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Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 07-Jul-2025 | Report No: PIDIA01334



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BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Zambia	EASTERN AND SOUTHERN AFRICA	P507971	Transforming Landscapes for Resilience and Development in Zambia II
Financing Instrument	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)	21-Jul-2025	17-Sep-2025	Environment, Natural Resources & the Blue Economy
Borrower(s)	Implementing Agency	GEF Focal Area	
Republic of Zambia, Ministry of Finance and National Planning	Ministry of Environment and Green Economy	Land degradation	

Proposed Development Objective(s)

To enhance livelihood resilience and natural resource management in target areas in Zambia's Miombo ecoregion

Components

- 1. Select priorities of the National Green Growth Strategy implemented
- 2. Resilient livelihoods and sustainable landscape management supported
- 3. Project activities and knowledge coordinated and managed

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?	No
Is this project Private Capital Enabling (PCE)?	No

SUMMARY

Total Operation Cost	137.38
Total Financing	137.38
of which IBRD/IDA	100.00



Financing Gap	0.00
DETAILS	
World Bank Group Financing	
International Development Association (IDA)	100.00
IDA Grant	100.00
Non-World Bank Group Financing	
Trust Funds	37.38
Global Environment Facility (GEF)	10.37
Africa Climate Change Program	10.01
Climate Investment Funds	10.00
Scaling Climate Action by Lowering Emissions (SCALE) MDTF	7.00

Environmental And Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

- Zambia, a land-linked country situated in Southern Africa is highly endowed with natural resources.** Its economy primarily relies on natural resources, with copper mining being the cornerstone, contributing significantly to foreign exchange earnings with about 70 percent of the total exports. The heavy dependence on mining makes the economy vulnerable to global price swings and environmental challenges, underscoring the need for sustainable management and diversification of exports. In 2024, Zambia's copper output increased for the first time after several years of decline. Despite experiencing one of the worst droughts in history with severe impact on agricultural output, food security and energy production. Zambia’s recovery showed resilience and grew by 4.0 percent in 2024. GDP growth is projected to accelerate to 5.8 percent in 2025 and 6 percent in the medium-term.
- Zambia faces significant challenges related to poverty and inequality, with approximately 60 percent of the population living below the national poverty line.** Notably, around 80 percent of the country’s poor reside in rural



areas.¹ These high poverty rates correlate with a large segment of the population engaged in agriculture, primarily in subsistence and rain-fed farming. There are considerable regional disparities, especially in Muchinga, Northern, Western, and Luapula Provinces, which were identified as the poorest in 2022.² The rural poor heavily rely on natural resources for their livelihoods, rendering them particularly vulnerable to the adverse effects of climate change, which hampers Zambia's goal of achieving middle-income status by 2030 as outlined in its Vision 2030.

3. **Water is a critical element to ensure economic growth, population resilience, and sustainable development.** The total renewable surface water resources potential for Zambia is estimated at about 144 km³/annum, including 86.6 km³ of surface water resources and 57.4 km³ of groundwater resources. The water resources utilization was estimated at 77.77 km³/annum, representing a water resources utilization rate of 54 percent of renewable water resources.³ Yet, there is high variation across the country, with Southern and Luapula provinces presenting lower levels of groundwater resources potential, indicating the urgency for appropriate planning for water resources development and management across the country and areas with higher water stress. Given that crop production in Zambia is predominantly rainfed, yields are highly dependent on water availability. Yet, the adoption of irrigation systems remains limited.
4. **Irrigation plays a vital role in enhancing the resilience of rain-fed farming systems in Zambia and contributes to job creation.** Zambia has approximately 523,000 hectares of irrigable land. However, only about 155,890 hectares, or 30 percent, are technically equipped for irrigation. Additionally, only one percent of smallholder farmers in Zambia engage in irrigation for their field crops, with 15-17 percent for fruits and vegetables. The dominant irrigation technique is rudimentary; over 80 percent rely on wells, streams, or rivers for water. Financial allocations for irrigation from the public budget remain exceedingly low. In 2025, only 0.6 percent of the total annual budget of the Ministry of Agriculture (MoA) was designated for irrigation, decreasing from previous years. Some additional funds for irrigation are allocated through a credit scheme. Climate shocks are exacerbating poverty, food insecurity, and livelihood instability and contributing to natural resources degradation. Households are vulnerable to crop failure, livestock loss, and income decline, especially during increasingly frequent droughts and floods.
5. **The country is grappling with severe deforestation and forest degradation rates, which are among the highest in Africa.** Current estimates indicate that deforestation occurs at a staggering rate of 172,000 ha per year, with degradation affecting an additional 38,400 ha annually.⁴ Forest degradation and unsustainable land use have accelerated, undermining ecosystem services critical to agriculture, food security, energy, and tourism. The primary drivers of this forest loss include the expansion of the agricultural frontier, charcoal production, unsustainable agricultural practices, uncontrolled wildfires, and illegal mining and logging. Zambia's forests offer crucial regulating services, supporting hydrological cycles, carbon sequestration, and acting as important carbon sinks that mitigate climate change. If the country continues to neglect the sustainable management and utilization of its natural resources, economic growth in nature-heavy reliant sectors critical for the economy such as agriculture and tourism will continue to be affected by external and climatic factors. Appropriate management of water, land, and forests will be key enablers to achieving Zambia's Vision 2030 to become "a prosperous middle-income nation by 2030."
6. **Zambia aims to transition to a more sustainable economic growth model.**⁵ In 2021, the Government of the Republic

¹ World Bank (2025). [Zambia Poverty and Equity Assessment](#): Turning Things Around After a Lost Decade.

² Zambia Statistics Agency (2022). Living conditions monitoring [survey report](#).

³ Zambia Ministry of Water Development and Sanitation (2022). Zambia Water Investment Programme 2022 – 2030: Supporting the attainment of Vision 2030 towards, prosperous middle-income status by 2030.

⁴ GRZ (2024). Draft National Forestry Policy, Ministry of Green Economy and Environment, Lusaka, Zambia.

⁵ GRZ (2024). National Green Growth Strategy (2024-2030), Ministry of Green Economy and Environment, Lusaka, Zambia.



of Zambia (GRZ) created a Ministry of Green Economy and Environment (MGEE) and in 2024 adopted a 2024-30 National Green Growth Strategy (NGGS). The NGGS objective is to promote development pathways that lead to Zambia transition to a low carbon, resource efficient, resilient and socially inclusive economy by 2030. Specific objectives are to: (1) promote resilient economic transformation that generates green growth opportunities in development priority sectors; (2) ensure resource efficiency by the promotion of sustainable consumption and production that safeguards environmental integrity; (3) enhance the protection, conservation and restoration of natural capital; and (4) enhance social inclusion by creating green jobs and sustaining livelihoods. By adopting the NGGS, the GRZ increased its commitment to promoting resource efficiency, enhancing protection and restoration of natural capital, including forest, water resources and biodiversity, and fostering social inclusion through creation of green jobs.⁶ Furthermore, the NGGS promotes enhanced productivity in the agricultural sector, which is the mainstay of the rural population and has experienced stagnation of incomes in recent years.

Sectoral and Institutional Context

9. **The agricultural sector in Zambia plays a significant role in the country's economy, accounting for approximately 3.1 percent of the GDP.** It employs 59 percent of Zambia's population, with over 75 percent of rural households relying on it for their livelihood. Among them, 99 percent engage in crop production as their primary agricultural activity. However, the sector exerts significant pressure on forests, primarily through deforestation for crop cultivation and livestock grazing. This leads to biodiversity loss, habitat destruction, soil erosion, and disruptions in water cycles, while also reducing the capacity of forests to sequester carbon. Forest-dependent communities face diminished access to essential resources like food, water, and fuelwood. Reduced rainfall and rising temperatures pose a threat to Zambia's rainfed agriculture. To address these challenges, it is essential to strengthen water and land resource planning and management and promote farmer and community-led irrigation schemes that utilize water-efficient technologies.
10. **Zambia's forests and woodlands are a global public goods and play a crucial role in regulating both global and local climates through carbon storage and sequestration.** These natural assets prevent erosion by stabilizing soils and intercepting rainfall, and in providing habitat for pollinators that support crop production. Together, these services are valued at around US\$450 million (2010 prices) or around 2 percent of GDP. Furthermore, Zambia's rural population rely on natural assets for their livelihoods. Ecosystems and their biodiversity also provide the basis for Zambia's significant wildlife-based tourism sector. Tourism contributed 9.9 percent to the country's GDP in 2022. Indeed, in 2014, 40 percent of Zambia's wealth was drawn from natural capital, with 73 percent of this total coming from renewable natural capital – protected areas, pastureland, cropland and forests.
11. **Forests in Zambia are critical for biodiversity conservation, socioeconomic development, and livelihood sustenance.** Rich in biodiversity, Zambia's forests host a diverse range of plant and animal species, including many endemic species to the region. According to the 2019 [Country Forest Note: Zambia](#), Zambia's forests cover around 61 percent of the country's land area and are crucial for Zambia's development. Zambia's forests provide: a) crucial support for 60 percent of the population's subsistence needs and provider of 1.5 million jobs (about 23 percent of the total labor force of 6.5 million in 2015); b) energy for about 80 percent of Zambians in the form of fuelwood and charcoal⁷; c) critical resource as "the lungs" for Zambia's climate change strategy and biodiversity conservation.

⁶ The NGGS defines green jobs as "Employment created in economic sectors and activities, which reduces environmental impact and ultimately brings it down to levels that are sustainable."

⁷ According to the International Energy Agency (IEA) 2016 Energy Balance (IEA Energy Balances available at <https://www.iea.org/statistics>), Zambia's total primary energy supply (TPES) was 466 Petajoule (PJ), almost 80% of which was derived from biomass. Biomass similarly dominated total final consumption (TFC), which stood at 370 PJ in 2016. Discounting biomass energy, almost all the remaining TFC was accounted for by electricity and petroleum products in approximately equal shares. Zambia's electricity generating plants produced a total of 42 PJ (11.7 TWh), with



Further, the forest sector contributed an estimated 5.4 percent of GDP in 2015, including estimated indirect and multiplier effects of forestry that include formal sector, informal sector, and ecosystem services contributions (i.e., erosion control and sediment retention, pollination services, and carbon storage). Despite abundant renewable energy resources in Zambia, about half of the population remains without electricity and more than 80 percent without access to clean cooking solutions. For rural communities, forests are vital for sustenance; they supply energy in the form of charcoal and firewood and timber and non-timber forest products (NTFPs), including fruits, vegetables, and edible caterpillars. Forests are not just a source of income but also a lifeline that sustains rural livelihoods and enhances socioeconomic wellbeing. The dependence on natural resources underscores the importance of sustainable management practices to ensure that both agriculture and forestry can thrive while supporting local communities and the national economy.

12. **Natural wealth is being eroded due to the ecosystem transformation and degradation occurring across Zambia.** The degradation of forests, rangelands and cultivated lands and of natural and semi-natural ecosystems is extensive, with negative impacts on agricultural and fisheries productivity, food and water security, and on the livelihoods of rural communities. Growth in cropland, built up areas, and mining infrastructure has led to the widespread conversion of grassland, woodland, and forest ecosystems. This trend is accelerating, with the average rate of tree cover loss increasing from 91,000 ha/year between 2001-2010 to 190,000 ha/year between 2010-2020. Additionally, 7.7 million ha of natural terrestrial land cover, 12 percent of Zambia's total land area, showed signs of degradation between 2000-2020.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

To enhance livelihood resilience and natural resource management in target areas in Zambia's Miombo ecoregion.

Key Results

- People with enhanced resilience to climate risks; People benefiting from increased resilience of livelihoods, jobs or firms, disaggregated by women and youth (target: 350,000 beneficiaries, 50% women and 30% Youth).
- Terrestrial and aquatic areas under enhanced conservation/management; Landscapes under enhanced conservation and/or sustainable management (terrestrial and inland water areas (target: 650,000 hectares).

D. Project Description

This Investment Project Financing (IPF) includes an IDA grant of US\$100 million (M) and additional grant resources: US\$10.37M from the Global Environment Facility (GEF), US\$10.01M from the Nordic Development Fund (NDF)⁸, US\$10M from the Climate Investment Fund (CIF), US\$7M from Scaling Climate Action by Lowering Emissions (SCALE).

13. **TRALARD II builds on Transforming Landscapes for Resilience and Development in Zambia (TRALARD, P164764).** Investments in value chains with market potential and rural, sustainable jobs will provide alternative livelihoods that

well over 90% deriving from hydro power. As of 2022, 81% of Zambia's domestic energy production came from biofuels and waste (500 546 TJ), hydro (61 519 TJ), coal (53 370 TJ), and wind/solar, etc. (515 TJ).

⁸ The World Bank and NDF have established a long-term partnership with the World Bank operating as an implementation partner on NDF grants under the Africa NDF Climate Change Program. US\$39M have been processed through successive Trustees to support 18 World Bank Group operations in line with the Strategic External Funding Framework (SEFF) for East Africa. TRALARD II is the first NDF grant under the new Africa NDF Partnership Successor TF.



reduce exploitation of natural resources. With support of NDF, TRALARD II will build upon initial TRALARD work on disability and gender inclusion in natural resource management (NRM), climate resilience, and rural livelihoods.

14. **TRALARD II will prioritize interventions and follow a phased approach.**⁹ TRALARD currently covers target districts in three provinces: (a) Luapula; (b) Northern; and (c) Muchinga. TRALARD II will consolidate and scale up prioritized efforts in these areas. The GEF co-financing will focus investments in two districts in Muchinga Province (Mpika and Lavushimanda), three districts in Northern Province (Mporokoso, Kaputa and Nsama), one district in Luapula Province (Kawambwa) and two districts in Copperbelt Province (Masaiti and Lufwanyama). The CIF co-financing will target selected areas in two districts in Copperbelt Province (Mpongwe and Mufulira) and Ngabwe district in Central Province. In addition, TRALARD II will support interventions in ten districts in Southern Province (Kazungula, Chirundu, Gwembe, Siavonga, Sinazongwe, Itezhi-Tezhi, Kalomo, Pemba, Monze, and Namwala). The programmatic and analytical approach used by TRALARD II can be expanded to additional districts within the selected provinces and potentially include new provinces as additional funding sources become available.
15. **Component 1:** Selected priorities of the National Green Growth Strategy implemented (US\$19M): Aligned with GRZ's NGGS 2024-2030, Component 1 will build capacity by providing technical assistance (TA) and implementing activities to support NGGS implementation. Component 1 activities will help set the platform and systems to promote sustainable land management, water resources management, resilient rural livelihoods, jobs, generation and monetization of high-integrity ERs, and access to carbon markets.
16. **Subcomponent 1.1:** Capacity building and TA activities to promote sustainable land management, water resources management, and rural livelihoods (US\$9M) will target different government levels to: (i) consolidate information systems for CSA (particularly through strengthening of hydromet services); (ii) enhance integrated and participatory land use planning at ward/village levels; and (iii) finance national sectoral plans to promote green rural jobs in cross-sectoral collaboration.
17. **Subcomponent 1.2:** Capacity and system building to develop an Emission Reductions Program (ERP) and access carbon markets (US\$10M, of which US\$7M from SCALE) will include TA to develop and register a new jurisdictional ERP to generate high-integrity carbon credits in Muchinga Province. This builds on the successful experience of Zambia Integrated Forest Landscape Project (P161490) and Eastern Province Jurisdictional Sustainable Landscape Program – Emissions Reduction Project (P155827). It includes cost-efficiencies, incentivizes adaptation, sustained NRM, and additional financing to improve rural livelihoods, with potential for replication in other provinces.
18. **Component 2:** Resilient livelihoods and sustainable landscape management supported (US\$107M). Activities under this component will target investments in forests and water resources in the landscape and livelihoods associated with nature-based solutions. It addresses the key drivers of deforestation, land, soil, and forest degradation while enhancing management of selected watersheds to increase land productivity and water availability for economic activities such as agriculture and animal production in TRALARD II districts.
19. **Subcomponent 2.1:** Support natural resources management (US\$46M, of which US\$10M from the GEF): This subcomponent will finance planning, monitoring, and conservation and rehabilitation of natural resources in targeted landscapes—including land, forests, and water bodies—within intact and degraded miombo forest ecosystems in selected project areas.

⁹ Details on the methodology for district prioritization are provided in Annex 3.



20. **Subcomponent 2.2:** Support productive infrastructure, resilient, and nature-positive rural livelihoods (US\$61M) will emphasize sustainable and resilient alternative livelihoods to remove pressure from natural resources and enhance adaptation. A landscape approach will be employed for the planning and selection of specific interventions tailored to each landscape and/or watershed. This approach aims to protect ecosystems, biodiversity, and natural resources while supporting sustainable livelihoods.
21. **Component 3:** Project activities and knowledge coordination and management (US\$11M). Component 3 will support effective implementation of project activities, including monitoring and evaluation (M&E) and reporting. It will finance procurement, financial management, environmental and social risks management, preparation of annual work plans and audit reports, goods and services, workshops, and operational costs. It will cover documentation of good practices, lessons learned, and innovative solutions for integrating land management, forestry, ecosystem restoration, and economic development to inform future initiatives. Through this component, the project will improve coordination and collaboration among stakeholders, leading to more effective and efficient project implementation. The project will have enhanced knowledge sharing and capacity building, resulting in better natural resource management and adaptive practices, and strengthened institutional and community capacities to manage natural resources sustainably. With a focus on project and knowledge management and coordination, the project will create a cohesive and well-coordinated approach to enhancing natural resource management, livelihoods, and climate resilience in the target Miombo ecoregions in Zambia.

Legal Operational Policies

Triggered?

Projects on International Waterways OP 7.50

Yes

Projects in Disputed Area OP 7.60

No

Summary of Screening of Environmental and Social Risks and Impacts

22. The TRALARD II builds upon the foundation laid by its predecessor by expanding operations across multiple regions of Zambia with an aim to scale up climate resilience, sustainable land and water resource management, and nature-based livelihoods. The project will consolidate ongoing activities in Luapula, Northern, and Muchinga Provinces while extending its geographic reach to include new districts in the Copperbelt, Central, and Southern Provinces. GEF co-financing will focus on specific districts in Muchinga, Northern, Luapula, and Copperbelt, while CIF resources will be directed toward districts in Copperbelt and Central Provinces. Furthermore, the project will introduce interventions in ten districts of the Southern Province, which are experiencing acute environmental pressures and increasing climate vulnerability. The project design remains adaptive, with the flexibility to include additional districts and provinces as more resources become available, maintaining its strong programmatic and analytical framework.
23. Water availability remains a defining environmental factor across the TRALARD II landscapes. While Zambia boasts considerable renewable water resources, spatial disparities in groundwater and surface water availability—particularly in Southern and Luapula Provinces—underscore the urgency for robust water resource planning. These disparities, combined with the predominantly rainfed agricultural systems, make rural livelihoods particularly vulnerable to rainfall variability and drought. The project recognizes the importance of scaling up farmer-led irrigation systems and other water-efficient technologies to reduce dependency on unpredictable rainfall.



24. Zambia’s agriculture sector employs most of its rural population, yet contributes only modestly to GDP, highlighting the productivity and structural challenges it faces. This sector’s reliance on forest conversion for cropland and grazing has placed intense pressure on Zambia’s forest ecosystems. Deforestation, biodiversity loss, and watershed degradation are critical risks not only to the environment but also to community well-being, as forests supply food, energy, and materials for rural households. The project therefore positions the sustainable use of forest and land resources as essential to sustaining agricultural productivity and building community resilience.
25. Zambia’s forests are part of the globally important Miombo woodland ecoregion and harbor rich biodiversity, including endemic tree species and fauna that support the tourism sector. Forests underpin rural livelihoods and provide employment in the formal and informal economies, especially through the charcoal value chain and timber harvesting. However, they are rapidly declining due to expanding agricultural frontiers, charcoal production, bushfires, illegal mining, and logging. The country currently experiences among the highest deforestation and forest degradation rates in Africa, with a loss of forest cover accelerating over the past decade. Degraded ecosystems are undermining ecosystem services critical to agriculture, water supply, and energy, and thereby threatening the resilience of Zambia’s rural economy.
26. The degradation of rangelands, croplands, and semi-natural ecosystems is weakening food systems, biodiversity, and rural livelihoods. With more than 7.7 million hectares of natural terrestrial cover showing signs of degradation in recent decades, the transformation of ecosystems due to expanding settlements, agriculture, and mining is accelerating. Poor and forest-dependent communities, including those living near protected areas, are increasingly affected by this loss of natural capital, often relying on unsustainable resource extraction for subsistence. These trends highlight the urgent need for integrated land, water, and forest management as central pillars of Zambia’s development strategy, with TRALARD II well positioned to contribute meaningfully to this agenda.

E. Implementation

Institutional and Implementation Arrangements

25. The Ministry of Green Economy and Environment (MGEE) serves as the cornerstone of Zambia’s institutional framework for promoting green growth and a resilient development path focused on integrated water management and food security. By coordinating climate-related programs across sectors, the MGEE ensures a harmonized and strategic approach to environmental stewardship and sustainable development. With the overall responsibility for project oversight, the MGEE exemplifies strong institutional competence in leading national initiatives aimed at making a significant impact on environmental resilience and adaptation. Central to TRALARD II implementation is the National Project Coordinating Unit (NPCU) that has accumulated a strong management capacity under TRALARD, which closes in December 2025. TRALARD II will pursue a limited competition for key NPCU/PPIU roles and an open and competitive selection for others to allow for it to continue its leadership and enhance its capacity by adding new staff as necessary. This ensures the NPCU can effectively collaborate with all relevant ministries and agencies at national, provincial, and district levels to promote landscape level impacts.

CONTACT POINT



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APPROVAL

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