Public Disclosure Authorized

Public Disclosure Authorized
Public Disclosure

Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 07/03/2025 | Report No: ESRSA04356

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P507971	Investment Project Financing (IPF)	TRALARD II	2026
Operation Name	Transforming Landscapes for Resilience and Development in Zambia II		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Zambia	Zambia	EASTERN AND SOUTHERN AFRICA	Environment, Natural Resources & the Blue Economy
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Republic of Zambia, Ministry of Finance and National Planning	Ministry of Environment and Green Economy	07-Jul-2025	17-Sep-2025
Estimated Decision Review Date	Total Project Cost		
24-Jun-2025	137,385,112.00		

Proposed Development Objective

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

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

Zambia is endowed with abundant natural resources, including land, forests, water, wildlife, and various minerals, which are crucial to its national economy. The country boasts 2.9 billion m^3 of trees, with 72% located in semi-evergreen miombo-dominated forests. However, with rural poverty levels averaging 80%, rural communities heavily depend on these natural resources for survival. Majority if not most of Zambia’s rural population relies directly on natural resources for fuel, food, income, raw materials, and medicines. Deforestation and forest degradation are the biggest threats to

Public Disclosure

Zambia’s forests, putting the economy and environment at risk. As of 2021, Zambia's forest cover was estimated at 45.4 million hectares, representing 60% of the country's total land area, with an average deforestation rate of 172,000 ha/year and forest degradation of 38,400 ha/year. The primary drivers include land use changes due to population growth, agricultural expansion, infrastructure development, mining, and wood extraction for fuelwood. Uncontrolled forest fires and unregulated charcoal production further exacerbate these issues, leading to biodiversity loss, reduced forest productivity, and diminished ecosystem services. Other negative impacts include, soil erosion, flooding, high evapotranspiration, water and food insecurity, displacement of people and reduced hydropower generation. Climatic impacts such as droughts are forcing migration from certain regions of the country to others, leading to exertion of pressure on relatively intact forested areas. Charcoal production, especially in urban areas, is a significant driver of deforestation, exacerbated by power outages due to prolonged drought. Agricultural expansion, particularly smallholder farming, also contributes to deforestation through increased production areas and shifting cultivation due to poor crop management practices. Weak governance and poor implementation of forest management practices further aggravate deforestation, necessitating effective governance to regulate land use and control deforestation. The management of natural resources in Zambia is hindered by a lack of coordination among institutions, insufficient manpower, and limited technical capacity within the relevant ministries and departments. TRALARD II is designed to address this context of environmental and climatic vulnerability, further hindered by limited institutional capacity and policy enforcement. The project will be implemented in Luapula, Northern, Muchinga, Southern, Copperbelt, and Central provinces, where deforestation due to agriculture, charcoal production, and logging is widespread, leading to habitat loss, soil degradation, and reduced biodiversity. Erratic rainfall patterns and prolonged droughts, particularly in Southern Province, exacerbate water scarcity and food insecurity. Overgrazing, unsustainable farming practices, and mining activities contribute to land degradation and pollution. Climate change has worsened these problems, increasing the frequency of extreme weather events, such as floods and droughts, further stressing local ecosystems and communities. TRALARD II will support the implementation of Zambia's first National Green Growth Strategy 2024–2030, investments in climate-smart livelihoods, and knowledge management. It will build on the successes and lessons of TRALARD, implemented in Luapula, Muchinga, and Northern Provinces until December 2025. In these provinces, TRALARD II will consolidate achievements and scale up good practices and lessons learned to Central, Copperbelt, Northwestern, and Southern Provinces. Key focus areas include diversified and sustainable livelihoods, operationalizing climate-resilient infrastructure, establishing new community forest management and natural forest regeneration areas, and improving the management of existing Protected Areas. TRALARD II will leverage the existing implementation arrangements and the capacity developed under TRALARD, particularly in Environmental and Social (E&S) risk management, procurement, and financial management and FM audits. Institutionally, the Ministry of Green Economy and Environment (MoGEE) will continue to oversee the project. The National Project Coordinating Unit (NPCU) in charge of TRALARD will lead TRALARD II preparation and implementation under MoGEE's coordination. Relevant line ministries will provide support needed for impacts at landscape level: Department of Forestry, Department of National Parks and Wildlife under the Ministry of Tourism, Ministry of Agriculture, Provincial Administrative Office, Zambia Meteorological Department, Ministry of Small Medium Enterprises, and Ministry of Water Development and Sanitation. TRALARD II will be developed through the following components: Component 1. Fostering Implementation of the National Green Growth Strategy (GGS): Component 1 will finance capacity building, technical assistance (TA), and other enabling activities to (i) enhance policy frameworks and related technical capacities of key stakeholders, including state and non-state actors and local communities for forest management and conservation, rehabilitation of degraded land, biodiversity conservation, and climate change adaptation in priority areas; (ii) develop integrated land management (ILM) plans; (iii) promote creation of green jobs and value chains; and (iv) create the conditions for a prioritized province to access carbon markets. The latter will cover preparation of a jurisdictional Emission Reduction Program (ERP) in a

Public Disclosure

selected TRALARD province and develop capacity at various government levels and among producers for ILM and emission reductions at the Agriculture, Forestry and Other Land Use (AFOLU) sector. Component 1 will also continue TRALARD investments in strengthening the climate and hydro-meteorological information system. Component 2. Promoting Climate-Smart Livelihoods and Value Chains and Green and Inclusive Jobs: Component 2 will finance physical investments and works to implement GGS measures fostered under Component 1, aligned with the ILM approach to achieve social, economic, and environmental objectives. It will address deforestation and forest degradation in high-value forest areas while providing grants for climate-resilient livelihoods and green jobs for local communities. Component 2 will fund (i) participatory Community Forest Management (CFM); (ii) strengthened management of Protected Areas and establishment of new conservation areas around threatened headwaters; and (iii) conservation and rehabilitation of prioritized productive landscapes with focus on drought resilience, climate-smart agriculture (CSA), and biodiversity-friendly production practices. It will support development of non-timber forest product (NTFP) value chains, reduction of post-harvest losses, and natural regeneration and re-vegetation through assisted natural regeneration (ANR) and tree planting, thus increasing forest cover and restoring degraded lands. Component 3. Project and Knowledge Management, Coordination, and Collaboration: Component 3 will ensure effective project management and coordination and execution of activities while capturing and sharing lessons learned throughout the implementation period. Along with planning, monitoring and evaluation (M&E), fiduciary management, environmental and social risk management, and reporting, Component 3 will support documentation, awareness raising and sensitization efforts on good practices, lessons learned, and innovative solutions for integrating forestry, ecosystem restoration, and economic development. Along with promotion of interinstitutional and cross-sectoral collaboration among stakeholders, the knowledge products will inform ongoing and future initiatives and enhance project outcomes and sustainability.

Public Disclosure

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

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.

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.

Zambia's agriculture sector employs the majority 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.

Zambia's forests are part of the globally important Miombo woodland ecoregion and harbour 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.

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.

Public Disclosure

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

The TRALARD II project will be implemented by the Ministry of Green Economy and Environment (MGEE) through the National Project Coordination Unit (NPCU) and four Provincial Project Implementation Units (PPIUs), building upon structures and systems established under the predecessor TRALARD project. The NPCU and three existing PPIUs (in Luapula, Northern, and Muchinga Provinces) demonstrated overall satisfactory performance in managing environmental and social (E&S) risks under the World Bank's Operational Policies and have gradually developed the necessary institutional capabilities. These units have built practical experience in coordinating with district and provincial government agencies and in providing technical support to community-level subprojects, including preparation of safeguards instruments and field-level implementation monitoring. TRALARD II will expand this framework by establishing a new PPIU in the Southern Province, which is a key target for landscape restoration and livelihoods support.

While the current project teams have a functional understanding of the Bank's safeguards policies, their experience with the Environmental and Social Framework (ESF) remains limited. Therefore, targeted capacity-building interventions will be implemented to enhance understanding of the ESF, including training programs and ongoing technical support. These capacity-building measures will be prioritized and formalized through the project's Environmental and Social Commitment Plan (ESCP). Furthermore, the NPCU and PPIUs will be staffed with dedicated E&S specialists, including the recruitment of a Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Specialist to be based in the Southern Province, where SEA/SH risks are expected to be elevated due to the scale of field operations. These specialists will be

responsible for managing environmental and social screening, supporting the development and monitoring of site-specific E&S instruments, and ensuring regular reporting and adaptive management of E&S risks across the project.

TRALARD II will no longer finance the management or enforcement activities in national parks. This decision follows the institutional assessment conducted in early 2025 by Mellivora Systems, which evaluated the capacity of the Department of National Parks and Wildlife (DNPW) under the Ministry of Tourism and the Forestry Department (FD) under MGEE to implement conservation enforcement in line with international good practice. Instead, the project will prioritize investment in Community Forest Areas (CFAs) and forest reserves managed by Community Forest Management Groups (CFMGs), thereby focusing on a model of participatory conservation. These CFAs are located in areas adjacent to national parks and are governed under the Forest Act. The project's interventions in forest reserves will be limited to areas where these reserves are managed by CFMGs under formal co-management agreements. This approach ensures that project activities are community-led and aligned with the principles of the Process Framework, and avoids top-down enforcement mechanisms.

TRALARD II will continue to strengthen community engagement and governance structures through support to the Forestry Department, which will be responsible for leading community interactions and facilitating the implementation of land use plans at ward and village levels. As part of this support, TRALARD II will assist the FD in operationalizing the recommendations of the institutional assessment by revising enforcement procedures, updating human rights-aligned Codes of Conduct and Standard Operating Procedures (SOPs), and delivering training in field operations, monitoring, and community-facing protocols. These institutional reforms will be embedded in the project's E&S risk management architecture and reflected in the relevant environmental and social instruments. The project will also reinforce its oversight systems to ensure that conservation outcomes are achieved in a manner that safeguards human rights and avoids harm to communities and stakeholders.

Public Disclosure

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Substantial

A.1 Environmental Risk Rating — Substantial

The environmental risk rating for TRALARD II is Substantial, reflecting the complexity and geographic scale of the operation, as well as the ecological sensitivity of target areas such as miombo woodland ecosystems and critical watersheds. Although the project scope no longer includes investments in national parks—thereby reducing potential risks associated with biodiversity-sensitive law enforcement—TRALARD II will continue to support activities in forest reserves and Community Forest Areas (CFAs), which are also environmentally significant. The key environmental risks relate to land disturbance and vegetation clearance during the implementation of small-scale infrastructure (e.g., irrigation schemes, dams, weirs), watershed restoration, and nature-based livelihoods activities. These may affect local biodiversity and ecosystem services. Additional risks include potential pollution from agrochemical use, improper management of construction waste and e-waste from digital systems, and occupational health and safety (OHS) concerns for field-based workers and community members. While the risks are largely site-specific, reversible, and can be mitigated through established environmental and social instruments, the risk rating reflects the uneven institutional capacity across participating provinces, particularly in newly added project areas. The Forestry Department (FD), the lead agency for forest management, still requires support to strengthen its monitoring systems,

update codes of conduct and SOPs, and implement human rights-aligned protocols. To mitigate these risks, the project will implement a robust Environmental and Social Management Framework (ESMF), supported by site-specific Environmental and Social Management Plans (ESMPs), screening procedures, and integrated capacity-building efforts. The project draws on the positive environmental performance under TRALARD I, which reported no major environmental incidents. Lessons learned from that experience—including the importance of community engagement, integrated land-use planning, and participatory restoration—have been integrated into TRALARD II's design to enhance environmental sustainability.

A.2 Social Risk Rating Substantial

The social risk associated with TRALARD II are substantial. This rating reflects the project's scale, diversity of implementing agencies, and the socio-cultural complexity across the targeted provinces. While the removal of direct support to national parks has reduced some of the more acute risks associated with conservation law enforcement, several residual and emerging social risks remain relevant and require careful management. Key social risks include: (i) the potential for elite capture of benefits, leading to the exclusion of marginalized and vulnerable groups from project-supported services and investments; (ii) the risk of internal community tensions or inter-group conflict related to benefit-sharing, particularly in the selection and implementation of subprojects; (iii) possible restrictions on access to natural resources due to the delineation of forest reserves and implementation of ward-level land use plans; (iv) risks of child labor or unsafe working conditions among enterprise and community beneficiaries; (v) an elevated risk of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), especially in areas with entrenched gender inequalities, harmful cultural norms, or weak survivor support services; and (vi) potential for tensions between communities and forest enforcement actors such as the Forestry Department, particularly in areas where land tenure arrangements are informal or resource access rights are contested. Forest reserves in Zambia are state-designated areas managed for the conservation of forest ecosystems, biodiversity, and sustainable use of natural resources. They are governed under the Forest Act and may be subject to regulated access and use restrictions, including controlled harvesting, grazing, and entry. Enforcement responsibilities rest with the Forestry Department, often working in partnership with local communities through CFMGs or similar structures under co-management agreements The project's geographic expansion into three new provinces—Southern, Central, and Copperbelt—increases the complexity of social risk management. In the Southern Province, for example, the prevalence of early marriage, teenage pregnancy, and polygamy further heightens the SEA/SH risk profile and necessitates proactive and culturally responsive mitigation measures. To address these risks, the project has developed a suite of Environmental and Social Framework (ESF) instruments, including an Environmental and Social Management Framework (ESMF), a Process Framework (PF), a Labor Management Procedures (LMP), and a Stakeholder Engagement Plan (SEP). These instruments provide guidance on screening, stakeholder consultation, grievance redress, monitoring, and the development of site-specific mitigation measures. The ESMF also outlines procedures for addressing potential physical and economic displacement and restrictions of access to natural resources. The SEP identifies relevant stakeholders and sets out strategies for inclusive engagement, with a strong emphasis on participatory planning in forest-dependent communities and with Community Forest Management Groups (CFMGs). A functioning Grievance Mechanism (GM), including a worker GM, will be maintained to address complaints and feedback at community and institutional levels. While TRALARD I demonstrated satisfactory social performance, including the effective operation of a project-level GM and consistent social risk reporting, institutional gaps remain—particularly within the Forestry Department and among provincial actors. These will be addressed through a targeted capacity-building program, the deployment of dedicated social inclusion specialists, and the implementation of institutional capacity-strengthening measures identified in the recently completed Institutional Assessment. These provisions will ensure that TRALARD II

Public Disclosure

can manage its substantial social risk profile and maintain compliance with the requirements of the ESF throughout the project lifecycl

B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts Relevant

To manage the environmental and social (E&S) risks and impacts associated with project activities—many of which will be defined during implementation—the Government of the Republic of Zambia (GRZ), through the Ministry of Green Economy and Environment, has updated the Environmental and Social Management Framework (ESMF) originally prepared under TRALARD. The revised ESMF outlines the overarching procedures for screening, identifying, assessing, managing, and monitoring E&S risks and impacts. It defines roles and responsibilities, criteria for risk classification, and procedures for preparing site-specific instruments such as Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), and Biodiversity Management Plans (BMPs), where applicable. It also includes an Exclusion List, grievance redress procedures, and guidance for mitigating risks related to agrochemical use, land conversion, and biodiversity conservation. Complementary instruments have been prepared or updated, including a Stakeholder Engagement Plan (SEP), a Process Framework (PF), and an Environmental and Social Commitment Plan (ESCP). A standalone Labor Management Procedures (LMP) will be finalized prior to effectiveness. These documents collectively ensure that social inclusion, labor management, access to grievance mechanisms, and potential restrictions to natural resources are adequately addressed. Capacity building measures are embedded in the project design to support institutional strengthening at both national and provincial levels, with emphasis on newly added provinces. TRALARD II includes community forestry and sustainable land use interventions that, while contributing to positive environmental outcomes, may restrict access to resources for some user groups. These risks will be managed under ESS1, in conjunction with ESS4 and ESS5, and addressed through participatory planning, inclusive consultations, and mitigation measures defined in the updated PF. The project will also assess and mitigate risks of conflict between communities and enforcement actors involved in forest resource management. Where required, security-related protocols and human rights commitments will be reflected in the Codes of Conduct, grievance processes, and environmental and social monitoring systems. Anticipated land use changes under TRALARD II include reforestation, agroforestry, and sustainable land and water management. While these contribute to restoration and resilience, potential risks include inadvertent conversion of ecologically sensitive secondary habitats, introduction of non-native species, and environmental degradation linked to increased fertilizer and pesticide use. The ESMF includes screening protocols, biodiversity safeguards, and land use planning guidance to ensure that such risks are avoided or mitigated. All technical assistance (TA) activities will incorporate environmental and social criteria in their terms of reference, in line with ESS1, to ensure that downstream risks are identified and managed. Outputs from TA activities must be consistent with the ESSs and reflect best practices for environmental and social sustainability. To strengthen accountability and learning, the project will undertake annual environmental and social performance assessments, in collaboration with the World Bank, to identify gaps, support corrective actions, and promote adaptive management throughout implementation.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

Public Disclosure

ESS10 is relevant to the TRALARD II project and forms a central pillar for ensuring inclusive, transparent, and meaningful participation of stakeholders across the project lifecycle. Given the project's wide geographic scope and complexity, spanning multiple provinces and affecting a broad spectrum of stakeholders, including vulnerable and marginalized groups, stakeholder engagement is both a foundational principle and a key enabler for achieving development outcomes. In line with ESS10, the GRZ, through the Ministry of Green Economy, has prepared a SEP to guide the identification, consultation, and ongoing engagement of stakeholders. The SEP draws from stakeholder engagement experiences under TRALARD and has been updated to include consultations conducted during TRALARD II preparation in new provinces and target areas. The SEP identifies relevant stakeholder groups, including affected communities, institutional actors, civil society, the private sector, traditional authorities, and community-based organizations. Special attention is given to engaging vulnerable groups such as women, youth, persons with disabilities, and forest-dependent communities, to ensure that their voices are reflected in project design and that benefits are equitably distributed. Engagement will occur across all levels—national, provincial, district, ward, and community—and will be tailored to the cultural and contextual realities of each area to ensure accessibility and inclusion. The SEP outlines a phased engagement approach from awareness raising and participatory planning to subproject selection, implementation, and monitoring. Particular attention is given to areas where project activities may restrict access to land or natural resources, requiring deeper and continuous consultation with potentially affected communities. Communication channels used include community radio, posters in local languages, village meetings, and coordination with structures such as Ward Development Committees, Community Forest Management Groups, and Community Resource Boards. In communities with low literacy, oral communication and visual tools are being used to ensure understanding and meaningful participation. Stakeholder feedback is recorded and integrated into project design, with mechanisms in place for follow-up consultations to close the feedback loop. Stakeholder consultations during project preparation included missions to Muchinga, Copperbelt, and Southern Provinces. Participants included government ministries, NGOs such as Frankfurt Zoological Society and WeForest, and local communities in over a dozen districts and villages. These engagements raised key concerns including equitable access to benefits, support for tenure security, inclusion of women and persons with disabilities, and the need for strong and accessible grievance mechanisms. Consultations also addressed how the project aligns with the National Green Growth Strategy and Zambia's Eighth National Development Plan, as well as views on implementing partners and the scope of proposed activities. The SEP includes a grievance mechanism (or GM in short), building on the TRALARD system and now extended to cover all new provinces and communities involved in TRALARD II. The GM allows affected people to raise concerns in a confidential and responsive manner. It will operate at multiple levels and be designed to ensure timely resolution and, where needed, anonymity. Provisions are included for SEA/SH-related grievances, and referral pathways to qualified service providers will be established in each district. All project personnel, including contractors and volunteers, will be trained in the GM and SEA/SH protocols. The SEP also promotes harmonization of engagement efforts across government and partner-supported interventions to avoid confusion and duplication. It extends stakeholder engagement to sites that may not be directly financed under TRALARD II but fall within the broader landscape-level planning of the project. This coordination is particularly important for the updated Process Framework, which addresses access restrictions in community forest areas. The SEP is a living document and will be updated throughout implementation to reflect evolving risks, new stakeholders, and emerging lessons. To support implementation, the project will assign dedicated E&S specialists and Community Liaison Officers across all implementation levels. Resources will be allocated for ongoing engagement activities, and training will be delivered on inclusive consultation, grievance handling, and conflict sensitivity. Stakeholder engagement will be tracked through the project's monitoring and evaluation system, using indicators such as the

Public Disclosure

number of people consulted, resolution rates of grievances, and stakeholder satisfaction. Feedback from engagement activities will be used to continuously adapt the project's approach and ensure responsiveness to community needs.

ESS2 - Labor and Working Conditions Relevant

ESS2 is relevant given that the project will involve the engagement of various categories of workers, including direct workers (e.g., civil servants and project implementation staff), contracted workers (e.g., personnel hired by construction firms, service providers, or NGOs), and community workers (e.g., beneficiaries engaged through community-based activities such as natural resource management, reforestation, or infrastructure maintenance). The project will also support the Forestry Department (FD), whose responsibilities will be central to protected area (PA) management and enforcement of conservation laws. Project activities that may pose labor-related risks include the construction and rehabilitation of small-scale/farmer-led irrigation schemes, water infrastructure (e.g., canals and weirs), rural access improvements (e.g., culverts and small bridges), as well as the dredging of transport channels in floodplain areas. These works will typically involve contracted and community labor in relatively remote and underserved locations where oversight and regulation may be limited. Additionally, community workers will likely be engaged in ecosystem restoration, wetland rehabilitation, and soil and water conservation activities. The key labour risks associated with TRALARD II include the potential for poor working conditions, such as inadequate occupational health and safety (OHS) provisions, absence of formal employment contracts for casual or community workers, delays in payment of wages, and a lack of training or protective equipment, especially in remote rural settings. Specific attention is required to prevent labour-related exploitation, including risks of gender-based violence (GBV), sexual exploitation and abuse (SEA), and sexual harassment (SH), particularly for women workers and those operating in male-dominated environments such as construction sites or protected area enforcement. Further labour risks pertain to the safety of forestry officers tasked with enforcing regulations in protected areas. These personnel may face threats of violence from the communityespecially in remote areas with weak law enforcement presence. Addressing these risks is crucial not only for ensuring the safety of project-supported workers but also for upholding the integrity of the conservation agenda. To manage these labour-related risks, the project will prepare a standalone Labor Management Procedures (LMP) document, which will outline the procedures and requirements for the recruitment, management, and protection of workers involved in TRALARD II activities. The LMP will be fully aligned with Zambia's labor legislation and the requirements of ESS2, as well as the World Bank Group Environmental, Health, and Safety Guidelines (EHSGs) and will also consider the recommendations of the institutional assessment, including recruitment and training, outreach to communities, employment conditions, and the process for allocating staff to a particular location. In alignment with findings of the institutional assessment commissioned, labor conditions under TRALARD II will reflect recommendations on recruitment practices, employment conditions, staff deployment, and community outreach. This includes improved transparency in the hiring process for public-sector workers and community workers, standardization of employment terms for rangers and forestry officers, and enhanced induction and training programs tailored to roles in Protected Areas and high-risk settings. Allocation of personnel to specific geographies will also consider community sensitivity, previous enforcement experience, and conflict management skills. These elements will be incorporated into the standalone LMP, which will guide employment practices across the NPCU and provincial PIUs and project-related entities, including co-management partners and service providers. The LMP will provide guidance on the classification of workers, conditions of employment, grievance mechanisms, rights to organize and bargain collectively (where applicable), and non-discrimination in employment. Special attention will be paid to community workers, whose participation may be informal or intermittent, and for whom safeguards must be in place to prevent exploitation and ensure safety, including through appropriate supervision, workload definition,

Public Disclosure

and compensation mechanisms. With regard to occupational health and safety (OHS), the LMP will define minimum safety standards to be applied across all worksites, including guidelines for the use of personal protective equipment (PPE), procedures for accident prevention and emergency response, and requirements for site-specific OHS management plans to be developed by contractors. OHS protocols will also address specific hazards that may arise during dredging activities, heavy lifting, the use of pesticides, and the handling of electronic waste from solar or ICT-related components. Workers' GRM will allow employees, contractors, and community workers to raise concerns related to their terms and conditions of employment, health and safety, discrimination, sexual harassment, or other workplace grievances in a confidential and efficient manner. The project will ensure that this GRM is accessible to all workers, including those in remote locations, and that its operation is clearly communicated to them upon recruitment or engagement. To prevent and respond to GBV, SEA, and SH, the project will enforce mandatory Codes of Conduct (CoC) for all project-related personnel, including contractors and subcontractors. These CoCs will include specific commitments related to ethical conduct, protecting human rights and minimizing harm, non-discrimination, respect for local cultures, and zero tolerance for harassment or abuse. All workers will receive orientation and periodic training on these provisions, and violation of the CoC will trigger disciplinary action, including possible termination of employment and referral to law enforcement. Implementation of the LMP will be monitored by Environmental and Social (E&S) Specialists based at the National Project Coordination Unit (NPCU) and Provincial Project Implementation Units (PPIUs). These specialists will be responsible for ensuring that labor and OHS standards are applied consistently across project activities and that contractors and other implementing partners are in full compliance with ESS2 provisions.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

ESS3 is relevant as planned activitie span a range of natural resource-dependent interventions across diverse and ecologically sensitive landscapes. The principal environmental risks under ESS3 relate to soil erosion, sedimentation of water bodies, pollution from agrochemicals, contamination from hazardous and non-hazardous waste, and depletion of water resources, particularly in areas already experiencing hydrological stress such as the Southern Province. These risks may arise both during construction activities and as a result of agricultural and livelihood-based subprojects. Without appropriate safeguards, these activities could lead to degradation of productive land, pollution of surface and groundwater, and loss of biodiversity. The ESMF includes screening tools and guidelines to identify subprojects with high pollution risks or intensive resource use. Subprojects with potentially significant impacts will be subjected to more detailed environmental assessments, including Environmental and Social Impact Assessments (ESIAs), and will be required to integrate robust pollution prevention and resource efficiency measures into their design and operational phases.

ESS4 - Community Health and Safety Relevant

ESS4 is relevant due to the anticipated risks and impacts on communities arising from both the livelihood-focused interventions and small-scale infrastructure development activitiesl in protected area management. The project's implementation across rural and ecologically sensitive landscapes will require careful attention to minimizing community exposure to health, safety, and security hazards. Community health and safety risks may arise from a variety of sources. Infrastructure works—including the construction of farmer-led irrigation schemes, canals and weirs, culverts, and dredging of transport channels—will involve the use of construction equipment and materials that could pose risks to nearby communities if not managed appropriately. These risks include increased traffic hazards, exposure to dust, noise, and vibration, accidental injuries, and disruptions to local movement patterns.

Public Disclosure

Furthermore, construction and civil works may lead to water stagnation and the spread of waterborne and vector-borne diseases, such as cholera and malaria, particularly in floodplain environments. It is worth noting is that, site-specific Environmental and Social Management Plans (ESMPs) will be required for all civil works and infrastructure-related subprojects. These ESMPs will include Community Health and Safety (CHS) provisions in accordance with ESS4 and the World Bank Group's Environmental, Health, and Safety Guidelines (EHSGs) and recommendations of institutional assessments. These provisions will include: (1) Traffic management plans to reduce risks from construction vehicles and materials transport; (2) Dust and noise control measures, including work-hour restrictions and suppression techniques; (3) Safe access pathways for pedestrians and surrounding communities in construction areas; (4) Measures to prevent the contamination of local water sources and mitigate standing water accumulation that could harbor disease vectors. In addition, TRALARD II will ensure that each ESMP includes an Emergency Response Plan (ERP) to prepare for and respond to incidents that could pose threats to community health and safety. These may include flooding, fire, hazardous material spills, or civil unrest. The ERP will outline communication strategies, responsible actors, evacuation protocols, and engagement with local health authorities and emergency services. The project also recognizes that certain groups within communities—such as women, children, persons with disabilities, and the elderly—may face disproportionate risks from project activities or from interactions with enforcement personnel. As such, project staff, contractors, and any security personnel supporting the project will be trained on gender-sensitive approaches, cultural respect, and non-discrimination, and Codes of Conduct (CoC) will be enforced across all project-supported actors. The GM, established under the Stakeholder Engagement Plan (SEP), will include provisions to receive and address complaints related to community safety and security, including those arising from the conduct of law enforcement actors. The GM will be designed to ensure accessibility, confidentiality (especially for GBV/SEA/SH cases), and timely resolution, with clear referral pathways for legal or protection services where necessary. To ensure oversight and accountability, the project will monitor community health and safety performance through regular environmental and social audits, field supervision, and third-party monitoring where feasible. Specific indicators—such as the number of traffic incidents, injury reports, public health alerts, or grievances related to enforcement—will be tracked and used to inform adaptive management.

Public Disclosure

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Relevant

ESS5 is relevant to the TRALARD II project due to the potential for project activities to result in restrictions on community access to natural resources, particularly in and around community-managed forest landscapes. While the project does not anticipate large-scale physical displacement or land acquisition, the nature-based solutions and conservation interventions supported under TRALARD II may introduce or reinforce restrictions on land and resource use that communities have traditionally depended upon for their livelihoods. Such restrictions are expected to arise from activities related to enhanced enforcement of conservation rules, demarcation and zoning of forest, reforestation or regeneration in areas previously used for grazing, charcoal production, or shifting cultivation, and the expansion of Community Forest Management (CFM) or co-management frameworks in new districts and provinces. Strengthening the role of the the Forestry Department (FD) in landscape governance will also mean tighter controls over natural resource extraction, which may limit customary or informal access to woodlands, , and non-timber forest products. To address these potential impacts in line with the requirements of ESS5, TRALARD II will update and expand the Process Framework (PF) that was originally developed under TRALARD. The Process Framework that will be updated will guide on how access restrictions are identified, assessed, and managed, and how project-affected persons (PAPs) will be consulted, supported, and provided with alternative livelihood options. The PF will apply particularly to subprojects and activities located in in proposed intervention areas in Southern, Copperbelt, and

North-Western Provinces, where CFM's are being expanded. The updated Process Framework will describe: (a) the categories of project activities likely to lead to access restrictions; (b) the criteria for determining eligibility for assistance among affected communities; (c) the organizational arrangements for implementing mitigation measures, including the roles of FD, Community Resource Boards (CRBs), and other stakeholders; (d) procedures for meaningful community consultation and participatory planning; (e) livelihood restoration strategies and benefit-sharing mechanisms to offset losses; and (f) monitoring and reporting mechanisms for access restriction impacts. The Process Framework to be updated prior to Board apporval and will include a clear linkage to the project's Grievance Redress Mechanism (GRM). The GM itself has been updated and is currently being assessed under TRALARD II to accommodate complaints arising specifically from forestarea management and natural resource use restrictions. This includes the establishment of accessible and culturally appropriate grievance reporting channels for rural and forest-dependent communities, as detailed in the SEP. The GRM will be widely communicated and operationalized at the community level through community facilitators, CRBs, and Ward Development Committees, ensuring that all affected persons—including those in remote or marginalized areas—are able to seek recourse without fear of reprisal. During project preparation, initial stakeholder consultations were carried out with communities in and around the project's proposed areas of intervention. These consultations revealed community concerns about the loss of access to forest resources, lack of clarity around user rights in CFM areas, and limited involvement in past enforcement decisions. These concerns have been integrated into the design of the updated Process Framework and SEP, and the project will continue to engage with stakeholders through ongoing, iterative consultations to ensure that mitigation measures are responsive and context-specific. To ensure transparency and accountability, the updated Process Framework and its associated provisions will be finalised and publicly disclosed prior to Board approval. Key actions related to access restrictions, community consultations, the implementation of the PF, and monitoring will be clearly set out in the Environmental and Social Commitment Plan (ESCP). These actions include the preparation and disclosure of the updated Process Framework, training of implementing agencies and community institutions, integration of PF measures into site-specific ESMPs, and regular reporting on the number of affected persons and the status of mitigation measures. It is important to note that the PF will apply not only to areas directly financed by the World Bank but also to other locations under the project's conservation envelope where access restrictions may arise as an indirect consequence of TRALARD II-supported capacity building or institutional reforms. This ensures consistency across the landscape approach adopted by the project and promotes equitable treatment of all affected communities. To operationalize the updated PF, the project will support the preparation of site-specific Action Plans for each targeted PA where access restrictions or resource use regulations are introduced. These Action Plans will be developed in close consultation with affected communities and co-management partners and will outline specific mitigation measures, implementation responsibilities, and monitoring arrangements tailored to the environmental and social context of each PA. The Action Plans will also reflect local livelihood strategies, the nature and extent of expected restrictions, and the available grievance mechanisms, and will be updated periodically to reflect emerging risks or changes in resource governance. In instances where project activities result in physical displacement (such as relocation from encroached land) or economic displacement (such as restrictions on access to natural resources), the project will prepare and implement site-specific Resettlement Action Plans (RAPs) and/or Livelihood Restoration Plans (LRPs) in line with ESS5. These instruments will be developed in consultation with affected communities and will ensure that displacement impacts are mitigated through fair compensation, restoration of livelihoods, and meaningful participation. The RAPs/LRPs will complement the updated Process Framework and will be disclosed and implemented prior to the commencement of any activity that may trigger resettlement impacts.

Public Disclosure

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

ESS6 is relevant as the project is involved on restoring and managing ecosystems in landscapes of high biodiversity value, including natural and modified habitats within Protected Areas (PAs) and community-managed forest ecosystems. The project will be implemented in the ecologically significant Miombo ecoregion, a globally important dry forest system that supports a rich diversity of flora and fauna, sustains key ecosystem services such as carbon sequestration and water regulation, and provides critical livelihoods for rural communities. The TRALARD II project aims to promote sustainable landscape restoration, conservation-compatible livelihoods, and nature-based solutions for climate resilience. In doing so, it is expected to generate several positive environmental impacts, including (a) restoration and rehabilitation of Miombo forest ecosystems, including both natural habitats and modified habitats in community forests, and buffer zones; (b) increase in native biodiversity as a result of improved forest management, reforestation, and reduced pressure from illegal logging or poaching; (c) enhanced ecological functions of the Miombo landscapes, particularly their role in carbon storage, hydrological regulation, erosion control, and climate moderation; and (d) strengthening of community-led conservation initiatives, such as Community Forest Management Groups (CFMGs) and Community Resource Boards (CRBs), which contribute to both biodiversity protection and sustainable livelihoods. However, as with any project involving natural resource use and landscape interventions, TRALARD II also presents potential risks to biodiversity and living natural resources if not properly managed. Key risks include the expansion of agriculture and value chains supported under Component 2, which may lead to habitat fragmentation, land clearing, and increased use of agrochemicals. Other risks include runoff of pesticides and fertilizers into nearby streams and wetlands, with adverse impacts on aquatic ecosystems and terrestrial species, and the introduction of agroforestry species that, while beneficial for livelihoods, could pose a risk to native biodiversity if not carefully selected, especially where exotic species might compete with indigenous flora or alter natural habitat composition. An exclusion list will be developed and applied during subproject screening to ensure that all species introduced—whether for agroforestry, restoration, or livelihoods—are either native or demonstrably non-invasive in the target ecosystem. The project's Environmental and Social Management Framework (ESMF) includes biodiversity screening criteria to be applied to all subprojects, particularly those located in or near protected areas, forests, wetlands, or other ecologically sensitive zones. The ESMF also provides for the preparation of site-specific Environmental and Social Impact Assessments (ESIAs) and Environmental and Social Management Plans (ESMPs), which will include a critical habitat assessment, where relevant, and tailored mitigation measures for any anticipated impacts on biodiversity. These measures will cover appropriate buffer zones, erosion control, limits on land clearing, and restoration of disturbed areas using native vegetation. In addition, TRALARD II will develop and implement a Biodiversity Management Plan (BMP), as a standalone instrument, particularly for subprojects located within or adjacent to forest reserves. The BMP will: (1) Identify key biodiversity values and critical habitats in project landscapes; (2) Define measures to avoid, minimize, or mitigate impacts on species and ecosystems; (3) Establish biodiversity baselines and indicators for ongoing monitoring; (4) Promote the use of community-based biodiversity monitoring, involving local residents and conservation stakeholders; (5) Include provisions for managing cumulative impacts in shared ecosystems or corridors. The project will also enhance the capacity of relevant institutions such as the, Forestry Department (FD), and local communities to implement biodiversity-friendly practices. This includes training on wildlife management, ecosystem restoration, protected area planning, and enforcement of conservation regulations, particularly in partnership with co-management entities such as African Parks, Conserve Global, and the Frankfurt Zoological Society (FZS), where applicable. Where project activities may intersect with legally designated or internationally recognized protected areas, additional diligence will be exercised. Activities will only be supported if

Public Disclosure

they are consistent with the conservation objectives of the area and are subject to robust consultation with the managing authorities and local communities. Where feasible, the project will support buffer zone management, community-based natural resource planning, and ecotourism opportunities to complement conservation goals. ESS6 also recognizes the importance of sustainably managing renewable natural resources that support livelihoods. TRALARD II will promote non-timber forest product (NTFP) value chains, such as honey and wild mushrooms, that are compatible with forest conservation and can provide economic alternatives to destructive land uses. Sustainable harvesting guidelines and capacity-building for producer cooperatives will be key to ensuring that such initiatives remain ecologically viable. The monitoring of biodiversity outcomes will be incorporated into the project's results framework. Key indicators may include the area of forest restored or conserved, number of hectares of critical habitat protected, number of wildlife corridors maintained or established, and species diversity indices in selected ecosystems. Periodic evaluations will be conducted to assess biodiversity impacts and the effectiveness of mitigation measures, with adaptive management strategies employed as needed.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities Not Currently Relevant

Not relevant currently

ESS8 - Cultural Heritage Relevant

ESS8 is relevant to the TRALARD II project as a precautionary and preventive safeguard to protect both tangible and intangible cultural heritage that may be affected during the implementation of project activities. While the project does not anticipate direct, large-scale impacts on known cultural heritage sites, the nature of the interventions—particularly small-scale infrastructure development, natural resource management, and enforcement activities in and around protected areas—could inadvertently result in the disturbance or restriction of access to cultural resources, including those of spiritual or historical significance to local communities. Potential tangible cultural heritage impacts may arise during excavation, earthworks, or construction activities—such as the development of irrigation infrastructure, water canals and weirs, and rural access improvements—where the clearing of land or digging could unearth objects or sites of archaeological, historical, or cultural value. In line with ESS8 and Zambian national heritage legislation, TRALARD II will adopt and implement a Chance Finds Procedure. This procedure will be included in all site-specific Environmental and Social Management Plans (ESMPs) and incorporated into contractor contracts. It will require that any unexpected discovery of cultural heritage be reported immediately, and that construction activities in the vicinity be halted until appropriate assessments and mitigation actions are undertaken in consultation with relevant authorities, such as the National Heritage Conservation Commission (NHCC). In addition to physical artifacts, TRALARD II may also have implications for intangible cultural heritage, especially in contexts where the project supports enhanced law enforcement and access restrictions in protected areas. In many rural and forest-dependent communities, sacred groves, ancestral burial grounds, and spiritually significant landscapes are closely tied to community identity and traditional belief systems. Project activities that limit access to these areas—whether through reforestation, boundary demarcation, or enforcement of conservation rules—could affect the ability of local groups to practice rituals, perform ceremonies, or maintain oral traditions associated with those landscapes. To mitigate these risks, the project will ensure that intangible cultural heritage is assessed and addressed as part of stakeholder consultations, particularly those undertaken during the update and implementation of the Process Framework (PF). The PF will include provisions for mapping culturally sensitive sites, identifying communities whose cultural practices may be affected by changes in land use or access, and developing strategies to minimize or

Public Disclosure

compensate for those impacts. These may include alternative access arrangements, community benefit-sharing, or co-management agreements that allow for continued cultural practices within conservation-compatible frameworks. Community consultations during the preparation phase will include specific inquiries about the location, use, and importance of cultural heritage, both tangible and intangible, and will inform the design of subprojects to avoid or minimize such impacts. In areas where cultural heritage is known or suspected, the project will engage with traditional leaders, elders, and cultural practitioners to document potential sensitivities and build culturally respectful mitigation plans. The Stakeholder Engagement Plan (SEP) provides the framework for inclusive and culturally appropriate engagement with communities, including those with cultural heritage concerns. Communication will be conducted in local languages and through traditional governance structures where appropriate. The project's GM will also be open to complaints or concerns related to cultural heritage, including the loss of access to sacred sites or damage to cultural artifacts, with appropriate protocols to handle these issues sensitively and confidentially. Institutional responsibilities for managing cultural heritage risks will be shared among the National Project Coordination Unit (NPCU), Provincial Project Implementation Units (PPIUs), and the contractors responsible for infrastructure works. Environmental and Social Specialists will be tasked with ensuring that Chance Finds Procedures are implemented, cultural sensitivities are respected, and cultural heritage-related commitments in the ESMPs and PF are monitored and reported on.

ESS9 - Financial Intermediaries Not Currently Relevant

Not relevant at the moment

Public Disclosure

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways	Yes
OP 7.60 Operations in Disputed Areas	No

B.3 Other Salient Features

Use of Borrower Framework No

Borrower Framework will not apply for this operation

Use of Common Approach No

No Financing partners will be used under this operation.

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

The documents to be prepared prior to appraisal include the Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP) and an updated draft Environmental and Social Management Framework (ESMF) which will contain the waste management plans and OHS plan. The GBV Action Plan and Labor Management Plan (LMP)

will be prepared as stand alone documents that will be disclosed with the final ESMF prior to project effectiveness. The updated Process Framework will be finalized and disclosed prior to board approval.

III. CONTACT POINT

World Bank

Task Team Leader:	Elisson M. Wright	Title:	Senior Environmental Finance Specialist
Email:	ewright1@worldbank.org		
TTL Contact:	Silvia Mauri	Job Title:	Senior Agriculture Specialist
Email:	smauri@worldbank.org		
TTL Contact:	Tuuli Johanna Bernardini	Job Title:	Senior Environmental Specialist
Email:	tbernardini@worldbank.org		

IV. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

V. APPROVAL

Task Team Leader(s):	Elisson M. Wright, Silvia Mauri, Tuuli Johanna Bernardini
ADM Environmental Specialist:	Abdirahman Zeila Dubow
ADM Social Specialist:	Joy Lubinda Chisompola

Public Disclosure