–200 individuals<sup>16</sup> and survives in only two protected areas, the Cangandala National Park and the Luando Special Reserve. Previously considered to be extinct, Western lowland gorillas and chimpanzees are found in low numbers – estimated at 1,652 and 1,705 individuals, respectively (Strindberg *et al.*, 2018) and only in Cabinda (Maisels *et al.*, 2016). The African lion population in the southeast corner of Angola is estimated at only 10–30 individuals (Fulton *et al.*, 2016); however, their presence is also reported elsewhere in the country.

**Table 2: Reported or Estimated Numbers of Main Angolan Wildlife**

Species	1960	1971	1989	2005	2013 onwards
<i>Rhinos</i>		30	6	-	-
<i>Elephants</i>	-	70,000	-	-	3,396 ± 1,562
<i>Giant sable</i>	3,000	-	-	-	200
<i>Gorilla</i>	-	-	-	3,086	1,652
<i>Chimpanzee</i>	-	-	-	-	1,705

### Protected Areas

**The network of protected areas currently covers 13 percent of the national territory (equivalent to an area of 156,909 km<sup>2</sup>).** In 2011, the network increased by 6 percent with the creation of three new conservation areas of 74,580 km<sup>2</sup> (the Mayombe, Luengue-Luiana, and Mavinga national parks). In total, there are 14 conservation areas, including nine national parks, four natural reserves, and one natural park, see Table 3. The new National Biodiversity Strategy aims to include all of the country’s biomes in the network of protected areas.

**Table 3. Status of Angola’s Protected Areas (adapted from PESAP, 2018)**

#	Name	Area (km <sup>2</sup> )	Year Established	Province
<b>National Parks</b>				
1	Iona	15,150	1957	Namibe

<sup>16</sup> P. vaz Pinto, personal communication.

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2	Cameia	14,450	1957	Moxico
3	Kissama	9,960	1957	Luanda
4	Bicuar	7,900	1964	Huíla
5	Mupa	6,600	1964	Cunene-Huila
6	Cangandala	630	1970	Malanje
7	Maiombe	1,930	2011	Cabinda
8	Lungué- Luiana	45,818	2011	Kuando-Kubango
9	Mavinga	46.072	2011	Kuando-Kubango
<b>Strict Nature Reserves</b>				
10	Luando	8,280	1957	Malanje/Bié
11	Ilhéu dos Pássaros	2	1973	Luanda
<b>Partial Reserves</b>				
12	Namibe	4,450	1963	Namibe
13	Búfalo	400	1971	Benguela
<b>Regional Nature Parks</b>				
14	Chimalavera	150	1974	Benguela

**Angola has no marine protected area (MPAs) at present.** With the productive Benguela current system in the south, the government recognizes the crucial role of MPAs in protecting marine resources and, with the support of GEF resources, the government is currently working on creating the country's first MPA, to be contiguous with the Iona National Park in Namibe province.

#### *Transfrontier Conservation Areas*

Angola has embarked on the establishment of TFCAs with its neighbors, including:

- **The Iona/Skeleton Coast TFCA**, linking Angola's Iona National Park to Namibia's Skeleton Coast Park (Box 1);
- **The Kavango Zambezi (KAZA) TFCA**, the largest protected area in the world, spanning five countries (Angola, Botswana, Namibia, Zambia, and Zimbabwe) through several parks, as well as community and private areas (Box 2); and
- **The Mayombe TFCA**, comprising three national parks in three countries (the Mayombe National Park in Angola, the Luki National Park in the Democratic Republic of Congo, and the Dimonika National Park in the Republic of Congo).

The KAZA and Iona/Skeleton Coast TFCAs host critical biodiversity and have significant potential for tourism, particularly because they can benefit from regional tourism from the neighboring countries (Botswana, Namibia, Zambia, and Zimbabwe) and from regional cooperation in managing the tourism asset (biodiversity) through joint law enforcement patrols, restocking wildlife, and joint marketing to international tourism markets.



**Box 1. Iona/Skeleton Coast TFCA**

The Iona Park covers an area of 15,150 km<sup>2</sup>. There are around 3,300 people living inside the park, who hold 70,000 cattle. There are also indigenous communities present in the park, known as the Himbas, who live off rainfed maize and beans cultivation.

The Iona/Skeleton Coast TFCA is the oldest desert in the world and holds a variety of endemic species of both flora and fauna providing an immense potential for high-end tourism.

Drought and irregular rainfall are affecting the agricultural productivity in the area. Calamities are frequent due to the desert, and often, the government supports the population by providing food. Due to an increase in the population living in the national park, there has been an expansion of settlements and an increase in human-wildlife conflict, illegal camping, deforestation, and overgrazing causing land degradation and a decrease in wildlife.

There are four guide companies present in the park both from Namibia and Angola. The Government of Angola established four camping sites near local communities to integrate them into tourism activities. Communities interact with tourists as guides and craft vendors and assist their needs (water supply and firewood collection). In 2018, the campsites received 120 tourists. Other revenues come from sport fishing.

Ondjila otchili (the Road of the truth), is a brand used by Yona Safaris, the company that provides training to local communities taking care of the campsites. The Chinunga camp site located in Cunene River was installed to open a new tourism venture as it was isolated from Iona Headquarters but being accessed by visitors from Namibia.

**Box 2. KAZA-TFCA**

The KAZA-TFCA covers 444,000 km<sup>2</sup>, making it the largest protected area in the world, and comprises multiple resource use areas including national parks, game reserves, forest reserves, conservancies, wildlife management areas, and communal lands.

Main tourist attractions include Victoria Falls (a World Heritage site and one of the seven wonders of the world) and the Okavango Delta (the world's largest Wetland of International Importance as recognized by the Ramsar Convention). KAZA is expected to be the ecosystem that sustains the world's largest elephant population (around 250,000).

Tourism in the Namibian and Botswana parts of KAZA is mostly nonconsumptive (photographic). Medium- to large-scale lodges and camps with 10–30 beds serving mid-market and upmarket tourists are common.

In Angola, the tourism plan of the touristic development node of Okavango projects the establishment of 700 beds and the arrival of almost 60,000 tourists in 2020 and over 90,000 tourists by 2030.

To accelerate the economic maximization of Angola's KAZA component, a commission was created in September 2018 to establish by 2019 a National Agency for the Management of the Okavango Region (ANAGERO). This agency will be responsible for promoting the integrated and sustainable management of the Okavango component of Angola; promoting tourism in accordance with sound environmental protection and preservation practices; and enhancing the socioeconomic, cultural, landscape, and scientific values of the region.

### 2.2.3. Institutional, Legal, and Policy Framework on Biodiversity and Protected Areas

**The Ministry of Environment is responsible for instituting policies and coordinating biodiversity conservation and its management.** Within the Ministry of Environment, INBAC has the mandate to

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implement and coordinate Angola’s conservation policies and the management of the national protected areas network. Wildlife conservation outside protected areas is under the responsibility of the Ministry of Agriculture and Forests, which provides hunting licenses for wildlife.

**The policy and legal framework for wildlife conservation and protected area management includes the Basic Law of the Environment (1998), the National Forest, Wildlife, and Conservation Areas Policy (2010), and the Forest and Wildlife Act (2017).** These laws are reinforced by strategic action plans. The National Biodiversity Strategy and Action Plan (NBSAP), which defines strategies and priority actions on biodiversity conservation, serves as the national mechanism for the implementation of the Convention on Biological Diversity. The 2014-2020 NBSAP recognizes the potential to reduce unemployment and poverty by creating jobs along biodiversity conservation priorities. The Plan for the Expansion of the Network of Protected Areas (PLENARCA) aims to expand and enhance the protected area system. Moreover, the PND aims to increase the number of big animals in national parks to at least 1,400 by 2022 (introducing 100 animals per year), as well as having 210 management infrastructures in operation in national parks and creating three new protected areas.

**The Strategic Plan for the Protected Areas System (*Plano Estratégico para o Sistema de Áreas Protegidas, PESAP, 2018*) is the most recent policy document for protected areas.** The PESAP underscores Angola’s participation in international conventions and treaties and foresees the expansion of conservation areas and MPAs to 17 percent and 10 percent, respectively, by 2028. Moreover, the plan focuses on enforcing measures that would allow fund raising, training of staff, and strengthening of institutions such as INBAC. It also emphasizes the importance of maintaining the socioeconomic and financial sustainability of conservation areas through specific objectives (table 4).

**Table 4. PESAP Objectives for Community Participation and Financial Sustainability of Conservation Areas**

General Objective	Specific Objective
<b><i>Ensure responsive, inclusive, participatory, and representative decision-making with the involvement of communities in management.</i></b>	• Encourage the involvement of communities and other stakeholders in the planning and management of each conservation area, promoting participation and recognition of their rights, responsibilities, and benefits sharing.
	• Increase awareness and promote a change of mindset of beneficiaries residing in conservation areas and surrounding areas, through information, education, and communication.
	• Promote and strengthen innovative systems of inclusive governance, as well as the development and adoption of standards, criteria, and best practices recommended for the management and governance of the conservation area system.
<b><i>Ensure the maintenance of the socioeconomic and financial sustainability of each conservation area.</i></b>	• Improve infrastructures to facilitate the mobility conditions in the territory and public spaces and other points of interest.
	• Implement mechanisms for equitable sharing of costs and benefits arising from the management of conservation areas.
	• Develop and implement mechanisms for attracting financial resources, both external and internal, using innovative financial instruments and environmental marketing at international and national levels.

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#### 2.2.4. Wildlife and Protected Areas in Angola - Challenges

**Angola's protected areas system is chronically underfunded.** It is estimated that the national system of protected areas needs US\$18 million for 2018–2020, which is not fully available from the Government of Angola. As a result, Angola's protected areas network is challenged by degraded infrastructure and weak management, which leads to environmental degradation and exposes wildlife to poaching.

**There is limited institutional capacity and lack of coordination among institutions.** INBAC has limited capacity to address threats to wildlife and protected areas. Moreover, government departments and sectors tend to work independently and there are coordination challenges between institutions on biodiversity conservation, including, for instance between the Ministry of Environment and the Ministry of Agriculture and Forests, the latter in charge of fauna management outside protected areas.

**Poverty and growing population pressure pose threats to biodiversity preservation, particularly** because of slash and burn agriculture into forest areas, overgrazing and illegal hunting. Loss of forest cover not only reduces habitats for biodiversity but can also result in land degradation with impact on agriculture and water flows.

**As other counties in southern Africa, Angola is facing a wildlife poaching crisis, linked to international wildlife trade.** Illegal wildlife poaching and trade often targets 'charismatic species' such as elephants and rhinos, which has led to a steady decrease of their population (including in the KAZA area), and even to extinction (as is the case with black rhinos) (Government of Angola, 2006). The killing of highly endangered species can reduce income from activities such as tourism, with accompanying impacts on incomes and taxation. In Africa, these losses have been estimated to range from US\$0.64 million to US\$4.26 million in 2016 (World Bank, 2018f). There is also bushmeat hunting by local villagers both for subsistence and commercial goals.

**Human wildlife conflict is on the rise in Angola, since the end of the civil conflict in 2002.** Conflicts include human losses, crop damage and loss and infrastructure damage, linked mostly to elephants, but also hippos, crocodiles, seals, leopards, and wild boars. In protected areas, human-wildlife conflicts have been registered mostly in agricultural areas and areas close to water.

**Data on wildlife are scarce and remain outdated.** One of the main challenges to adequate monitoring and data collection is the lack of local capacity to carry out such activities. There is an urgent need for collecting and updating national data and to strengthen the institutional capacity in terms of staffing and training, as already recognized by the government in the 2006 NBSAP. There are also no national biodiversity monitoring systems in place to help monitor wildlife and biodiversity population trends.

**Participation of local communities in protected areas management is not adequate.** The policy and legal framework of Angola does not clearly address the participation of local communities in the management of protected areas. The National Policy of Forestry, Wildlife, and Protected Areas identifies the difficulties in stimulating the involvement of traditional authorities and the participation of local communities and CSOs in the decision-making process for managing wildlife and protected areas. It also acknowledges that the legislation does not provide clarity on the access modalities of local communities to the resources and the benefits derived from its use, which is a source of conflict. Finally, community rights to natural resources are often weak and do not protect them from dispossession by outside users.

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**Angola does not have any legislation for game ranching or exploitation of wildlife in captivity. However, there are several private operators who capture animals and manage them in fenced areas.** Some cattle farms started to use wildlife present in their farms and eventually adopted game ranching as the preferred economic activity, given its profitability. This is a similar trend also experienced elsewhere in southern Africa, particularly in South Africa and Zimbabwe.

#### 2.2.5. Wildlife and Protected Areas in Angola - Opportunities

Angola is making positive progress toward the protection of its biodiversity. As it approves various policy and legal instruments, most notably the PESAP, it is receiving attention from development partners and attracting technical and financial support. The following opportunities could be explored to address the main challenges identified for biodiversity conservation:

- **Financing opportunities.** There are a number of opportunities to mobilize resources to sustainably finance the network of protected areas in Angola, including: (a) domestic resources through the Environmental Fund (which manages resources from environment license fees); (b) international cooperation (including multilateral financial mechanisms, such as the GEF, donor funding and other partnerships); (c) the marketing and sale of services, which may be composed of fees, and other products associated with tourism; (d) the promotion of public-private partnerships (PPPs) for park management (also known as co-management), similar to what other countries in the region have been doing (such as Mozambique and Zambia); and (e) payment for ecosystem services (PES) from different sources (such as water and carbon), potentially even from neighboring countries.
- **Institutional capacity strengthening.** Strengthening the technical capacity of all institutions involved in protected area management and wildlife, particularly INBAC but also including the Ministry of Agriculture and Forests, would be important. This could be done by mobilizing external technical assistance and implementing a comprehensive training program that integrates various skills (such as administration, financing, procurement, sociology, and economics) to support the protected areas system. Angola counts with specialized schools in wildlife management and conservation that could be used as a resource, including the School of Environment of Cuando Cubango, and there are also networks of schools in the region (the Southern African Wildlife College and the Mweka College). Angola could also promote South-South knowledge exchanges, such as those that the World Bank has been promoting in a programmatic way with Brazil. These opportunities should also benefit
- **Promoting a landscape approach around protected areas, and multi-stakeholder participation.** Given that the current legal framework is unclear on the participation of communities in the management of natural resources, Angola should develop legislation that would guide their involvement, including through land use planning, the sustainable use of natural resources, and mechanisms for community participation in decision-making processes. In addition, inter-sectoral coordination should be reinforced to promote an integrated landscape approach in the management of protected areas jointly with rural development objectives, addressing also the presence of people in national parks.

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- **Strengthening efforts to address the illegal exploitation and trade of fauna and flora and address human-wildlife conflicts.** Angola participates in international efforts to this effect and should continue investing in the implementation of international conventions, especially the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and its mechanism for Monitoring of Illegal Killing of Elephants (MIKE). The unit to combat illegal exploitation of natural resources should also be strengthened with resources and staff, and the coordination with relevant institutions should be improved to review and strengthen the implementation of laws targeting environmental crime. In addition, Angola should develop a national strategy to manage human-wildlife conflicts that is aligned with the PESAP, defining how to prevent and manage cases in a way that wildlife and people's lives and goods are protected. The sustainable utilization of wildlife (such as sport hunting) could also be explored as this would increase the economic opportunities for the country and to local populations.
- **Strengthening monitoring systems to improve data availability on biodiversity, including through the use of modern technologies.** Monitoring of species is critical for conservation management. Building the capacity for monitoring and assessing biodiversity with the use of digital technology plays an important role in management planning processes. The use of mobile phones, remote sensing data, and Geographic Information System (GIS) to track habitat changes and population sizes in conservation areas are considered useful tools to improve the gathering of key data. At the national level, Angola should consider developing a research policy that defines the priorities for data collection. Partnerships between INBAC and national and international research institutions, public and/or private, should also be promoted to this end.
- **Promoting game ranching under a sustainable quota system.** The Government of Angola has received a proposal from the South African Farms Association, which showed interest in starting game ranching in the Cuando Cubango province. However, this intention is still at early stages. When the Luengue Luiana and Mavinga parks were established, the Government of Angola eliminated the two controlled hunting areas of the country and designated them as parks, thus eliminating sports hunting. The government continues issuing hunting licenses for subsistence hunting through IDF. Sports hunting could also be resumed when wildlife stock levels are appropriate, and under a sustainable quota system, as practiced in other countries in the region.

## 2.3. Nature-based Tourism

### 2.3.1. Nature-based Tourism – Global and Regional Trends

**Tourism is an engine for jobs, exports, and investments worldwide.** In 2016, travel and tourism generated US\$7.6 trillion (10.2 percent of global GDP) and an estimated 292 million jobs globally (World Bank 2018a). A strong tourism sector contributes in many ways to a country's economy by raising national income, increasing export revenues, creating a significant number of jobs and promoting economic diversification. Moreover, through its links to other sectors, tourism has a high multiplier effect in relation to other industries (3.2 as compared to 2.70 in other industries, according to the World Travel and Tourism Council [WTTC]) and makes other indirect contributions to the economy.

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**Tourism can also help revive and develop remote rural areas.** Rural tourism contributes significantly to economic diversification by creating jobs for rural youth, ethnic minorities, women, and marginalized people; alleviating poverty; and preserving heritage and culture. China, Panama, and Spain are examples of countries that have been promoting rural tourism as an effective way to alleviate poverty.

**In southern and eastern Africa, tourism depends almost exclusively on nature, especially wildlife, and has been growing.** Tourism makes an important contribution to the GDP of several African countries (Table ). Wildlife-watching tours represent 88 percent of the total annual revenues from tourist visits to Africa for participating tour operators. The average daily price for a wildlife watching tour is estimated at US\$433, excluding flights, and ranges from US\$243 (for the ‘standard’ market segment) to US\$753 (for the ‘luxury’ market segment) (UNWTO, 2015). Evidence from six southern African countries (Botswana, Malawi, Namibia, South Africa, Zambia, and Zimbabwe) found that employment and income generated for local communities from ecotourism reduced poverty levels (World Bank, 2017). In Namibia, communal conservancies are considered one of the most innovative conservation models in the world, not only protecting the nation’s wildlife but also enabling innovative tourism partnerships that create jobs and attract visitors attracted to the flourishing wildlife populations.

**Table 5. Contribution of tourism to the GDP of selected African Countries and legislation**

Country	Contribution of Tourism to GDP (%)	Procedures for concessioning within PAs	Capacity to market tourism	Participation of communities
Botswana	11.3	Since 2017, the Ministry of Land Management, Water and Sanitation Services has been given executive power to award and value of tourism concessions in wildlife management areas, proposed by the BTO, with no community (trust) involvement. The Community Trust as recipients become party to these BTO land-bank agreement with a private tourism operator who they were not involved in selecting.	Botswana Tourism Organization (BTO) operates as independent body for tourism promotion and development funded through income from concession fees and tourism tax.	Community Trust formal partners in (hunting) concessions across Wildlife Management Areas; Joint Venture agreements for lodges including agreements with BTO as state owned initiator of tourism enterprises that attract different (new) market segments and/or are located in lesser-visited areas.



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Country	Contribution of Tourism to GDP (%)	Procedures for concessioning within PAs	Capacity to market tourism	Participation of communities
Mozambique	7.2	Concessions are tendered through an open competitive process, recent legislation adopted (with IFC support).	Limited capacity, lack of inter-sectoral coordination between Ministry of Tourism / Tourism Institute and Ministry of Environment / Protected Areas Agency.	Communities around protected areas receive 20 percent of revenues generated by the PA (including from hunting blocks). Some tourism concessions are awarded to communities, who can then operate JV with the private sector.
Namibia	14.7	No concessions within protected areas, tourism facilities managed by the Namibia Wildlife Resorts. Concessions within conservancies negotiated directly with communities.	Namibia Tourism Board as independent entity responsible for tourism promotion funded through a tourism levy on accommodation.	Communities organized in demarcated areas as conservancies are provided with economic user rights from wildlife and tourism across communal areas and are given concession rights (including selected protected areas) that they can outsource to bona-fide private sector operators.
South Africa	9.1	Leading country in concessioning tourism facilities within protected areas. Concessions are tendered through an open competitive process.	South African Tourism is the tourism marketing arm of the South African government, which works in close collaboration with the private sector.	Weighting concessions procurement to encourage community involvement in the concessions process developed by South African National Parks, bids included 'empowerment plans' which received 20% of the weighting during the proposal reviews. Elements included were: 1. Shareholding by historically disadvantaged individuals or groups; 2. Training and affirmative action in employment and; 3. Business and economic opportunities for local communities.
Zimbabwe	10.9	Concessions within some protected areas (such as Victoria Falls) have been awarded in a somewhat discretionary manner causing concerns from private sector and NGOs,	Zimbabwe Tourism Authority is responsible for marketing Zimbabwe as a tourist destination	Zimbabwe's national community-based natural resource management initiative, the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), is a multi-level programme aimed to change the governance of wildlife, seeking to integrate local communities into the wildlife and natural resource management governance system (weak state after a 'lost decade')

Source: Adapted from UNCTAD 2017.

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### 2.3.2. Tourism AND Nature-Based Tourism in Angola – Status and Trends

**Tourism in Angola is still limited but holds significant potential.** Angola’s tourism sector is small in terms of jobs and GDP contribution and its recent evolution is linked to oil sector performance as most foreign visitors are business travelers. According to the World Travel and Tourism Council data, tourism contribution to GDP in 2016 was 1.8 percent and the sector generated 136,500 jobs (1,5 percent of total employment). The number of tourist arrivals reached 357,000 in 2016, well below its peak of 650,000 in 2013, with the slump being associated with the economic crisis. Before, the sector had been growing steadily (from a very low base) since the end of the conflict in 2002. International tourist receipts were US\$628m in 2016, compared to US\$1.6bn in 2014, and represent 2.2 percent of total exports (UNWTO, 2018). However, this is expected to grow significantly in the coming years. Travel and tourism is expected to attract US\$788 million in capital investment by 2028, with an increment of 1.5 percent per year (WTTC, 2018). Angola’s domestic tourism (including foreigners working in Angola) has increased drastically and is now more significant than international tourism.

**Tourism is one of the Government priority sectors in the strategy to diversify exports.** The 2011-2020 Tourism Master Plan presents a gradual approach for improving the competitiveness of the tourism sector, starting with domestic tourism, followed by regional tourism and international tourism. By 2020, the Tourism Master Plan aims at creating one million direct and indirect jobs, generating revenue of US\$4.7 billion and attracting 4.6 million domestic and international tourists. In addition, Angola aims to increase the tourism’s sector contribution to GDP to 3.21 percent by 2020, for which an investment of around US\$1 billion in basic infrastructure is estimated (Government of Angola, 2011). In addition to improving the means of transportation and support infrastructure, the country also plans to focus on reducing the price of international flights and public transportation, and revisiting the visa requirements for entering Angola (Jacinto and du Preez, 2018). Three tourism development poles were prioritized in the tourism strategy: Cabo Ledo (a coastal resort near Luanda), Calandula (site of majestic waterfalls in Malanje Province), and Okavango (an area of rich biodiversity in the Okavango-Zambezi river basins).

**Nature-based tourism – a subsector of overall tourism – is a keystone of tourism development in Angola, given the country’s unique landscape, biodiversity, and costal zones, and protected areas play a key role in that.** The protected areas prioritized by Angola as tourist destinations and for promoting investments include KAZA (Luengue Luiana Park, particularly), which is also one of the tourism poles (mentioned above), and Iona (transfrontier with Namibia’s Skeleton Coast).

**The private sector in Angola is investing in some of Angola’s protected areas; however, this is still very limited.** In contrast, private sector investment in nature-based tourism is increasing significantly in neighboring countries of the region, such as Botswana, Mozambique, Namibia and South Africa. This represents an untapped potential for Angola.

**More recently, the Government of Angola has been making efforts to promote tourism investments in protected areas,** including by hosting an international conference with private investors, NGOs and multi- and bilateral agencies in December 2018. Several private sector companies participated in the conference, and in a business attraction roadshow to selected protected areas that the Ministry of Environment led in December 2018. The regulatory framework would need to be developed, as well as the capacity to manage the transactions. However, there are concerning indications that the Government of Angola may



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adopt an inadequate approach to engaging with the private sector in tourism – that of building infrastructure first, and then concessioning it to the private sector to operate.

### 2.3.3. Nature-based Tourism in Angola – Challenges and Opportunities

**The general challenges to tourism identified by the Country Private Sector Diagnostic (CPSD) apply to nature-based tourism, and include:**

- Visa policy and investment policy have discouraged tourism development but are currently being reformed: The 2015 Private Investment law required minimum participation of 35% by Angolan shareholders in investments in the hotel and tourism sector. This restriction has been lifted in the new law. Presidential Decree 56/18 of February 20 allows citizens from 61 countries, including the European Union, to obtain visa on arrival as of March 30, 2018. This builds on the elimination of visa requirements for citizens of South Africa and Mozambique. Nonetheless, it is unclear that this measure is being applied in practice, as most visitors still go to the consulate to apply for their visa.
- Foreign exchange issues and large players leaving the country: despite being a foreign exchange generating sector, the difficulty to repatriate earnings has disrupted the tourism sector. Accor Hotels pulled out of a deal with Angolan insurance and investment company AAA Activos to open 50 hotels under the IBIS brand in the country by 2017. The hotels have been built and currently sit empty (Macau Hub, 2018). Emirates cancelled its strategic partnership with Angolan national carrier TAAG and reduced frequency of flights due to issues of repatriation. The contract with Emirates had allowed to balance losses by TAAG and to develop a strategy to turn Luanda into a transit hub for destinations like Lisbon, Johannesburg. Recently British Airways stopped serving Luanda.
- High prices relatively to the quality: the overvalued kwanza, high expatriate population, and limited offer, among other factors, drove up the price of accommodation and food in Angola. For years, Luanda has featured as the costliest city for expatriates due to the high-cost of goods and security (Mercer, 2017). The depreciation of the kwanza could contribute to lower prices of tourism and hospitality services, although high end hotels have largely kept their rates in foreign exchange. In some areas, such as taxi services, reliable providers are appearing in the market, contributing to improve service and lower prices.
- Lack of infrastructure and limited organized tourist offerings: the existing international airport in Luanda has quality of service constraints (construction of a new international airport with capacity for 13 million passengers is being finalized). Despite large investments, the road network suffers deficiencies. Of the 30 airports in the country, 17 have been rehabilitated, but only 12 of these receive regular commercial flights from the national air carrier TAAG (U.S. Department of Commerce, 2018). Overall, outside of Luanda the offer of hotels, restaurants and other tourism services is limited. Health care services outside Luanda are limited.
- A bad image fueled by a history of conflict and news of corruption: Angola continues to be associated with conflict, land mines, and more recently with oil-driven corruption. There are also security concerns related to armed robberies (U.S. Department of State, 2018). Changing this negative image may take time, but there are examples of countries, like Colombia and Rwanda, that have overcome

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**Despite these challenges, the private sector, both domestic and international, has expressed interest in investing in nature-based tourism in Angola.** Table shows some of the potential domestic investors. In addition, renowned international investors, such as Wilderness Safaris, Chobe Holdings, and the Singita group, have also expressed interest in investing in protected areas in Angola and recently conducted prospecting visits to the country. Whether these opportunities will translate into concrete investments will depend on (a) the regulatory framework for concessions in protected areas, (b) Angola’s capacity to negotiate, and (c) market trends.

**Table 6. Firms Investing in Protected Areas in Angola**

No.	Firm	Origin	Conservation Area Concession	Province
1	DNH-HOLDING	National	Iona National Park	Namibe
2	AJIBEL	National	Cameia National Park	Moxico
3	EUCALYPTUS-TALL	National/foreign	Kissama, Kangandala, and KAZA	Luanda, Malange, and Cuando Cubango
4	CAMBOTE RESORTS	National	<i>Reserva Parcial do Búfalo</i>	Benguela
5	MAJORIS/TEKBIO	National	<i>Rio Cunene e Zona do Tchivale</i>	Cunene
6	NGASSAKIDILA	National	Iona	Namibe
7	MAIOMBE-Lodge-Ecoturismo	National	Kissama, Kangandala, and Bicular	Luanda, Malange, and Lubango
8	MBUTA & NDENGUE	National	Ambriz	Bengo
9	Tchangana	National	Quiçama	Luanda

Source: Based on interviews conducted by the authors.

## 2.4. Fisheries

*The following section is adapted from the ASA Central African Coastal Fisheries (P165882), which assessed the fisheries sector of countries within COREP—of which Angola is a part—and drew up recommendations for sustainable fisheries management, including through greater regional cooperation.*

### 2.4.1. Fisheries Contribution at Local, National, and Global Levels

**Fisheries make a significant contribution to the economy of Angola and are a major source of livelihoods.** The fisheries sector accounted for 3.5 percent of GDP in 2015, 96 percent of this contribution coming from marine fisheries while inland fisheries and aquaculture remain largely underdeveloped. Fish and fish products accounted for 11 percent of all non-oil exports in 2015. About 150,000 people are estimated to work in the sector, including in fishing, gathering, processing, and selling. Angola’s fisheries sector is strategic for food security, livelihoods and the national economy and it makes an important contribution to the GDP relative to other countries in the region (table 7).

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**Table 7. Contribution of fisheries to the GDP of selected African countries**

Country	Contribution of fisheries to GDP (%)
Angola <sup>a</sup>	3.5
Cameroon <sup>a</sup>	1
Democratic Republic of Congo <sup>a</sup>	<1
Equatorial Guinea <sup>a</sup>	<1
Gabon <sup>a</sup>	<1
Namibia <sup>b</sup>	3.5
Republic of Congo <sup>a</sup>	2
São Tomé and Príncipe <sup>a</sup>	5
South Africa <sup>c</sup>	<1

Sources:

- World Bank. 2018. Central African Coastal Fisheries - Pathways to improve fisheries governance and increase economic benefits for countries of the Gulf of Guinea Regional Fisheries Commission (COREP)
- Republic of Namibia. Ministry of Fisheries and Marine Resources. Annual Report 2012-2013.
- SADC-EU Economic Partnership Agreement. 2017.

**National accounts downplay the larger role of the fisheries sector in the economy, especially in countries in which the overall food and fisheries system has become more sophisticated and more integrated.** The importance of fisheries in a country's economy is traditionally measured as the direct contribution of primary production activities to the overall GDP. While national accounts measure the value added of primary production activities, any contributions of the sector extending beyond primary production, in particular through the food industry, are captured in the value added of other sectors including manufacturing, trade, and services.

**The development of the marine fisheries sector could significantly contribute to Angola's economic growth and diversification, and improve its trade balance.** The country imports a high share of its needs, from agricultural products to consumer and capital goods. In 2017, agricultural and food imports corresponded to 29 percent of imports, including large quantities of fisheries products. The most important import is horse mackerel (*carapau*): 74,231 tons (US\$121.7 million) in 2015 and 37,248 tons (US\$82.1 million) in 2016, as the domestic production does not cover the national demand; as well as salted cod, frozen tilapia, and dried and canned fish, representing 84,913 tons (US\$86 million) in 2015 and 20,341 tons (US\$22.8 million) in 2016. In terms of exports, Angola's fisheries products contribute to 11 percent of the non-oil exports of Angola in 2015 (with oil contributing with 88 percent of total exports). These mostly include frozen fish and fish meal in quantity, and crustacean (crabs and shrimps) in value. Export value of fisheries products in 2015 was US\$45.8 million; therefore, Angola has a commercial deficit for fisheries products of US\$161.9 million that year.

**The Government of Angola prioritizes the fisheries and aquaculture sector to diversify its economy, reduce imports, increase exports, and alleviate poverty.** This is embedded in Angola's PND as well as in the 2018–2022 Fisheries Management Plan (*Plano de Ordenamento de Pescas e Aquicultura*). The government's vision is one of integrated management of all marine resources, which is line with the Bank's proposed *blue economy* approach. In addition, fishing products are identified as a priority within the Program to Support Production, Exports Diversification, and Import Replacement (*Programa de Apoio a Produção, Diversificação das Exportações e Substituição das Importações*, PRODESI), which sets, as one of

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its several objectives, to double the production of and at least halve the flow of foreign exchange resources to priority products by 2022.

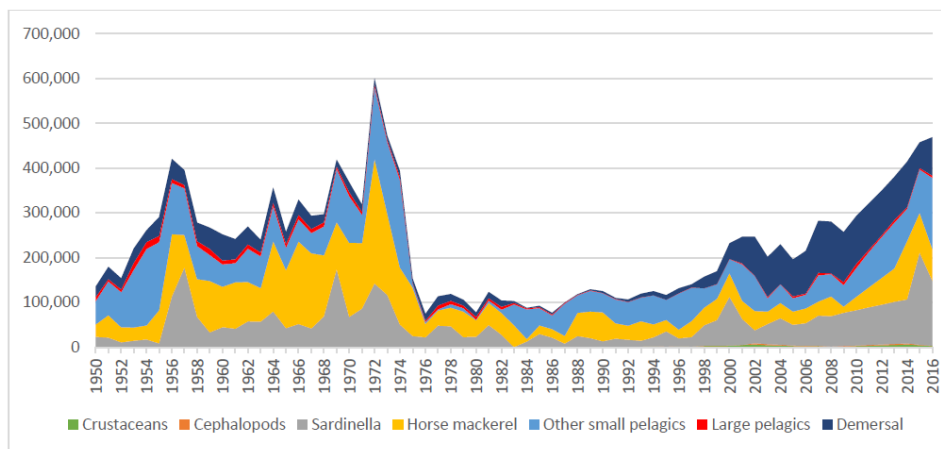
#### 2.4.2. Fisheries in Angola - Status and Trends

**The fisheries sector in Angola is advanced relative to other countries in the region in terms of fleet, organization, management, surveillance and control, and research.** There is relatively high human and institutional capacity. The management of the industrial and semi-industrial components of the fishery sector is based on fishing rights, licenses, and a total allowable catch (TAC) and quota system, which depends on data and continuous research. The artisanal sector is regulated through the licensing of vessels and is quite informal and relatively weaker in terms of capacity, organization, infrastructure, and data. The resource appears to be relatively well managed, but some stocks appear to be fully fished or overfished and are vulnerable to changes in environmental conditions, particularly climate change, which points to the need to improve governance, stock assessments and research of environmental conditions affecting fish stocks.

**Angola has a relatively long maritime coast and an EEZ.** It also benefits from areas of high biological productivity, resulting in important fisheries resources, both pelagic and demersal. With a coastline of 1,600 km and an EEZ of 497,800 km<sup>2</sup>, Angola sits between two large marine ecosystems and benefits from ocean upwellings, owing to the Benguela current system in the south—one of the most productive ecosystems in the world—and the Guinea current system in the north.

**Angola has the largest marine fisheries production within the COREP region, averaging 413,468 tons over the last five years (2012–2016).** In 1971, national catches peaked at around 600,000 tons and rapidly decreased thereafter, remaining low until the early 2000s due to the ongoing civil war in the country. Following the end of the conflict, the sector has been rebuilt and catches have been steadily increasing (Figure 3).

**Figure 3. Catch of Main Species Groups in Angola between 1950 and 2016 (in tons)**



Source: FAO.

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**Stock assessments<sup>17</sup> indicate that species important for food security and exports are fully exploited or overexploited (horse mackerel and sardinella) or showing reductions in overall biomass (demersal species).** Assessments are conducted annually by the National Fisheries Research Institute (INIP), mandated to provide scientific advice and recommendations on the status of the stock. For several years, Angola has taken strict management measures to reduce the fishing pressure on the stocks, in particular through a management system based on quota. INIP continues to recommend implementing and strengthening conservation and management measures and adopting a precautionary approach to ensure the sustainability of the stocks.

- Horse mackerels (*carapau*) include two species commercially exploited in the waters of Angola, and these resources are shared with the Republic of Congo, the Democratic Republic of Congo, and Gabon in the north and Namibia in the south. The stock of carapau is assessed to be overexploited, at a level 15 percent above the maximum yield per recruit. At the end of the 1990s, catches of carapau were as high as 140,000 tons annually, but they have been steadily decreasing to 90,000 tons in 2015 and 75,500 tons in 2016, and Angola now imports carapau from other countries in Africa to sustain the demand on the national market.
- Reported catches of sardinellas vary between 100,000 tons and 150,000 tons per year, estimated to be exploited at levels close to what is considered sustainable. These resources are also shared with the neighboring countries in the north of Angola. Most of these species are primarily being caught by industrial and semi-industrial purse-seine vessels, 80 percent and 97 percent for horse mackerels and sardinellas, respectively.
- Demersal fish are part of multispecies fisheries and are caught by all sectors of the fishery (artisanal, semi-industrial and industrial), and stock assessment methods require robust fisheries statistics, not available in Angola. Therefore, analysis of the status of these resources is based on trends in biomass indices. Biomass indices of demersal fish for 2016 show a reduction of 22 percent in the overall biomass compared to 2015.
- Crustacean resources are not large in quantity, but they are highly valuable, especially some species for export markets. Nowadays, both the coastal and deep-sea shrimp are showing signs of full exploitation without any possibility for further expansion. The deep-sea crab, West African geryon, which used to be a bycatch of other fisheries, has drastically increased since 2011, by 393 percent from 2011 to 2015. Since 2015, however, indexes of abundance are showing a declining trend, suggesting a possible overexploitation of the stock.

**Regional stock assessments by the International Commission for the Conservation of Atlantic Tunas (ICCAT) indicate that certain tuna species (bigeye tuna and yellowfin tuna) are overfished.** In the Atlantic Ocean, bigeye tuna is overfished and overfishing is occurring as current catches, 78,500 tons, are above the maximum sustainable yield (MSY), 76,000 tons, and the TAC set by ICCAT, 65,000 tons. Yellowfin tuna is overfished, but overfishing is not occurring. The catch, 139,300 tons, is above the MSY, 126,000 tons, and the TAC set by ICCAT, 110,000 tons, and the catch continues to increase relative to previous years. The Eastern Atlantic skipjack stock is not overfished, and overfishing is not occurring.

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<sup>17</sup> Stock assessments are conducted by the INIP based on regular scientific surveys and fisheries statistics.

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**Climate change is expected to have significant implications for Africa's marine ecosystems and fish stocks, including Angola's, due to their extreme environmental conditions, the array of human disturbances they are exposed to, and the high sensitivity of their biota to environmental fluctuations since species are close to their environmental limits.** Though the region is highly productive due to major ocean currents, human activities (such as pollution, coastal development, overfishing, illegal foreign fishing, and unsustainable discarding), and changes in environmental conditions (such as increases in sea surface temperature, ocean acidification, decline in oxygen content, rise in sea levels, and increased ultraviolet [UV] exposure) adversely affect marine organisms and the associated ecosystem goods and services derived from them, such as fisheries. The maximum catch potential of almost all African countries is projected to undergo major declines under a high GHG emission scenario by the end of this century, and local extinction rates are expected to increase considerably throughout the coast of Africa.

**Climate change thus accentuates the urgent need for comprehensive fisheries governance reform.** These impacts, which will inexorably become more severe, are, and will continue to be, felt in fisheries that are already in a state of severe overexploitation (90 percent of the stocks are fully exploited or overexploited). Further, these impacts remove the 'safety net' that previously allowed depleted stocks to recover post-overexploitation. Fundamental reforms thus require two parallel and simultaneous paths: stock recovery (giving depleted and overexploited stocks a chance at a comeback) and restoration of the integrity of critical habitats on which the stocks depend (including, but not limited to, mangroves, coral reefs, and seagrass beds).

#### *Structure of the Fisheries Sector in Angola*

**The fisheries law in Angola defines three main types of commercial fishing fleets** actively operating in Angola: artisanal fleets comprising vessels up to 14 m in length overall, semi-industrial fleets comprising vessels above 14 m and up to 20 m in length overall, and industrial fleets comprising vessels above 20 m in length overall. In addition to those fleets, there is also subsistence fishing made up of nonmotorized canoes spread along the coast of Angola in coastal communities.

**Semi-industrial and industrial fisheries are responsible for most of the catch (about 60 percent), with artisanal fisheries responsible for the remaining.** This could be underestimated in official statistics, as there is currently no statistical system in place for artisanal fisheries. The industrial sector targets mainly pelagic species (horse mackerel and sardinella) and deep-sea shrimps. The semi-industrial sector targets mostly small pelagic fish but also demersal species. The latter are also targeted by the artisanal sector given that it is more of a coastal resource.

**Industrial fishing in Angola is carried out mostly by foreign vessels, which work in joint venture with Angolan individuals or companies and hold fishing rights and purchase quotas quarterly.** In 2017, 118 industrial fishing vessels were authorized to operate in Angolan waters, 55 percent of which were foreign vessels (mostly from Italy, Poland, Portugal, Russia, Spain, South Korea, and Taiwan) while the remaining were flagged in Angola. These vessels mainly target small pelagic species, in particular, horse mackerel and sardinella, as well as deep-sea shrimps. Horse mackerel is mostly consumed domestically. Sardinellas are supplied to fish meal plants in Benguela and Namibe, or frozen or canned for human consumption. Deep-sea shrimps are frozen onboard fishing vessels and exported, mostly to Spain. This fleet is based in Luanda, Namibe, and Benguela and operates in the more productive southern part of the country.



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**In addition, foreign tuna purse seiners, 38 in 2017, mostly European, operate seasonally from June to September targeting tropical tuna species (yellowfin, skipjack, and bigeye tuna).** The vessels do not call in Angola ports for unloading, transshipping, bunkering, or resupplying, but rather return to their base in Dakar for these operations. Until 2004, the EU and Angola were party of a fisheries agreement covering tuna, demersal species, and shrimps. The annual financial compensation of the latest agreement, 2002–2004, received by Angola under this agreement was €15.5 million paid by the EU plus the cost to the boat owners. The agreement was not renewed after 2004 to provide a better revenue to nationals by mandating foreign vessels to operate through joint ventures.

**Semi-industrial fishing is mostly carried out by domestic fishing vessels (90 percent in 2016), which own fishing rights and purchase quotas quarterly for their targeted species.** In 2017, 92 semi-industrial fishing vessels were authorized to operate in Angolan waters, mostly from Luanda, Namibe, and Benguela. Most of the fleet targets small pelagic fish, that is, sardinella and horse mackerel, as well as coastal shrimp. Fish caught by semi-industrial vessels are kept fresh on ice onboard and sold at unloading places to fishmongers, processors, and retailers and eventually frozen or processed on land. These products are sold almost exclusively on the local market. Coastal shrimps are mostly sold and consumed in the domestic market, mostly in urban centers, sold to the middle and upper class.

**The artisanal fleet in Angola is significant, spreading all along the 1,600 km of coast with 7,860 vessels and involving more than 85,000 people in the value chain.** In 2016, over 380,000 people were living around 151 artisanal fishing landing sites in 19 municipalities in the seven coastal provinces of the country, the most important ones being Luanda and Benguela. Over 15 percent of this population is directly involved in the fisheries sector, representing around 60,000 people, most of them being fisherfolks (30,091), processors (18,230), and resellers (6,300). Including the indirect stakeholders along the value chain, it is more than 85,000 people that are dependent on marine artisanal and subsistence fisheries. The vessels are mostly targeting demersal species, including snappers, groupers, lobsters, and so on, with the majority using gillnets as fishing gear. Boat owners are almost exclusively males, with only 6 percent of the vessels being owned by females.

**The artisanal sector is significant in terms of production and food security but quite informal and relatively weaker in terms of capacity, organization, infrastructure, and data.** Products from artisanal fisheries are mostly consumed locally. The fish are landed and sold in the 151 landing sites along the coast, sometimes in markets, but most of the time directly on the beach. Fishmongers, women in their large majority, buy the fish from the fishermen, upon their return to the beach, and resell it to other fishmongers or retailers or directly to consumers. Fish is also sold processed, mostly salted and dried or smoked for conservation. The artisanal fleet is not supported by much infrastructure, and hygiene and handling conditions in landing sites are poor, with little use of ice leading to low quality and postharvest losses. There are only 16 markets, for 151 landing sites, and 40 ice plants, 90 percent of them being in the three main provinces serving the semi-industrial fleet (Benguela, Luanda, and Namibe). Similarly, cold storage is only available in Benguela and Namibe, being used mostly by the semi-industrial fleet. Though efforts have been made to supply the artisanal sector with much-needed infrastructure, most of them were either never used or failed due to lack of management and high operating and maintenance costs.

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### *Infrastructure*

**Angola has only one dedicated industrial fishing port in Luanda.** Other ports also have the capacity to receive industrial vessels, but they are commercial ports, not dedicated to fishing activities, and missing critical infrastructures. Semi-industrial vessels, however, can unload their catch directly on smaller docks, or on the beach, using smaller vessels where they transship their catch. Artisanal vessels unload directly on the beach along the coast of Angola. In recent years, a project from the African Development Bank developed “support centers” to Artisanal Fisheries, which aim to support the fleet and to commercialize and process the products. In total, 16 of these centers have been built under this project in the different provinces of Angola. Despite these efforts, most of them were either never used or failed due to lack of management and high operating and maintenance costs, pointing out to infrastructure management challenges.

**Eight shipyards can service the artisanal and semi-industrial fleets, and two drydocks can support the industrial fleet.** This is not enough to provide adequate services to the fleet operating in Angola, and many vessels do their maintenance in Namibia. There is therefore the potential for more of these infrastructures in Angola, with the associated potential for job creation and economic benefits.

### *Mariculture*

**Marine aquaculture is a nascent sector in Angola with a strong potential that could be further supported by incentivizing private sector investment.** This could be important to enhance production of fisheries products such as bivalves (oysters and mussels), demersal fish, and shrimps. Angola has assessed the feasibility of production methods and developed investment plans that are pending private financing. Angola has also been supported by the Government of the Republic of Korea with the construction in 2016–2017 of a training facility for mariculture in Ramiros. The main challenge hampering the development of aquaculture in Angola currently is the lack of investment and access to credit by the private sector.

#### 2.4.3. Institutional, Legal, and Policy Framework for Fisheries

**The fisheries law in Angola was adopted in 2004.**<sup>18</sup> The law and its implementing text provide a framework for the management of the industrial, semi-industrial, and artisanal fisheries as well as for investment in the sector, including aquaculture. In 2018, the ministry in charge of fisheries prepared a new Fisheries and Aquaculture Master Plan (*Plano de Ordenamento das Pescas e Aquicultura*, POPA), defining the strategy for the development of the sector for the next five years. The policy and legal framework would need to be updated to integrate new orientations from this new plan in 2018–2022.

**The legal framework includes an annual decree setting management measures for the year at three levels:** (a) measures controlling the fishing effort and number of vessels for each fishery; (b) measures controlling the catch, including TACs; and (c) technical measures controlling certain aspects such as closure periods and areas, minimum sizes, and characteristics of fishing gear. In addition, the legal framework is completed with several texts including an annual decree setting authorized import quantities of horse mackerel, for example, 70,000 tons in 2018 and a decree on measures to prevent,

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<sup>18</sup> Lei n.6-A/04, Lei dos recursos biológicos aquáticos.



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combat, and eliminate illegal, unreported, and unregulated (IUU) fishing, which includes many provisions of the FAO Port State Measures Agreement (PSMA) to which Angola is not a party.

**Access to the fisheries is centered around fishing rights, that is, right to fish or sell marine resources, licenses, and quotas which are only available to fishing right holders.** Angolan fisheries are not open access; rather, access to the fishery is given through 20-year fishing rights. Fishing rights are granted to the commercial, artisanal, or subsistence sectors. Fishing rights are given in priority to individuals or companies from Angola and to those who have infrastructure on land, such as processing plants or wholesale. In practice, no foreigner currently holds fishing rights in Angola. Fishing rights provide holders with a long-term vision that incentivizes investments in the sector, and their management could be improved to provide valuable tenure rights to their holders.

**A TAC is set annually for the different commercial species targeted based on scientific advice provided by INIP.** TACs are distributed as quotas to holders of industrial and semi-industrial fishing rights, and their compliance is monitored through logbooks, inspections in port and at sea, and other Monitoring Control and Surveillance (MCS) tools. Angola stands out in the region as having the research capacity to carry out stock assessments and monitor the ocean ecosystem, directly providing scientific advice to the ministry in charge of fisheries. In 2018, Angola reinforced its research capacity with a new research vessel, the Baia Farta, a state-of-the-art tool for fisheries research. The vessel is scheduled to conduct at least six research campaigns per year for a total of 220 days at sea.

**Artisanal fisheries and foreign tuna fisheries are not attributed with quotas; instead, a limit on the number of licensed vessels is set annually by decree.** In 2018, the maximum number of artisanal vessels licensed was set to 5,500, and foreign tuna vessels at 100 vessels.

**Additional management measures are taken and enforced mostly on the industrial and semi-industrial fleets.** This includes closure periods (*veda*) for the different species and gear specification, for example, mesh size, fishing area, minimum size, and so on. These measures are controlled through vessel monitoring system, onboard observers, and patrols.

**The Ministry of Fisheries and the Sea, responsible for the management of the marine resources in the waters of Angola, has relatively a strong capacity and enjoys a good level of partnership with the fishing industry.** The ministry includes several national directorates and agencies with specific mandates.

#### 2.4.4. Fisheries in Angola - Challenges and Opportunities

**The growth of the fisheries sector (particularly value addition) is challenged by a lack of foreign currency and access to credit, which limits domestic investment, as well by limited public funds.** Various opportunities exist for enhancing the value chain and value addition for the benefit of the national economy. Domestic trade in fish is currently hampered by a lack of processing, transportation, and storage facilities.

**The management of the sector could be improved by strengthening data collection and statistics and strengthening management systems, particularly for the artisanal sector.** Statistics from the artisanal fleet are poor, and a data collection system needs to be developed. There are very limited data from the

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artisanal sector as there is no collection system in place, and data are not integrated into the stock assessments.

**A good statistical system that allows covering all sectors of the fishery is necessary to better assess the stock status and enforce the quota-based management system in Angola.** A robust, integrated, and cost-effective fisheries information system (FIS) for the collection and analysis of fisheries statistics is the basis for the management of the sector and for the collection of associated fees, taxes, and other fiscal and non-fiscal revenues. This includes an up-to-date vessel registry, national catch and effort database, and other biological and socioeconomic data. Sound data are important to assess the contribution of the sector to the economy and monitor its economic performance. Such a system could be improved through close to real-time reporting for the industrial and semi-industrial fishery to monitor the quota consumption of the vessels.

**Currently, industrial and semi-industrial vessels are reporting through logbooks feeding a database, which is used to monitor the compliance of the quota of each individual vessel.** Landings are monitored at ports to verify and validate the data provided, but as the data are not integrated, cross-validation is often difficult. The government is currently developing an electronic system where all the information pertaining to the fishing fleet will be integrated and shared among the different entities of the fisheries administration. The new database will include vessel registration, license, quota, and catch reporting and, coupled with the Electronic Reporting System (ERS) and Vessel Monitoring System (VMS), will provide a powerful tool to the National Fisheries Directorate for the management of the fisheries. The system is first being developed for the industrial and semi-industrial fleet but could be extended to the artisanal fleet in the future.

**Co-management systems, by which management responsibilities are shared between government and local communities, could be developed in Angola using the experience and lessons drawn from other regional fisheries programs.** Tenure rights for small-scale fisheries would need to be further developed to provide robust access and management systems to the fisheries, which rights holders could capitalize on. This would involve strengthening the control of small-scale fisheries with the registration of artisanal vessels and artisanal fishers, which could provide them with security by professionalizing their activities and eventually improving social protection, insurance, access to credit, and so on. Finally, as part of improved management, greater transparency within fisheries should be promoted. This includes opening access to fisheries data, lists of licensed vessels and associated payments, and so on. Improved transparency is promoted in all fisheries as a necessary tool for sustainable fisheries management, with initiatives such as the Fisheries Transparency Initiative (FITI). Finally, the development of multi-annual management plans would provide stakeholders with long-term visibility of the sector.

**In Angola, the level of organization of the artisanal and semi-industrial sectors is low, and could be strengthened.** Stakeholders could access financing as a group rather than as individuals to share costs and improve efficiency, to collaborate with governmental institutions, and to invest and manage production or processing infrastructure. This is key in the development of co-management activities, for example, when communities or associations are delegated with some management responsibilities. The organization of the sector is also paramount for improving the value chain and addressing other issues such as hygiene and food safety, which could also affect consumers and access to profitable markets.

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**Facilitating investments in critical infrastructures is needed for a variety of functions, particularly for the artisanal sector.** There is potential to crowd-in private sector investment in these activities if there is an enabling business environment, good access to credit, and entrepreneurship and to develop some public infrastructure to support coastal communities, with proper management systems in place. Throughout Africa, many examples exist of investments in such infrastructure having resulted in failure. Fish centers and landing sites with ice machines, and cold storage often remain unused or close a few weeks or months after their inauguration. However, well-designed infrastructure with good management practices and a realistic business model can be impactful for beneficiary communities. This infrastructure is critical for:

- **Reduce postharvest losses, thereby reducing physical losses and losses in the value of the product.** This is a critical aspect in the artisanal fisheries sector of Angola, mainly due to a lack of conservation facilities for fish along the value chain and inefficiencies in the trade system. Ice, for example, is largely inaccessible to most fishermen and fishmongers.
- **Improve processing to generate and keep more value in the local economy and incentivize exports.** This could apply for both the artisanal and the industrial sectors (that is, dried, smoked, and salted fish; frozen/canned products; fishmeal; and fish oil).
- **Facilitate critical operations.** For example, shipyards should retain the fleet in country for their maintenance and repair, to create jobs and economic benefits for the government and the operators.

**As part of the POPA 2018–2022, the Ministry has identified the critical infrastructure investments that would require to be built over the next few years to improve the value chain of the industrial, semi-industrial, and artisanal fisheries.** These include port facilities, landing sites, and support centers as well as processing plants that would create the most value addition to the products (for example, canneries).

**Supporting the development of marine aquaculture (mariculture).** This is important to enhance the production of fish whose biomass is limited (or started to decrease), in anticipation of an increasing demand for fish products due to population growth and tourism. Angola is a large importer of fish products, sometimes coming from Africa but often from China. As countries are looking to improve their trade balance and reduce their commercial deficit, the development of aquaculture, including mariculture, would avoid covering the supply gap in fish supply through imports. Aquaculture is a sector that is generally driven by the private sector, however, with investment conditions enabled by governments that reduce the associated risks. Currently, there are potential projects by the private sector that have been developed for Angola for bivalves, shrimps, and fish, with the potential capacity of around 40,000 tons, that could start when the conditions are propitious.

### *Regional Cooperation*

COREP is an intergovernmental organization and specialized agency of the Economic Community of Central African States (ECCAS), which brings together six member countries: Angola, Cameroon, Gabon, the Democratic Republic of Congo, the Republic of Congo, and São Tomé and Príncipe, as well as Equatorial Guinea as an observer. Its mission is to assist its member states to protect and enhance fisheries resources in a sustainable way and to promote the development of aquaculture with a view to maximize the exploitation of the potential of aquatic environments and to guarantee the well-being of

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the greatest number of inhabitants. Its area of competence is the Gulf of Guinea and inland waters of its member states.

**Regional cooperation is important due to the presence of shared resources and the synergies and efficiencies that could be realized through joint efforts in various aspects of fisheries management.**

Generally, the COREP countries consider regional cooperation as important for the sustainable development of their fisheries sectors but are far from realizing it to their full potential. Regional cooperation could be enhanced through the areas identified below. For some of these, COREP has developed regional strategies; however, funds are needed for their implementation and for COREP to fulfill its coordination role. In addition, Angola expressed the desire to play an active role in regional cooperation and pointed to various services (for example, for scientific research and surveillance) that could be made available to COREP countries.

- **Development and implementation of regional management plans.** COREP has defined regional management plans for shared stocks, that is, sardinellas and horse mackerel. A management plan for sardinellas has already been adopted; however, it is not yet implemented.
- **Sharing and centralization of data at the regional level.** COREP has defined a plan to create a regional register of vessels, which will be based on the national registers of its member states to inform actions against IUU fishing, such as port state measures. To be effective, support should be provided for improving the vessel registries of member states where needed. In addition, COREP counts with a statistical system and a regional protocol for data exchange on fish production. A pilot activity supported by the FAO tested the collection of data by digital tablets in the COREP countries, which could be built on with further support and by strengthening a regional database for analysis and stock assessment.
- **Research on the status of fish resources.** Because some marine resources are migratory and shared between countries (that is, sardines, horse mackerel, and tuna), research efforts and data could be shared and coordinated. Areas of research could include status of shared stocks, vulnerability of the sector to environmental conditions (current modifications, climate change, and so on), and innovations in production (that is, marine aquaculture). In the region, only Angola has research capacity in the maritime sector through the INIP, which carries out stock assessments and monitors the ocean ecosystem, directly responding to and providing scientific advice to the ministry in charge of fisheries. Angola has research assets that could be used to gather some of the necessary data for stock assessments or the production of stock status indicators in the region while allowing Angola to rent this asset.
- **Regional MCS.** Deterring and eliminating IUU fishing requires regional coordination, intelligence gathering, and data sharing. Given the associated costs of some MCS tools, in particular marine and aerial patrols, there are also efficiencies that could be explored. COREP has defined a regional MCS strategy that would establish an MCS unit within the secretariat to work with the Regional Center for Maritime Safety in Central Africa (CRESMAC) and its Multinational Coordination Centers (MCCs). The CRESMAC is a multinational body composed of civil servants and military staff from the administrations of its member states based in Pointe-Noire, Republic of Congo, and is responsible, at the strategic level, for controlling the maritime space of ECCAS states in the Gulf of Guinea. It relies on its MCCs—located in

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Cameroon, already functioning, and Angola, soon to be installed—to plan and implement operations and tactics. This regional strategy would pool the surveillance resources of the countries of the region and strengthen the cooperation needed to combat IUU fishing and other fisheries crimes.

### 3. Strengthening Environmental Management in Angola

**The Government of Angola is investing heavily in infrastructure development, but lack of adequate human and technical capacity for social and environmental management could exacerbate risks of irreversible environmental degradation and social conflicts.** In turn, these can deter responsible investors from participating in the investments or delay their implementation. There is also a risk to the World Bank from potential noncompliance under the World Bank’s Environment and Social Framework. The government’s capacity is limited when it comes to addressing the negative externalities of infrastructure projects through policies and institutional arrangements. This is due to understaffing, poor financing, and underequipped staff of the National Environmental Assessment Directorate (the Environmental and Social Impact Assessment [ESIA] arm of the Ministry of Environment). Moreover, current personnel lack social and occupational safety background or training. In addition, there are no logistics and annual operating budget to ensure environmental compliance and enforcement. According to Table , the Government’s development priority to invest in energy, commercial agriculture, and water infrastructures for economic growth will continue to result in greater institutional capacity-building needs in relation to safeguards issues and environmental risk management. Accurate environmental data to inform the preparation of investment projects are challenging to obtain due to the lack of technical skills and equipment.

**Table 8. Overview of International Bank for Reconstruction and Development (IBRD) Active and Pipeline Projects**

Practice Area	Status	Value of Project (US\$, millions)	Timeline
Energy and Extractives	Pipeline	250	Appraisal, 2020
Water	Active	350	Closes in 2024
Agriculture	Active	250	Closes in 2024
Social protection and Labor	Pipeline	320	Closes in 2024

#### 3.1. Policy Framework and Legislation

The Government’s environmental strategies, policy framework, and management approaches and priorities are spelled out in two major documents—the National Environmental Management Program (*Programa Nacional de Gestão Ambiental*, PNGA) and the National Environmental Strategy (*Estratégia Nacional do Ambiente*, ENA). The PNGA emphasizes the need for implementing an environmental management strategy to protect the environment.

**The cornerstone of environmental legislation in Angola is the Environment Framework Law (EFL).**<sup>19</sup> This law and relevant subsequent decrees establish the general conditions for public consultations,

<sup>19</sup> No. 5/98, of June 19, 1998. *Lei de Bases do Ambiente*.

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enforcement, and the prevention and control of pollution and lay down the requirements before environmental assessments.

**The regulation on Health and Safety Conditions at Work<sup>20</sup> covers occupational safety issues.** It enforces the rights of workers to a safe and hygienic work environment, ensuring proper equipment and workplace safety. The decree also entails the rights to adequate housing in accordance with hygiene and sanitation standards. The identified gap in the regulation is that officials from the Ministry of Labor are not involved in the ESIA report review process. Their regular inspection activities are usually focused on mining and petroleum projects, excluding projects financed with bilateral and multilateral loans.

**Concerning civil society participation, the 1992 Constitution guarantees “freedom of expression, meeting, demonstration, association, and other forms of expression” of citizens.** Law No. 3/06, stipulates the regulation of the right of participation and intervention of associations of environmental defense in environmental management. The Local Administration Law 02/07 considers social issues and presents opportunities for environmental, climate, and disaster resilience mainstreaming.

**A total of 271 environmental licenses have been issued and 257 projects have been subject to ESIA between 2016 and 2017.** The ESIA guidelines consist of a general guideline to assist developers and practitioners with the ESIA process in Angola. Other specific ESIA guidelines exist for the water, mine, gas pipeline, road, and house-building sectors. However, there are no ESIA standards for the fisheries sector, for infrastructure development in and around protected areas, and for coastal tourism.

### 3.2. Institutional Arrangements for ESIA

**The responsibility for ESIA falls under the National Directorate for Prevention and Environmental Impact Assessment (DNAIA).** The Directorate is responsible for the review of draft ESIA reports, and consists of 13 technical staff who work under two departments, namely the Department of Assessment and Licensing of EIA and the Department of Prevention and Environmental Audits.

**The National Institute for Environmental Management<sup>21</sup> is responsible for the implementation and monitoring of environmental policies.** Other duties include mainstreaming environmental policies into sectoral policies, reporting on the state of environment, pollution prevention and control, establishment and maintenance of the environmental management systems, regulation of environmental risk, and emergency planning and management. Within the Institute, the Environmental Monitoring Unit is responsible for monitoring the mitigation measures in ESIA reports.

**The Environmental Fund<sup>22</sup> was established as a financial mechanism to support management of the environment at the national level.** The purpose of the fund is to provide financial support to management of the environment and management of protected areas. The fund was set up to receive income from, among others, (a) environmental licenses, (b) environmental fees, (c) environmental fines, and (d) environmental certification fees. The fund also considers biodiversity offsets, whereby the private sector

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<sup>20</sup> Decree No. 31/94 of August 5, 1994

<sup>21</sup> Approved by the Presidential Decree No. 11/11 of January 7, 2011

<sup>22</sup> Approved by Presidential Decree No. 09/11 of January 7, 2011.



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would provide funds to compensate for impacts on biodiversity caused by their activities through biodiversity protection elsewhere. The Ministry of Finance provides financial oversight to the fund.

### *ESIA Review for Investment Projects and Inter-sectoral Cooperation*

**The Ministry of Environment (DNAIA) is responsible for reviewing ESIA reports, and occasionally appoints a technical evaluation committee for support.** Since the DNAIA does not coordinate environmental compliance activities with other institutions with direct and indirect environmental responsibilities, other sectoral ministries are not formally involved. The Ministry of Labor appoints accredited third parties to undertake occupational safety due diligence. A single investment project may then be subject to compliance requirements from more than one sector of the Ministry of the Environment, as well as from other government agencies.

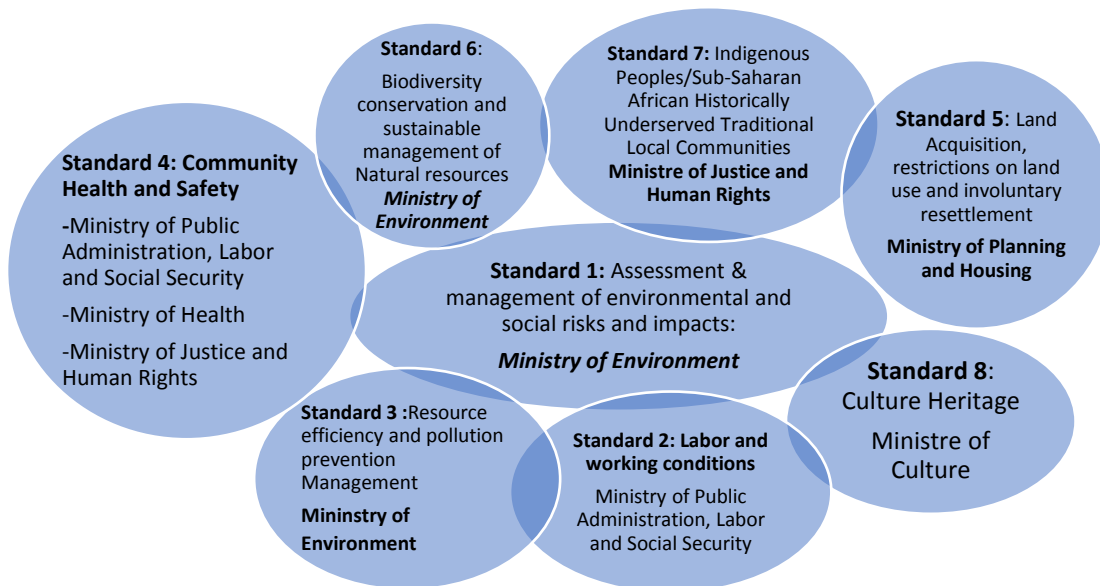
**The World Bank's new ESF requires intersectoral coordination and the integration of environmental and social issues into other sectors.** The ESF delegates more responsibilities to the government in implementing IBRD-financed projects, and places emphasis on Grievance Redress Mechanisms (GRMs), Gender-based Violence (GBV), labor, working conditions, and occupational safety, among other issues that are handled by sectoral ministries other than the Ministry of Environment. These aspects have not been well addressed in traditional ESIA reports in Angola, and current IBRD projects under implementation in Angola have recorded an incomplete understanding or knowledge of hazards and risks (World Bank 2017). Other sectoral ministries will have growing roles and responsibilities in overseeing and managing potential risks and impacts associated with investment projects. Like the Ministry of Environment, other sectoral ministries are understaffed, poorly financed, and underequipped and usually rely on consultant firms to perform environmental and social due diligences.

**Sectoral responsibilities for environmental and social management in Angola involve a multiplicity of ministries and government agencies.** The current organizational review structure of the ESIA portrays a weak inter and intra-sectoral collaboration and, per the ESF requirement, and does not foster the integration of both environmental and social considerations. Applying the ESF would contribute to bridge this gap by building cross-sectoral institutional and technical capacity in environmental and social management. Substantial and high-risk projects applying the ESF would contribute to building capacity in the host ministry and key environmental and social management related ministries and agencies. For example, the Electricity Sector Improvement Project (P166805), which applies the ESF, has committed financial resources to building the environmental and social management capacity of the Ministry of Energy and Waters and other key ministries (Ministry of Environment, Ministry of Labor).

**Furthermore, the ESF enables the government and the World Bank to consider applying relevant parts of the Government's Environmental and Social Framework to a project** when this is likely to (a) address the risks and impacts of the project, and (b) enable the project to achieve objectives materially consistent with the World Bank's Environmental and Social Standards. Assessment and use of Angola's Environmental and Social Framework would strengthen Angola's approach to managing environmental and social risks and impacts. Identifying gaps in Angola's framework, and selecting and implementing measures and actions to address such gaps during project preparation or implementation, would enhance ownership and capacity, strengthen institutions and provide opportunities for collaboration and learning.

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**Figure 5. Institutional responsibilities for environmental objectives and concerns in Angola**



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**Figure 5. Institutional responsibilities for environmental objectives and concerns in Angola**

### *Provincial and Municipal Authorities role in ESIA*

**In the last few years, Angola’s leadership has demonstrated commitment toward the gradual implementation of a decentralization process.** This is reflected in its medium- and long-term strategic documents (Felicio and Yilmaz 2009). A few environmental and natural resources management responsibilities (such as fishing, sanitation, cleaning, and maintenance of beaches and bathing resorts) were transferred to provincial and municipalities authorities. The provincial governments do not issue environmental licenses and do not report to the central government. The environmental licensing procedure should be revised to include periodic reporting requirements, which could ensure the flow of information and enable government entities to prepare their audit and conduct spot-check of the accuracy of the proponent’s work.

**Several central ministries currently deal with local issues, and the distribution of responsibilities among provinces, municipalities, and communes involves risks of concurrent competencies.** From an environmental management perspective, environmental licenses are only issued at the central level. Monitoring of Environmental and Social Management Plans (ESMPs) is done by staff at the central level based in Luanda and by the project implementers or in collaboration with Angolan institutes such as the Natural History Museum. Although decentralization is not a panacea to all environmental problems, the current organization setting proposed by Local Administration Law 02/07 considers social issues and presents opportunities for environmental, climate, and disaster resilience mainstreaming. Some examples are described below:

- The Municipal Administration counts with a Municipal Council for Social Consultation (*Conselho Municipal de Auscultação e Concertação Social [CMACS]*), which is tasked to support the municipal administration in its decision-making processes of political, economic, and social nature in the municipality.
- The Provincial Council for Social Consultation (*Conselho Provincial de Auscultação e Concertação Social, CPACS*) is composed of vice governors, provincial directors, municipal administrators, representatives of traditional authorities, representatives of unions, public and private business sector representatives, farmers, and churches recognized by law and nongovernmental organization (NGO) representatives.
- The councils for civic engagement (*Conselhos de Auscultação e Concertação Social, CACS*). are oversight committees at the provincial and municipal levels, responsible for supporting the respective government administrations in the decision-making process for economic and social policy in that jurisdiction.

A policy dialogue should be undertaken to figure out how:

- These entities could be trained and involved in ESMPs monitoring activities;
- To introduce priorities for environmental issues and climate and disaster risk aspects in local development planning through integration with sectoral development plans and programs;

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- To develop, throughout the municipality and commune, a community awareness of, and a need to address, environmental problems on a continuing basis; and
- Strengthening municipal capacity for the integration of climate and disaster risk aspects and interactive planning techniques aimed at improving community participation in natural resource management.

In addition, if CACSs and CPACS are operational and financially viable, they will be key to stakeholder engagement under the ESF Standard 10.

### *The of Civil Society Organizations, communities and individuals in ESIA*

**As the process of public consultation is not properly done, NGOs and CSOs experience barriers to participate in dialogues about environmental policies.** This also includes discussions related to the process of ESIA. Even when organizations manage to participate, their input is not binding to the decisions. Despite this, there have been some positive aspects, including the participation in the “Environmental Olympics” by some organizations and the preparation of national environmental awareness and education campaigns. Strengthening civil society’s skills will incrementally increase accountabilities in environmental and social management activities and ensure proper oversight. Currently, there are approximately eight organizations registered in the country that are concerned with environmental issues, with a focus on environmental education to the communities and the youth (schools and universities).

**Environmental management is not the exclusive prerogative of the government; it involves communities and the citizens of Angola in their capacity as primary users or managers of land, water, forests, and other natural resources.** Farmers cultivating soils for food are the primary managers of land, and fishermen are the primary managers of fish stock. Communities through farmer groups and organizations manage communal land and vegetation for grazing and fuelwood production. As people lack resources and appropriate technologies, many farmers resort to cultivating on erosion-prone steep slopes or encroach on the protected areas to meet their demands. Opportunities for commercial forestry, wildlife and tourism management, or fishery programs for communities and other community microprojects that address community natural resource degradation problems should be promoted.

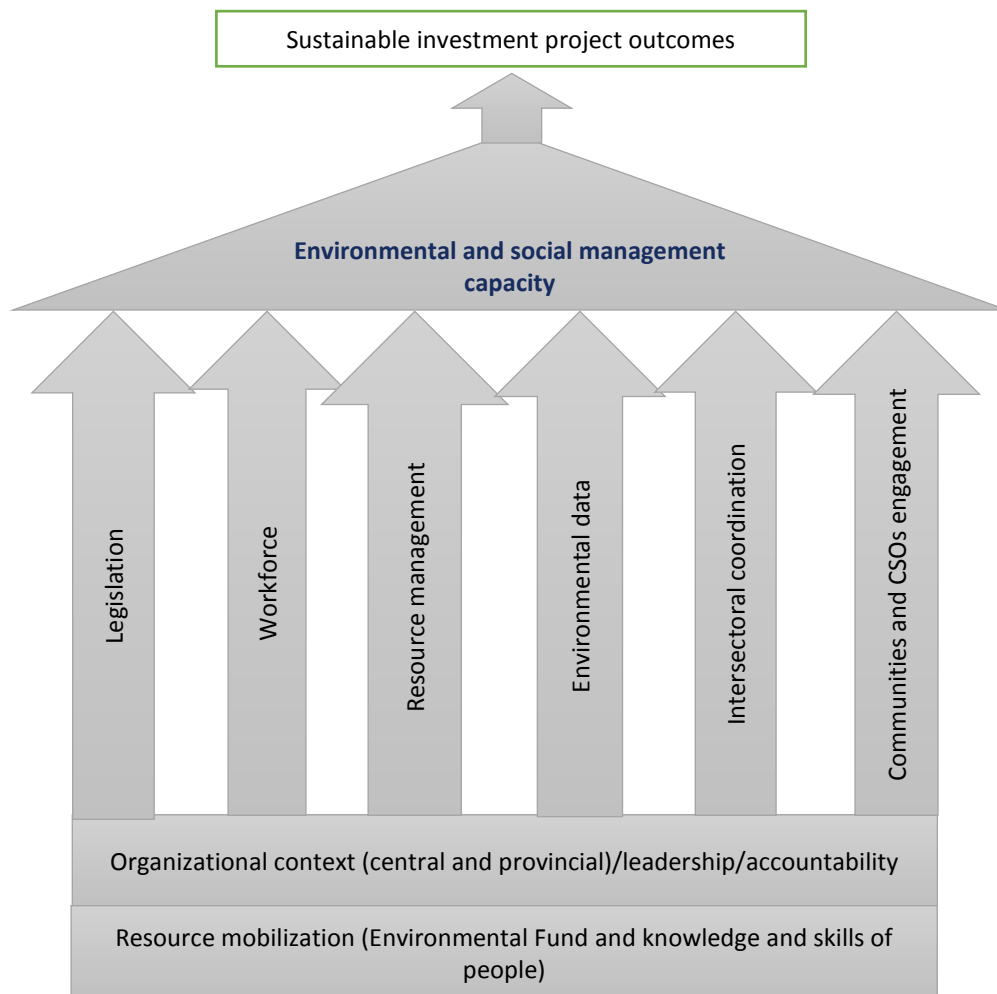
**Promoting community management of natural resources (such as forests, wildlife and fisheries) can promote the application of environmental law and regulations, including consultations, multi-sectoral coordination, strengthening local capacity for monitoring, involvement of local authorities, engagement of vulnerable populations, among others.** Implementation of natural resource management plans with enhanced community participation can enable affected and/or interested local communities to demand accountability and environmental improvements. However, local capacity for environmental compliance monitoring is typically weak in Angola, making monitoring and enforcing national environmental laws difficult. Tailor-made training courses and workshops that enhance the awareness of communities, promote their active involvement in environmental conservation, sustainable natural resource management, and the application of environmental laws and technologies are also needed.

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### 3.3. Challenges and Opportunities to ESIA implementation

**Barriers to greening infrastructure projects in Angola are grouped in six categories:** (a) legislation and regulations, (b) resource mobilization and management, (c) workforce capacity and competency and instruments, (d) intelligence (environmental data), (e) intersectoral coordination, and (f) leadership. Figure 6 depicts a conceptual framework that illustrates the relationship between the different aspects or determinants of environmental and social capacity building for Angola. The base of this model represents the key foundations for environmental and social capacity building, including leadership and resource mobilization. Developing leadership across several levels of environmental and social actions (legislation, sectors, data, community, and so on) could increase the degree of influence and improve the likelihood that infrastructures projects are implemented sustainably. Achieving sustainable investment project outcomes is not only dependent on the legal frameworks and the capacities of the environmental authorities and sector ministries, but also largely on external factors such as stakeholder engagement, transparency in financial resource mobilization and management.

**Figure 6. Relationship between different aspects of environmental and social capacity building for Angola**



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**This capacity-building framework suggests a multiagency capacity-building initiative, especially with respect to safeguards, environmental management, and the application of the ESF.** As an example, an “Enhancement of Environmental and Social Quality Services” project could help strengthen the capacities of the Ministry of Environment for environmental management, analysis, and monitoring; design better-informed environmental and social policies and regulations; and build partnerships in the respective sectors.

**Several laws are applied poorly, and there are major gaps identified for their implementation.** The main gaps in the legislation for environmental management are the EFL and subsequent decrees that do not refer to the Strategic Environmental and Social Assessment or assessments to be undertaken for policies, plans, or programs. They do not explicitly refer to social issues and—there are no regulations or requirements concerning preparation of resettlement action plans. However, the World Bank is involved in the preparation of Resettlement Policy Frameworks (usually followed by Resettlement Action Plans) in all investment projects it finances in Angola.

**ESIA guidelines exist for specific sectors in the country, but other relevant sectors are lacking.** The sectors lacking guidelines are, among others, electricity, tourism, protected areas, agriculture and fisheries. Further, the guidelines do not properly address land mine risks affecting investment projects as well as agricultural production and natural resources management. Developing ESIA guidelines for these relevant sectors is important. The government’s ability to plan and manage environmental and social risks and impacts is essential for the success of the upcoming transformation of these sectors; for example, investment in agribusiness could push further deforestation if not planned and managed well.

**Implementation of measures included in ESIA reports is poor.** Even though many ESIA reports are available, environmental and social measures outlined in these reports are seldom implemented, thus making it difficult to audit and assess the environmental and social performance as well as the monitoring of the impacts induced.

**Environmental data is lacking.** The state of the Environment report is outdated and the lack of accurate environmental data regarding the condition of the environment, underlying pressures, and sustainability trends undermine the proper preparation and planning of infrastructure projects.

**The capacity of Angola to mitigate the impact of investment projects on the environment is currently low.** Within the National Institute for Environmental Management, there is lack of technical capacity, and the Institute usually relies on DNAIA for compliance monitoring. In practice, there is often no follow-up from the Ministry and its Directorate, due to the lack of available resources. Consequently, mitigation measures and penalties are rarely enforced on projects that do not comply with ESIA rules and recommendations. Environmental self-compliance monitoring by project proponents is widespread because DNAIA is understaffed and lacks basic logistics. There is a lack of expertise in sociology, anthropology, and health and safety in the directorate. The staff also does not have sufficient technical competency (good international industry practice) to review environmental and social instruments and make appropriate regulating decisions such as granting approvals and permits and specifying required norms and conditions. Logistical means to undertake periodic visits to project areas are lacking, particularly at the local level, which is contrary to World Bank guidelines that require the borrower to prepare and implement a capacity-building strategy to mitigate environmental risks as a condition for financing. The World Bank also requires the borrower to have dedicated budget provisions proportionate



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to the project risks. An incomplete understanding or knowledge of hazards/risks and grievance Redress mechanism requirements is underscored.

**Rating of projects subject to ESIA is not in line with Bank's policies.** Unlike the World Bank's ESF, Angola's ESIA regulation does not have a clear definition on risk rating. The national system is driven by the sector in which the project is submitted to determine the need to carry out an ESIA or exempt it. Nevertheless, there are some similarities when it comes to the sectors that may have critical environmental impacts on natural habitats, forests, and wildlife.

**National permitting system is inadequate.** The national system has a phased licensing system presumably to overcome the inadequate capacity to supervise projects once licenses are granted. However, this is not effective as there is no tracking tool to monitor projects from one phase to another. As an example, proponents hardly go back to the Agency to seek proper operational license once they progress from the installation phase to the operational phase, and they also do not submit compliance report as required by the law.

**Financial resources are inadequate.** Although environmental licenses and fees are being collected under the ESIA administrative procedure, there is no annual budget allocated for environmental inspection and compliance activities.

**Environmental law and regulations do not meet international best practice requirements.** As an example, they do not refer to strategic environmental and social assessments to integrate environmental considerations into policies, plans and programs, particularly in sectoral decision-making and reform. In addition, they do not address acquisition, restrictions on land use and involuntary resettlement. The current regulations and existing ESIA guidelines do not properly address land mine risks affecting investment projects. Public consultation during the scoping process is not regulated and there is no mention of disclosure of the final version of ESIA reports.

**Inter-sectoral coordination is lacking.** The environmental sphere is not isolated from other policy areas and depends on general governance aspects. However, the Ministry of Environment maintains full control of the ESIA procedure, and the environmental and social considerations are not consistently integrated. This practice will likely hinder the proper implementation of the new ESF, which pays specific attention to other environmental and social aspects handled by other sectoral ministries.

### **Opportunities**

**Angola is willing to strengthen its capacity in the domain of environmental management, and has requested support from the Bank.** This reflects the Government's commitment to strengthen the ESIA process as a principal management tool for private and public investments and presents an opportunity to modernize and strengthen environmental management in the country.

**Whenever possible, compliance activities should be conducted in a coordinated and consistent manner to reduce the impact on the regulated parties.** Building cross-sectoral institutional environmental and social management capacity including the involvement of key stakeholders will help Angola oversee the implementation of infrastructure projects. Fostering a culture of coordinated compliance activities by promoting joint compliance site visits could in the long run contribute to reduce the current lack of

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collaboration. In addition, to ensure regular compliance activities and contribute to a better oversight of the impacts of infrastructure projects on human health and the environment, including biodiversity, the technical and logistical capacities of the NDPEIA should be strengthened.

**Given the political commitment to ensure transparency and fight corruption, the Environmental Fund should be strengthened.** In addition to revenues from environmental licenses, fines, and fees, the Environmental Fund has the potential to manage biodiversity offsets, with significant potential for private sector involvement. The Environmental Fund may need to be restructured to serve as a long-term source of finance for environment and protected area management. It needs a results-based management system, with clear and transparent rules for the allocation and use of funds according to technical criteria. A practical operational manual to govern the management of the fund should be developed, specifying its governance, management, allocation, transparency, accountability, audit, and reporting requirements. The Fund should have an independent board overseeing its activities, which would allow the Fund to gain trust from different partners and increase its transparency.

**The establishment of Environmental Units in different sectors should be explored to promote inter-sectoral coordination.** This could start in targeted sectors and be progressively expanded. This could give sector ministries a focal person within their own ministry to deal with environmental issues, rather than having to deal exclusively with a separate ministry. This arrangement may provide an opportunity to influence lower risk investments, that do not capture high profile attention, and provide an opportunity for developing capacity in a targeted way. This could also provide opportunities for incremental capacity improvements with concrete applications.

**The current organization setting proposed by Local Administration Law 02/07** through the established CMACS, the CACS, and the CPACS presents opportunities for Feedback and Grievance Redress Mechanisms (FGRMs) and stakeholder engagement activities.

### **Box 3. Indigenous Peoples in Angola**

An Indigenous Peoples Policy Framework (IPPF) should be developed for projects with proposed activities in regions where Indigenous Peoples are present. Angola is an ethnically diverse nation, with more than 40 local languages spoken in its territory. From the point of view of the World Bank's policies, peoples of Angola who would be considered indigenous include the San (often referred to as "Khoisan" or "Koisian") and related khoisan descendent groups including the Kwisi, Kwepe; and the Herero-speaking Himba, Kuvale, and Zemba. These Indigenous Peoples are present in Southern Angola and represent approximately 0.1% of Angola's population.

There is limited data on Indigenous Peoples in Angola, and issues such as lack of recognition of indigenous groups, discrimination, and limited service provision are reported by NGOs and multilateral agencies. The lack of information is partly due to the limited infrastructure and remoteness of areas in Southern Angola where indigenous groups are present. There is limited state and civil society engagement with Indigenous Peoples.

The San number between 9,000 and 20,000 in Angola, and are primarily in the provinces of Cuando Cubango, Moxico, Cunene, and Huila. They are the largest indigenous group in Angola. The San in Angola include the Kwhe and Mpungu !Kung, who are related to groups in northern areas of Namibia and Botswana. The Kwhe are numerous along Cuando Cubango's southern border with Namibia. Cross-border movements appear to be common. The Kavango Zambezi Trans Frontier Conservation Area (KAZA TFCA) includes areas in which Indigenous People are found.

In the past the San were hunter-gatherers (whereas the Himba, Kuvale, and Zemba were traditionally semi-nomadic pastoralists). Now most practice a combination of subsistence agriculture and manual work, or receive food aid. A number of traditional livelihood practices still persist, including gathering of bush food, hunting, and craft production.

The San have strong group identity, are considered a minority group where they live, and have been subject to discrimination. The San are amongst the earliest inhabitants of Southern Africa, predating Bantu migrations. Many San groups have inhabited the same lands for thousands of years and have a close relationship with the land and natural resources. They have little (if any) political representation in Angola. The San of Angola appear to share similar socio-economic challenges as those experienced by the San in neighbouring countries. Many San fled across the border to Namibia during the conflict in Angola.

The Angolan Constitution does not make specific references to Indigenous Peoples or minorities. Nevertheless, it does mention universal rights to services such as medical care and education. The Government of Angola, through a Government Act, provides a mandate to MINARS (Ministério da Assistência e Reinserção Social) to develop policies and promote social assistance for the most vulnerable groups in Angola. It appears that MINARS is implementing activities to integrate San communities into the mainstream economy. The Ministry of Health and Ministry of Education have also developed programs to benefit San communities. The Government of Angola is a signatory to the Indigenous and Tribal Populations Convention (ILO107) of 1957 and voted in favour of the United Nations Declaration on the Rights of Indigenous Peoples in 2007.

Non-governmental organizations (NGOs) such as ACADIR (Associação de Conservação do Ambiente e Desenvolvimento Integrado Rural) and MBATIKA have work programs with San communities in Cuando Cubango. These NGOs receive limited funding from Angolan sources, and key donors include international NGOs such as the Open Society Foundation and Terre des Hommes. ACADIR works specifically with issues of natural resource management, environment, and communities. It has supported indigenous land registration processes.

In 2016 there were allegations (made by the Catholic Bishop of Namibe) of forced evictions and violence towards Indigenous People in Namibe, Cunene, and Huila provinces. In the same year, land expropriations which affected 39 indigenous people's settlements were noted in Cuando Cubango province, primarily related to tourism development and logging operations. A group of 18 NGOs which work on human rights monitoring (GTMDH – Grupo de Trabalho de Monitoria de Direitos Humanos em Angola) sent a petition to the President, National Assembly, and Attorney General denouncing the expropriations. GTMDH also produced a report regarding allegations by San communities over incidents where they were unjustly implicated in poaching activities.

## 4. Addressing Climate Change in Angola

**Climate change poses a serious threat to Angola's economy and its population.** Angola is ranked 171 out of 191 countries in its ability to cope with climate change effects, with low readiness and a high vulnerability score. Among the most vulnerable sectors to climate change are natural resources, including fisheries, wildlife, and forests – impacts on which were highlighted in the relevant sections of this report.

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#### 4.1. Policy Framework and Legislation

**Angola aims to address the impacts of climate change as stated in its PND.** It includes the main goals and actions to tackle current and future impacts on important sectors for economic development and for environmental sustainability. In addition, the National Strategy for Climate Change (2018–2030) includes five pillars on mitigation, adaptation, capacity strengthening, funding, and institutional coordination. **In addition, the Government of Angola has ratified the UNFCCC** and developed and submitted its National Adaptation Plans of Action (NAPAs).

**Angola submitted its intended Nationally Determined Contribution (iNDC) in 2015 and is a signatory to the 2015 Paris Agreement on climate change.** Angola’s iNDC includes conditional and unconditional mitigation targets as well as adaptation priorities. According to the iNDC, Angola plans to reduce GHG emissions up to 35 percent unconditionally by 2030 as compared to a Business-as-Usual (BAU) scenario (base year 2005). The country also expects to reduce an additional 15 percent below BAU emission levels by 2030, through a conditional mitigation scenario. Angola’s iNDC also includes adaptation priorities and states that the economy has been hit hard by the impact of climate change through prolonged droughts and damaging flash floods. This has likely resulted in forest fires, reduced crop production, and reduced water resources in addition to affecting fishing resources. The main economic sectors that have been the most affected by climate variability in the last 30 years include agriculture, coastal zones, land use, forests, ecosystems and biodiversity, water resources, and health.

**Priority actions.** According to the iNDC, Angola prioritizes the implementation of adaptation measures in coastal zones, land use, forests, ecosystems and biodiversity, and water resources. On mitigation, Angola aims to reach 70 percent of the installed renewable energy by 2025 and to sequester 5 million tons of CO<sub>2</sub>e per year through reforestation by 2030.

**Costs.** Fully implementing the iNDC would require additional international support in the form of finance, technology transfer, and capacity building.

#### 4.2. Climate Change – Challenges and Opportunities

**The insufficient response to climate change is exacerbated by an inadequate capacity to cope with climate change effects and inadequate financial resources.** Angola’s overall response to the effects of climate change has not been sufficient despite its high vulnerability. More is needed to update and implement climate-related policies including the iNDC. There is a multisectoral committee on climate change and biodiversity, which should be strengthened to be more technical and operational. Challenge remains in mainstreaming climate change into different sectors at the ministerial level. Due to the broadness of climate change, there is a general lack of understanding within the sectors. However, there are some sectors such as health, fisheries, energy, and water that do refer to climate change in their Sector Development Plans aligned with the PND.

**Although Angola is highly vulnerable to climate change, research on climate projections is scarce and data are lacking.** Climate information systems to gather data on floods and droughts would help assessment and planning. Vulnerability data are not yet fully identified for each sector. However, the government is planning a national adaptation plan to identify vulnerabilities for the sectors. There is a

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need to implement a national measurement, reporting, and verification (MRV) system, which would support an efficient planning of adaptation and mitigation actions.

**Climate-smart-resilient growth, especially within the renewable natural resources sector, can help build resilience to climate change, increase productivity, and reduce poverty.** Investment in renewable energy expansion as well as efforts in reforestation as called for in the INDC and in national plans can help diversify the economy while building resilience. Angola can diversify the rural economy through industries that rely on a healthy environment and sustainable natural resource management, as well as through sustainable forestry practices and value chains, and address food insecurity through climate-resilient food production. This will require a holistic approach that considers ecological and economic links in the rural economy.

## 5. Potential World Bank Engagement

**As presented in this report, renewable natural resources – forests (through commercial forest plantations and sustainable forest management), wildlife (through nature-based tourism), and fisheries (as well as the broader blue economy), can contribute to diversifying Angola’s economy, enhancing economic benefits to rural communities, and ensuring the protection of vulnerable global public goods (biodiversity, climate change mitigation, water flow and quality).** These sectors offer significant opportunities for private sector investment, particularly in sustainable extraction (marine fisheries, sustainable forest logging and sports hunting), resource cultivation (aquaculture, commercial forest plantation and game ranching) and value addition to natural resources products such as seafood, timber and meat.

**The World Bank Group has several instruments through which it supports countries, including investments and technical assistance.** As this would be a new sector of engagement for the Bank, a gradual approach could be explored, where investments could initially be financed through trust funds (such as the GEF). Any potential engagement would need to be discussed between the Bank and the Government of Angola within the context of the Country Partnership Framework (CPF) and other strategic guidelines. The potential of financing by IBRD could be explored in the future depending on results, the size of available financing and government willingness to borrow for the sector. More sophisticated instruments, such as PforRs and DPOs could also be potentially considered in the future.

**In terms of sectoral prioritization, protected areas and wildlife offer short-term opportunities, given the Government of Angola’s interest in partnering with the Bank and the Bank’s comparative advantage in the sector.** The GoA has expressed interest in having the Bank support the implementation of GEF 7 funds to target some of the TFCAs with most potential for wildlife conservation and where climate resilience of surrounding local communities, particularly in agriculture, can be strengthened. Fisheries also offer significant opportunities in the short-term as the sector counts with a sound policy and institutional framework and a relatively well-developed private sector. Forests, with its relatively new legal framework, weak institutional capacity and a private sector with weak capacity and lacking financing offers opportunities for the medium to long-term.

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**The Bank can also support Angola’s efforts to increase its capacity to management environmental risks by mainstreaming capacity strengthening in existing and planned operations.**

*Wildlife Management / Nature-Based Tourism*

Type of instrument	Sources	Size and Status
Investments	GEF financing (GEF 7 STAR allocation for biodiversity and funds from the Least Developed Countries Fund / LDCF)	\$16 million – Ministry of Environment has expressed interest in having the Bank support the implementation of GEF 7 funds to target some of the TFCAs with most potential for wildlife conservation and where climate resilience of surrounding local communities, particularly in agriculture, can be strengthened.
Technical Assistance and Analytical Work	Potential TA for Tourism development.	IFC / FCI currently identifying pilot countries for a regional Tourism TA TF, Angola is a potential country. This could support Angola in drafting regulations for concessioning within protected areas, and potentially with dialogue with domestic and international private investors.
	TA for KAZA / TFCA management	The ENRM GP is currently discussing with some donors the potential of establishing a KAZA TFCA support facility to support the management of the KAZA TFCA. Angola could potentially benefit from this support facility.

**Potential results indicators could include:**

- Management effectiveness of targeted TFCAs improved
- Capacity to identify climate risk and/or engage in adaptation measures enhanced
- Land under climate resilient management increased

*Fisheries*

**The potential for a regional project in the area of competence of the Gulf of Guinea Regional Fisheries Commission (*Commission Régionale des Pêches du Golfe de Guinée, COREP*), which includes Angola, Cameroon, Gabon, Equatorial Guinea, the Democratic Republic of Congo, the Republic of Congo, and São Tomé and Príncipe is being explored. As is the case with other regional fisheries projects at the World Bank, this could be structured around:**

- national projects in participating countries, aimed at addressing country-specific issues (i.e., enhancing the value chain, strengthening fisheries management); and*



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- (ii) *means to enhance regional cooperation*, including strengthening the capacity of the COREP’s Secretariat, due to the presence of shared resources and the synergies and efficiencies that could be realized through joint efforts (in areas such as regional management plans, monitoring, control and surveillance, research, and statistics). With a more advanced fisheries sector relative to other COREP countries, Angola has the opportunity to put at the disposal of the regional some services and assets that could potentially be made profitable for the country.

Any potential engagement would need to be discussed between the Bank and the Government of Angola within the context of the Country Partnership Framework (CPF) and other strategic guidelines.

**Potential results indicators could include:**

- Capacity to govern and manage targeted fisheries strengthened
- Capacity to increase local value added to fish products strengthened
- Targeted marine and coastal environment assessed and monitored

*Forests*

Type of instrument	Sources	Status
Investments	IBRD	Any potential engagement would need to be discussed between the Bank and the Government of Angola within the context of the Country Partnership Framework (CPF) and other strategic guidelines.
	Trust Funds	Trust funds related to climate change, such as the Green Climate Fund, the Forest Carbon Partnership Facility, may allow engagement in key forest issues, such as sustainable forest management.
Technical Assistance and Analytical Work	TA to implement regulatory changes to the forest regulations	Could be financed by trust funds (such as the NDC Partnership).

**Potential results indicators could include:**

- Contribution of forests to the national GDP increased (percentage);
- Rate of deforestation reduced (percentage);
- Capacity to manage and monitor forests strengthened (index);

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### *Environment and Social Management*

The table below presents Environmental and Social Management challenges and opportunities for Bank engagement through different instruments. Below are potential indicators.

**Potential indicators include:**

- Number of infrastructure projects that have relevant E&S management plans across all phases that have been effectively prepared, implemented and followed;
- Number of key CSOs/NGOs (including community-based organizations [CBOs] with defined planning and implementation roles and responsibilities in monitoring E&S plans;
- Number of coordination entities at the national, provincial, and municipal levels strengthened for planning; revision of evaluation assessment reports; and preparation of rules, procedures, and instruments for environmental and social management;
- Number of guidelines available to verify whether the approved infrastructure projects comply with international best practices and standards;
- Number of sectoral guidelines on standards and procedures issued that integrate international best practices published. The initial focus will be on fishery; agriculture; coastal tourism; protected areas and electricity transmission.

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Aspects	Opportunity	Issues	Capacity-building Areas and Potential Sources of Funding		
			GEF-7 Project	Current Safeguards Projects	Planned Operations
<b>Environmental data</b>	Legislation requires a State of Envir. Report (SOE) every five years	SOE outdated: Latest is dated 2012. Lack of accurate environmental data regarding the condition of the environment, underlying pressures, and sustainability trends	Support the Ministry of Environment to prepare a second SOE	Key environmental performance indicators/scorecard for key investment projects	Set up an environmental information system or a documentation and information center on key environmental performance indicators/ scorecard for key investment projects
<b>Financing</b>	Strengthening the Envir. Fund	There is no budget for environmental compliance activities. Use of the funds from the Environmental Fund not transparent and not linked to the priorities in environmental and protected areas management. Missed opportunities to collaborate with the private sector (e.g. biodiversity offsets).	Institutional strengthening of the Fund (results-based management, process and criteria for resources allocation, transparency), including operational manual	N/A	N/A
<b>Legislation</b> (EFL of 1998 and subsequent decrees)		Project's proponents do not submit compliance reports as required by the law; EFL and decree do not refer to SESA to be undertaken for policies, plans or programs; Law and decrees do not explicitly cover social issues (social inclusion, GBV compensation, indigenous peoples) and cumulative impact assessment requirements; No requirements concerning preparation of resettlement action plans; Public consultation during scoping process is not regulated; Systematic involvement of other sectoral ministries in the ESIA report review procedure ;Disclosure of the final version of ESIA report not required; No clear definition on project risk rating.	SESA for Angola's trans-border conservation areas	N/A	Update the environmental law and regulations to meet international standards specially to be aligned with the environmental legislation in the SADC region: SESA, acquisition, restrictions on land use, involuntary resettlement, and so on.

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<b>ESIA Guidelines</b>	Appeal may be brought on the Executive Decree on Public Consultation for Projects Subject to Environmental Impact Assessment	GRMs are not operational and there is an inadequate understanding of GRM requirements.	N/A	Review and build on CMACS to develop one GRM per municipality.	Provide technical assistance
	Specific ESIA guidelines exist for water, mine, gas pipeline, road and house building sectors.	Lack of guidelines for agriculture, biodiversity, electricity, and fishery sectors.	Guidelines for mainstreaming biodiversity in ESIA.	N/A	Develop ESIA guidelines for commercial agriculture, fishery, coastal tourism, and electricity transmission. Review existing guidelines to include landmine risks. ESIA review tools and methods. Guideline to review the ESIA report. Develop a National Biodiversity Offset System for Angola.
<b>Human/staffing and logistic</b>	<b>Central authority:</b> 11 technical staff are young (ages 28-32), and the majority hold a bachelor's degree in environment	No staff member has a social background (sociology or anthropology), nor holds a master's degree. Though staff have experience with World Bank projects, they have not yet participated in the new ESF roll out activities.	Finance few joint supervision missions.	<b>ESF.</b> Disseminate the Guidance Notes for Borrowers targeting all relevant sectors.  Training on safeguards or	Provide equipment and vehicles to the DNAIA and the National Institute for Environmental Management.  Develop a technical capacity-building plan to address environmental and social risks and impacts associated with investment projects: staff, training, awareness, health impact

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	al and natural resource management or environmental and land planning.			ESF to be planned by the ministry and financed by the World Bank.	assessment, training of trainers on Occupational Health and Safety (OHS).
<b>Central and provincial ESIA authorities</b>	Decentralization law	There is a significant lack of information flow between both levels of government.	N/A	Involved provincial and central authorities in safeguards supervision missions.	Assess and propose coordination mechanism.  Promote joint compliance site visits.

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