

P000736-CIV July 14, 2023

Sovereign-Backed Financing

Approval Project Document P000736 Republic of Côte d'Ivoire: Inclusive Connectivity and Rural Infrastructure Project

Indicative approval route: President

Exceptions to delegation triggered: Nil

# **Currency Equivalents**

(On April 30, 2023)

Currency Unit – West African CFA Francs (XOF) XOF1.00 = USD0.00168 USD1.00 = XOF589.512 XOF1.00 = EUR0.00152EUR1.00 = XOF655.957

# Borrower's Fiscal year

1 January – 31 December

# Abbreviations

	Road Management Agency (Agence de Gestion des Routes)
BCEAO	Central Bank of West African States (Banque Centrale des Etats de
002/10	l'Afrique de l'Ouest)
CBA	Cost-Benefit Analysis
CC-PRICI	Coordination Unit, Côte d'Ivoire Infrastructure Renaissance Project (Cellule de Coordination des Projets d'Infrastructures en Côte d'Ivoire)
COVID-19	Coronavirus Disease 2019
DA	Designated Account
EIRR	Economic Internal Rate of Return
ES	Environmental and Social
ESF	Environmental and Social Framework (of WB)
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy (of AIIB)
EUR	Euros
FER	Road Maintenance Fund (Fonds d'Entretien Routier)
GBV	Gender Based Violence
GOCI	Government of Côte d'Ivoire
GRM	Grievance Redress Mechanism
IDA	International Development Association
	Investment Project Financing
	Inter-Ministerial Steering Committee
	Kilometer
	Kilometei Laber Managament Broadura
	Monitoring and Evaluation
MCC	Millennium Challenge Corporation
MDB	Multilateral Development Bank
MEER	Ministry of Equipment and Road Maintenance (Ministère de l'Equipement et
	de l'Entretien Routier)
MEF	Ministry of Economy and Finance
MRAI	Modified Road Access Index
NDC	Nationally Determined Contributions
ND-GAIN	Notre Dame Global Adaptation Initiative
NPV	Net Present Value
OHS	Occupational Health and Safety
OPBRC	Output and Performance Based Road Contract
OSR	Office of Road Safety (Office de la Sécurité Routière)
PA	Paris Agreement
PAP	Project Affected Person
PBC	Performance-Based Condition
PCU	Project Coordination Unit
PIM	Project Implementation Manual
PND	National Development Plan (Plan National du Developpement)
PPSD	Project Procurement Strategy for Development
RUU	Regional Consultative Committee
	Results Monitoring Framework
	Resettiement Policy Flamework
	Stakeholder Engagement Den
SEF	Stakeholder Eligagement Flam Specialized Implementation Agency
ТА	Technical Assistance
	United States Dollars
WAFMU	Western African Economic and Monetary Union
WB	World Bank
XOF	West African CFA Francs

# CONTENTS

1.	SUMMARY SHEET	2
2.	PROJECT DESCRIPTION	5
A. B. C. D. E.	Project Overview Rationale Components Cost and Financing Plan Implementation Arrangements	5 6 10 14 15
3.	PROJECT ASSESSMENT	18
A. B	Technical Economic and Financial Analysis	
C.	Fiduciary and Governance	25
D.	Environmental and Social	28
Ε.	Operational Policy on International Relations	
F.	Risks and Mitigation Measures	
Anr	nex 1: Results Monitoring Framework	
Anr	nex 2: Performance-Based Conditions Matrix	
Ann	nex J. France Will Asia	
Δnr	nex 5: Member and Sector Context	41 <i>1</i> 7
Anr	nex 6: Paris Agreement Alignment Assessment	47 50
Anr	nex 7: Country Credit Fact Sheet	
, u ii		

,	1. Summary Sheet
Project No.	P000736
Project Name	Inclusive Connectivity and Rural Infrastructure Project
Asian Infrastructure Investment Bank (AIIB) Member	Republic of Côte d'Ivoire
Borrower	Republic of Côte d'Ivoire
Project Implementation Entity	Ministry of Infrastructure and Road Maintenance
Sector Subsector	Transport Roads
Alignment with AIIB's thematic priorities	Green infrastructure; Connectivity and Regional Cooperation
Project Objective	The Project objective is to provide inclusive and climate resilient rural road connectivity in selected underserved regions of Côte d'Ivoire.
Project Description	<ul> <li>The Project will involve upgrading and climate proofing of strategic and non-strategic roads in eleven regions of northern Côte d'Ivoire. It will provide climate resilient transport connectivity and improve access to schools, health services, and centers of economic activity in northern Côte d'Ivoire. The Project will also support the development of climate resilient rural socio-economic infrastructure including key infrastructure in the agricultural logistics chain which, together with the enhanced connectivity, will facilitate trade notably with Asia. Finally, the Project will build institutional capacity to foster the sustainability of the road sector, in areas such as road safety, road asset management, and road maintenance planning and execution. The Project will be co-financed with the World Bank (WB), through the International Development Association (IDA).</li> <li>The Project will comprise 5 components:         <ol> <li>Inclusive and resilient rural connectivity infrastructure. This is the largest component of the Project. It will involve the construction and rehabilitation of climate resilient strategic roads, periodic and routine climate-resilient maintenance, and climate-resilience improvement of the non-strategic network.</li> <li>Rural socio-economic infrastructure, which will include consolidation of the agricultural logistics chain.</li> <li>Capacity building and support to the institutional and sector frameworks for sustainability of the development objectives.</li> </ol> </li></ul>
	4. Support to project management.
	5. Contingency emergency response component.
	AIIB will jointly co-finance the Project with the World Bank (IDA). The AIIB financing will be allocated to component 1, component 2.1, and all of component 3.
Implementation Period	Jun. 01, 2023 Jun. 30, 2029
Expected Loan Closing Date	Jun. 30, 2029
Proposed Amount of AIIB	200 (equivalent)
Financing Plan	Government of Côte d'Ivoire: USD 71.2 million
	IDA Credit: USD 300 million
	AIIB: USD 200 million equivalent

ES Category (or AIIB equivalent, if using another MDB's ES Policy)	В
ES Category Comments	The environmental and social (ES) risks are linked to land
	acquisition and resettlement of project affected persons resulting from works that may require acquisition of strips of land to improve road alignments or build/upgrade associated road infrastructure; gender-based violence; labor and Occupational Health and Safety; community health and safety; and efficient use of natural resources. The WB has categorized the ES risks of the project as "Substantial" (which is equivalent to Category B if AIIB's ESP were applicable).
Risk (Low/Medium/High)	Medium
Conditions of Effectiveness	<ul> <li>The Co-financing Agreement has been executed on behalf of the Co-financier and the Borrower, and all conditions precedent to its effectiveness have been fulfilled; and</li> <li>The Project Co-lenders' Agreement has been executed on behalf of the Bank and the Co-financier</li> </ul>
Key Covenants	No later than three months after the Effective Date, the Borrower shall establish a decentralized office of the Project Coordination Unit (PCU) in one of the Selected Regions headed by the deputy- coordinator.
	The Borrower shall, no later than three months after the Effective Date, establish and thereafter maintain, a committee "Regional Consultative Committee", in each of the Selected Regions, each with terms of reference, composition and resources acceptable to the Bank.
	The Borrower shall recruit or assign, no later than three months after the Effective Date, the following additional key staff to strengthen the PCU: (i) one deputy-coordinator responsible for facilitating the day-to-day operations and follow-up of Project activities; (ii) environmental and social specialists as described in the ESCP; and (iii) one security specialist to monitor the security situation.
	The Borrower shall, not later than one month after the Effective Date for the Fiscal Year in which Loan Agreement shall become effective, and November 30 of each subsequent Fiscal Year, consolidate and furnish to the Bank and the Co-financier for the Bank's and the Co-financier's no objection, a consolidated annual program of activities proposed for implementation under the Project during the following Fiscal Year, together with a proposed budget which shall include the funds from the Financing, as well as any other funds which may become available for the implementation of the Project.
Conditions for Disbursement	No withdrawal shall be made for any category linked with performance-based conditions, until and unless the Borrower has furnished the evidence satisfactory to the Bank that the respective performance-based conditions have been satisfied before the respective deadlines.
Retroactive Financing (Loan % and dates)	0
Policy Waivers Requested	No
Policy Assurance	The Vice President, Policy and Strategy, confirms an overall assurance that the proposed Bank Financing complies with the applicable Bank operational policies.
Economic Capital (Ecap) Consumption (USDm)	53.52

President	Liqun Jin
Vice President	Konstantin Limitovskiy
Director General	Gregory Liu
Team Leader	Suzanne Shaw, Infrastructure Sector Economist
Back-up Team Leader	Manuel Benard, Senior Investment Operations Specialist -
	Transport
Team Members	Bernardita Saez, Project Counsel
	Winnie Xuan Zhao, Legal Associate
	Shodi Nazarov, Financial Management Specialist
	Jurminla Jurminla, Procurement Specialist
	Pedro Ferraz, Environment & Social Development Specialist
	Thao Do, Finance Officer
	Mengmeng He, Finance Officer
	Bilal Muhammad Khan, Economist
	Nami Battsogt, Investment Analyst
	Furu Hu, Project Assistant
Credit Officer	Liang Xue

# 2. Project Description

### A. Project Overview

1. **Project Objective.** The Project objective is to provide inclusive and climate resilient rural road connectivity in selected underserved regions in Côte d'Ivoire.

2. **Project Description.** The Project will involve upgrading and climate proofing of strategic and non-strategic roads in eleven regions of northern Côte d'Ivoire. It will provide climate resilient transport connectivity and improve access to schools, health services, and centers of economic activity in northern Côte d'Ivoire. The Project will also support the development of climate resilient rural socio-economic infrastructure including key infrastructure in the agricultural logistics chain which, together with the enhanced connectivity, will facilitate trade notably with Asia. Finally, the Project will build institutional capacity to foster the sustainability of the road sector in areas such as road safety, road asset management, and road maintenance planning and execution. The Project will be co-financed with World Bank (WB) through International Development Association (IDA).

3. **Expected Results.** Progress towards achieving the Project objective will be measured through the following Project indicators:

- 1) Modified Road Access Index (MRAI) in the selected regions (percentage of persons with access to an all-season passable road within five kilometers);
- 2) Population provided with improved climate resilient road access in the eleven regions and the proportion of which are female (number of persons within five kilometers, percentage); and
- 3) Population reporting satisfaction with the quality of roads in their area (percentage, within five kilometers).

Indicators 2) and 3) will be accompanied by intermediate indicators relevant to connectivity through trade with Asia. The detailed Results Monitoring Framework (RMF) is included in **Annex 1: Results Monitoring Framework**. Progress against indicators of the RMF will be monitored by the WB and the AIIB during implementation to confirm that the Project is progressing in accordance with the implementation plan.

4. **Expected Beneficiaries.** Through the strategic roads that will be built or maintained across the 11 regions, the Project will directly benefit the 3.67 million persons living within five kilometers of the targeted strategic roads (compared to a total population of 4.08 million, based on population figures of the 2014 census). The Project will also benefit persons living beyond the five-kilometer threshold, through the improvements to be made to non-strategic roads. The main anticipated (direct) benefits include reduced travel time; greater consistency in travel times; improved connectivity and access to social infrastructure and centers of economic activity and trade; and enhanced climate resilient economic and social infrastructure. These are expected to reduce post-harvest losses, lower transportation costs, and improve intra- and interregional transportation of agricultural produce resulting in greater economic surplus from trade, especially trade with Asia as the main market for regions' key agricultural products. Key beneficiaries include farmers who will benefit from improved connectivity to markets

(regional, national, and international), strengthened agri-logistics infrastructure and, consequently, more efficient trade with Asia. Women are also expected to be key beneficiaries of the Project, as they are disproportionately affected by the limited access to healthcare, education, and economic facilities due to the poor quality of the existing road network and infrastructure. Finally, public, and private sector stakeholders in the road transport sector will benefit from the capacity building and sector support activities to be provided through the Project.

#### B. Rationale

5. **Strategic Fit for AllB.** The proposed Project is well-aligned with AllB's thematic priorities as follows:

- Green Infrastructure. Côte d'Ivoire is among the most vulnerable countries to 1) climate change due to its geographic location, economic structure and low preparedness. Climate models project an increase in the number of days with heavy precipitation, and the annual number of very hot days (days with daily maximum temperature above 35 °C) is projected to rise substantially and with high certainty, particularly in northern Côte d'Ivoire.<sup>1</sup> The road network is particularly subject to climate impacts. Significant precipitation events have repeatedly led to flooding, specifically to flash floods and landslides that destroy or damage both unpaved and paved roads, causing significant disruptions across the network. Extreme heat can deform road surfaces leading to impassable roads and shorter lifespans. Climate resilience features, including nature-based solutions, will be incorporated into the planning and design of the roads to be rehabilitated and in the rural infrastructure to be implemented under the Project. This will minimize disturbances in the transportation network and improve all-weather resilience of rural infrastructure. Climate resilience features include crossing structures, creation of drainage, and waterproofing of roadways.
- Connectivity and Regional Cooperation. The supported roads will strengthen 2) rural-urban linkages and, by extension, local and international connectivity of the northern regions. The rural areas of northern Côte d'Ivoire are the main centers of agricultural production, while the primary sites for collection and onward transportation of agricultural products for trade are located in urban centers. These centers are equipped with agro-processing facilities and good connections to the main trade hubs of Côte d'Ivoire - including the port of Abidjan. For instance, the 238-kilometer Dianra-Bouandougou-Bouaké road which will be rehabilitated under the Project, is highly strategic for opening up the Béré region - the main agricultural production area of the eleven regions - and for connecting northern Côte d'Ivoire, as a whole, to the town of Bouaké. Bouaké is the second most significant agricultural processing and consumption center in the country and is located on the main motorway to Abidjan for easy access to the Abidjan port, the main trading port of the country. Through this, and by strengthening the associated rural-urban linkages in the northern regions, the Project will facilitate greater international connectivity and trade of the regions' agricultural products,

<sup>&</sup>lt;sup>1</sup> Federal Ministry for Economic Cooperation and Development, 2019. <u>Climate Risk Profile: Côte d'Ivoire.</u>

primarily cotton and cashews, for which Asia is the main market. The new and rehabilitated roads are expected to provide all-weather connectivity.

6. Sector and non-Sector Strategies. By upgrading existing transport infrastructure, the Project is aligned with AllB's Transport Sector Strategy. The Project is also aligned with the Bank's Non-Regional Member Strategy based on Principle 1 of the Strategy on Financing Operations in Non-Regional Members<sup>2</sup> as the investment supports trade with Asia. Currently, the trade of cotton and cashews accounts for 40-60 percent of Côte d'Ivoire's total exports to Asia. On average, 98 percent of raw cashew exports and 87 percent of cotton exports are destined for Asian markets (based on 2015-2020 data). Overall trade activity between Côte d'Ivoire and Asia showed a compound annual growth rate of 12 percent over the period 2015-2020. By improving rural-urban linkages, and integrating climate resilience measures for all-weather connectivity, the Project will promote more efficient international trade with Asia. In addition, the Project will strengthen non-road rural infrastructure in the agricultural logistics chain which will facilitate trade, including with Asia.

Paris Alignment and Climate Finance. The Project comprises investments in 7. rural roads to enhance access, resilience and connectivity without causing deforestation. Based on the Joint Multilateral Development Bank (MDB) Assessment Framework for Paris Alignment for Direct Investment Operations,<sup>3</sup> the Project is considered universally aligned with the Agreement's mitigation goals. The Project is also aligned with the adaptation goals of the Paris Agreement (PA) as it considers the resilience of the relevant infrastructure assets and will incorporate climate resilience features in the design of roads and rural infrastructure. These climate resilience features will enhance the adaptive capacity of the target regions and reduce vulnerability to climate change impacts. Moreover, the Project is not inconsistent with the sectoral or national priorities for climate resilience outlined in the country's Nationally Determined Contributions (NDC).<sup>4</sup> Details on the PA-alignment assessment are provided in Annex 6: Paris Agreement Alignment Assessment. The Project will contribute to adaptation finance. With respect to AIIB financing, the expected contribution is USD 102 million or 51 percent of AIIB financing.

8. Côte d'Ivoire ranks 141<sup>st</sup> out of 182 countries on the Notre Dame Global Adaptation Initiative (ND-GAIN) country index.<sup>5</sup> Côte d'Ivoire is among the most vulnerable countries to climate change<sup>6</sup> due to its geographic location, economic structure – which strongly depends on agriculture which is highly vulnerable to climate change effects – and low preparedness. The Project will incorporate climate resilience standards in the design specifications for the unpaved and paved strategic roads to be upgraded so as to reduce damage from extreme heat, flooding and erosion. Côte d'Ivoire's 2030 objective for adaptation is to reduce vulnerability and increase resilience in five priority sectors: (i) agriculture, livestock, aquaculture; (ii) forests and land use; (iii)

<sup>&</sup>lt;sup>2</sup> AIIB, 2018, <u>Strategy on Financing Operations in Non-Regional Members</u>

<sup>&</sup>lt;sup>3</sup> <u>BB1 and BB2 Technical Note. Joint MDB Assessment Framework for Paris Alignment for Direct Investment Operations (Working Draft as of November 2021)</u>

<sup>&</sup>lt;sup>4</sup> Government of Côte d'Ivoire, 2022, <u>Côte d'Ivoire Second Nationally Determined Contributions</u>

<sup>&</sup>lt;sup>5</sup> University of Notre Dame, 2023, <u>ND-GAIN Country Index Database</u>. The ND-GAIN index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

<sup>&</sup>lt;sup>6</sup> Government of Côte d'Ivoire, 2022, <u>Côte d'Ivoire Second Nationally Determined Contributions</u>

water resources; (iv) health; and (v) coastal areas.<sup>7</sup> The Project will support the resilience objectives of the water sector and contribute to cross-cutting measures to build climate resilience awareness and capacity. Specific resilience measures outlined in Côte d'Ivoire's NDC,<sup>8</sup> to which the Project will contribute, include: (i) improved management of water resources through infrastructure and technology; (ii) capacity building to integrate climate change in territorial planning tools; (iii) reinforcement of monitoring of adaptation measures in the territories. Through the incorporation of the "Green Roads for Water" approach, the Project will contribute to flood risk mitigation and water management solutions by waterproofing roadways and improving drainage and groundwater recharge.

9. Value Addition by AIIB. Beyond the provision of financing, AIIB's participation will allow for a more comprehensive and far-reaching focus on the link between connectivity and economic development. AIIB's participation will introduce keener attention to enhancing the regions' participation in the international export market. Northern Côte d'Ivoire consists of eleven regions. WB's focus was initially on the six border regions, given their particular vulnerability due to the potential spillover of conflicts in some of the neighboring countries. Improved connectivity in these regions is critical for conflict and violence prevention and would be a key contributor to social and economic resilience, helping to correct disparities between the North and the rest of the country. The border regions were therefore prioritized under the WB's program. AIIB's participation will expand the Project in the remaining five regions which are amongst the highest cotton and cashew producers in Côte d'Ivoire, to facilitate trade with Asia. Trade of cotton and cashew products contributes significantly to the regions' income. As a result, the Project will have an additional focus on the facilitation of movement of goods which will improve economic outcomes for the highly agriculture-dependent northern regions. AIIB's participation will also promote, alongside WB, the incorporation of climate resilience as an integral part of the Project design. The integration of climate resilience in the infrastructure and road strategies to be developed under the Project will reduce disruptions in connectivity, extend the economic life of the infrastructure, and contribute to improved water management in the target regions. In so doing, AIIB's participation will contribute to the continuity and sustainability of the Project's benefits.

10. Value Addition to AIIB. AIIB's first project in Côte d'Ivoire was a vaccination and health strengthening project under the Coronavirus Disease 2019 (COVID-19) Crisis Recovery Facility. The proposed Project will be AIIB's first project in Côte d'Ivoire under the Bank's core mandate of sustainable infrastructure. The Project will help AIIB develop knowledge and expertise in: (i) climate resilience measures for roads, particularly in climate change-vulnerable areas; (ii) road safety; (iii) the use of performance-based conditions and innovative contracting methodologies such as Output and Performance Based Road Contracts (OPBRC). The Project will increase AIIB's impact and visibility in Côte d'Ivoire, strengthening AIIB's presence in the country and the region as a whole. It will also enhance AIIB's capacity to operate in the roads sector, particularly in low-income countries. The Project will broaden and strengthen AIIB's relations with the member by providing the opportunity to work with a new Ministry and its affiliated institutions. The Project will also strengthen AIIB's partnership with the

7 Idem

<sup>&</sup>lt;sup>8</sup> Government of Côte d'Ivoire, 2022, <u>Côte d'Ivoire Second Nationally Determined Contributions</u>

WB (lead co-financer) in Côte d'Ivoire. Finally, the financing will contribute to diversification of AIIB's sovereign-backed finance portfolio.

11. **Lessons Learnt.** The Project is built on the findings of a WB study<sup>9</sup> which proposed a new approach to enhance human capital and economic development through inclusive, equitable and sustainable connectivity. The study concluded that rural connectivity is critical to enhancing accessibility and in reducing the rural-urban divide. At the same time, it identified that connectivity should be accompanied by the provision of basic facilities and services to enable the smallest cities to play a better role in the territories' economic development and in strengthening the rural-urban interface. The Project integrates these learnings by ensuring that interventions to improve connectivity through the road network are accompanied by investments in basic socio-economic infrastructure to increase the benefits that can be derived from greater connectivity.

12. The Project benefits from WB's experience in West Africa. It adopts a multisectoral approach that combines investments in infrastructure, basic services, governance, and community engagement to achieve inclusive development. The Project involves the community in the selection of Project activities to promote social cohesion, as well as ownership and sustainability of investments, and engages women, youth, and minorities in the decision-making process. Lessons learnt from prior WB projects in Côte d'Ivoire highlight the following factors which have been incorporated into the Project: (i) while absorption capacity of the market is high, the capacity of local public and private sector actors is a key element with respect to the success and sustainability of outcomes; (ii) technical issues must be clarified early on to avoid substantial modifications and challenges at implementation stage; and (iii) contract management capacity of public entities requires special attention.

13. AIIB's experiences from earlier projects on rural roads highlight the importance of maintenance for the sustainability of rural road assets after project completion.<sup>10</sup> Strengthening of road maintenance management, including the allocation of appropriate levels of funding and greater use of private sector, are identified as key elements for consideration to strengthen road development and maintenance outcomes. The Project integrates these learnings by: (i) supporting the development of a rural roads' maintenance strategy and making part of the Project's financing conditional on the completion of the strategy, and (ii) promoting greater involvement of private sector through the use of OPBRCs. Lessons from earlier AIIB projects,<sup>11 12</sup> also point to the importance of capacity building of the implementing and coordinating entities to foster effective project implementation and enhanced sustainability of project outcomes. The Project includes the provision of technical assistance for capacity building of the Project.

<sup>&</sup>lt;sup>9</sup> WB, 2021, Roads for Inclusive and Resilient Access to Basic Socio-Economic Facilities in Northern Côte d'Ivoire

<sup>&</sup>lt;sup>10</sup> India: Gujarat Rural Roads

<sup>&</sup>lt;sup>11</sup> Idem

<sup>&</sup>lt;sup>12</sup> India: Assam Secondary Road Network Improvement Project

The Project also benefits from lessons learnt from earlier work<sup>13</sup> in relation to the 14. application of OPBRCs. Results from the application of OPBRCs in other projects, indicate that the use of OPBRCs provides several benefits for road asset management, including: (i) OPBRCs produce benefits in terms of cost certainty, predictability of results, faster completion of emergency repairs, risk transfer to the private sector, and could lower long-term procurement costs, and facilitate contract administration; (ii) users are generally more satisfied due to the better quality of service; and (iii) OPBRCs help contractors and governments to focus on the long-term efficiency of road investments and carefully define service levels to avoid underinvesting or overinvesting. The Project will therefore seek to integrate OPBRCs to foster greater efficiency and long-term sustainability of road asset management in the target areas. At the same time, OPBRCs are relatively more complex to prepare and implement (compared to traditional contracts) for many public entities and private sector firms. As the OPBRC concept is relatively new to the rural roads sector in northern Côte d'Ivoire, a pilot will be conducted at the start of the Project to prepare the government and private sector for an eventual scaleup. The pilot will also allow the WB, AIIB and the government to assess and decide whether and how to scale-up the OPBRC approach.

# C. Components

15. The Project will provide infrastructure investment and technical assistance to address immediate and long-term connectivity challenges. It comprises five components:

- 1) Inclusive and resilient rural connectivity infrastructure;
- 2) Rural socio-economic infrastructure;
- 3) Support to institutional framework and sector strategies and capacity building;
- 4) Support to project management; and
- 5) Contingency emergency response.

AIIB will jointly co-finance the Project with the WB. The AIIB financing will be allocated to Component 1, sub-component 2.1, and Component 3. These components are prioritized based on their alignment with AIIB's thematic priorities, and sector and non-sector strategies.

16. **Component 1.** Inclusive and resilient rural connectivity infrastructure (USD 449.1 million – USD 181.7 million, AIIB; USD 196.2 million, WB; USD 71.2 million, Government of Côte d'Ivoire (GOCI)). This is the largest component of the Project. It will involve rehabilitation and improvement of the strategic and non-strategic road network and will include strengthening the climate resilience of roads for all-weather usability. The majority of the resources will be dedicated to the development and rehabilitation of the strategic road network. The strategic network of each region is defined based on: (i) maximum contribution to MRAI to connect the most agglomerated populations; and (ii) direct connection to socio-economic infrastructure (such as markets, schools, and health

<sup>&</sup>lt;sup>13</sup> Ogita, Satoshi; Palsson, Gylfi; Mills, Leslie Nii Odartey, 2022. <u>Assessing Economic Efficiency of Long-</u> <u>Term Road Asset Management Strategies</u>. World Bank Group.

facilities). The Project will increase the MRAI to 90 percent in each of the regions. Resources are also dedicated to non-strategic roads to render them "passable" since their usability influences the traffic flow of the overall road network. The entire network was mapped<sup>14</sup> and four categories of roads distinguished, in addition to the existing paved network: (i) strategic roads under asphalting with government funding; (ii) strategic roads eligible for development/rehabilitation under the Project; (iii) strategic roads to be maintained, developed or rehabilitated under previous programs; and (iv) non-strategic roads i.e., unpaved roads. The component comprises three subcomponents:

- 1) Sub-component 1.1. Rehabilitation and upgrading of strategic roads to climate-resilient standards (USD 294.8 million USD 141.7 million, AIIB; USD 153.1 million, WB). This sub-component will finance the rehabilitation of 7,450 kilometers of unpaved roads in the strategic network. It will complete the ongoing works in the strategic network, enhance climate resilience of roads, and restore all-season passability through: (i) rehabilitation and upgrading of crossing structures; (ii) creation of drainage and waterproofing of roadways; and (iii) improvements in road durability. The sub-component will also finance the asphalting and climate resilient upgrading of the Dianra-Bouandougou-Bouaké road. This 238-kilometer (km) long road is highly strategic for opening up the Béré region the main agricultural production area of the eleven regions and for connecting northern Côte d'Ivoire, as a whole, to the town of Bouaké, the second most significant agricultural processing and consumption center in the country, after Abidjan.
- 2) Sub-component 1.2. Periodic and routine climate-resilient maintenance for strategic network (USD 127.5 million USD 27.1 million, AIIB; USD 29.2 million, WB; USD 71.2 million, GOCI). This sub-component will finance the improved climate resilience of strategic roads (15,250 kilometers) in all eleven regions through periodic and routine maintenance throughout the Project. It will maintain the accessibility level of all unpaved roads in the strategic network, including the 7,450 kilometers to be rehabilitated under sub-component 1.1. The works consist primarily of facilitating rainwater drainage and repairing structures and carriageways to keep the design lifespan of the roads.
- 3) Sub-component 1.3. Spot climate-resilient improvement of the non-strategic network (USD 26.8 million USD 12.9 million, AIIB; USD 13.9 million, WB). This sub-component focuses on the rest of the network (23,000 kilometers, including sections within the five-kilometer MRAI) for which the targeted service level is the absence of traffic disruption points. Interventions will focus on roads classified as "impassable" and involve construction or rehabilitation of crossing structures (bridges and culverts). At least 600 structures will be rehabilitated in the eleven regions. Sections for intervention will be determined based on an analysis of the climate change vulnerability (level and duration of flooding) of the long list of roads developed by the regional councils in cooperation with agricultural professional associations and the road management agency. The study for the first phase of works, which covers the regions of Poro, Bagoué and

<sup>&</sup>lt;sup>14</sup> Mapped by WB based on data provided by road management agency, AGEROUTE.

Tchologo, will be completed by end-2023. The studies for the other regions will be conducted in phases, in line with the phased approach for the execution of roadworks under the Project.

17. **Component 2**. Rural socio-economic infrastructure (USD 76 million – USD 12.5 million, AIIB; USD 63.5 million, WB). This component will develop and improve climate resilience of key socio-economic infrastructure to complement investments of component 1 and maximize impact. It comprises five sub-components: (i) consolidation of the agricultural logistics chain; (ii) pastoral connectivity – rehabilitation of transhumance corridors and tracks; (iii) tree-planting; (iv) strengthening social cohesion through support to social services; and (v) support to rural mobility. AIIB will finance sub-component 2.1 only.

- 1) Sub-component 2.1. Consolidation of the agricultural logistics chain (USD 26.2 million - USD 12.5 million, AIIB; USD 13.7 million WB). This sub-component aims to develop the most important rural markets and complementary agricultural collection points (public infrastructure only) in the eleven regions, integrating climate resilience features to minimize disruptions to agricultural logistics. The sites for intervention will be selected from a long list compiled by the regional councils. Site-selection will be informed by a study, which will take into the account the following factors: (i) exposure to climate risks; (ii) proximity to an area of high agricultural production; (iii) accessibility via a year-round passable road, or one that will be by the end of the Project; (iv) relative proximity to the main urban centers; (v) volume of food products on the market; (vi) existence of well-marked agricultural and marketing channels; and (vii) existence of professional agricultural organizations that are established and active. The site selection study will include a gender assessment to identify entry points in the intervention sites for women's economic empowerment to promote their productive involvement in the value chain. Facilities will provide weather protection and storage facilities for crops, and amenities for market users; facilities will be basic but functional. This sub-component will also support the development of centers to facilitate collection, purchase, and transfer of produce to markets, and an agricultural trade information system in each selected market.
- Sub-component 2.2. Improvement of pastoral connectivity (USD 6.0 million, WB). This seeks to restore conditions for orderly, peaceful and sustainable management of transhumance routes, and involves the rehabilitation of 900 km of transhumance corridors and the development of 65 transhumance trails.
- 3) **Sub-component 2.3.** Tree planting and environmental education (USD 5.2 million, WB). This aims to contribute to the country's climate change mitigation and adaptation policy, through afforestation along roads, schools, health centers, villages, and water bodies.
- 4) Sub-component 2.4. Strengthening social cohesion through support to social services (USD 37.5 million, WB). This seeks to improve facilities in selected schools and health centers, and enhance living conditions in towns, in 49 noncommunalized territories of the six border regions.

5) **Sub-component 2.5.** Support to rural mobility (USD 1.1 million, WB). This subcomponent will support the development of intermediate means of transport, namely tricycles, which are commonly used for transportation in this part of the country.

18. **Component 3.** Support to institutional framework and sector strategies and capacity building (USD 11.8 million – USD 5.7 million, AIIB; USD 6.1 million, WB). This component will enhance the institutional capacity of the sector, strengthen sector management, and build awareness amongst concerned actors, towards the sustainability of the Project development objectives. It comprises five sub-components:

- 1) Sub-component 3.1. Capacity building. This will support building of technical skills amongst the key actors, primarily small and medium enterprises (SMEs), involved in road maintenance management. It includes training in areas such as: climate adaptation/resilience measures, management of construction companies, contracts management, bid preparation, and works control. The detailed program will be developed through a capacity needs assessment covering all actors, including public authorities, and will be executed in conjunction with relevant national structures. In addition, given the innovative nature of some aspects of the Project e.g., nature-based climate resilience measures and OPBRC, technical assistance (TA), including hands-on support during implementation, will be provided to the implementing agencies of the Project. The TA will be provided by an international firm to be located within the Project Coordination Unit (PCU), to assist all implementing agencies.
- 2) Sub-component 3.2. Support to road sector management. This will include activities to provide over-arching frameworks and strategies for: (i) road network planning and investment; (ii) management of rural roads; (iii) road maintenance; and (iv) road sector climate change action. These interventions will enhance the overall efficiency and responsiveness of road sector management.
- 3) **Sub-component 3.3.** Support to road safety in rural areas. This will focus on awareness-raising amongst communities and schoolchildren, and the training of road safety inspectors in the practice of audits, including on unpaved roads.
- 4) **Sub-component 3.4.** Support for the climate agenda. This will include the rehabilitation and construction of meteorological facilities in the eleven regions.

19. **Component 4.** Support to Project management (USD 34.2 million, WB). This comprises three sub-components:

- 1) **Sub-component 4.1.** TA to Project coordination. This will finance TA to the PCU for Project preparation, implementation, and completion.
- 2) Sub-component 4.2. Audits. This will finance external financial, technical, road safety, environmental and social audits of the Project. Technical audits will be systematically conducted throughout the works, and recommendations implemented. A technical auditor will be mobilized within this framework to verify the fulfillment of disbursement conditions related to maintenance (refer to paragraph 34).

3) **Sub-component 4.3.** Contribution to Project management. This will finance Project management related costs not covered by counterpart funding, including salaries and travel expenses of the staff of the PCU, and implementing agencies, public information, and operating costs and equipment of the PCU.

20. **Component 5.** Contingency emergency response (USD 0 million). This is an unfunded, contingency component that will allow, based on a justified request from the Borrower, for rapid reallocation of uncommitted WB and AIIB loan resources to address an eligible emergency event. The conditions under which this component may be triggered, and relevant procedures to be followed, will be detailed in a dedicated section of the project implementation manual.

# D. Cost and Financing Plan

21. **Project Cost.** The total Project cost is USD 571.2 million, to be financed as follows: (i) a sovereign-backed loan of USD 200 million from AIIB; (ii) a sovereign-backed loan (IDA credit) of USD 300 million from WB; and (iii) USD 71.2 million counterpart financing from GOCI. The indicative financing plan is given in **Table 1**.

Item	Project Cost (USDm)	Financing (USDm and %)		d %)
		AIIB	WB	GOCI
Component 1. Inclusive and resilient rural	449.1	181.7	196.2	71.2
connectivity infrastructure		(167.2 EURm)		
1.1 Construction/Rehabilitation of Climate- Resilient Strategic Roads	294.8	141.7	153.1	0
1.1a Rehabilitation of unpaved rural roads	134.0	64.4	69.6	0
1.1b Upgrading of the Dianra- Bouandougou-Bouaké road (paving)	160.8	77.3	83.5	0
1.2 Periodic and Routine Climate-Resilient Maintenance	127.5	27.1	29.2	71.2
1.3 Spot climate-resilient improvement of Non- Strategic Network	26.8	12.9	13.9	0
Component 2. Rural socio-economic infrastructure	76.0	<b>12.6</b> (11.6 EURm)	63.4	0
2.1 Consolidation of the Agricultural Logistics Chain	26.2	12.6	13.6	0
2.2 Pastoral Connectivity – Rehabilitation of Transhumance Corridors/Tracks	6.0	0.0	6.0	0
2.3 Tree Planting	5.2	0	5.2	0
2.4 Strengthening Social Cohesion through Support to Social Services	37.5	0	37.5	0
2.5 Support to Rural Mobility	1.1	0	1.1	0
Component 3. Support to institutional	11.8	5.7	6.1	0
framework and sector strategies and		(5.2 EURm)		
capacity building				
3.1 Capacity Building	4.1	2	2.2	0
3.2 Support to Road Sector Management	4.6	2.2	2.4	0
3.3 Support to Road Safety in Rural Areas	1.4	0.7	0.7	0
3.4 Support for the Climate Agenda	1.7	0.8	0.9	0

Table 1	. Project	Cost and	Financing	Plan <sup>15</sup>
---------	-----------	----------	-----------	--------------------

<sup>&</sup>lt;sup>15</sup> Differences between the Project Cost amount and the sum of the individual Financing amounts are due to rounding.

Item	Project Cost (USDm)	Financing (USDm and %)		
Component 4. Support to project	34.2	1.2 0 34.2		
management				
4.1 Assistance to project implementation	14.3	0	14.3	0
4.2 Support to Implementation agencies	4.1	0	4.1	0
4.3 Contribution to Project Management	15.8	0	15.8	0
Component 5. Contingency emergency response	0	0	0	0
Grand Total	571.2	<b>200 300</b> (167.2 EURm)		

AIIB and WB will jointly co-finance: component 1; sub-component 2.1; and component 3. The ratio of co-financing is 48.1 percent (AIIB) to 51.9 percent (WB).

22. **Pricing.** The AIIB loan will follow standard pricing applicable to sovereign-backed, variable-spread loans.

# E. Implementation Arrangements

23. **Implementation Period.** The implementation period for the Project is expected to be six years, from June 2023 to June 2029.

24. **Institutional Arrangements.** The Project's institutional arrangements and relevant bodies include: (i) oversight and orientation by an Inter-Ministerial Steering Committee (ISC); (ii) overall coordination of Project activities and partners by the Ministry of Infrastructure and Road Maintenance (Ministère de l'Equipement et de l'Entretien Routier, MEER) through a PCU; (iii) advice on planning and monitoring of Project implementation by Regional Consultative Committees (RCCs); and (iv) technical execution of Project activities by strategic public entities – Specialized Implementation Agencies (SIAs). The ISC will be chaired by the Minister of MEER or a designated representative and will comprise representatives of: (i) ministries in charge of Budget, Regional Development, Finance, Land Tenure, Decentralization, Rural Development, Environment, Hydraulics, Education, Health and Livestock; (ii) the Assembly of Regional Councils and Districts of Côte d'Ivoire; (iii) cotton and cashew nut organizations, to foster inclusivity and good governance.

25. **Implementation Management.** Project implementation will be led by the existing PCU for WB-funded transport projects (known as CC-PRICI – Cellule de Coordination des Projets d'Infrastructures en Côte d'Ivoire), which reports to MEER. The CC-PRICI is experienced in the management of WB-financed projects and is currently managing several WB-financed projects satisfactorily. The PCU will be responsible for: (i) coordinating overall Project implementation; (ii) making Project funds available to implementing agencies in a timely manner; (iii) financial management and reporting for the Project; (iv) providing technical advice to SIAs; and (v) M&E of Project implementation and impacts, and reporting on these to the ISC and relevant stakeholders. The PCU is fully staffed and will be strengthened through the Project in accordance with the identified additional needs of the Project. The PCU, with the support of dedicated personnel and SIAs, will oversee the planning and budgeting of project activities and execute the approved annual work plan and budget. SIAs include regional councils and government agencies. The PCU will coordinate closely with regional

councils of the targeted Project areas to foster local ownership and buy-in for Project activities. SIAs will implement the Project activities that fall within their respective mandates. Under component 1, activities related to strategic roads will be implemented by the Road Management Agency (AGEROUTE); AGEROUTE will work in association with regional councils for spot improvements on non-strategic roads. Under component 2. regional councils will oversee activities under component 2.1. in line within their mandate under decentralization laws i.e., rural markets, agricultural produce collection points, schools and health centers. Under component 3, institutional support activities will be managed by the beneficiary ministries and SIAs; support to road management strategies will be managed by MEER; road safety activities will be implemented by the Office of Road Safety (Office de la Sécurité Routière, OSR); and capacity building activities will be managed by the PCU in collaboration with the various stakeholders. The cc-PRICI will sign delegated management contracts with all SIAs; each contract will define the SIA's roles and responsibilities in implementation. Beneficiary communities will be engaged at various stages of project implementation. RCCs - responsible for monitoring the implementation of Project activities - will be established in the target regions and will include representatives of the ministries represented at the ISC level, local civil society, and local private sector. A Project Implementation Manual (PIM), to be prepared by the PCU, will detail all implementation coordination and management functions within the Project. A management contract will be signed between MEER and CC-PRICI.

26. **Procurement Arrangements.** This Project is jointly co-financed with the WB. As WB is the lead co-financer of the Project, procurement will be conducted in accordance with the WB's Procurement Regulations for Investment Project Financing (IPF) Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated July 1, 2016 (revised November 2017 and August 2018). The WB's Procurement Policy is materially consistent with AlIB's Procurement Policy and therefore deemed fit-for-purpose. The Project will be subject to the WB's Anti-Corruption Guidelines, dated October 15, 2006 (revised in January 2011 and July 1, 2016, and AlIB's Policy on Prohibited Practices. The rights and obligations of co-financers are embodied in the Project Co-Lenders' Agreement.

27. **Financial Management.** The existing CC-PRICI was set up by MEER to implement WB-funded transport projects in the country. MEER will formally assign the CC-PRICI as the implementing entity for the proposed Project prior to effectiveness of the financing. The CC-PRICI has sufficient finance and accounting resources and will be responsible for the overall Project financial management and disbursement work. The CC-PRICI will adopt the accrual basis accounting system for Project accounting. It will maintain Project accounts and have custody of supporting documents.

28. **Environmental and Social.** The Environmental and Social Management Framework (ESMF) outlines three levels of environmental and social (ES) monitoring: (i) WB (and AIIB) proximity monitoring, which is carried out at the same time as the technical implementation supervision missions – proximity monitoring missions serve to verify the effectiveness of implementation of ES mitigation measures by the contractor(s) and compliance with WB's environmental and social standards; (ii) ES monitoring by the National Environment Agency (Agence Nationale De l'Environnement) to verify compliance with national environmental and social regulations, confirm effective implementation of mitigation measures, and assess interactions between the Project

and the surrounding population; and (iii) inspection, by the ES specialists of the Project Coordination Unit (PCU), with the support of the focal points of the implementing agencies, to verify that ES safeguard requirements are being followed by the contractor(s). The PCU's ES specialists will produce a quarterly summary report on the state of ES management of the sub-projects, the challenges encountered, and the decisions taken for the proper ES management of these sub-projects. The quarterly report will be sent to the WB by the PCU. AIIB and the WB will undertake joint missions for the Project.

29. The PCU is staffed with an environmental specialist and a social specialist. The PCU will be strengthened, for the Project, with additional dedicated staff, including environmental and social specialists to identify ES risks and develop mitigation measures, a social development specialist to address gender issues and citizen engagement, and a security specialist to monitor the security situation. The PCU's ES capacity will be strengthened in line with the findings of the WB's capacity needs assessment. In addition, the ES staff of the PCU and the ES focal points of the SIAs will receive training to strengthen in-house ES capacity, through the Project's TA.

30. Monitoring and Evaluation (M&E). The PCU will continuously monitor the intermediate results indicators of the RMF and report to WB and AIIB on a six-monthly basis. The Project will have an M&E system, which includes a management information system to record all information related to Project activities; this will be the basis for the reporting on physical implementation, financial execution of activities, and results monitoring. The M&E system will incorporate the collection of quantitative data linked to the RMF indicators and qualitative information on Project impacts that cannot be fully assessed with quantitative methods. The Project will conduct an impact evaluation to identify changes in the livelihoods and welfare of target beneficiaries as a result of the Project. The PCU will have overall responsibility to continuously monitor the progress of Project implementation, and the intermediate results indicators of the RMF, and report to WB and AIIB on a six-monthly basis. The PCU will also include in its reporting a summary of the status of implementation of the Project's ES instruments. Implementation progress reports will be submitted within 45 days of the end of each reporting period. WB will conduct semi-annual Implementation Supervision Missions jointly with AIIB and GOCI to assess the status of Project progress and outcomes, monitor compliance with WB policies, and provide recommendations as needed to keep the Project on track to achieve its stated objectives. WB and AIIB will work in close coordination in the monitoring and supervision of Project implementation. The PIM will provide details on the M&E and reporting processes and functions. The M&E section of the PIM will include the RMF as well as several project management and impact indicators.

31. **AIIB's Implementation Support.** While the WB, as the lead co-financier, will take the lead in supervising the Project in accordance with WB's applicable policies and procedures, AIIB will work closely and cooperate with the WB in conducting due diligence and providing Project oversight. A Project Co-Lenders' Agreement will be signed between the two institutions detailing the nature of their cooperation.

# 3. Project Assessment

#### A. Technical

32. **Project Design.** A recent WB study<sup>16</sup> identified that improved and more inclusive rural connectivity in the eleven northern regions can have a positive impact on human capital development and on the populations' resilience to climate change and poverty. At the same time, the study determined that the existing approach to rural roads management in Côte d'Ivoire was sub-optimal in terms of achieving inclusive and meaningful impact. The study developed a strategy and framework to prioritize investments in the sector to promote more inclusive development. The Project design was informed by the results of this analytical work, which was conducted in response to the government's need to develop a more deliberate approach to road sector investments.

- 33. The key recommendations of the study reflected in the Project design include:
  - 1) Targeting greater inclusivity and equity by guaranteeing a minimum level of service for the greatest number of people. This means: (i) providing the largest possible population with access to an all-weather road within five kilometers of their home; (ii) ensuring 100 percent of health and school facilities are accessible via an all-weather road; and (iii) eliminating impassable points as a matter of priority. Accessibility was measured using the MRAI, a variant of the Road Access Index, which takes a more economic perspective. The use of MRAI, instead of Road Access Index: (i) limits over-investment in the tertiary-level network, serving a lower number of beneficiaries, and favors primary and secondary networks, which have an economic dimension; (ii) accounts for the fact that, for small-scale farmers and persons travelling to schools and health centers, level of road comfort is not a crucial issue for the five-kilometer buffer zone; the absence of traffic disruption points is important as is the presence of adequate infrastructure for two-wheelers; (iii) acknowledges that many populations are still located beyond five kilometers from an all-weather passable road. The Project design therefore not only takes into consideration road infrastructure needs based on transport demand but also based on various users' needs and priorities in terms of service-level. For instance, as the main need in relation to low-traffic roads is passability rather than comfort and speed, the focus is on structures (bridges, culverts, and submersible slab structures) to provide all-weather passability.
  - 2) Using road development to catalyze the development of agricultural logistics, as well as social services and community resilience, through improved urban-rural linkage and access to socio-economic infrastructure. With specific reference to agricultural logistics development, the Project design recognizes that rural markets and collection points are both complementary and essential to achieving more inclusive development from enhanced road accessibility. Agricultural products are sold either at collection points (frequently close to the fields) or at rural markets. These trading points are critical in the urban-rural relationship as

<sup>&</sup>lt;sup>16</sup> WB, 2021. Roads for Inclusive and Resilient Access to Basic Socio-Economic Facilities in Northern Côte d'Ivoire.

they are an essential interim point before transfer to larger cities and serve as a platform for the main source of income for rural populations. The focus for the agricultural logistics chain is on improving strategic roads needed to better connect agriculture collection points to secondary urban centers for processing and/or onward transport to national and international trading points. In this context, where distances are large, better road conditions can lead to quicker, more reliable, and affordable transport of crops.

3) Enforcing financing and maintenance of road assets, ensuring the quality of roads throughout their designed lifespan. For road maintenance, which is normally a part of operating costs, WB and AIIB financing is used as an incentive for reforms needed in this sector and is matched with performance-based conditions.

34. Performance-based conditions (PBCs) are integrated in the Project design to build consensus on rural road development strategies and incentivize effective institutional collaboration towards the intended outcomes of the Project. The PBC modality makes part of the financing conditional upon the achievement of specified, measurable intermediary results; these intermediary results are important milestones in building a road management approach that will ensure the sustainability of Project benefits after the Project ends. Specifically sub-component 1.1a and sub-component 1.1b will be partially financed using the WB's IPF with PBCs modality. The matrix of PBCs to be applied are outlined in Annex 2: Performance-Based Conditions Matrix. The PBCs are intermediate results of the Project and are contained in the RMF (refer to Annex 1: Results Monitoring Framework). Sub-component 1.1a is linked to PBCs 1, 2, and 6, and sub-component 1.1b is linked to PBCs 3, 4 and 5. For sub-component 1.1a, approximately 75 percent of Project financing (USD 100 million out of USD 134 million allocated to component 1.1a) is subject to WB's IPF with PBC modality. For subcomponent 1.1b, approximately 56 percent of Project financing (USD 90 million out of USD 160.8 million) is subject to the PBC modality. Additional information on disbursement modalities in relation to PBCs is provided in paragraph 54.

35. Given the large volume of activities, the Project will be implemented in stages. A first tranche of the most important works of component 1 (paved road, rehabilitation of one-third of rural roads, and maintenance of all roads), accounting for almost fifty percent of the financing, will be executed immediately after effectiveness of the financing. In addition, component 2 will be implemented at a subsequent stage, starting with the least complex sub-components.

36. **Operational Sustainability.** Sustainability considerations are integrated into the design of the Project. Beyond the extension of the road network, the Project fosters sustainability by supporting the development and implementation of an appropriate road maintenance strategy. The Project will foster long-term reform of rural roads' management and financing by supporting: (i) development of systematic programming of road maintenance; (ii) strengthening of the governance of road maintenance; (iii) development and introduction of long term OPBRCs; and (iv) road maintenance financing on a degressive basis to allow the Road Maintenance Fund (Fonds d'Entretien Routier, FER) to progressively assume the full financing in accordance with its expected increase in financial health and resources. In addition, under component 3, the Project will strengthen the capacity of relevant public institutions through staff training, more

efficient organization, and building of technical and managerial skills. This component will also support capacity-building of private sector entities to continue the works and remain active beyond the life of the Project. The duration of the Project (six years) is also conducive to the development and implementation of reforms and building of capacities. Finally, the proposed Project was prepared through a participatory process involving consultations with a wide range of partners and stakeholders (government, regional councils, private sector, and civil society), allowing the Project to benefit from their technical and institutional views and expertise, while building stakeholder ownership. Key comments and concerns raised by stakeholders were taken into consideration when developing the ES instruments of the Project and will inform the development of ES mitigation measures. This participatory approach will be maintained during implementation to sustain the shared vision and collaborative relationships built during Project preparation.

# B. Economic and Financial Analysis

37. Economic Analysis. The improved connectivity and socio-economic infrastructure that will be achieved through the Project will result in greater and improved access to socio-economic services (education and health), boosted agricultural production and trade, and improved road safety. These will result in greater inclusion, improved household welfare, and building of the regions' overall economic growth and resilience. The main Project costs are the capital and operation and maintenance costs related to new road development and to the rehabilitation and maintenance of existing roads. The main Project benefits are: (i) direct benefits from reduced vehicle operating costs, reduced travel time for passengers and freight, reduced road maintenance costs from road improvements, and improved road safety; (ii) indirect benefits from the avoided externalities of vehicle greenhouse gas (GHG) emissions. A detailed economic analysis, based on the Cost-Benefit Analysis (CBA) approach, was conducted on a sample of roads targeted under the Project. The roads in the sample were selected to incorporate a range of roads based on the type of roadwork envisaged (asphalting, rehabilitation, maintenance) and to achieve representative coverage across the various regions of the Project. The CBA was conducted to assess the Project's economic impact taking into account the following cases: (i) savings from vehicle operating costs, travel time and road maintenance (the base case); (ii) the base case plus road safety benefits; (iii) the base case plus GHG emission reduction benefits; (iv) the base case plus road safety and GHG emission reduction benefits. The results of the CBA, shown in Table 2, indicate that the investment has positive Net Present Value (NPV) and an economic Internal Rate of Return (EIRR) above ten percent for all cases considered. In the base case, paving of one of the key strategic roads of the Project results in EIRR of 18 percent and NPV of USD 53 million . The maintenance and rehabilitation of rural roads is also economically justified under the base case, as is the Project overall. With the introduction of road safety, overall NPV and EIRR are higher, although the individual economic results for the paved Dianra-Bouandougou segment are somewhat less favorable due to the increased risk of crashes and fatalities from higher speeds on this road once paved. On the other hand, accounting for GHG emissions increases NPV and EIRR for the paved segment due to emissions reductions from improved vehicle fuel efficiency on this segment, but lowers the results for the rural road works due to higher emissions resulting from increased traffic demand. With the inclusion of both road safety and GHG emissions considerations, EIRR and NPV are higher than for the base case,

at 27.9 percent and USD 505 million respectively. A sensitivity test on the base case, indicates the investment is robust in the face of potential under-estimation of costs or over-estimation of benefits. In a scenario with 30 percent higher investment costs and 20 percent lower benefits, overall EIRR remains above 12 percent and NPV positive (refer to **Table 3**). Furthermore, the investment is economically viable at the higher discount rate of 12 percent. Details on the methodology and disaggregated results of the economic analysis are provided in **Annex 4: Economic Analysis**.

Road Works/Sections	ions Base case		Base case + Road Safety		Base case + GHG Reduction		Base case + Road Safety + GHG Reduction	
	EIRR	NPV	EIRR	NPV	EIRR	NPV	EIRR	NPV
	(%)	(MUSD)	(%)	(MUSD)	(%)	(MUSD)	(%)	(MUSD)
Paving: Dianra-Bouandougou	17.9	53.2	16.3	41.3	22.3	86.5	20.8	74.6
Rehabilitation: Rural Roads	26.5	134.2	27.4	144.3	25.6	126.1	26.6	136.3
Maintenance: Rural Roads	31.6	272.1	34.2	316.0	29.9	250.6	32.5	294.5
Overall	26.7	459.5	27.9	501.6	26.7	463.3	27.9	505.4

# Table 2. EIRR and NPV for the Project

# Table 3. Sensitivity Analysis of Cost-Benefit Analysis

			Sensitiv	vity Test		
Road Types/Sections	Base	case	+30% Inves	stment Cost	Sensitivity Test	
			-20% E	Benefits		
	EIRR NPV		EIRR	NPV	NPV at 12%	
	(%)	(MUSD)	(%)	(MUSD)	(MUSD)	
Paving: Dianra-Bouandougou	17.9	53.2	13.5	28.7	34.7	
Rehabilitation: Rural Roads	26.5	134.2	15.7	53.6	103.5	
Maintenance: Rural Roads	31.6	272.1	17.4	109.0	214.8	
Overall	26.7	459.5	12.4	165.1	353.0	

38. Financial Analysis. The Project's financial analysis assesses the ability of the sector to assume the ongoing financing of development and maintenance of the rural road network in northern Côte d'Ivoire. The FER is coming out of a financially vulnerable situation, with payment arrears to contractors and various service providers of over USD 120 million, which was recently resolved. The road sector, and FER as part of this, are already undergoing reform with a view to foster the sustainability of investments in road infrastructure. In 2017, the GOCI entered into a Millennium Challenge Corporation (MCC) Compact grant agreement. As part of the Compact program, the GOCI and the MCC agreed on a package of reforms which address the issue of sustainability of investments in road infrastructure. The main aim of the reforms is to ensure sustainable financing of road maintenance through: (i) increased budget allocation of the FER; (ii) greater participation of private sector in FER's governance. The pre-requisites for entry into force of the Compact required: (i) A 20 percent increase in FER's budget allocation relative to the year preceding entry into force; (ii) A 40 percent increase in participation of private sector or road users in the FER's Board of Directors. In addition, the prerequisites for disbursement for one of the projects of the Compact included: (i) definition of reasonable prudential ratios with which the FER should comply to undertake new borrowing; (ii) development and adoption of a plan, acceptable to MCC, to clear FER's existing debt before the end of the Compact period (2025); (iii) increased participation of private sector or road users in FER's Board of Directors to 50 percent. Finally, during the implementation period of the Compact, the GOCI should propose and implement a plan, acceptable to MCC, for reporting annual increases in FER's budget allocation, or implement, at a minimum, annual increases of 10 percent. The Compact program entered into force in 2019. Thus far, the GOCI has met all the pre-requisites for entry into force of the Compact and has met two (of three) FER reform requirements, which were the pre-requisites for disbursement of one the projects of the Compact. The Minister of Budget and State Portfolio has since redefined the level of resources to be allocated to FER (refer to Table 4), and FER has thus far received in full the planned resources for 2021 and 2022.

Planned Allocation	2021	2022	2023	2024	2025			
XOF million	197.8	218.1	240.4	261.5	261.5			
USD million <sup>1</sup>	356.5	349.7	388.5	420.9	421.8			

**Table 4.** Planned Resource Allocation to FER

1. Exchange rates used for 2021 and 2022 are average annual exchange rates. The exchange rate for 2023 is the average year-to-date rate. The exchange rate for 2024 and 2025 is based on the average of years 2022 and 2023.

39. In terms of governance, a decree to reform the FER is under preparation, to strengthen its governance, include audits, and prevent the use of road charges for activities other than maintenance. In accordance with the Compact, the FER Board of Directors currently has parity in the level of public and private sector participation. The implementation of road sector reforms to achieve sustainable rural roads' management and financing, will be further strengthened through the Project. Specifically, the Project will assist in: (i) providing TA for the programming of road maintenance including procedures to link commitments with available resources; (ii) providing support to implement FER reforms under the decree; (iii) the introduction of long term OPBRCs

including design-build and maintenance activities; and (iv) contributing, on a declining basis, to road maintenance financing to reduce the financial burden until FER's financial health and its resources increase – importantly, the WB/AIIB contribution is contingent on FER undertaking a pre-defined, and progressively increasing (to 100 percent), share of the required road maintenance (see **Table 5**).

40. Historically, FER's budget for road maintenance is over USD 150 million per year, and this is expected to be maintained, and potentially increased, with the envisaged increases in FER allocations (Table 4). A part of FER's budget has consistently been allocated to rural roads, in accordance with AGEROUTE's maintenance work program and budget, and this will continue to be the case during and after Project implementation. While to-date there has been no clearly defined allocation of funding for the rural road network, from the FER budget or other sources, the road maintenance strategy to be developed under the Project (for adoption in 2025, prior to the first maintenance works to be financed by FER) will seek to set a percentage of the FER maintenance budget to be allocated to rural roads. The cost (refer to Table 6) of the expected ongoing road maintenance program in the Project's target areas is well within the FER maintenance budget, representing less than 15 percent of the historical overall annual maintenance budget. It is expected that, with the implementation of the road maintenance strategy and corresponding road maintenance program, the necessary system will be in place to allocate the budget to finance the ongoing road maintenance program. Finally, the roads selected for rehabilitation and maintenance under the Project will be systematically registered in the Road Maintenance Program. This will allow AGEROUTE and FER to ensure compliance with the commitments of GOCI with respect to proper maintenance of the selected sections.

	2024	2025	2026	2027	2028	2029	Total <sup>1</sup>
Road length to be maintained (km) <sup>2</sup>	7,800	9,493	11,789	13,632	15,280	15,280	73,274
Unit cost of maintenance (USD/km) <sup>3</sup>	3,250	1,100	1,100	1,100	1,100	1,100	1,100
Total Road Maintenance Cost	25.37	10.44	12.97	15.00	16.81	16.81	97.39
Project Contribution	25.37	8.56	7.75	-	-	-	41.67
FER contribution	-	1.88	5.22	15.00	16.81	16.81	55.71
Project Contribution	100%	82%	60%	0%	0%	0%	
FER contribution	0%	18%	40%	100%	100%	100%	

Table 5. Ru	Iral Road Maintenanc	e Financing F	Responsibilities	2024-2029
-------------	----------------------	---------------	------------------	-----------

1. Differences between the total amounts and the sum of the individual amounts is due to rounding.

2. The road length to be maintained in years 2025-2029 include the roads that will be rehabilitated (during the period 2024-2027) under the Project.

3. The unit cost of maintenance in 2024 is estimated to be much higher than that of the subsequent years given that the roads subject to maintenance in 2024 have not been maintained for an extended period. Roads to be maintained in the period 2025-2029 are roads which will have been newly rehabilitated under the Project. These would have experienced less wear and tear and would thus entail lower maintenance costs than in 2024; the unit cost employed for the period 2025-2029 is in line with typical values observed for the region.

Maintenance Type	2024	2025	2026	2027	2028	2029	Total				
Strategic Rural Roads	-	1.88	5.22	15.00	16.81	16.81	55.71				
Paved Roads			1.84	1.84	1.84	1.84	7.35				
Rehabilitated Roads			2.03	2.03	2.03	2.03	8.13				
Total Cost		1.88	9.09	18.87	20.68	20.68	71.19				

Table 6. Full Road Program Maintenance Costs

### C. Fiduciary and Governance

41. **Procurement.** CC-PRICI, the PCU, will be implementing the Project and will be responsible for coordinating all procurement activities including: (i) preparation and update of the procurement plans; (ii) preparation, finalization and launch of tender documents; (iii) preparation of evaluation reports; (iv) preparation of contracts and overseeing payments. The CC-PRICI has implemented several WB-funded projects and is familiar with WB procurement procedures. The PCU will provide support to local government staff for procurement activities falling under the mandate of regional councils.

42. The WB has conducted a procurement capacity and risk assessment; the findings include: (i) technical staff may not be familiar with OPBRCs which may lead to poor technical documents and procurement processes; (ii) local government staff may not have sufficient procurement knowledge; and (iii) procurement delays may arise due to inadequate communication and interaction between the PCU and regional councils. Considering these issues, WB has rated the procurement risk as "Substantial" which is equivalent to "Medium" for AIIB.

43. In order to mitigate the procurement risk, the following mitigation measures are proposed and will be monitored during implementation: (i) regional councils will handle small value procurement (less than USD 300,000); (ii) seasoned procurement specialists will be assigned to assist local government staff; (iii) the current PIM will be updated to cater to the Project's procurement requirements; (iv) a capacity building program to strengthen procurement capabilities will be developed and implemented throughout the Project.

44. The client has prepared a Project Procurement Strategy for Development (PPSD) and a Procurement Plan, to identify the most appropriate procurement strategy to meet the development objectives given the prevailing market context. The key insights from the PPSD are: i) the domestic market has the capacity to meet most of the needs of the Project; ii) most local suppliers, contractors and consultants have the capacity to carry out the contracts of the Project; iii) the international market will be solicited for consultancy services and works on paved roads; iv) pre-qualification will be carried out for works mobilizing national SMEs; and v) with respect to the execution of OPBRCs, capacity strengthening is required for actors across the various sectors implicated. The AIIB Project team has reviewed the final PPSD approved by the WB and is satisfied that it is materially consistent with AIIB requirements.

45. **Financial Management.** The existing PCU under MEER will be responsible for the overall project financial management (FM). The WB has conducted an FM assessment and shared it with AIIB. The assessment covered primarily the system of

accounting, budgeting, flow of funds, financial reporting, auditing, and internal controls of the existing PCU. The residual FM risk is considered "Medium" and the following mitigation measures are proposed: (i) update the existing FM procedures manual, which is a part of PIM, prior to effectiveness of the WB financing; (ii) update the configuration of the existing accounting software within three months of WB loan effectiveness; and (iii) the PCU will be required to submit to WB and AIIB: (a) a consolidated annual work plan and budget (AWPB) no later than November 30 of the year preceding the year the AWPB will be executed; (b) consolidated, quarterly Interim Unaudited Financial Reports (IUFRs) within 45 days of the end of each quarter; and (c) consolidated audited annual financial statements (e.g., audit reports prepared by independent external auditors) to be submitted to the WB and AIIB no later than June 30 of each year.

46. The FM assessment determined that the PCU is familiar with WB FM requirements and is satisfactorily managing the ongoing WB projects. Current FM staffing is adequate. The PCU's FM staff consists of a financial and administrative manager, an FM specialist, two accountants and four assistant accountants who are experienced in the implementation WB-financed projects, together with one financial controller and one public accountant assigned respectively from Ministry in charge of budget, and Ministry in charge of finance, to the Project. Moreover, no major FM issues have been raised under the projects managed by the PCU during the WB supervision missions or by the auditors, and there are no overdue audit reports or IUFRs.

47. The PCU, with input from all implementing agencies, will prepare a consolidated AWPB, based on a template to be included in the PIM. Not later than November 30 of the year preceding the year to which the AWPB applies, it will first be submitted to the ISC for approval and then to the WB and AIIB for no objection.

48. The accounting standards for West African francophone countries, SYSCOHADA, which are in use in Côte d'Ivoire for current WB-financed operations will be applied. The new accounting systems, policies, and financial procedures of the Project will be documented in the PIM. The PCU will customize the existing accounting software to meet the new Project requirements.

49. The internal control policies and procedures will be documented in the PIM which will be updated and adopted prior to effectiveness of the WB financing. The existing government internal control systems, including the use of budget controllers and separation of duties between the administrative phase of budget execution and the accounting phase of public expenditure, will be used for the Project. The Project's internal audit function will be managed by the General Inspectorate of Finance (Inspection Générale des Finances) in collaboration with the internal audit team of the PCU.

50. The Project's financial progress will be reported each quarter through IUFRs to be submitted within 45 days from the end of each quarter. The PCU will present the audited Project financial statements for each year of project implementation, within six months of the fiscal year-end. The Project's annual accounts will be audited by an independent external auditor to be recruited in compliance with Terms of Reference acceptable to the WB and AIIB.

51. **Disbursements.** Considering the joint co-financing approach, the WB will manage all Project disbursements according to its disbursement procedures. Disbursements will follow the transaction-based method, including the following procedures: Advance procedure (through advances to the Designated Account (DA)), Direct Payment procedure, and Reimbursement procedure with full documentation.

52. AIIB will disburse funds in euros (EUR), to a EUR-denominated DA. This eurodenominated DA will be the account of the Central Bank of West African States (Banque Centrale des Etats de l'Afrique de l'Ouest, BCEAO) held at the Banque de France. Upon receipt of the disbursement, the BCEAO will deposit the equivalent XOF amount to BCEAO's account in Côte d'Ivoire. The exchange rate to be used is the fixed (pegged) XOF/EUR exchange rate of the BCEAO. Funds can be further transferred from BCEAO's account, in XOF, to the AIIB Project Account based on the needs of the project. The ceiling of the EUR-denominated DA will be EUR 6 million. An initial advance up to the DA ceiling will be made and subsequent disbursements will be made against submission of a statement of expenditure on the use of the previous advance. The WB will provide disbursement services to AIIB, including review and approval of withdrawal applications.

53. Separate Project accounts will be opened for WB and AIIB, in a reputable commercial bank, under conditions acceptable to the WB. The Project accounts will be managed by the public accountant assigned to the PCU and will be used to pay expenditures. The PCU accountant will stipulate, on an as-needed basis, the XOF amounts to be transferred to the Project accounts, in line with payments to be made from the Project. The relative amounts to be transferred to the WB and AIIB Project accounts will be determined in accordance with the WB/AIIB co-financing ratio. Cash withdrawal transactions from the Project accounts will be authorized by the Project Coordinator and the Project's FM Specialist in the PCU. Payments made by the regional coordination unit, based in Korhogo, will be processed by a "regisseur" under the responsibility of the Project's public accountant. The Project will report eligible expenditures in EUR, through statements of expenditure, applying the fixed XOF/EUR exchange rate of the BCEAO.

54. The WB's IPF with PBCs modality will apply for part of the financing related to sub-components 1a and 1b. Disbursements against PBCs are conditional on two factors: (i) the documentation of eligible expenditures having been incurred; and (ii) achievement of the corresponding PBC. Eligible expenditures are expenditures related to the subcomponent which is being (partially) financed under the PBC modality, in this case subcomponent 1a (linked to the amounts connected to PBCs 1, 2 and 6), and subcomponent 1b (linked to the amounts connected to PBCs 3, 4 and 5). In the case of nonachievement of a PBC, the amount associated with that PBC will not be eligible for Bank financing even if eligible expenditures have been incurred. The Bank may advance funds to the DA to finance eligible expenses as they are incurred. Disbursement under categories subject to PBCs are provisional when evidence of expenditures incurred has been provided but the achievement of the PBC has not been demonstrated. If the PBC is not met, refunds will be due to the Bank. All PBCs are time-bound. All PBCs, except one (PBC 6), are non-scalable. For non-scalable PBCs, the borrower must achieve the identified PBC target to get the full payment amount associated with the PBC; if the target is not achieved within the indicate timeframe the payment is cancelled. In the case of the scalable PBC, there is flexibility of disbursement if the target has been partially

met. The achievement of PBC targets will be verified based on the verification protocol of the WB.

55. **Financial Crime and Integrity Due Diligence (FCIDD) and Know Your Counterparty (KYC).** Following AIIB's applicable policies and guidelines, KYC/FCIDD has been conducted to assess Financial Crime (FC) risks, including Money Laundering and Financing of Terrorism (ML/FT) risks, sanction risk, and risk deriving from integrity unsoundness when dealing with its Counterparties and Connected Parties in the financing. Integrity screenings have been performed on the state representatives of the GOCI, as well as senior management of the MEF, MEER and the CC-PRICI. No critical findings were found. The above-mentioned representatives are identified by World-Check One as politically exposed persons (PEPs) due to their public status.

56. **Governance and Anti-corruption.** AllB is committed to preventing fraud and corruption in the projects it finances. For this Project, the WB's Anti-corruption Guidelines and AllB's Policy on Prohibited Practices (2016), will apply. The WB will take the lead in any inquiry or investigation. The AllB may conduct assurance and integrity activities in line with its financing agreement.

# D. Environmental and Social

57. **Environmental and Social Policy** (including Standards). The Project will be cofinanced with the WB as lead co-financier, and its ES risks and impacts have been assessed in accordance with the WB's Environmental and Social Framework (ESF). To provide a harmonized approach to addressing the ES risks and impacts of the Project, and as permitted under AIIB's Environmental and Social Policy (ESP), the WB's ESF will apply to the Project in lieu of AIIB's ESP. AIIB has reviewed the WB's ESF and is satisfied that: (i) it is consistent with AIIB's Articles of Agreement and materially consistent with the provisions of AIIB's ESP, including the ES Exclusion List and the relevant ES standards; and (ii) the monitoring procedures that are in place are appropriate for the Project.

Categorization and ES Instruments. The ES risks are linked to land acquisition 58. and resettlement of Project Affected Persons (PAPs) resulting from works that may require acquisition of strips of land to improve some road alignments or build associated road infrastructure; Gender Based Violence (GBV); labor; and Occupational Health and Safety (OHS); community health and safety; and resource efficiency. Risks related to resource efficiency may stem from extraction of natural resources for use as construction materials, energy and water usage by the Project, and waste generation and pollution from mis-handling or improper disposal of oils, cement, plastic waste and other types of solid waste. The WB has categorized the ES risks of the Project as "Substantial" (which is equivalent to Category B if AIIB's ESP were applicable). Identification of Project sites is yet to be finalized and therefore, an Environmental and Social Management Framework (ESMF) has been prepared. The ESMF includes policy, procedures, and directives on the assessment of specific ES risks applicable to the Project and provides guidance to mitigate them. In line with the requirement of the WB's ESF, a Resettlement Policy Framework (RPF), a Stakeholder Engagement Plan (SEP), and a Labor Management Procedure (LMP) have been prepared.

59. Environmental Aspects. Project related activities are likely to be associated with potential environmental risks and adverse impacts. These include: occupational and community health and safety issues related to the civil works of roads, markets, school and health facilities, and transhumance corridors; nuisances related to air and water and soil pollution due to sediment from road noise emissions: construction/rehabilitation and oil spreads from machineries; risks related to the use of pesticides as part of the treatment of cattle and crops preservation; nonhazardous and hazardous waste management and pollution; road traffic safety; and potential disruption or degradation of natural habitats, and the ecological consequences of conversion and changes in ecosystem functions. Given the nature of the Project related interventions and the large geographical area potentially impacted, assessment by the client and WB indicate that there are substantial environmental risks. In addition, there is a need to strengthen the institutional capacity of the client. However, the risks are localized in nature and reversible.

60. The ESMF describes the procedures and processes followed in screening of sub-projects for ES risks and impacts, and in preparing and disclosing site-specific safequard instruments such as Environmental and Social Impact Assessments (ESIAs). and Environmental and Social Management Plans (ESMPs) — as soon as the exact locations and scope of a specific activity are known. Each ESIA and corresponding ESMP shall be prepared in line with the screening results and shall be approved in consultation with all stakeholders before the corresponding activity starts. Prior to the initiation of any works supported under the Project, the PCU or other delegated contract manager is required to approve contractor ESMPs and require that contractors include environmental health and safety and OHS guidelines. The draft ESIAs and ESMPs, initiated upon the conclusion of the feasibility studies and preliminary engineering designs, shall be submitted for the WB's review and clearance. ES clauses will be included in the bidding documents and contracts for civil works and will require contractors to prepare the specific contractor ESMP prior to initiating civil works. Moreover, the client's capacity to manage environmental risks and impacts will also be strengthened.

61. All roads selected for the Project will be screened prior to works and rehabilitated so that clearing, and loss of vegetation and faunal habitat will be minimal to moderate. Sub-projects' ESMPs will include the revegetation and reforestation of Project technical sites, borrow areas, unused quarries, socioeconomic infrastructures, and transhumance corridors; the ESMPs will also include revegetation and reforestation along water bodies. The Project will support reforestation through planting of native/local trees alongside the roads to be rehabilitated or maintained under the Project. The Project will not interfere with areas of significance to biodiversity conservation or under a protection regime. The site-specific ESMPs to be prepared will provide prevention and mitigation measures to protect biodiversity areas and living natural resources.

62. Land Acquisition and Involuntary Resettlement. The Project is not expected to involve any large-scale land acquisition, and Project related rehabilitation works will broadly take place within the existing footprints and the right of way. Nevertheless, there may be cases where the construction or rehabilitation of public infrastructure (construction and maintenance of rural roads, water and sanitation facilities, drainage infrastructure, rehabilitation of markets, and establishment of transhumance pathways, among others) may lead to a limited amount of physical displacement and economic

displacement to both title and non-title holders. The nature of the displacement can be temporary or permanent. The Project may also disproportionately impact vulnerable groups, including women, the elderly, persons with disability, and individuals below the poverty line.

63. A RPF has been prepared by the Borrower and provides guidance regarding identifying and managing resettlement impacts during Project implementation. Upgrading infrastructure will be preferred as a way to minimize the need for land acquisition and related physical and economic displacement. The RPF defines the eligibility for all categories of PAPs (individuals and groups) and includes an entitlement matrix linking the various categories of losses with entitlements. For example, during the rehabilitation of rural markets, any temporary displacement of vendors will be considered in the design of these sub-projects.

64. Consultations will be carried out with PAPs, government, and local authorities to avoid or minimize this displacement and enhance community acceptance of solutions to minimize or avoid conflict. Resettlement plans will be developed by the PCU and their consultants in line with the RPF to manage these impacts.

65. **Indigenous People.** No indigenous peoples have been identified in the potential Project areas. Should the presence of indigenous communities be confirmed through further screening during implementation, the necessary assessments, consultations, and instruments will be undertaken per the provisions of the WB's Environmental and Social Standards on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.

66. **Cultural Heritage.** The Project is not expected to impact cultural heritage, such as sacred places or where rituals are performed. However, it will finance investments that may require excavation during the construction or rehabilitation of roads or facilities. The ESMF incorporates the "chance finds" procedure and the ESIAs, and the ESMPs to be prepared once the Project sites are selected, will screen for the existence of any tangible or intangible cultural heritage. In addition, all construction and rehabilitation contracts will include a "Chance Find" clause, which will require contractors to stop construction/rehabilitation when cultural heritage sites are encountered during civil works and to implement the "chance finds" procedures as per the ESMF. The Project activities will not encroach on the Comoé National Park, a UNESCO World Heritage Site located in the Project area.

67. **Gender and GBV.** The Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) assessment of the Project carried out by the WB has classified the SEA/SH risk as "Moderate". Country-level factors that heighten these risks include the absence of laws on domestic violence and marital rape. At the Project-level, factors that increase the potential risks of SEA/SH relate to the construction of small-scale infrastructure mainly in rural and peri-urban areas but also in highly impoverished areas. Labor influx may create scenarios where women are exposed to SEA/SH. It should be noted that the Project foresees medium-sized rural constructions requiring moderate to low levels of labor influx. In line with the recommendations of the WB's Good Practice Note on Addressing SEA/SH in Investment Projects Financing involving major civil works, these risks will be mitigated through measures outlined in the SEA/SH response and mitigation action plan. With respect to gender equality, the Project will address barriers to women's

participation in the local economy. It will identify entry points and opportunities for women's active and productive involvement in the rural markets value chain and integrate this in the selection of intervention sites for rural markets. The Project will also give a voice to women through its citizen engagement process. It will support the organization of focus groups with balanced participation of women and men, but also conduct dedicated women-only consultation sessions, to obtain information on their concerns and aspirations and to ensure their active participation in the Project design and implementation. The Project also seeks to support a more balanced distribution of power within local government authorities, and in formal and informal institutions, through capacity building activities.

68. Occupational Health and Safety, Labor and Employment Conditions. Labor related risks include: (i) employment discrimination; (ii) non respect of national labor legislation; (iii) labor related disputes; (iv) SEA/SH; (v) labor and working conditions in construction work; (vi) inadequate workers' housing, including housing for government staff at the border posts; and (vii) OHS-related issues that can be caused by inadequate personal protective equipment, lack of training, and inadequate sanitation facilities for workers at construction sites. A stand-alone LMP has been prepared to provide guidance on screening for labor issues and identifying OHS measures applicable to the various categories of Project workers. The PCU will arrange for all workers to have social security (health and life insurance) before the commencement of Project activities. The PCU will also regularly undertake audits to confirm that there is no improper labor as part of the Project's workforce (direct employees, contractors, suppliers, or community workers). Laborers, especially construction labor and drivers, have an increased risk for substance abuse and such substance abuse is often a contributing factor to accidents and incidents associated with SEA/SH.

69. Codes of Conduct will be included in the letter of appointment for government staff and contractors and their employees. The PCU has developed a dedicated Worker Grievance Redress Mechanism, as part of the LMP, for all groups of workers, to collect and address potential grievances coming from Project workers. Community employment policies and procedures have been developed as part of the LMP to provide community members with equitable access to the Project's employment opportunities, with attention given to policies promoting youth employment and gender parity. The Project's LMP will consider the latest COVID-19 safety guidelines mandated by the government and/or best practice in the country, in order to maintain a safe working environment for workers and for the community, and minimize the risk of COVID-19 transmission. The tender document for contractors will require the development of site-specific management plans with associated budget provisions for managing all potential impacts and risks associated with OHS: (i) Project contractors must comply with all national regulations regarding workers' safety; (ii) the contractors will provide training on occupational safety regulations and use of personal protective equipment; (iii) the contractors will provide safety measures as appropriate during works such as first aid kits etc.; (iv) the contractors will document and report occupational accidents/incidents/diseases; (v) emergency prevention and preparedness and response arrangements will be implemented; (vi) remedies for adverse impacts such as occupational injuries and disease will be implemented; and (vii) adaptive management strategies will be implemented to address new or unforeseen OHS impacts and risks that arise during Project implementation.

70. Contractor management and preparation of contractor requirements, particularly for the OHS aspects, will be detailed in the PIM that will be prepared by the PCU prior to effectiveness of the WB financing. The PCU and their delegated contract managers will also regularly monitor the contractors' performance in implementing OHS measures through both internal monitoring and reporting systems, and third-party evaluations.

Stakeholder Engagement, Consultation, and Information Disclosure. The 71. Project will engage stakeholders at the national, regional, and local levels. At the institutional level, MEER is the lead ministry and is responsible for housing the PCU. MEER will be supported by other Ministries involved in the Project. The decentralized technical services of these ministries and regional administration bodies (prefectures, regional councils, traditional authorities) are also part of the institutional framework. Other key stakeholders include professional agricultural organizations, construction companies, civil society (women, youth, pastoralists organizations, institutions involved in the protection of vulnerable persons, transportation worker unions, national or beneficiary/neighboring international NGOs), local communities and their representatives, and project affected persons or groups.

72. A SEP including a grievance mechanism sensitive to SEA/SH complaints from PAPs (including vulnerable groups, community members and other stakeholders), has been prepared to provide a framework for citizen engagement, meaningful consultation and participation and feedback mechanisms. The SEP includes a framework for a multi-stakeholder consultation mechanism where authorities, the private sector, communities, and their representatives can be consulted, engaged, and provide feedback in an iterative manner. This mechanism will be in place throughout the Project.

73. A citizen engagement plan will be developed by the PCU so that: (i) the citizen consultation and participation process is inclusive, transparent, and responsive to the needs of the targeted communities; and (ii) the Grievance Redress Mechanism (GRM) is effective and accessible to all stakeholders, particularly, vulnerable groups. The PCU will implement the citizen engagement plan and incorporate PAPs' concerns and aspirations in Project design and mitigation measures.

74. Meaningful community consultations, particularly with youth, women, and vulnerable groups, will be key for the success of the Project. Objective criteria for the selection of communities and sub-projects will be developed and publicly disseminated. The Project screening and selection process will be informed by, among other things, a gender analysis that assesses the benefits of Project activities for girls and women. The Project SEP also includes measures to prevent COVID-19 which will remain relevant for as long as COVID-19 is an issue during the Project cycle. The ES safeguard documents have been prepared in French, the local language, and disclosed on the WB and AIIB websites and hardcopies are being made available locally. English versions of the Executive Summaries of the ESMF and the RPF have been prepared and are disclosed on the AIIB website.

75. **Security.** The northern border area of Côte d'Ivoire is under threat from extremist groups primarily operating in Mali and Burkina Faso. A Security Risk Assessment has been prepared by the client. It provides guidance for the Project-specific Security Management Plan to be prepared and disclosed prior to the start of works in specific localities.

76. Project Grievance Redress Mechanism and Bank's Project-Affected People's Mechanism. The GRM will be designed to provide for the timely resolution of grievances and include pathways to address any SEA/SH issues that arise as a result of the Project, including establishing a protocol with the GBV platforms to support survivors of SEA/SH. The GRM will also have a pathway for anonymous reporting to be accessible for reporting of sensitive complaints. This will be implemented through multiple reporting channels and a feedback mechanism that will be part of the design of the GRM. The GRM will provide for appropriate levels of discretion, and cultural appropriateness. In addition, a dedicated Workers' GRM has been established as part of the LMP, for all groups of workers, to collect and address potential grievances from Project workers. Information on the existence of the Workers' GRM will be reflected in tender documents for Project contract workers. The Workers' GRM will be maintained throughout the Project implementation period. ES clauses will be included in the bidding documents and contracts for civil works and will require contractors to implement measures such the development of codes of conduct, and the operationalization of a GRM a sensitive to SEA/SH.

77. As noted previously, WB's ESF will apply to this Project instead of AIIB's ESP. The WB's Independent Accountability Mechanism, the Inspection Panel, which reviews the WB's compliance with its policies and procedures, will handle complaints relating to the WB's compliance with its ESF with respect to the Project. In accordance with AIIB's Policy on the Project affected People's Mechanism (PPM), submissions made to the PPM regarding such complaints under this Project will not be eligible for consideration PPM. WB's by the Information on Inspection Panel is available at http://www.inspectionpanel.org.

#### E. Operational Policy on International Relations

78. International Waterways. The Operational Policy on International Relations (OPIR) applies to the Project because it involves the waters of the Sassandra, Comoé, and Volta rivers and the Niger river basin, which are considered international waterways, as defined in Section 2.1(b) of the OPIR. The Sassandra River forms in the Guinea highlands and drains much of the western part of the Ivory Coast east of the Cavalla River. The Comoé River originates on the Sikasso Plateau of Burkina Faso, and briefly follows the border between Burkina Faso and Ivory Coast before entering Ivory Coast. It drains the northeastern and easternmost portions of the country before emptying into the eastern end of the Ebrié Lagoon and ultimately the Gulf of Guinea in the Atlantic Ocean. The Volta River is the main river system in the West African country of Ghana. It flows south into Ghana from the Bobo-Dioulasso highlands of Burkina Faso. The main parts of this river are the Black Volta, the White Volta, and the Red Volta. In the northwest, the Black Volta forms the international borders between the Ivory Coast, Ghana, and Burkina Faso. The Volta flows southward along the Akwapim-Togoland highlands, and it empties into the Atlantic Ocean at the Gulf of Guinea at Ada Foah. The Niger River originates in Guinea and Ivory Coast, passes through Mali and Niger and enters the Atlantic Ocean in Nigeria. The Niger River Basin also extends over Algeria, Burkina Faso, Benin, Chad and Cameroon. The Niger River basin area within Ivory Coast represents 1 percent of the whole river basin and includes the Bani River and Sankarani River as Niger River's tributaries. Notification to these riparian states of the proposed Project's details is required under the OPIR unless one of the exceptions to notification specified in the OPIR applies. Since this Project is expected to have minimal or no effect on any of the other riparians, notification is not required under the exception in Section 3.3(c)(i) of the OPIR, which provides that the notification requirement does not apply to Projects that are expected to have minimal or no effect on any of the other riparians.

79. The WB's assessment of the impact of the Project on the use of the waters of the Comoé, Sassandra and Volta Rivers, and the Niger River basin concluded that the Project activities are limited to the rehabilitation and improvement of existing schemes and, thus, will not cause appreciable harm such as the reduction of water resources for the population or water pollution. Based on this assessment, the WB determined that in this case notification under its Policy on International Waterways (OP 7.50), which is similar to the OPIR, is not required because the Project would not: (i) adversely change the quality or quantity of water flows to the other riparians; or (ii) be adversely affected by the other riparians' possible water use. AIIB concurs with this determination. Section 2.3 of the OPIR allows AIIB to rely on the assessment of the WB, since AIIB is satisfied with the WB's assessment capacity and process, as well as the assessment itself. Consequently, riparian notification under this Project is not required under the OPIR.

# F. Risks and Mitigation Measures

80. The overall risk of the proposed Project is considered "High" at Appraisal stage, due to the risks associated with: (i) the political, governance and sector contexts; (ii) institutional capacity; (iii) security; and (iv) environmental and social aspects. Key Project risks and mitigation measures are outlined in **Table 7**. As it relates to interest rate risk, and mitigation, the Borrower may take advantage of the interest rate hedging solutions offered by AIIB, as outlined in the Conversion Guidelines for Sovereign-Backed Loans. The Project team, together with relevant AIIB specialists, conducted a workshop with representatives from the MEF, providing an update on AIIB's financing terms which included an overview of the option for interest rate hedging.

Risk Description	Assessment (H/M/L)	Mitigation Measures
<ul> <li>Political and Governance</li> <li>Local and presidential elections over the coming 2 years may produce changes in regional councils' political management which may negatively impact Project activities to be carried out by the regional councils</li> <li>Sector strategies and policy</li> </ul>	Medium	<ul> <li>Project will undertake citizen engagement activities</li> <li>Performance contracts will be signed between the PCU and regional councils to frame implementation modalities</li> </ul>
<ul> <li>Decision-making subject to political influence, as no clear road maintenance strategy exists</li> </ul>	Medium	<ul> <li>Project to develop needed reforms</li> <li>The use of PBCs will be an incentive for implementing reforms</li> </ul>
<ul> <li>Institutional capacity</li> <li>SIAs do not have sufficient capacity, particularly with respect to contract management, preparation, and supervision of studies/works in non-road related areas or of an innovative nature (e.g., water resources management)</li> <li>Regional councils have limited capacity</li> <li>Risks are increased by the distance of the target area from the centralized PCU in Abidjan</li> </ul>	High	<ul> <li>TA on contract management will be provided under the Project</li> <li>Training sessions will be provided to public and private stakeholders on innovative project aspects</li> <li>Staffing of the PCU will be bolstered with specialists in non- road areas</li> <li>A decentralized unit for the PCU and AGEROUTE will be established</li> <li>An assessment of regional councils' capacity will be conducted to identify tailored measures to strengthen capacity</li> </ul>
<ul> <li>Security</li> <li>Risk of violent extremism, community and socio-political conflicts, in particular in the six border regions</li> </ul>	High	<ul> <li>A Security Management Plan has been prepared for the Project. It incorporates measures inspired by the experience of road projects in the far north of Cameroon and includes special security arrangements involving Ministry of Defense.</li> <li>Mitigation measures include: (i) an early alert plan of security risks to the local residents; (ii) a strong citizen engagement plan to be prepared prior to the start of the works; and (iii) preventive measures to be included in the works contracts to protect physical infrastructure and mitigate risk exposure for workers</li> </ul>
<ul> <li>Environmental and Social</li> <li>Significant ES risks are expected in extensive road construction</li> </ul>	High	<ul> <li>All environmental risks are expected to be addressed by the adoption of appropriate ES instruments in accordance with WB's ESF</li> <li>Social risks will be addressed through the instruments of the ESF and SEA/SH Good Practice Note</li> </ul>

Table 7. Summary of Risks and Mitigating Measures
---

# Annex 1: Results Monitoring Framework

Project Objective:	Inclusive and climate resilient rural connectivity in northern Côte d'Ivoire									
Indicator Namo	Unit	DRC	Baseline	С	umulative	Target Valu	ues	End	Frequency	Posponsibility
	Unit	PBC	2023	YR1	YR2	YR3	YR4	Target	Frequency	Responsibility
Project Objective Indicators:										
Inclusive rural road connectivity										
Modified road access index (-5km) in the selected regions			77	79	83	87	90	90	Annual	AGEROUTE
Climate resilient road connectivity										
People provided with improved climate resilient road access within 5 km in the selected regions	Number		0	500,000	1,200,000	3,300,000	3,670,000	3,670,000	Annual	AGEROUTE
Female	%		51.0	51.0	51.0	51.0	51.0	51.0		
Beneficiaries' satisfaction										
Population within 5 km reporting satisfaction with the quality of rural roads in their area <sup>17</sup>	%		20.0	40.0				75.0	Every 2 years	PCU
Intermediate Results Indicators:										
Component 1 – Inclusive and Resilient Rural Connectivi	ty Infrastr	ucture								
Rural roads rehabilitated under the project	km		0	1,500	4,500	6,000	7,450	7,450	Annual	AGEROUTE
Rural roads maintained under the project using OPBRC	km		0	600	600	1,200	2,000	2,000	Annual	AGEROUTE
Built or rehabilitated structures	Number		0	50	100	250	450	600	Annual	Regional Councils
Strategic rural roads provided with climate change resilience features	%		0.0	20.0	50.0	75.0	100.0	100.0	Annual	AGEROUTE
Roads provided with road safety features	km		0	6,000	8,000	11,000	15,493	15,493	Annual	AGEROUTE
Average travel time along key roads maintained <sup>18</sup>	Minutes		50	30	30			30	Annual	AGEROUTE
Paved roads under maintenance	Yes/No		No	No	No	Yes	Yes	Yes	Annual	AGEROUTE
Rural roads maintained with FER financing under the project	km	PBC 6	0.00	7,800	9,500	12,000	15,250	15,250	Annual	AGEROUTE
Maintenance contract signed for Dianra-Bouandougou- Bouake Road	Yes/No	PBC 5	No	No	Yes	Yes	Yes	Yes	One time	AGEROUTE
Component 2 – Rural socio-economic infrastructure										
Mini-storage facilities used by female entrepreneurs in improved markets	%		0.0	40.0	40.0	40.0	40.0	40.0	Annual	Regional Councils

 <sup>&</sup>lt;sup>17</sup> This indicator will also measure separately satisfaction of drivers of heavy-duty vehicles. The focus on heavy-duty vehicles is due to the fact that these are the vehicles used to transport agricultural produce to key connection points for international trade of goods.
 <sup>18</sup> This indicator will also measure separately travel time for heavy-duty vehicles.

Project Objective:	Inclusive and climate resilient rural connectivity in northern Côte d'Ivoire									
Indicator Name	Unit	DBC	Baseline	Cumulative Target Values			Jes	End	Frequency	Posponsibility
	onit	FBC	2023	YR1	YR2	YR3	YR4	Target	Frequency	Responsibility
Component 3 – Capacity Building, Support to the Institu	tional Fra	mework	and Sector S	Strategies						
Rural roads' strategy adopted	Yes/No	PBC 1	No	Yes				Yes	One time	MEER
Rural roads' pluriannual priority investment program adopted	Yes/No	PBC 2	No	Yes				Yes	One time	MEER
Road maintenance strategy adopted	Yes/No	PBC 3	No	Yes				Yes	One time	MEER
Road Maintenance Program adopted	Yes/No	PBC 4	No	Yes				Yes	One time	MEER
Improved institutional oversight capacity in the roads sector	Yes/No		No	Yes				Yes	Annual	MEER
Female beneficiaries of capacity building activities	Number		0.0	30.0	45.0	60.0	60.0	60.0	Quarterly	PCU
Graduates who report being employed 12 months after they complete internship which are women	%		0.0	0.0	70.0	70.0	75.0	75.0	Annual	PCU
Road safety audit recommendations addressed	%		0.0					100.0	Annual	OSR from subsequent road safety audits
Road safety audits conducted	Number		0	22	30	36	44	44	Annual	OSR from subsequent road safety audits
Meteorological facilities rehabilitated / constructed in the selected regions	Number		0	0	30	30	30	30	Annual	Airports, aeronautics and meteorology operation and development company (Société d'Exploitation de Développement Aéroportuaire Aéronautique et Météorologique)

#### **Annex 2: Performance-Based Conditions Matrix**

	PBC Description / Financing	Component	Baseline		Annual	targets	
	amount which is conditional, subject to PBC achievement	financed with PBC- linked amount	2023	December 2024	December 2025	December 2026	December 2027
1	Rural Road's Strategy Adopted		No clear strategy for rural roads	A rural road's strategy is prepared and adopted			
	US\$35,000,000 (AIIB: US\$16,830,000)	1.1a		US\$35,000,000 (AIIB: US\$16,830,000)			
2	Rural Road's Pluriannual Priority Investment Program Adopted		No clear investment program for rural roads		A national pluriannual investment program is prepared based on the strategy and adopted		
	US\$35,000,000 (AIIB: US\$16,830,000)	1.1a			US\$35,000,000 (AIIB: US\$16,830,000)		
3	Road Maintenance Strategy Adopted		No clear strategy for road maintenance	A national road maintenance strategy is prepared and adopted			
	US\$10,000,000 (AIIB: US\$4,810,000)	1.1b		US\$10,000,000 (AIIB: US\$4,810,000)			
4	Road Maintenance program Adopted		No clear program for road maintenance		A national pluriannual maintenance program is prepared based on the strategy, and adopted		
	US\$40,000,000 (AIIB: US\$19,230,000)	1.1b			US\$40,000,000 (AIIB: US\$19,230,000)		
5	Maintenance Contract for Dianra- Bouandougou-Bouake Road Signed		Road not maintained			A contract is signed for the maintenance of the Dianra-Bouandougou- Bouake road	
	US\$40,000,000 (AIIB: US\$19,230,000)	1.1b				US\$40,000,000 (AIIB: US\$19,230,000)	
6	Rural roads financed by FER		No maintenance of rural roads		1,000 km <sup>19</sup> maintained under FER financing	3,000 km <sup>20</sup> maintained under FER financing	11,000 km <sup>21</sup> maintained under FER financing
	US\$30,000,000 (AIIB:US\$14,420,000)	1.1a			US\$2,000,000 (AIIB: US\$960,000)	US\$6,000,000 (AIIB: US\$2,880,000)	US\$22,000,000 (AIIB: US\$10,580,000)
	US\$190,000,000 (AIIB: US\$91,350,000)			US\$45,000,000 (21,640,000)	US\$77,000,000 (37,020,000)	US\$46,000,000 (22,110,000)	US\$22,000,000 (10,580,000)

 <sup>&</sup>lt;sup>19</sup> It is planned to have about 1,700 km of roads rehabilitated under the project by end 2024, to be maintained under FER financing in 2025.
 <sup>20</sup> It is planned to have about 4,000 km of roads rehabilitated under the project by 2025, to be maintained under FER financing in 2026.
 <sup>21</sup> It is planned to have about 15,250 km to be maintained under FER financing starting 2028 (7,800 of the 1<sup>st</sup> triennial maintenance program + 7,450 of additional roads rehabilitated under the project by 2025. Project).

## Annex 3: Trade with Asia

1. Cashew and cotton sectors and economic activity. Côte d'Ivoire's economic development was driven largely by its agricultural sector. The country is well-known for its dominance in cocoa for which it was the world's second-largest exporter in 2020; in the same year, it was also the largest world producer and exporter of raw cashew nuts<sup>1</sup>. It remains one of the largest exporters of several other agricultural products including rubber, palm oil and bananas. The agricultural sector accounts for approximately 20 percent of the country's GDP,<sup>2</sup> and over two-thirds of all exports, while agricultural exports represent roughly 10 percent of GDP.<sup>3</sup> Further, a significant share of the manufacturing and transport sectors depends on agriculture - agro-industries represent about 7 percent of total GDP and 50 percent of the manufacturing sector, while the domestic trade and transport industry (trucking, rail, port) depends on the agricultural sector for a large part of its business.<sup>4</sup> The sector employs around 45 percent of the labor force – in rural areas 72.6 percent of the employed population work on family farms; agricultural self-employment is relatively more prevalent in the north of the country.<sup>5</sup> The sector is targeted for development towards higher value-added products, with an emphasis on participating in regional and international trade.<sup>6</sup> Côte d'Ivoire's sectoral program for agriculture foresees a tenfold increase in investment over the period 2017-2025. Under the program, both cotton and cashew sectors are categorized amongst the top ten agricultural products having a close link to employment, income and expenditure of small producers, and as such are identified as priority sectors for investment.

2. **Cashew and cotton sectors and trade with Asia.** Côte d'Ivoire's trade with Asia currently accounts for approximately 25 percent of its global trade, and trade activity between Côte d'Ivoire and Asia showed an average annual growth rate of 12 percent over the period 2015-2020.<sup>7</sup> Cotton and cashew sectors, for which the Project's target region is the main production region in Côte d'Ivoire, accounted for 47.7 percent of Côte d'Ivoire's total exports to Asia, on average over the last six years (refer to Figure 1).

<sup>&</sup>lt;sup>1</sup> Based on UN Comtrade data

<sup>&</sup>lt;sup>2</sup> World Bank, 2023, World Development Indicators

<sup>&</sup>lt;sup>3</sup> Calculated based on <u>UN Comtrade data</u>

<sup>&</sup>lt;sup>4</sup> World Bank,2019, Republic of Côte d'Ivoire: Agricultural Sector Update

<sup>&</sup>lt;sup>5</sup> Idem.

<sup>&</sup>lt;sup>6</sup> Food and Agriculture Organization of the United Nations, 2023, <u>Programme National d'Investissement Agricole</u> <u>de deuxième génération 2017-2025</u>

<sup>&</sup>lt;sup>7</sup> Calculated based on <u>UN Comtrade data</u>

#### \*OFFICIAL USE ONLY





#### Annex 4: Economic Analysis

1. **Base case.** The economic analysis considers the difference in costs and benefits of "with Project" and "without Project" scenarios over a period of 20 years. The base case economic analysis for the Project was conducted using the Highway Development and Management Model version 4 (HDM-4) for the roads to be paved and the Roads Economic Decision Model (RED) for rural roads to be maintained and rehabilitated. Additional economic analyses are conducted to assess the cost-benefit of the Project's road safety measures, and the greenhouse gas (GHG) emissions impacts of the road improvements and tree planting under the Project.

The base case assessment conducted with HDM-4 and RED uses a consumer surplus approach to compare direct road user costs and benefits from upgrading the 113 km roadstretch between Dianra and Bouandougou and from the maintenance and rehabilitation of a sample of rural roads across the border regions. The analysis assumes that the improvements in the road network will result in a 3 percent annual increase in light-vehicle traffic (light vehicles and buses) and a 5 percent annual increase in heavy goods vehicular traffic. During the dry season, base case traffic demand is expected to remain unchanged compared to the "without Project" scenario. However, during rainy season, traffic demand is assumed to increase relative to the "without Project" scenario; demand increases by 50 percent for roads which undergo rehabilitation and by 70 percent for roads that undergo maintenance. Road improvements will reduce travel time and vehicle operating costs. Due to limited availability of data, the cost of travel is used as a proxy for the value of time savings and vehicle insurance costs, for distinct categories of vehicle types, are used as a proxy for avoided vehicle operating costs. The majority of the benefits in the base case result from maintenance of the rural roads.

## \*OFFICIAL USE ONLY

2. Table 8 shows the annual results cost-benefit analysis for the base case for the various types of roadworks to be conducted under the Project. The economic internal rate of return (EIRR) of the Project for the base case is 26.7 percent and the next present value (NPV) positive at USD 459.5 million.

	Base Ca	ase Benefit – p overall (	er roadwork t USDm)	ype and	Additio Benefit	onal Net (USD m)	Net Benefit (USDm)
Year	Paving	Rehabilitation	Maintenance	Total	Road Safety	GHG emission	Total
2024	-30.97	-80.57	-108.35	-219.9	-	-2.13	-222.03
2025	-46.6	17.1	25.44	-4.07	2.4	-0.92	-2.62
2026	13.39	18.19	27.98	59.55	2.6	1.71	63.86
2027	15.25	19.32	30.63	65.2	2.8	0.92	68.92
2028	15.87	20.51	33.41	69.79	3.1	1.29	74.16
2029	16.39	21.76	36.31	74.45	3.4	1.33	79.2
2030	16.01	23.06	39.35	78.42	3.9	1.35	83.68
2031	15.92	24.42	42.53	82.86	4.2	1.42	88.52
2032	-11.47	25.84	45.85	60.22	4.8	1.51	66.49
2033	20.14	27.33	49.33	96.79	5.2	1.63	103.6
2034	21.04	28.88	52.96	102.89	5.7	-1.31	107.28
2035	21.98	30.51	56.77	109.26	6.2	-1.12	114.33
2036	22.96	32.21	60.75	115.92	7.1	-1.36	121.68
2037	23.98	33.99	64.91	122.88	7.8	-5.58	125.1
2038	25.01	35.85	69.27	130.14	8.5	0.87	139.51
2039	-1.99	37.8	73.84	109.64	9.5	2.46	121.62
2040	27.88	39.84	78.61	146.33	10.6	2.68	159.56
2041	29.18	41.97	83.61	154.76	11.8	2.83	169.38
2042	30.54	44.2	88.84	163.58	13.2	2.98	179.72
2043	55.68	46.53	94.31	196.53	14.1	3.13	213.79
EIRR	17.9%	26.5%	31.6%	26.7%			27.9%
NPV	53.22	134.18	272.06	459.46	126.9	13.69	505.4

3. **Road Safety Benefits.** To incorporate the impact of road safety impacts of improvements (asphalting, rehabilitation, and maintenance), the Road Safety Screening and Appraisal Tool (RSSAT) was used. Given the large scope of the Project, involving rehabilitation of 7,450 km of roads and maintenance of 7,800 km, across 11 regions, a sample of the most representative roads was done: two roads per region were preselected and analyzed for a total of 669 km of roads (207 km of roads for rehabilitation, 349 km of roads for maintenance roads, and 113 km of roads for asphalting). The sample of roads, their length, and the expected safety impact of the Project are shown in Table 9.

Table 9. Project S	Safety Impact by	/ Region and Road	Segment
--------------------	------------------	-------------------	---------

Region	Rehabilitated segment	Length (km)	PSI	Maintained segment	Length (km)	PSI
Bagoue	Kolia-Sianhala	72.8	0.88	Kouto-Sianhala	55	0.73
Boukani	Téhini-Niamoué	26.4	0.96	Doropo-Gogo	20	0.63
Poro	Boron-Ouataradougou	19	0.84	Mbengué-Bougou	27	0.68
Tchologo	Diawala-Kakoroko	23	0.86	Sikolo-Mbamouena	14	0.88
Bafing	-	-	-	Ouaninou-Santa	23	0.71
Béré	Filaso-Siriho	11	0.96	Samorosso-Kpesso	35	0.73
Folon	Kimbirilla Nord- Missimahana	15	0.86	Tienko-Goulia	43	0.72
Gontougo	Diamba-Tchiedio			Kouassi Datekro-Diamba	28	0.69
Hambol	-	-	-	Foumbolo-Boniéredougou	33	0.71
Kabadougou	Madinani-Fengolo	40	0.79	Séguelon-Madinani	41	0.62
Worodougou	Séguela-Dioulassoba	32	0.86	Séguéla-Massala	30	0.59
Sub-total (length)/Average (PSI)		207.2	0.88		349	0.69
Bere	Dianra-Bouandougou (Asphalted)	113	1.62			
TOTAL		320.2		TOTAL	349	

Source: RSSAT computation. PSI = Project Safety Impact.

#### **\*OFFICIAL USE ONLY**

4. The results indicate that the rehabilitation and maintenance of roads under the Project will result in, respectively, 12 and 30 percent reduction in fatalities, as the aggregated Project safety impact for these interventions are 0.88 and 0.70, respectively. The results are, however, heterogenous across the regions. For the asphalting of the Dianra-Bouandougou road section, the PSI is 1.62 and the net road safety cost is USD 35 million. The latter result is due to the expectation of speeding and increased fatalities on this road stretch as a result of the improved condition. However, the aggregate road safety impact of the Project will be positive, with the Project's aggregate safety impact estimated at 0.81, or an 19 percent reduction in fatalities once the Project is operational and the safety features integrated. For the entire sample of roads, the estimated net road safety benefit in 20 years is around USD 127 million. The results of the road safety screening and road safety audits to be carried out under the Project will be used in the design of roadworks to be implemented under the Project. Road safety audits will be conducted before and after works to confirm that roads are designed, upgraded, rehabilitated and maintained in accordance with road safety best practices. Additional measures will be considered for the Dianra-Bouandougou asphalted road to aim for a target safety level of at least three stars for all road users, based on the International Road Assessment Program (iRAP) methodology.<sup>1</sup>

5. Greenhouse Gas Emission Reduction and Climate Resilience Benefit. A separate analysis was conducted to assess the Project's net GHG emissions over a 20-year period, "with Project" and "without Project". GHG emission analyses are conducted with respect to the following Project activities: (i) asphalting of the 113 km road section Dianra-Bouandougou; (ii) rehabilitation and maintenance of a sample of the 15,250 km of rural roads covered by the Project; and (iii) planting of 2,800 ha of trees along selected roads and sites. Emissions factors for all roads were estimated using the HDM-4 model. Traffic demand and related GHG emissions projections were obtained from the HDM-4 model (for the Dianra-Bouandougou asphalted road section) and the RED model (for the rural roads network). For GHG emission analyses related to tree-planting, additional carbon sequestration enabled by the Project was determined using the Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST) Carbon Storage and Sequestration model.<sup>2</sup> The model estimates the amount of carbon sequestered over time, using Land Use Land Cover maps and data on carbon stocks in aboveand below- ground biomass, soil, and dead organic matter in the Project area. The analysis assumes a range of USD 40-80 per ton in 2020 and USD 50-100 per ton in line with internationally accepted reference values.<sup>3</sup> The total net GHG emissions reduction due to the selected roadworks is estimated at 113 ktons CO<sub>2</sub> over the Project lifetime. With the inclusion of carbon sequestration by tree-planting net GHG emissions reduction is 3 Mtons. In addition to the quantified GHG emission reduction benefits, the rehabilitation and maintenance of roads under the Project according to climate resilience standards - including the adoption of the "Green Roads for Water" approach – will result in more efficient water management especially in flood prone areas. Further, the Project will support investments in the protection of forested areas and afforestation, deployment of solar energy for lighting, enhanced climate resilience

<sup>&</sup>lt;sup>1</sup> International Road Assessment Program. Organization Official website.

<sup>&</sup>lt;sup>2</sup> Stanford University Natural Capital Project. InVEST

<sup>&</sup>lt;sup>3</sup> Carbon Pricing Leadership Coalition 2017. <u>Report of the High-Level Commission on Carbon Pricing</u>

of rural markets and essential community infrastructure, and capacity building to promote the implementation of nature-based solutions in roadworks.

	Base Ca	ise (BC)	BC + Road safety		BC +	GHG	BC + Road Safety + GHG		
Road sections	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)	
Paving (Dianra- Bouandougou)	17.9%	53.2	16.3%	41.3	22.3%	86.5	20.8%	74.6	
Rehabilitation	26.5%	134.2	27.4%	144.3	25.6%	126.1	26.6%	136.31	
Maintenance	31.6%	272	34.2%	316	29.9%	250.6	32.5%	294.5	
Overall project	26.7%	459.5	27.9%	501.6	26.7%	463.3	27.9%	505.4	

 Table 10. Project Benefits with Road Safety and GHG Emissions Inclusion

6. There is heterogeneity across various road sections of the Project. The paving of the Dianra-Bouandougou segment results in an EIRR of 17.9 percent and NPV of USD 53 million in the absence of GHG and road safety cost-benefit considerations. Inclusion of GHG emissions net benefits results in an increase in EIRR and NPV to 22.3 percent and USD 86.5 million respectively, due to expected resultant higher average speeds on this segment, which lower fuel consumption and emissions factor. Tree planting along this paved road will also contribute to GHG emission reduction. On the other hand, the inclusion of road safety costs and benefits yields slightly lower EIRR and NPV of 16.3 percent and USD 41.3 million due to the negative safety impacts of higher speeds on this road, as mentioned earlier.

7. The rural roads maintenance and rehabilitation will generate an estimated higher EIRR and NPV, compared to the paving. Maintenance results in an EIRR of 31.6 percent and NPV of USD 272 million, while rehabilitation produces an EIRR of 26.5 percent and USD 134.2 million. In both cases, the result is somewhat higher with the inclusion of road safety impacts and lower with the inclusion of GHG emissions cost-benefit results. The decrease in cost-benefit as a result of GHG emissions considerations is due to the expectation of increased traffic, post-Project, on the roads to be maintained/rehabilitated under the Project. This increased traffic outweighs the GHG emission reductions from lower fuel consumption.

8. **Robustness Check by Sensitivity Testing.** For the baseline analysis, the assumed discount rate is 10 percent. To check the robustness of the results, a sensitivity analysis is conducted under the following scenarios: i) 30 percent increase in economic costs; ii) 20 percent reduction of economic benefits; and iii) a combination of i) and ii). Table 11 summarizes the results of the robustness together with the baseline scenario. The results indicate that even in the most challenging scenario (30 percent increase in costs and 20 percent reduction in benefits), the EIRR for the overall project is above 17 percent, with each segment above 10 percent. Further, the NPV remains positive. These results indicate the Project to be economically viable and above the threshold level.

	Baseline		(+30% Investments)		(-20% E	Benefits)	(+30% Investments and -20% benefits)	
Road sections	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)	IRR (%)	NPV (USDm)
Dianra- Bouandougou (paved)	17.9%	53.2	13.6%	29.5	14.2%	26.7	10.4%	3
Rural Roads Rehabilitation	26.5%	134.2	21.0%	110	21.8%	91.2	17.1%	67.1
Rural Roads Maintenance	31.6%	272	25.5%	240	26.3%	196	21.1%	164
Overall project	26.7%	459.5	21.2%	379	22.0%	313.9	17.3%	233.5

 Table 11. Base Case Sensitivity Analysis

#### **\*OFFICIAL USE ONLY**

#### Annex 5: Member and Sector Context

#### A. Country context

9. After the end of civil war and electoral crisis in 2011, Côte d'Ivoire exhibited high economic growth, which led to a reduction in poverty, while the debt increase has been moderate. The economy grew at 9 percent on average during 2012-2015 and at about 7 percent during 2016-2019. Social policies helped to lower the poverty rate from 46.3 percent in 2015 to 39.4 percent in 2018, and access to basic services has increased.

10. The National Development Plan (Plan National du Développement, PND) 2021-2025 aims to accelerate economic and social transformation towards higher and more inclusive growth, through the development of the industrial sector, increased productivity, enhanced human capital, and stronger governance. Under the PND, the authorities envisage annual economic growth to reach 7.7 percent on average over 2021-25, supported by a strong increase in private investment from 14.4 percent of GDP in 2021 to 22.7 percent in 2025. The plan is expected to bring the poverty rate to 30 percent by 2025, and eventually double GDP per capita by 2030.

11. Though poverty has declined over the last decade in Côte d'Ivoire, there are huge disparities across the rural-urban divide as well as the northern-southern divide. Most of the poverty reduction since 2015 has been concentrated in urban areas (-6.9 percentage points). In contrast, the poverty rate in rural areas has decreased by 1.7 percentage points between 2015 and 2018.<sup>4</sup> Similarly, there are huge regional disparities. The most impoverished areas such as Tchologo (62.9 percent), Tonkpi (66.5 percent) and Bafing (68.5 percent), are in the northern and central western regions whereas Greater Abidjan Area (GAA) and Sud Comoe in the south have lowest poverty rates in the country.<sup>5</sup> Incidentally, the areas in the north and central west also score lower on Human Development Index. The government has been increasing investment in social protection and infrastructure in underserved areas as well as security investments in the areas that are prone to violence, especially in the northern parts.

12. There are significant gender gaps in Côte d'Ivoire across education and employment. The United Nations Development Program ranks Côte d'Ivoire 162 out of 189 countries in Gender Inequality Index (GII) 2020. Women not only have lower access to healthcare and educational opportunities but an Ivorian woman with the same education as an Ivorian man is less likely to find formal employment, and on finding the employment, she will be paid 30 percent less on average. This gender gap is amplified in rural areas as well as in the northern areas especially when accounting for future climate risk. According to one estimate, elimination of gender discrimination in the labor market can help the economy expand by USD 6 billion to USD 8 billion in the long term and can be the key in achieving higher economic growth<sup>6</sup>.

<sup>&</sup>lt;sup>4</sup> World Bank, 2023, Côte d'Ivoire: Systematic Country Diagnostic Update

<sup>&</sup>lt;sup>5</sup> United Nations Development Program, 2022, <u>Extreme Poverty and its Determinants, Inequality and Vulnerability in Côte d'Ivoire</u>

<sup>&</sup>lt;sup>6</sup> World Bank, 2017, <u>Are Women the Key to Unlocking Economic Emergence in Côte d'Ivoire? Key Messages</u>

13. As PND 2021-2025 also envisages improved human capital as well as reduced income inequality in the economy, along with higher economic growth, the government is committed to building inclusive and resilient infrastructure in the northern and central-western areas. This with a view to not only improve access to healthcare and educational opportunities for the vulnerable population in these areas but also to support better access for agricultural products from these areas to the international markets.

# **B. Sector and Institutional Context**

1. **Sector Context.** The road network in Côte d'Ivoire spans nearly 82,000 km, of which only 7,500 km are paved and only 250 km are highways. Roads are divided into four classes depending on importance (A – national and international, B – regional, C – prefecture and village level, and D – rural and agriculture roads). There are over 35,000 km of prefecture and village roads and over 31,000 km of rural and agriculture access roads in the country – most of which are unpaved.<sup>7 8</sup>

2. With an underdeveloped rail network, the road network carries most of the traffic in Côte d'Ivoire. The interior of the country originates more than half of the agricultural exports. The diagnostic report for the PND 2021-2025 stated that an underdeveloped secondary road network and logistics infrastructure reduces the quantity of products exported, due to high transport and logistics costs. Lack of hinterland connectivity also hinders accessibility and access to basic services, and contributes to poverty and isolation.<sup>9</sup> This diagnostic report also found inadequate road safety measures, for which the government is looking to develop a comprehensive nationwide road safety plan. As is common in the region, overloaded heavy goods vehicles and lack of adequate control results in road degradation, requiring early maintenance. This problem is especially acute in rural areas in the interior.

3. Côte d'Ivoire's road density is on par with that of a developing country, at 0.26 km/km<sup>2</sup>. However, according to a 2021 study by the WB, the 11 northern regions have the lowest Road Accessibility Index values in the country. The WB study formulated investment priorities in the road sector that can also be used as the basis for regional development.<sup>10</sup>

4. **Institutional Context.** The MEER is governed by Decree No. 2018-648 of August 01, 2018. The ministry is responsible for ensuring the country is equipped with infrastructure and public works. The ministry is responsible for program and project management, monitoring of design and construction of the road network, as well as road maintenance and road management regulation. In addition to having multiple directorates general under the ministry, it also supervises two state-owned companies, responsible for road construction and maintenance: AGEROUTE and FER.<sup>11</sup>

<sup>&</sup>lt;sup>7</sup> AGEROUTE, 2023, <u>Etendue du Réseau Routier Ivoirien</u> (Extent of the Ivorian Road Network)

<sup>&</sup>lt;sup>8</sup> AGEROUTE, 2023, <u>Réseau Routier de la Côte D'ivoire</u> (Côte d'ivoire Road Network Map)

<sup>&</sup>lt;sup>9</sup> Ministry of Planning and Development, 2021, <u>Plan National de Développement</u> <u>PND 2021-2025</u> (National Development Plan NDP 2021-2025)

<sup>&</sup>lt;sup>10</sup> World Bank, 2022, Côte d'Ivoire: New Strategy for Inclusive and Resilient Road Connectivity

<sup>&</sup>lt;sup>11</sup> Ministry of Equipment and Road Entry, 2023, <u>A propos du ministère</u> (About the Ministry)

5. AGEROUTE is an Ivorian state-owned company, responsible for managing the road network of national importance and conducting project management and procurement for road network expansion. It is managed by the Ivorian law No. 97-519 of September 4, 1997, on the organization of state companies, and is placed under the MEER. The agency maintains a road database, which tracks road quality.<sup>12</sup> FER is mainly responsible for the mobilization of resources allocated to finance the national road maintenance program for Côte d'Ivoire's road network. It is also responsible for the toll road network.<sup>13</sup> <sup>14</sup> The fund works in close collaboration with AGEROUTE, and there is some overlap in their mandate. The Ministry of Transport provides administrative oversight of the national transport policy in accordance with government objectives. It is responsible for multiple sub-sectors, including the road sectors. It oversees a number of directorates general and other offices, including: the Road Safety Office (l'Office de Sécurité Routière) as well as the fund for development of road transport, Fond de Développement du Transport Routier, responsible for facilitating credit to companies for improving road fleet condition. The Regulatory Authority for Domestic Transport is responsible and has legal authority to develop regulations for the road transport sector in the country.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> AGEROUTE, 2023, <u>Road Quality Database</u>

<sup>&</sup>lt;sup>13</sup> FER, 2023, <u>FER official website</u>

<sup>&</sup>lt;sup>14</sup> Ministry of Construction, Housing, Sanitation and Urban Development, 2015, <u>The Project for the Development</u> of the Urban Master Plan in Greater Abidjan

<sup>&</sup>lt;sup>15</sup> Regulatory Authority for Domestic Transport, 2023, <u>Organization official website</u>.

3. BB1 Assessment					
Questions / assessment steps	Answer and justification				
UNIFORM ASSESSMENT CRITERIA					
<ul> <li><b>#U1:</b> Is the project/ economic activity included in the "universally aligned list" with activities that have a positive or negligible impact on the climate?</li> <li><b>#U2:</b> Does the project/ economic activity contradict the mitigation goals of the PA directly or indirectly (e.g., is it on the "universally non-aligned list")?</li> </ul>	<b>Yes.</b> The main Project activity is the development, rehabilitation and climate proofing of rural roads. The activities, by virtue of targeting "roads with low traffic volumes providing access to communities which currently do not have all-weather access" and posing no risk of contributing to deforestation, are included in the list of Activities Considered Universally Aligned. <sup>16</sup> <b>No.</b> The project activities are not in the list of Activities Considered Universally Not Aligned. <sup>17</sup>				
SPECIFIC ASSESSMENT CRIT	<b>FERIA</b>				
Questions / assessment steps	Answer and justification				
<b>#SC1:</b> Is the operation/economic activity inconsistent with the NDC of the country in which it takes place?	<b>No.</b> The Project activities are not inconsistent with Côte d'Ivoire's updated NDC. <sup>18</sup> Mitigation measures for the transportation sector include increasing the share of electric vehicles in the automobile fleet, renewal of the automobile fleet, transitioning to low-sulfur fuel, and promoting mass transportation. The Project activities are not inconsistent with these.				
economic activity, over its lifetime, inconsistent with the country's long-term strategy or other similar long-term national economy-wide, sectoral, or regional low-GHG strategies compatible with the mitigation goals of the PA?	long-term strategy or other similar long-term national economy- wide, sectoral, or regional low-GHG strategies. The Project activities will indirectly contribute to climate change mitigation since the rehabilitation and maintenance of rural roads will result in increased average speeds and thus lower fuel consumption.				
<b>#SC3:</b> Is the operation/ economic activity inconsistent with global sector-specific decarbonization pathways in line with the PA mitigation goals, considering countries' common but differentiated responsibilities and respective capabilities?	<b>No.</b> The Project activities are not inconsistent with global transportation sector-specific decarbonization pathways in line with the PA mitigation goals, considering countries' common but differentiated responsibilities and respective capabilities. Côte d'Ivoire is a lower middle income developing country and is not a major emitter of GHG emissions in the global context; Côte d'Ivoire ranks 204 <sup>th</sup> (out of 239 countries for which data is available) in terms of emissions per capita. <sup>19</sup>				

<sup>&</sup>lt;sup>16</sup> <u>BB1 and BB2 Technical Note. Joint MDB Assessment Framework for Paris Alignment for Direct Investment</u> Operations (Working Draft as of November 2021)

<sup>&</sup>lt;sup>17</sup> Idem

<sup>&</sup>lt;sup>18</sup> Government of Côte d'Ivoire, 2022, <u>Contributions Déterminées au niveau National</u> (Second Nationally Determined Contributions)

<sup>&</sup>lt;sup>19</sup> WB, 2023, <u>CO2 emissions database</u>

<b>#SC4:</b> Does the operation/economic activity prevent opportunities to transition to Paris-aligned activities, OR primarily support or directly depend on non-aligned activities in a specific country/sectoral context?	No. As indicated in #U1, the Project is already Paris-aligned. The Project does not support or depend on activities are in the list of Activities Considered Universally Not Aligned.
economic activity economically unviable, when taking into account the risks of stranded assets and transition risks in the national/sectoral context?	assets as road transportation is expected to remain a main means of passenger and freight transportation in the target region in the medium to long term, regardless of the envisaged mitigation measures for the transportation sector in Côte d'Ivoire. There are no anticipated transition risks, as the main decarbonization measures identified in the country's NDC target the transitioning of vehicle type and fuel type, which are not expected to reduce or remove the reliance on the road network. The promotion of mass transit, the other decarbonization measure of the NDC, is expected to still include significant road-based mass transit given the existing extent of the road network and the associated service level it can provide compared to rail or other forms of mass transit.
Result	Aligned as per BB1
	Assessment of the Office of a se
steps	Answer and justification
<b>CRITERION 1: Establishment</b>	of Climate Risk and Vulnerability Context
<b>Step 1:</b> Identifying and assessing physical climate risk Is the operation (including assets, stakeholders, and the system within which it takes place) at risk?	<b>Yes.</b> The operation centers on the development, rehabilitation and maintenance of roads, in northern Côte d'Ivoire, an area which is subject to both droughts and flooding. Flooding events in particular have been known to produce flash floods and cause landslides that damage the roads. The northern regions, targeted under the Project, are principally characterized by a savanna landscape, unimodal wet season from April/May to October, with annual precipitation of 800-1,300 mm, and a wide range of average temperatures. It ranks as high risk to river flooding. <sup>20</sup> Significant precipitation events have been known to lead to flooding, in particular flash floods, and landslides, which destroy or damage both unpaved and paved roads and cause significant disruptions across the road network. On average 16 percent of the road network in the 11 regions is located in the 20-year flood zone and thus exposed to floods. Further, extreme heat can deform and damage paved road surfaces leading to temporarily impassible roads and shorter lifespans if not well-maintained. External vulnerability factors, such as the receding of traditional vegetation, deforestation and the depletion of aquifers further increase the risks of climate change and aggravate impacts from climate events. Aquifers and vegetation contribute to stabilizing soils. fostering water filtration – their deterioration

<sup>&</sup>lt;sup>20</sup> Think Hazard!, 2023

	leads to higher risks of erosion, landslides and road subsidence and worsened flooding.						
<b>CRITERION 2: Definition of th</b>	Climate Adaptation and Resilience Measures						
CRITERION 2: Definition of th Step 2: Addressing physical climate risks and building climate resilience Have climate adaptation and resilience measures been identified to reduce material physical climate risks and contribute to building climate resilience?	e Climate Adaptation and Resilience Measures Yes. Adaptation and resilience measures are built into the designs of the roads to be developed and rehabilitated under the Project, and include (component 1): (i) strategic roads will incorporate climate resilience measures, such as the construction and rehabilitation of culverts and submersible slabs, creation of drainage and waterproofing of roadways for all-season passability, and use of materials to withstand extreme heat, flooding and erosion; (ii) vulnerable non-strategic roads which are critical for connectivity will be targeted for spot climate resilience improvements; (iii) strengthening of periodic and routine maintenance, in accordance with climate resilience standards and observing considerations such as timely programming of maintenance and repair of roads, passage points and drainage systems, to foster year-round road connectivity even in the aftermath of extreme weather events; and (iv) incorporation of the "Green Roads for Water" concept in road designs, to improve water management to reduce vulnerability/protect roads against floods, heavy rains, erosion and drought, while using roads to collect water. In addition, under component 2, rural markets and storage facilities, in the agricultural logistics chain, will be designed to make facilities naturally cooler and less vulnerable to flooding, including through the use of elevated construction and basing market site-selection on low exposure to flooding and (post- Project) year-round road accessibility. Finally, the Project will support institutional capacity building and sector strategies to foster long term integration of climate resilience in the road transportation sector including (component 3): (i) capacity building and institutional support for the design, planning and deployment						
	and (vii) component 3: rehabilitation and densification of meteorological facilities to strengthen weather and climate-						
	relevant information systems and capabilities.						
CRITERION 3: Assessment of Inconsistency with a National/Broad Context for Clima Resilience							
Step 3: Assessing the broader climate resilience context Is the operation not inconsistent with relevant national policies/strategies, private sector or community- driven priorities for climate adaptation and resilience?	<b>Yes.</b> None of the Project activities are inconsistent with Côte d'Ivoire's national policies and strategies, private sector or community-driven priorities for climate adaptation and resilience. The proposed activities are not inconsistent with the country's NDC, its PND 2021-25 or the GGGI Country Planning Framework for Côte d'Ivoire. <sup>21</sup> No adaptation plans have been outlined specifically for the road transportation sector; however, the Project activities do not present any inconsistency with adaptation plans outlined for the water sector, which will be positively impacted by the Project. Through integration of the "green roads for water" approach and through its capacity building activities, the Project will support adaptation plans outlined in the NDC, which include: (i) improved management of water resources through infrastructure and technology; (ii) capacity building to integrate climate change in territorial planning tools; (iii) reinforcement of monitoring of adaptation measures in the territories.						

<sup>&</sup>lt;sup>21</sup> Global Green Growth Initiative, 2022, <u>Country Planning Framework 2021-2025 – Côte d'Ivoire</u>

Result			Aligned as per BB2		
Climate USD	finance	estimate,	The total estimated climate adaptation finance amount is USD 102 million and was calculated based on the Joint MDB methodology for tracking adaptation finance, using proportional and incremental approaches (where applicable). The total amount is based on an attribution of climate finance to the various components of the project as follows: component 1.1, 50%; component 1.2, 50%; component 1.3, 100%; component 2.1, 25%; component 3.1, 10%; component 3.2, according to the individual activities, of which there are four (financing assumed to be equally split amongst activities), 25% for road network planning, and 100% for support to adaptation planning (0% for the other two activities); component 3.3, 0%, component 3.4, 100%. Most activities are classified as type 2 activities (activities that directly reduce physical climate risk and build adaptive capacity of the system within which the activity takes place).		
5. PA Alignment Assessment Result: Alignea					

#### **\*OFFICIAL USE ONLY**

### **Annex 7: Country Credit Fact Sheet**

1. **Background.** Côte d'Ivoire is a lower-middle-income country with GDP per capita of around USD 2500 and a population of 28 million (as of 2021). Côte d'Ivoire has performed better than other economies in Sub-Saharan Africa during the last decade while keeping the inflation one of the lowest in the region.

Selected Economic Indicators	2019	2020	2021*	2022*	2023*	2024*	2025*
Real GDP growth <sup>1</sup>	8.3	1.7	7.0	6.7	6.2	6.6	6.4
Inflation <sup>1</sup>	0.8	2.4	4.2	5.2	3.7	1.8	1.7
Current account balance	-2.3	-3.1	-4.0	-6.5	-5.7	-5.3	-4.6
General government overall balance	-2.2	-5.4	-4.8	-6.7	-5.1	-4.0	-3.0
General government debt	37.5	46.3	50.9	56.8	63.3	60.6	57.3
External debt	28.1	32.3	33.0	32.6	31.5	30.4	
Gross financing need	5.4	8.6	8.4	9.9	10.0	10.1	
WAEMU gross reserves (USD billion) <sup>2</sup>	17.5	21.8					
Exchange rate (XOF/EUR) <sup>2</sup>	656	656	656	656	656		

Source: IMF WEO Apr 2023; IMF Country Reports No. 22/205; in percent of GDP unless indicated otherwise; <sup>(\*)</sup> = projections and estimates from 2021 onwards.

1. Percent change year-on-year, average

2. Western African Economic and Monetary Union

2. **Recent Developments.** The economic impact of the pandemic has been less than feared and the economy managed to grow by 1.7 percent in 2020. In 2021, the growth rebounded strongly to 7 percent on account of strong domestic consumption and investment. GDP growth has been estimated to marginally slow down to 6.7 percent in 2022, due to subdued global demand, higher global energy and commodity prices and increased uncertainty. The growth is expected to average around 6.5 percent during 2023-2025.

As the government pursued an expansionary fiscal policy during the pandemic, to protect the economy from falling into recession and provide social safety nets to the vulnerable, it resulted in more than doubling of fiscal deficit to about 5.4 percent of GDP in 2020. The overall fiscal deficit in 2021 improved slightly to 4.8 percent of GDP, because of better tax collection, which offset the greater needs for security spending. As the vaccination rate improves and the economy recovers further, a gradual return to the Western African Economic and Monetary Union (WAEMU) fiscal deficit target of 3 percent is expected in 2025.

IMF's estimate for inflation in 2022 is 5.2 percent, much higher than the average inflation rate over the last decade, resulting from the spike in energy and commodity prices since June 2021. The government introduced differentiated fuel price measures and price caps on essential food

items to protect the vulnerable households. Inflation is expected to fall back to 1.8 percent from 2024 onwards i.e., similar to the average for the decade prior to COVID-19.

The war in Ukraine has indirectly affected the economy through the rise in global energy and commodity prices, leading to worsening of the current account deficit. Current account deficit has been estimated to peak at 6.5 percent of GDP in 2022 and is expected to start declining from 2023 onwards, on the expectation of decline in energy prices, and reach 3.5 percent in the medium term.

PND 2021-2025 aims to accelerate economic and social transformation towards higher and more inclusive growth, through the development of the industrial sector, increased productivity, enhanced human capital, and stronger governance. Under the draft plan, the authorities envisage annual economic growth to reach 7.7 percent on average over 2021-25, supported by a strong increase in private investment from 14.4 percent of GDP in 2021 to 22.7 percent in 2025. The plan is expected to bring the poverty rate to 30 percent by 2025, and eventually double GDP per capita by 2030.

The government and IMF staff have reached a staff level agreement in April 2023 on economic policies and reforms to be supported by 40-month USD3.5 billion blended Extended Fund Facility/Extended Credit Facility. The program will help to preserve fiscal and debt sustainability and advance reforms envisioned under 2021-2025 PND.

3. Outlook and Risks. There are near-term risks on the external front. The geo-political tensions in Europe, tightening monetary policies around the world and regional security challenges in the Sahel region increase the risks to the macroeconomic outlook. The tensions in Europe can affect the external demand as well as higher global energy prices whereas tighter global financial conditions would increase the borrowing costs for the government. The worsening political outlook in the Sahel region will affect Côte d'Ivoire exports as well as increase security-related expenditures. These risks are balanced by the low external vulnerability due to WAEMU membership, recent discovery of oil and gas reserves as well as reforms introduced under PND 2021-2025 to attract higher private sector investments. ENI has started developing the Baleine oil field, which would add about 9,000 barrels per day (bpd) in 2023 and between 75,000 bpd and 100,000 bpd by 2026 to Côte d'Ivoire's oil production. It would add around 0.5 percent to GDP and about 1.5 percent to exports from 2026 onwards. The implementation of structural reforms under PND 2021-2025 will improve the competitiveness of the economy, strengthen governance, and improve growth prospects in the near term.

As per the IMF Debt Sustainability Analysis in May 2022, Côte d'Ivoire's risk of debt distress is expected to remain moderate but with limited capacity to absorb shocks. Côte d'Ivoire's public debt increased significantly over the last few years. About two-thirds of public debt is external, of which about half is on commercial terms (Eurobonds). The increase in indebtedness over 2016-2019 was driven by the need to finance investments and social spending under the NDP 2015-2020. A large share of external borrowing is denominated in EUR, limiting the exchange rate risk as the currency is pegged to Euro. Public debt, as a percentage of GDP, is estimated to be 56 percent by the end of 2022, compared with 31.8

#### **\*OFFICIAL USE ONLY**

percent in 2016. However, with the high economic growth and expected fiscal discipline, especially under the recently agreed IMF Extended Fund Facility/Extended Credit Facility, the debt-to-GDP ratio is expected to fall to 50 percent by 2027. Fitch upgraded Côte d'Ivoire's sovereign rating to BB- from B+ during the pandemic in July 2021 citing the macroeconomic and political stability. As of May 2023, Côte d'Ivoire is rated BB- (stable) by Fitch as well as S&P and Ba3 (Positive) by Moody's.