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JEC Assessment: Zambia. 2022

May 11th, 2022

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1. Macroeconomic Outlook

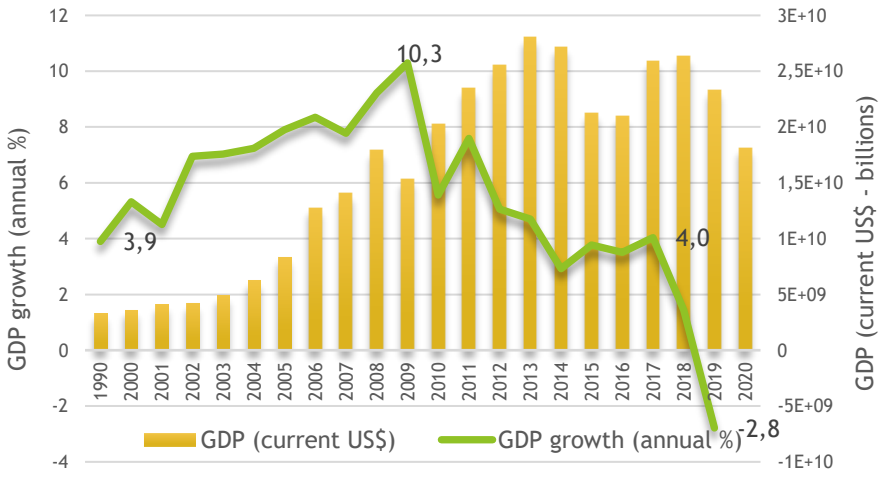
Zambia is a landlocked lower-middle-income country[1] in Central-Southern-East Africa with an area of about 752,600 km[2]. A least developed country, Zambia met the criteria for graduation for the first time in 2021. If it meets the criteria again, the country could graduate as early as 2027[2]. Zambia is a representative democratic republic that gained independence from the United Kingdom in 1964. From 1972 to 1991 Zambia was a one-party state, after which it entered into a period of socio-economic development and government decentralization with a multi-party system. The country´s population is about 18.38 million as of 2020 with a per capita GDP of approximately USD 1,000, for a total GDP in 2020 of USD 18.11 billion[3]. The country has a human development index (HDI) of 0.584, ranking it 146th out of 189[4]. The Zambian economy has been historically based on the copper mining industry; however, due to the falling global demand for copper, different sectors have started playing a significant role. Agriculture, services (tourism) and manufacturing, along with mining, are the four key sectors that the Government intends to use to spur the transformation of the country´s economy[5].

1.1 Key economic data

After almost two decades of significant socio-economic progress[6], the Zambian economy stalled from 2010 onwards. Between 2000 and 2010, the annual GDP growth rate averaged 7.47%; this rate slowed its pace to 4.63% (on average) per annum between 2010 and 2017, with a steep fall in 2018 (to 1.44%). This fall was attributed to copper prices and declines in agricultural output and hydroelectric power generation due to insufficient precipitation[7]. By 2020, the Zambian economy contracted even more, by 2.9%, marking Zambia's first recession since 1998 due to the economic impacts of the COVID-19 pandemic[8] along with the unprecedented deterioration in all the key sectors of the economy, together with an unsustainable trajectory of fiscal policies (

Figure 1).

Figure 1 GDP rate growth (annual %) and GDP (current US$ in billions)



[1] World Bank Indicators (Accessed 23 March 2022)
[2] Zambia met the graduation criteria for the first time in 2021.
[3] World Bank Indicators (Accessed 23 March 2022)
[4] Human Development Report (Accessed 23 March 2022)
[5] Policy Monitoring and Research Centre. Agriculture, Mining, Manufacturing and Tourism. Four key sectors to drive Zambia´s economic stabilisation agenda (news dated 09/09/21, Accessed 23/03/22)
6 In 2010, the World Bank named Zambia one of the world´s fastest economically reformed countries.
[7] World Bank. Overview Zambia (Accessed 23 March 2022)
[8] World Bank Group. MacroPoverty Outlook – Zambia. (Accessed 23 March 2022)

Source: World Bank Indicators

In parallel, Zambia has endured persistent inflationary pressures mainly driven by the effects of the depreciation of the local currency and elevated food and transport prices[9] (**Figure 3);** in 2020, COVID-19 exacerbated inflation, pushing it to a similar level as in 2015. Such conditions led Zambia to reduce imports[10] with the greatest impact on the most vulnerable. Poverty rates in Zambia are significant with almost 59% of the population living under extreme poverty (on less than US$1.09 a day), and 90% (on average) still vulnerable to extreme poverty (on less than US$5.5 a day), twice the global level[11] (Figure 3).

Figure 3 Inflation, Consumer prices (Annual %). Source: World Bank Indicators

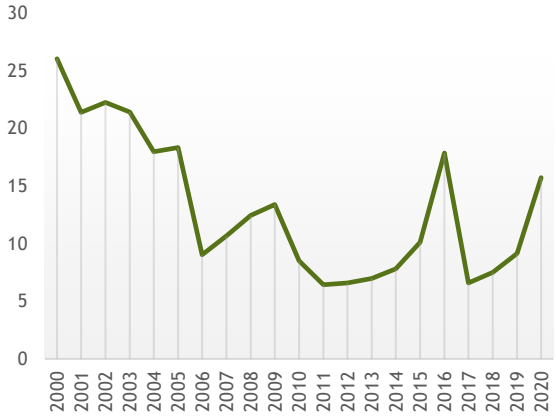
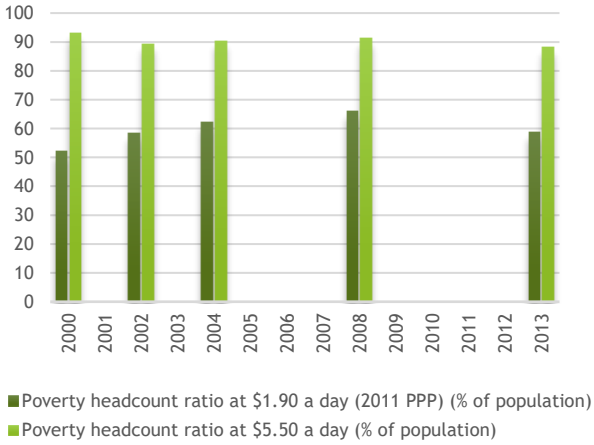


Figure 3 Poverty headcount (% population). Source: Macrotrends Zambia poverty rates



The unemployment rate has shown a growing trend since 2012 with a stabilization period between 2016 and 2020 averaging 12%[12]. The agriculture, forestry, and fishing sector is second largest contributor to jobs in Zambia, followed by the service industry (e.g. wholesale and retail trade; repair of motor vehicles and motorcycles). Overall, informality almost reaches 70% according to data from 2019[13].

Zambia´s human capital accumulation has been slow despite progress in health and education indicators; its Human Capital Index (HCI, 2018) is 0.4, which, though relatively low compared to global levels, is slightly higher than the average for Sub-Saharan Africa (0.38)[14]. Zambia is characterized by stark inequality in access to health and education services between poor and non-poor populations, and between rural and urban areas[15]. Consistent with this, Zambia shows a severe income gap (its Gini index is above 50) that has been continuously growing since 2004[16].

In 2020, Zambia launched its Economic Recovery Programme (ERP) 2020-2023 targeting five work areas: macroeconomic stability, fiscal sustainability, growth and economic diversification, adequate budget provisions, and social protection programs[17]. However, the plan does not anticipate near-term relief in poverty rates. Despite GDP growth estimations for 2021-2022, the poverty headcount is expected to

[9] African Development Bank Group. Zambia Economic Outlook (Accessed 24 March 2022)
[10] World Bank Group. Macro Poverty Outlook – Zambia. (Accessed 23 March 2022)
11 World Bank Group. Nearly Half the World Lives on Less than $5.50 a Day. (Accessed 23 March 2022)
[12]Macrotrends. Zambia Unemployment rate (Retrieved on March 24)
[13] Zambia Statistics Agency. 2019 Labour Force Report (Accessed 24 March)
[14]The World Bank. Human Capital Index 2018. (Accessed 24 March)
[15] The World Bank. Helping Zambia Invest in its Human Capital (news dated 26/07/19, Accessed 24/03/22)
[16] The World Bank. Gini index – Zambia (Accessed 25/03/22)
[17] Government of the Republic of Zambia. Economic Recovery Programme.

increase due to significant job losses[7]. This reaffirms the country´s need to evolve towards economic diversification to complement the natural resource (mining-based) development model. This initiative builds upon the Country Partnership Framework (2019-2023) established in 2018 by the World Bank to support the government in its efforts to enhance economic growth along a more inclusive and sustainable path that prioritized three areas: i) More even territorial development, ii) Public services and social protection for job participation and iii) Institutions for resilience[18].

The ERP points out that economic growth in Zambia is characterized by high volatility, especially in the last decade. From 2011 to 2019, agriculture was the most volatile sector, shrinking its GDP share from 9.4% to 3.2%[19]. Conversely, during the same period, other sectors expanded their GDP contribution, including financial services, other industrial activities, and wholesale & retail trade, which largely depends on imported products, increasing the vulnerability of the country to supply chain disruptions. Manufacturing's share remained unchanged while mining showed a slight increase over this period. The economic diversification proposed in the ERP targets agriculture and manufacturing as the most important sectors for economic recovery based on their contribution to employment and their historic relevance in the country´s economic background. It also considers tourism and mining, but for the latter, it only highlights the need for improving the enabling conditions as it is predominantly driven by the private sector[20].

In line with this, the World Bank portfolio includes a number of projects related to the infrastructure and the agriculture sectors. Meanwhile, the IFC has a significant project portfolio in agribusiness and financial services as well as manufacturing. The Multilateral Investment Guarantee Agency (MIGA) has committed about US$106 million to agriculture, livestock, and aquaculture development. Furthermore, the country is also part of the Common Market for Eastern and Southern Africa (COMESA) and the South African Development Community (SADC), both promoting the regional trade, where Zambia plays a significant role.

Table 1 Summary of key economic data. Source: Unless otherwise noted, World Development Indicators, latest year available

Zambia (National Level)	
Size	752,600 sqkm
Population	18,380,000
GDP per capita	USD 985 (2020)
Unemployment rate	12% (2020)[21]
Gini Index	57.1 (2015)[22]
Poverty rate	54.7% (2010) (at national poverty lines)
Inflation rates	14.2% (2022)[23]
Main agricultural and forest products	Maize, sorghum, millet, and cassava while exports are driven by sugar, soybeans, coffee, groundnuts, rice, and cotton as well as horticultural produce[24]

2. Political background

Zambia is a multi-party democracy with a separation of powers between the three branches of government: the Executive, Legislature, and Judiciary. The Central Government operates through subnational structures at provincial, district, and ward levels; the provincial and district

[18] The World Bank. Zambia Country Partnership Framework (2019-2023) (Accessed on March 24)
[19] Statista. Zambia: Share of economic sectors in the GDP from 2010 to 2020 (Accessed on March 23)
[20] Policy Monitoring and Research Centre. Agriculture, Mining, Manufacturing, and Tourism – four key economic sectors to drive Zambia´s economic stabilisation Agenda (Accessed on March 23)
[21] Trading Economics. Zambia Unemployment Rate (Accessed on March 30)
[22] The World Bank. Gini Index Zambia (World Bank estimate) (Accessed on March 30)
[23] Trading Economics. Zambia Inflation Rate (Accessed on March 30)
[24] International Trade Administration. Country profile Zambia (Accessed on March 18)

coordination committees are the established structures through which the Central Government governs the country[25].

Zambia's geography consists mostly of high plateaus with some hills and mountains and dissected by river valleys. The ten administrative provinces of Zambia are distributed among three major agroecological regions[26]. Wildlife in Zambia is managed through National Parks (NPs) and Game Management Areas (GMAs). There are currently 20 NPs and 36 GMAs covering a total area of about 6.36 million ha (8.5% of total land area) and 16.6 million km^2 or (22% of the country) respectively[27].

2.1 Environmental governance

Zambia has abundant natural resources and a rich biological diversity that constitutes the foundation of Zambia's economy[28]. The composition and evolution of the Environmental and Climate Change Policy Framework of Zambia are presented in **Figure 4**, along with key data and description of each instrument listed in in **Table 2.** The potential conflict between the conservation of Zambian natural wealth and economic growth were first reflected in the National Policy on Wetlands Conservation and the National Biodiversity Strategy and Action Plan, both advocating for sustainable use of resources. During the first decade of the twenty first century, the widespread concern of Zambian society to make decent economic progress was consolidated in the first-ever long-term plan, the National Long Term Vision 2030 expressing Zambian´s aspiration to become a **Prosperous Middle Income Nation** by 2030. Vision 2030 was a result of a nationwide consultative process and highlights three possible scenarios for development (baseline, preferred, and optimistic) defined by different economic indicators; it also acknowledges the need to develop policies consistent with a sustainable environment and natural resource management principles.

Zambia's recurring experiences with climatic hazards such as droughts, seasonal floods, and flash floods posed the need for a serious approach to assess climate change impacts and their potential effects on the economic sectors targeted to sustain the desired economic growth. Hence, the Zambia National Adaptation Programme of Action (NAPA) prioritized the implementation of immediate adaptation interventions; this initiative articulated the need to integrate climate change in every policy, program, or plan to encourage a low carbon and climate-resilient development pathway while attaining middle-income status.

Agriculture, forestry, and other land use (AFOLU) represent the dominant sectors of Zambia´s economy. Sixty percent of the rural population depends on agriculture, while about 16% of the rural population rely on forests and non-forest resources for their livelihood[29]. These activities are extremely vulnerable to climate change and at the same time constitute an important driver for greenhouse gas (GHG) emissions. Therefore, the consolidation of a land-use policy framework aimed at the development of competitive, equitable, sustainable, and climate-oriented agricultural and forestry activities is key for Zambian development. This framework is represented by different instruments such as the Forest Policy, Forest Act, the National Climate Change Response Strategy, the National Agricultural Policy (first and second versions).

At the same time, the Government of Zambia has begun implementing several programs and projects in an initial implementation phase. For the agricultural sector, there were a significant number of projects aimed at reducing hunger, improving food security and nutrition, building resilience and adaptive capacity in agricultural systems, and promoting sustainable use of natural resources. Examples include the Pilot Programme for Climate Resilience Project (2013-2019) in the Barotse and Kafue sub-basins, the

[25] 2020, Biennial Updated Report
[26] Country presentation on Agricultural Policy (Accessed on March 29)
[27] Zambia Protected Area Overview (Accessed on March 29)
[28] Zambia´s Second National Biodiversity Strategy and Action Plan (2015-2025)
[29] 2020, Third National Communication

Conservation agriculture scaling up project (2013-2017) (>250.000 beneficiaries), Promoting Climate Resilience Community-Based Regeneration of Indigenous forest in Zambia´s Central Province (2015-2019), and Strengthening integrated adaptation planning and implementation in smallholder farming systems in southern Africa to support food security (2016-2020). Likewise, in the forestry sector, two REDD+ projects are aimed at producing carbon offsets: COMACO Landscape Management Project and the Biocarbon Partners REDD+ project. The potential of Zambia for emissions reductions through preventing deforestation and forest degradation was consolidated in 2015 with the REDD+ Strategy of Zambia.

In parallel, in order to keep a low carbon development pathway, Zambia also started working on the reduction of GHG emissions in various sectors with the support of the Low Emission Capacity Building Programme. Under this Programme, Zambia positioned the Sustainable agriculture NAMA (estimated reduction of about 9.1 $MtCO_2$) and the Charcoal NAMA (estimated reduction potential by 2050 of 3.49 $MtCO_2$)[30]. Additional efforts were also put into the energy and water sectors.

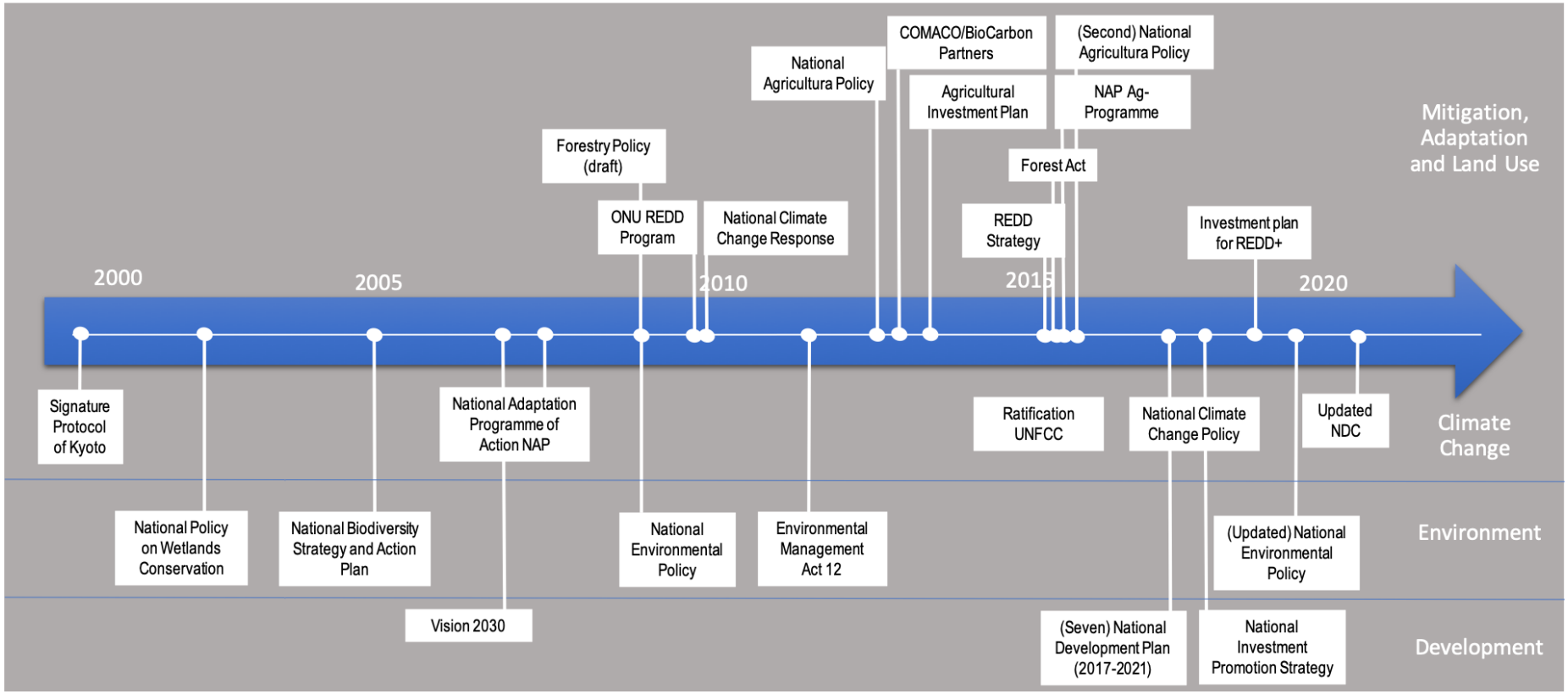
In 2017, Zambia introduced a National Policy on Climate Change (NPCC) built upon the foundations of the Vision 2030, with an overall objective to mainstream climate change into policies, plans, and strategies at all levels. Arising from this policy, The Seventh National Development Plan (7NDP) (currently under implementation) integrated climate change as overarching guidance to promote social wellbeing, and economic growth and at the same time, to reduce environmental risks, such as shortage of water, air pollution, and other effects.

According to the Third National Communication (2020), analysis of projected emissions showed that Zambia would transition from net sink to net source in 2018 under the business as usual scenario (BAU). This was attributed to increasing economic activities linked to the land-use sector. Zambia's NDC (updated in 2021) commits to reducing GHG emissions by 25% (compared to BAU) and towards 47% with substantial international support (compared to 2010 levels) as an effort to maintain its net sink status and reduce emissions in the various sectors.

Zambia continues to propose and leverage opportunities for climate financing to allow the country to find a balance between economic growth and sustainable development facing the challenges that climate change poses. In line with this aim, Zambia launched its Economic Recovery Programme (ERP) (2020-2023) in 2020, which seeks the enhancement of productivity in crops, fisheries, and livestock and promotes exports by encouraging private sector participation. The ERP was built upon the Country Partnership Framework for Zambia signed with the World Bank with whom there is an active project focused on the development of sustainable and resilient initiatives and forest management and forest restoration (Transforming Landscapes for Resilience and Development).

[30] 2020, Biennial Updated Report

Figure 4 General overview and evolution of the Environmental and Climate Change Policy Framework



Source: Authors' elaboration

Table 2 Description of environmental and climate change key instruments. Source: Authors' elaboration.

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
			INTERNATIONAL COMMITMENTS		
2010	*UN REDD*	Program participation	x	x	Zambia's National REDD+ Strategy Development was supported by financing from the UN-REDD with substantive financial resources over a period of three years. In its REDD readiness phase (2012-2015), Zambia developed: -The National Forest Monitoring System (NFMS); -FREL 2016/FREL 2021: -First REDD+ Safeguards
2015	*The REDD+ Strategy* *Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation*	Strategy			The goal is to contribute to national reductions in greenhouse gas emissions by improving forest and land management and ensure equitable sharing of both carbon and non-carbon benefits among stakeholders. It has ten strategic objectives that describe the intervention, expected (qualitative) results and the risk and mitigation strategies; relevant objectives for the AFOLU sector are: -By 2030, **threatened and unsustainably managed national and local forests** are effectively managed and protected -By 2030, selected **high value forests in open areas** are effectively managed and monitored -By 2030, all **timber concession** areas have management plans -By 2030, **good agricultural practices** that mitigate carbon emissions are adopted -By 2020, **threatened and sensitive protected areas** are legislated as "no-go areas" for mining and infrastructure development. -By 2025, **land and resource rights** on customary land are legislated and secured. -By 2020, **relevant institutions** are capacitated to plan, manage, implement, and monitor REDD+ programme activities
2016-2021	*Zambia NDC*[31] *(2016)* *(2020)*	Commitment	x	x	Zambia has submitted three versions of NDC. As per updated NDC (July 30th, 2021), , Zambia intends to reduce its greenhouse gas emissions at least by **25% (20,000 Gg CO_2 eq.) by 2030 against a base year of 2010 under the business-as-usual scenario with limited international support, or by 47% (38,000 Gg**

[31] The initial NDC, reference emissions were estimated using the IPCC 1996 Guidelines whereas in the revised NDC IPCC 2006 Guidelines were used.

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
	(2021)				CO2 eq.) with substantial international support. This is a single-year target to be implemented between 1st January 2015 and 31st December 2030 (NDC, 2021). Mitigation actions are focused on three programmes: (1) Sustainable forest management; (2) Sustainable agriculture, and; (3) Renewable energy and energy efficiency. Adaptation actions are focused on (1) Adaptation of strategic productive systems (agriculture, wildlife, and water); (2) Adaptation of strategic infrastructure and health systems; and (3) Enhanced capacity building, research, technology transfer and finance for adaptation.
2018-2022	*Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (NIP)*	Plan	x	x	Aimed to support the conservation and management of forests as well as restoration through investment in local communities. This Plan seeks to address underlying drivers of deforestation and prioritise and actualize actions, associated costs, and leverage funding mechanisms to reduce deforestation and forest degradation. The implementation of the Investment plan requires US$404.67 million over five years. The Investment Plan aspires to reduce emissions from land-use change by 30% (Forestry Department, 2018).
NATIONAL LEGISLATION, STRATEGIES, POLICIES, PLANS AND PROJECTS					
2002	*National Policy on Wetlands Conservation*	Policy	x		Aims to promote the conservation and sustainable use of wetlands and to sustain their ecological and socio-economic functions for the benefits of the present and future generations' well-being.
2005	*National Biodiversity Strategy and Action Plan (NBSAP) (2005-2015)*	Strategy	x		Developed in response to Zambia's consent to become a signatory to the UN Convention on Biodiversity (UNCBD). The Strategy recognizes deforestation as a key threat to biodiversity conservation including plant loss and habitat destruction and it sets up management objectives intended to reduce emissions from deforestation: -By 2020, the deforestation rate in Zambia is reduced by at least 25%. Following up reports do not provide quantitative figures on this goal. Progress is mostly referred to the REDD+ Strategy that appropriate deforestation goals.
2006	*Vision 2030*	Strategy			Sets a goal of "a productive environment and well-conserved natural resources for sustainable socio-economic development by 2030" to become a prosperous middle-income nation by 2030. It sets Zambia's long-term development vision that emphasizes development based on "sustainable environment and natural resource management principles".

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
2007	*Zambia National Adaptation Programme of Action (NAPA)*	Program	x		Zambia has evaluated the impacts of climate change on the relevant sectors and has identified the most urgent needs. Key adaptation needs were identified for Agriculture and Food Security, Human Health, Natural resources (wildlife and forest sector).
2009	*National Policy on Environment*	Policy	x	x	The expected outcomes and benefits include the achievement of measures that address the need to manage the impact of human activities on the environment having particular regard to the following areas: biodiversity conservation, deforestation, land degradation, air pollution, and inadequate management of water resources, and water pollution.
2009	*Forestry Policy (draft)*	Policy	x		One of the objectives of the Forestry Policy is to improve the role of forests in addressing climate change to contribute to reducing its impact through mitigation and adaptation measures.
2010	*National Climate Change Response Strategy*	Strategy	x		Aims to make the country climate-resilient and help fulfil the development priorities as listed under the National Long-Term Vision 2030. The strategy includes mainstreaming climate change concerns (mitigation and adaptation interventions) into the vulnerable sectors of the economy including land use, water, infrastructure, energy, and governance among others.
2011	*Environmental Management Act 12 (EMA)*	Policy	x		It is a milestone towards the realization of environmental and climate change mainstreaming in the national development context. It further provides for public participation in environmental management decision making – social safeguards and the establishment of an Environmental Fund in support of encouraging investments in environmental safeguards for sustainable development
2012	*National Agricultural Policy (NAP), 2012-2030).*	Policy			This is a review of the NAP 2004 - 2015. It is a nationwide sectoral document aimed at facilitating the development of a competitive, diversified, equitable and sustainable agriculture sector. The NAP envisages the achievement of the following objectives: (1) increase the annual growth rate of the real crop GDP; (2) increase the value and growth rate of crop exports; and (3) contribute to a reduction of poverty and food insecurity.
2012	*COMACO Landscape Management Project (2012-2032)*	Program	x	x	(Ongoing) This is the first large-scale Reducing Emissions from Deforestation and Forest Degradation (REDD+) carbon project. Through a carbon offset scheme, communities are paid for their conservation efforts. In the first monitoring period, 228,000 tonnes of CO_2 emission reductions were recorded, which paid out $490,000 to the participating chiefdoms. Many of the target areas for the project expansion are important wildlife corridors that connect fragmented forests and greatly aid in the effort to rebuild the Luangwa Valley's elephant population. Current credits sold are representative of 230.000 tCO_2.
2012	*Biocarbon Partners Luangwa Community*	Project	x	x	BCP is working on two projects: The Luangwa Community Forest Project (LCFP) and the LZRP Lower Zambezi REDD+ Project (LZRP), between which BCP is protecting close to 535 million trees from

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
	Forest Project and Lower Zambezi REDD+ Project				deforestation across almost 1 million hectares. That is an annual average reduction of deforestation-related emissions of 1.4 million tonnes of carbon dioxide across both projects per year.
2013	*Zambia National Agriculture Investment Plan (NAIP) 2014-2018*	Plan			A strategic framework aimed to prioritize investments in the agriculture sector and identifies the promotion of small-scale irrigation as a priority area for investment. The framework puts forward four interrelated programmes: (1) Sustainable Natural Resources Management – USD 280.80 million; (2) Agricultural Production and Productivity Improvement – (i) Livestock – USD 354.25 million; (ii) Crops – USD 852.68 million; and (iii) Aquaculture development – USD 51.57 million; (3) Market Access and Services Development – USD 257.21 million; and (4) Food and Nutrition Security and Disaster Risk Management – USD 659.86 million.
2014	*Forest Policy*		x		One of the objectives of the Forestry Policy is to improve the role of forests in addressing climate change in order to contribute to reducing its impact through mitigation and adaptation measures. This will be achieved through creating public awareness on the environmental and socio-economic effects of climate change, deforestation and forest degradation arising from unsustainable forest management. Other measures include; provision of incentives for development of alternative energy sources and technology to reduce reliance on biomass energy sources. An appropriate legal framework to facilitate the establishment of appropriate monitoring systems for reducing deforestation and forest degradation would also need to be put in place. The policy also seeks to define forest resource tenure regimes, roles and responsibilities, cost and benefit sharing mechanisms originating from sustainable forest management, carbon, reducing deforestation and reducing forest degradation. (BUR 3) pg. 96
2015	*Forest Act*	Policy	x		Provides for the establishment and declaration of National Forests, Local Forests, joint forest management areas, botanical reserves, private forests, and community forests as well as provides for the conservation and use of forests ecosystems and biological diversity with the participation of multiple stakeholders; it establishes the Forest Development Fund and the implementation of the UNFCCC and the Convention on Wetlands of International Importance, among others.
2015	*Integration of Agriculture Sectors into National Adaptation Plans (NAP-Ag) Programme (2015-2018)*	Programme			A multi-year programme co-led by UNDP and FAO to identify and integrate climate change adaptation measures into relevant national planning and budgeting process with a focus on the agricultural sectors.
2015	*Forest Bill*	Policy	x		Provide for the establishment and declaration of National, local, and joint forest management areas, botanical reserves, private forests, and community forests

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
2016	*(Second) National Agricultural Policy*	Policy			Provides a framework to promote sustainable agricultural diversification, agricultural commercialization, private sector participation, and inclusive agricultural growth. It is envisaged to promote competitiveness, stimulate efficiency, increased productivity, and profitability in the agriculture sector as well as to contribute effectively to attaining food and nutrition security, employment creation, increased incomes, reduced rural poverty, and climate change.
2017	*(Seventh) National Development Plan (2017-2021)*	Plan	x		Mainstreams climate change in all strategies to reach the Government's Vision 2030. The 7NDP's key investment areas include agriculture (particular projects for coffee, fruits, tobacco, cashew nut), livestock, and fisheries which are susceptible to climate. The forestry sector is considered a significant contributor to employment and wealth creation, with expected outcomes including: a) 50,000 hectares of land acquired in each province for forest plantation development; b) Tree nurseries established for the supply of seedlings to forest plantations; c) Jobs created in land clearing, preparation, planting and weeding; d) Increase in the number of community beekeeping groups as well as quantity of honey harvested from forests; e) Number of private sector participants in the forestry sector increased; and f) Increased forest production and productivity through research and development.
2017	*National Climate Change Policy*	Policy		x	Introduces a well-structured and coordinated national strategy to effectively tackle the adverse effects of climate change, to deploy a prosperous and climate resilient economy in Zambia by 2030. It includes nine major objectives that consider adaptation and disaster risk reduction measures, land-use management practices, investments in low carbon development pathways among others.
2017	*Zambia Integrated Forest Landscape Programme (2017-2022)*	Programme	x	x	(Ongoing) An initiative supported by the Government and the WB (and partnering with BioCarbon Fund and GEF) to support rural communities in the Eastern Province to better manage resources of the landscape directed to reduce deforestation while improving economic benefits. It comprises four components: i) Enabling environment; ii) Livelihood and low carbon emissions; iii) Project management and iv) Contingent Emergency Response.
2018	*National Investment Promotion Strategy (2018-2022)*	Strategy	x		Is an overarching programme for the country to become a prosperous, competitive, and dynamic world-class investment destination by 2026. It outlines strategic objectives to deliver outcomes (investment targets) on the identified priority sectors for investment such as Manufacturing - Processed Foods, Wood and Wood Products, Leather and Leather Products, Agriculture, and Tourism among others. The Strategy provides for consideration of climate change and environmental protection in industrial processes.

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
2020	*NAP Readiness and preparatory support Program (GCF)*	Programme			Seek to strengthen institutional coordination and collaboration for adaptation planning in Zambia. The National Policy on Climate Change provides for comprehensive national-level coordinating arrangements for climate change. However, there are gaps in terms of cross-sectoral linkages and processes related to national adaptation and subnational planning. This support is needed to carry out technical assessments, analyses, and project appraisals, including the preparation of projects to access climate finance from international climate funders.
2021	*National Lands Policy*	Policy			Released after 20 years of consultations, the National Lands Policy aims to enable a transparent land administration and management system for inclusive sustainable development by the year 2035. The policy lays out eight objectives which together aim to secure and clarify tenure, rationalize land registration, enable access to land ownership by Zambians to facilitate livelihoods, improving the land market, mainstreaming environmental and climate change concerns in land administration and management, and ensuring an inclusive land sector.
2022	*(Eighth) National Development Plan (2022-2026)*	Plan	x	x	As one of the outcomes of the eighth national development plan (8NDP), Zambia expects to enhance mitigation and adaptation to climate change. It will prioritise the implementation of adaptation actions as per NDC, increasing its resilience level from low in 2021 to medium in 2026. Government will also invest in ambitious mitigation actions by promoting low carbon sustainable consumption and production to reduce greenhouse gas emissions and meet the emission reduction targets set out in the Nationally Determined Contributions. Interventions in forestry, agriculture and energy will follow NDC and focus on forestry enhancement, sustainable charcoal production, improved cooking devices and forestry fire management. In agriculture, the focus will be on climate-smart agriculture. If implemented, these interventions will reduce GHG emission to Scenario 1 of mitigation pathways as per 3rd National Communication to UNFCCC. Under its strategy to increase agricultural production, the plan will promote extension services, tree crop production and irrigation, and research and development. Farm block development will promote diversification and the expansion of livestock and fisheries sub sectors. Promotion of the tourism sector will concentrate around Kasaba Bay and Liuwa National Park.

Year	Policy of initiative	Type	Forest, peatland,	GHG emissions reduction	Description
	SUBNATIONAL				
2018	*FP072. Strengthening Climate Resilience of Agricultural Livelihoods in Agro- Ecological Zones I & II in Zambia (Parts of Western, Southern and Provinces) (2018-2025)*	Project			GCF project that seeks to strengthen the capacity of farmers to plan for climate risks that threaten to derail development gains, promote climate-resilient agricultural production and diversification practices to improve food security and income generation, improve access to markets, and foster the commercialization of climate-resilient agricultural commodities

2.2 Recommendations for the jurisdictional level of assessment

Zambia's planning, climate, and forest governance structures justify jurisdictional assessment at the national level. After the initiation of multiparty politics in 1991, the initiative of decentralization in Zambia arose with the purpose of devolving decision-making authority to district and sub-district levels. This initiative sought transparent policymaking, effective community participation, and administration of their local affairs while maintaining sufficient linkages between the centre and the periphery. Nonetheless, the Coordination Mechanism established for the planning issues conceives different levels of a decentralized processes:

i) the **National level,** headed by the Ministry of Development Planning (MDP) under the office of the President, charged with enhancing synergies between sectors
ii) the **Sectoral level**, in charge of harmonizing sectors towards development objectives
iii) the **Provincial** level, which plays an oversight role on the implementation of district plans ensuring the alignment to the national development plans; it is responsible for the inter-provincial collaboration when required, as well as for linking the national and the district levels in providing feedback on planning, financing, implementation and monitoring
iv) the **District level**, which acts as the direct implementor of programs and projects under its jurisdiction; districts are entitled to design their own plans and monitoring and evaluation systems
v) the **Subdistrict** level, that undertake planning, monitoring and evaluation of activities planned at this level.

The **National Policy on Climate Change** (NPCC) defines a coordination structure with the Council of Ministers as the supreme decision-making body for overseeing climate change interventions in the country. The Chairperson of the Council is the Vice President while the Secretariat is provided by the Ministry of National Development Planning. The Steering Committee is the main advisory body to the Council of Ministers on policy and programme coordination and implementation whose Secretariat is provided by the Ministry of Lands and Natural Resources (MLNR). This Ministry is also the Chair of the Technical Committee on Climate Change and the UNFCCC focal point; it has delegated the functions of coordinating the compilation of Zambia's National Communications to the Zambia Environmental Management Agency (ZEMA).

Similarly, forestry development is also headed by the Ministry of Lands and Natural Resources, which is responsible for the formulation and implementation of policies. It is also in charge of encouraging the establishment of forest plantations (promoting private sector engagement), proper management of indigenous forests, and facilitation of stakeholder participation as well as all matters related to the forest carbon market. The Forestry Department based on this Ministry is responsible for capacity development, coordination, and implementation of rules, and regulations at the national, provincial, district, and forest reserve levels. For the agricultural sector, the Ministry of Agriculture together with the Ministry of Fisheries and Livestock (after 2015), are responsible for the facilitation, coordination, regulation, monitoring, and evaluation of policies on these matters as well.

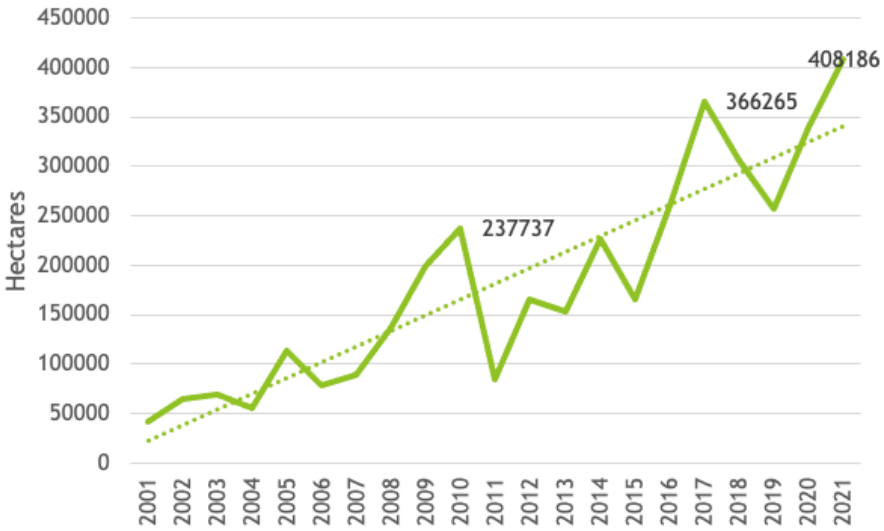
Although there is a perceived delay in the effective implementation of the decentralization policy in Zambia[32], carrying out sectoral policies might follow the same cascade structure as for the planning processes, given that the responsibility for the development of policies continues to be centralized at the national level. Furthermore, it is relevant to note that Zambia submitted a national Forest Reference Emission Level (FREL) and that the emissions reductions are planned to be monitored at the national scale as well. Zambia is already working on nested REDD+ projects through participation in the BioCarbon Fund program. However, **according to the FREL submission, the country is yet to develop more refined FRELs at the provincial level, therefore, the recommended jurisdictional level for this assessment is the national level.**

[32] GRIN. Decentralization policy implementation in Zambia. (Accessed 30/03/22)

3. Deforestation trends

According to Global Forest Watch, from 2001 to 2021, Zambia lost over 3.8 million ha of forest. In 2021 alone, the country lost 408,186 ha. During this period, an average yearly loss of 181,800 ha was presented.[33] Overall, tree cover loss in the country has been increasing in the last decades (**Figure 5).**

Figure 5 Deforestation trend in Zambia 2001-2021. Source: Global Forest Watch



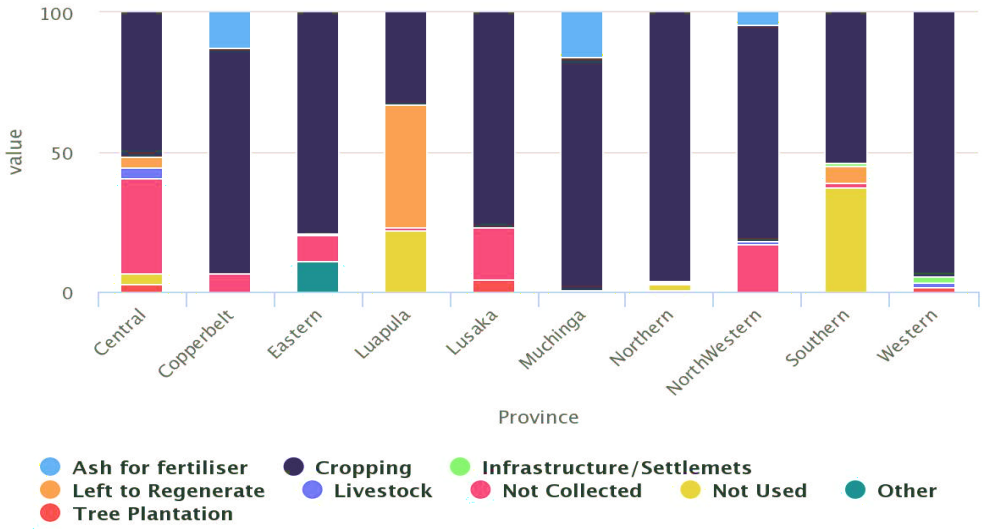
Zambia's Third National Communication (2020) estimated a baseline annual deforestation rate of 276,021 ha/year, which might represent a potential loss of about 10 million ha of forests in the next 30 years.

3.1 Deforestation and food production

According to the Forest Livelihood and Economic Survey (FLES) –which was conducted within the Integrated Land Use Assessment project (ILUA)– after clearing forests, households mainly use the land for cropping. This is the case for all the provinces, except for the Luapula province in which households mainly left the land for its regeneration **(Figure 6).**

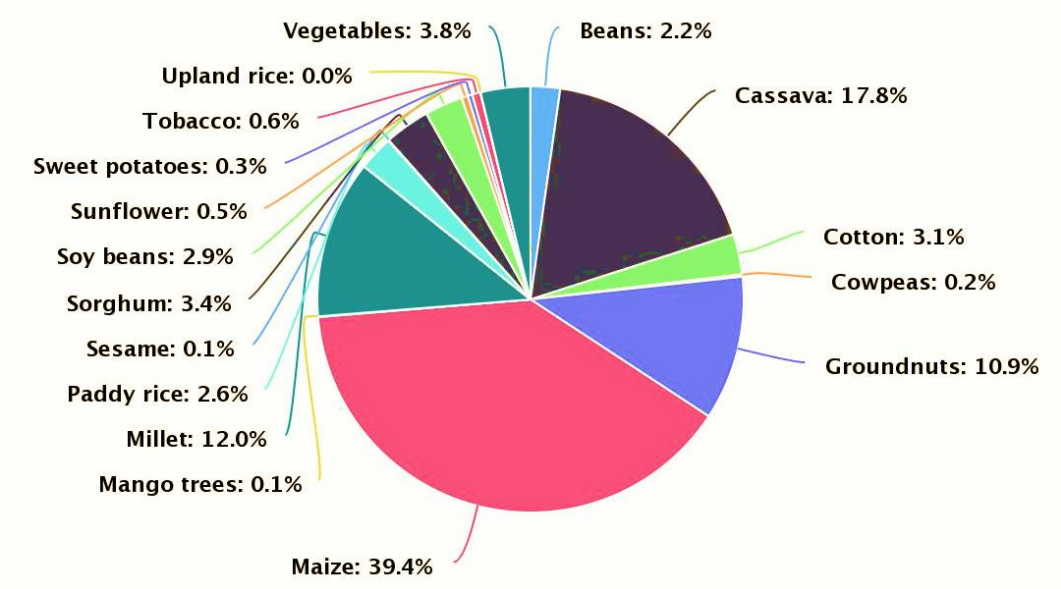
[33] GFW. Zambia outlook. (Accessed 18/05/22)

Figure 6 Usage of land by households after clearing by province. Source: Forest Livelihood and Economic Survey



The crops grown by households after clearing forest include primarily maize (39.4%), cassava (17.8%), millet (12%), and groundnuts (10,9%). Other minor crops include vegetables, paddy rice, soybeans, and beans (**Figure 7**). In other provinces such as Copperbelt, Muchinga, and NorthWestern, households clear the forests to use the ash as fertilizer.

Figure 7 Crops grown by households after clearing. Source: Forest Livelihood and Economic Survey



Deforestation might also be associated with the development of export-oriented food production including wheat, sugar, cotton, tobacco, coffee, tea, and maize. In 2002, Zambia's government approved the Farm Blocks Development Plan (FBDP) to allocate 11 'farm blocks' for agricultural investment –one block per province. Within these blocks, the government intends to provide infrastructure, while one large investor (10,000 ha) facilitates initial forest clearing and cooperation with other out-growers such as commercial farms (1,000-5,000 ha) and smallholders (30-3,000 ha). Overall, farm blocks are planned to cover around 1 million ha[34].

[34] Middelberg, Susanna L., van der Zwan, Pieter and Oberholster, Cobus. "Zambian farm blocks: A vehicle for increased private sector investments" Open Agriculture, vol. 5, no. 1, 2020, pp. 817-825. https://doi.org/10.1515/opag-2020-0079

The 8th National Development Plan (2022-2026) has identified the growth of the agricultural sector, in particular the expansion of large-scale commercial farming, as one of its economic development priorities. Agriculture could continue driving deforestation unless commercial and subsistence farming succeed in the development of sustainable and deforestation-free food production models.

Country	***Date of Report***	***Author***
Zambia	*11th of May, 2022*	*Climate Focus*
sub-national jurisdiction	***Date of AB Decision***	***Approval Status***
[N.A.]	*13th of May, 2022*	Approved

Version History

Date	Version	Author
11/05/2022	**1**	**Climate Focus**

Checklist JEC 1 Zambia

Item	Criteria	Analysis	Check	References
1.1	Amount of forest/peatland in the jurisdiction	**Summary conclusion**: Zambia has approximately 46 million hectares of forests, covering 61% of the country's total area. Dry woodlands and forests form the majority of forest types in Zambia, predominantly located in the Northern and North-Western parts of the country. Wetlands cover 14 to 19% of the country's area. Around 55,000 hectares are under forest plantations, the majority of which are managed by state-owned enterprise. The latest remote sensing assessment of forest cover was conducted in 2014. As of 2014, forests cover in the country was 45.94 million ha; Zambia has lost more than 1 million ha since 2000 [1]. Dry woodlands and forests form the majority of forest types in Zambia, which are defined land covered both by natural and planted forest meeting the threshold of 10% canopy cover growing over a minimum area of 0.5 ha with trees growing above 5m height [2]. This definition encompasses a broad range of vegetation types from wooded grasslands and scrub to closed forests. The main dry forests and woodlands found in Zambia (representing 91% of all vegetation types and covering over 40 million ha) include miombo, Kalahari, mopane and munga or mixed woodlands, predominantly located in the Northern and North-Western parts of the country. Dry deciduous and dry evergreen forests represent other 8% of Zambia's forests. Moist evergreen forests are present as well, although distributed only in ca. 0.5 million ha [3]. Forest plantations cover 55,000 ha (**Figure 8**, **Figure 9**, **Table 3**).	OK	[1&3] ILUA II. Final Report. 2016 [2] FREL 2020-2021. [3] ILUA II. Area statistics [4] National Wetlands Policy (2018) [5] Biennial update report (BUR)

Figure 8 Types of Zambia's forests. Source: ILUA II (2016).

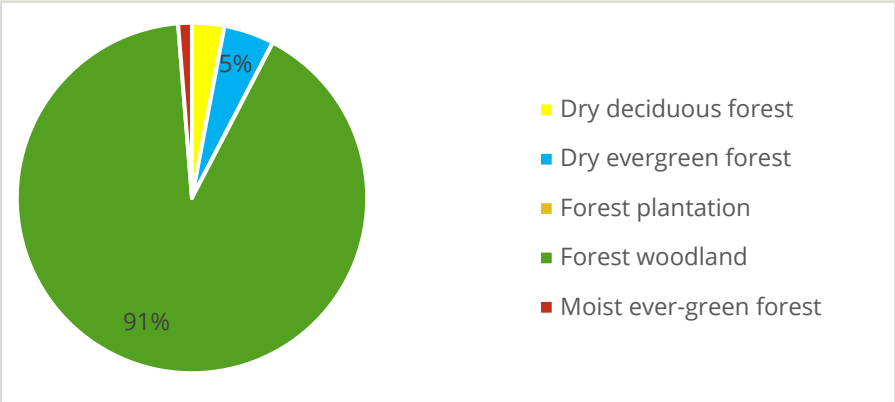


Figure 9 Ecoregions of Zambia. Source: Zambia country profile (CIFOR).

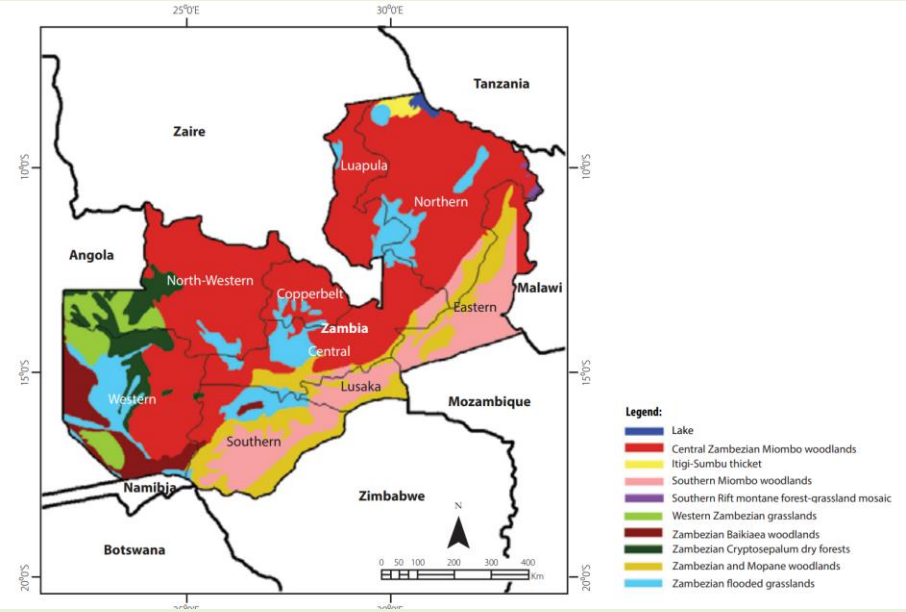


Table 3 Provincial Land Areas in the "Forest" FRA Class by Major Vegetation Type (in ha. Source: ILUA II (2016).

Region	Dry deciduous forest	Dry evergreen forest	Forest plantation	Forest woodland	Moist ever-green forest	Total
Central	15,804	189,652	0	5,324,107	111,895	5,641,458
Copperbelt	0	47,014	55,000	1,753,562	16,925	1,872,501
Eastern	0	21,940	0	2,600,593	15,796	2,638,329
Luapula	16,922	51,545	0	2,751,723	28,946	2,849,136
Lusaka	16,884	33,768	0	1,533,083	67,537	1,651,272
Muchinga	0	118,921	0	5,886,213	171,444	6,176,578
Northern	205,991	368,467	0	3,866,255	0	4,440,713
NorthWestern	0	930,861	0	7,992,301	127,080	9,050,242
Southern	274,511	135,561	0	2,437,557	16,945	2,864,574
Western	782,150	159,622	0	6,039,152	4,469	6,985,393
Total	1,312,262	2,057,351	55,000	40,184,546	561,037	44,170,196

Wetlands cover between 10 and 14 million ha (14-19% of the country area) [4].

The country has 470 Forest Reserves (FRs) comprising 172 National Forests (NFs) and 298 Local Forests (LFs) with an estimated combined total area of 7.3 million ha [5].

1.2	*Quality of forest/peatland in the jurisdiction*	*Summary conclusion: Zambian forests are secondary, naturally regenerated forests with long history of human use. The ecosystems, though, are rich in biodiversity with a high degree of endemism. Miombo woodland is by far the most dominant forest type, representing around 68% of the total forest and 45% of the total land area of the country. Zambia's Miombo woodlands have the highest diversity of tree species in all countries where the ecosystem is present, and miombo also recognized for its carbon sequestration value due to the trees' rapid regeneration capacity after clearing or wildfires. Zambia has a large network of national Protected Areas covering around 40% of land area, as well as 42 Key Biodiversity Areas and 8 Ramsar sites.* *Zambia's vegetation is dominated by miombo, which is characterized by open woodland dominated by Caesalpinioideae tree species. They are often located on nutrient-poor soils and are generally deciduous, shedding their leaves in dry seasons of the year. Zambian woodlands have long history of human use, including extraction of wood for timber and fuel, grazing, harvesting of non-timber forest products (NTFPs) and fire. FAO classifies all Zambian forests as secondary, naturally regenerated forests with no true primary forest remaining [1].* *The Miombo ecoregion – which extends at its maximum across 11 countries in eastern and southern Africa, including the whole of Zambia – was recognized as one of the Global 200 Ecoregions of WWF [2] and one of five High Biodiversity Wilderness Areas by Conservation International [3]. WWF included the Miombo woodlands as one of its 35 priority eco-regions in its 2012 Global Programme Framework and developed a conservation strategy for 2011-2020 for this eco-region [4].* *The Miombo woodlands are linked to the Zambezi River and its tributaries and include some of Southern Africa's most iconic national parks and globally significant populations of mega-fauna and WWF flagship species such as elephants and rhinoceros [5]. Zambia's woodlands, including the Miombo woodland ecosystem, have the highest rate of endemic mammal species which do not occur in other ecosystems [6]. It is also incredibly rich in plant species, with 8,500 species occurring of which 54% are endemic. Zambia's Miombo has the highest diversity of tree species in all countries where the ecosystem is present. In addition, the Miombo ecosystem is recognized for its value for carbon sequestration because of the sheer size of the ecosystem and for the trees' rapid regeneration capacity after clearing or wildfires [7].* *The central Zambezian Miombo woodlands are an extensive ecoregion, covering about 50% of the country's territory. The ecoregion includes extensive grassy wetlands (up to 30% of the region's area),*	*OK*	*[1&17] FAO (2020) Global Forest Resources Assessment* *[2] Olson and Dinerstein (2002) The Global 200: Priority Ecoregions for Global Conservation* *[3] Mittermeier et al. (2003) Wilderness and biodiversity conservation* *[4, 7 & 11] Tear et al. (2014) A return-on-investment framework to identify conservation priorities in Africa* *[5] WWF (2012) Miombo Eco-region: "Home of the Zambezi" Conservation Strategy:20211-2020* *[6,19&22] National Biodiversity Strategy* *[10] World Bank (2019) Country Forest Note* *[12,13&14] Zambia country profile. CIFOR (2014).* *[15&16] IUCN ESARO (2020) State of protected*

		*which increase its biodiversity. The Southern Miombo woodlands are drier than the central Miombo woodlands and cover about 15% of the country's area. The tree density is generally lower with a higher proportion of woody shrubs. The ecoregion has been significantly cleared for farming and ranching (see Figure 9 Ecoregions of Zambia. Source: **Zambia country profile** (CIFOR).* *In a 2014 study, Tear et al. [11] identified Zambia as a priority country for conservation investment based both on high biodiversity return value and return-on-investment principles. By combining biodiversity datasets for both terrestrial and freshwater environments, the authors adopted a biological distinctiveness index (primarily indicting species richness and endemism) for each ecoregion studied. The central and eastern Miombo woodlands were identified as priorities both for their significant biodiversity value as well as their proximity to globally important freshwater ecoregions.* ***Kalahari or Baikiaea–Terminalia woodland** is found on Kalahari sands of the upper-Zambezi basin in Zambia's Western and North-Western provinces. This woodland, similar to miombo in terms of species composition, covers approximately 9% of the country's land and is a secondary vegetation type formed from the disturbance of either Baikiaea or Cryptosepalum forests due to fire or agriculture [12].* ***Mopane woodlands** are distributed in a band stretching from Southern to Eastern Zambia, covering approximately 3.5% of the country's land area. Mopane woodland is important economically for timber and edible caterpillars, as well as charcoal and fuelwood. This formation is typically single storied with an open deciduous canopy approximately 6–18 m high, and has a less developed grass layer compared to miombo woodland [13].* ***Munga or Acacia–Combretum woodland** is a more open or park-like deciduous woodland. Often viewed as secondary woodland, the munga woodlands are found over a large part of central and southern Zambia, covering almost 4% of the land area. The woodland lacks the main species of miombo and mopane woodlands and is dominated by Acacia, Combretum and Terminalia species. It is one to two storied with emergent trees up to 18m in height. The undergrowth layer is characterized by dense, tall grass.* ***Dry evergreen forests** are part of the transition of forest types from Guineo-Congolian rainforest to Zambian dry woodlands. Dry evergreen forests cover less than 3–5% of the country's land area and are restricted to North-Western and Western provinces in Zambia. These are three storied forests with*		*and conserved areas in Eastern and Southern Africa.* *[18&23] Third National Communication.* *[20] Key Biodiversity Areas* *[21] BirdLife International* *[24] National Wetlands Policy (2018)*

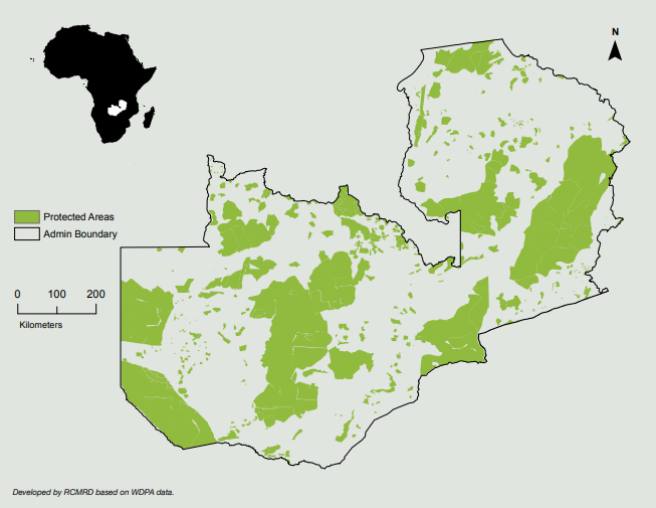
		a canopy up to 27m high and a dense shrub layer of 1.5–6.0 m high. An understory of 0.3–1.3 m high is also sometimes found. *Other forest types (both **evergreen and deciduous**) with limited distributions across Zambia include moist evergreen forest (divided into montane, swamp and riparian types); chipya woodland (derived from dry evergreen forest); and closed deciduous forests, which are divided into Baikiaea and itigi types.* *Very few **forest plantations** occur in Zambia. Between 55 and 61 thousand hectares[35] of plantations have been established across the country, 80% of them in Copperbelt Province. The main plantation species include Pinus kesiya, Pinus oocarpa, Eucalyptus grandis and Eucalyptus cloeziana [14].* *Approximately 40% of Zambia's total surface area is covered by protected areas whi*ch include national forests, national parks, game management areas and wetla*nds (Figure 10* Zambia's protected areas. Source: IUCN ESARO [15]. *[15]. This is the second largest proportion of land under protected status in Southern Africa, with 28.6 million hectares protected [16]. Zambia is one of the top ten countries in the world for proportion of total forest area designated for biodiversity conservation [17]. The country has a total of 635 protected areas including national parks, game management areas, and forest/wildlife reserves. The 480 Forest Reserves comprise 175 National Forests and 305 Local Forests, covering slightly less than 10% of national territory [18].* *Zambia is also a part of six transboundary conservation areas: the Kavango-Zambezi (potentially the world's largest conservation area, spanning five Southern African countries; home to large elephant populations), Liuwa Plains-Mussuma (home to the second largest wildebeest migration in Africa), Lower Zambezi-Mana Pools, Malawi-Zambia, Mosi-oa-Tunya/Victoria Falls Transboundary World Heritage site and the Zimbabwe-Mozambique-Zambia conservation area [19].* *Zambia is home to 42 Key Biodiversity Areas (KBAs) covering over 10,451,400 hectares. Of these, 37 KBAs are forests while 25 are shrublands and 8 are wetlands. The vast majority (36 out of 42) KBAs in the country have identified threats. The country has 184 trigger species, 94% (173) of which are birds[36] [20] Three of these bird species are endemic to the country [21].*		

[35] Based on different published sources, with the official figure (ILUA II) of 55,000 ha.
[36] Trigger is defined as a biodiversity element (e.g., species or ecosystem) by which at least one KBA criterion and associated threshold is met.

Zambia's watersheds and wetlands are also critical for the country's economic development, livelihoods, and biodiversity. *The Zambezi watershed (comprising mostly Miombo forest) has been threatened by deforestation from mining and infrastructure; the Kafui watershed has been polluted with runoff from industry and agriculture, while the Luangwa watershed has been encroached upon by agricultural and tourism development [22]. In the Luangwa, deforestation has led to soil loss, which is exacerbated when farmers are pushed into hillier, more sensitive landscapes.*

Besides these territorial watersheds, Zambia has several globally important wetlands. The country has eight Ramsar sites covering 4.03 million hectares, home to endemic and endangered plant and animal species [23]. They include Kafue Flats Wetland, Bangweulu Swamps, Barotse (Zambezi) Floodplains, Luangwa Floodplains, Busanga Swamps, Lukanga Swamps, Lake Mweru-wa-Ntipa and Lake Tanganyika [24].

Figure 10 Zambia's protected areas. Source: IUCN ESARO [15].

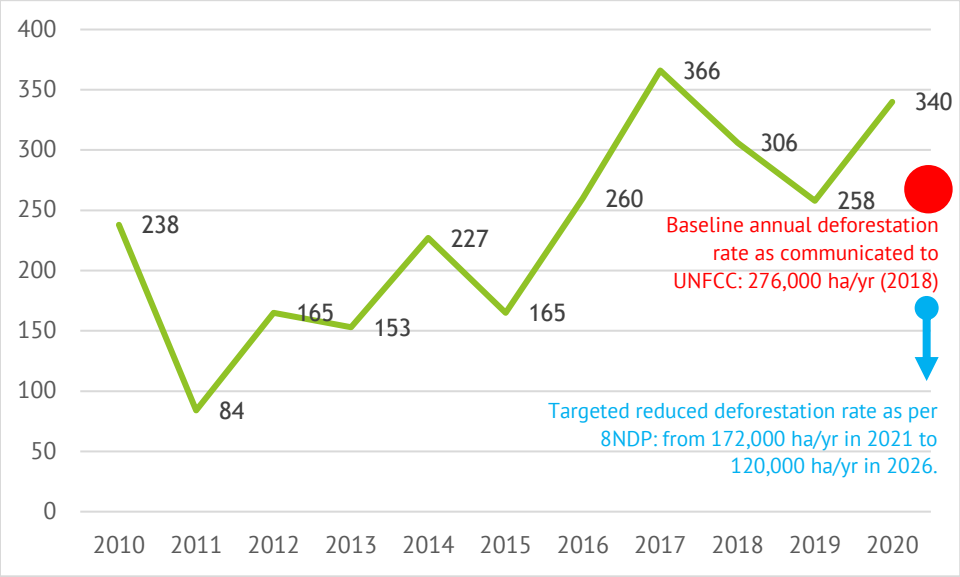


Checklist JEC 2: Ambition and Strategy — Zambia

Item	Criteria	Analysis	Check	References
2.1	*Quantitative target against historic rates of gross deforestation*	*Summary conclusion: Zambia integrated its first quantitative target related to deforestation reduction into the Eighth National Development Plan, aimed to reduce deforestation rate from 172,000 hectares per year in 2021 to 120,000 hectares per year by 2026. The major policy shift is expected to be a ban of unsustainable production and consumption of charcoal by 2025. The baseline used in this target is, however, 38% lower than the officially communicated national rate of 276,000 ha/year. The scope of the 8NDP's baseline is not detailed in the document. The difference may be due to the specific measures tackled by 8NDP.* *According to the Third National Communication (2020) [1], Zambia's annual deforestation rate is 276,000 hectares, with the average of 250,000 ha/year between 2010 and 2014, or 0.6% of total forest area lost per year. The updated NDC provides an annual rate of 0.7% of total forest area [2].* *The Eighth National Development Plan (8NDP) sets out Zambia's strategic direction, development priorities and implementation strategies for the period 2022 to 2026. As one of its outcomes, the country expects to enhance mitigation and adaptation to climate change. It will prioritize the implementation of adaptation actions as per NDC. [3]* *Until 2026, the Government will implement programs aimed at reversing the growing threats to natural resources ranging from habitat transformation, encroachment, uncontrolled wildfires, and invasive species. Among the key interventions will be to enhance community participation in natural resource management. The operations of structures, such as the natural resources management committees, game management areas committees, forest management committees, and water management committees will, therefore, be strengthened. Further, the Government will promote the quantification and valuation of natural resources and ecosystem services and operationalize conservation plans for critical wetlands. The Government will also strengthen research and technology development while addressing illegal land-use change with local authorities and other relevant institutions and stakeholders [4&5].*	OK	*[1] Third National Communication.* *[2&6] NDC* *[3&8] Eighth National Development Plan (2022-2026).* *[4] The REDD+ Strategy Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation* *[5] Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (2017).*

A major policy shift during the 8NDP period will be to ban the unsustainable production and consumption of charcoal by 2025, aiming to reduce the deforestation rate to 120,000 hectares of forest cover loss per annum by 2026 from 172,000 hectares per annum in 2021. The 8NDP does not provide the clear scope of the baseline deforestation rate, which represent only 62% of the one stated in the NDC and endorsed as the official deforestation rate for Zambia [6]. Considering the focus of the short-term intervention, the baseline can possibly be adjusted to reflect the impacts related to charcoal production only (excluding agriculture, settlements and other deforestation drivers). The previous development plan, 7NDP, considered the baseline annual deforestation rate (2011-2016) to be 300,000 hectares.

Figure 11. Annual deforestation rates in Zambia, as estimated by Global Forest Watch. Red dot represents official annual deforestation rate as per 3rd National Communication. The blue arrow shows the short-term target to reduce deforestation rate per the Eighth National Development Plan.



The 8NDP is the latest development that puts in practice the country's commitments and plans, including NDC that commits to reducing emissions by 25% by 2030 compared to 2010 base year emission levels, or by 47% if international support is provided [7].

<table>
<tr>
<td>2.2</td>
<td>Ambition</td>
<td>
Summary conclusion: The deforestation-related target, integrated into the Eighth National Plan, seeks to reduce deforestation rate by 37% between 2021 and 2026. This is the first quantitative target expressed directly in hectares impacted, and the Plan is expected to have NDP Data Catalogue that will centralize all the key information (metadata) pertaining to the indicators and MRV system. Considering the steady growth of the country's deforestation rate, this target is considered highly ambitious, although needs clarification on the scope for the next reassessment.

Zambia was a net sink of GHGs from 1994 to 2016 [1]. Between 1994 and 2016, the net sink shrunk from -56,866.0 Gg CO_2eq to -9,508.5 Gg CO_2eq; a reduction of 83.3% by 2016 compared to 1994. Total (gross) emissions increased from 86,063.2 Gg CO_2eq in 1994 to 126,758 Gg CO_2eq in 2016, a growth of 47.3%. Removals declined by 4.7% over the same period. In 2016, AFOLU contributed to 93% of GHG emissions. Forests were the highest emitting subcategory at 55.93%. Emissions data indicates increasing gross emissions for all sectors, as well as declining removals, across the time period.

Table 4 Zambia total GHG emissions and removals and percent change, 1994-2016, in Gg CO2eq [2]
<table>
<tr><th></th><th>1994</th><th>2010</th><th>2016</th><th>% change 1994 to 2010</th></tr>
<tr><td>Removals</td><td>-142,929</td><td>-137,213</td><td>-136,266</td><td>-4.7</td></tr>
<tr><td>(Gross) Emissions</td><td>86,063</td><td>120,604</td><td>126,758</td><td>47.3</td></tr>
<tr><td>Net Emissions</td><td>-56,866</td><td>-16,718</td><td>-9,509</td><td>-83.3%</td></tr>
</table>

The country's NDC [1] sets an economy-wide 2030 emission reduction goal of 25% (20,000 Gg CO_2 eq) with limited international support) or by 47% (38,000 Gg CO_2 eq) with substantial international support, compared to a 2010 baseline. The mitigation plan is focused on three programs:

1 Sustainable forest management
2 Sustainable agriculture
</td>
<td>OK</td>
<td>
[1] Biennial update report (BUR1) (2020)

[2] 2020/2021 (Modified) FREL

[3] Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (2017).
</td>
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		3 Renewable energy and energy efficiency *If each sector contributes proportionally to the target, reducing its own emissions by 25% or 47%, then forest sector annual emissions should be reduced by 7,450 (25%) or 11,026 (47%) Gg CO_2e, respectively, based on the annualized emissions of 29,800 Gg CO_2e from the sector identified in the 2016 FREL for the period 2010-2014.* *According to National Investment Plan for REDD+ (NIP), the first investment priority has potential to reduce emissions from deforestation on customary land by 30% or 7,170 Gg CO_2e per year, by 2030 [3].* ***Considering that Zambia's business-as-usual emissions trend identified in its BUR1 has seen a steady increase in gross and net emissions since 1994, it is ambitious for the country to set both an economy-wide reduction target and a specific associated deforestation emissions reduction target.***		
2.3	*… equaling or exceeding national targets*	***Summary conclusion:*** *not applicable* *Assessment is conducted at the national level.*		
2.4	*Feasible Strategy*	***Summary conclusion:*** *Zambia's National REDD+ Strategy to reduce forest loss and increase forest cover contains essential features that allow to consider it feasible. Key stakeholders from all provinces of Zambia took part in a broad-based consultative process during its development. The strategy relies on a robust investment plan, to be implemented by the end of 2022, with a total budget of ca. USD 400 million.* *In its readiness phase, Zambia developed the National Forest Monitoring System (NFMS) in 2012. In 2015, the country published its National Strategy to reduce Deforestation and forest Degradation and submitted its first FREL in 2016 (later updated in 2021). In 2017, the Government of Zambia developed the Investment Plan to provide details for how the Strategy might be financed and implemented on the ground.* *The* ***National REDD+ Strategy*** *has been developed based on an integrated natural resources management perspective at landscape level. The Strategy is anchored on widespread stakeholder consultations, communication, and knowledge management at national,*	*OK*	*[1] The REDD+ Strategy Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation* *[2] Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (NIP)* *[3] Biennial update report (BUR1) (2020)*

		provincial and district levels. Further, the development of the Strategy benefited from key studies including the drivers of deforestation, economic context of REDD+, the economic valuation of forests and ecosystem services, finance, incentives, and benefit sharing opportunities for REDD+. *The **Strategy** established a set of strategic objectives including that the mining industry should contribute to the management of surrounding indigenous forests and the establishment of forest plantations for its own timber needs by 2025. Furthermore, it sought to advance legislation to secure land and resource rights on customary lands by 2025. Objectives by 2030 include:* • *Effectively manage and protect threatened and unsustainably managed national and local forests* • *Effectively manage and monitor selected high value forests in open areas* • *Management plans for all timber concession enforced and monitored with the full participation of local communities* • *Adopt good agricultural practices that mitigate carbon emissions* • *Regulate production of wood fuel (charcoal & firewood) and improve its utilization [1]* ***The strategy was developed and implemented through a multistakeholder consultation process.** Zambia's REDD+ Strategy is guided by core principles which include fairness, transparency, and inclusiveness. Transparency specifically includes the opportunity for stakeholders to participate in both decision-making and implementation. This principle is reflected throughout the plan's description of its strategic interventions. The strategy's overall goal includes the equitable sharing of both carbon and non-carbon benefits among stakeholders. During its development, the strategy was informed by national dialogue forums, and its implementation will be guided by a number of civil society and local community forums. The implementation of its Safeguards Information System will also be informed by a multi-stakeholder group representing a range of institutions and sectors. The strategy development included the development of a Stakeholder Analysis and Engagement Plan (SAEP) to ensure that all relevant stakeholders including local communities are effectively involved in all phases of REDD+ development in the country. Other aims include developing robust guidelines for free, prior and informed consent (FPIC) and a REDD+ Benefit Distribution System.*		*[4] 2016 FREL* *[5] 2020/2021 (Modified) FREL*

		The strategy sets quantified and timebound targets. *Zambia's REDD+ Strategy [1] was developed before its FREL, so it does not include specific targets for reducing deforestation or achieving a certain forest cover. However, it includes a number of specific and timebound targets for the enabling environment for REDD+, e.g. by 2025, land and resource rights on customary land are legislated and secured.* *Zambia submitted its first FREL to the UNFCCC in 2016 [4]. The National Investment Plan for REDD+ (NIP) (2017) [2] references this FREL when it sets an emissions reduction target of 30% for land use change (forest to non-forest, i.e. deforestation). In its discussion of community based forest management for conservation of high-value forest areas (Core Investment Priority 1), it notes that 94% of land in Zambia is designated under customary land tenure. It then notes the 2016 FREL of 25.42 MtCO2e/yr and says:* *"If the government aims to cut its emissions from land use change (customary land only) by 30% (Forest to Non-Forest) then investment priority 1 has the potential to abate approximately 7.17 MtCO2e/yr-[1]" (p.46-47) [2].* *The country's first Biennial Update Report (BUR1) [3], submitted in 2020, confirms that the NIP sets this target: "The Investment Plan aspires to reduce emissions from land use change by 30%" (p.174).* *The country's NDCs (2016, 2020, and 2021 submissions) consistently set economy-wide emission reduction goals of 25% **by 2030** (compared to a 2010 baseline, with limited international support). The REDD+ Strategy similarly sets its furthest targets for 2030, including specifically "By 2030, selected high value forests in open areas are effectively managed and monitored," which aligns with the NIP's CIP1. Therefore, it can reasonably be assumed that the NIP's 30% land use change emissions reduction target is intended to be accomplished by 2030.* ***Implementation of the strategy includes a plan to strengthen the enabling environment and relies on the detailed investment plan.*** *The National REDD+ strategy includes specific steps to improve the enabling environment for forest protection, sustainable management, and restoration throughout its strategic objectives. In 2017, the Government published the **National Investment Plan to Reduce Deforestation and Forest Degradation (IP)**. It sets out the*		

		implementation priorities of the REDD+ National Strategy over the period of 2018-2022, based on a multi-sectoral approach as articulated under the 7NDP. *This Investment Plan's core priorities draw from the 7NDP Implementation framework. It combines supportive programmes on capacity development, participatory mapping and strengthened community forest governance with two Core Investment Priorities (CIPs) on: a) Conservation and management of high-value forests; and b) Promotion of resilient landscapes, sustainable agriculture, and energy. The IP aims at attracting and guiding the allocation of national and international funding sources for the implementation of the country's REDD+ strategy that will steer the country towards a green development pathway.* *For each of a small number of core investment priority areas, the IP indicates the actions that need to be undertaken to carry out the REDD+ National Strategy, what is likely to be done under existing initiatives, what are the missing investments, and proposes possible funding sources. The implementation of this strategy requires the mobilization of multiple sources of funding (public and private, multilateral and bilateral) and calls on various funding modalities with a* ***preliminary funding target in the range of US$404.67 million over five years*** *and aims to shift from a project-based approach to a more integrated and inclusive approach. The IP provides the details on the necessary enabling environment. It is expected that the enabling environment creates suitable conditions to facilitate livelihood investments to reduce deforestation and lay the ground for the other investment priorities. Each investment priority is described in terms of components, key activities and indicators as well as the estimated budget required for its accomplishment. The IP also defines an implementation plan that embraces a cross-sectoral approach considering strong stakeholder engagement and giving relevance to public-private partnerships; it also envisions a landscape approach at the watershed level prioritizing three watersheds (Zambezi, Kafue and Luangwa).* *CIP1* ***Conservation of high--value forest areas*** *focuses on effective conservation and management of forest reserves, open forest areas on customary lands, timber concession areas, threatened and sensitive protected areas and forests adjacent to mining and other large infrastructural development sites. At the core of CIP1 is gender responsive community participation in the sustainable management of forests in these different forest regimes. The budget estimate for this CIP is USD 194.6 million.*		

		Approximately 94% of land in Zambia (or 62% of its forests) is designated under customary land tenure and as such this priority has significant potential for abatement of GHG emissions. Zambia's Forest reference emissions level quantified annual emissions to be in the order of 25.42 tCO_2e/yr. If the government aims to cut its emissions from land use change (customary land only) by 30% (Forest to Non-Forest) then investment priority 1 has the potential to abate approximately 7.17 $MtCO_2e/yr$. *CIP2 **Resilient landscapes, sustainable agriculture, and energy** emphasizes adoption of climate-smart agricultural practices and restoration and/or /rehabilitation of degraded land areas, regulated production of wood fuel and its improved utilization, and promotion of wide adoption of appropriate and affordable alternative energy sources. The estimated budget for CIP2 is USD 178.1 million.*		

Checklist JEC 3: Progress — Zambia

Item	Criteria	Analysis	Check	References
3.1	*Timely progress towards milestones of the strategy…*	*Summary conclusion: Zambia adopted its National REDD+ Strategy in 2015 [1] and its National Investment Plan for REDD+ in 2017 [2]. The investment plan covers 2018-2022 and intends to provide details for how the REDD+ Strategy can be financed and implemented on the ground. The 2020/2021 FREL [3] lists the expected results period as 2019-2023. The first quantitative target related to deforestation, has been set for the Eighth National Plan 2022 – 2026. Given the country's adoption and implementation of a number of new laws and policies, the country appears to be on track to make timely progress towards its milestones.* *Zambia has documented its progress in developing and implementing supporting laws, regulations, and policies to advance its forest strategy, along with strengthening the responsible institutions, in e.g. its 2020/2021 FREL [3]. Among the relevant laws and policies adopted are the following:* • *2006 – Vision 2030* • *2007 – National Policy on Environment* • *2008 – National Energy Policy* • *2014 – National Forestry Policy* *National Agricultural Policy* • *2015 – National REDD+ Strategy* *Forest Act (revised)* • *2017 – National Climate Change Policy* *National Investment Plan (include key activities aligned to 2020 REDD+ Objectives):* *- Setting up and declaring protected areas around threatened headwaters and other HCV and HCS areas – Priority areas influenced by mining* *-It sets a core area of investment on "Enabling environment to facilitate positive action"* • *2021 – National Lands Policy*	*OK*	*[1] The REDD+ Strategy Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation* *[2] Investment Plan for REDD+ National Investment Plan to Reduce Deforestation and Forest Degradation (NIP)* *[3] 2020/2021 (Modified) FREL*

		• *2022 – Eighth National Development Plan*		
3.2	*… measurably on a trajectory towards the targets for reduced deforestation*	*Summary conclusion: Zambia has not yet published results toward its forest strategy milestones. However, it has submitted two separate FRELs [1&2] under the UNFCCC, with the latest (2020/2021) FREL demonstrating significant methodological improvement and enhanced alignment with international guidelines. The 2021 FREL also identifies continued areas for improvement that the country will pursue. Assuming the country continues to improve its forest monitoring and reporting capacity, it is reasonable to expect that future REDD+ results will be measurable and verifiable.* *The 2021 FREL outlines a number of areas of technical Improvement beyond the first FREL submission. Notably, the 2nd FREL includes disaggregated FRELs for each subnational area (province), allowing for more granular monitoring and reporting. Degradation has been added as a tracked REDD+ activity (beyond just deforestation). Emissions factors and activity data have been improved through collaboration with technical partners from the U.S. Forest Service and improvement of sampling methods and data collection. Calculations are now aligned with IPCC GHG inventory categories, and uncertainty estimates are now included with all FREL results.* *The technical assessment report for the 2021 FREL [3] confirms that the data and information used by Zambia in constructing its FREL are transparent, complete and in overall accordance with the guidelines contained in the annex to decision 12/CP.17. Areas for future technical improvement include* *1) alignment between Zambia's FREL and National Communications deforestation estimates, which Zambia noted in its 2021 FREL was due to different emission factors and activity data applied (the FREL used Tier 2 data, which is generally more accurate than the Tier 1 data applied for the National Communication)* *2) applying comparable weights to its deforestation data at national and provincial levels to address differences in the two estimates (Zambia explains this difference in Annex 1 to the 2021 FREL)* *3) aligning application of forest definition (minimum canopy cover of 10%) across emission factors and activity data to improve estimation for young tree stands*	*OK*	*[1] 2016 FREL* *[2] 2020/2021 (Modified) FREL* *[3] Report on the technical assessment of the proposed forest reference emission level of Zambia submitted in 2021*

		4) improving estimation of the activity of forest degradation (Zambia notes limitations to its methods in the 2021 FREL) 5) exploring other sampling approaches to increase the accuracy of its FREL estimates 6) using high-resolution imagery across the entire time series for analysis to ensure comparability of analysis year-over-year 7) improving approaches for uncertainty calculations to avoid underestimating uncertainty in future submissions *Because the majority of these improvements were already noted in Zambia's modified FREL submission, it is reasonable to expect that Zambia will continue to improve its methodology as part of a stepwise approach.*		
3.3	*Verifiable improvement of the enabling environment*	*Summary conclusion: Zambia has made significant progress in the last decade to update and modernize its land and forest policy and regulatory framework, navigating long and contentious multi-stakeholder consultations and balancing competing interests to decentralize and improve its forest governance structures. Significant challenges and weaknesses in the enabling environment remain, but the government of Zambia has identified these challenges and set out its intention and plans to address them, through strategies like the National REDD+ Strategy (2015), the National Lands Policy (2019), and the Eighth National Development Plan (2022). Its intention to improve forest management in the country is reflected throughout its domestic policy context and in its international commitments.* ***Zambia has achieved significant policy milestones in its journey to achieve forest protection, sustainable management, and restoration.*** *The World Bank's 2019 Country Forest Note for Zambia (CFN) [1] identifies the National Forest Policy of 2014 and the 2015 Forest Act as particularly significant. Until these were passed, forestry was governed by policies from the 1970s. Together, these policies decentralized forest control and seek to more fully engage local communities and non-state actors in sustainable forest management. However, the impact of these changes and recent statutory instruments has yet to be translated into results toward Zambia's forest targets.* ***To make up for low state capacity for sustainable forest management, Zambia's recent forest policy framework seeks to empower and leverage local communities and the private sector for participatory forest management.*** *The World Bank's CFN [1] identifies participatory forest*	*OK*	*[1] World Bank (2019) Country Forest Note* *[2] The REDD+ Strategy Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation* *[3] National Lands Policy* *[4] Eighth National Development Plan (2022-2026).* *[5] Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (NIP)*

		management as a key solution to achieve forest targets given low state capacity and because a large share of forest area is under customary tenure. The new forest policy framework aims for an "integrated approach" to forest management, poverty alleviation, and achieving biodiversity and climate targets by encouraging community forest management and benefit-sharing mechanisms. The National REDD+ Strategy [2] aims to address weaknesses in governance and land tenure security on community and customary lands, which will increase communities' capacity to effectively and sustainably manage their forests. Regulatory instruments to enable communities to obtain recognized rights over forest resources include Statutory Instrument No. 11 of 2018 - The Forests (Community Forest Management) Regulations. *To attract private sector investment for private forest management, the policy framework also seeks to clarify land use rights and access to markets. The country's National Lands Policy [3], adopted in 2019 after 20 years of consultations, aims to rationalize and enhance the land administration, registration, and management system of the country to achieve a functional land market, improve tenure security, and increase the inclusiveness of the land sector.* ***Low government capacity is still a hindrance to sustainable forest management; Zambia's Eighth National Development Plan (8NDP) [4] aims to finally implement the country's planned decentralization to increase local government capacity.*** *Proper implementation of Zambia's forest policy framework and achievement of its forest targets relies on strong forest governance. According to the World Bank [1], the central Forest Department still suffers from weak capacity to control and monitor land use conversion, even in protected areas, in addition to in customary lands. Implementation of the country's plan to decentralized and devolve certain authorities and responsibilities to local governments will help to address this weakness. The country's 8NDP [3] intends to realize the long-planned decentralization from 2022-2026.* ***Zambia has developed a strategy to secure sufficient financial resources to implement its forest strategy. As part of the REDD+ process, Zambia completed the Readiness Phase and then developed a National Investment Plan for REDD+ [5].*** *The plan sets out investment priorities for 2018-2022 in line with the country's NDCs and national development plans. The investment plan outlines a core principle of financial sustainability, ensuring that the government of Zambia will dedicate funding to achieve its goals via its normal national budgetary processes to assure long term sustainability of activities implemented under the plan. The government shall*		

		also diversify its funding of the plan to meet any financial shortfalls and assure sound financial management of any secured finances. *Forests are well integrated into Zambia's domestic priorities and international commitments.* *Per the World Bank [1], both Vision 2030 and the country's national development plans emphasize development based on the sustainable management of natural resources. The National Policy on Climate Change also includes the objective of reducing climate change emissions from land use change and forestry. The country's international commitments rely heavily on sustainable forest management and reducing deforestation to meet its mitigation objectives. Zambia's NDC includes an ambitious pledge to reduce GHG emissions by between 25% and 47% by 2030 from a 2010 baseline, depending on the availability of international support. Three main sectors will contribute to these mitigation goals (1) sustainable forest management, (2) sustainable agriculture, and (3) renewable energy and energy efficiency.*		

Checklist JEC 4: Monitoring, Reporting and Verification (MRV) [Zambia]

Item	Criteria	Analysis	Check	References
4.1	Transparent system operational	Summary conclusion: As a participant of the ONUREDD+ (2012-2015) Programme, Zambia has attained relevant progress in its monitoring systems. The Forestry inventory system (ILUA) has been actualized and integrated into REDD+. In addition, the Forest Monitoring System has been established and institutionalized focusing on the development of a decentralized national forest monitoring system. However, information has only been updated through 2014, and there is no evidence of a planned reporting schedule. Data for Zambia's National Forest Inventory is collected through the Integrated Land Use Assessment project (ILUA) led by the Forestry Department [1]. ILUA provides useful statistical estimates of volume and biomass for major forest types (and associated pools) and other land uses at the provincial level across variations in forest canopy cover caused by disturbances, degradation, and ecological conditions [2]. The data is comprised of both biophysical and socio-economic data as well as spatial data sets including land use change and forest biomass. They developed national land cover maps for 2000, 2010, and 2014 from which, 2010 has undergone an accuracy assessment and was defined as the base year. The website of the project provides an option to download "Tiff" images for the three years[37]. Socio economic information is based on results from the survey on Forest Livelihoods and Economy; it includes topics such as "Access to and availability of forest land and forest products", "Forest clearing and reforestation", "Forest management". Activity data for FREL/FRL's development were estimated on the basis of a random systematic sampling approach and the construction of grids covering the country, resulting in 11,110 sample points. High-medium resolution satellite imagery (from Google Earth and Bing Maps) were interpreted using Collect Earth. Among the technical improvements of FREL submissions between 2016 and 2021 (2009-2018) was including forest degradation in the scope of the REDD analysis, in addition to deforestation [3]. In its REDD readiness phase (2012-2015), the Government of Zambia developed a Web Portal which incorporates the National Forest Monitoring System (NFMS) and a REDD+ Wiki/Database.	OK	[1&2] Integrated Land Use Assessment project (ILUA) [3] Technical Assessment [4] BUR

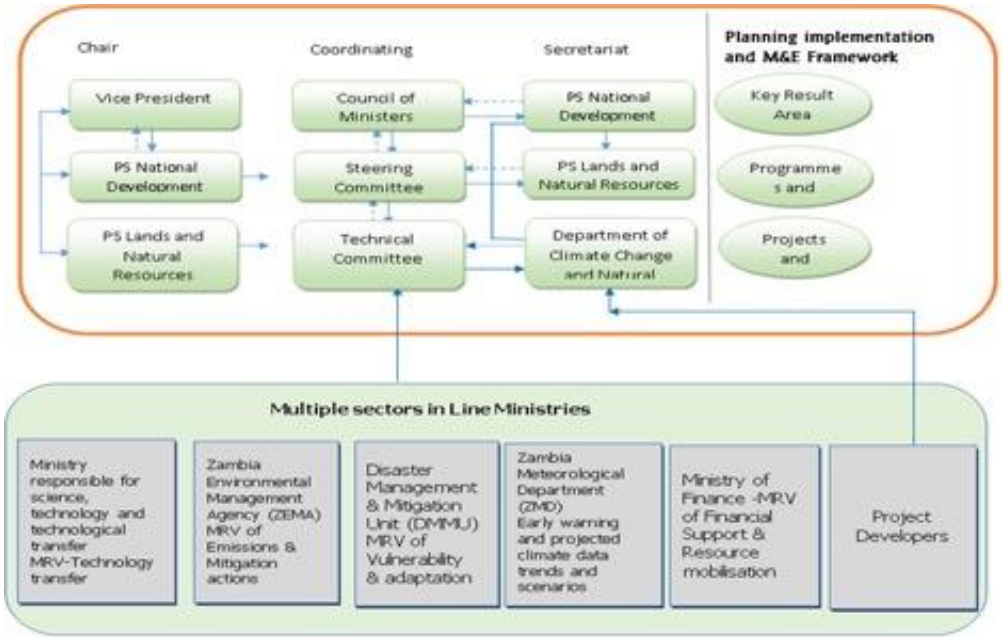
[37] Available at: http://zmb-nfms.org/iluaii/images/D_Downloads/Zambia_lcm.zip

		Zambia's work in the area of MRV for REDD+ has focused on the development of a decentralized national forest monitoring system (NFMS). Ten provincial forest monitoring laboratories have been established and equipped with tools for forest monitoring such as computers with Geographic Information System (GIS) software, Geographical Positioning System (GPS) units for forest monitoring field activities and printers and plotters for field map production. The laboratories will provide near real-time spatial data on deforestation and forest degradation that can be relayed to the central national forest monitoring laboratory in Lusaka to inform national reporting. Along with this infrastructure development, extensive capacity building of provincial of cross- sectoral technicians [4].		
4.2	Progress towards implementation of the MRV system	*Summary conclusion: Progress on the development of MRV systems has been linked to specific projects. An integrated MRV system is still in design phase, and there is no evidence of available short-term support to continue development. However, the MRV for finance was targeted for a diagnosis and a baseline study in 2020 conducted by Commonwealth Secretariat with the support of NDC Climate Action Enhancement Package (CAEP).* *Efforts have been undertaken in Zambia to develop MRV related systems pre-Paris Agreement as preliminary systems that were linked to particular projects. These systems included MRV of GHGs, NAMAs (supported by the Low Emissions Capacity Building Programme) and REDD+ (supported by ONUREDD+). There have been also efforts to develop MRV systems at the sub national level through interventions under the Community Markets for Conservation (COMACO) model. The Netherlands Development Organisation (SNV) also practices a model of MRV with participating communities. However, the progress of these systems has been limited due to identified constraints and gaps (for example, lack of mechanisms for tracking emissions, mitigation actions, finance, capacity building and technology transfer) [BUR 3].* *In the BUR 1 (2020), Zambia claimed that is developing an MRV system in the context of the Enhanced Transparency Framework. The National MRV System is envisaged to contain three main components namely, MRV of emissions, mitigation and support (i.e. finance, technology transfer and capacity building) and will be characterized by the following:* *a.) Mechanism for tracking emissions, mitigation actions, finance, capacity building, and technology transfer;* *b.) Online monitoring plans;*	*OK*	*[1] Country report: Monitoring, Reporting and Verification of Climate Finance for Zambia*

		c.) Facility for accrediting independent verifiers; *d.) Guidelines, instructions and audit procedures;* *e.) MRV Institutional coordination structures, responsibilities and competencies;* *f.) Interactive NDC database and IT Platform;* *g.) Web based, Multi-user;* *h.) Geospatial Database with interactive map of Zambia showing implementation of climate change projects; and* *i.) An interactive database showing NDC mitigation and adaptation projects, support received and SDGs progress contributions of NDC projects.* *However, based on the above information it is not clear how this model design will be aligned to the initial REDD+ MRV linked to the Zambian Integrated Land Use Assessment (ILUA II)[38] discussed in 4.1.* *The institutional arrangements planned for the MRV system will be based on the provision of the National policy on climate change with established linkages to sub-national and sectoral institutions (**Figure 12**). The benefits of institutionalization include: Improved inventory quality; data documentation; archiving; and transparency.*		

[38] Success Stories: Developing Zambia's National Forest Monitoring System

Figure 12 Institutional arrangements for MRV



The Ministry of Land and Natural Resources (MLNR) and the Ministry of National Development Planning (MNDP) developed a mechanism (Dashboard) to track support received and actions taken on adaption and mitigation. The data and information is collected from projects work plans and progress reports that are provided to the Climate Change Technical Committee through the Department of Climate Change and Natural Resources (BUR pg. 172).

In short, Zambia has made progress in setting arrangements for monitoring, coding and tracking climate change expenditures to enhance accountability and transparency in line with the Paris Agreement [4]. However, the process is still developing and effort is required to develop robust and measurable indicators for both mitigation and adaptation. Through the Commonwealth Secretariat supported by the NDC Climate Action Enhancement Package (CAEP), it was developed a baseline report on MRV for climate change actions (2020) [1]. It presented an

		analysis and diagnosis of practices in the country, the related regulatory instruments, relevant actors, technological platforms and initiatives already implemented or in the process of being implemented. It aimed at improving understanding of the financial flows to mitigate and adapt to climate change, from public, private, national and international sources. *Nonetheless, in terms of progressing with an integrated MRV system, the country identified some capacity building needs in the areas of data collection under the GHG inventory, data information systems, modelling, reporting and verification and data collection tools and equipment. Further, Zambia's implementation of its NDC ambition requires substantial international support and leveraging on private sector-led initiatives (BUR).*		

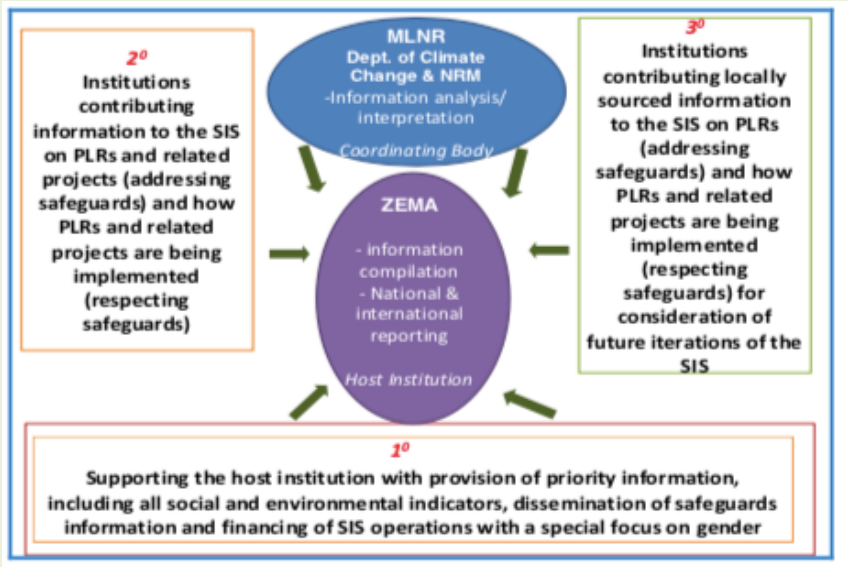
Checklist JEC 5: Social and environmental safeguards — Zambia

Item	Criteria	Analysis	Check	References
5.1	Safeguards against social and environmental risks associated with the strategy in place	Summary conclusion: Building on the initial draft version of Zambia's Safeguards Information System (2012) supported by the UN-REDD Joint Programme (2010-2014), Zambia developed the first summary of safeguards information coordinated by the National Safeguards Technical Working Group, a multi-stakeholder platform engaging key government agencies, civil society organizations, academia, private sector and existing on-the-ground REDD+ projects. Building on this version, and after a series of steps involving wide consultations of stakeholders at national level, Zambia has made progress in linking safeguards to the REDD+ strategic interventions of the National REDD+ Strategy (2014-2015); unpacking the Cancun safeguards in accordance with national circumstances (2015-2017); conducting environmental and social benefits and risks assessment of the proposed National REDD+ Investment Plan (2017); national interpretation of the Cancun safeguards (2018); and development of Zambia's first REDD+ safeguards summary of information (2018). This first summary of information confirms that Zambia is promoting and supporting the implementation of Cancun safeguards, demonstrating how Zambia is addressing and intends to eventually respect the safeguards backed by a functional and effective institutional framework for reporting safeguards information. The summary presents the Zambian approach to safeguards as well as country-level interpretation of Cancun safeguards, the Safeguards Information System (SIS) design, the description of the institutional arrangements backing up the system, other systems related, and an SIS development process. The SIS is envisioned as a source for accurate, consistent, comprehensive, up to date and accessible REDD+ safeguards information to: • Improve the design of REDD+ actions and the National REDD+ Strategy/investment Plan	OK	[1] First summary of REDD+

- *Inform evidence-based reform of national policies, laws and regulations; law enforcement and identify investment priorities*
- *Improve institutional capacity and operation of existing information systems and*
- *Contribute to the implementation and reporting to international conventions.*

*The proposed national institutional arrangement for Zambia is presented in **Figure 13**:*

Figure 13 Institutional arrangements for Zambian SIS



To finalize the SIS and ensure that it is functional will require the following actions:

- *Use the final national interpretation as primary basis for specifying information needs*
- *Identify existing or needed institutional arrangements to provide information for the SIS*
- *Focus at an initial stage on **Type I** information on how safeguards are addressed*
- *In parallel, with compiling **Type I** information, begin to clarify approaches for developing **Type II** (information on how safeguards arrangements are implemented) and **Type III** information on how safeguards are respected in terms of actual results*

		• *Once options for Type II and III information have been assessed, set priorities for information to be included in SIS versions 1.0* • *Revise the design of SIS v1.0 to incorporate lessons learned and close gaps in information coverage, leading to a fully operational SIS v1.1 that meets all objectives identified for Zambia's SIS and undertake a stakeholder engagement process in the revision of the SIS document, incorporating the proposed institutions identified in the institutional arrangements* • *Continue to conduct capacity building for key institutions for SIS (based on further identified capacity need) to meet their capacity needs with respect to their different functional responsibilities in operating the SIS* • *Develop an operational manual on how to use the SIS, the manual should also be used in the capacity building endeavours.* • *Determine IT requirements and work toward building an on-line platform.*		
5.2	*Progress*	*Summary conclusion: According to the REDD+ investment plan, Zambia has embarked on the design of the first iteration of the SIS development.* *Among the core investment priorities of the REDD+ investment plan is the enforcement of environmental and social safeguards as part of capacity development. This plan defines a list of activities to make progress in the SIS however, there is no information on the expected timeline to perform these improvements [1].*	*OK*	*[1] Investment Plan for REDD+. National Investment Plan to Reduce Deforestation and Forest Degradation (NIP)*