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Report No: PADHI00385

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF US$57.3 MILLION

AND A

SHORTER MATURITY LOAN

IN THE AMOUNT OF US$22.7 MILLION

TO THE

KINGDOM OF LESOTHO

FOR AN

INTEGRATED TRANSPORT, TRADE AND LOGISTICS PROJECT

MAY 15, 2024

Transport Global Practice
Eastern and Southern Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective {April 26, 2024})

Currency Unit =	Lesotho Maloti (LSL)
US$1 =	LSL 18.8

FISCAL YEAR
April 1 - March 31

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ABBREVIATIONS AND ACRONYMS

AFCFTA	African Continental Free Trade Area
AFE	Eastern and Southern Africa
AGOA	African Growth and Opportunity Act
AM	Accountability Mechanism
ASYCUDA	Automated System for Customs Data
CAFI	Competitiveness and Financial Inclusion
CCDR	Climate Change Development Report
CE	Citizen Engagement
CPF	Country Partnership Framework
CPI	Consumer Price Index
CRVA	Climate Risk and Vulnerability Assessment
DA	Designated Account
DIME	Development Impact Evaluation
E&S	Environmental and Social
ESCP	Environmental and Social Commitment Plan
ESMS	Environmental and Social Management System
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standards
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
FAO	Food and Agriculture Organization
FM	Financial Management
GAP	Gender Action Plan
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GOL	Government of Lesotho
GRS	Grievance Redress Service
HDM-4	Highway Development and Management
HLO	High-Level Objective
ICR	Implementation Results and Completion Report
IFMIS	Integrated Financial Management Information System
IFR	Interim Financial Report
IRR	Internal Rate of Return
ITTL	Integrated Transport, Trade and Logistics
LCCNS	Lesotho's Climate Change National Strategy
LNSW	Lesotho National Single Window
LNTSMP	Lesotho National Transport Sector Masterplan
M&E	Monitoring and Evaluation
MCC	Millenium Challenge Corporation
MDTC	Maloti Drakensberg Transfrontier Corridor
MFD	Maximizing Finance for Development
MOPWT	Ministry of Public Works and Transport
MTIBDMTIBD	Ministry of Trade, Industry, and Business Development
NAP	National Adaptation Plan
NAPA	National Adaptation Program of Action
NDC	Nationally Determined Commitments

NPV	Net Present Value
NSDP II	Second National Strategic Development Plan
OHS	Occupational Health and Safety
OSBP	One Stop Border Post
PACs	Project Affected Communities
PAPs	Project Affected Parties
PCE	Private Capital Enabling
PCF	Private Capital Facilitation
PCM	Private Capital Mobilization
PDO	Project Development Objective
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PMU	Project Management Unit
PPSD	Project Procurement Strategy for Development
PRAMS	Procurement Risk Assessment and Management System
PS	Principal Secretary
PSC	Project Steering Committee
PSI	Project Safety Impact
RAP	Resettlement Action Plan
RF	Results Framework
RD	Roads Directorate
RSA	Regional Safeguards Advisor
RSL	Revenue Services Lesotho
RSSAT	Road Safety Screening and Appraisal Tool
RTRN	Regional Trunk Road Network
SACU	Southern Africa Customs Union
SADC	Southern Africa Development Community
SADP II	Smallholder Agriculture Development Project II
SARTF	Southern African Regional Trade Facilitation
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SOE	Statement of Expenditures
STEP	Systematic Tracking of Exchanges in Procurement
SUW	Scale-Up Window
TA	Technical Assistance
TFCA	Transfrontier Conservation Area
TICP	Transport Infrastructure and Connectivity Project
TRS	Time Release Study
UA	Universally Aligned

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DATASHEET

BASIC INFORMATION

Project Beneficiary(ies)	Operation Name		
Lesotho	Lesotho Integrated Transport, Trade and Logistics Project		
Operation ID	Financing Instrument	Environmental and Social Risk Classification	
P502125	Investment Project Financing (IPF)	Moderate	

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternative Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
06-Jun-2024	31-Dec-2029
Bank/IFC Collaboration	
No	

Proposed Development Objective(s)

The Project Development Objective (PDO) is to improve climate resilient regional connectivity on the Katse to Thaba-Tseka road corridor and reduce the costs of trade at three of Lesotho's commercial borders with South Africa.

Components

Component Name	Cost (US$)

Road Corridor Infrastructure Development	60.00
Regional Trade, Integration, and Logistics Services	16.00
Technical Assistance, Capacity Building, and Project Management	4.00

Organizations

Borrower:	Kingdom of Lesotho
Implementing Agency:	Ministry of Trade, Industry and Business Development, Ministry of Public Works and Transport

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)? Yes

SUMMARY

Total Operation Cost	**80.00**
Total Financing	**80.00**
of which IBRD/IDA	**80.00**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	80.00
IDA Credit	57.30
IDA Shorter Maturity Loan (SML)	22.70

IDA Resources (US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
National Performance-Based Allocations (PBA)	57.30	0.00	22.70	0.00	80.00
Total	**57.30**	**0.00**	**22.70**	**0.00**	**80.00**

Expected Disbursements (US$, Millions)

WB Fiscal Year	2024	2025	2026	2027	2028	2029	2030
Annual	0.00	4.00	13.00	20.00	20.00	20.00	3.00
Cumulative	0.00	4.00	17.00	37.00	57.00	77.00	80.00

PRACTICE AREA(S)

Practice Area (Lead)

Transport

Contributing Practice Areas

Agriculture and Food; Macroeconomics, Trade and Investment; Finance, Competitiveness and Innovation

CLIMATE

Climate Change and Disaster Screening

Yes, it has been screened and the results are discussed in the Operation Document

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial

4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Overall	Substantial

POLICY COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
ESS 8: Cultural Heritage	Not Currently Relevant
ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description
Schedule 2. Section 1.A.2. To facilitate effective implementation of RD's Respective Part of the Project, the Recipient shall ensure that not later than four (4) months after the Effective Date, RD recruits a procurement officer, safeguards officers, and a monitoring and evaluation expert with training, experience and under Terms of Reference satisfactory to the Association.
Schedule 2. Section 1.A.4.(a) In order to ensure the proper Project oversight, the Recipient shall, no later than six (6) months after the Effective Date, establish and thereafter maintain during the Project implementation a Project Steering Committee with composition and terms of reference satisfactory to the Association, to be responsible for strategic decision making, overall monitoring, and oversight and coordination of activities towards the objectives of the Project.

Conditions

Type	Citation	Description	Financing Source
Effectiveness	Article IV, 4.01(a)	the Recipient has prepared and adopted the Project Implementation Manual, in form and substance acceptable to the Association	IBRD/IDA
Effectiveness	Article IV, 4.01(b)	the Recipient has entered into a Subsidiary Agreement with the Roads Directorate satisfactory to the Association	IBRD/IDA

I. STRATEGIC CONTEXT

A. Country Context

1. **The Kingdom of Lesotho is a lower-middle-income country and one of Southern Africa's poorest economies.** With a population of about 2.3 million, the country is entirely encircled by the Republic of South Africa, which provides Lesotho with access to global markets, its migrants with livelihoods, and affects its national currency, the Loti, which is pegged 1:1 to the South African Rand. Lesotho faces high unemployment, business informality, inequality, and poverty. Gross Domestic Product (GDP) growth has decelerated from a peak of 6.3 percent in 2012 to -1.1 percent in 2022.[1] As a result, GDP per capita declined by 12 percent from 2016 to 2020. Unemployment is estimated at 16.3 percent in 2023.[2] While the poverty rate fell from 56.6 percent to 49.7 percent between 2002 and 2017, economic vulnerability persists with more than 75 percent of the population either poor or vulnerable to poverty. Lesotho is among the top 20 percent of countries worldwide with the highest inequality, with a Gini index coefficient of 44.9,[3] though it has become less unequal than its neighbors. The poor private sector performance has been the result of compounding factors including large skill gaps, high costs of doing business, and difficulties in access to credit, which are both contributing factors to the large informal sector. As a small economy, Lesotho is vulnerable to the performance of its trading partners[4],with its exports accounting for over 90 percent of its exported goods and composed mostly of textiles and garments, diamonds and water. In particular, the underperformance of regional partners such as South Africa weighs on Lesotho's economic performance. Recurrent climate shocks have constrained growth, draining fiscal resources,[5] while a high public sector wage bill has inhibited spending on key development objectives, including on infrastructure investment.

2. **Lesotho's topography presents a challenge to poverty reduction and economic equality**. The spatial distribution of poverty is intertwined with topography, with remote rural highland communities impacted most. Poverty rates[6] in urban areas, particularly in Maseru District, declined between 2002 and 2017 from 41.5 percent to 28.5 percent, while the poverty rates remained almost the same or increased in rural foothills, rural mountains, and the Senqunyane river valley area. Equal access to economic opportunities is a challenge due to a lack of connectivity between rural and urban areas. The government, through its Second National Strategic Development Plan (NSDP II) 2018/19-2027/2028, noted that road infrastructure connectivity is a binding constraint to tackling spatial poverty variation.

3. **Lesotho remains largely agrarian with 70 percent of its population living in rural areas.**[7] Agriculture remains the primary income source for most of the population. The topography and climate make it mostly a livestock-rearing country with coarse grains and meat representing a large part of the remote rural diet. Over the past two decades, there have been efforts to increase food production to reduce dependency on food imports on the one hand, but also to promote export-oriented commercial farming products. The programs have led to increasing horticultural production in most communities with the objective of improving nutrition, while also allowing relatively small farms to operate on-farm activities that can generate sustainable livelihood income from surplus produce sales[8]. However, fresh horticultural

[1] World Development Indicators (2024): https://data.worldbank.org/country/LS
[2] Ibid.
[3] World Bank Poverty and Inequality Platform (2024): https://pip.worldbank.org/country-profiles/LSO
[4] OECD (2022) Quarterly International Trade Statistics: https://games.oec.world/en/profile/country/lso#:~:text=Yearly%20Trade&text=During%20the%20last%20five%20reported,%2Dshirts%20(%2461.6M).
[5] The average annual cost of disaster response is estimated at US$19.3 million, or 1.6 percent of the total budget expenditure in the 2019/20 fiscal year.
[6] World Bank. 2024. Territorial development in Lesotho: accelerating economic growth and development. Washington, DC: World Bank.
[7] World Bank Report # 3310 Project Appraisal Document, Smallholder Agriculture Development Project (P165228)
[8] WFP (2022) Annual Country Report

produce is perishable, and depends on proper logistics chain to bring produce to market, with improved road access a critical element of this chain.

4. **Given its unique geographical position, Lesotho needs to strengthen its regional integration, especially with South Africa, to accelerate growth through export promotion.**[9] The need to combine financing of physical infrastructure with policy and trade reforms to create regional markets and address diseconomies of scale remains a key requirement for achieving regional integration in Africa. The Southern Africa Development Community (SADC) – of which the Kingdom of Lesotho is a part – was ranked as the least integrated sub-region[10] in 2020. While the continent has made significant progress in ensuring free movement of people across countries, it continues to struggle with integration of production of goods and regional infrastructure connectivity. Road connectivity to primary borders is essential to enhance linkages to regional and domestic markets. Growth through export promotion is a part of the government's strategy to reduce dependence on Southern Africa Customs Union (SACU) revenues. These SACU revenues, coming from customs duties, currently make up around 40 percent of the government's revenue generation, which leaves the budget vulnerable to the yearly volatility of trade volumes.

5. **Lesotho and the broader SACU community have significant potential to increase regional trade through implementation of the African Continental Free Trade Agreement (AFCFTA) and taking further advantage of preferential trade agreements.** A recent World Bank analysis has estimated that a significant proportion of the estimated US$450 billion of income gains available from increased intra-regional trade can be realized by improving trade facilitation and addressing non-tariff barriers. The analysis further indicated that, SACU countries are expected to increase exports by 17.6 percent and imports by 24.7 percent by 2035 by exploiting the AFCFTA.[11] Lesotho has taken advantage of trade preferences under the African Growth and Opportunity Act (AGOA) to build its garments sector. The AGOA as well as the Everything but Arms agreements (with the United States and European Union, respectively) provide Lesotho further opportunity for trade in new potential export sectors.

6. **Impact of climatic shocks to the transport sector.** Since the 1980s, Lesotho has been affected by 22 economic shocks, 90 percent[12] of which were climatic. The frequency of intense precipitation events is likely to increase leading to heightened risks of flooding, increased aridity, temperature extremes, and droughts.[13] In 2020-2021, Lesotho declared two states of emergencies for the COVID-19 pandemic and heavy rains. The latter severely impacted businesses due to damage to road infrastructure disrupting trade logistics. The vulnerability to temperature extremes, flooding, and drought, expected to increase with climate change, are serious challenges to the transport sector, highlighting the importance of strengthening climate resilience, including much-needed attention to road infrastructure rehabilitation, upgrading, and new construction.

B. Sectoral and Institutional Context

7. **Lesotho's connectivity to its neighbors through the regional trunk road network (RTRN) is critical**. Moshoeshoe I International Airport is the only international airport, connecting Maseru to Johannesburg, through daily scheduled flights. Mokhotlong and Qacha's Nek airports serve as the two domestic airports, while several aerodromes are spread throughout the country. The only rail service is a freight line from the Maseru Railway Station to Bloemfontein. As part of the Southern Africa Transfrontier Conservation Area (TFCA) treaty,[14] Lesotho has identified the Maloti Drakensberg Transfrontier Corridor (MDTC) as critical to the SADC regional integration. MDTC includes four road corridors covering the

[9] World Bank: Supporting Africa's Recovery and Transformation: Regional Integration and Cooperation Assistance Strategy Update for the period FY21–FY23 (December 7, 2020).
[10] African Regional Integration Index. SADC - ARII (integrate-africa.org)
[11] World Bank. The African Continental Free Trade Area: Economic and Distributional Effects. Washington, DC: World Bank
[12] Climate Risk Profile: Lesotho (2021): The World Bank Group.
[13] Ibid.
[14] The Southern Africa TFCA treaty was founded on the realization that natural resources straddling boundaries between SADC destinations are shared assets that contribute to regional integration, socio-economic development, and biodiversity conservation.

eastern portion of the country, including the proposed Katse to Thaba-Tseka road project (part of Corridor 3 of the MDTC). Further, a "Bi-national Commission treaty" signed between the governments of Lesotho and South Africa in November 2021 has identified several areas of cooperation including development of economic corridors, trade and logistics, border management, and implementation of the MDTC. South Africa has initiated upgrading of its border facilities with Lesotho with bids for the construction of the upgraded border posts on the South African side due in July 2024.

8. **The Government of Lesotho (GOL) recognizes that robust economic growth, regional integration and trade, and improved service delivery are the main drivers of poverty reduction.** Thaba-Tseka district has the highest poverty rate among Lesotho's districts, and weak service delivery. The development of transport infrastructure in the remote mountain regions (such as Thaba-Tseka), is part of the strategy to reduce poverty by promoting economic growth and improving access to socio-economic services such as education, health, social welfare, and administrative services. Improving access for major population centers to key border posts and supporting logistical infrastructure to develop productive sectors in lagging regions is a key strategic objective of the government**.** The investment will also result in better integration of domestic and regional markets. Thaba-Tseka district will be connected with improved road networks with other districts and international borders, including the Maseru Bridge and Maputsoe-Ficksburg borders, therefore presenting a clear linkage between the road and border investments proposed in the project. Improving connectivity by developing the road adds to climate resilience by providing redundancy to Lesotho's outlets to markets.

9. **Investment in climate resilient roads is a government priority to connect key productive sectors.** The road network accounts for more than 70 percent of domestic transport needs. The total road network is approximately 6,906 kilometers (km) in length, of which 1,799 km are paved. Of the remainder, 3,831 km are gravel roads and 1,277 km are earth tracks. The NSDP II requires the update of the current design standards for roads, bridges, and culverts, accounting for the expected impacts of climate change and applying the revised standards in rehabilitating existing roads and developing new roads and bridges. Currently, the road subsector faces multiple challenges. The average condition of the road network is considered 'poor'; in addition to lack of funds available for road maintenance, there is also inadequate utilization of Road Fund resources by road agencies.[15] In its current condition, the Katse to Thaba-Tseka road is vulnerable to annual floods and landslides resulting in damages to road structures (including bridges and culverts) and landscape degradation. The project design and construction will adopt climate resilient methods as proposed in a recent study.[16]

10. **Lesotho's economic prospects depend on trade and improving intra-regional transport, logistics, and customs facilities, which are central to reducing Lesotho's costs and lead times of regional trade.** Transport and logistics constitute 6 percent of GDP.[17] Comparatively, South Africa's combined total is 16 percent, while Africa's average is 16.2 percent, indicating the need to improve logistics performance for Lesotho as a ratio of GDP. Lesotho performs poorly in terms of logistics, as measured by the World Bank Logistics Performance Index,[18] particularly on infrastructure (primarily trade and transport related infrastructure), customs (efficiency of the clearance process by border control agencies), and international shipments (ease of arranging competitively priced shipments). Efficiency in logistics translates to competitiveness in transport and trade and Lesotho is already at a relative disadvantage by being a landlocked country. Lesotho's costs to key overseas markets (e.g., China and the United States) are at least three times higher than those with South Africa. The difference in costs can be attributed to the fact that Lesotho's goods must transit through South Africa to third country markets. This provides rationale for investing in smart border management systems in alignment with South Africa.

[15] The Road Fund is a government agency established in 1995 which finances routine, emergency and periodic maintenance of all roads in Lesotho, road rehabilitation, road upgrading, new road works, road safety projects and any other project or matter connected with roads.

[16] National Climate Risk and Vulnerability Assessment (CRVA) for Roads in Lesotho - Development of a Vulnerability Assessment Tool for Lesotho Roads and Vulnerability Assessments of Selected Catchment Areas (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099051023095517471/P17247607085ec0580bf2407698ff1ec3a9

[17] World Data Atlas, 2017): https://knoema.com/atlas/Lesotho

[18] World Bank, 2023, The Logistics Performance Index and Its Indicators. https://lpi.worldbank.org/sites/default/files/2023-04/LPI_2023_report.pdf

11. **Lesotho's goods and services trade is highly dependent on South Africa, a market for Lesotho's products, and a conduit to and from international markets.** Lesotho has nine border crossings with South Africa for commercial trade. Among these, three borders (Maseru Bridge, Maputsoe-Ficksburg, and Caledonspoort) operate 24 hours a day. The Maseru Bridge crossing in the west and the Maputsoe-Ficksburg crossing in the northwest handle most of the activity. Trade routes to the east and south are constrained by high mountains and undeveloped road infrastructure. Thus, under the project, the Katse to Thaba-Tseka road investment will close the missing link from the Thaba-Tseka district to the Leribe district, opening up economic and export opportunities for Thaba-Tseka's population. Improved border infrastructure with harmonized digitally enabled joint border procedures with South Africa could minimize time and costs at the two main borders. Investment at the Qacha's Nek border, the only commercial border in the east, will provide improved access from eastern Lesotho to South African markets, including the city of Matatiele, South Africa, which is only one hour from the border, compared to Maseru which is three hours away. This also provides another step in improving east-west regional integration and creation of a regional corridor with the Port of Durban.[19]

12. **Lesotho's highly concentrated trade is closely integrated into the regional supply chains** with 80 percent of trade by volume and value undertaken by 250 entities. Historically, the market has been dominated by a few players in each industry, supporting oligopolistic behavior that can be observed by prices often being lower in nearby South African border towns, even though duty and value added tax rates are the same within SACU countries. The increased regional trade integration, supported by the investments, should simplify regional trade to provide open market access to small traders wishing to export as well as improving access to source imports regionally and internationally, supported by e-commerce and new last mile supply chains.

13. **The government has ongoing efforts to improve trade facilitation.** The World Bank Southern African Regional Trade Facilitation (SARTF) project (P179671) provides technical assistance to develop a collaborative Lesotho-South Africa trade reform agenda and a formal joint action plan for border reform. This includes a joint blueprint for the smart one stop border at Maseru Bridge including customs, immigration, agriculture, health, and environment agendas from both the Government of Lesotho and their South African counterparts, namely the Border Management Authority and South African Revenue Services which are mandated to lead the border reform with Lesotho, including plans to establish a SACU single Customs Declaration[20] that consolidates the export and import formalities between the countries into a single electronic submission, as well as developing joint borders at Maseru Bridge and Maputsoe-Ficksburg aligning to South Africa's policy commitment to develop six One Stop Border Posts at key regional borders.[21] The government is also, through the World Bank financed Competitiveness and Financial Improvement (CAFI) Project (P175783), investing in the digitalization of trade through connecting all the border agencies to the Automated System for Customs Data (ASYCUDA). The government is completing the Lesotho National Single Window (LNSW) that will enable traders to apply for all licenses, permits, certificates and other authorizations required by trade for regulatory purposes, and for the border agencies to manage certification digitally.[22] Nevertheless, improvements are still needed for cross border transport and transit bond operations and harmonized regulation of transport services to help reduce the time and cost of providing international export transport services, as well as development of a Simplified Trade Regime and applications to facilitate declarations by small traders. These initiatives by Lesotho are needed to match the coordinated and ongoing initiatives by South Africa, as described in the joint blueprint. South Africa has its policy and legal regime in place to establish its smart borders with Lesotho and bids for construction of the upgraded border posts on the South African side are due in July 2024.

14. **Lesotho is integrated into a highly competitive global textile and apparel sector.** The textile and apparel sector is the top contributor to exports. However, 80 percent of interviewed apparel companies (accounting for 43 percent of

[19] The corridor requires additional road infrastructure investment on the South African side of the border to ideally support commercial cargo; this is included within the Lesotho-South Africa binational commission treaty of 2021.

[20] Customs single declaration was committed to in May 2023 in Johannesburg at the meeting of SACU Commissioner Generals

[21] Border Management Authority One Stop Border Post Policy May 2022: http://www.dha.gov.za/images/PDFs/OSBP_POLICY-_MAY2022.pdf

[22] Revenue Services Lesotho and Ministry of trade and small business were connected to the LNSW in Phase 1, 2021-2022

the exports) reported problems with crossing the South African border among their key constraints to competitiveness.[23] Delays are accentuated on key export products, such as textiles and perishable goods, where inspections, stringent testing and certification are required adding further to complications arising from the lack of harmonized border procedures. A 2022 Lesotho Time Release Study (TRS) measured the average time taken from arrival of both imports and exports to their exit from the Maseru Bridge[24] border at a competitive 22 minutes. However, the TRS also reported that the time taken from the registration of the declaration to the exit of a truck from the border is more than one day (and up to a week), reflecting that significant time delays and costs are incurred in regional trade. These delays are validated by studies reporting an average time of over five hours for trucks to travel end-to-end through both borders (including the Lesotho and South African stops at the same crossing). Investment in modern inspection facilities and smart border management systems will likely reduce overall costs, including those related to delays.

15. **Horticulture contributes considerably to the economy through exports.** The World Bank, under the CAFI project (P175783), supports production and commercialization of horticulture by building value chains for fresh fruit and produce. The Millenium Challenge Corporation (MCC) Compact II, which became effective in April 2024, will finance irrigation and other infrastructure for commercial horticulture. However, there remain key constraints, such as a lack of logistics terminals, cold chains, and warehousing to mitigate production losses and extend shelf life. While country specific estimates are not available for horticulture, the Food and Agriculture Organization (FAO) estimates[25] that in sub-Saharan Africa about 37 percent of all food produced is either lost or wasted,[26] which is about 120-170 kilograms/year per capita. Measures to address food loss and wastage will contribute to enhanced income levels, reducing nutritional insecurity and a reduction in greenhouse gas (GHG) emissions.

16. **Gender gaps exist in the trading system and in the transport sector.** About 70 percent of informal (non-registered) traders in the SADC region are women, and they are disproportionally affected by barriers due to inequalities at the border, gender norms and time poverty. Female-owned businesses in Lesotho tend to start and stay small (45 percent remain in this category) and are concentrated in a few trades,[27] and evidence shows that non-tariff measures are more prohibitive for small and medium enterprises. Given that small businesses export infrequently or in small batches, they are particularly exposed to costs derived from cumbersome and lengthy administrative procedures.[28] In addition, data shows that women have limited information on international and regional trade agreements, required fees, forms, procedures and permits due to restricted access to the internet as information is posted in an online portal.[29] Women in particular are vulnerable to sexual harassment and corruption at the border.[30] Across Southern Africa, female cross-border traders have noted that they have been charged double border fees when officers notice their lack of knowledge in trade

[23] Unlocking the potential of Lesotho's Private Sector: A Focus on Apparel, horticulture, and ICT. World Bank 2018.
[24] This measurement considered the clearance procedures only at the Lesotho side of the border and did not include the administrative procedures on the South African side. Lesotho and South Africa are currently planning an end-to-end TRS, covering the entire process, with the study being initiated in July 2024.
[25] WRI (2022). 3 Ways to Tackle Food Loss and Waste in Africa: https://www.wri.org/insights/3-ways-reduce-food-loss-waste-africa
[26] Food loss takes place at production, postharvest and processing stages in the food supply chain and food waste is that which occurs at the end of the food chain (retail and final consumption).
[27] The World Bank (2022). Lesotho - Gender Assessment (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099015105102231913/P1715600219ee403708dad08cfff91db633
[28] World Bank and World Trade Organization. 2020. Women and Trade: The Role of Trade in Promoting Gender Equality. Washington, DC: World Bank
[29] UNWOMEN. UNDP (2022). The Engine of Trade in Africa. Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women And Youth in Trade work for Development: https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.
[30] UNWOMEN. Africa. (2024). Empowering Women in Trade: https://africa.unwomen.org/en/what-we-do/womens-economic-empowerment/empowering-women-in-trade.

procedures.[31] A 2021 online survey found that 43 percent of women cross border traders recommend the creation of a special regime with simplified procedures for small-scale traders.[32] Women also have incentives to use informal routes as they are sometimes banned from entering South Africa for long periods of time.[33] There is limited representation of women in trade networks and associations.[34] Women's time poverty and gender social norms in Lesotho associated with uneven distribution of household activities, transport burden of having to walk long distances to border posts,[35] and husband's frustration with women's frequent traveling as they spend a long time away from home, limit their market time and business choices, impacting business size and profitability.[36] Women face employment segregation in the construction sector. Of the people employed in the construction sector, only 5 percent are women compared to 95 percent men.[37] Barriers to participate in the sector can be found during worker recruitment, retention, and promotion (Annex 5).

C. Relevance to Higher Level Objectives

17. **The project aligns with the World Bank Group Country Partnership Framework (CPF) for Lesotho (FY24-28, report number 183872) discussed by the Board on May 16, 2023.** The project supports the CPF High Level Objectives (HLOs), including HLO1: Increased employment in the private sector; HLO 2: Improved human capital outcomes; and HLO 3: Improved Climate resilience. The project will also increase access to schools and basic services.[38] The project benefits from the territorial development approach,[39] emphasizing customized support to areas with poor and vulnerable people. The project is also aligned with the World Bank's Africa Regional Integration and Cooperation strategy[40] by supporting several thematic pillars, including connectivity, trade and resilience and supports the World Bank's Gender Strategy (2024-2030) through the economic participation objective (outcomes 3 and 5).

18. **The project aligns with the Lesotho's national planning including the NSDP II and the Lesotho National Transport Sector Masterplan (LNTSMP).** The NSDP II has objectives to which the project aligns: to promote participation in regional and global value chains and to create better access to major towns, key border posts, and productive sectors through improved transport corridors. The LNTSMP highlights key road linkages (including Katse to Thaba-Tseka) that will play a

[31] UNWOMEN. UNDP (2022). The Engine of Trade in Africa. Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women And Youth in Trade work for Development: https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.

[32] Ibid.

[33] The African Continental Free Trade Area (AfCFTA) Secretariat, the United Nations Development Programme (UNDP) and UN Women. (2022). The Engine of Trade in Africa: Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women and Youth in Trade work for development report. https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.

[34] Ibid.

[35] USAID. 2016. Women Crossborder Traders in Southern Africa: Contributions, Constraints, and Opportunities in Malawi and Botswana. https://banyanglobal.com/wp-content/uploads/2017/05/ICBT-Gender-Assessment-Report_Final_4-30-2016_DEC.pdf.

[36] Finmark Trust and FSD network. (2023). Summary report on women cross-border traders between South Africa and Lesotho: https://www.finmark.org.za/Publications/Summary_report_WCBT_Lesotho.pdf

[37] ILOSTAT (2020). Data on Economic participation by economic activity. https://ilostat.ilo.org/data/

[38] See Annex 4 for (i) the locations of schools and (ii) locations of footbridges (funded under the Transport Infrastructure and Connectivity Project (TICP) (P155229) project that closed in December 2023)

[39] The 2024 report on a Territorial Development Approach for Lesotho provides recommendations on how to accelerate economic growth and development across differentiated regions of the Kingdom of Lesotho.

[40] Supporting Africa's Recovery and Transformation: Regional Integration and Cooperation Assistance Strategy - Update for the Period FY21–FY23 (English). Washington, DC: World Bank Group.

crucial role in supporting economic and other development.[41] The road is also marked as a priority project in the LNTSMP, based on the demand model[42] that underpins the masterplan.

19. **The project is consistent with Lesotho's Nationally Determined Contribution (NDC),[43] the National Adaptation Program of Action (NAPA),[44] and Lesotho's Climate Change National Strategy (LCCNS).[45]** The NDC states that Lesotho intends to reduce GHG emissions through the adoption of energy efficiency measures and technologies in buildings and transport. The NDC, NAPA and LCCNS include the following priorities relevant to this project: (i) the promotion of low-carbon and climate resilient transport systems, (ii) revision and implementation of existing building standards in line with climate change, improvement of community food security through the promotion of food processing and preservation technologies, and (iii) tree planting for erosion control and soil protection, and capacity building and policy reforms to integrate climate change in sectoral development plans. The project will upgrade a road to climate resilient standards[46] and provide spot improvements in a second road corridor (A1 road) to enhance its climate resilience, upgrade border crossing infrastructure, and construct climate-controlled community packing houses and facilities, observing climate resilient and energy efficiency standards, as well as contributing to a reduction on food losses and food insecurity. The project will plant drought-tolerant trees along the road corridors and at the border crossing facilities, community packing houses, and storage facilities to provide shade and natural cooling, and for soil stabilization and reduction of erosion.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

20. The Project Development Objective (PDO) is to improve climate resilient regional connectivity on the Katse to Thaba-Tseka road corridor and reduce the costs of trade at three of Lesotho's commercial borders with South Africa.

PDO Level Indicators

21. **Achievement of the PDO will be measured by the indicators set forth below.** These PDO indicators and intermediate indicators are described in detail in the results framework (RF).

Improved climate resilient regional connectivity on the Katse to Thaba-Tseka road corridor

a) Travel time reduction on project corridors (percentage)
b) Millions of people that benefit from improved access to sustainable transport infrastructure and services (number)[47]

[41] The LNTSMP was presented to Cabinet in February 2024 and awaits approval.

[42] The model is based on transportation planning and policy analysis, presenting evidence on multiple policy or program scenarios to support the transport sector masterplan.

[43] Lesotho's National Determined Contribution under the Unites Nations Framework Convention on Climate Change. Ministry of Energy and Meteorology. Lesotho. December 2017. URL: https://unfccc.int/sites/default/files/NDC/2022-06/Lesotho%20First%20NDC.pdf

[44] Lesotho's National Adaptation Programme of Action on Climate Change; Ministry of Natural Resources and Lesotho Meteorological Services; URL: https://unfccc.int/resource/docs/napa/lso01.pdf

[45] LMS 2017. Lesotho's National Climate Change Policy. Ministry of Energy and Meteorology, Lesotho. URL: https://faolex.fao.org/docs/pdf/les203460.pdf

[46] Construction design standards observant of current and future climate conditions.

[47] This measures, as part of the World Bank Group scorecard, the number of beneficiaries of improved transport condition. It assesses the number of people that experience improved access to sustainable transport infrastructure or services that have been built or rehabilitated through financed or guaranteed interventions (e.g., climate-resilient highways, rural roads, non-motorized transport facilities, public transport).

Reduced costs of trade across commercial borders between Lesotho and South Africa

a) Reduction in border clearance time for commercial traders through implementation of smart border systems at Maseru Bridge and Maputsoe-Ficksburg crossings, disaggregated by sex (Percentage)

B. Project Components

22. **The project has three components:** (i) Road corridor infrastructure development, (ii) Regional trade, integration, and logistics services, and (iii) Technical assistance, capacity building, and project management.

Component 1: Road Corridor Infrastructure Development (US$60 million)

23. **Component 1 has two sub-components: Sub-Component 1.1: (i)Upgrading of the Katse to Thaba-Tseka road corridor to climate resilient paved standard (US$55 million), and Sub-Component 2.2: (ii) Spot improvements along the A1 economic corridor (US$5 million).** The first sub-component consists of upgrading 55km of the existing engineered gravel surfacing. The upgraded road will have significant regional integration benefits as it constitutes part of the regional trunk road network through the MDTC, also linking existing part of the road network that connects to Maseru, Maputsoe and Qacha's Nek borders. The upgraded road will reduce vulnerability to climate related shocks and natural hazards, reduce travel times for motorists, lower road user costs (Vehicle Operating Costs), decrease accidents, uplift and boost economic activity, and improve access to public services (e.g., health and education) in the area. The second sub-component will finance spot improvements along the A1 economic corridor between Maseru and Butha Buthe, which serves as the primary economic corridor linking the three 24-hour commercial borders of Maseru Bridge, Maputsoe-Ficksburg, and Caledonspoort. The component will finance the employment of women in roadworks.

Component 2: Regional Trade, Integration, and Logistics Services (US$16 million)

24. **Component 2 has three sub-components:**

25. **Sub-Component 2.1: Smart One-Stop Border Post facilities at the Maseru Bridge and Maputsoe-Ficksburg border crossings, and improvement of Qacha's Nek border facilities (US$8 million).** The sub-component aims to establish smart one-stop border posts (OSBPs) at both the Maseru Bridge and the Maputsoe-Ficksburg border crossings between Lesotho and South Africa.[48] These are Lesotho's two busiest commercial borders, accounting for around 80 percent of commercial traffic. These OSBPs will enable coordinated administration by the South Africa and Lesotho border agencies and facilitate movement of most goods, people, and consignments between the countries in an automated non-stop process that does not require the truck driver or traveler to step down from their vehicle, reducing wait times and related emissions. The OSBP will facilitate the movement of cargo as well as travelers, light vehicles, and people, improving the business environment for trading services, including the tourism industry. The Qacha's Nek border will also be upgraded to provide agency capabilities to efficiently facilitate commercial trade, light vehicles, and people moving to and from South African markets to the east. Buildings will be grid connected and rehabilitated to climate resilient and energy efficiency standards. The project will design and install an information desk at the OSBP facilities at Maseru Bridge, Maputsoe-Ficksburg, and Qacha's Nek borders with information benefitting women, and the design of the OSBPs will include violence prevention environmental design features and gender considerations (e.g., separate bathrooms).

26. **Sub-Component 2.2: Inspection and laboratory testing facilities (US$5 million).** The sub-component involves construction and equipping of two inspection and laboratory facilities at the Maseru Bridge and Maputsoe-Ficksburg border crossings to standards that will meet service requirements by Lesotho's border agencies, including those located at these two OSBPs. The inspection facilities will provide a dedicated and appropriately equipped venue that is easily accessible from the borders to perform a professional examination of goods in a controlled environment. The inspection

[48] The OSBP will be like other joint border facilities in the region that have proved instrumental for trade facilitation through drastic reduction of border crossing time and simplification of processing and procedures.

facilities will mitigate risks identified by customs, agriculture, health, standards, and environmental border agencies and include technology that supports case management and remote monitoring by the relevant agencies. The availability of inspection facilities will support the expedited release of most trucks assessed as low risk, as the cargo targeted for inspection will be automatically directed to the inspection facilities, emptying the lanes and eliminating congestion at the borders.

27. **Sub-Component 2.3: Climate controlled community-level horticulture packing and storage facilities (cold chain) (US$3 million).** The sub-component will purchase energy efficient, climate-controlled mobile containers, using climate friendly refrigerants and solar roof installations, to enable the handling and cold storage of horticultural products ahead of transport to markets. These cold storage facilities will be provided to a minimum of four locations in each of three districts (Leribe, Maseru, and Quthing) that are horticulture producing regions. Establishment of the packhouses will be phased to match the growth of the horticulture sector. These facilities allow the horticulture products (e.g., apples) to be aggregated and stored until volume and market conditions are optimal for shipping, reducing losses and increasing output across this value chain. The containers will be purchased with project funds but lent out in concession agreements to private logistics operators who will work with communities to operate them and identify temporary sites where the communities will provide site maintenance as well as waste management. The communities and local government will be involved in deciding priority locations that will change during the season in line with produce seasonality. There will be active collaboration between the operators and the communities including agreement on a fee by users to ensure cost coverage on operations and maintenance and eventual replacement cost after depreciation. The communities will also link up with water use associations (WUAs) in the Thaba-Tseka region that were established as part of irrigation investments made under the second Smallholder Agriculture Development Project (SADPII- P165228) and other development partner funded projects.

Component 3: Technical Assistance, Capacity Building, and Project Management (US$4 million)

28. **Component 3 will support implementation of the project by the Roads Directorate (RD) implementation unit for Component 1, and by the CAFI Project Management Unit (PMU) for Component 2.** Component 3 financing will be split according to needs with the expectation that US$2.5 million will be utilized on RD managed activities and capacity building and US$1.5 million will be utilized on CAFI Project PMU managed activities and capacity building. The component will finance operating costs, technical assistance activities, and capacity building support through training activities for these implementing agencies. This will include strengthening both the RD and CAFI Project PMU's capacity to carry out project management activities including coordination, procurement, financial management, monitoring and evaluation, implementation of environmental and social standards, communications, independent audits, and carrying out citizen engagement (CE) activities. Government agencies supporting trade facilitation including the Revenue Services Lesotho (RSL) will also receive capacity building support to ensure sustainability of the project interventions at the border. This complements capacity building support under the CAFI Project (P175783) for the agencies that support trade facilitation systems including the LNSW (trade) and ASYCUDA (customs) systems. In addition, Component 3 will finance:

a) **RD:** (i) a gender assessment and gender action plan (GAP) to identify, implement, and monitor interventions for women working in roads, women traders, and women farmers in communities along the improved roads, (ii) enhancement of climate resilience in planning and management of road infrastructure, including the development of standard operating procedures for climate disaster warning and response, (iii) development of community resilience committees led by women to support emergency disaster preparedness and response, (iv) promotion of women's employment in the road sub-sector, and (v) an assessment of landscape restoration needs along the project corridor.

b) **CAFI Project PMU:** (i) a gender assessment and GAP to identify, implement, and monitor interventions for women traders and women farmers in communities along the improved roads and at the border, (ii) development of community resilience committees led by women to support emergency disaster preparedness and response, (iii)

development of a training program for officials and operators at the Maseru Bridge and Maputsoe-Ficksburg border crossings on sexual exploitation and abuse and sexual harassment (SEA/SH) and anti-corruption, (iv) business advisory services, mentoring, and training for traders and business owners in agriculture, including women traders and business owners, along the economic corridor, and (v) support for registration and licensing of informal businesses for female traders.

C. Project Beneficiaries

29. **The project is expected to directly benefit about 136,817[49] people of all ages and genders by improving their access to markets, health services, and additional social services.** The project will also benefit the 1.6 million people in the six districts that utilize the A1 corridor. Direct project beneficiaries are communities with limited or seasonal access to key basic infrastructure, who will be provided with better access through the road constructed under the project. Additional direct project beneficiaries are approximately 5,000 importers and exporters,[50] and the private sector, whose growth and job creation potential will be supported by enhanced access and connectivity to markets and services. Indirectly, all people in Lesotho will benefit from the project as they will benefit from lowered costs for consumer products. For example, 70 percent of food consumed in Lesotho is imported from South Africa. Additional beneficiaries include the population that transits through the border crossings on a daily basis to travel to work or home. The latest data from tolling statistics in 2022 suggests ~1.5 million vehicle crossings are made at the project supported borders in a year, including significant bus action. Also, Lesotho welcomes about 1,196,214 visitors from around the world, and 15 percent (approximately 200,000) of them visit Katse Dam, situated along the Katse to Thaba-Tseka corridor.[51]

30. **The road design has been prepared with consideration to the needs of women and girls, men and boys, and the disabled and elderly residing in the adjacent communities (as described in the Environmental Impact Assessment (EIA)).** Specific attention to children's safety is a priority and specific interventions targeting women and other beneficiaries are reflected in the results indicators included in the project. The project will prioritize road sections that facilitate easier access and shortened travel times for female traders based on the findings from the consultations with female traders who regularly use the A1 corridor, and Maseru Bridge and Maputsoe-Ficksburg commercial borders.

31. **The project will utilize Citizen Engagement approaches to involve beneficiary communities in the early stages of project development.** Through community engagement and mobilization, the project is expected to consult and collaborate with direct beneficiaries and promote transparency and accountability.

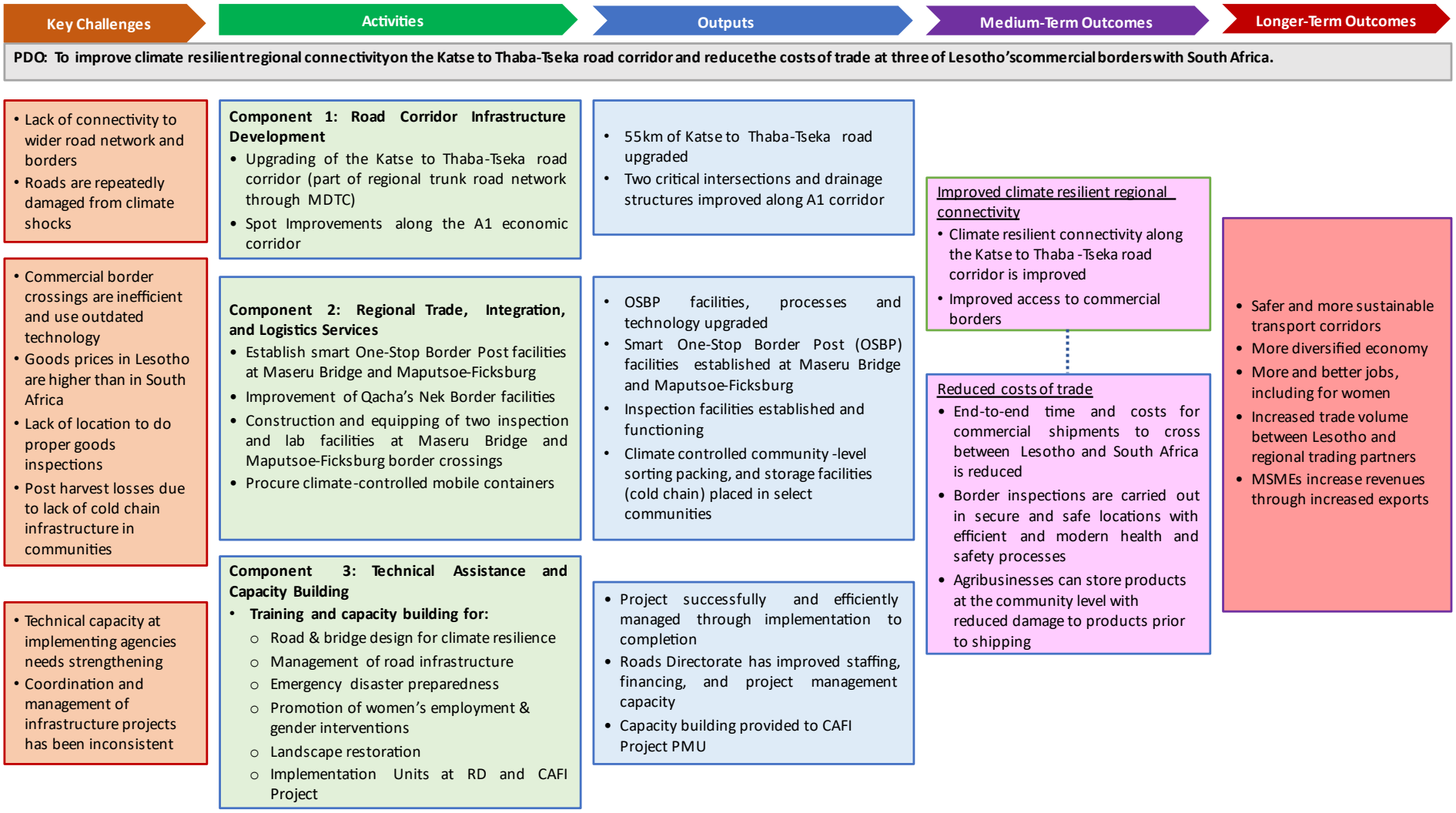
D. Results Chain

32. **Figure 1 illustrates the project's theory of change which links the activities financed with the planned outputs and the envisioned medium-term and long-term outcomes.** The investments into climate resilient roads in component 1 and related capacity of the RD in component 3 will lead to the specific corridor improvements listed under the outputs. These corridor improvements in turn will lead to the medium-term outcomes of improved climate resilient connectivity along the Katse to Thaba-Tseka corridor and improved access to commercial borders, aligned with the PDO level objective of climate resilient regional connectivity. The investments into smart border infrastructure, inspection facilities, and cold chain under component 2 and related capacity of the CAFI Project PMU in component 3 will lead to the specific border and cold chain improvements listed under the outputs. These improvements will in turn lead to the medium-term outcomes of reduced border crossing times, improved inspections, and improved agricultural handling and reduced post-harvest losses, aligned with the PDO level objective of reduced costs of trade. These medium-term outcomes will in turn

[49] Population of the five constituencies for the Thaba-Tseka district, inclusive of the adjacent Mashai along the route to Sani Top Pass (Source: Roads Directorate).
[50] Revenue Services Lesotho Customs data
[51] Roads Directorate's assessment of project beneficiaries

contribute towards longer-term outcomes, such as improved access to jobs and services leading to a strengthened local economy.

Figure 1. Theory of Change



Critical Assumptions: (i) The RD continues to improve staffing and organizational changes; (ii) Successful collaboration continues between the GOL and South Africa on border crossings and trade; and (iii) the CAFI Project PMU continues its successful collaboration with the project.

E. Rationale for Bank Involvement and Role of Partners

33. **The World Bank's previous engagement in the transport sector helped deepen the World Bank's understanding of transport issues**. The Transport Infrastructure and Connectivity Project (TICP) (P155229) focused on improving access to social services and markets through improved connectivity to targeted rural areas through construction of footbridges. The Integrated Transport, Trade and Logistics (ITTL) Project builds on the lessons and results of the TICP, including design of more efficient project implementation structures and increased climate resilient investment in construction of road infrastructure. Improved access provided by ITTL investment also supports key investment objectives of other World Bank financed projects such as improved student retention supported under the Lesotho Basic Education Strengthening Project (P175065) and community-based health and nutrition services supported under Lesotho - Nutrition and Health System Strengthening Project (P170278).[52] Similarly, there will be synergies with the SADP II project as road access is critical for access to agriculture markets.

34. **The World Bank is well placed to support a coordinated dialogue and implementation of border management infrastructure between Lesotho and South Africa.** The World Bank has helped convene cross-border coordinated smart border discussions, including an in-person workshop in February 2024, between the leaders of the Lesotho and South Africa border agencies, under the auspices of the SARTF advisory project (P179671). The ongoing technical assistance will ensure that simultaneous investments by both governments in their shared borders are well coordinated and aligned to the regional integration agenda. Similarly, the World Bank is supporting the ASYCUDA (customs) and LNSW (trade) systems under the CAFI project (P175783), which provides synergies with the ITTL project activities.

35. **The project is coordinated with development partners.** The MCC Compact II will finance irrigation and other infrastructure for commercial horticulture, which complements the CAFI project support for horticulture production. The project will fill the remaining key constraints, such as a lack of logistics terminals, cold chains, and warehousing to mitigate production losses and extend shelf life. The International Fund for Agricultural Development is supporting the wool and mohair value chain, including in the region that will be better connected by the project's financed road.

36. **The project offers value for money in the use of public resources because:** (i) the provision of quality infrastructure for better mobility and access is a win-win solution for the target populations; (ii) improvements in road safety will lead to better health and economic outcomes with reduced mortalities and injuries for a more productive and healthy society, and help to mitigate the descent of families into poverty due to the loss of breadwinners; and (iii) improvements in the institutional capabilities of the RD will ensure a better managed, more efficient, and more reliable transport system, resulting in an optimized use of scarce public resources. The financing is proposed with public funds as opposed to private financing because the private sector may not have sufficient incentives to invest in the mountainous and remote areas.

F. Lessons Learned and Reflected in the Project Design

37. **Adequate maintenance arrangements for road projects need continuous attention and a long-term solution.** Road asset management, at least of national roads, has improved under the previous World Bank-financed project-Integrated Transport Project (P075566), with the establishment of the Lesotho Road Management System. Measures have been taken to attract more skilled engineers, procurement and financial management (FM) specialists, and to provide technical assistance to introduce more efficient and effective contractual practices for managing road assets based on performance in the entire country. This will be further addressed in the project, regarding both funding needs and the adequacy of capacity within the RD.

[52] Mokhotlong (47 percent), Butha Buthe (40.3 percent), and Thaba-Tseka (40 percent) have the highest stunting rates.

38. **Strengthening climate resilience in the selection of roads**. The project will follow recommendations of a recently completed technical assistance[53] on assessment methodology for climate risk assessment for Lesotho roads. The engineering designs of the identified roads and bridges will factor in climate and disaster risks to ensure strong adaptation measures are put in place.

39. **Enhance road safety.** The project will promote safe design, construction, and use of road infrastructure considering the road safety challenges experienced across the country.

40. **Attracting investment and growing export sectors requires efficient trade facilitation infrastructure and processes.** As Lesotho invests in expanding its horticulture production, matching investments in improving trade facilitation are a necessity to support supply chains to meet regulatory standards while allowing products to reach markets in a cost efficient and timely manner. The project design takes lessons from the first and second Private Sector Competitiveness and Economic Diversification projects (P088544 and P144933). These projects successfully supported export of horticulture (apples) which also revealed the challenges of aggregating, sorting, and storing the products before export and challenges in crossing the border to South Africa which are being addressed in the proposed project's activities. The SARTF regional ASA (P179671) supported cross-border dialogue and trade and gender studies have revealed challenges at the border crossings including disadvantages for women traders and the need for digitized ("smart") and efficient border processes, which are being addressed with the proposed project activities.

41. **Governance and project implementation capacity need to be strengthened.** The recently completed TICP (P155229) has been challenged by weak governance and limited capacity. On governance, while the RD was responsible for implementation, the project was coordinated by a separate project implementation unit (PIU) under the Planning Unit of the Ministry of Public Works and Transport (MOPWT). This governance arrangement made the TICP project implementation challenging. Although the RD had sufficient staff members, they lacked capacity, for example, on Financial Management (FM). At the same time, the government has taken a position of not establishing further PIUs. The implementation arrangements address the capacity and governance issues revealed under TICP within the government's position on PIUs. In order to ensure long-standing institutional memory, knowledge transfer, and in-house capacity building within the implementing agencies, Component 1 of the project will be implemented directly by the RD with support of dedicated road management specialists as needed, for design, scoping and supervision and limited staff deployment. Component 2 of the project will be implemented under the existing CAFI project PMU, as it aligns with some existing CAFI project activities and the CAFI project PMU has sufficient capacity. Component 3 has capacity building support activities to strengthen both the RD and the CAFI Project PMU as needed.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

42. **Component 1 and road related aspects of Component 3 will be implemented by the RD.** The RD is a semi-autonomous entity reporting to an independent Board of Directors chaired by the Principal Secretary of the MOPWT. All the existing departments in the RD have clearly defined functions to contribute to the project implementation. Dedicated staff will be assigned to manage implementation of the RD managed project activities. The proposed structure for administration of the RD managed project activities is illustrated in Figure 1.1 of Annex 1. Only key support services (procurement and finance have been indicated in the organogram, however other support services like human resources, administration, etc.) will also play their roles in their respective areas of operation within the project scope.

43. **The implementation capacity of the RD will be strengthened through procurement of consultants for design, scoping of works and supervision of works. To augment existing structure and ensure dedicated project staff, the project will also hire a procurement officer, environmental and social development officers, and a monitoring and evaluation**

[53] National Climate Risk and Vulnerability Assessment (CRVA) for Roads in Lesotho. World Bank publication for 2023.

(M&E) specialist. The Procurement Officer will work closely with the Procurement Manager of the Procurement Unit of the RD to coordinate and handle the procurement responsibilities for the activities implemented by the RD under Components 1 and 3 (relevant to RD) and fill in the capacity gap of the RD to fulfill the reporting and procurement requirements under the World Bank-financed projects. The environmental and social development specialist will be responsible for the environment and social issues of the components implemented by the RD. Project engineers responsibilities will include, *inter alia*, (i) day to day onsite supervision of Sub-component 1.1, (ii) overseeing and ensuring that daily instructions issued by the RD are implemented, and (iii) reporting to the Project Manager (Director Road Network Development) on daily activities of the project. The M&E Expert will report to the Director General. The M&E Expert will also serve to establish a dedicated M&E unit to carry out M&E functions of the project, in addition to systematizing the wider M&E capacity to the RD.

44. **Component 2 and trade/logistics-related aspects of Component 3 will be implemented by the CAFI Project (P175783) PMU under the Ministry of Trade, Industry, and Business Development (MTIBD).** The CAFI Project PMU has existing responsibility for activities with direct relevance to the development of the private sector and growth of exports. Therefore, the CAFI Project PMU is well placed to coordinate ITTL Component 2 activities and the related CAFI Project activities. The CAFI Project PMU has a good track record of implementation performance and good capacity. Thus, the CAFI Project PMU is expected to be able to effectively handle the additional responsibilities. The CAFI Project PMU is under the MTIBD and will also ensure the Ministry of Agriculture, Food Security, and Nutrition is engaged on agriculture related activities including the cold chain investments.

45. **A Project Steering Committee (PSC) will guide the strategic direction of the project and ensure coordination across ministries and implementing agencies (additional details on the PSC are in Annex 1).** The PSC will coordinate overall project implementation and will consist of implementing ministries and other government partners, in addition to private sector and civil society organizations. The Principal Secretary (PS) from the MOPWT will Chair the PSC and the PS from MTIBD will be the Co-Chair of the PSC. The PSC will be on a biannual basis.

46. **A Project Manager at each of the RD and the CAFI Project PMU will be responsible for the project management of the sub-components under their supervision and will be responsible, inter alia, for**: (i) the management of the environmental and social standards, (ii) procurement and contract management for respective sub-components, (iii) coordinating the project as a whole and working closely with the Director General of the RD and ensuring timely submission of combined progress reports and other documents to the World Bank, (iv) following up on submissions in coordination with the sub-components managers and other stakeholders, and (v) reporting on the project implementation progress to the World Bank and to a PSC. The RD Project Manager will have the overall responsibility to ensure coordinated implementation across activities[54] including collating reporting.

B. Results Monitoring and Evaluation Arrangements

47. **Effective monitoring will enable the capture of project outcomes and results.** Continuous monitoring, periodic reviews, and midterm evaluation will be based on pre-determined indicators, which will measure inputs, processes, outputs, and outcomes. These indicators, together with the M&E arrangements, are detailed in the Project Procurement Strategy for Development (PPSD). Measurement of implementation progress of the project activities will be documented in a quarterly project progress report. The report will cover design, construction, environmental and social standards, GBV, SEA/SH and TA services. The responsibility for the preparation of project progress reports will rest with the Project Managers at the RD and CAFI Project PMU, while RD Project Manager will be responsible for collating and submission of the final report. An M&E specialist will be recruited to coordinate the M&E requirements of the project to supplement existing M&E capacities. The RD will be responsible for M&E for Component 1, as indicated in the RF, while the CAFI Project

[54] The rationale for RD's overall coordinating responsibility is that (i) it has the principal share of the investment, and (ii) the MOPWT is responsible for construction of government facilities. The CAFI Project PMU remains responsible for the implementation of Component 2.

PMU be will responsible for M&E for Component 2. The Project Managers at the RD and CAFI Project PMU will ensure that the reports are submitted to the World Bank for review on time and in accordance with the agreed formats, as documented in the Project Implementation Manual (PIM). In addition to reporting on the project results indicators and intermediate outcome indicators, the reports will include information on disbursements, FM, procurement, and social and environmental policies and guidelines, as well as an updated annual plan of works and activities. The reports will also include M&E results on the project's gender and social aspects. The RD's Manager for Environment and Safety will be responsible for M&E of gender-targeted and social interventions. The World Bank's implementation support missions will be conducted twice a year. The M&E teams will undertake baseline data gathering during the first months of project implementation to fill in select gaps in the results framework data including on number of traders utilizing the borders and data relevant to climate resilience of infrastructure.

48. **A knowledge agenda will be embedded into the project design.** An impact evaluation or similar assessment of project outcomes will be developed. During the initial phase of the project, the RD and CAFI Project PMU will work with the World Bank Development Impact Evaluation (DIME) department to: (i) identify and prioritize impact evaluation opportunities, (ii) develop research questions in key areas and an accompanying counterfactual implementation structure, (iii) develop impact evaluation data collection strategies, and (iv) perform data analysis to be incorporated into scale up activities.

C. Sustainability

49. **The project design includes suitable, appropriate, and relevant sustainability provisions.** Sustainability will be ensured through quality controls at the construction phase and the subsequent routine maintenance of the physical infrastructure, in particular for Sub-component 1.1 (Road Corridor Infrastructure Development). Also, the project will provide technical assistance to the road sector institutions, including the Road Fund, to (i) pilot long-term efficient maintenance practices of road assets (ii) construction management, including resource management. Capacity will be built throughout project implementation. Furthermore, the project will finance the upgrading of the Katse to Thaba-Tseka road (part of the MDTC corridor) to climate resilient design standards and will finance spot improvements of the A1 economic corridor to enhance its climate resilience. To address the overall road sector sustainability, the project will provide technical assistance to the RD in the institutionalization of climate resilience in design, construction, and maintenance of road infrastructure. For the border facilities, sustainability will be reinforced by using modern, smart border infrastructure and processes which minimize the need for manual processes and reduce staffing requirements. However, sustainability will require government support for a well-structured and fully staffed border agency.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical

50. **Upgrading of Katse to Thaba-Tseka Road:** This sub-component (1.1) will consist of upgrading of the existing engineered gravel surfacing of about 55km in length. The proposed upgraded road will contribute to regional integration, as the road is MDTC Corridor number 3. The upgraded road will reduce travel times for motorists, lower road user costs (Vehicle Operating Costs), decrease accidents, as well as uplifting and boosting the economic activity in the area it traverses and improving service delivery (e.g., access to health and education services), thus reducing poverty among the local population. The upgrade will also include walkway improvements in Thaba-Tseka town. The upgrade will advance Lesotho's poverty alleviation strategy and promote sectors that drive of economic growth such as mining, agriculture, tourism, fishing, and commerce.

51. **Spot improvements along the A1 Economic corridor:** The A1 corridor connecting Maseru and Botha Bothe serves the primary economic corridor linking three 24-hour commercial borders of Maseru Bridge, Maputsoe-Ficksburg, and

Caledonspoort. This sub-component (1.2) will include configuration and improvement of the main intersection of Sir Seretse Khama Road (from Maputsoe Border Post to A1 Junction at Ha Nyenye) and the Hlotse town intersection where A8 Pitseng to Katse Road connects with A1. In addition, this sub-component will finance the improvement of critical sections and damaged cross drainages along the A1 Road from Maseru to Hlotse. The sub-component will also support purchase and erection of bailey bridges meant to address most critical sections cut off by floods. The corridor also has a concentration of commercial farming. Thus, the project will finance the development of climate-controlled packing houses. Improvement in this corridor will result in reduction of crop losses during transportation due to poor roads.

Paris Alignment

52. The project is aligned with the goals of the Paris Agreement on both adaptation and mitigation. The project is consistent with the country's NDC and NAPA as documented in the section on the Relevance to Higher Level Objectives. Lesotho does not have a National Adaptation Plan (NAP) nor a Climate Change Development Report (CCDR). The full description of the climate risks is provided in the section on Country Context and Annex 3. The project integrates targeted adaptation and mitigation measures as below.

53. **Assessment and reduction of adaptation risks:** The project is expected to reduce climate risks to the project outcomes. The project's climate resilience and adaptation design considerations will reduce the exposure and vulnerability of the project to climate hazards. The residual physical climate risks are reduced to an acceptable low level. The project invests in: (i) Upgrading the Katse to Thaba-Tseka road to climate resilient standards and conducting spot improvements along the A1 economic corridor to enhance its climate resilience, (ii) Upgrading border crossings, construction of inspection and laboratory facilities and of climate–controlled community packing houses and storage facilities integrating climate resilience considerations in building construction and renovations, (iii) Providing technical assistance and training to update Lesotho's construction design standards for road and bridge infrastructure and the operations and maintenance protocols to integrate climate risks and resilience considerations, (iv) Developing a climate emergency response plan and deploy training activities for logistics operators on value-chain disruptions due to climate emergencies, and (v) conducting climate vulnerability and risk assessments to inform transport planning and prioritization of interventions like spot improvements.

54. **Assessment and reduction of mitigation risks***:* The project is not at material risk of having a negative impact on the country's low-GHG-emissions development pathways. The activities financed by the project are either universally aligned (UA) or present low mitigation risk. The operation is therefore assessed to be aligned from a mitigation perspective.

(i) Upgrading the Katse to Thaba-Tseka road and providing spot improvements along the A1 economic corridor to serve an essential access function including to rural areas without expanding capacity nor creating barriers to non-motorized transport (NMT) or long-distance public transport, and not contributing to urban sprawl. The investments in the road cannot be substituted by lower transport modes like railways. Therefore, these activities are UA.

(ii) The upgrading of border crossings, the construction of inspection and laboratory facilities and of climate–controlled community packing houses and of storage facilities will integrate climate efficiency considerations in building construction and renovations, utilities and equipment. The new and the rehabilitated buildings will be fully electrified, and grid connected. air conditioning and refrigeration will be energy efficient and use climate friendly refrigerants. Due to the integrated low-GHG design standards of the processing, packing and storage facilities, the impact on GHG emissions is expected not to be significant, and measures have been integrated into the activities which ensure that emissions are reduced to the lowest possible level. These activities are not expected to lock-in GHG-intensive practices, and given their low impact on GHG emissions, the activities are still economical after accounting for transition risks. There are no alternative measures which could achieve the objectives of these activities. Therefore, these activities are assessed as presenting low risk from a mitigation perspective.

(iii) Capacity building activities such as training, to strengthen the deployment of building energy efficiency standards, are assessed to be UA, and provision of technical assistance that do not hinder the mitigation goals of the country.

Economic Evaluation

55. **Benefits of the investments to upgrade the road corridor between Katse and Thaba-Tseka to paved standard and installation of two smart OSBPs are expected to be substantial.** Benefits come through four main channels: (a) reduced vehicle operating costs, reduced loss of time of road users, and reduced loss of lives due to fatalities, injuries, and property damage from accidents; (b) reduced costs of repairing roads due to natural events due to the use of climate-resilient technologies in road construction, (c) increases in economic activity in the villages near the road, lowering prices for imported goods and leading to higher prices for exported goods; and (d) reduced cost of crossing the border due to constructing and putting into operation two one-stop-borders at Maputsoe-Ficksburg and Maseru Bridge. Over the longer term, upgrading of the road with its reduced travel times is expected to result in higher educational attainment, and therefore the lifetime incomes of people attending school. They are also likely to lead to lower costs of health care, time lost at work, and reduced productivity associated with road traffic injuries. Currently existing data allow only for calculation of the economic internal rate of return (IRR) and cost/benefit ratio related to upgrading of the road corridor.

56. **Benefits of investments to upgrade the road corridor between Katse and Thaba-Tseka to paved standard are likely to be significant.** Nearly 70 percent of the project funds will be spent on upgrading the road corridor between Katse and Thaba-Tseka. The Highway Development and Management model (HDM-4)—a globally accepted economic evaluation model developed by the World Bank—was used by a consulting firm hired by the government to estimate the net present value (NPV) and IRR of the investments in roads. It assesses total annual costs of road construction, maintenance, vehicle operating costs, travel time, traffic accidents, and other variables with and without the project over a period of 20 years, using a discount rate of 5 percent.[55]

57. **The main data and assumptions underlying the analysis are:** (a) the construction period will begin in year 1 of the project and last for three years, (b) the benefits start to flow from year four and continue for 20 years, and (c) fatal accidents decline from 3 to 1 and serious injuries fall from 30 to 10 per 100 million vehicle kilometers. The investment in the roads remains viable even with changes in costs and benefits. Table 1 presents the results of various scenarios.

Table 1. Economic analysis for the roads' investments under the proposed project

	Base case	**Scenario 1:** Capital costs up by 10 percent	**Scenario 2:** Benefits down by 10 percent	**Scenario 3:** Capital costs up by 10 percent and benefits down by 10 percent
NPV	US$43.3 million	US$38.0 million	US$35.2 million	US$29.9 million
EIRR[56]	14.8 percent	12.9 percent	13.2 percent	11.4 percent

58. **GHG Emissions Accounting Assessment.** The GHG assessment was conducted for Component 1 of the project related to upgrading 55km of the Katse to Thaba-Tseka road corridor to climate resilient standards. The assessment considered scope 3 emissions related to the emissions from vehicles that will be using the upgraded road. The assessment considered projections of normal traffic, based on estimated population growth and economic development, and generated traffic, due to improved driving conditions, reduced travel times and vehicle operating costs. The assessment did not include diverted traffic from other routes nor induced traffic that occurs due to the economic development brought about by the project. The project is expected to reduce CO_2 emissions from motorized vehicles by 110,153 tons, during the economic life of the project. The annual net CO_2 emissions are estimated at -5,508 tons. The project gross CO_2 emissions are estimated at 378,504 tons and the baseline (without investment) CO_2 emissions at 488,657 tons. The

[55] World Bank. "Discounting Costs and Benefits in Economic Analysis of World Bank Projects." OPSPQ May 9, 2016.

[56] Base case without shadow price of carbon.

shadow price of carbon was considered in the economic analysis and the project NPV is US$48 million and US$52.7 million with a low and high shadow price of carbon, respectively. The project economic internal rate of return (EIRR) is estimated to be 15.8 percent and 16.9 percent with a low or a high shadow price of carbon, respectively,[57] based on a 5 percent discount rate.

59. **Road safety benefits:** Under Component 1, the project seeks to invest in road safety features (such as road markings, hazard removal, footpaths, pedestrian crossings, and widening road widths) along the approximately 55 km Katse to Thaba-Tseka road. The Road Safety Screening and Appraisal Tool (RSSAT) analysis on the 55 km road revealed a Project Safety Impact (PSI) of 0.94 (threshold is 1.0 or lower), a 6 percent reduction in road crash fatalities, and monetary savings/benefits of US$1.8 million over 20-year period.

B. Fiduciary

(i) Financial Management

60. The financial management assessment was carried out in accordance with the World Bank's Operational Policy and the Financial Management Manual (Annex 1). The objective of the assessment was to determine whether the project implementing units (the RD and the CAFI Project PMU) have acceptable financial management arrangements, which will ensure (i) that the project funds are used only for the intended purposes in an efficient and economical way, (ii) the preparation of accurate, reliable, and timely periodic financial reports, and (iii) safeguarding of the assets. The overall responsibility for financial management for Component 1 will rest with the Finance Manager at the RD; and for Component 2, the Finance Manager at the CAFI Project PMU. The project will open and manage two segregated designated accounts (DAs), namely, one for the RD and the other for the CAFI Project PMU. The Accountant General will authorize the opening and use of the two DAs (as part of the GOL Development Fund), denominated in United States Dollars, at the Central Bank of Lesotho to receive the funds from IDA. Disbursement methods available for use by the project include (i) Advances to a DAs, (ii) Reimbursement, (iii) Direct payments, and (iv) Special commitments. The initial disbursement will be based on the forecast for six months up to a maximum of US$1,000,000, and subsequent disbursements will be based on the Statement of Expenditures (SOE) for RD activities; and interim unaudited financial reports (IFRs) and forecast for the CAFI Project PMU. Local project expenditures will be processed through the local commercial bank accounts to be opened by the RD and the CAFI Project PMU and reimbursed from the DAs at the Central Bank. The CAFI Project PMU has already been managing the local bank accounts to effect local payments and will continue with the same procedures. Foreign currency project expenditures for both implementing entities will be paid directly from the Central Bank of Lesotho. In accordance with the World Bank's financial reporting and audit requirements, each implementing entity will be required to prepare and submit to the World Bank IFRs not later than 45 days after the end of each FY quarter. Annual project audited financial statements for each implementing entity, including the auditor's opinion and a management letter, will be submitted to the World Bank not later than six months after the end of each fiscal year. The audit will be performed by the Auditor-General of Lesotho. The residual risk rating conclusion of the financial management assessment is Moderate.

(ii) Procurement

61. **Procurement Arrangements:** Procurement will be carried out in accordance with the World Bank's Procurement Regulations for IPF Recipients.[58] The project will also be subject to the "Guidelines on Preventing and Combatting Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated July 1, 2016. The procurement

[57] The social cost of carbon was derived from the 2024 World Bank Group's Guidance Note on Shadow Price of Carbon in Economic Analysis and the carbon price adjusted to the 2023 Consumer Price Index (CPI).

[58] Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services, Fifth Edition, September 2023

planning, execution and contract management processes will be tracked through the World Bank's monitoring platform, Systematic Tracking of Exchange in Procurement (STEP) System.

62. **National Procurement System**: The Public Procurement law was enacted in March 2023. The Procurement Regulations and Standard Procurement Documents are under preparation. The new Procurement Act and the old Procurement Regulations of 2007 (revised in 2018) have been assessed. The assessment indicates that Lesotho's Procurement Regulations are generally consistent with international good practices, although there are some weaknesses to be mitigated through adequate measures so that National Procurement procedures may be used for National Competitive procurement. Measures include, (i) adequate advertising in national media; (ii) procurement is open to eligible firms from any country; (iii) contract documents have an appropriate allocation of responsibilities, risks, and liabilities; (iv) publication of contract awards; (v) the national regulations do not preclude the World Bank from its rights to review and audit procurement documentation and activities under the financing; (vi) implementation of an effective complaints review mechanism; (vii) maintenance of records of the procurement process; and (viii) the request for bids/requests for proposals document shall require that bidders/proposers submitting bids/proposals present a signed acceptance at the time of bidding, to be incorporated in any resulting contracts, confirming application of, and compliance with, the World Bank's Anti-Corruption Guidelines, including without limitation, the World Bank's right to sanction and the World Bank's inspection and audit rights. With incorporation of these qualifications/provisions, the Lesotho Procurement Regulations will be acceptable to be used for open national approaches that are not subject to the World Bank's Prior Review. Each activity's procurement implementation arrangement will be agreed with the World Bank in the Procurement Plan to be approved in STEP.

63. **Project Procurement Packages' Profile:** The project will involve two large procurement contracts, including selection of consultants for the construction supervision assignment and the works contract of the Katse to Thaba-Tseka road and spots improvement of the A1 Road. There will be numerous other contracts of smaller value procurement for technical assistance and capacity development. The project also involves procurement of medium to smaller size contracts for cold chain facilities, construction of inspection facility buildings and installations. Supply of different goods and IT systems; non-consulting services and consulting services; and design, supply, and installation of Smart OSBP facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings including inspection and laboratory facilities; and other related goods and facilities, may be financed from the project.

64. **Implementation Arrangements and Project Procurement Strategy:** The RD will be responsible for the day-to-day coordination and implementation of the project activities under the transport component, while the CAFI Project PMU will be responsible for the trade and logistics component activities. The RD and the CAFI Project PMU have prepared a Project Procurement Strategy for Development (PPSD) that lays out the delivery strategy of project procurement activities. The PPSD, being a living document, is subject to updates as the project definitions and requirements evolve. Considering the project activities' level of definitions, designs, operating context, market situations, stakeholders' consultations, risks, and opportunities, the PPSD justifies and recommends fit-for-purpose contracts packaging, market approaches and procurement methods for significant contracts that supports the achievement of the project development objectives more effectively and efficiently.

65. **Project procurement risks** are (i) delays in procurement delivery lead time, (ii) ineffective coordination and limited procurement/contract management capacity of the Implementing Agencies, (iii) inadequate quality of procurement documents that impacts smooth implementation, and (iv) underperformance of contractors and consultants compromising achievement of quality project delivery. The PPSD details the risks mitigation measures and procurement objectives to be achieved. Table 2 summarizes the identified procurement risks and recommended mitigation measures. Overall project procurement risk is rated as Substantial. The residual Project Procurement Risk, after implementation of the recommended mitigation measures, is rated as "Moderate".

Table 2. Procurement Risks and Recommended Mitigation Measures

Procurement Risk	Recommended risk mitigation measure
Delays in procurement delivery Lead-Time as a result of cumbersome decision-making process in the ministries' approval process which affects implementation (with both RD (of MOPWT) and CAFI (of MTIBD)	➢ The Borrower to design agile decision-making matrix and put in place an accountability system thereto (implementable & monitorable project charter with team agreed & committed business performance standard). ➢ Advance preparation of critical contracts procurement documents and processing before effectiveness.
Ineffective coordination and limited procurement and contract management capacity of the two Implementing Agencies, RD (of MOPWT) and CAFI (of MTIBD)	➢ The RD will be strengthened through hiring one additional procurement specialist coupled with early onboarding of design review, tender support and construction contract supervision consultant for technical assistance. ➢ The CAFI team is also to be supported by a consultant to be hired for technical assistance for implementation of Smart one-stop border post facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings (OSBPs).
Inadequate quality of procurement documents that impacts smooth implementation of the major contract activities	➢ Both Implementing Agencies' (IAs) teams will be provided with World Bank Standard Procurement Documents (SPDs)applications training and technical assistance consultants will support the teams . ➢ The two IAs will have internal documents reviewed for quality assurance before documents go out to third party.
Performance of Consultants and contractors is usually below expectations and affects timely, at cost and quality delivery of project implementation (market capacity)	➢ The selection process will include conducting necessary due diligence on the track records of the performance of contractors/consultants. ➢ Contract implementation management and performance monitoring system (applying the STEP Contract Management Module-CMM) to be strengthened & implemented from early days of commencement of contracts implementation.

C. Legal Operational Policies

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

D. Environmental and Social

66. **The Environmental and Social Risk Rating is Moderate, as potential risks and impacts are predicted to be reversible, temporary, and site-specific**. Key environmental issues are related to Components 1 and 2. These include upgrading of existing engineered 55km Katse to Thaba-Tseka Road to paved standard and spot improvements along the A1 road corridor under Component 1, as well as reconfiguration and rehabilitation of existing physical border infrastructure and procurement of prefabricated climate-controlled mobile containers for farm produce collection and transportation under Component 2. All interventions will take place within existing road reserve or existing footprints of facilities. Potential adverse environmental impacts are related to the construction phase, and include among other noise and dust emission, generation of solid waste, soil erosion, sedimentation, occupational health and safety (OHS) issues for workers, including security, road, and traffic safety issues for communities and workers. Potential impacts also relate to the clearing of vegetation and waste generated at construction sites, which can pollute land and water bodies (cement mixing areas, metal, wood, and paint residues, hydro-carbon oils, and other residues). The operation phase of the prefabricated climate-controlled mobile containers may require high energy demand. As such, the containers will be equipped with solar-powered photovoltaic cells as the primary energy source to reduce their carbon footprints. Overall,

the project's potential risks and impacts are considered to be predictable and expected to be temporary and/or reversible; low to moderate in magnitude; site-specific, without the likelihood of impacts beyond the actual footprint of the project. It is also expected that there will be low probability of serious adverse effects to health and safety risks posed to the communities during construction. These risks and impacts are expected to be managed through the application of appropriate mitigation measures that are readily identifiable.

67. **The government has committed to restrict all construction-related activities within the existing right of way, including existing modified or disturbed habitats**. This restriction extends to ancillary infrastructure, such as workers' accommodation, asphalt plants, contractor laydown areas, etc. A draft ESIA was prepared in 2021 for the Katse to Thaba-Tseka Road upgrade , prior to engaging the World Bank. The ESIA highlighted the anticipated risks associated with the road upgrade, in line with the risks and impacts identified above. According to the ESIA the environmental risks and impacts are considered moderate and can be mitigated. The draft ESIA will be updated to include the spot maintenance of the A1 road corridor under Component 1.3 and to align with the applicable World Bank Environmental and Social Standards (ESS) within the timeframe stipulated in the ESCP disclosed on April 12, 2024.[59] Activities under Component 2 will require the preparation of site specific ESMPs. The site specific ESMPs will be prepared and consulted upon for the activities under Component 2 after approval. The site specific ESMP must be submitted for World Bank clearance, and thereafter disclosure both in-country and by the World Bank, prior to initiating the relevant procurement processes for the construction activities under Component 2 The RD has experienced and qualified environmental staff to oversee the preparation of E&S instruments and management of potential E&S impacts and risks.

68. **The social risk classification of the project is Moderate**. The following social risks are anticipated: (i) The activities under Components 1 and 2 -- upgrading and broadening of the 55 km Katse to Thaba-Tseka Road, the refurbishment of the existing border infrastructure, and the climate-controlled packhouse facilities in 3 districts -- may result in temporary or permanent physical and economic displacement of some Project-Affected Parties (PAPs). This is not expected to result in restrictions of access to any natural resources in legally designated parks and protected areas; and (ii) risk of inadequate consultation with relevant stakeholders in remote areas. The project will adopt a participatory approach and forge partnerships across the public sector and civil society. The Project has prepared and will implement the Stakeholder Engagement Plan (SEP) disclosed in-country on April 19, 2024 and on the World Bank external website on May 3, 2024.[60] The SEP includes procedures for a grievance redress mechanism. Resettlement Action Plans (RAPs) will be prepared as necessary and compensations to PAPs will have to be paid prior to commencement of civil works, as per requirements in the ESCP. Necessary requirements for such timing of RAP preparation will be included in the ESCP and reflected in the financing agreement. Preliminary screening suggests that the SEA/SH risk rating is also moderate. Some local labor influx is expected, including increased risks of frontier posts during preparation, which may contribute to SEA/SH risks. The project will include mitigation measures aimed at the prevention of SEA/SH, including installation of GRM boxes to submit complaints and suggestions at the border, as well training to officials and referals to services, if needed. Site-specific ESMPs will also include Codes of Conduct to be signed by all project workers. The estimated number of workers is unknown at this stage, but it is likely that the project activities will not require labor camps as most workers will be local. camps as most workers will be local. camps as most workers will be local. camps as most workers will be local.

E. Gender

69. **The project will seek to close gender gaps in employment in the road, trade, and logistics sectors.** The project will finance a gender assessment to identify interventions to promote women's employment in the road sector, as well as for women traders and women farmers along the road and at the border. On the employment side, the analysis will look at the barriers women face in their recrutiment and retention and identify actions to support their employment in the spot improvement activities. Activities, depending on the results of the assessment, may include provision of skills and on

[59] The ESCP is available on the RD's website at: https://www.rd.org.ls/publications.php?section=Plans
[60] The SEP is available on the RD's website at: https://www.rd.org.ls/publications.php?section=Plans

the job practices, definition of gender sensitive recruitment and installation of a mechanism to present reports of sexual harassment in the workplace. It will explore procurement as an entry point for the contractor to hire and/or train women. With relation to trade, the assessment will also look at specific barriers that women are vulnerable to at the border to inform the design of the interventions, including but not limited to mechanisms to report cases of sexual harassment, training to border officials on appropriate response to violence and costumer service, and defining mechanisms to improve access to information for women. Activities may also include business advisory services, mentoring, and training for women traders and women in agriculture along the economic corridor. The project will also support registration and licensing of informal businesses for female traders and the prioritization of a simplified trade regime with South Africa. Activities will be included and monitored through a GAP (Annex 5).

F. Citizen Engagement

70. **The project adopts a CE approach.** Targeted project beneficiaries, including road users and cross border traders, have been identified, consulted and engaged during project preparation, and will continue to be engaged during implementation, monitoring and evaluation, as well as completion of Component 1 and Sub-component 2.1. Under Component 1, social audits will be undertaken annually/quarterly. For Sub-component 2.1, annual/quarterly citizens satisfaction surveys will be conducted to inform the design and continually adapt and improve the OSBPs. The project's results framework includes two beneficiary feedback indicators.[61,62] Furthermore the borrower has prepared a SEP. The SEP sets out approaches and modalities of stakeholder engagement through citizen-led planning and monitoring using participatory tools and techniques, as appropriate. The SEP also includes a project-specific grievance management process that outlines procedures for receiving, evaluating, and addressing project-related complaints from stakeholders including citizens, PACs, PAPs, and other interested parties.

G. Private Capital Enabling

71. **The project will be private capital enabling (PCE).** The produce handling and storage (cold chain) facilities will be managed by private logistics operators that will bring their own capital to invest in the operations of the facilities as businesses. These community-driven facilities will further drive investment by the private sector into horticulture production and related infrastructure including irrigation, power, and farming equipment and inputs. Additionally, related investments by development partners into commercial production of horticulture, including the CAFI project and the MCC Compact 2, will crowd in private investment into the regions that will utilize the cold chain infrastructure financed under this project.

V. GRIEVANCE REDRESS SERVICES

72. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities (PACs) and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on

[61] Road users/Local people/community members that express that the project works meet their needs (disaggregated by gender).
[62] Cross border traders reporting that the design or improvements to the OSBPs is aligned with their needs and recommendations/contributions in the planning process (Disaggregated by Gender; Percentage).

how to submit complaints to the Bank's GRS, visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, visit https://accountability.worldbank.org.

VI. KEY RISKS

73. **The overall Project Risk is rated Substantial for the reasons provided below**. The key risks to achieving the project objectives are presented below, as are relevant proposed mitigation measures:

74. **Political and Governance risk is rated Substantial**. Lesotho is characterized by an unstable political environment which contributes to challenges in implementation of important policies and regulations. Over the past decade, Lesotho's key governance indicators have been generally better than the lower middle-income country and Sub-Saharan African averages, but have been declining over time, particularly around political stability, and government effectiveness. Frequent changes at the political level have impacted project implementation in the past with frequent changes at the Ministries' leadership. To mitigate this risk, the project implementation structure is designed to minimize impact of political changes - technical and implementation decision making will be through the RD (which is semi-autonomous with a board appointed Director General) and the CAFI Project PMU.

75. **Macroeconomic risk is rated Substantial**. The macroeconomic and fiscal situation has continued to deteriorate in the past few years, and low growth rates are likely to continue in the next few years. Budget pressures have increased due to repeated economic distress, leaving the government with a limited ability to respond to climatic shocks. The macroeconomic risk can impact project sustainability on road and overall asset maintenance. To mitigate the risk of budget shortfalls, the main project road investment is fully financed by World Bank resources and focuses on an already engineered road that should have limited cost fluctuations that would rely on government budget to makeup shortfalls. Implementation support will closely follow forecasts and actual expenses for the road construction to be able to make early adjustments to project activities if cost overruns occur.

76. **Sector Strategies and Policies are rated Substantial.** According to the recently completed National Transport Masterplan, the risk associated with sector strategies and policies is rated Substantial, mainly due to the lack of evidence-based decision making. The master plan will be implemented through government programs following cabinet approval (submitted to cabinet in February 2024). Fully realizing trade gains from the border investments will rely on matching investments from South Africa. This will be mitigated by ensuring that project investments on the Lesotho side will still independently improve trade facilitation outcomes and by the SARTF ASA (P179671) that coordinates the cross-border dialogue with South Africa. In addition, South Africa has in place a policy and legal regime for smart borders with Lesotho and is already undertaking procurement for upgrades on the South African side.

77. **Institutional Capacity for Implementation and Sustainability risk is rated Substantial.** Despite overall successful implementation of the TICP (P155229), lessons from the project point to several issues related to technical and implementation capacity. Despite a fully staffed PIU, the project experienced persistent lack of coordination between the PIU and the Implementing Agency (Roads Directorate), impacting on project ownership and accountability resulting in insufficient benefit in institutional capacity. In the new project, technical capacity and coordination constraints will be addressed through direct implementation of the project through the RD and using of existing CAFI Project (P175783) PMU.

VII. RESULTS FRAMEWORK AND MONITORING

PDO Indicators by PDO Outcomes

Baseline	Closing Period
Improve climate resilient regional connectivity on the Katse to Thaba-Tseka road corridor.	
Travel time reduction on project corridors (Percentage)	
Feb/2024	Dec/2029
0	50
Millions of people that benefit from improved access to sustainable transport infrastructure and services (Number)	
Feb/2024	Dec/2029
0	136,817
Reduce the costs of trade across commercial borders between Lesotho and South Africa.	
Reduction in border clearance time for commercial traders through implementation of smart border systems at Maseru Bridge and Maputsoe-Ficksburg crossings, disaggregated by sex (Percentage)	
Feb/2024	Dec/2029
0	40
➢Reduction for women commercial traders (Percentage)	
0	40

Intermediate Indicators by Components

Baseline	Closing Period
Road Corridor Infrastructure Development	
KMs upgraded on Katse to Thaba-Tseka corridor (Kilometers)	
Feb/2024	Dec/2029
0	55
Spot improvements along A1 Corridor (Number)	
Feb/2024	Dec/2029
0	20
Roads constructed (Kilometers)	

Feb/2024	Dec/2029
0	55
➢Roads constructed - rural (Kilometers)	
0	50
➢Roads constructed - non-rural (Kilometers)	
0	5
Road user costs will be decreased by (Percentage)	
Feb/2024	Dec/2029
0	40
Number of direct local jobs created in construction of the road (Number)	
Feb/2024	Dec/2029
0	540
➢Number of direct local jobs created in construction of the road that are taken by women for which they are certified in a specific skillset (Percentage)	
0	25
Road users/local people/community members that express that the project works (roads) meet their needs (Percentage)	
Feb/2024	Dec/2029
0	75
➢Of which are women (Percentage)	
Feb/2024	Dec/2029
0	50
Regional Trade, Integration, and Logistics Services	
Smart one-stop border post facilities are established at Maseru Bridge and Maputsoe-Ficksburg border crossings (Yes/No)	
Feb/2024	Dec/2029
No	Yes
Construction, equipping, and staffing of two inspection and lab facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings is completed (Yes/No)	
Feb/2024	Dec/2029
No	Yes
Number of climate controlled community-level sorting, packing and storage facilities (cold chain) that are in place and in use (Number)	
Feb/2024	Dec/2029
0	12
Number of traders utilizing the commercial borders at Maseru Bridge, Maputsoe-Ficksburg, and Qacha's Nek per month, disaggregated by sex (Number)	
Feb/2024	Dec/2029
	TBD
➢Of which are women (Number)	

Feb/2024	Dec/2029
	TBD
Cross border traders reporting that the smart One-Stop Border Posts are aligned with their needs (Percentage)	
Feb/2024	Dec/2029
0	75
➢Of which are women (Percentage)	
Feb/2024	Dec/2029
0	50
Increase of women that cross through smart border systems at Maseru Bridge and Maputsoe-Ficksburg crossings (Percentage)	
Feb/2024	Dec/2029
0	40
Increase of women traders that know how to report cases of sexual harassment at the border (Percentage)	
Feb/2024	Dec/2029
0	50
Technical Assistance, Capacity Building, and Project Management	
Training provided for climate resilient road and bridge designs at Roads Directorate (Number)	
Feb/2024	Dec/2029
0	50
Women's participation in the skills development programs (Percentage)	
Feb/2024	Dec/2029
0	25
Improved road safety (Number)	
Feb/2024	Dec/2029
0	200
Increased capacity for climate resilient road infrastructure management (Number)	
Feb/2024	Dec/2029
0	20
Training on smart border management (Number)	
Feb/2024	Dec/2029
0	40

Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

Improve climate resilient regional connectivity on the Katse to Thaba-Tseka road corridor.	
Travel time reduction on project corridors (Percentage)	
Description	This is the average travel time of project corridors in both directions, normalized as a percentage of the baseline, weighted by the length of corridors included in the project.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	The travel time on the project corridors are measured along each project corridor sections in both directions. The travel time for the subject corridor (i) is calculated taking the average of the 2 runs in each direction of a normal working week.
Responsibility for Data Collection	RD
People that benefit from improved access to sustainable transport infrastructure and services (Number)	
Description	This measures, as part of the WBG's Corporate Scorecard, the number of beneficiaries of improved transport condition. It assesses the number of people that experience improved access (throughout the years) to sustainable transport infrastructure (climate resilient roads with non-motorized and public transport facilities) or services due to upgrade and spot improvement of the road corridors. These includes traffic (destined and through) attracted to the route as a result of the investment.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Collection of data of number of beneficiaries from the infrastructure investment.
Responsibility for Data Collection	RD
Reduce the costs of trade across commercial borders between Lesotho and South Africa.	
Reduction in border clearance time for commercial traders through implementation of smart border systems at Maseru Bridge and Maputsoe-Ficksburg crossings, disaggregated by gender (Percentage)	
Description	This indicator measures the overall time spent by commercial traders (disaggregated by gender) while complying with all formalities involved in clearing the Lesotho side of the border. It covers both incoming and outgoing commercial traffic on the Lesotho side of the border. Women should disproportionally benefit from this time reduction as they are time limited and represent 70% of informal traders.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Study to measure the time to clear goods on the Lesotho side of the border.
Responsibility for Data Collection	CAFI Project PMU

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

Component 1: Road Corridor Infrastructure Development	
KMs upgraded on Katse to Thaba-Tseka corridor (Kilometers)	
Description	KMs of roads upgraded under the project on the Katse to Thaba-Tseka corridor, with climate resilient measures (upgraded drainage structures, slopes stabilized, climate resilient surfacing materials and other climate resillient measures), specifications; and climate resilience practices will be applied during construction.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD

Spot improvements along A1 Corridor (Number)	
Description	Sections along the A1 corridor improved with resilient measures, specifications; and climate resilience practices will be applied during construction.
Frequency	Semi-annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Roads constructed (Kilometers) CRI	
Description	Kilometers of roads upgraded under the project with climate resilient measures (number of upgraded drainage structures, slopes stabilized and other climate resilient measures), specifications; and climate resilience practices will be applied during construction.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Road user costs will be decreased by (Percentage)	
Description	Collection of road user coast data
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Number of direct local jobs created in construction of the road (Number), disaggregated by gender	
Description	Number of workers engaged by contractors for the upgrading works.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Road users/local people/community members that express that the project works (roads) meet their needs (Percentage)	
Description	Survey of road users undertaken to establish how the investment responds to community needs.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Survey
Responsibility for Data Collection	RD
Component 2: Regional Integration, Trade, and Logistics Services	
Smart one-stop border post facilities are established at Maseru Bridge and Maputsoe-Ficksburg border crossings (Yes/No)	
Description	Indicates that the smart one-stop border posts at Maseru Bridge and Maputsoe-Ficksburg have been designed and constructed.
Frequency	Annual
Data source	Project progress reports
Methodology for Data Collection	Visual inspections

Responsibility for Data Collection	Component 2 (CAFI) PMU
Construction, equipping, and staffing of two inspection and lab facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings is completed (Yes/No)	
Description	Indicates that the inspection and lab facilities at Maseru Bridge and Maputsoe-Ficksburg have been constructed, equipped, and staffed.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Visual inspections
Responsibility for Data Collection	CAFI Project PMU
Number of climate controlled community-level sorting, packing and storage facilities (cold chain) that are in place and in use (Number)	
Description	Measures the number of cold chain facilites that have been placed in communities and are being utilized.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Visual inspections and community interviews
Responsibility for Data Collection	CAFI Project PMU
Number of traders utilizing the commercial borders at Maseru Bridge, Maputsoe-Ficksburg, and Qacha's Nek per month (Number)	
Description	Measures the number of traders (commercial entities) that use the three commercial borders upgraded by the project, in a given month.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Customs data
Responsibility for Data Collection	Revenue Services Lesotho
Cross border traders reporting that the smart One-Stop Border Posts are aligned with their needs (Percentage), disaggregated by gender	
Description	Measures the percentage of traders (commercial entities and individual traders) that report that the OSBPs align with their needs as traders.
Frequency	Annual
Data source	Project Progress report
Methodology for Data Collection	Survey
Responsibility for Data Collection	CAFI Project PMU
Component 3: Technical assistance, capacity building, and project management	
Training provided for climate resilient road and bridge designs at Road Directorate (Number)	
Description	Number of engineers (client, consultants and contractors) trained on climate resilient engineering design principles.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Women's participation in the skills development programs (Percentage)	
Description	This measures the participation of women in the skills development program
Frequency	Annual
Data source	RD and CAFI Project PMU

Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD and CAFI Project PMU
Improved road safety (Number)	
Description	Number of people trained on road safety and road safety awareness campaings carried along the road corrdior
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	RD
Increased capacity for climate resilient road infrastructure management (Number))	
Description	Number of interventions to support climate resilient road maintenance management introduced.
Frequency	Annual
Data source	RD
Methodology for Data Collection	Project progress report
Responsibility for Data Collection	RD
Training on smart border management (Number)	
Description	Number of border agency staff (client, consultants and contractors) trained on smart border management.
Frequency	Annual
Data source	CAFI Project PMU
Methodology for Data Collection	Project progress reports
Responsibility for Data Collection	CAFI Project PMU

ANNEX 1: Implementation Arrangements and Support Plan

1. **The implementation arrangements will leverage sector governance arrangements**. The MOPWT and MTIBD will be responsible for the overall coordination of the project. The RD and the CAFI Project PMU will be the formal implementing agencies. The RD will be responsible for Component 1. The CAFI Project PMU will be responsible for Component 2, with the support of RSL for the technical design and oversight of trade related activities. Component 3 implementation will be shared between the RD and CAFI Project PMU. The RD Project Manager will have the overall responsibility to ensure coordinated implementation across activities including collating reporting.

2. **PSC.** The government will establish an inter-ministerial PSC responsible for strategic decision making and monitoring of overall project implementation. This PSC will (i) set policy and make high-level decisions; (ii) facilitate coordination among the relevant agencies; (iii) review and approve the annual work plans; and (iv) assess risks to project implementation and identify solutions. The PSC which must become operational within six months of effectiveness, will meet twice a year to provide strategic guidance, ensure coordination, and monitor progress. The RD will act as the secretariat of the PSC. The PSC will be on a biannual basis.

3. **The PSC will include representation from the agencies and stakeholders engaged in the overall project**. The Principal Secretary (PS) of MOPWT will Chair and PS MTIBD will Co-Chair the PSC. The RD will take the secretariat role. Members of the PSC will also include the agencies involved for other components. PSC membership is as follows, represented by PS or their designee**:**

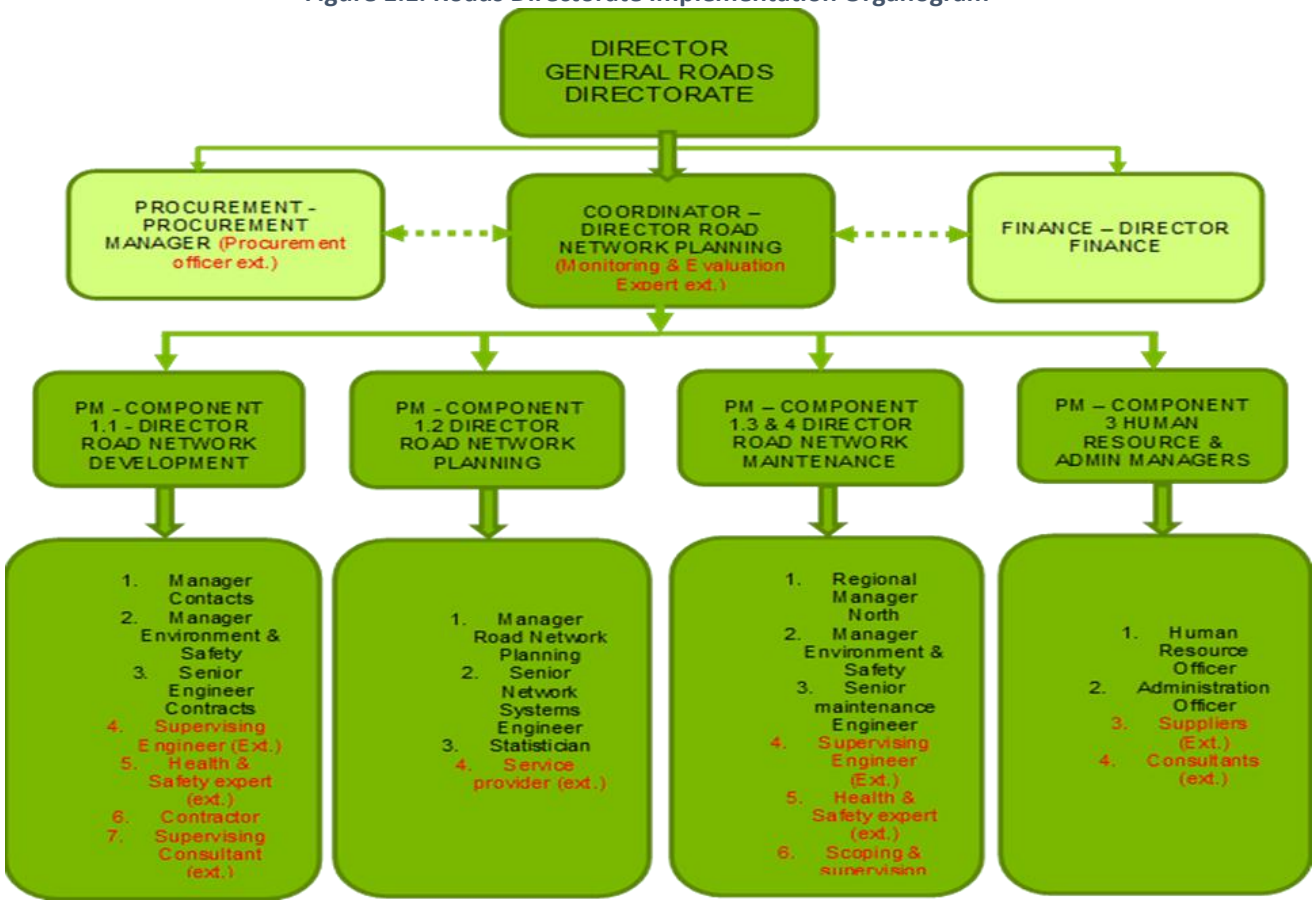
a) MOPWT – Principal Secretary (Chair)
b) MTIBD – Principal Secretary (Co-Chair)
c) Ministry of Finance and Development Planning
d) Ministry of Agriculture, Food Security, and Nutrition
e) Revenue Services Lesotho – Commissioner General
f) Ministry of Local Government, Chieftainship, Home Affairs and Police
g) Ministry of Foreign Affairs and International Relations
h) Ministry of Gender, Youth, and Social Development
i) RD – Secretary/Head Legal Services
j) CAFI Project – Project Manager
k) Roads Directorate — Director General
l) Any other Primary Stakeholder that may be identified

4. **The RD and CAFI Project PMU will oversee implementation for their respective components, including technical aspects, engineering (works and monitoring of works), environment and social, fiduciary, and M&E.** Each implementing agency will liaise with contractors and stakeholders and coordinate with subnational government bodies. The project will build capacity within each PIU to ensure strong delivery throughout project implementation.

5. **The RD and CAFI Project PMU will have overarching responsibility for financial management including contract payments**. The RD and the CAFI Project PMU will manage the respective designated special dollar accounts into which project funds will be deposited and will submit withdrawal applications. Each will track use of funds and implementation progress.

6. **The RD and the CAFI Project PMU will lead procurement; and prepare feasibility studies, detailed designs, and bid documents (Figure 1.1).** By decree, the RD is the only government agency mandated to construct, rehabilitate/upgrade and maintain the road network, in coordination with other levels of government, contingent on the road classification. The RD will supervise these works; monitor physical progress; and ensure the successful completion of studies and training activities. Both the RD and the CAFI Project PMU will jointly prepare the PIM and handle project planning.

Figure 1.1. Roads Directorate Implementation Organogram



Financial Management Assessment

7. **The project's financial management risk is rated as Moderate and the financial management arrangements satisfy the World Bank's minimum requirements under the World Bank's policy and procedures on financial management.**

8. **Risk assessment and mitigation.** Table 1.1 below summarizes the results of the risk assessment and the mitigation measures.

Table 1.1. Financial Management Risk Assessment and Mitigation

Description of Risk	Risk Mitigation Measures incorporated in Project Implementation	Condition of Effectiveness (Yes/No)	Residual Risk / (Risk) rating
INHERENT RISKS			
Country Level			
There are still notable challenges in the public financial management reforms, namely, the rollout of the IFMIS and implementation of the PFMRAP.	The Government has acknowledged these challenges and action plans have been identified with the support of development partners to work on these challenges.	No	S

Description of Risk	Risk Mitigation Measures incorporated in Project Implementation	Condition of Effectiveness (Yes/No)	Residual Risk / (Risk) rating
Entity Level			
The RD will implement the project with the MOPWT staff who have no prior experience with the World Bank FM and Disbursement Guidelines. CAFI staff is well conversant with the World Bank Financial Management and Disbursement guidelines.	Initiation and ongoing training will be offered by the World Bank staff to support the project.	No	M
Project Level			
This is a complex operation that involves larger amounts of contract to be managed and paid; there is a risk of inadequate verifications prior to payments being made.	Both the RD and CAFI Project PMU's FM will be handled by the highly skilled staff who has experience in handling infrastructure and complex projects.	No	M
Overall Inherent Risk	**Residual Risk: M**		
CONTROL RISK			
Budgeting			
The budgeting process may not be comprehensive and realistic to provide an adequate basis for performance monitoring	Budgets will be prepared based on approved procurement plans. Monthly and quarterly reports will be produced to report and monitor variances.	No	M
Accounting and financial reporting			
No risk identified, both Entities will use the existing accounting software called TOMPRO.		No	M
Internal control			
Project funds could be exposed to ineffective controls which could result in the misuse of funds.	The project implementation manual will be developed to govern every accounting transaction. The PIM will be approved by the World Bank.	No	M
Funds flow			
No identified risk as the funds will flow through the Designated Account.		No	L
Auditing			
Since COVID pandemic, the Government of Lesotho has significantly delayed in the submission of the annual audit reports.	The World Bank has already started engagement with the Office of the Auditor General to explore areas of support.	No	M
Overall Control Risk	**M**		
Overall Risk	**M**		

H – High S – Substantial M – Moderate L – Low

Financial Management Arrangements

9. **Budgeting arrangements:** The planning units of the RD and the CAFI Project PMU will prepare an annual budget for the project based on approved annual work plans, and the FM specialists will be responsible for producing variance analysis reports comparing planned to actual expenditures on monthly and quarterly bases. The periodic variance analysis will enable the timely identification of deviations from the budget. These reports will be part of the unaudited IFRs that

will be submitted to the World Bank on a quarterly basis. The FM specialists will coordinate the budgeting process in conjunction with the technical teams.

10. **Accounting arrangements:** The projects will use the computerized accounting software called TOMPRO or other suitable software for project financial management and the production of accounts. The accounting package has proved capable of transaction processing, production of project annual financial statements, IFRs, and other reports as required for the effective management and monitoring of the project. For the preparation of the financial reports, the RD will use the accrual basis, and the CAFI Project PMU will use cash basis of accounting as prescribed under the Cash Basis Standard issued by the International Public Sector Accounting Standards Board. The accounting procedures will be spelt out in the Project Implementation Manual.

Internal auditing, internal controls, and staffing arrangements

11. ***Internal Auditing:*** RD has a fully-fledged Internal Audit department that will cover the project based on their annual audit plans and risk-based approach. CAFI is serviced by the Government of Lesotho for Internal Audit. Based on the experience, the Internal Audit is thinly stretched and had not been able to cover the World Bank funded projects. To mitigate this risk, the project will rely on detailed reviews of the external management letters, intensive follow ups on resolution of the findings as well as supervision mission.

12. ***Internal Control Systems:*** The project will use the Project Implementation Manual to govern and execute transactions under the project.

13. ***Staffing arrangements***: The FM specialists for the RD and the CAFI Project PMU will take the ultimate responsibility for the financial management function. The FM specialists will be supported by the existing staff in the RD and CAFI Project PMU for adequate segregation of duties. The staffing arrangement will be continually reviewed during the project implementation, and if the need arises for additional capacity, additional staffing will be considered.

Funds flow and disbursement arrangements

14. ***Banking arrangements***: Each project will open a segregated Designated Account denominated in United States Dollars at the Central Bank to receive the funds from IDA. Project accounts denominated in Maloti will be opened at local commercial banks and used to make local payments. These local accounts will be reimbursed with funds from the US dollar accounts (DAs), although a minimum balance needs to be kept in these accounts.

15. ***Funds flow arrangements****:* Upon effectiveness of the financing agreement and submission of a withdrawal application, the World Bank will disburse an initial amount equivalent to six months' expenditure into each Designated Account. Subsequent disbursements will be made based on unaudited IFRs for the CAFI Project PMU and SOE(s) for the RD.

16. The project will also have the option of using: (i) the Direct Payment disbursement method, involving direct payments from the credit account on behalf of the Government and to the suppliers of goods and services that have a value above a set threshold; and (ii) the Reimbursement disbursement method, whereby the Government makes payments for eligible expenditures and submits withdrawal application for reimbursement.

17. The disbursement details will be spelled out in the project's Disbursement and Financial Information Letter.

Financial reporting arrangements

18. The project will prepare quarterly unaudited IFRs for the project in form and content satisfactory to the World Bank, which will be submitted to the Bank within 45 days after the end of the quarter to which they relate.

The IFRs submitted to the World Bank will contain the following statements:

- Statement of Sources and Uses of Funds;
- Statement of Uses of Funds by Project Activity/Component;
- DA Activity Statement;
- Bank Statements for both the Designated and Project Account;
- Summary Statement of DA Expenditures for Contracts subject to Prior Review; and
- Summary Statement of DA Expenditures not subject to Prior Review.

19. The annual financial statements will be prepared using International Public Sector Accounting Standards. These statements will be submitted to the World Bank within six months after the end of the accounting year.

The accounts/financial statements will comprise of:

(i) **A Statement of Sources and Uses of Funds/Cash Receipts and Payments**, which recognizes all cash receipts, cash payments and cash balances controlled by the entity; and separately identifies payments by third parties on behalf of the entity.

(ii) **The Accounting Policies Adopted and Explanatory Notes**. The explanatory notes should be presented in a systematic manner with items on the Statement of Cash Receipts and Payments being cross referenced to any related information in the notes; and

(iii) **A Management Assertion** that World Bank funds have been expended in accordance with the intended purposes as specified in the relevant World Bank legal agreement.

Auditing arrangements

20. The project financial statements will be audited by the Office of the Auditor General in accordance with International Standards on Auditing, and the audit report together with the management letter and management responses will be submitted to the World Bank within six months after the financial year-end.

21. The external auditor will be required to express a single opinion on the project financial statements. In addition, a detailed management letter containing the auditor's assessment of the internal controls, accounting system and compliance with financial covenants in the financing agreement, suggestions for improvement, and management's response to the auditor's management letter will be prepared and submitted to management for follow-up actions.

Audit Report	**Due Date**
Project financial statements and management letter	Within six months after the end of the financial year i.e., 30 September

Implementation Support Plan

22. **Based on the outcome of the FM risk assessment, the following implementation support plan is proposed.** The objective of the implementation support plan is to ensure the project maintains a satisfactory financial management system throughout the project's life.

Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the program	Annually
Review of other relevant information	Continuous as they become available
On site visits	
Monitoring of actions taken on issues highlighted in audit reports, management letters, and other reports	As needed

23. **Conclusion of the assessment:** The overall residual risk rating is Moderate hence the project will have an on-field supervision at least once a year.

24. The financial management arrangements were prepared jointly by the Senior personnel in the RD and the CAFI Project PMU.

Procurement

25. **The full procurement assessment is included in the PAD main text, procurement section.**

ANNEX 2: Detailed Project Description

1. **The project will help upgrade and rehabilitate roads and bridges in a climate resilient and safe manner**. Climate adaptation measures will be introduced to enhance the resilience of the roads and bridges infrastructure.[63] The road construction, improvement of road safety, and implementation of climate resilience measures will be aligned with recently completed technical work on the climate vulnerability of Lesotho's roads.[64] Community social and economic infrastructure will be provided to the rural population along segments of roads under the project.[65]

2. **The project has three components:** (i) Road corridor infrastructure development, (ii) Regional trade, integration, and logistics services, and (iii) Technical assistance, capacity building, and project management.

Component 1: Road Corridor Infrastructure Development (US$60 million)

3. **Component 1 has two sub-components:** (i) Upgrading of the Katse to Thaba-Tseka road corridor to climate resilient paved standard (US$55 million), and (ii) Spot improvements along the A1 economic corridor (US$5 million).

4. **Sub-Component 1.1: Upgrading of Katse to Thaba-Tseka road corridor to climate resilient paved standard (US$55 million).** This sub-component will consist of upgrading of the existing engineered gravel surfacing of about 55km in length. The proposed upgraded road will have significant regional integration benefits as it constitutes part of the regional trunk road network through the MDTC Corridor number 3. The upgraded road will reduce vulnerability to climate related shocks and natural hazards, reduce travel times for motorists, lower road user costs (vehicle operating costs), decrease accidents, and uplift and boost the economic activity in the area it traverses, thus reducing poverty among the local population.

5. **Sub-Component 1.2: Spot improvements along the A1 economic corridor (US$5 million).** The A1 corridor connecting Maseru and Butha Buthe serves as the primary economic corridor linking the three 24-hour commercial borders of Maseru, Ficksburg and Caledonspoort. The corridor also has a concentration of commercial farming and is linked to development of climate-controlled investments planned under Component 2.

Component 2: Regional Trade, Integration, and Logistics Services (US$16 million)

6. **Component 2 has three sub-components:** (i) Smart OSBP facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings, and improvement of Qacha's Nek border facilities (US$8 million), (ii) Inspection and laboratory testing facilities (US$5 million), and (iii) Climate controlled community-level horticulture packing and storage facilities (cold chain) (US$3 million).

7. **Sub-Component 2.1: Smart One-Stop Border Post facilities at Maseru Bridge and Maputsoe-Ficksburg and improvement of Qacha's Nek Border facilities (US$8 million).** Along with South Africa, Lesotho plans to establish smart OSBPs at both the Maseru Bridge and the Maputsoe-Ficksburg border crossings between the two countries.[66] These are Lesotho's two busiest commercial borders, accounting for around 80 percent of commercial traffic. These OSBPs will enable joint administration by South African and Lesotho border agencies and facilitate most goods, people, and

[63] The project will raise and reinforce flood-prone road sections, provide adequate cross drainage structures, construct concrete pavements in selected flood vulnerable locations, and strengthen or replace bridges with structures to adapt to the changing hydrology and flooding risks. Furthermore, the project will introduce bioengineering measures such as tree and grass planting to improve road slope protection, flood control and reduce erosion.

[64] National Climate Risk and Vulnerability Assessment (CRVA) for Roads in Lesotho - Development of a Vulnerability Assessment Tool for Lesotho Roads and Vulnerability Assessments of Selected Catchment Areas (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099051023095517471/P17247607085ec0580bf2407698ff1ec3a9

[65] The provision of community social infrastructure will be incorporated into the works' contracts and will be identified through a consultative process during project implementation.

[66] The OSBP will be similar to other joint border facilities in the region that have proved instrumental for trade facilitation through drastic reduction of border crossing time and simplification of processing and procedures.

consignments moving between the countries in an automated non-stop process that does not require the truck driver or traveler to step down from their vehicle. Collaborative planning for the OSBPs between the Lesotho and South African governments, led by the respective border agencies, has been underway since 2023 to develop jointly designed OSBP plans. This is critical to ensure that simultaneous investments by both governments in upgrading their shared borders are aligned and well-coordinated. This collaboration has been supported by the World Bank's SARTF advisory project (P179671). The government of South Africa has initiated a tendering process for the OSBP upgrades on its side of the border with bids due in July 2024.[67] The government plans to finance the OSBP investments on its side of the border through this ITTL project.

8. **The OSBPs will require upgrading and reconfiguring of the existing physical border infrastructure to modern standards, with efficiency of border checks and crossing as a top priority.** The smart border infrastructure will also be energy efficient and climate resilient in line with modern standards. Procurement of smart border equipment such as number plate recognition and systems integration[68] will enable a collective, digital decision based on risk selectivity to be made at the joint border booth to either automatically release the consignment or direct it into a secondary inspection process. Simpler infrastructure and processing improvements will also be made at the Qacha's Nek border including renovations to buildings that house customs and immigration agencies as well as gates and other basic border infrastructure.

9. **The project will design and install an information desk at the OSBP facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings, and at the Qacha's Nek border crossing, with the inclusion of female traders in mind.** This will include having translated information and brochures on safe mobility routes and time, how to report sexual harassment, business registration and licensing for informal business, international and regional trade agreements, fees, and other information needs to be identified by the gender assessment and consultations. A mechanism to present reports of sexual harassment at the border will be introduced, as well as violence prevention environmental design features and occupational safety and health standards at the border. Customs officials will be trained on violence prevention, appropriate response to sexual harassment, and customer service with a gender perspective.

10. **Sub-Component 2.2: Inspection and laboratory testing facilities (US$5 million).** This subcomponent involves construction and equipping of two inspection and laboratory testing facilities, at the Maseru Bridge and Maputsoe-Ficksburg border crossings, that will service requirements by Lesotho's border agencies, including those located at these two OSBPs. This will replace the inadequate facilities currently in use (Figure 2.1). The inspection facilities allow for physical examination of goods where required to mitigate risks identified by customs, agriculture, health, standards, and environmental border agencies. These inspection facilities will be located close to the two busiest commercial borders to enable easy redirection of trucks from the borders when inspection is warranted. The facilities will be configured to enable trucks to be easily parked and inspected under cover at a ramped inspection bay, and for the provision of relevant equipment such as a forklift truck to support efficient movement of goods, and appropriate facilities for the storage of seized goods. The facility may also include modern inspection equipment that can provide audio and video communications linkages to the border agencies to inform the inspection, as well as supporting reporting into the ASYCUDA World border processing (customs) system. The laboratory testing facilities will be located within each of the inspection facilities to enable rapid testing of goods when determined necessary. The inspection and laboratory testing facilities will be built to climate resilient and energy efficiency standards and will be grid-connected for power supply, with consideration of supplemental solar power.

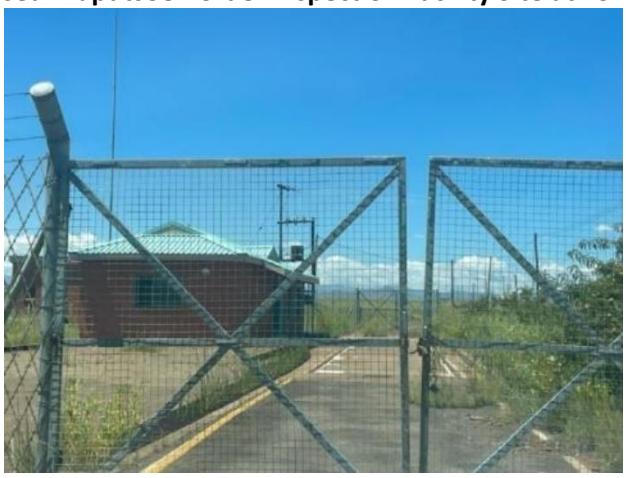
[67] The South African border upgrade tender is available at: https://www.gov.za/news/media-statements/border-management-authority-extension-submission-date-bids-redevelopment-six

[68] The CAFI project already includes budget for digitalisation of border agencies within the Lesotho National Single Window (trade system) expansion and addition of more government agencies into the ASYCUDA World (customs system).

Figure 2.1. Current Maseru Bridge Inspection Site at Border Crossing

11. **The inspection facilities at both border crossings will be located on land near the border crossings that is already owned by the government.** At Maseru Bridge, the location is within 0.5 km of the border, north of the main road near the railway unloading area. At Maputsoe-Ficksburg, the location is within 1 km of the border, on a former weighbridge site located on the access road to town (Figure 2.2). These locations have been agreed by the relevant government authorities including the MTIBD, MOPWT, and RSL. The inspection facilities will be newly constructed buildings on each of the two sites.

Figure 2.2. Proposed Maputsoe Border Inspection Facility Site at Former Weighbridge



12. **Sub-Component 2.3: Climate controlled community-level sorting, packing, and storage facilities (cold chain) (US$3 million).** This sub-component will purchase energy efficient, climate-controlled mobile containers, using climate friendly refrigerants and solar roof installations, to enable the cold storage of horticultural products ahead of transport to markets. These facilities allow the horticulture products (e.g., apples) to be aggregated and stored until volume and market conditions are optimal for shipping, reducing losses and increasing output across this value chain. The packing and storage facilities will be provided to a minimum of 4 locations in each of 3 districts (Leribe, Maseru and Quthing) that are horticulture producing regions. These facilities allow the horticulture products (e.g., apples) to be aggregated and stored until volume and market conditions are optimal for shipping. Establishment of the packhouses will be phased to match the growth of the horticulture sector. The investment will be aligned to, and leverage, the ongoing investments in horticulture and agriculture through the CAFI project and the SADP II Project. The packing houses and storage facilities will be built to climate resilient standards and consider energy efficiency in the construction, utilities, and equipment

selection. The packing houses and storage facilities will be grid connected and complemented by solar panels (see Figure 2.3). The packing houses will be shipping container sized and moveable to allow repositioning to match the geographical growth of horticulture output over time. The facilities will include sorting, grading, and packing lines, with appropriate hygiene and sanitation facilities complying to HACCP[69] norms. The temperature-controlled storage facilities will be used for both incoming and processed/packed produce with appropriate quality inspection areas and staff hygiene facilities, and loading- unloading bays, etc. The packed product could be shipped out to supermarket retailers, wholesalers and other business-to-business customers, regional markets in South Africa, or international markets. There will be a separate crate washing and drying area, adjacent to the packing and storage facilities. Waste produce (byproduct) is biomass that can be composted on site, to be supplied as high-quality compost to neighboring farmers. Wastewater will be cleaned as necessary and utilized by neighboring farms.

Figure 2.3. Example of Container-Based Solar Powered Sorting and Storage Facilities

Source: Thermodesign Solar-Powered Cold Storage: Sustainable and Efficient Cold Preservation Solutions[70]

13. **The project will finance the initial purchase of the facilities, but they will be lent out in concession agreements to private logistics operators who will work with communities to operate them and, identify temporary sites where the communities will provide site maintenance as well as waste management.** The communities and local government will be involved in deciding priority locations that will change during the course of the season in line with produce seasonality. Communities that are interested in receiving the facilities will prepare a proposal on how the facilities will be operated by the community. This could, for instance, be a "producer owned enterprise", that is established by the community or an association of local producers, to operate and manage the facilities. The project implementation team will manage the outreach and proposal process to identify the communities most suited to receive the facilities based on proximity to horticultural production and the proposed management arrangements. There will be active collaboration between the operators and the communities including agreement on a fee by users to ensure cost coverage on operations and maintenance and eventual replacement cost after depreciation. The communities will also link up with water use associations (WUAs) in the Thaba-Tseka region that were established as part of irrigation investments made under the SADP and other donor development partner funded projects.

[69] HACCP – hazard analysis critical control points, a process used to prevent/minimize food safety hazards in a processing facility.
[70] Thermodesign Solar-Powered Cold Storage: Sustainable and Efficient Cold Preservation Solutions can be accessed at: https://medium.com/@grcgrup/thermodesign-solar-powered-cold-storage-sustainable-and-efficient-cold-preservation-solutions-c6ca5837c2b9

Component 3: Technical Assistance, Capacity Building, and Project Management (US$4 million)

14. **Component 3 will support implementation of the project by the RD implementation unit for Component 1, and by the CAFI Project PMU for Component 2.** It will also include operating costs, technical assistance activities, and capacity building support through training activities for these implementing agencies. In addition, it will cover (i) a gender assessment to identify interventions for women traders and women farmers in communities along the improved roads and at the border, (ii) review and update the road and bridges design manual for enhanced climate resilience, (iii) enhancement of climate resilience in planning and management of road infrastructure, including the development of standard operating procedures for climate disaster warning and response, (iv) development of community resilience committees led by women to support emergency disaster preparedness and response, (v) promotion of women's employment in the road sub-sector, and (vi) an assessment of landscape restoration needs along the project corridor.

ANNEX 3: Climate Risks, Climate Adaptation and Mitigation, and Paris Alignment

Climate and Natural Hazard Risk Assessment

1. **Lesotho has a temperate climate with hot summers and cold winters. Lesotho is already experiencing the impacts of climate change, with rising temperatures and variable precipitation levels.** Mean annual temperatures, maximum and minimum have been increasing since 1960/70s and annual rainfall trends are weak though observations indicate a decrease in annual mean levels of precipitation. ThinkHazard identifies high risk of wildfires at the country level and at project locations; high risk of river flooding at the country level and very low to high risk in the project locations; medium risk of urban flooding at the country level and very low to medium risk at the project locations; very low to medium risk of landslides; and low risk of earthquake and water scarcity. Other publications identify additional hazards that present a high degree of risk such as droughts, frost, strong winds and heavy snowfall. In 2020-21, Lesotho declared a state of emergency for shocks related to heavy rains that severely impacted businesses, primarily due to damage to road infrastructure disrupting trade logistics. In 2022, the country experienced heavy rainfall and floods that left many parts of Lesotho impassable and disconnected.

2. **Climate projections indicate that mean annual temperatures are expected to increase by 1.6°C by 2039 and 2.1°C by 2059; while mean annual precipitation is expected to decrease by 0.5mm by 2039 and by 1.9mm by 2059 (CMIP5 ensemble projection under RCP8.5).** Lesotho's Extreme Climate Indices Report predicts increasing rainfall frequency and severity, particularly in the lowlands, and Lesotho's Climate Change National Strategy indicates that climate change projections show an increase in rainfall variability, including with unpredictable and extreme events. This is expected to increase the incidence of heat waves, droughts, and floods, with impacts on the transport sector, agriculture productivity and animal health.

3. **Extreme heat and floods contribute to issues such as asphalt pavement deformation, slope instabilities, landslides, gulley formation, sedimentation of rivers, unexpected road and bridges washouts, material losses from gravel roads and erosion, scouring of bridge foundations and abutments, all of which contribute to increasing the risk of road and bridge failures.** Climate hazards can also cause disruptions in transport network connectivity and in agribusiness services. In recent years, temporary road closures due to washouts have caused extensive disruption to key transport routes. Road closures due to road damage and washouts place an excessive burden on the GOL's infrastructure budgets, particularly due to rising needs of financing for road maintenance and repairs. In 2022, the country experienced heavy rainfall and floods that left many parts of Lesotho impassable and disconnected. The impacts of heavy rains were more apparent in rural areas than in urban areas. Some rural areas have become inaccessible due to landslides, rock falls, and damaged drainage systems causing flooding of roads and bridges.

4. **A recent analysis of the climate vulnerability of Lesotho roads has identified poor road design and conditions (42 percent maintenance backlog) which increases the vulnerability to climate related risks.** The study suggests that most paved roads are likely to be subject to a high level of climate-related risk and most unpaved roads are likely to experience high to very high levels of climate risk. The study identified issues related to limited protection works – unprotected side drains and riverbanks, erosion of road shoulders, slope instability, lack of downstream erosion protection for culverts, bridges and drifts, damage to bridge embankments; inadequate or lack of rehabilitation and maintenance as shown by sediment deposition or slope instability from unrehabilitated borrow pits, blocked/damaged culverts, blocked/insufficient side drains, insufficient drainage of unpaved roads, lack of connection to main drainage channels; insufficient infrastructure for river crossings; and meandering rivers (Figure 3.1). Climate change is expected to accelerate these issues due to limited protection works, poorly constructed roads, inadequate rehabilitation of slopes, inadequate regular maintenance.

Figure 3.1. Inadequate Current State of Lesotho's Roads

(a) Sedimentation has increased the risk of overtopping, damaging the stone-pitching bridge scouring protection at the embankments. (b) Eroding of the shoulder of the road is a common issue across most of Lesotho and can be seen on most paved roads outside the cities. Insufficient connection with the side drains increases the risk of erosion (Northern Mohokare catchment). (c) Severe scouring of a drift that is damaging the road infrastructure and increasing erosion in the downstream catchment.

5. **Lesotho's topography is mountainous, and the soil is erodible.** Climate related events like droughts and floods contribute to increased rates of soil erosion, desertification, and reduced soil fertility. High aridity and periods of intense drought deteriorate rangelands and reduce agricultural and livestock productivity. Rising temperatures, with climate change, are expected to increase the risk of food spoilage and food loss. The community depends on rain-fed agriculture and is therefore highly vulnerable to the impacts of climate change and to food insecurity.

Integrating Climate Adaptation and Mitigation in the Project Design

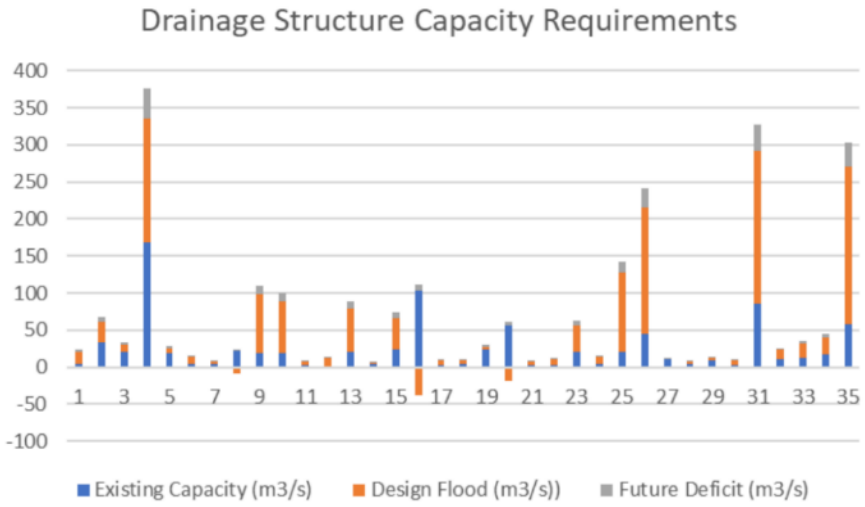
6. **The Catchment Climate Risk and Vulnerability Assessment for Lesotho Roads recommends increasing investments in climate-proofing national and local government roads with pavement upgrades, improved drainage, paved shoulders, culvert replacement, protection of budge embankments, pacing connections to minor roads, etc.** These recommendations are to be adopted in the proposed project. The proposed project incorporates measures to manage and reduce climate risks to an acceptable low level. The project also incorporates mitigation measures to reduce to a low level the risk that the operation presents to the country's low-GHG emissions development pathways (Table 3.1).

Table 3.1. ITTL Project Climate Adaptation and Mitigation Interventions

Component 1: Road Corridor Infrastructure Development ($60 million)
Sub-Component 1.1: Upgrading of Katse to Thaba-Tseka Road corridor to climate resilient paved standard (US$55 million)
Adaptation: This component includes the upgrading of the Katse to Thaba-Tseka Road corridor to climate resilient standards. This road was selected for upgrading based on its criticality and its current high vulnerability to climate impacts. Important elements to be considered are the road levels, pavement design, cross drainage, slope stabilization, erosion protection of the road, as follows: • Road drainage design specifications adjusted for recurrent weather and flood events. Use of additional cross and side drainage. Current culvert capacities are too small for the current design standards. The culvert capacities will therefore be insufficient to handle any potential impacts of climate change and/or increases in flood frequencies, sedimentation, or debris. An analysis shows that only three of the 34 culverts have sufficient capacity for the current design standards. On average, the culverts' capacities need to be increased by around 70 percent to account for the current flood estimates. The capacity of the culverts, on average, will need to be increased by a factor of three to account for the potential impacts of climate change (Figure 3.2). • Adjustment in the vertical alignment of the road and provision of higher hydraulic clearances for bridges and culverts.

- Use of appropriate weather-resistant pavement surfacing materials based on robust asphalt mix designs and revised pavement thicknesses which consider temperature projections. Modified subsurface conditions and materials to control and prevent soil water saturation or dehydration from damaging the overlaying infrastructure.
- Add paved shoulders to protect the main section of the road and improve connectivity with drainage structures.
- Bridge design and construction consider thermal expansion from temperature (e.g., use of expansion joints).
- Tree and grass planting for roadway reserve protection and slope stabilization.

Figure 3.2. Current capacity of drainage structures on the Katse to Thaba-Tseka Road, required capacity, and future deficit based on a 12 percent increase to account for climate change.



Mitigation: The upgrading of the Katse to Thaba-Tseka Road corridor without capacity expansion does not cause deforestation and provides an essential access function and does not create barriers to non-motorized transport (NMT) nor long distance public transport. The upgrade includes provisions for safe use by NMT such as sidewalks, pedestrian crossings, and overpasses, as appropriate, along the whole Katse to Thaba-Tseka road corridor. Investments in NMT are estimated at US$10 million. The upgrade works include tree and grass planting contributing to carbon capture and sequestration. Solar powered street lighting will be provided along the corridor, as appropriate.

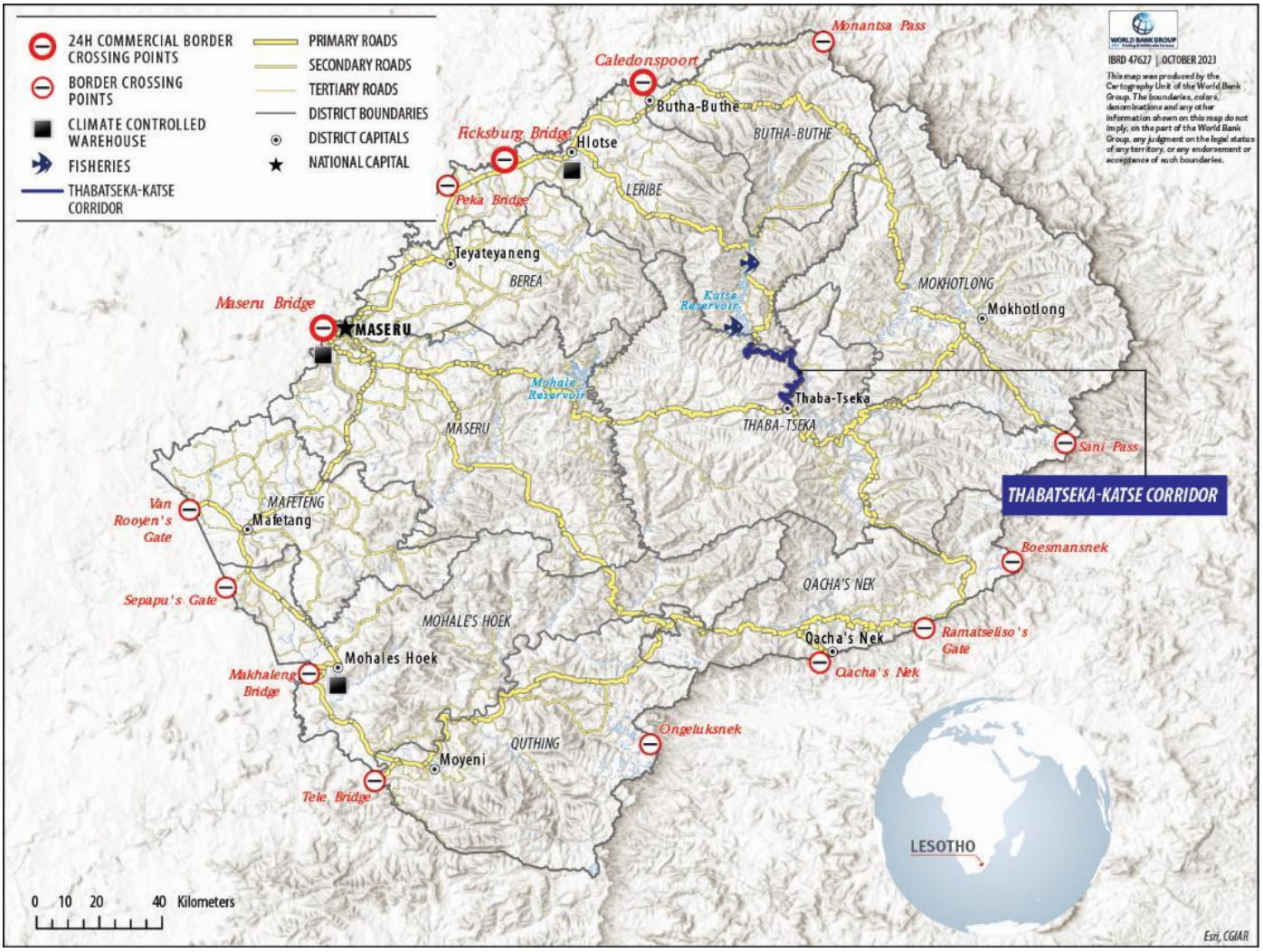
Sub-Component 1.2: Spot improvements along the A1 economic corridor (US$5 million)

Adaptation: This component includes deploying spot improvements along the A1 economic corridor to make it climate resilient and will include the replacement of culverts and drainage infrastructure which currently is 30-40 percent under designed, in order to cope with the current and future climate condition. This road was selected for upgrading based on its criticality and its current high vulnerability to climate impacts. Special focus will be provided to areas with major risks of flooding and extreme heat that might cause erosion, gully formation and damage to the road assets, and will include the construction of slope protection structures, where needed, including with nature-based solutions like tree planting.
Mitigation: Spot improvements include the provision of NMT facilities like sidewalks and pedestrian crossings. Tree and grass planting activities contribute to carbon capture and sequestration. Solar powered street lighting will be provided along the corridor, as appropriate. Tree and grass planting activities contribute to carbon capture and sequestration.

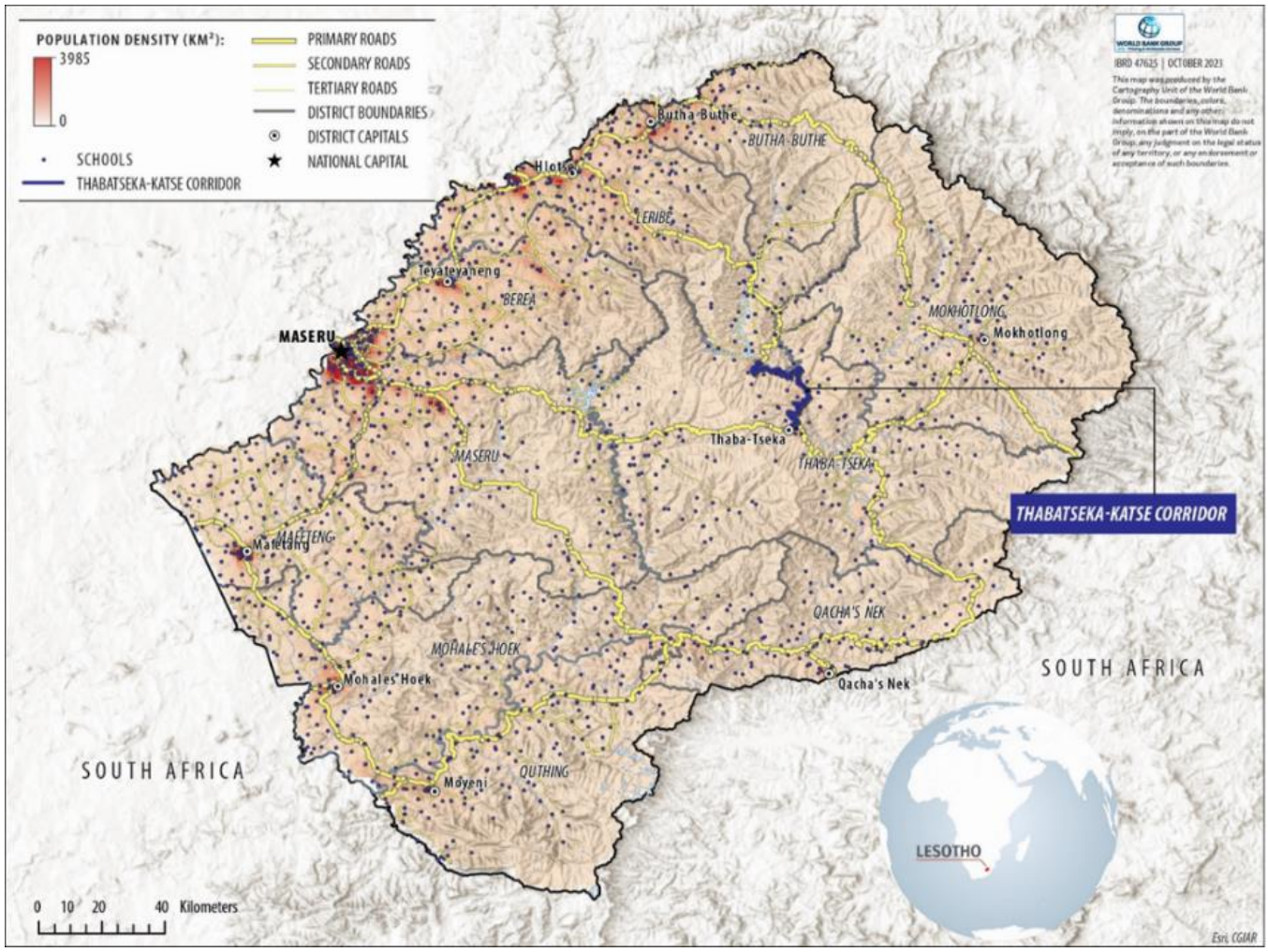
Component 2: Regional Trade, Integration, and Logistics Services (US$16 million)
Sub-Component 2.1: Smart OSBP facilities at Maseru Bridge and Maputsoe-Ficksburg border crossings, and improvement of Qacha's Nek Border facilities (US$8 million)
Adaptation: Sub-Component 2.1 includes the upgrading of border postings including parking areas, office buildings, and other infrastructure that will be built observing climate resilience standards, including enhanced drainage, slope protection, enhanced pavement design, and efficient water use. The OSBP will introduce systems and procedures to enhance the climate resilience of operations and maintenance, such as data recovery and backup to prevent data loss in the event of climate disasters. Tree planting will be provided for natural cooling. **Mitigation:** The border posts' buildings are grid connected and will be upgraded to energy efficient standards (physical infrastructure and equipment). Financing will be allocated to the deployment of solar powered street lighting and tree planting in parking areas.
Sub-Component 2.2: Inspection and laboratory testing facilities (US$5 million)
Adaptation: Construction and equipping of two inspection facilities and laboratories at the Maseru Bridge and the Maputsoe-Ficksburg border crossings observing climate resilience standards, including enhanced drainage, slope protection, and efficient water use. Introduction of systems and procedures to enhance the climate resilience of operations and maintenance, such as data recovery and backup to prevent data loss in the event of climate disasters. Tree planting will be provided for natural cooling. **Mitigation:** The inspection facilities and laboratories will be grid connected and built to energy efficiency standards (physical infrastructure and equipment). Deployment of solar powered street lighting and tree planting in parking areas.
Sub-Component 2.3: Climate-controlled community-level processing, packing and storage facilities (US$3 million)
Adaptation: Construction of climate-controlled packing and storage facilities for horticulture products to reduce food spoilage due to high and increasing temperatures with climate change. The facilities will be constructed observing climate resilience standards, including enhanced drainage, slope protection, and provisions for efficient water use. Wastewater will be cleaned and supplied to neighboring farms. Tree planting will be provided around the facilities for natural cooling. **Mitigation:** The climate-controlled packing and storage facilities for horticulture products will be grid connected and built to energy efficiency standards (physical infrastructure and equipment). Refrigeration will use climate friendly refrigerants. Waste products will be segregated at source and collected separately. Some of the collected bio-waste will be re-used as livestock feed and the bio-waste that is not re-used will be composted and supplied as high-quality natural fertilizer and soil conditioner compost to neighboring farms. The collection, composting and distribution of fertilizer/soil conditioner is not expected to release significant levels of methane as these are small-scale composting facilities Tree planting around the facilities.
Component 3: Technical assistance and capacity building (US$4 million)
Adaptation: This component will support implementation of the project (US$3 million) and includes the provision of technical assistance and training (US$1 million). This component finances a review and update to the road and bridges design manual for enhanced climate resilience, technical assistance and training to integrate climate resilience in planning and management of road infrastructure, the development of community resilience committees led by women to support emergency disaster preparedness and response, and assessment of landscape restoration needs along the project corridor to enhance climate resilience. **Mitigation:** This component will support implementation of the project and includes the provision of technical assistance and training on the topics of e-mobility, motorization management and green logistics with the objective of understanding the current challenges and opportunities to advance the country in these agendas.

ANNEX 4: Project Maps

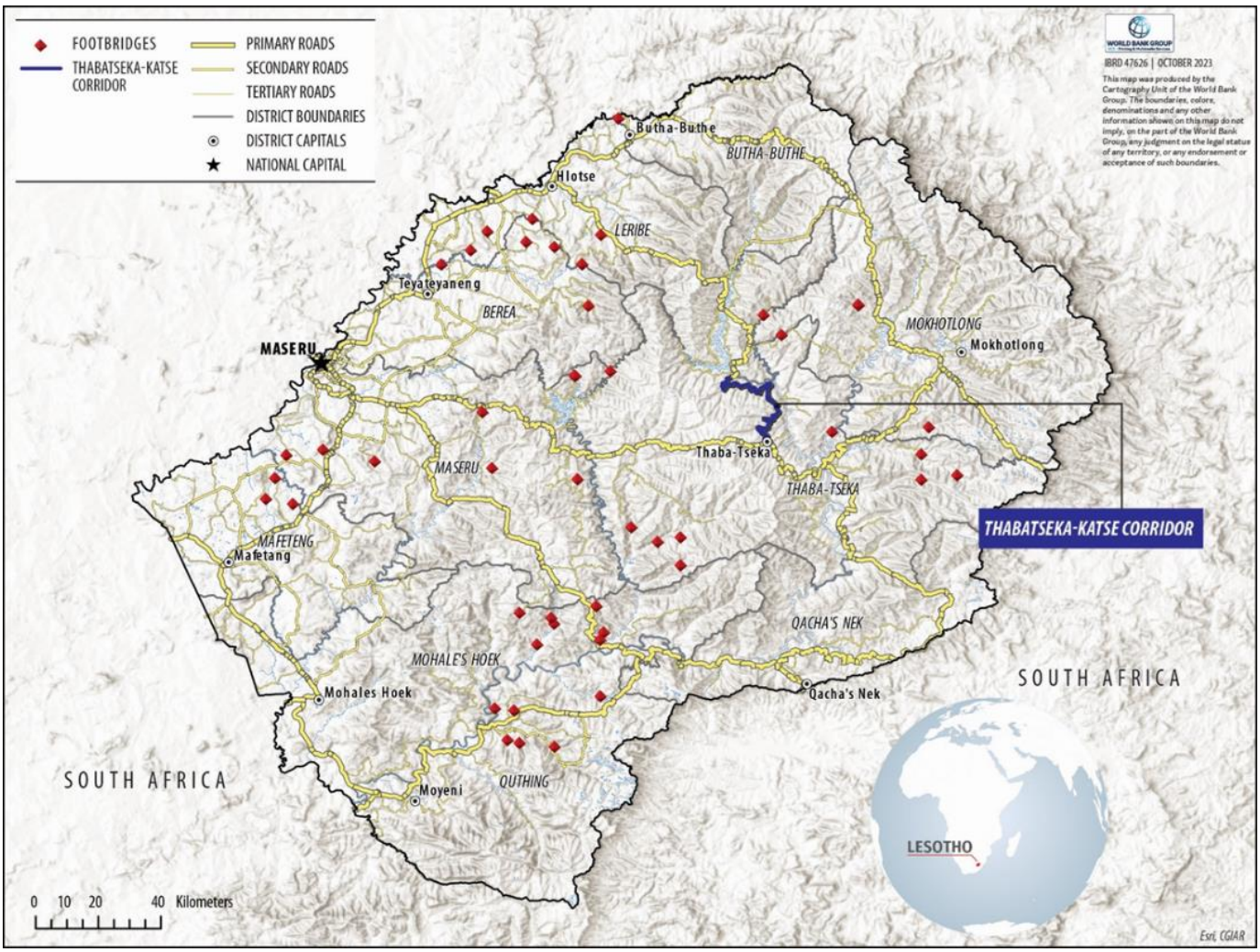
Map 1. Lesotho Border Crossing Points and Existing Cold Chain Facilities



Map 2. Location of Schools Relative to the Project Road



Map 3. Location of Footbridges Funded under the TICP Project



ANNEX 5: GENDER

1. **The project will contribute to the operationalization of the World Bank Gender Strategy (2024-2030) and support the recommendations of the 2022 Lesotho Gender Assessment.** The project will seek to close gender gaps in employment in the road, trade, and logistics sector. Therefore, this project is aligned with the Gender Strategy's economic participation objective, particularly Outcome 3: Improve equal access to more and better jobs, including jobs of the future; and Outcome 5: Expand access to and use of services that enable economic participation.

Sectoral and Institutional Context

2. **Women form the majority of informal traders in Lesotho and face gender specific risks. Women makeup approximately 70 percent of informal traders in SADC, but they are affected by specific constraints such as sexual harassment and corruption at the border.**[71] In addition, they have limited information on international and regional trade agreements, and there is absence of service specific desk to serve informal traders. Female traders also face the challenge of being banned to entering South Africa from long periods of time which incentivize them to use informal routes.[72] Finally, there is limited representation of women in trade networks and associations.[73] Additionally, even though the textile industry is a big employer for women in formal jobs, it is also contributing to patterns of inequality as wages in the sector are low and are disproportionally affected by external shocks leading to the closing of factories given women's particular restrictions to relocation.[74]

3. **Female traders highlighted barriers to ascend to leadership roles in trade associations.**[75] Some of these constraints include one's financial capability to absorb some of the resource gaps in terms of transportation, unpaid care work, level of exposure in business (backed by a successful enterprise) and, to some extent, level of education.[76] These factors have largely contributed to the limited participation and representation of female traders in leadership positions and their further marginalization, as most do not meet the laid-out criteria.[77]

4. **While women in Lesotho have access to services that facilitate cross-border trade, there are no service desks specifically designed to serve informal cross-border traders, let alone female informal cross-border traders.**[78] The challenges for female traders have worsened during the COVID-19 pandemic.[79] Due to changes in the operating times at the borders, traders find themselves having to spend the night in the border area where there are no accommodation

[71] UNWOMEN. Africa. (2024). Empowering Women in Trade: https://africa.unwomen.org/en/what-we-do/womens-economic-empowerment/empowering-women-in-trade

[72] The African Continental Free Trade Area (AfCFTA) Secretariat, the United Nations Development Programme (UNDP) and UN Women.(2022).The *Engine of Trade in Africa: Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women and Youth in Trade work for development* report.https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.

[73] Ibid.

[74] Africa Renewal (2014). Raw deal for African women traders: https://www.un.org/africarenewal/magazine/august-2014/raw-deal-african-women-traders.

[75] The African Continental Free Trade Area (AfCFTA) Secretariat, the United Nations Development Programme (UNDP) and UN Women. (2022). The Engine of Trade in Africa: Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women and Youth in Trade work for development report. https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.

[76] Ibid.

[77] Ibid.

[78] Ibid.

[79] Ibid.

facilities.[80] In some instances, when female informal cross boarder traders stay over, their documents get destroyed, they are banned from travelling to RSA for prolonged periods of time, and thus they end up using informal routes.[81]

5. **Female informal cross-border traders in Southern Africa embark on long travel distances which increases their time poverty and hurts their businesses as well as health issues.**[82] They travel long distances with buses, minibuses/kombis, and haulage trucks, in addition to walking long distances while carrying heavy loads is detrimental to their health.[83] Many also suffer from fatigue and backache because of these long distances and poor working conditions.[84] Long lines at border posts also contributed to fatigue. Long travel times also impacts women's households, especially for single mothers or female headed households.[85]

6. **Evidence shows that female informal and formal cross border traders face cumbersome challenges and barriers faced in relation to border and customs procedures.** Lesotho has an online trade information portal that provides border users with all relevant information (including procedures, fees, regulations, forms, permit requirements, etc.).[86] However, the portal is unknown to small-scale traders, as most do not have access to the internet.[87] Female cross-border traders (formal and informal) only discover new regulations and requirements introduced by the Lesotho Revenue Authority or the South African Revenue Authority when they reach the border and are threatened with fines, penalties, and arrests.[88] Across Southern Africa, female cross-border traders have noted that they have been charged double border fees when officers notice their lack of knowledge in trade procedures.[89] A 2021 online survey found that 43 percent of women cross border traders recommend the creation of a special regime with simplified procedures for small-scale traders.[90]

7. **Women are asked for sexual favors in return for quick clearance across borders, and they get threatened with detention at the borders after getting unexplained assessments whenever they do not submit to advances.**[91] Female entrepreneurs noted that bribery and corruption are so rife that accepting and offering bribes are a normal occurrence.[92] It was highlighted that due to lack of information about procedures and requirements, informal cross-border traders could at times offer bribes on goods that are exempted from duties.[93]

8. **There are several solutions that women engaged in trade in Lesotho (formal and informal) and those involved in cross-border trade (formal and informal) have noted as vital to address.**[94] To Illustrate, the development of a country-

[80] Ibid.
[81] Ibid.
[82] USAID. 2016. WOMEN CROSSBORDER TRADERS IN SOUTHERN AFRICA Contributions, Constraints, and Opportunities in Malawi and Botswana. https://banyanglobal.com/wp-content/uploads/2017/05/ICBT-Gender-Assessment-Report_Final_4-30-2016_DEC.pdf.
[83] Ibid.
[84] Ibid.
[85] Ibid.
[86] UNWOMEN. UNDP (2022). The Engine of Trade in Africa. Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women And Youth in Trade work for Development: https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.
[87] Ibid.
[88] Ibid.
[89] Ibid.
[90] Ibid.
[91] The African Continental Free Trade Area (AfCFTA) Secretariat, the United Nations Development Programme (UNDP) and UN Women. (2022). The Engine of Trade in Africa: Amplifying the voices of women across Africa on how to make the AfCFTA Protocol on Women and Youth in Trade work for development report. https://africa.unwomen.org/sites/default/files/2022-10/Engine%20of%20Trade%20in%20Africa%20report%20Amplifying%20the%20voices%20of%20women%20across%20Africa%20on%20how%20to%20make%20the%20AfCFTA%20Protocol%20on%20Women%20and%20Youth%20in%20Tra.pdf.
[92] Ibid.
[93] Ibid.
[94] Ibid.

wide strategy that will educate and facilitate ease of business registration/licensing of informal businesses through their associations and affiliations.[95] Another recommendation noted ensuring the inclusion of MSMEs in the discussions leading to the construction of one-stop border posts that will support their cross-border business operations.[96] Lastly, encouraging the formalization of businesses to promote participation in external markets and prioritize the development of a Simplified Trade Regime between Lesotho and RSA with a view to enable simplified customs declarations and border processes to facilitate female traders and informal traders.[97]

9. **Besides barriers in the trade sector, women in Lesotho face barriers to participate in the road industry. Of the people employed in the construction sector only 5 percent are women, compared to 95 percent of men.**[98] Barriers to participate in the sector can be found during their recruitment (lack of gender sensitive practices, limited access to information, and absence of training and skill development) and retention (no work-life family balance policies, and absence of mechanisms to present cases of sexual harassment) along the job cycle. Gender stereotypes also permeate along the job cycle by posing limitations from families, communities and employers are road works are mainly considered masculine.

Activities

10. **The project will finance a gender assessment and development of a GAP to promote women's employment in the road sector and to facilitate trade for women informal traders (Component 3).** The GAP will define specific activities derived from the assessment and indicators to track progress. To close employment gaps in the road works, under Component 1, the project will promote the employment in road works of women through the implementation of gender sensitive recruitment strategies, collaboration with women's groups and Non-Governmental Organizations, establishment of mechanism to present sexual harassment in the workplace, as well as piloting procurement clauses to encourage the hiring and training of women. The project will also explore opportunities to engage women-led self-help groups on long-term road off roadway or walk path maintenance work. Under Component 2, the assessment will inform financing the installation of help desks that include a gender perspective by providing targeted information for instance on safe mobility routes and modes of transport, how to present reports of sexual harassment, registration and licensing for informal businesses, applicable international and regional trade agreements, and others identified through the gender assessment. Component 2 will also finance violence prevention environmental and OHS design at the OSBP on the Lesotho side. Skills development for women traders, customs officials, and women in road works will be financed by Component 3.

[95] Ibid.
[96] Ibid.
[97] Ibid.
[98] ILOSTAT (2020). Data on Economic participation by economic activity. https://ilostat.ilo.org/data/