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Évaluation indépendante du développement

A Decade on the Move: Evaluation of the AfDB's Support for the Transport Sector (2012-2023)

Summary Report

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Acknowledgments

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Acronyms and Abbreviations

ACET	African Center for Economic Transformation
ADB	African Development Bank
ADF	African Development Fund
AFCAC	African Civil Aviation Commission
AfDB	African Development Bank Group
AfCFTA	African Continental Free Trade Area
AIBD	Blaise Diagne International Airport
AHAI	Agriculture and Agro-Industry Department
AHHD	Human Capital, Youth and Skills Development Department
AsDB	Asian Development Bank
AUC	African Union Commission
BRT	Bus Rapid Transit
COCM	Cameroon Country Office
COMESA	Common Market for Eastern and Southern Africa
CSO	Civil Society Organization
CSP	Country Strategy Paper
DFI	Development Finance Institution
EBRD	European Bank for Reconstruction and Development
ECCE	Country Economics Department
ECGF	Governance and Public Financial Management Coordination Office
EQ	Evaluation Question
EU	European Union
GHG	Greenhouse gas
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
IATA	International Air Transport Association
IsDB	Islamic Development Bank
KPI	Key Performance Indicator
MDB	Multilateral Development Bank
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
NPV	Net Present Value
O&M	Operations and maintenance
OECD	Organization for Economic Co-operation and Development
ONCF	Moroccan National Railways Office
PAP	Priority Action Plan
PAR	Project Appraisal Report
PIDA	Programme for Infrastructure Development in Africa
PICU	Infrastructure and Urban Development Department
PIU	Project Implementation Unit
PPP	Public-Private Partnership
RDGN	Nigeria Country Department
RDSA	Portfolio Monitoring and Delivery Department
REC	Regional Economic Community
RMC	Regional Member Country
SAATM	Single African Air Transport Market
SDG	Sustainable Development Goal
SME	Small and Medium-sized Enterprise
SNDR	Development Impact & Results Department
SNPB	Programming and Budget Department
SNSP	Corporate Strategy and Policy Department
SSA	Sub-Saharan Africa
SSATP	Africa Transport Policy Program

IDEV	Independent Development Evaluation (at the AfDB)	**TYS**	Ten-Year Strategy
IMF	International Monetary Fund	**UA**	Unit of Account
ISRG	Institutional Support & Rehabilitation Grants	**UN**	United Nations
JICA	Japan International Cooperation Agency	**UNECA**	United Nations Economic Commission for Africa
JKIA	Jomo Kenyatta International Airport	**US**	United States

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Executive Summary

Background

As part of its 2023 work program, the African Development Bank Group (AfDB or "the Bank")'s Independent Development Evaluation function (IDEV) evaluated the Bank's support for the transport sector from 2012 to 2023. This report summarizes the evaluation's findings, conclusions, lessons, and recommendations.

Adequate transport infrastructure is crucial for sustainable development and socio-economic growth across Africa. It facilitates the movement of goods, services, and people, stimulating economic activity, expanding access to social services, and improving the quality of life. It provides access to larger markets, promotes regional integration, and enhances business competitiveness. Over the past decade, the continent has significantly developed its transport infrastructure. Enhancements in intracity, intercity, and international networks have increased the number of paved roads, strengthened political support for regional integration, and encouraged investment. At the same time, several challenges remain, including inadequate infrastructure, high transport costs, limited regional connectivity, climate change impact, urbanization, and population growth. As the demand for transport grows, improving infrastructure is critical.

Since 2012, the transport sector has faced substantial challenges, including uneven access to funding, political instability, and climate change vulnerability. The AfDB Regional Member Countries (RMCs) primarily rely on multilateral development banks, Chinese investments, and domestic budgetary allocations to finance their infrastructure needs. Development partners have different priorities: the AfDB focuses on regional connectivity, Agence Française de développement (AFD) focuses on urban mobility, the Islamic Development Bank (IsDB) and the World Bank Group (WBG) prioritize regional links, and the Japan International Cooperation Agency (JICA) targeted trade facilitation initiatives. Chinese banks are heavily involved in road and rail projects through the Belt and Road Initiative.

The AfDB's support for the transport sector in Africa

Strategic orientation: The AfDB has several strategic documents, including the Transport Policy (1993), the Medium-Term Strategy 2008-2012 (2008), the High 5s for Transforming Africa (2016), Climate Change Action Plan II 2016-2020 (2017), the Programme for Infrastructure Development in African (PIDA) 2021-2030 Action Plan (2020), the AfDB Sustainable Urban Development Action Plan (2022), the Second Continental Report on the Implementation of Agenda 2063 (2022), the Bank Policy for Addressing Fragility 2022-2026 (2023), the AfDB Climate Change and Green Growth Strategic Framework (2023), etc. These strategic documents identify the main developments that influenced Africa's transport sector and how the AfDB responds to these developments.

The AfDB's transport portfolio: Between 2012 and 2023, the AfDB committed nearly Units of Accounts (UA) 14 billion in net approvals to 258 transport interventions across its RMCs, marking a two-fold increase in funding compared to the 2000-2011 period (UA 7 billion). Though fewer in number than those in other sectors, transport projects represented the second-largest share of the Bank's commitments by value. In this period, the AfDB directed most of its funding toward road infrastructure, which comprised 70% of the financing by value and 68% by project count. Out of the 44 beneficiary countries involved in the AfDB transport initiatives during the evaluation period, six—Cameroon, Côte d'Ivoire, Kenya, Tanzania, Uganda, and Senegal—emerged as the primary recipients. Together, these nations accounted for nearly one-third of the total net approvals in this sector. As of mid-November 2024, most transport interventions were active, with 78% by value either newly approved or currently ongoing.

Purpose and scope of the evaluation

This evaluation seeks to provide insights that will inform the AfDB's strategic and operational approaches in the transport sector. It covers the management of sovereign and non-sovereign investment loans and grants, guarantees, equity participations, technical assistance, and analytical and advisory services—such as knowledge sharing, policy dialogue, and economic and sector work—aimed at developing the transport sector of RMCs over the evaluation period. Additionally, the evaluation examines the Bank's involvement in major regional transport strategies and programs, like the African highway initiatives.

The evaluation identified emerging trends within the sector, assessed how the Bank has responded to these trends, reviewed the results of the AfDB's support, and drew lessons for ongoing and future interventions. It

encompasses two dimensions: accountability, and learning.

The evaluation addressed the following questions:

Q1: **Relevance:** To what extent did the objectives and design of the Bank's interventions respond to beneficiaries' needs?

Q2: **Coherence**: To what extent did other Bank interventions (particularly policies) support or undermine the Bank's interventions in the transport sector and vice versa?

Q3: **Effectiveness**: To what extent have the Bank's interventions been effective across different groups of beneficiaries, including women and youth?

Q4: **Efficiency:** To what extent were the Bank's interventions efficient (time and resource utilization)?

Q5: **Sustainability**: To what extent are the net benefits of the Bank's support for the transport sector sustainable?

Q6: **Impact:** To what extent have the Bank's interventions generated or are expected to generate significant positive or negative, intended or unintended, higher-level effects?

Methodology

The evaluation was theory-based, guided by the Theory of Change (ToC) of the Bank's transport sector interventions (see Annex 1). The evaluation used quantitative and qualitative methods to assess the transport sector's management and performance. It employed a 4-point rating scale - from Highly Satisfactory (4) to Unsatisfactory (1) for each evaluation criterion: relevance, coherence, effectiveness, efficiency, and sustainability (see Annex 2). The evaluation used multiple sources of evidence, including a literature review, desk-based research, key informant interviews, portfolio reviews, site visits to intervention locations, six country case studies (Cameroon, Côte d'Ivoire, Namibia, Senegal, Tanzania, and Tunisia), five regional case studies across Africa's mainland regions, two thematic case studies (focused on climate resilience and adaptation, and gender), two project cluster evaluations (covering 36 road, port, rail, and aviation projects), and assessments of 83 selected projects. The evaluation used geospatial analysis with satellite and digital images to assess the effectiveness and impact of six completed projects, using nighttime light intensity as a proxy indicator for economic activity.

The evaluation faced some limitations, including data scarcity and inconsistencies concerning project outcomes and impacts. As previously indicated, most projects were still active, making the assessment of long-term outcomes and impact challenging. Geospatial analysis provided valuable insights into infrastructure projects but had limitations, such as insufficient resolution and the inability to account for external factors, affecting the precision of impact quantification. Economic activity surged in the AfDB-funded transport intervention areas, though the evaluation could not directly attribute this growth to the interventions. Multiple lines of evidence, systematic triangulation, and the validation of emerging conclusions strengthened the evaluation's findings. However, the evaluation could not assess the impacts of roads on local populations, which are crucial in both positive (e.g., access to health or education) and negative (e.g., accidents, prostitution) aspects.

Findings

Relevance

Corporate strategic alignment: The literature and policy review found that global frameworks such as the African Union's Agenda 2063, the Sustainable Development Goals (SDGs), and the Paris Agreement strongly influenced African transport development. Key initiatives included the PIDA and the United Nations Millennium Development Goals, with priorities such as developing regional road corridors, modernizing railways, and enhancing port capacity. The underdeveloped air transport sector, highlighted by the Single African Air Transport Market (SAATM), presented growth opportunities alongside the need for integrated mass transit systems in urban areas.

The evaluation noted that the AfDB's key strategic documents, such as the Transport Policy (1993) and the High 5s for Transforming Africa (2016), have also guided its interventions. The Sustainable Urban Development Action Plan (2022), and the draft Sustainable Transport Action Plan 2024-2028, aim to address emerging challenges. The AfDB's Ten-Year Strategy 2013-2022 and High 5 priorities also emphasize integrating Africa through infrastructure development and regional connectivity. In addition, the evaluation found that the AfDB incorporates the SDGs and the African Union's Agenda 2063 in its Regional Integration Strategy Papers (RISPs) and Country Strategy Papers (CSPs), particularly in infrastructure and regional integration. For instance, the Central Africa RISP (2019-2025) supports SDG 9 through transport corridors,

while the Ethiopia CSP (2020-2025) aims to improve road networks for market access, aligning with SDG 1 and SDG 2. The Kenya CSP (2019-2023) promoted sustainable public transport (SDG 11). However, the evaluation also found that many RISPs (e.g., the Southern Africa RISP for 2020-2025 and the North Africa RISP) and CSPs (e.g., Mozambique) missed opportunities to include green transport and did not adequately monitor emissions or engage marginalized communities, impeding progress toward SDG 13.

Operational Alignment: The AfDB was found to have aligned its transport projects' objectives with the SDGs and the African Union's Agenda 2063. Major initiatives, such as the Trans-African Highway Network and the Kazungula Bridge connecting Zambia and Botswana, strengthened intra-African trade and mobility, as well as the Abidjan-Lagos Corridor, facilitated 70% of West Africa's trade. Other notable interventions included the expansion of Kenya's Jomo Kenyatta International Airport and the Nacala Rail Corridor and Port Project in Mozambique, critical to regional logistics efficiency and economic integration.

Quality of design: The evaluation found that AfDB-funded transport projects in the two evaluated clusters—roads & ports and rail & aviation—generally featured sound technical design elements when underpinned by thorough feasibility studies. A notable example is the Kazungula Bridge Project, which included thorough analyses of traffic patterns, trade dynamics, environmental impacts, and a one-stop border post (OSBP) to ease trade. However, the quality at entry across the broader portfolio was found to be uneven. Challenges arose in the rail and aviation sub-sector, particularly in terms of monitoring and evaluation (M&E) design, including poor logic models and indicators. For example, the ancillary component of the Sharm el-Sheikh Airport Development Project aimed to establish a Centre of Excellence for airport management but lacked specific implementation details and indicators to track its contributions to employment targets.

The evaluation also found that the AfDB predominantly focused its funding on the development of physical transport infrastructure, like roads and ports, with less attention given to the optimization of logistics systems and other service solutions. A case in point is the AfDB support for Tanzania's Dar es Salaam Bus Rapid Transit (BRT) System, which failed to integrate systems for real-time passenger information or advanced ticketing mechanisms. Although some initiatives like the OSBPs aimed to improve logistics efficiency, persistent non-tariff barriers and fragmented procedures limited their overall impact and continued to impede intra-regional trade.

Adaptation over time and to country circumstances: The stakeholders interviewed highlighted the AfDB's adaptability in tackling urbanization, population growth, and climate change. The AfDB-adjusted transport projects, such as the Dar es Salaam BRT, integrated climate resilience measures into projects like the Nador West Med Port in Morocco and revised designs in initiatives like the Trans-Gambia Bridge to mitigate environmental impacts. However, the evaluation also identified gaps in adaptability related to environmental sustainability, and some projects required design modifications to suit local conditions, such as redesigning pavement structures in the Sierra Leone Matotoka-Sefadu Road Rehabilitation Project, section I.

On balance, the **relevance** of the Bank's support for the transport sector was rated as **satisfactory**.

Coherence

Internal coherence: The evaluation found that the AfDB's support for the transport sector was effectively synergized and interlinked with its broader corporate and sector/thematic strategies and those of regional economic communities. This synergy and interlinkage promoted regional integration, economic development, and poverty reduction by improving connectivity and facilitating trade among African countries. The Bank was found to design transport projects that enhanced other sectors like agriculture and energy. For example, linking agricultural corridors with transport initiatives facilitated the movement of agricultural goods. However, the evaluation also identified operational challenges in the implementation of safeguard requirements, particularly regarding compensation to project-affected people.

External coherence: The evaluation highlighted the AfDB's collaborative efforts with development partners, while noting that local contexts and the degree of government control over development agendas influenced the effectiveness of regional cooperation. Regular coordination with the African Union Commission under the PIDA contributed to addressing infrastructure gaps, but weak local

coordination sometimes led to overlaps and missed opportunities for synergy. For instance, the Nacala Rail Corridor and Port Project experienced delays due to misalignment between the AfDB and the governments of Malawi and Mozambique, compounded by political and financial issues. From 2012 to 2023, the AfDB-funded transport interventions' total cost amounted to approximately UA 34 billion, with the AfDB contributing 22% of the cost.

Overall, the Bank's support for the transport sector demonstrated a **satisfactory** level of **coherence**.

Effectiveness

Lending operations: The evaluation found that completed projects improved transport efficiency by reducing travel times, increasing traffic intensity, and enhancing rural accessibility. For example, the Arusha-Holili/Taveta-Voi Road Project (Tanzania and Kenya) cut travel time from Arusha to Mombasa from 6 to 4 hours, as expected. Similarly, the Mombasa-Nairobi-Addis Ababa Road Corridor reduced travel time by one-third, facilitating trade between Ethiopia and Kenya, and contributing to a 410.61% increase in trade volume. The Kazungula Bridge Project achieved a 271.55% rise in truck traffic, highlighting the economic benefits of improved infrastructure. Rural accessibility was also enhanced, as shown by the Rural Access Index (RAI). Kenya's RAI increased from 21.8% to 43.41%, and Ethiopia's RAI rose from 34.56% to 84.52% after completing the Mombasa-Nairobi-Addis Ababa Road in 2019. In the aviation sector, the Priority Air Safety Project Phase II in the Democratic Republic of Congo (DRC) enhanced air traffic safety. The evaluation highlighted the importance of ancillary components like schools, markets, and health facilities, which amplified infrastructure projects' social and economic benefits despite facing more significant implementation challenges than the core civil works. For example, a road project in Ghana demonstrated that ancillary components provided benefits exceeding their costs. One-stop border posts also played a key role in improving transit times and trade. The Kazungula OSBP between Botswana and Zambia reduced transit times, while the Namanga OSBP between Tanzania and Kenya successfully cut border transit times and created jobs.

The capacity-building efforts showed mixed results, mainly due to limited collaboration among stakeholders and weak institutional capacity. Beneficiary agencies often struggled to meet AfDB standards, with insufficient technical expertise hindering partnership. Even with project extensions, initiatives focused on building institutional capacity, such as the Support for the Air Transport Sectors of West and Central Africa project, did not achieve their goals. Delays in consultancy services and funding issues hindered support efforts, failing to establish runway safety teams or train qualified staff by 2023.

Non-lending operations: Stakeholder interviews highlighted the AfDB's influence in sharing knowledge across Africa, though its impact on policy development varied by region. In Namibia, the AfDB positioned itself as a key advisor through strategic analyses, while in Senegal, economic studies advanced policy development, particularly in gender-sensitive budgeting. Although the Bank's analytical work supported transport projects, gaps in applying lessons learned and challenges in planning and engagement reduced their overall effectiveness. Co-financing and leverage strategies showed mixed results, with successes like Senegal's Regional Express Train, but struggles to engage the private sector in high-risk environments were also noted. Additionally, while the AfDB demonstrated selectivity in operations, the effectiveness of promoting broader policy dialogue in the transport sector was found inconsistent.

Overall, the **effectiveness** of the Bank's support for the transport sector was found to be **satisfactory**.

Efficiency

The evaluation found that almost all AfDB transport projects experienced significant delays in delivering results, mainly due to inefficiencies and limited flexibility in implementing procedures, understaffing, and national-level challenges. Delays often occurred both at project start-up and during implementation, worsened by administrative hurdles like problems with securing non-objection notices and delays in signing financing agreements. Stakeholders highlighted coordination issues between executing agencies and development partners, and an insufficient delegation of authority to local project staff, which further extended timelines, especially in Cameroon and the East Africa Region. They also pointed to limited flexibility in implementing Bank procedures, especially in procurement and compliance with environmental and social safeguards (ESS), often leading to conflicts and strained relationships with partners, as seen in Senegal and Benin. In terms of resource efficiency, the

evaluation found that limitations in resource allocation and constrained capacity hindered the staff of the AfDB's local and regional offices from optimizing workload management, thereby impacting their ability to meet project timelines and requirements. The evaluation found that budget management was generally strong, with minimal cost overruns in major construction projects. However, some projects, like the Douala-Bangui Corridor located in Cameroon and the Central African Republic, experienced a 20% overrun. The Bank provided technical expertise to manage these challenges. However, issues with financial management, particularly with audits, persisted.

The overall **efficiency** of the Bank's support for the transport sector was rated **partly unsatisfactory**.

Sustainability

Technical soundness: The evaluation found that the Bank's transport interventions often integrated advanced technologies and climate resilience, demonstrating strong technical soundness. Projects such as Namibia's Walvis Bay Port upgrades and the Addis Ababa International Airport modernization showcased durable, climate-adaptive designs and adherence to international standards. However, significant issues undermined the sustainability of these efforts. Road projects across Africa frequently struggled with inadequate maintenance, largely due to overreliance on government budgets. Additionally, poor enforcement of axle load limits, driven by economic pressures and political interference, accelerated road deterioration and increased maintenance costs. Ineffective weigh stations and weak infrastructure management, particularly in Central Africa, compounded these challenges. Governance and funding issues further jeopardized maintenance efforts, while limited capacity within executing agencies often led to shortcomings in feasibility studies. Recurring issues with low-quality feasibility studies, as highlighted in the road and port cluster evaluation, hindered projects.

Financial sustainability: The evaluation revealed concerns about the long-term financial sustainability of the AfDB transport sector results, as seen in projects like the Nacala Rail Corridor. Financial sustainability differed by country, with Namibia and Morocco showing better resilience due to more robust institutional support. At the same time, Central Africa faced significant risks from weak governance and limited resource mobilization.

Institutional sustainability and capacity strengthening: The evaluation found mixed results regarding the institutional sustainability of the AfDB's support, highlighting both successful and less successful cases. Despite significant efforts to enhance institutional sustainability and capacity development, many projects lacked technical assistance components. Additionally, coordination issues were experienced between the AfDB, government agencies, and executing bodies.

Stakeholder ownership: The evaluation found a variable sense of ownership among project beneficiaries. A positive example related to Namibia, which showed higher ownership among stakeholders, thanks to extensive consultations. In contrast, projects like Msalato International Airport in Dodoma, Tanzania, suffered from inadequate local input, resulting in operational mismatches**.**

Environmental and social sustainability: The evaluation found that environmental and social initiatives were incorporated into project designs, achieving varying levels of success in countries such as Namibia, Benin, and Tanzania. However, integrating climate resilience into project designs consistently and comprehensively continued to pose challenges.

Given these shortcomings, the evaluation rated the **sustainability** of the Bank's support for the transport sector as **partly unsatisfactory**.

Impact

The evaluation found that, despite persistent delays, completed transport projects funded by the AfDB contributed to advancing regional development, economic activity, and integration. For example, the Mombasa-Nairobi-Addis Ababa Road Corridor resulted in a 221% increase in nighttime light intensity in Kenya and 147% in Ethiopia after 2019. Similarly, the Arusha-Holili/Taveta-Voi Road contributed to a 139% increase in Kenya and 81% in Tanzania. The Mombasa-Nairobi-Addis Ababa Corridor resulted in a 41% growth in household incomes.

Regarding regional integration, projects like the Arusha-Holili/Taveta-Voi Road and Mombasa-Nairobi-Addis Ababa Corridor were found to contribute to some extent to improved regional connectivity, increasing Kenya's Regional Integration Index from 0.656 to 0.792 between 2016 and 2019. The evaluation also highlighted favorable cost-benefit dynamics, particularly when projects incorporated complementary infrastructure such as educational institutions and marketplaces. For example, the Ghana Fufulso-Sawla Road Project found a reduction

in the Multidimensional Poverty Index of 2.16% among beneficiary households compared to control households, illustrating poverty alleviation impacts.

The evaluation also identified unintended consequences. On the positive side, projects such as the Ghana Fufulso-Sawla Road fostered greater social cohesion and attracted additional investments. On the negative side, the same project threatened ecosystems with increased charcoal burning and logging. Sections of the Nacala Rail Corridor, particularly in Mozambique's conflict-prone regions, were vulnerable to illegal toll collection by armed groups.

The evaluation did not rate the impact criterion due to challenges in evaluating it, which impeded an objective rating.

Cross-cutting issues: Gender, climate, and transport sector in states facing fragility

Gender: The evaluation found that the AfDB included gender-focused initiatives from the start of its transport projects, with examples like the Dar es Salaam Bus Rapid Transit Project, which improved accessibility for women, and the Dakar-Diamniadio-AIBD Regional Express Train in Senegal, which included women's centers and markets. There were efforts to provide training for women and young contractors, as demonstrated in Kenya's Sirari Corridor Project. However, challenges such as limited consultations with women's groups and complex compensation processes hindered effective gender mainstreaming. The evaluation highlighted mixed results: while some projects in Tanzania and Namibia achieved their gender training targets, others in Côte d'Ivoire and Senegal fell short of commitments, highlighting a gap between gender policy and its implementation. The Bank included gender specialists in teams, but the effectiveness of this approach varied, often due to the prioritization of infrastructure over gender-related components. Globally, although the AfDB was generally considered successful in integrating women and gender-related considerations into construction projects, the evaluation highlighted insufficient targeted initiatives specifically designed to deliver tangible benefits to women.

Climate change: The Bank successfully integrated climate adaptation measures into its transport projects, such as the Dodoma City Outer Ring Road in Tanzania, which included flood mitigation strategies. However, the evaluation pointed out several ongoing challenges. Most projects focused on climate adaptation, with less emphasis on climate mitigation. The evaluation also found a lack of standardized best practices for climate-resilient infrastructure.

Fragility: The evaluation found that the AfDB has significantly addressed fragility as a cross-cutting issue. However, integrating fragility considerations into transport projects was deemed inconsistent. In countries in fragile situations, or conflict-affected, such as those involved in the Support for the Air Transport Sectors of West & Central Africa Project, ambitious targets were unmet due to a lack of expertise and operational teams. Additionally, while the Bank successfully mobilized private sector investment in high-risk environments, such as the Nacala Rail Corridor, these investments were often vulnerable to governance weaknesses, inadequate capacity, and risk.

Conclusions

Overall, the Bank's support for the transport sector from 2012 to 2023 has notably enhanced connectivity, contributed to trade facilitation, and propelled economic growth. However, challenges related to efficiency, sustainability, and the integration of cross-cutting issues—such as gender equality and climate resilience—hindered interventions' full potential.

The AfDB's transport projects aligned with international frameworks like the SDGs and Agenda 2063, focusing on infrastructure, regional integration, and private sector engagement. Notable projects like the Trans-African Highway Network and the Kazungula Bridge showcased the Bank's commitment to reducing transport costs and promoting trade. The Bank's support demonstrated satisfactory coherence, aligning transport projects with corporate and regional strategies, while fostering collaboration with development partners. Internally, transport initiatives complemented sectors like agriculture and energy, enhancing productivity. Externally, challenges in coordination and synergy optimization persisted.

The AfDB projects generally met their objectives, improving transport efficiency through reduced travel times and enhanced accessibility. Initiatives like the Mombasa-Nairobi-Addis Ababa Road Corridor and the Arusha-Holili/Taveta-Voi Road spurred local economic growth. Despite delays, completed projects contributed to driving regional integration, as evidenced by increased

economic activity (proxied by increases in nighttime luminosity in project areas) and household incomes. However, unintended negative impacts, including environmental degradation, highlighted the need for robust risk mitigation. Efficiency remained a concern, with significant delays caused by systemic inefficiencies, perceived limited flexibility in implementing Bank procedures, and coordination challenges. While budget management was sound, inflexible implementation of processes strained partnerships and undermined resource efficiency.

Sustainability was also found partly unsatisfactory, with inadequate maintenance frameworks reliant on national governments. Financial sustainability varied significantly across regions and was particularly problematic in areas with weak governance and limited resource mobilization. Institutional support was found inconsistent, with some successes but also coordination issues and insufficient technical assistance.

Lessons

The following are the key lessons from this evaluation.

- **Integrating well-planned ancillary components into transport infrastructure projects can significantly enhance their impact and sustainability.** Ancillary components were expected to complement main project activities and enhance overall impact. The evaluation found that ancillary components often delivered benefits which exceeded their costs.

- **Tailored approaches that account for state fragility, including enhanced capacity-building and risk mitigation, are essential for successful transport sector projects.** The evaluation found that state fragility hampered project implementation and sustainability. Weak institutional capacity and political instability in states facing fragility often led to delays and compromised outcomes.

- **Ensuring sustainable maintenance funding and robust governance frameworks of the transport sector are crucial for the long-term success of infrastructure projects.** The evaluation found that the long-term sustainability of the AfDB-funded transport sector infrastructure was frequently compromised by inadequate maintenance provisions and insufficient capacity building at the national level. Insufficient maintenance funding and weak governance led to the rapid deterioration of infrastructure.

- **Clear guidelines and consensus on climate resilience best practices are essential for effective integration into transport sector infrastructure projects.** Climate resilience was expected to be fully integrated into project designs. The evaluation found that while climate considerations were included, best practices were not consistently applied.

- **Early and thorough consultations with women's groups and targeted gender-focused interventions are key to successful gender integration in projects**. Gender considerations were expected to be fully integrated and effectively implemented. The evaluation found that while gender was included in project designs, implementation faced significant challenges. Inadequate consultation with women's groups and weak implementation of gender-related activities limited their impact.

- **Proactive and structured coordination with development partners is crucial to maximize the impact and efficiency of joint interventions**. The evaluation found that coordination varied, with some projects suffering from poor alignment and communication. Weak coordination led to overlapping efforts and missed opportunities.

- **Flexibility in implementation processes, combined with hands-on support and delegated authority to local teams, can enhance efficiency and minimize delays.** While it is essential to adhere to the AfDB's predefined implementation procedures—such as procurement rules, safeguard compliance under the Integrated Safeguards System, and financial accountability protocols—applying these processes in a context-sensitive and flexible manner can significantly improve project efficiency.

- **Ensuring high quality of initial project designs can improve efficiency and avoid further changes during the implementation stage**. It was found that the initial design of outputs and outcomes did not always accurately address the needs of the beneficiaries and sometimes had to be changed before the implementation stage.

- **Cooperation between regional economic communities, external partners and executing agencies can encourage the efficient delivery of capacity-building outcomes**. It was noted that the achievement of capacity-building outcomes showed a mixed performance, which has mostly proven difficult due to limited cooperation between actors and institutional capacity constraints. Indeed, the issues faced in the majority of projects with a focus on institutional capacity building were found to be the direct result of delays from executing agencies in disbursing funding.

Recommendations

IDEV makes the following recommendations:

1. **Ensure strong alignment with and operationalization of the AfDB's TYS 2024-2033 priorities in its transport sector interventions and approaches at the corporate, regional, and country levels.**

   Key priority actions to consider include:

- In the Transport Sector Action Plan that Management intends to develop, ensuring a balance of focus between Bank investments in transport infrastructure and support for services solutions.
- Considering the optimal mix of investment in different modes of transport, responding to countries' and regions' needs, and leveraging the Bank's strong comparative advantage in regional and cross-border interventions.
- Ensuring systematic integration of the Transport Sector Action Plan in Country Strategy Papers and Regional Integration Strategy Papers, cascading through to operations.
- Promoting the accurate monitoring, tracking and reporting of transport sector results through a clear underlying theory of change and results frameworks aligned with the corporate Results Management Framework.

2. **Improve the efficiency of AfDB transport sector interventions and reduce start-up and implementation delays by addressing key hampering factors.**

   Areas that could be considered include:

- Identifying good practices by other development partners and considering their appropriateness for the AfDB.
- Addressing the capacity constraints at local, national and regional levels that impede efficient and effective project implementation.
- Reviewing approval procedures, including sign-off thresholds and delegation of authority to relevant project teams or country offices, to expedite approvals.
- Exploring possibilities for developing or enhancing automated systems to support key approval workflows—such as non-objection notices—aiming to streamline operations, reduce processing times, and improve transparency.

3. **Respond to climate change and strengthen the sustainability of transport interventions by integrating climate resilient design standards.**

   Key priority actions to consider include:

- Building on the Bank's current approach for integrating climate considerations into transport interventions, develop and consistently apply standards for climate resilient infrastructure design, based on climate resilience assessments, processes and tools specific to the transport sector.
- Strengthening capacity-building and knowledge-sharing initiatives on climate adaptation among transport sector actors on the continent.

4. **Together with other development partners, promote a comprehensive approach to transport infrastructure maintenance.**

   Key priority actions to consider include:

- Strengthening policy dialogue with national governments and regional organizations to shape and implement transport sector infrastructure maintenance priorities.
- Proactively supporting RMCs in developing innovative financial solutions for mobilizing and effectively utilizing resources for transport infrastructure maintenance, drawing on successful experiences from the AfDB and other development partners.
- Enhancing the capacity of national transport agencies and local governments to manage maintenance programs effectively through targeted training and TA support.

5. **Deepen the Bank's development results and maximize impact by enhancing the design and implementation of ancillary components in transport projects.**

   Key priority actions to consider include:

- Ensuring the availability of the skillsets needed for the thoughtful design and focused delivery of ancillary components, including, forming strategic partnerships with local authorities and non-governmental organizations to leverage local expertise and resources.
- Integrating metrics for ancillary components into the transport sector projects' key performance indicators and M&E frameworks to track their impact effectively.

1. BACKGROUND

1.1 Introduction

As part of its 2023 work program, the African Development Bank Group (AfDB or "the Bank")'s Independent Development Evaluation function (IDEV) evaluated the Bank's support for the transport sector from 2012 to 2023. The evaluation focused on accountability and learning, drawing lessons and recommendations to better inform the design and implementation of future strategic and operational directions for the AfDB's assistance in the transport sector. This report summarizes the findings, conclusions, lessons, and recommendations from the evaluation.

The first section of this report presents the background to the evaluation. The next section describes the approach and methodology, followed by a section highlighting the Bank's engagement in the development of transport in Africa. The evaluation's main findings, are next, followed by cross-cutting issues. The final section summarizes the evaluation's conclusions, lessons and recommendations.

1.2 Purpose, objectives, and scope of the evaluation

Purpose and objectives: This evaluation aims to inform the Bank's strategies and operational approach to the transport sector, as well as its support to major regional transport strategies and programs. The evaluation identified emerging trends in the sector, assessed how the Bank has responded to them, took stock of the results of the Bank's support, and drew lessons for ongoing and future interventions.

Scope: The scope of the evaluation is the Bank's general transport portfolio, specifically the road, rail, water, air, and urban transport sub-sectors. The evaluation assessed the AfDB interventions approved and implemented over the 2012–2023 period. The interventions included sovereign and non-sovereign investment loans and grants, guarantees, equity participations, technical assistance, and analytical and advisory services for the development of Regional Member Countries' (RMCs) transport sectors, as well as the Bank's support to major regional transport strategies.

1.3 Key trends and challenges in Africa's transport sector

Providing adequate transport infrastructure is critical for Africa's economic development and regional integration, as well as addressing the continent's demographic challenges.

Key trends include:

- **Growing significance of transport in Africa's infrastructure**: In 2018, transport accounted for 33% of total new financial commitments to African infrastructure, underscoring its significance. Efficient transport systems enhance productivity and quality of life, but inefficiencies lead to higher prices of goods.
- **Renewed focus on rail infrastructure**: The search for minerals needed for the energy transition has renewed external interest in expanding freight rail networks. One is the Zambia-Lobito railway (supported by the United States, European Union and the AfDB) connecting the Democratic Republic of Congo (DRC), Zambia, and Angola. This project would support the transport of copper, cobalt, and manganese. To meet African Continental Free Trade Area (AfCFTA) demands, the United Nations Economic Commission for Africa (UNECA) estimated a need for 97,614 wagons for bulk cargo and 20,668 for container cargo by 2030. The AfDB financing has also played an essential role in expanding rail infrastructure on the continent, ready for the AfCFTA.
- **Rising potential in aviation**: Despite representing only 2.1% of global air passengers in 2023, the aviation sector is vital for Africa's growth, contributing 2.7% to gross domestic product (GDP), supporting 6.2 million jobs, and carrying nearly 100 million passengers annually (Ronak Gopaldas, 2022). Efforts to liberalize the aviation market, such as the Yamoussoukro Declaration and the Single African Air Transport Market, aim to enhance connectivity. Implementing the AfCFTA could

double air cargo tonnage from 2.3 to 4.5 million.[1] The International Air Transport Association (IATA) estimates Africa's passenger traffic to nearly double by 2035, exceeding 260 million passengers.[2]

- **Maritime trade and port development:** Maritime transport handles around 90% of Africa's international trade. UNECA forecasts a significant increase in maritime cargo, from 58 million to 132 million tons by 2030, spurred by the implementation of the AfCFTA. This growth will require significant investment in maritime infrastructure. Rapid urbanization exacerbates congestion in port cities, affecting supply chains. Public-private partnerships are recognized as essential for investing.
- **Urbanization and transport demand:** Africa faces rapid population growth, projected to double from 1.3 billion in 2019 to 2.4 billion by 2050, with urban populations increasing significantly (UN, 2018[3]; Minsat, 2018[4]). Two-thirds of this urban population will live in small towns or intermediate cities, presenting challenges in housing, food provision, and infrastructure services. This demographic shift will place additional pressure on existing transport systems, requiring both the expansion of infrastructure and the development of new, more sustainable solutions. The OECD-ACET report (OECD & ACET, 2020[5]) emphasizes the importance of understanding demographic changes and migration patterns to better plan infrastructure that meets citizens' needs. For example, as cities expand, there is a need for more efficient public transport systems, such as bus rapid transit (BRT) and urban rail networks, to alleviate congestion and reduce the environmental impact of transport.

Despite investments, Africa faces challenges that impede the development and sustainability of its transport infrastructure. They include:

- **Inadequate and outdated infrastructure**: Much of Africa's transport infrastructure is outdated or in poor condition. Road infrastructure handles 80% to 90% of transportation activities in Africa[6], but is plagued by poor maintenance. Only about 25% of Africa's road network is paved, compared to the world's average of more than 50%, and even less is in good condition. Delays in maintenance can increase costs—a three-year delay can raise costs sixfold. Lack of reliable transport infrastructure increases costs and slows trade. Road safety is also a concern due to high fatalities.

  Maritime transport faces challenges like limited connectivity, capacity constraints, high costs, corruption, and piracy.

  Rail infrastructure has historically suffered from underinvestment and fragmentation. One of the significant challenges is Africa's lack of uniformity in railway track gauges, complicating cross-border freight movements. Past public-private partnership (PPP) approaches often underestimated investment needs, leading to terminated or modified agreements.

  In the aviation sector, challenges include high operating costs, limited connectivity, and regulatory hurdles. The sector has suffered losses of USD 3.5 billion from 2020 to 2022 due to the COVID-19 pandemic and rising oil prices. At the same time, Ethiopian Airlines exemplified successful strategies by expanding intra-African networks and adapting operations during the pandemic.

  In terms of urban transport, most African cities lack formal and affordable public transport systems. Developing integrated mass transit systems and innovative mobility solutions presents an opportunity to enhance urban development. Additionally, cities will need to address the challenge of fleet electrification shortly.
- **High transport costs**: Africa's transport costs are among the highest in the world, making it difficult for businesses to compete in regional and global markets. For example, shipping costs are up to two to three times more expensive in landlocked countries than in coastal countries. Landlocked Central African nations face transport expenses accounting for 45% of import value and 35% of

[1] https://www.uneca.org/stories/africa-transport-sector-to-strongly-benefit-from-african-continental-free-trade-area-

[2] IATA. (2023). Focus Africa Media Briefing. https://www.iata.org/contentassets/898a4919cc0b463a9cbba1a79d61e742/focus-africa-presentation_final.pdf.

[3] UN (2018), World Urbanization Prospects, https://population.un.org/wup/Publications/Files/WUP2018-Highlights.pdf

[4] Minsat, A. (2018), "Small and Intermediary Cities Will Make of Break the Sustainable Development Goals in Africa", Urban Planning International vol.33, No.5. August 2018, http://dx.doi.org/10.22217/upi.2018.328

[5] https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/07/quality-infrastructure-in-21st-century-africa_8fe31a0f/83f17831-en.pdf

[6] Connecting Africa – Role of transport infrastructure: https://www.tralac.org/images/docs/12896/connecting-africa-role-of-transport-infrastructure-exim-bank-working-paper-march-2018.pdf

export value.[7] Poor infrastructure, inefficient logistics, and inadequate maintenance drive these high costs. A 2016 Cabinet Infhotep Report[8] found that transport costs account for 30-40% of the price of imported products, with logistical costs four to six times higher than in other developing economies.

- **Limited regional connectivity**: Despite efforts to improve cross-border infrastructure, regional connectivity remains a significant barrier to trade and economic growth, and inadequate transport links between countries continue to impede progress.
- **Climate change and sustainability**: Climate change poses a significant threat to Africa's transport infrastructure. Extreme weather events like floods, droughts, and rising sea levels are damaging roads, bridges, and ports. To ensure their long-term success, it is essential to prioritize climate-resilient and environmentally sustainable designs.

2. EVALUATION APPROACH AND METHODOLOGY

2.1 Evaluation questions

The evaluation addresses the following overarching question: Over the evaluation period (2012-2023), how well did the AfDB support RMCs to develop transport? The specific questions are as follows:

Q1. **Relevance:** To what extent did the Bank's interventions' objectives and design respond to the beneficiaries' needs, policies, and priorities and continue to do so if circumstances change?

Q2: **Coherence**: To what extent did other Bank interventions (particularly policies) support or undermine the Bank's interventions in the transport sector and vice versa? To what extent were synergies and interlinkages between the Bank's interventions in the transport sector and other Bank interventions optimized (integrated solutions)? And to what extent were the Bank's interventions in the transport sector complementary, harmonized and coordinated with other development partners' support to RMCs, adding value while avoiding duplication of effort?

Q3: **Effectiveness**: To what extent has the Bank been effective in achieving its objectives and results with regard to transport development across different groups of beneficiaries, including women and youth? Which factors have enabled or hampered success?

Q4: **Efficiency:** To what extent were the Bank's interventions in the transport sector efficient (time and resource utilization) from both program and institutional perspectives?

Q5: **Sustainability**: To what extent are the net benefits of the Bank's support for the transport sector sustainable?

Q6: **Impact:** To what extent have the Bank's interventions generated or are expected to generate significant positive or negative, intended or unintended, higher-level effects (economic growth, regional integration, trade between countries, agricultural outcomes through feeder roads, urban mobility, and climate change)?

2.2 Evaluation approach and methodology

The evaluation aimed to fulfill accountability and learning objectives, providing valuable lessons to guide the design and implementation of transport sector interventions. The evaluation used a theory-based approach combining quantitative and qualitative methods to address the evaluation criteria and questions. It focused on four levels (interventions, clusters, countries, and strategies), considering contextual, policy, governance, and organizational influences on the Bank's performance at each level. The findings of the evaluation were generated by triangulating information from multiple lines of evidence

[7] Viljoen, W. (2023). Transportation costs and efficiency in West and Central Africa. Tralac/AGOA Information, https://www.tralac.org/discussions/article/9364-transportation-costs-and-efficiency-in-west-and-central-africa.html

[8] https://old.infhotep.com/wp-content/uploads/Edition2016-Les-transports-en-Afrique-Enjeux-et-perspectives.pdf

(Annex 3) gleaned from a literature and policy review, document review, a portfolio review, six country case studies (Cameroon, Côte d'Ivoire, Namibia, Senegal, Tanzania, and Tunisia), five regional case studies covering each of the five mainland regions (Central, East, North, South, and West), two thematic case studies (climate resilience and gender – impact on women), two cluster evaluations (18 Road and Port projects, and 18 Rail and Aviation projects), and 83 projects selected for assessment. Annex 1 presents the reconstructed results chain and the related assumptions.

The evaluation also conducted a geospatial analysis, including satellite and digital images, to assess the effectiveness and impact of six completed projects.[9] One of the key methods used was the analysis of nighttime light intensity, which serves as a proxy for economic activity. By analyzing changes in nighttime light levels before and after the implementation of major transport projects, the evaluation team was able to assess whether these interventions contributed to economic growth. The geospatial analysis was particularly useful for assessing the indirect benefits of transport infrastructure, such as increased commercial activity, urban development, and improved access to markets and services. This method also helped address challenges related to data availability in regions where formal economic data was limited or outdated.

The evaluation team selected countries for case studies, using criteria that ensured balanced representation across several dimensions. These included the number of AfDB-supported transport projects, geographical distribution, language diversity, income levels, state fragility, travel restrictions, availability of project information, and project status. The final set consisted of five regional studies, each focusing on one of mainland Africa's regions as defined by the Bank. Each regional case study included multiple multinational projects to assess the Bank's impact across these regions. Projects that did not span multiple countries were included if they aimed to promote regional connectivity and integration, such as airport infrastructure projects, or if they were key segments in broader strategic networks. Due to their regional significance, some projects from the country and thematic case studies were also incorporated into the regional analyses. Examples of these projects are the Lomé-Cotonou Road Rehabilitation (Phase 2) and Coastal Protection project (Benin-Togo), the construction of the Trans-Gambia Bridge, and the feasibility study for the Trans Maghreb Railway. For the cluster evaluations, the selected projects for in-depth and desktop analyses included a mix of sovereign and non-sovereign interventions, covering all five regions of the continent to ensure broad geographical representation. With regional integration central to many of the Bank's policies and strategies, several multinational projects were evaluated in each cluster. All selected projects were either completed, nearing completion or had been canceled during implementation.

The data collection methods included desk-based research, key informant interviews, and site visits to intervention locations. Annex 4 presents the evaluation matrix, which helped in planning, guiding, and ensuring a comprehensive analysis of the evaluation criteria and questions.

Rating Scale. The evaluation used a four-point rating scale (4: Highly Satisfactory; 3: Satisfactory; 2: Partly Unsatisfactory; 1: Unsatisfactory) for the evaluation criteria of relevance, coherence, effectiveness, efficiency, and sustainability (Annex 2). Due to challenges in evaluating the impact criterion, which impeded an objective rating, the evaluation did not rate this criterion.

Limitations and mitigation strategies

The evaluation encountered the following limitations:

- **Data scarcity and inconsistency.** Projects were at varying stages of implementation; some completed, others canceled, and many ongoing—which affected the availability of crucial documents such as project completion reports (PCRs), project completion report evaluation notes (PCRENs), expanded supervision reports (XSRs), expanded supervision report evaluation notes (XSRENs), and project results assessments (PRAs). Evaluators relied on interim progress reports and stakeholder interviews for projects without PCRs to assess performance, particularly effectiveness and efficiency. In some instances, essential documentation like Implementation Progress Reports or back-to-office reports were used.

[9] Tanzania / Kenya - Arusha-Holili/Taveta-Voi Road Project, Zambia/Botswana - Multinational - Kazungula Bridge Project, Mombasa-Nairobi-Addis Abeba Road Corridor, Gambia / Senegal - Multinational - Trans-Gambia Corridor Project (Phase I) - Construction of the Trans-Gambia Bridge and Cross Border, and Senegal - Dakar-Diamniadio-AIBD Regional Express Train Project - Phase I: Dakar-Diamniadio Segment.

- **Challenges in evaluating the impact criterion**: Initial results were sometimes available for completed projects, while there was a lack of evidence on medium-term performance and the sustainability of benefits. This gap limited the ability to assess long-term impacts. The projected contributions of these projects to regional integration remain largely unmeasured at this stage, mainly due to insufficient data and challenges in attributing outcomes directly to the projects. Although geospatial analysis provided some evidence of positive impacts that completed projects contributed to, it was not enough to draw definitive conclusions. Additionally, the evaluation could not assess the impacts of roads on local populations, which are crucial in both positive (e.g., access to health or education) and negative (e.g., accidents, prostitution) aspects.
- **Geospatial analysis limitations**: While geospatial analysis offered valuable insights into infrastructure projects' spatial and temporal effects, its limitations—such as insufficient resolution and the inability to account for other explanatory factors—reduced its precision in quantifying change. Despite these challenges, satellite data analysis remains a valuable tool for understanding the broader impact of infrastructure projects in complement to traditional evaluation methods.

Using multiple lines of evidence, systematic triangulation, and validating emerging conclusions through stakeholder engagement ensured the robustness of the evaluation's findings. The Judgement Criteria and data sources for responding to the evaluation questions were presented in a comprehensive evaluation matrix (see Annex 3) that established a coherent framework for triangulating the different lines of evidence collected in this evaluation.

3. THE AfDB'S ENGAGEMENT IN THE DEVELOPMENT OF THE TRANSPORT SECTOR IN AFRICA

3.1 Evolution of the AfDB's strategic approach to the transport sector

The AfDB has developed several strategic documents to guide its investment and development activities in the transport sector over the years. The most recent is the draft Sustainable Transport Action Plan 2024-2028[10]. In addition to its strategic documents, the AfDB's transport sector efforts are complemented by partner organizations' guidance. Notably, the African Union's Programme for Infrastructure Development in Africa (PIDA) and Africa50 provide additional frameworks and support that align with the Bank's objectives, enhancing regional cooperation and development in transportation infrastructure. The main transport sector strategic documents are as follows:

- **Transport Sector Policy (1993)**: This policy defines Africa's transport sector as all means of moving people and goods within, between, and outside member states. Based on physical and economic characteristics, the transport sector is classified into five sub-sectors: roads, railways, water, air, and urban.
- **Ten-Year Strategy 2013–2022**: In 2012, the AfDB formulated the Ten-Year Strategy (TYS) to guide its overall operations and investments in various sectors, including transport. The strategy emphasized promoting inclusive and sustainable growth, anchored by two primary objectives: fostering inclusive growth and facilitating the transition to green growth. Within the transport sector, AfDB recognizes that improving connectivity and shifting toward green growth serve as pivotal drivers of economic and social development throughout the continent.
- The **Integrated Safeguards System (2013)** establishes the guiding principles for an Integrated Safeguards System (ISS) that consolidates and revamps the AfDB's existing environmental and social safeguards. The paper presents two components of the ISS—the Integrated Safeguards Policy Statement and five Operational Safeguards.
- **High 5s for Transforming Africa**: The High 5s were developed in 2016 in response to the Sustainable Development Goals (SDGs), the Paris Agreement, and multilateral development banks' call for more financial resources. The AfDB's High 5 priorities are strategic objectives designed to accelerate Africa's economic transformation. The transport sector is pivotal in achieving these goals by facilitating trade, improving connectivity, and enhancing access to markets and services.

[10] The Bank, led by the Infrastructure and Urban Development (PICU) Department, has been working on the draft Sustainable Transport Action Plan 2024-2028. It is expected to be presented to the Operations Committee (OpsCom) in quarter one 2025 and shared with the Board for information.

- **Climate Change Action Plan II 2016–2020**: This plan outlined the AfDB's approach to addressing climate change challenges and promoting African climate resilience. It was closely linked to the transport sector through its focus on promoting low-carbon, climate-resilient infrastructure that supports sustainable development. The plan emphasized integrating climate considerations into all investment decisions, including transport, given the sector's significant contribution to greenhouse gas emissions and its vulnerability to climate-related risks.
- **Programme for Infrastructure Development in Africa (PIDA) 2021-2030 Action Plan (2020)**: Launched in 2010, PIDA PAP2 (2021-2030) is the African Union's infrastructure program. It aims to promote regional integration and industrialization through an integrated corridor approach that incorporates gender, climate, job creation, rural connectivity, and economic and financial elements.
- **Sustainable Urban Development Action Plan (2022)**: The AfDB's 2022 urbanization action plan highlighted that limited urban land dedicated to streets in African cities led to congestion and that privately owned minibus taxis ("paratransit") were the main public transport mode, impacting the Bank's goals of providing accessible transport to women and youth.
- **Second Continental Report on the Implementation of Agenda 2063 (2022)** is the African Union's comprehensive blueprint for achieving inclusive and sustainable socio-economic development across the continent over 50 years. The First Ten-Year Implementation Plan, covering 2014 to 2023, set out specific goals, priority areas, and targets to be achieved at national, regional, and continental levels.
- **Strategy for Addressing Fragility and Building Resilience in Africa 2022-2026 (2022)**: This Strategy sets out the AfDB's approach to addressing fragility by building more resilient institutions, economies, and societies in all its Regional Member Countries. Annex VI of the policy outlines regional fragility and possible entry points for the Bank.
- **Climate Change and Green Growth Strategic Framework (2021 and 2022)**: The AfDB's first Climate Change and Green Growth Strategic Framework aimed at operationalizing the Bank's commitment to "ensuring that 40% of its annual finance can be identified as climate finance using multilateral development banks' (MDBs') climate finance tracking methodologies."
- The **Integrated Safeguard System (2023)** is the cornerstone of the AfDB's strategy to promote growth that is socially inclusive and environmentally sustainable.
- **The draft Sustainable Transport Action Plan 2024-2028** outlines the Bank's transport investments and highlights funding mechanisms from other Development Finance Institutions (DFIs), Project Preparation Facilities (PPFs), and Climate Finance Institutions.

These strategic documents helped the AfDB to identify the main developments that influenced Africa's transport sector and explored how these trends affected the development community. They also help to understand how the AfDB responded to these developments. They aim to achieve the SDGs, align with the Paris Agreement, and promote inclusive, green, and sustainable economic growth in Africa. Initially, strategies focused on addressing infrastructure deficits and enhancing basic connectivity, with significant investments in road and rail networks to promote regional integration and economic development. More recent strategic documents, however, emphasize a broader, more integrated approach, aligning transport investments with cross-cutting priorities such as climate resilience, urbanization, and inclusive economic growth.

3.2 Overview of the AfDB's transport sector portfolio, 2012-2023

The AfDB's comprehensive transport sector portfolio showcases a dynamic African transport development approach. This presents several interesting characteristics that align with the institution's commitment to promoting green growth and addressing pressing transport challenges.

Although the transport sector had fewer projects than other sectors, it attracted significant investment from the Bank due to the high value of large-scale infrastructure projects. As a result, it became the second-largest portfolio by value during the evaluation period. From 2012 to 2023, the Bank committed nearly Units of Accounts (UA) 14 billion to 258 transport projects, reflecting a two-fold increase in funding compared to the 2000-2011 period. These projects covered a wide range of transport infrastructure, including roads, railways, ports, airports, and urban transport systems, focusing on promoting regional integration, reducing transport costs, and improving access to markets and essential services. Although fewer transport projects were financed compared to sectors like multi-sector (499 projects), agriculture (395 projects), and power (299 projects), the transport sector accounted for the second-largest share of the Bank's total commitments by value. This was mainly due to the capital-

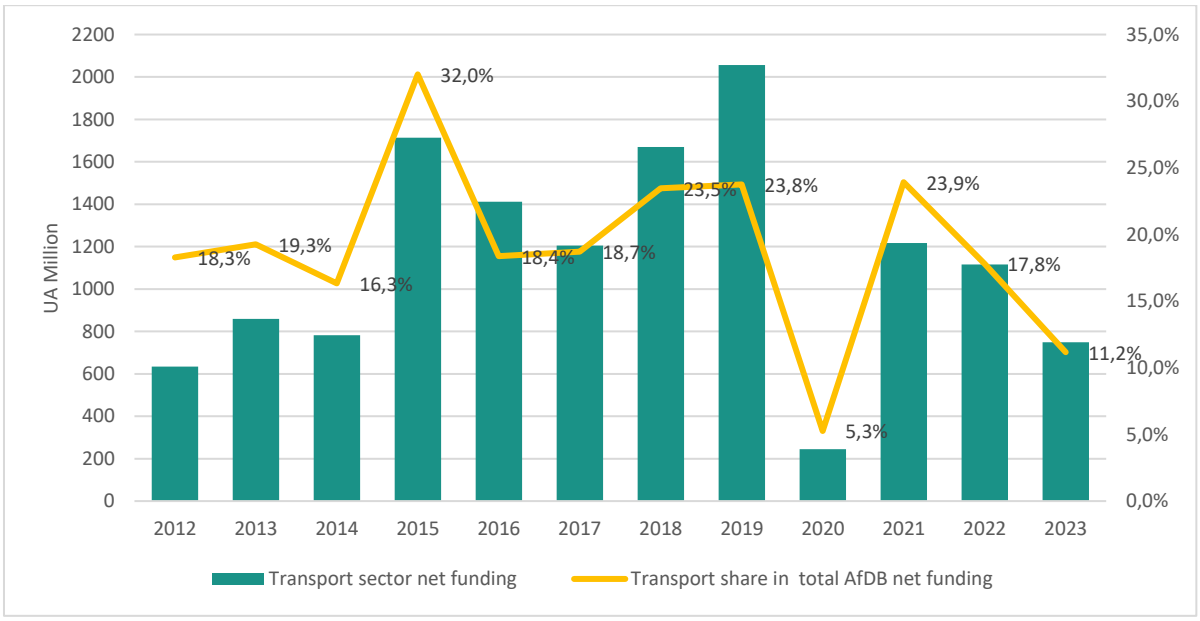
intensive nature of large-scale transport investments, which comprised 19% of the total net funding, trailing only the multi-sector portfolio at 20%.

Funding for transportation projects increased significantly over the evaluation period due to the strategic emphasis on infrastructure, peaking in 2019. However, the COVID-19 pandemic caused a significant downturn, with recovery efforts bringing funding back up, although not to pre-pandemic levels. Between 2012 and 2023, funding for transport projects fluctuated significantly, both in terms of value and as a share of the Bank's overall portfolio. A sharp increase in transport funding occurred in 2015 following the Bank Group's decision to prioritize infrastructure as part of its TYS. The peak of transport financing (in volume terms) was in 2019, with a total of UA 2 billion. However, the onset of the COVID-19 pandemic led to a dramatic drop in funding to UA 244 million as projects were restructured and resources reallocated to address immediate needs. While funding has gradually recovered, it remained below the average annual level between 2015 and 2019[11].

The Bank's transport sector investments were concentrated mainly in state-backed projects, with 85% of funds going to sovereign operations. Out of the total UA 14 billion pledged, UA 12 billion (85%) was allocated to state-guaranteed transport projects, highlighting the Bank's strong emphasis on government-backed initiatives.

Road infrastructure dominated the Bank's transport lending, receiving over three-quarters of the total. Within the transport sector, road infrastructure received the largest share of the Bank's financial commitments, and this fluctuated between 2012 and 2023 in terms of value and the Bank's overall portfolio. Nearly UA 9.5 billion was allocated to road projects, accounting for over three-quarters of all transport-related funding during this period. Roads are the backbone of Africa's transportation networks, carrying 80%-90% of all passengers and freight movements. Major road projects financed by the AfDB during this period include the Trans-Gambia Bridge in Senegal and The Gambia, which has eliminated long ferry waits and significantly reduced travel times.

Figure 1: Transport Project Funding Over Time - Key Trends (2012-2023)



Source: Calculated by IDEV, based on Bank internal databases (as of 19 November 2024)

Although fewer, railway projects were also a key focus, accounting for approximately 5% of the portfolio in value terms. The AfDB supported several strategic rail initiatives, including the Nacala Corridor Railway in Mozambique, which aimed to facilitate the export of coal and agricultural products by connecting the landlocked regions of Malawi and Zambia to the deep-sea port of Nacala. The Dakar Regional Express Train in Senegal is another notable project. The Bank also invested significantly in maritime ports and airports, which were critical to boosting Africa's international trade. Examples include the Walvis Bay Port Expansion in Namibia, and the Nador West Med Port in Morocco. Airport

[11] Outside the scope of this evaluation, lending for the transport sector reached UA 1.845 billion again in 2024.

investments, such as the Blaise Diagne International Airport in Senegal, were designed to support tourism, trade, and economic growth by improving access to international markets.

While the AfDB continues to invest heavily in roads, other MDBs are increasingly shifting their focus towards urban mobility projects. Road infrastructure has traditionally been the primary focus of MDBs in the transport sector. Over the past 50 years, roads have consistently received the largest share of the AfDB's transport investments. However, other MDBs such as the Asian Development Bank (AsDB) have gradually shifted their focus toward urban mobility. The AsDB's latest budget (2020-2024)[12] nearly doubled its allocation to urban mobility, reducing road funding to 52%.

An active transport sector portfolio. As expected, the Bank's transport projects were in various stages of completion at the time of the review. Of the 258 projects, 171 were underway, representing 78% of the total funding allocated to the transport sector. While many transport operations approved from 2012 to 2023 were active, air transport had the highest share, with 84% of the operations still in progress. Conversely, the water transport sub-sector had the highest completion rate at the end of the analysis period, with over one-quarter of projects reaching fulfillment. About 1% of pledged funds were either abandoned or terminated during this analysis period. Considering the approval year, the average disbursement ratio for the transport sector was 48.9% over the 2012-2023 period, while the Bank-wide average disbursement rate was 58.3%.

The AfDB supports transport interventions through diverse funding channels, with ADB and ADF being the most significant contributors. The AfDB finances its transport interventions primarily through two channels: the African Development Bank (ADB) and the African Development Fund (ADF) windows. The ADB window, which raises funds by borrowing from global capital markets, provides non-concessional loans, while the ADF, funded by donor countries and the AfDB, offers concessional loans and grants. Between 2012 and 2023, the ADB lending window accounted for nearly half of the volume of approvals – about UA 7 billion – while the ADF was the second largest, contributing over UA 5 billion.

Project Loans were the leading financial instrument for the AfDB's transport sector investments, with the road sub-sector receiving the most funds. However, there was a notable difference in allocation between the ADF and ADB windows, with the latter showing more diversity in sub-sector investments. Project Loans (PLs) were the primary financial instrument used by the AfDB for transport investments, valued at approximately UA 11 billion (83%). Other significant instruments included Project Cycle Grants (PCGs) and Institutional Support & Rehabilitation Grants (ISRGs), valued at around UA 1.3 billion and UA 998 million, respectively. Additional support from the Bank came from Guarantees, Technical Assistance (Middle-Income Countries Technical Assistance Fund), Project Preparation Facility, Emergency & Special Assistance Grants, and Transition Support Facility (TSF)-Pillar 3. Given that PLs were the most prominent instrument, it is unsurprising that most funding across each sub-sector was linked to this type of financing. The road sub-sector, which received the majority of overall funding, also attracted the bulk of funds from each main instrument. However, it's noteworthy that while the road sub-sector received nearly 90% of the ADF's net funding, it accounted for less than 52% of the ADB's funding.

Geographically, the AfDB's transport sector investments were spread across Africa, with a strong emphasis on regional integration and connectivity. The Abidjan-Lagos Corridor, which spans five West African countries (Côte d'Ivoire, Ghana, Togo, Benin, and Nigeria), is a prime example of the AfDB's efforts to enhance regional connectivity. This corridor, one of the busiest transport routes in West Africa, is crucial in facilitating trade. Another key example of the AfDB's regional focus is the Kazungula Bridge project, which links Zambia and Botswana across the Zambezi River. This multinational project aims to reduce travel times and transport costs. It promotes regional cooperation by providing a critical trade route for landlocked countries in Southern Africa, including Zimbabwe and Malawi, to access international markets via Botswana's dry port in Walvis Bay, Namibia.

The East Africa region received the most significant amount of funding for the transport sector from 2012 to 2023, with a total of UA 4 billion (31% of total funding) and an average of UA 50 million per project. West Africa followed with UA 3 billion (23% of total funding). In contrast, the North (7%) and South (12%) regions received comparatively less funding despite having some of the most developed

[12] Bank, A. D. (2023). Strategy 2030 Transport Sector Directional Guide. In www.adb.org. Asian Development Bank. https://www.adb.org/documents/strategy-2030-transport-sector-directional-guide

infrastructure on the continent. This indicates a shift in the Bank's lending priorities in these regions from transport to other sectors compared to the previous decade (2000-2011). However, regarding average net lending per project, the North (UA 56 million) and Central (UA 45 million) regions ranked higher, reflecting a different approach to investment distribution.

Tanzania was the largest recipient of the Bank's transport sector financing, with Kenya and others also receiving significant support. At the individual country level, Tanzania received the largest share of AfDB financing in the transport sector, accounting for 10.3% of the total, with project funding of UA 1.4 billion. Kenya followed with UA 1.1 billion (8.0%), while Uganda (UA 880 million or 7.3%), Cameroon (UA 959 million or 7%), Senegal (UA 747 million or 5.5%), and Côte d'Ivoire (UA 739 million or 5.4%) and were also among the top recipients. On the other hand, South Sudan (UA 0.45 million), Zimbabwe (UA 0.9 million), Mauritius (UA 1.1 million), Djibouti (UA 2.8 million), and Angola (UA 4 million) received the least. The AfDB transport sector financing disparities among African countries stem from a complex mix of economic, political, and strategic factors. Allocations are typically directed to nations like Tanzania and Kenya, which have significant development needs, large populations, and roles in regional trade. Their political stability and alignment with AfDB priorities support the effective implementation of infrastructure projects. In contrast, countries like South Sudan and Zimbabwe, which are currently in arrears and grappling with political instability and inadequate institutional frameworks, are receiving less funding. These states facing fragility often receive targeted support through smaller, impactful projects, while nations with diverse development partnerships may see AfDB resources redirected to different strategic priorities.

4. MAIN FINDINGS

4.1. Relevance

To what extent did the Bank's interventions' objectives and design respond to beneficiaries' global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances changed?

The evaluation examined the relevance of the AfDB's support for the transport sector at three levels: strategic and operational alignment, quality of design, and adaptation over time and to country circumstances.

4.1.1 Strategic and operational alignment

Finding 1: **The evaluation found that the AfDB's transport sector interventions were highly aligned with global, regional, and national development priorities, effectively addressing the urgent needs of Africa's expanding population and economies. By focusing on regional integration, sustainable infrastructure, and climate resilience, the AfDB enhanced the relevance of its transport interventions, reinforcing its position as a key driver in the development of Africa's transport networks.**

Sector strategic documents' alignment with international and continental commitments related to transport and with the AfDB corporate strategies

The literature and policy review found that the AfDB aligned its transport sector, country, and regional strategies with international and continental initiatives and with its corporate strategies. Global frameworks, including the African Union's Agenda 2063, the SDGs, and the Paris Agreement significantly influenced Africa's transport development. Key initiatives included the PIDA and the United Nations Millennium Development Goals (MDGs), with priorities such as developing regional road corridors, modernizing railways, and enhancing port capacity. The underdeveloped air transport sector, highlighted by the Single African Air Transport Market (SAATM), also presents growth opportunities alongside the need for integrated mass transit systems in urban areas. The AfDB's key strategic documents, such as the Transport Policy (1993), the High 5s for Transforming Africa (2016), and the Climate Change Action Plan II (2017), have guided its interventions. Recent frameworks, including the

PIDA 2021-2030 Action Plan, the AfDB Sustainable Urban Development Action Plan (2022), and the draft Sustainable Transport Action Plan 2024-2028, aimed to address emerging challenges. These strategies focused on enhancing regional connectivity, improving access to markets and services, and promoting sustainable and inclusive economic growth across Africa. Additionally, the AfDB's Ten-Year Strategy 2013-2022 and High 5 priorities also emphasized integrating Africa through infrastructure development and regional connectivity.

The evaluation noted that the AfDB continues to operate under the 1993 transport policy framework. This finding echoes the 2014 IDEV transport evaluation, which recommended that the Bank update its policy to provide a forward-looking strategic vision aligned with Africa's changing infrastructure landscape. Despite this recommendation, no formal policy revision has occurred.

Finally, the evaluation found that the AfDB incorporated the SDGs and the African Union's Agenda 2063 in its Regional Integration Strategy Papers (RISPs) and Country Strategy Papers (CSPs), particularly in infrastructure and regional integration. For instance, the Central Africa RISP (2019-2025) supports SDG 9 through transport corridors, while the Ethiopia CSP (2020-2025) aims to improve road networks for market access, aligning with SDG 1 and SDG 2. The Kenya CSP (2019-2023) promoted sustainable public transport (SDG 11). However, many of these CSPs and RISPs were found to lack provisions for environmental sustainability and social inclusivity. The evaluation also found that many RISPs (e.g., the Southern Africa RISP for 2020-2025 and the North Africa RISP) and CSPs (e.g., Mozambique) missed opportunities to include green transport and did not adequately monitor emissions or engage marginalized communities, impeding progress toward SDG 13 (Climate Action).

Operational alignment - Alignment of AfDB-funded transport interventions' objectives with international, continental, corporate, regional and country strategies and RMCs' needs

The evaluation found that the objectives of the AfDB's transport projects across the air, rail, road, and port sub-sectors aligned well with global strategic frameworks. The AfDB aligned its transport project objectives with the SDGs, notably SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities), as well as the Agenda 2063, to support intra-African trade and regional integration. Major initiatives, such as the Trans-African Highway Network and the Kazungula Bridge, facilitated industrial growth, promoted cross-border trade, reduced transport costs, and advanced regional integration for landlocked countries. The AfDB supported SDG 13 (Climate Action) by incorporating climate resilience measures into project designs. For instance, the Walvis Bay Port Expansion Project in Namibia addressed the impacts of climate change. The AfDB invested in regional integration projects that improved economic resilience and enhanced access to global markets for RMCs. These investments included trans-border roads, airports, and ports. The Arusha-Holili/Taveta-Voi Road improved connectivity across the Kenya-Tanzania border, while the COMESA Airspace Integration Project advanced airspace cooperation among member states. In island nations, the AfDB supported projects to improve port access, such as the Terminal Project in Madagascar, which connected rural areas to key ports for agricultural trade. The evaluation highlighted that the AfDB's initiatives boosted intra-African trade and regional integration. The SAATM Project enhanced connectivity and economic integration, while road and port developments, such as the Lagos-Abidjan Corridor and the Tangier Med Port expansion, facilitated trade. Similarly, road corridors between Zambia and Botswana and Zambia, Malawi, and Mozambique promoted regional trade. Specific projects under PIDA PAP included rehabilitating the Lomé-Cotonou Road and the Libreville-Brazzaville Corridor Transport Facilitation, strengthening connectivity and supporting economic growth across Africa**.**

The evaluation found a strong alignment between the objectives of the AfDB-funded transport interventions and the needs of its RMCs. One notable success was the Morocco Railway Infrastructure Reinforcement Project, which doubled a 141 km track on the Casablanca-Marrakesh line and constructed modern passenger stations. These enhancements aimed to alleviate traffic congestion and address the growing demand for transport services. Similarly, the Jomo Kenyatta International Airport (JKIA) Airfield Expansion Project and a corporate loan to Ethiopian Airlines demonstrated the AfDB's commitment to boosting regional integration and expanding Africa's air transport sector. The JKIA Project increased airport capacity and international connectivity, contributing to Kenya's economic growth.

However, the evaluation identified gaps in alignment with the Paris Declaration, particularly concerning environmental sustainability in road, rail, and aviation projects. Documentary evidence highlighted limited and non-deliberate mitigation measures to offset anticipated increases in greenhouse gas (GHG)

emissions from market development. For instance, while the Nacala Rail Corridor improved market access, it failed to deliver broader integration and green growth benefits.

4.1.2 Quality of Design

Finding 2: **The evaluation found that AfDB-funded transport projects in the two evaluated clusters—roads & ports and rail & aviation—generally featured sound technical design elements when underpinned by thorough feasibility studies. However, the quality at entry across the broader portfolio was found to be uneven. The evaluation identified recurring design shortcomings, including unclear project objectives, weak risk identification and mitigation measures, inadequate monitoring and evaluation systems, and limited integration of soft components such as logistical system enhancements.**

The two cluster evaluations (roads & ports, and rail & aviation) showed that projects with comprehensive feasibility studies were generally well-designed. A notable example is the Kazungula Bridge Project, which included detailed analyses of traffic, trade patterns, and environmental impacts. Its design integrated a one-stop border post (OSBP) to streamline cross-border trade and reduce customs processing times. This careful planning approach demonstrated the AfDB's commitment to developing infrastructure that addresses current needs and supports future growth and regional integration. Evaluated cluster projects were generally found to have cogent and well-articulated logical frameworks. However, the rail and aviation cluster highlighted issues related to inadequacy and choice of outcomes, and the monitoring thereof in multiple projects. Although results-based management was implemented in some evaluated projects, the monitoring and evaluation (M&E) design presented challenges in defining logic models and measurable indicators during appraisal, hampering evaluability. For example, the Sharm el-Sheikh Airport Development Project included an ancillary component to establish a Centre of Excellence for airport management. However, the planning for this initiative lacked precise implementation details and timelines. Furthermore, while the Centre intended to support broader employment targets, the absence of specific output or outcome indicators made monitoring and evaluating its progress, and overall impact challenging.

The evaluation found that the AfDB traditionally prioritized funding physical transport infrastructure—such as roads, railways, and ports— with less emphasis on optimizing logistics systems that utilize this infrastructure. In Mozambique, development partner funding for the Nacala Rail Corridor and Port Project prioritized infrastructure to support coal exports, but investments in logistics management systems to optimize cargo handling and supply chain efficiency were minimal. Some projects successfully incorporated logistics system efficiencies, such as the OSBPs, including the Holili-Taveta OSBP and the SADC Trade and Transport Facilitation Project. However, the impact of these efforts remained limited, as intra-regional trade volumes showed modest growth despite improvements in recent years in regional road infrastructure service levels. Among the obstacles to the development of trade are (i) the presence of numerous road checkpoints, and (ii) the existence of non-tariff barriers resulting from non-harmonized procedures regarding the movement of goods and people between states.

4.1.3 Adaptation over time and to country circumstances

Finding 3: **The evaluation found that the AfDB's transport interventions generally exhibited adaptability and flexibility, enhancing their relevance in a rapidly evolving African context. However, it also identified gaps in adaptability, particularly in relation to environmental sustainability considerations.**

The stakeholders interviewed highlighted that African countries face challenges like rapid urbanization, population growth, and climate change, and commended the AfDB for its adaptability in addressing these issues. As urban areas expanded, the AfDB adjusted its transport initiatives to meet the growing demand for urban mobility solutions. Notable examples include the Dar es Salaam BRT in Tanzania and the Dakar Regional Express Train (TER) in Senegal, which aim to provide efficient public transport, reduce congestion, and improve air quality. This approach ensured the continuity of critical infrastructure projects despite economic constraints. However, the evaluation also identified areas requiring greater adaptability, particularly in integrating new technologies and sustainable practices. While projects like the Walvis Bay Port Expansion successfully incorporated

innovative design elements to enhance climate resilience, others missed opportunities to adopt sustainable construction practices, renewable energy, and digital technologies for traffic management. For example, the Bamenda-Enugu Road in Cameroon, which enhanced regional trade between Cameroon and Nigeria and improved accessibility in underserved regions: while the road passes through ecologically sensitive areas, no detailed measures to reduce environmental disruption, such as wildlife corridors or reforestation efforts, were documented.

The evaluation found that evaluated project designs often required modifications to meet local conditions and beneficiary needs before implementation, leading to implementation delays. The road and ports cluster evaluation found that seven of eight projects underwent adjustments, such as redesigning pavement structures in the Sierra Leone Matotoka-Sefadu Road Rehabilitation Project, section I and Tanzania, or reinforcing drainage systems in Madagascar. While these changes were essential for improving the quality and sustainability of the infrastructure, they frequently caused delays.

On balance, the evaluation rates the **relevance** of the Bank's support for the transport sector as **satisfactory** despite some important shortcomings.

4.2. Coherence

To what extent did other Bank interventions (particularly policies) support or undermine the Bank's interventions in the transport sector and vice versa?

Finding 4:	**The evaluation found strong synergy and interlinkage between the AfDB transport initiatives and broader Bank goals at the strategic, regional, and operational levels. These interventions supported multimodality, regional integration, trade and industrialization. This synergy and interlinkage strengthened internal coherence by ensuring consistency, fostering cross-sectoral synergies, optimizing resource use, and enhancing collaboration. Collaboration with development partners was deemed robust, although it varied by region due to local contexts and the degree of government control over development agendas. Many projects built on previous AfDB financing, and benefitted from donor coordination platforms, ensuring well-coordinated transport investments. However, the evaluation also identified operational challenges in the implementation of safeguard requirements, particularly regarding compensation to project-affected people.**

Internal Coherence

The evaluation found that the AfDB's support for the transport sector effectively synergized and interlinked with its broader corporate and sector/thematic strategies, and those of regional economic communities. The AfDB enhanced internal coherence by ensuring its transport initiatives were synergized and interlinked with strategic objectives. The Bank increasingly designed transport projects that complemented sectors like agriculture and energy. For instance, integrated agricultural corridors with transport projects facilitated goods movement, while energy initiatives supported sustainable transport infrastructure by incorporating renewable energy, energy efficiency, and resilient power solutions. The AfDB's integrated approach to transport projects ensured that ancillary works promoted coherence and inclusive growth. For instance, highway projects with feeder roads improved farmers' access to major markets, supporting rural development, as illustrated by Ghana's Fufulso-Sawla Road Project.

However, the evaluation identified challenges in applying the Bank's Environmental and Social Safeguards (ESS) policies to transport sector interventions. The ESS standards mandate that project-affected persons receive compensation before project implementation; however, misalignment with national legal frameworks often caused delays and financing challenges. In some countries, particularly in the Central Africa Region, national procedures stipulated compensation at different project stages or lacked precise mechanisms to ensure compliance. These misalignments delayed project progress until the AfDB and national authorities had reconciled their requirements.

External Coherence

The evaluation highlighted examples of strong cooperation with development partners characterized by regular discussions on priorities, but it also found variability in the effectiveness of coordination across regions. The AfDB actively engaged with the African Union Commission (AUC) under the PIDA framework to address infrastructure gaps and maintain consistent local communication with partners. Successful examples include monthly partner meetings in Zambia and co-financing of the Kazungula Bridge Project with the Japan International Cooperation Agency (JICA). However, the evaluation identified challenges in maintaining consistent coordination and leveraging additional resources, particularly in fragile environments and regions with complex political and economic conditions. While coordination platforms in countries like Tanzania and Rwanda facilitated well-coordinated investments, others, such as the Nacala Rail Corridor and Port Project, experienced delays due to misalignment between the AfDB's priorities and those of local governments in Malawi and Mozambique. The portfolio review showed that the total cost of the AfDB-funded transport interventions from 2012 to 2023 amounted to approximately UA 34 billion, with the AfDB covering 22% of the total, while other development partners and governments financed 78%.

Most countries have established donor coordination platforms for the transport sector, ensuring well-coordinated investments, particularly in the road and port sub-sectors of Tanzania, Rwanda, Burundi, Madagascar, and Tunisia. Railway studies demonstrated a strong alignment with other projects, showcasing excellent cooperation with the European Union. During site visits, the evaluation team observed significant involvement from various DFIs, including the World Bank, Islamic Development Bank (IsDB), and others, contributing to major transport projects across Africa. Each DFI exhibited a distinct funding focus: Agence Française de développement (AFD) emphasized urban mobility, the IsDB and World Bank prioritized regional connectivity, and JICA concentrated on facilitating trade beyond the continent. This diversity of focus underscored the complementarity among donors and their contributions to advancing Africa's transport infrastructure.

The evaluation highlighted that external coherence is most potent in regions with proactive government engagement and robust donor coordination platforms, such as Morocco and Senegal. In Morocco, regular meetings and sector working groups strengthened aid coordination among development partners. However, challenges remained in harmonizing priorities. For example, in Tunisia, where the government exercised strong oversight of development initiatives, government-set parameters often constrained interactions and communications among development partners. Also, maintaining effective collaboration was difficult in regions with fragile environments or limited government capacity.

Overall, the Bank's support for the transport sector demonstrated **satisfactory coherence**.

4.3. Effectiveness

To what extent has the Bank been effective in achieving its transport development objectives and results across different groups of beneficiaries, including women and youth? Which factors enabled or hampered success?

The effectiveness of the AfDB's support for the transport sector was evaluated at six levels: (i) achievement of outputs and outcomes of lending activities, (ii) knowledge management and analytical work, (iii) co-financing and leverage, (iv) coordination and partnership, (v) selectivity, and (vi) policy dialogue.

4.3.1 Lending activities

To what extent did the Bank's transport sector interventions achieve their expected outputs, and direct and indirect outcomes?

Achievement of outputs

Finding 5:	**The evaluation found that most AfDB transport initiatives involving major construction, infrastructure, and vehicles were effectively implemented and well supervised, achieving most objectives and delivering high-quality outputs. However, regional disparities in performance were observed.**

The analysis of evaluated projects found that completed projects generally delivered their main transport-related outputs as planned, but challenges arose in achieving full completion across the continent. Many completed projects successfully constructed or rehabilitated infrastructure, such as roads, bridges, railways, ports, and airports. However, regional disparities were evident, with Central Africa facing the most significant hurdles due to low completion rates and delays owing to procedural inefficiencies. For example, the Integrated Transport Project experienced inconsistent performance, and parts of the Ethiopia-Djibouti transport corridor remained incomplete at the time of data collection. In West Africa, the AfDB-funded transport initiatives have generally met their goals. A standout example is the Trans-Gambia Bridge, which spans 1,892 meters across the River Gambia and replaced the ferry service, facilitating smoother transit for vehicles, especially trucks. Despite its success, communication challenges between The Gambia and Senegal delayed the implementation of OSBPs.

At the same time, the evaluation identified a misalignment between the intended objectives of several projects and the practical utility of their outputs across different regions. For example, the evaluation of the Ethiopia-Sudan Standard Gauge Railway Feasibility Study raised concerns about whether the project outputs effectively aligned with its intended objectives. While the feasibility study produced the required reports, questions about their technical and financial soundness within the local context limited their practical value for informed decision-making. This indicated that the outputs did not fully achieve the level of relevance and applicability envisioned during the project's design phase. Similarly, the COMESA Airspace Integration Project delivered outputs that diverged from the original project design due to the interests of Member States. Instead of achieving the envisaged COMESA Unified Airspace, the project delivered the COMESA Seamless Upper Airspace, representing an unanticipated output. Phase I of the Dakar-Diamniadio-AIBD Regional Express Train Project revealed a capacity shortfall, with an intended target of transporting 115,000 passengers daily, but it currently accommodates only 80,000 due to insufficient rolling stock. In Tunisia, the Road Infrastructure Modernization Project met six out of nine targets, but some objectives like road development were only partially fulfilled.

Finding 6:	**The evaluation found recurring issues hindering the overall efficiency and effectiveness of delivering secondary and ancillary components.**

The evaluation found that ancillary components of transport projects encountered more significant implementation challenges compared to the core civil works. These challenges were mainly due to insufficient funding allocations, weak prioritization, and limited project management capacity. Furthermore, inadequate planning and fragmented funding hindered the timely procurement and delivery of these components. For example, in Côte d'Ivoire's Abidjan Urban Roads Project, the government had to cover the costs of women's centers because neither the AfDB nor the executing agency allocated them, leading to delays. In Morocco's Railway Infrastructure Reinforcement Project, the team completed main outputs such as 141 kilometers of double-track rail, 10,000 square meters of train stations, and 14,000 square meters of maintenance workshops, but failed to implement 25 planned gender initiatives due to fiscal constraints. Similarly, in the DRC's Priority Air Safety Project (PPSA) Phase II, only 3% of the HIV/AIDS sensitization campaign was completed. In the Trans Gambia Bridge Project, a market center intended to boost local trade was relocated due to private land purchases, reducing its intended impact. Projects prioritizing institutional support over construction also faced significant challenges in delivering ancillary components.

Achievement of outcomes

Finding 7:	**The evaluation found that transport projects significantly contributed to regional development – notable transport efficiency gains and improvements to people's living conditions were generally recorded.**

The analysis of evaluated projects showed that transport projects have significantly reduced travel times and increased traffic intensity across various regions. For example, the Arusha-Holili/Taveta-Voi Road Project in Tanzania and Kenya cut the travel time from Arusha to Mombasa from 6 to 4 hours, as expected. The Mombasa-Nairobi-Addis Ababa Road Corridor reduced travel time by one-third (compared to the planned 40% reduction). In Ghana, the impact evaluation of the Fufulso-Sawla Road showed that the project improved commuting times in 2019 by 33%, saving households about 120 minutes monthly, though transport costs rose by 14.5% due to higher demand and service charges. Additionally, the Dakar-Diamniadio Toll Highway in Senegal reduced travel times by over 50%.

Project-level evaluations highlighted that completed AfDB-funded transport interventions significantly boosted freight traffic and volume, positively impacting regional trade. For example, the Kazungula Bridge Project increased daily truck traffic by 271.55% and freight volume by 294.54%, showcasing improved trade efficiency. The Mombasa-Nairobi-Addis Ababa Road Corridor also led to a 410.61% rise in trade volume. The Nacala Rail Corridor and Port Project in Mozambique provided crucial export links for Malawi and Zambia, supporting regional economic growth and industrialization.

Selected completed projects analysis indicated that road projects contributed to some extent to significant improvements in rural accessibility, as evidenced by notable increases in the Rural Access Index (RAI)[13]. This index measures the percentage of the rural population living within 2 km (or 5 km) of an all-season road. After the completion of the Mombasa-Nairobi-Addis Ababa Road Corridor in 2019, the RAI saw substantial improvements in Kenya and Ethiopia. In Kenya, the RAI rose from 21.8% in 2016 to 43.41% in 2023, benefiting residents in neighboring Marsabit County. Similarly, Ethiopia's RAI increased from 34.56% to 84.52% during the same period, with most rural populations in Borena, Gedeo, and Sidama now enjoying better access.

Aviation projects delivered mixed results. While some projects have successfully improved air traffic safety and enhanced the movement of goods and people, others have encountered delays, primarily due to the COVID-19 pandemic. The Priority Air Safety Project Phase II in the DRC effectively reduced incidents and improved safety. Similarly, the Corporate Loan to Ethiopian Airlines yielded positive outcomes. However, progress on the project supporting the Single African Air Transport Market was unclear, and efforts to strengthen air transport in West and Central Africa faced pandemic-related implementation delays and setbacks. Regarding port projects, these also showed important efficiency gains, although cumbersome customs operations reduced their overall effectiveness.

Safety issues emerged in some road projects due to unenforced speed limits and increased motorized traffic, resulting in reduced road safety. The road and port cluster evaluation identified safety issues due to increased motorized traffic and higher speeds. Increased speeds without adequate enforcement of traffic regulations can lead to accidents. Many road projects reported similar concerns, with unenforced speed limits and higher speeds. This issue was particularly emphasized in the Central and West African case studies, where some significant declines in road safety were noted by the AfDB following the implementation of some road projects. However, the evaluation did not collect sufficient reliable data on traffic accidents and injuries before and after the project's implementation, making it challenging to quantify the safety impact.

Although stakeholders interviewed highlighted the significant potential of OSBPs to reduce transit times and enhance trade through streamlined procedures, they also pointed out several challenges that have hindered the realization of these benefits. For example, while the Kazungula OSBP linking Botswana and Zambia demonstrated potential, its implementation revealed the critical need for a well-defined regulatory framework encompassing global and regional agreements, bilateral accords, and national legislation such as Botswana's One-Stop Border Posts Act and Zambia's Border Management Act. The Namanga OSBP between Tanzania and Kenya, in contrast, successfully reduced border transit times and created jobs.

Finding 8: Documentary evidence and stakeholder interviews indicated that the results of capacity-building efforts displayed mixed performance, primarily due to limited cooperation among stakeholders and constraints in institutional capacity.

Documentation and stakeholder interviews highlighted that transport projects aimed at institutional capacity-building—such as the Support for the Air Transport Sectors of West and Central Africa and Support to AUC/AFCAC on the Single African Air Transport Market— did not achieve their objectives, even after significant extensions. In the first project, providing institutional support, conducting studies, and performing diagnostics were delayed due to difficulties obtaining consultants' services and external funding. Similarly, activities related to training national inspectors in air safety, delivering certifications, and deploying local teams were still experiencing significant delays in 2023, a year before the expected project completion. Despite ambitious targets, no effective local runway safety teams, operator certifications, or qualified staff pools were established. Similar issues were noted in the National Transport Masterplan in Tunisia, where the capacity-building component

[13] The Rural Access Index (RAI) quantifies the percentage of the rural population that lives within a 2-kilometer radius of an all-season road. This is an important indicator developed by the World Bank. World Bank data is available for 2016. The Center for International Earth Science Information Network (CIESIN), using the same methodology, produced data on the Rural Access Index (RAI) on a larger scale for 2023.

aimed at supporting the implementation of the strategic plan was not delivered. This was mainly due to the authorities' inability to communicate their needs promptly. Overall, the challenges faced in most projects focused on institutional capacity-building stemmed from capacity and funding issues within the executing agencies. These problems hindered the implementation of all planned activities under their responsibility. As a consequence, beneficiary agencies faced challenges meeting the AfDB's standards because they lacked the necessary technical skills. This situation resulted in a disconnect between the AfDB and the beneficiaries' agencies rather than fostering a collaborative partnership. They revealed a lack of coordination among the relevant regional economic community (REC) and external partners in achieving the capacity-building components.

4.3.2 Non-lending activities

Knowledge management and analytical work

Finding 9: **The evaluation found that the AfDB actively engaged in knowledge management and analytical work, effectively supporting informed decision-making and policy development across its RMCs. However, the effectiveness of these initiatives was influenced by the specific local context and resource availability.**

Stakeholder interviews underscored the AfDB's critical role in sharing knowledge across the continent. However, the Bank's influence on policy development and its responsiveness to the specific needs of different countries varied by region. In some areas, the AfDB shaped policy frameworks effectively and addressed local challenges. For example, the AfDB positioned itself as a key knowledge disseminator and advisor in Namibia, conducting comprehensive analyses at the country and project levels. A case in point was the Roads Sub-sector Sustainability Strategy Study. However, a gap was found to exist between the Bank's strategic objectives and project selection, limiting its effectiveness in shaping transport sector policies. The AfDB staff and stakeholders interviewed in Senegal expressed the view that the Bank made significant progress in promoting knowledge through economic and sector work since 2010. It has conducted over a dozen studies on cross-cutting issues, such as gender-sensitive budgeting and youth employment. These studies were instrumental in informing policy dialogue, developing CSPs, and designing projects. In others, its impact was less significant. This was exemplified by the case of Tunisia, where, despite valuable contributions to the Transport Masterplan, the Bank struggled to initiate new projects, often being restricted to existing beneficiary-led initiatives. The AfDB succeeded in Namibia and Senegal by proactively disseminating knowledge, aligning its initiatives with national priorities, and actively engaging stakeholders. Conversely, the Bank struggled to significantly impact Tunisia because beneficiary-led initiatives often restricted its involvement, limiting its ability to influence the transport sector's strategic direction. Additionally, gaps between strategic objectives and implementation and contextual barriers further hindered its effectiveness.

The Bank's ability to lead in knowledge dissemination through regional seminars and events was not deemed well established. Regionally, the AfDB collaborated with partners in Central Africa to develop essential analytical tools, such as the Africa Regional Integration Index (ARII) and the Africa Visa Openness Index (AVOI). While in Cameroon, the Bank prioritized capacity building in critical areas such as the green economy, climate change, and gender mainstreaming, its activities in the DRC were constrained by a complex socio-political landscape. In East and Southern Africa, the AfDB was recognized for conducting detailed project analyses, but faced challenges due to reliance on regional teams instead of country-specific ones, which impacted responsiveness in addressing country-specific needs. The evaluation identified the AfDB Transport Forum (ATF) flagship event as a powerful policy platform in the African transport sector. The forum brings together senior transport sector leaders and experts for high-level discussions and presentations, allowing participants to share experiences and best practices, showcase projects, and highlight emerging challenges in African transport. The second edition of the forum, held in 2024, focused on accelerating sustainable transport and logistics connectivity and attracted around 600 participants.

The evaluation found that while the AfDB's analytical work guided transport projects, gaps in applying lessons learned and challenges in planning and engagement reduced their effectiveness. Although the Bank's analytical work was found to have informed various transport projects, gaps remained in effectively using this knowledge. For instance, while the Single African Air Transport Market Project benefited from previous analyses, the Sharm el-Sheikh Airport Development Project faced challenges due to insufficient integration of lessons learned.

Cofinancing & Leverage

Finding 10: **The evaluation found that the AfDB's co-financing and leverage strategies produced mixed results, influenced by local conditions and the level of private sector engagement. While some successes in mobilizing partners were noted, challenges persisted in achieving consistent financial leverage across regions, particularly in terms of private sector participation.**

The evaluation found that the AfDB's co-financing and leverage strategies achieved mixed results, with outcomes influenced by regional contexts, the nature of partnerships, and levels of private sector engagement. While the AfDB demonstrated strong leadership in mobilizing government funding and collaborating with development partners through effective co-financing arrangements, challenges persisted in consistently leveraging private sector resources across regions. The AfDB successfully secured co-financing for major infrastructure projects, significantly enhancing their scope and impact. For example, in Senegal, the Dakar-Diamniadio-AIBD Regional Express Train Project and the Dakar St. Louis Motorway Project attracted substantial contributions from international development banks and private investors, such as the Africa Growing Together Fund (AGTF), the West African Development Bank (BOAD), and the IsDB. The Bank's credibility and convening power played a pivotal role in mobilizing UA 1,036 million in transport sector co-financing by 2023, achieving a leverage ratio of 1:1.6. Similarly, early-stage involvement in the Pemba Airport Feasibility Study in Tanzania facilitated the mobilization of €179 million from Citibank for airport expansion. In Côte d'Ivoire, the Henri Konan Bédié Bridge Project showcased effective financial structuring, aligning public and private investments to deliver impactful results. However, the evaluation also identified challenges in leveraging private sector participation, particularly in fragile environments and high-risk regions. For instance, while the AfDB successfully mobilized funding and coordinated with partners such as the Japan Bank for International Cooperation (JBIC) and the International Finance Corporation (IFC) for the Nacala Rail Corridor and Port Value Addition Project, the initiative faced significant political and financial risks that delayed implementation and raised costs. Similarly, in Central Africa, high-risk profiles constrained the Bank's ability to attract private sector investments, limiting co-financing opportunities and resulting in funding levels below the 5.5% target. Although the AfDB collaborated with partners like the Development Bank of Central African States (BDEAC), these constraints underscored the difficulties of operating in politically and economically fragile environments.

In addition to regional disparities, legal, economic, and institutional barriers were further found to hinder private sector engagement. For instance, the Air Côte d'Ivoire (ACI) Project struggled to secure the USD 80 million in commercial lending needed for its expansion due to unmet conditions[14], despite receiving a private sector loan from the AfDB, highlighting the challenges of structuring deals in sectors requiring significant private sector buy-in. Conversely, the New Port of Walvis Bay Container Terminal Project in Namibia demonstrated effective co-financing, with the Bank coordinating contributions from various partners to deliver a successful outcome. The evaluation underscores that while the AfDB effectively mobilized resources in some contexts, achieving consistent private-sector engagement remained challenging. Successes were more frequent in regions with stable political environments, robust governance, and proactive donor coordination platforms, such as Senegal and Namibia. Conversely, fragile environments and high-risk regions like Central Africa and some projects in East Africa highlighted the need for tailored approaches to enhance private sector participation and overcome institutional and economic barriers. Moving forward, the AfDB can continue leveraging its credibility and partnerships, while addressing structural constraints to achieve more consistent co-financing outcomes across the continent.

Stakeholder interviews and documentation highlighted that legal, economic, and regional barriers limited the AfDB's ability to attract private sector investments, leading to mixed results across various regions. In Central Africa, high-risk profiles constrained co-financing opportunities. Although the AfDB secured funding from partners like the BDEAC, co-financing levels remained below the 5.5% target, reflecting the challenges of operating in environments perceived as being politically and

[14] Indeed, not all conditions were satisfied to allow the ADB's private sector loan to enter into force. Furthermore, ACI indicated that it would not purchase the last two aircraft given the price escalation since their order in 2014. The expenses for these last two aircraft were reallocated to finance two new A330 Neo 1 type aircraft ordered in October 2022 by ACI, in the hope of extending its network to more distant destinations (journey times of four hours).

economically risky. In East Africa, while the AfDB co-financed a road project in Ethiopia with JICA, it missed opportunities for additional funding for Ethiopian Airlines.

Coordination and partnership

Finding 11:	**The evaluation found that while the AfDB made significant progress in fostering partnerships and coordination, its approach could be more consistent and strategic in certain areas.**

The evaluation highlighted that the success of the AfDB projects depends on strong partnerships and effective coordination with stakeholders. In Southern and Central Africa, the AfDB was found to have established robust mechanisms for collaboration, thus enhancing project outcomes. For example, the AfDB facilitated quarterly meetings among transport agencies in Southern Africa, allowing for experience sharing and updates. Stakeholders pointed out that this helped avoid duplication and enabled scaling of projects when individual development partners lacked resources. They indicated that each co-ordinating partner kept an up-to-date spreadsheet of activities to ensure they were complementary, not overlapping. Similarly, in Central Africa, the AfDB's understanding of local contexts enhanced its effectiveness, as pointed out by the stakeholders interviewed. In Cameroon, the AfDB led a multi-donor unit and engaged with the government, civil society, and the private sector. An example of effective collaboration was the partnership with UN WOMEN to create a guide for gender mainstreaming in road projects. Senegal further showcased the AfDB's coordination abilities, which were facilitated by its participation in the development partners technical group - G15- and workshops for civil society.

The evaluation also highlighted challenges in various regions, particularly where coordination was less structured. For example, in Côte d'Ivoire, stakeholders noted that the AfDB partnerships were formal and procedural, rather than collaborative and proactive, leading to missed opportunities for collaboration. A case in point was the insufficient coordination between the Abidjan Road Project and the development of the metro system, which led to missed opportunities for synergy and efficiency. In Ethiopia, despite strong ties with the Ministry of Finance, the effectiveness of partnerships was hindered by the lack of regular coordination meetings. In Namibia, the absence of a country office limited ongoing engagement with local stakeholders, though specific projects like the Transport Infrastructure Improvement Project (TIIP) were successful. Senegal exemplified effective coordination, with the AfDB actively engaging with development partners and civil society. Conversely, Tanzania and Tunisia illustrated the pitfalls of inadequate coordination. In Tanzania, stakeholders interviewed expressed the view that a lack of proactive partnerships limited the Bank's overall impact. The absence of a working group among development agencies also represented a missed opportunity for more cohesive and effective project implementation. Similarly, in Tunisia, although the co-financed North-East Connectivity Project with the European Investment Bank (EIB) illustrated the potential benefits of resource pooling, delays due to coordination issues underscored the risks of ineffective partnership mechanisms.

Selectivity

This section presents the Bank's selectivity in the transport sector in terms of encapsulating the AfDB's efforts to focus its resources and activities on strategically important, high-impact projects, while navigating the challenges of operational constraints, external pressures, and multi-stakeholder dynamics.

Finding 12:	**The evaluation found that while the AfDB was committed to selectivity and focused on high-impact areas, success depended on countries' capacity, the presence of development partners, and the broader economic and political environment. Challenges persisted in consistently applying selectivity and achieving the desired outcomes.**

The evaluation found that the AfDB's selective approach led to mixed results across countries due to differing operational environments and capacity constraints. In Cameroon, the Bank prioritized mature and well-prepared projects from its pipelines outlined in the CSPs and RISPs. However, challenges such as low project quality at entry and the country's limited absorptive capacity hindered the full application of this strategy, resulting in a more dispersed portfolio than intended. In contrast, in Senegal, the Bank improved its selectivity by focusing on its High 5 priorities, such as rural

road development, which concentrated its portfolio, with 83% of the budget allocated to critical infrastructure by 2021. In Tunisia, the AfDB's decision to support small and medium enterprises (SMEs) in road maintenance aligned with its selective strategy of focusing on interventions where it could have a meaningful impact. After the withdrawal of major players like Kreditanstalt für Wiederaufbau (KfW) in Namibia, the AfDB strengthened its role in the transport sector there. However, despite its advantages, the AfDB must navigate the complexities of collaborating with other significant development partners, like the World Bank and JICA, to maintain its strategic focus and ensure its interventions are impactful and aligned with its overall objectives.

Evaluated projects revealed that the involvement of multiple development partners often complicated the AfDB's ability to maintain a selective approach and assert its leadership, which impacted its strategic focus. At times, the Bank's involvement in projects appeared to be influenced more by external pressures and to some extent the presence of development partners, rather than adhering strictly to its selectivity criteria. In some cases, geopolitical or regional dynamics may have led to pressure to fund projects that aligned with political interests rather than purely development-oriented outcomes. Additionally, collaboration with development partners, while beneficial in mobilizing additional resources and leveraging expertise, could sometimes lead to a compromise in project selectivity. For example, the Sharm el-Sheikh Airport Development Project demonstrated a situation where the Bank's role added limited unique value, indicating a misalignment with its strategy of selective engagement. The Bank also faced difficulties in maintaining a focused approach in regions with a crowded development landscape, such as East and West Africa. For example, in Côte d'Ivoire and Tanzania, the AfDB's impact on transport was diluted by multiple donors, making it hard to establish leadership in line with the AfDB vision to be a preferred partner for assisting RMCs. Moreover, the cluster evaluations highlighted that the desire to respond to urgent or politically motivated demands sometimes compromised the Bank's selectivity, resulting in the inclusion of projects that did not align well with its strategic goals.

Policy dialogue and advisory

This section presents the Bank's overall engagement with governments on transport sector issues, particularly regarding the financial sustainability of investments and the adequacy of funding for transport maintenance.

Policy dialogue at project level. The evaluation found that the AfDB has not consistently used its transport projects to promote policy dialogue, although it achieved some notable successes. A previous IDEV evaluation of the AfDB's Support for the Transport Sector (2014) found that the Bank generally did not use projects in this sector to promote policy dialogue on transport issues. The 2022 Management Action Record System Report highlighted the low level of adoption of the main recommendations in that evaluation, specifically those advocating for mainstreaming policy dialogue and upscaling the AfDB's role in policy dialogue and donor coordination. However, some policy dialogue was found to have occurred in Namibia, where institutional reforms were moderate, and relationships with government agencies limited. In some instances, the AfDB effectively engaged in policy dialogue, but these efforts were often confined to immediate project needs, limiting their broader influence on sectoral policies. This evaluation confirmed this trend, revealing limited evidence of progress.

A broader perspective. In addition to leveraging projects as a basis for policy dialogue, the AfDB engaged with governments through knowledge work and regular discourse. For instance, knowledge products such as sector studies, policy briefs, and technical assistance (TA) informed and shaped discussions on strategic priorities. For example, in Tunisia, the AfDB financed a national transport plan to serve as a reference for future interventions and in-sector dialogue. However, in other countries like Cameroon and Côte d'Ivoire, there was little evidence from stakeholder interviews that the Bank's non-lending operations had led to enhanced dialogue with the government.

Overall, the **effectiveness** of the Bank's support for the transport sector was found to be **satisfactory**.

4.4. Efficiency

To what extent were the Bank's interventions in the transport sector efficient (in terms of time and resource utilization) from both the program and the institutional perspective?

The efficiency of the AfDB's support for the transport sector was assessed along three dimensions: timeliness, resource use efficiency, and budget performance.

4.4.1 Timeliness

To what extent did the Bank's transport sector portfolio deliver expected outputs promptly?

Finding 13:	**The analysis of the evaluated projects revealed that significant delays in delivering outputs and outcomes were among the most common issues identified across nearly all projects and case studies. Most projects experienced these delays both at the start-up phase and during the implementation process.**

Project-level evaluations found that the AfDB's transport portfolio faced significant project startup and implementation delays, mainly due to the Bank's procedures and administrative obstacles. The road and port cluster evaluation indicated that it took an average of 26 months before conditions for the first disbursement were fulfilled. Completed projects experienced an average implementation delay from 3 years (in Senegal) to 4 years (e.g., in Central Africa). Specifically, the portfolio review indicated that the transport sector experienced 520 instances of delayed project closing dates, resulting in an average of 1.3 extensions per operation. The road sub-sector reported a notably high cumulative number of closing date extensions totaling 409, outpacing other sub-sectors. In terms of average extension times, the rail sub-sector led with 1.67 extensions, followed closely by urban transport at 1.42, roads and highways at 1.39, water and fluvial transport/ports at 1.23, multimodal transport at 1.05, and air transport with a lower average of 0.96. Remarkably, air transport projects showed a reduced susceptibility to closing date extensions, with 45.0% of these projects experiencing no delays. In contrast, only 39.1% of all transport projects avoided any extension delays altogether. This data underscored the relative efficiency of air transport initiatives within the broader context of transport sector operations. Interviewees attributed most project delays to the perceived limited flexibility or inefficiency in the implementation of Bank procedures, exacerbated by understaffing and a range of national issues. Administrative obstacles were identified as the main cause of delays, with some projects experiencing delays ranging from 18 months to 4 years. For example, the Nacala Road Corridor Project and the DRC Air Safety Project experienced a four-year delay due to administrative obstacles and inefficiencies in Mozambique and procedural issues in DRC, respectively.

Stakeholders interviewed noted that a lack of support mechanisms from the AfDB and broader national issues often worsened delays in project execution. Key challenges included ineffective monitoring systems, funding difficulties, and slow responses from government entities. These delays could be partly attributed to constraints like a debt ceiling in countries like Cameroon. In cases where certain nations faced unsustainable debt levels, as seen in Congo, sovereign-guaranteed loans may have continued to be suspended, limiting Bank interventions to loans without such guarantees. In DRC, the documentary evidence highlighted delays in meeting the conditions needed for effectiveness and the first disbursement of funds.

Finding 14:	**The evaluation found that long delays in obtaining non-objection notices were the primary obstacle to project disbursement, along with insufficient delegation of authority, complex and inflexible review processes, and coordination challenges as reported by stakeholders.**

Stakeholder interviews and documentary evidence revealed that the need for formal non-objection notices, the complexity of the AfDB's Environmental and Social Safeguard processes, and the limited decision-making authority of local project staff contributed to substantial project delays. Stakeholders noted that these notices were a major administrative issue, often taking months to obtain even when not affecting the budget. Lack of delegation resulted in excessive administrative processes that hindered both small and large projects. In Cameroon, AfDB project officers could not sign off on procurement documents, leaving them with no alternatives to address the issues raised, thus resulting in average project delays of three and a half years in the country. Despite some appreciation for the Bank's proactive approach to disbursements, teams still struggled with securing non-objection decisions and accessing funds for projects like the DRC - Priority Air Safety Project Phase II and the Tunisian Railway Infrastructure Modernization. Inefficient processes prompted beneficiaries to seek

partnerships elsewhere, resulting in stalled projects. A case in point was the Benin government, which has stopped collaborating with the Bank on road projects beyond the Lomé-Cotonou corridor due to previous challenges with the AfDB's approval policies for other projects, as per documentary evidence corroborated by stakeholders interviewed. Similarly, in Tunisia's North-East Road Connectivity Project, a firm debarred by the AfDB under the Agreement for Mutual Enforcement of Debarment Decisions was selected by the EIB. Since the EIB was not a signatory to this agreement, the procurement process adhered to EIB's policies, which resulted in the selection of a company unable to collaborate with the AfDB, complicating the project implementation since both banks were co-financiers, ultimately delaying the project. In the Ethiopian Airlines corporate loan case, the Bank's inflexibility to minor changes from non-sovereign loan recipients led to confusion over payments due to a name change, resulting in three years of incorrect notices. While this didn't delay the project, it created administrative challenges. In Senegal, the Bank's applicable processes hampered efficiency and possibly undermined its credibility, particularly regarding the Senegal TER Phase II project, which drew public scrutiny. Finally, slow disbursement processes and a lack of agility in administrative procedures hindered effective project implementation, negatively impacting the Bank's reputation. In contrast, an independent evaluation of the European Bank for Reconstruction and Development (EBRD) Delegated Authority (2019) found that the EBRD increased the approval threshold from €10 million to €25 million with a 3-day limit on non-objections. This situation led to approval time taking 3-7 days, reduced by 2.5 weeks on average. Half of EBRD projects were approved by delegation versus 21% for the IFC.

Coordination challenges between executing agencies and development partners were found to be significant contributors to delays that undermined effectiveness and progress. The evaluation identified key areas where these issues arose. For example, a project aimed at supporting the air transport sectors of West and Central Africa highlighted major shortcomings in collaboration between its executing agency and the International Civil Aviation Organization (ICAO), resulting in delayed delivery. Additionally, the feasibility study on the Ethiopia-Sudan Standard Gauge Railway faced delays during its implementation phase because of poor coordination between the Commercial Bank of Ethiopia and the various stakeholders involved in the study. Finally, the link between projects and certain outcomes was often found to be dependent on agreements and signatures.

Finding 15:	**The evaluation found that, in a number of instances, based on their experiences with implementing AfDB-funded projects, stakeholders from both the AfDB and visited countries perceived the Bank's procurement and environmental and social safeguard procedures as complex and not easily adaptable during implementation. These views—particularly in relation to delays in obtaining non-objection notices and challenges in adjusting to contract modifications—were reported to have contributed to implementation delays and coordination difficulties with executing agencies in countries such as Cameroon, Senegal, and Benin. The evaluation noted that these issues were more reflective of experiences with operational implementation challenges than of fundamental shortcomings in the design of the Bank's E&S and Procurement Frameworks.**

Interviews and benchmarking evidence revealed that stakeholders perceived the AfDB's environmental and social safeguards, and procurement procedures as complex and not easily adaptable during implementation, and the level of support for beneficiaries as insufficient, hindering project implementation and beneficiary compliance. Stakeholders expressed the view that since 2020/2021, the implementation of ESS standards, which was perceived as inflexible, had exacerbated these delays. Additionally, they pointed out certain rules which were found to be insufficiently adaptable to local contexts, making compliance resource-intensive. Poor implementation of environmental and social management plans and a lack of experienced professionals to meet the Bank standards were significant issues in the DRC. In Tunisia, the Study on the National Transport Masterplan experienced a two-year delay due to the beneficiary's lack of sufficient capacity to complete the report according to AfDB standards. In contrast, Cameroon and the Republic of Congo stakeholders noted the World Bank's ability to maintain high ESS standards while adopting a pragmatic implementation approach (Box 1). Documentary evidence showed adaptive management processes that were designed to be flexible and iterative, and to support systematic monitoring and modifications.

Box 1: Implementation of AfDB Policies on Environmental and Social Safeguards compared to the World Bank

The AfDB's Environmental and Social Safeguard (ESS) processes were found to be more complex and less flexible than those of other DFIs such as the World Bank. Consultations with project stakeholders and interviews conducted for the Benchmarking Report revealed that the World Bank's process for obtaining a Non-Objection Letter related to environmental and social requirements was significantly more streamlined and constructive. The World Bank process was led by the on-site project manager rather than by the World Bank's headquarters. While feedback from headquarters was considered in the decision-making process, the final decision on whether a project could proceed rested with the on-site task manager. If a project experienced an objection, the on-site project manager provided detailed feedback, including in-person workshops, to help the project modify its activities and obtain the Non-Objection Letter. This approach delegated substantial authority to World Bank staff on the ground, resulting in quick project approvals that typically took less than a month (2-3 weeks), compared to 6-18 months for the AfDB. These findings aligned with the World Bank's Guidance for Borrowers under Investment Project Financing. The guide explains that "the environmental and social assessment is a flexible process that can utilize different tools and methods depending on the project's specifics and the Borrower's circumstances." However, interviews with World Bank transport staff indicated that this process had not adequately met the needs of transport projects in Africa, which were often classified as high or substantial risk due to their characteristics. Despite this challenge, World Bank staff noted that with the support of technical teams, borrowers had successfully integrated environmental and social (E&S) considerations into their projects. Clients understood that incorporating E&S components, such as road safety, was not an extra burden but a foundational element that enhances project quality.

In contrast, the AfDB was perceived to lack adaptive support mechanisms for borrowers that might not have the capacity to meet ESS requirements, unlike other DFIs that provide proactive technical assistance. When a borrower lacked the legal or technical capacity to carry out required E&S assessments, the World Bank offered proactive support. The policy states, "If the Bank concludes that the Borrower has inadequate legal or technical capacity to carry out such functions, it may require strengthening programs to be included as part of the project." In practice, the World Bank provided technical assistance to member countries in specific situations, such as countries facing fragile conditions, to support project preparation and ensure better project quality from the outset. While 37% of PIDA PAP 2 Transport Projects are set in conflict-affected areas, the Bank does not currently have a comparable adaptive approach to providing technical assistance.

Source: Benchmarking Report

4.4.2. Resource use efficiency

Finding 16: The evaluation found that limitations in resource allocation and capacity constraints in the AfDB's local and regional offices affected the efficient use of available resources. These constraints hindered staff's ability to optimize workload management, which in turn impacted their efficiency in meeting project timelines and requirements.

Stakeholder interviews highlighted that inadequate resources undermined the effectiveness of the AfDB's local and regional offices, contributing to project delays and reduced implementation effectiveness. The documentary evidence corroborated this finding. For instance, in Cameroon, one task manager oversaw 8 to 10 transport projects, which accounted for 52% of the Bank's portfolio. Similarly, in Tanzania, one engineer managed 8 projects worth UA 2.5 billion, raising concerns among beneficiaries and development agencies about delays and associated risks. In the Republic of Congo, only two local staff members handled operational roles, which drew criticism regarding the Bank's impact on strengthening institutions. In comparison, the AFD in Brazzaville had 11 staff members for similar tasks.

Evidence from documentation review and stakeholder interviews indicated that inadequate internal expertise and capacity within RECs and Project Implementation Units (PIUs) presented significant barriers to effective project implementation. These challenges, including administrative bottlenecks and insufficient project management capacity, highlighted the need for more substantial institutional support at the local level to ensure timely and efficient project execution. The mid-term review of the Central Africa Regional Integration Strategy Paper (RISP) for 2019-2025 underscored that RECs in the region often lacked the necessary skills and knowledge for successful project implementation, leading to frequent reliance on ad hoc PIUs within their technical departments. Strengthening capacity at the local level through targeted capacity-building efforts to enable enhanced delegation of authority could mitigate these challenges, reduce inefficiencies, and accelerate the implementation of loan agreements and project activities.

Additionally, national governments faced challenges in delivering counterpart contributions, disrupting project continuity and necessitating costly restructuring. The lack of reliable suppliers and SMEs also impeded effective project delivery, affecting timelines and quality. Evaluations, including a case study in Cameroon, revealed a significant gap in supplier networks. High material and transport costs, limited market opportunities, and insufficient affordable financing hindered supplier reliability, resulting in delays and low quality in project execution.

4.4.3. Budgetary performance

Finding 17:	The evaluation found that projects generally delivered good financial performance, but frequent issues with financial management and auditing impacted efficiency.

Regarding the budget, the documentary evidence showed that most projects performed well, with minimal cost overruns—especially in main construction works. However, the Transport Facilitation Programme for the Douala-Bangui and Douala-N'Djamena Corridors Project in the Central African Republic stood out as a notable exception. The PCR indicated a cost overrun of approximately 20% due to the absence of a thorough preliminary cost evaluation for the Meïganga road network. The AfDB provided technical expertise and essential proposals to address the cost overruns in response to this challenge. While the overall performance was positive, the evaluation highlighted that additional investments were sometimes necessary to ensure all allocated resources were effectively utilized. This trend was particularly evident in road and port projects across Madagascar, Burundi, and Rwanda.

The project assessments could not adequately assess the economic internal rate of return (EIRR) due to the ambiguities surrounding the methodologies and inputs used to calculate the EIRR during the ex-ante phase and at project completion. However, the initial ex-ante projections and the estimations provided in the PCRs indicated substantial positive economic benefits. At both the appraisal and completion stages, the average EIRR was found to be 21%, which exceeded the average opportunity cost of capital of 11%.

Despite some successes, the evaluation revealed financial management challenges that hindered efficient project execution. The quality of financial reporting consistently did not meet established standards, and audit recommendations were frequently ignored, as seen in evaluations of road and port projects in Madagascar, Sierra Leone, Burundi, and Rwanda. While the relevant PIUs had experience with the Bank's procedures that helped accelerate processes, this did not fully address the underlying administrative capacity issues, which contributed to the financial challenges described.

The overall **efficiency** of the Bank's support for the transport sector was rated as **partly unsatisfactory.**

4.5. Sustainability

To what extent are the net benefits of the Bank's support for the transport sector sustainable?

The evaluation examined five aspects of sustainability: (i) technical soundness, (ii) economic and financial sustainability, (iii) institutional sustainability and capacity strengthening, (iv) stakeholder ownership, and (v) environmental and social sustainability.

4.5.1. Technical soundness

Finding 18:	The evaluation noted that the AfDB's transport interventions generally demonstrated strong technical soundness and short-term climate resilience. However, the medium- to long-term sustainability of the infrastructure was compromised by issues such as freight overloading and inconsistent maintenance.

Documentary analysis and direct observations showed that physical infrastructure projects in the transport sector adhered to established quality standards, focusing on adaptations for long-term climate resilience. The evaluation of various interventions within the transport sector highlighted a high degree of technical robustness, effectively addressing challenges such as temperature variability, flooding risks, and other climate-related impacts. Road and port infrastructure in cluster projects were

engineered to rigorous standards, ensuring an operational lifespan of 15 to 20 years under proper maintenance conditions. The roads featured advanced drainage systems to mitigate flooding, durable pavement materials designed for heavy load capacity, and specifications tailored to Africa's diverse climatic conditions. Safety features like speed bumps, reflective signage, and designated pedestrian crossings enhanced road safety, while reducing wear and tear associated with accident-related damage. Port infrastructure, including facilities at Walvis Bay in Namibia and Cabo Verde's Maio and Palmeira ports, underwent extensive modernization to accommodate larger vessels and increased cargo volumes. These ports incorporated measures to address anticipated sea-level rise, combat coastal erosion, and mitigate the impacts of storm surges. In the aviation sub-sector, projects such as upgrades at Addis Ababa International Airport expanded capacity to handle growing passenger traffic. Newly constructed runways complied with ICAO standards for safety and load-bearing capacity.

The evaluation found that one of the critical challenges to the technical sustainability of road transport infrastructure was the overloading of freight vehicles. This issue significantly accelerated road deterioration and increased maintenance costs. Effective axle load control, which involves enforcing regulations on the maximum allowable weight per axle, has become a strategic priority for preserving road integrity and optimizing transport systems across the continent. The AfDB supported this approach to axle load control but saw mixed results. Economic pressures faced by trucking companies, especially in landlocked countries, often compelled operators to overload their vehicles to enhance cost efficiency. Political influence from key stakeholders was deemed to undermine the enforcement of axle load regulations, creating a cycle of non-compliance. Although regional organizations like COMESA, ECOWAS, and SADC aim to harmonize regulations, inconsistent enforcement practices and technical standards were found to impede the flow of goods across borders. In Southern Africa, the heavy reliance on mining freight exacerbated pressure on road maintenance. The absence of weighbridges on key routes, such as the Nacala Corridor in Zambia, resulted in severe overloading and rapid road damage. In West Africa, enforcement remains largely symbolic: overloaded trucks are often fined but permitted to continue their journey without offloading excess cargo. Transport stakeholders reliant on Senegal's ports lobbied for leniency in enforcing weight limits, which threatens the long-term effectiveness of regulations. Central Africa faced significant challenges in implementation due to poorly located weigh stations, environmental vulnerabilities, and a lack of qualified personnel and spare parts.

Documentary evidence revealed that structural challenges, such as poor governance, inadequate planning and funding mechanisms, lack of clear responsibilities, procurement issues, and a shortage of reliable civil engineering companies, impeded effective maintenance and also threatened the medium- and long-term sustainability of AfDB-funded infrastructure projects. This was confirmed by regional case studies in North, West and Southern Africa. Additionally, the Ghana Airport Company Limited (GACL) Capital Investment Program assessment revealed concerns about the regular maintenance of roofs and ceilings in certain areas. These issues stemmed from inadequate resources, as funding for essential maintenance activities needed to be properly allocated. The AfDB's transport projects contributed to addressing these structural issues, for example through studies to establish or enhance road funds in countries like Tunisia and Tanzania. However, neither the AfDB nor other development partners had secured government commitments to allocate adequate resources for maintenance.

Stakeholder interviews expressed that even with funding theoretically available, obstacles remained. In the Republic of Congo, road maintenance and rehabilitation efforts faced challenges despite a designated maintenance fund. Issues such as inadequate tax redistribution to maintenance authorities and flawed procurement policies contributed to delays in interventions and hindered the deployment of essential maintenance personnel in critical areas. Maintenance agencies often operated with insufficient staffing and faced lengthy procurement processes that could extend up to two years. This prolonged timeline exacerbated asset deterioration, as infrastructure in need of repair continued to degrade while awaiting procurement completion.

At the same time, the evaluation also found examples from Ethiopia, Kenya and Tunisia which demonstrated that integrating maintenance into medium- and long-term planning could uphold technical standards and ensure infrastructure sustainability. In addition, Morocco's National Railway Office (ONCF) maintained a comprehensive maintenance plan for railway infrastructure, equipment, and rolling stock, supported by a dedicated budget for these components. ONCF's highly qualified staff were also organized into specialized teams that plan, execute, and evaluate maintenance activities.

Finally, the evaluation highlighted (technical) shortcomings in the quality at entry of interventions, particularly regarding feasibility studies, local stakeholder involvement, and

environmental considerations. Many feasibility studies faced design flaws due to the limited capacity of executing agencies, which later caused delays and cost overruns, as seen in the Kampala-Jinja Expressway Project in Uganda. The cluster evaluation of road and port projects revealed that the executing agencies often struggled to assess the quality of studies conducted by international consultants. Environmental considerations were often insufficient, with the Trans-Gambia Bridge impacting mangrove swamps, and lessons from past projects were frequently overlooked in new feasibility studies, leaving resulting operational issues unaddressed.

4.5.2. Economic and Financial sustainability

Finding 19:	The evaluation found the long-term financial sustainability of the results of AfDB transport sector interventions to be uncertain.

Project assessments and stakeholder interviews underscored that while some AfDB-supported projects achieved (or were expected to achieve) short-term financial stability, establishing robust mechanisms for long-term sustainability remained inconsistent across countries. Financial sustainability of the AfDB-supported projects was achieved where institutional responsibilities were well-defined, and staff training adequately implemented. In Côte d'Ivoire, the Henri Konan Bédié (HKB) bridge currently relies on government subsidies, a situation attributed to a cap on toll charges. When this arrangement expires in 2027, the government will need to choose between continuing subsidies or allowing significant toll increases, neither of which is attractive. Failure to select either option could undermine the private sector operator, Société Concessionnaire du Pont Riviera-Marcory (SOCOPRIM), and erode investor confidence, making financing similar infrastructure more difficult. Railway cluster projects were also found to face challenges related to their economic feasibility and competition from road transport, making it difficult to achieve financial sustainability without sufficient passenger demand. On a positive note, Morocco's Railway Infrastructure Reinforcement Project exemplified both financial and institutional sustainability, driven by the robust capacity of the ONCF. In contrast, smaller African airlines, such as Air Côte d'Ivoire, have traditionally struggled with poor financial performance due to high operating costs. If ticket prices rise to offset these expenses, it could lead to a detrimental cycle of increasing costs and declining demand, casting doubts on the airline's potential for financial self-sustainability.

Evaluated cluster projects emphasized that financial autonomy, resource mobilization, and financial management challenges also threatened the long-term sustainability of the AfDB-funded transport projects, particularly in the road sub-sector. The road and port cluster evaluation reported that many road projects encountered severe funding and resource mobilization issues, impacting maintenance efforts. Available resources often fell short of covering maintenance costs, undermining both medium- and long-term sustainability. Project assessments further highlighted the limited capacity of governments to generate sufficient revenue to replenish road funds through charges and taxes, compounded by administrative and governance shortcomings.

4.5.3 Institutional sustainability and capacity strengthening

Finding 20:	The evaluation revealed mixed results regarding the institutional sustainability and capacities of the AfDB's support for the transport sector, highlighting successful and less successful cases. It found a noticeable lack of technical assistance from the AfDB. Additionally, coordination issues were experienced between the AfDB, government agencies, and executing bodies. These factors posed a potential risk to long-term institutional sustainability.

Institutional sustainability and capacity development were found to be critical for the effective implementation and management of transport projects across RMCs. The evaluation found that the AfDB made significant efforts to enhance institutional sustainability and capacity development within the transport sector. A notable example was Namibia, where projects substantially strengthened institutional capacity. The Namibian Ports Authority (Namport) adopted the 'landlord port model,' which separates port authority functions from private sector operations. This model was expected to increase operational efficiency and encourage private sector engagement. In Côte d'Ivoire and Tanzania, the AfDB's involvement enabled the sustainable management of major transport projects and assisted governments in developing their capacity. In Côte d'Ivoire, the effective technical delivery of projects ensured the successful delivery of infrastructure and equipment. Similarly, in Egypt, the success of the

National Railway Modernization Project relied heavily on capacity building and training programs for Egyptian National Railway staff provided by the AfDB.

However, the evaluation also identified several challenges which hindered the AfDB's efforts to promote institutional sustainability and capacity development in RMCs, including inappropriate organization, inadequate staffing and skills gaps in PIUs, and administrative inefficiencies in sector ministries. The road and ports cluster evaluation also highlighted that most AfDB road projects faced difficulties establishing new institutions. Institutional sustainability in the transport sector often extended beyond the project scope. The projects typically did not address governance frameworks within the transport sector and lacked technical assistance to implement substantial reforms**.** As a result, the management of new transport infrastructure frequently relied on existing institutions, which often lacked adequate capacity. While studies and training initiatives improved internal capacity, many institutions faced staffing shortages, as demonstrated by Tanzania's road projects.

A lack of effective coordination between the AfDB, government entities, and executing agencies was found to hinder institutional sustainability. Although staff training and medium-term capacity building were effectively executed, as shown in some case studies, absence of comprehensive coordination weakened the continuity and effectiveness of capacity-building initiatives.

4.5.4 Stakeholder Ownership

Finding 21:	**The evaluation found a variable sense of ownership among project beneficiaries.**

Despite positive feedback from stakeholder consultations, evidence from regional and country case studies suggested that these interactions did not consistently foster a strong sense of ownership. Country case studies (e.g., Côte d'Ivoire, Cameroon, Senegal) and regional case studies (e.g., Central Africa and North Africa) pointed out that consultations with beneficiaries, private sector representatives, and civil society received positive responses. However, it remained uncertain whether these interactions genuinely influenced stakeholder ownership. For example, while the Nacala Road Corridor succeeded due to its design catering to the Moatize mine, projects like Msalato International Airport in Dodoma, Tanzania suffered from inadequate local input, resulting in operational mismatches. Namibia, however, was an exception, where extensive consultations effectively cultivated a strong sense of ownership among stakeholders.

4.5.5. Environmental and social sustainability

Finding 22:	**The evaluation found that environmental and social considerations were generally integrated into the design and implementation of the AfDB-financed transport projects between 2012 and 2023, reflecting the Bank's policy commitment to sustainability. However, the systematic incorporation of climate-related best practices remained under development and had not been fully mainstreamed. Persistent complaints related to inadequate compensation, negative environmental and social impacts, human rights concerns, and limited public consultation highlighted ongoing challenges in fully aligning transport interventions with sustainable development principles. The evaluation noted that the extent and effectiveness of implementation varied significantly across regions and projects. While several operations in North and West Africa demonstrated efforts to integrate resettlement and livelihood support—such as multifunctional centers for displaced women in Côte d'Ivoire—other regions recorded complaints about delayed or insufficient compensation, limited public consultation, and unresolved environmental impacts.**

The evaluation found that the AfDB had demonstrated a clear commitment to integrating environmental and social considerations into its transport sector projects across the continent. In North Africa, projects demonstrated significant efforts to ensure environmental and social sustainability. Similarly, the corporate loan to Ethiopian Airlines addressed social concerns by promoting women's employment, particularly in skilled roles such as flight crews and technicians. The project generated positive employment and human development outcomes by expanding technical maintenance capacity and increasing staffing levels to accommodate new destinations served by the

airline's growing fleet. In Côte d'Ivoire, several projects included components supported by the national government to assist displaced persons, such as housing and multifunctional centers for women. These initiatives aimed to mitigate the negative social impacts of infrastructure development on local communities.

Despite these efforts, the long-term viability of environmental and social sustainability initiatives was found to remain in question. Training and capacity-building programs were implemented to achieve immediate goals, but the evaluation found little evidence to suggest that these efforts would continue to provide sustained social benefits after project completion. Concerns were particularly highlighted in the evaluation of road and port projects, where the sustainability of promoted environmental and social activities was unclear.

Furthermore, documentary evidence showed that infrastructure projects had sometimes significantly impacted the environment and local communities, resulting in complaints and formal investigations. The Independent Recourse Mechanism (IRM) reported challenges in managing large-scale transport projects, particularly regarding compensation of project-affected people, community engagement, and safety and environmental standards compliance. According to the IRM's 2023 report[15], implementing development projects in Africa, particularly in the transport sector, faced numerous difficulties. In 2023, 10 out of 18 ongoing IRM cases with formal complaints concerned the transport sector, highlighting these ongoing issues. For example, the Kenya Mombasa-Mariakani Highway Project faced complaints about insufficient compensation and violations of the involuntary resettlement policy. In Côte d'Ivoire, the 4th Abidjan Bridge Project was criticized for restricting workers' rights, lacking effective grievance mechanisms, poor safety standards, and inadequate public consultations. Similarly, the Mombasa-Mtwapa-Kwa Kadzengo-Kilifi Expansion Project was called out for insufficient stakeholder engagement. Additionally, the Dakar Regional Express Train Project in Senegal received complaints regarding delays and inadequate compensation for those displaced by construction. These cases illustrated significant gaps in adhering to sustainable development principles. The IRM works actively to address such complaints, aiming to ensure that development initiatives benefit local communities and promote a more sustainable and equitable future across the continent.

The evaluation highlighted that transport sector interventions generally incorporated key climate considerations into their designs (see under Technical Soundness), although challenges remained due to a lack of consensus on best practices for climate-resilient infrastructure. Notable positive examples include Namibia, Benin, and Tanzania, where project assessments highlighted that key climate considerations were integrated into infrastructure designs. In Namibia, measures were taken to mitigate the impacts of sea-level rise and drought. Benin established coastal protection mechanisms, while Tanzania's Dodoma Ring Road Project enhanced water drainage systems around road infrastructure. In addition, the corporate loan to Ethiopian Airlines addressed climate change concerns in the aviation sector by acquiring more fuel-efficient aircraft. The transition from road-based logistics to rail transport is increasingly acknowledged as a vital strategy for advancing sustainable development within Africa's transport sector. The stakeholders interviewed expressed strong support for this modal shift. Additionally, insights from the 2024 AfDB Transport Forum emphasized the importance of transitioning from road to rail, positioning it as a critical measure for mitigating greenhouse gas emissions and enhancing environmental sustainability.

However, uncertainty was found to remain about the medium- to long-term sustainability of these climate-focused projects. While immediate goals were met, concerns existed regarding the ongoing maintenance and support required to ensure lasting climate resilience. Challenges include a lack of consensus on best practices for integrating climate resilience into project designs in a consistent and comprehensive manner**.** Without agreement on the most effective approaches to climate-resilient infrastructure, projects may not be designed or implemented in a way that ensures long-term sustainability. Similar to environmental and social programs, the evaluation found little evidence to indicate that climate resilience efforts would continue after project completion without sustained support and funding.

Given these shortcomings, the evaluation rated the **sustainability** of the AfDB's support for the transport sector as **partly unsatisfactory.**

[15] https://www.afdb.org/fr/documents/irm-accountability-report-2023

4.6. Impact

To what extent did the Bank's interventions generate or were expected to generate significant positive or negative, intended or unintended, higher-level effects (economic growth, regional integration, trade between countries, agricultural outcomes through feeder roads, urban mobility, and climate change)?

The impact criterion examined high-level impact and comprehensive and sustainable changes within systems or normative frameworks, in addition to the overall changes—both positive and negative, intended and unintended—that a project or intervention generated within the target community or environment. This assessment aligns with the OECD-DAC evaluation framework and focuses on how the intervention contributed to observed changes. It uses qualitative and quantitative evidence, including interviews, case studies, and secondary data, to establish links between the intervention and its outcomes. Instead of isolating causality, it relies on evaluative judgment to identify plausible links. Additionally, its scope goes beyond traditional counterfactual analysis by considering all influencing factors, including external elements and synergies with other concurrent interventions.

Contribution to regional integration

Finding 23:	**The evaluation found that the AfDB's transport initiatives contributed or were expected to contribute to regional integration, despite frequent delays in the delivery of related components.**

Transport projects contributed to regional integration, as evidenced by increased regional integration indices. The completion of the Arusha-Holili/Taveta-Voi Road connecting Kenya and Tanzania in 2019 significantly enhanced regional integration between the two countries. This improvement was reflected in the increases in their regional integration indices, calculated within the context of the East African Community[16]. Kenya's index rose from 0.656 in 2016 to 0.792 in 2019, while Tanzania's index increased from 0.433 to 0.513. In addition, the completion of the Mombasa-Nairobi-Addis Ababa Road Corridor in 2019 appeared to significantly enhance regional integration between Kenya and Ethiopia (calculated within the context of COMESA): Kenya's regional integration index rose from 0.573 in 2016 to 0.596 in 2019, while Ethiopia's index increased from 0.233 to 0.297 over the same period.

Generation of socio-economic benefits

Finding 24:	**The evaluation found that road projects contributed to increased economic activity, household incomes, and access to socio-economic services in the respective areas.**

Geospatial analysis of completed projects showed a significant increase in nighttime light following the completion of specific AfDB-funded road projects, indicating a rise in economic activities. For instance, the Mombasa-Nairobi-Addis Ababa Road Corridor contributed to a 221.04% increase in nighttime light in Kenya and a 146.66% increase in Ethiopia after its completion in 2019. Similarly, the Arusha-Holili/Taveta-Voi Road contributed to a 138.50% increase in nighttime light in Kenya and an 80.53% increase in Tanzania. In Senegal, the Regional Express Train segment from Dakar to Diamniadio, completed in 2021, contributed to a 44.24% increase in nighttime light in the surrounding municipalities. However, this effect could not be attributed solely to the AfDB interventions. Furthermore, an impact evaluation of the Ghana Fufulso-Sawla Road Project revealed a 14% increase in access to farming and non-farming opportunities. Establishing new businesses bolstered local economies, particularly in areas connected to health facilities, which resulted in significant job gains.

Evaluations of various completed road projects showed a significant positive impact on household incomes. For example, the Mombasa-Nairobi-Addis Ababa Road Corridor Project increased monthly household incomes by 41.02%. Likewise, the Ghana Fufulso-Sawla Road Project led

[16] Data on regional integration come from the Africa Regional Integration Index (https://www.integrate-africa.org). Africa Regional Integration Index is composite index based on 5 indicators: trade, productive, macroeconomic, infrastructural and free movement of people dimensions, and is calculated within the context of each Regional Economic Community.

to an impressive 84% rise in household incomes. This growth was attributed to improvements in the roads, as well as related developments in healthcare and education.

A positive cost-benefit ratio for ancillary outcomes became a hallmark of the Bank's approach. For example, the impact evaluation of the Fufulso-Sawla Road Project in Ghana revealed a favorable distribution of costs and benefits. The ancillary works associated with the project generated disproportionately high additional benefits compared to their costs. Specifically, while road construction alone resulted in a 2.16% reduction in the Multidimensional Poverty Index (MPI), the addition of schools and markets amplified this poverty reduction (to 2.70% and 2.55%, respectively), showcasing the advantages of integrated infrastructure projects. Completed road projects regularly yielded significant results, such as improved cross-border trade flows and reduced travel times.

Ongoing AfDB projects showed promising progress toward their intended outcomes, suggesting sustained positive impacts on regional development and integration. While most ongoing projects were yet to reach their full potential, they were progressing well. Evaluated projects like the Support to AUC/AFCAC on the Single African Air Transport Market and the regional case study on North Africa showed notable progress. Projects that met their output targets had positive effects on regional integration by enhancing connectivity, facilitating trade, stimulating economic growth, and improving the socio-economic well-being of local populations. The latest data on the Morocco Railway Infrastructure Reinforcement Project indicated that most of its intended outcomes were successfully achieved.

Unintended impacts

Unintended impacts from AfDB-funded transport projects included positive social cohesion, harmful environmental degradation, and criminal exploitation. On a positive note, some projects, like the Fufulso-Sawla Road in Ghana, fostered greater social cohesion among communities along the road corridor. The project also attracted additional investments from development partners, such as the World Bank, in a water treatment plant and network expansion. However, it also contributed to environmental degradation, mainly through increased charcoal burning and logging activities, threatening local ecosystems, including the Mole National Park. Additionally, in countries in fragile situations, transport projects faced severe challenges due to criminal exploitation. For example, sections of the Nacala Corridor, particularly in Mozambique's conflict-prone regions, became vulnerable to illegal toll collection by armed groups.

At the same time, documentary evidence and stakeholder interviews revealed that the AfDB's assistance led to significant social impacts by providing rewarding future career prospects to individuals from low-income backgrounds and enhancing regional air traffic management during crises. For instance, stakeholders in the Air Côte d'Ivoire Modernization and Expansion Program pointed out that the program enabled children from low-income families to access careers in aviation, such as airline pilots and aircraft technicians. This opportunity empowered them, within their families and communities, profoundly transforming their lives and positively impacting their families. Moreover, in the DRC, AfDB's support for the Régie des Voies Aériennes (RVA) through the PPSA1 Project enhanced air traffic management, particularly during regional conflicts such as the Sudan crisis. The conflict in Sudan led to an overload of air traffic in DRC's airspace, as airlines increasingly used DRC's skies as a bypass route between East and West Africa, the Middle East, and Southern Africa. The quality navigation and communication equipment provided by the AfDB and the skilled personnel trained under the project enabled DRC to manage this increased air traffic effectively, preventing incidents and accidents. Stakeholders, including the ICAO commended the improvements in airspace control. The involvement of trained technical agents and controllers in monitoring overflights ensured the smooth and safe management of airspace congestion during this critical period.

4.7 Cross-cutting issues

Integrating cross-cutting issues into the evaluation is critical to ensuring a comprehensive understanding of the relevance, effectiveness, and sustainability of the AfDB's support for transport. This section covers: (i) gender – women and youth, (ii) climate change, and (iii) fragility.

4.7.1. Gender – women and youth

Finding 25: While the AfDB made policy commitments and integrated gender considerations into project designs, significant challenges in implementation, consultation, and monitoring hindered the full realization of gender equality objectives in transport projects.

The gender thematic case study emphasized the AfDB's proactive commitment to integrating gender-related considerations into transport projects from inception, reflecting a strong commitment to promoting gender equality. **However, the outcomes of the projects showed mixed progress in achieving gender targets across several initiatives supported by the AfDB, hampered by significant challenges in implementation, consultation, and monitoring**. For example, the Dar es Salaam BRT System prioritized accessible and comfortable transport for women, who are the primary users of the BRT. Similarly, the Dakar-Diamniadio-AIBD TER Project supported women entrepreneurs by providing dedicated processing, storage, and sales spaces. The project resulted in a 10% improvement in the performance of the activities of women's groups compared with the 20% targeted, and 200 youth, including 40 females trained in railway professions. Additionally, the Sirari Corridor Project in Kenya aimed to train 150 women youth trainers, with 109 (72%) trained as of December 2023. Projects like the Dar es Salaam BRT and the Dakar TER also incorporated features to improve women's safety.

While these initiatives demonstrated the AfDB's commitment to gender inclusion, the evaluation also identified areas for improvement. In particular, the gender thematic case study noted that while there were consultations with various stakeholders in some transport projects, the absence of specific consultations with women's groups was a recurring issue. For example, in the Dakar TER Project, while consultations were held with various municipalities, market traders, and car mechanics, there was no specific mention of consultation with women's groups in the project documentation. Such omissions caused projects to not fully account for or address gender-specific needs during the early stages of project design and planning, particularly those of women in local communities, and limited the provision of more gender-responsive project outcomes. This lack of targeted consultation limited the projects' ability to fully address the specific needs of women in the affected communities and thus limited the effectiveness of gender mainstreaming efforts. Moreover, despite policy commitments, the effective integration of gender considerations in transport projects was often found to encounter implementation challenges. A notable example was the Dakar TER Project, which experienced significant postponements in delivering gender-focused components, such as women's and childcare facilities. These delays were partly due to difficulties in aligning national compensation procedures with the Bank's ESS policies. The Bank's requirement for compensation prior to commencing construction conflicted with local practices, resulting in project delays and hindering the effectiveness of gender mainstreaming efforts.

The AfDB projects track key performance indicators (KPIs) such as training women and youth in road and rail maintenance, HIV prevention awareness, and supporting women-led businesses through access to market spaces and agricultural tools. Documentary evidence from projects in Tanzania, Namibia, and Cameroon confirmed successful gender-related outcomes, while other projects demonstrated varying levels of success or faced challenges in achieving these objectives. Out of the 38 projects evaluated, 27 included gender provisions with mixed results:

- *Full Achievement of Gender Outputs*: Five projects met their stated gender outputs, such as the Transport Sector Support Program in Tanzania, which achieved its training and HIV awareness goals, and the Walvis Bay Project in Namibia, which exceeded targets for training women in freight forwarding.
- *Partial Progress:* Eleven projects noted some progress toward gender outputs. For example, 8 of the targeted 30 workshops promoting women's participation in the Dar Es Salaam BRT system took place in Tanzania. Additionally, 20 out of 70 jobs created by the North-East Road Connectivity Project in Tunisia went to women.
- *Limited or No Progress*: Eleven projects—including those in Tanzania, Namibia, Côte d'Ivoire, and Senegal reported limited success in meeting gender-related goals, with delays and institutional challenges impacting outcomes. For instance, projects like the Mnivata-Newala-Masasi Road in Tanzania and Dakar TER had not yet delivered on job creation and facilities for women.

Some barriers were found to hinder the achievement of gender-related objectives, including project implementation delays, weak institutional frameworks, and insufficient stakeholder engagement. Projects like the Mnivata-Newala-Masasi Road in Tanzania and the Dakar Terrestrial Transport Project in Senegal experienced slow progress and inadequate focus on women's needs. Additionally, socio-cultural barriers and financial constraints, highlighted by the North-East Road Connectivity Project in Tunisia, limited women's job creation opportunities.

The benchmarking analysis suggests that adopting strategies similar to the World Bank's gender tagging system could significantly benefit the AfDB. The World Bank's system requires that each project includes at least one targeted gender action, which provides a structured framework for achieving gender objectives. For the AfDB, incorporating sector-specific gender specialists in transport intervention task teams would present a distinct advantage, enabling gender initiatives tailored to the transport sector. These initiatives could include mentorship programs, specialized training in road maintenance, and the promotion of public transport licensing for women. This customized approach would not only enhance gender inclusivity but also support the AfDB's broader goals of equitable and sustainable development within the sector.

In conclusion, while gender inclusion was often embedded in the AfDB transport projects, implementation lagged due to a predominant focus on physical infrastructure over gender components, for instance in the Morocco Railway Infrastructure Reinforcement Project, which did not implement gender activities. Globally, while the AfDB was often successful in integrating women or gender-related questions in construction, there were limited projects designed to bring specific benefits for women, or these were ancillary projects, which were often very limited in scale, not always fully realized, and in some instances, cancelled altogether. Interim progress reports often showed zero values for gender metrics, suggesting that these outputs were viewed as add-ons rather than essential to project success.

4.7.2. Climate Change

Finding 26:	**The evaluation found that the AfDB generally integrated climate adaptation measures into transport projects. However, it noted issues with climate mitigation focus, standardized resilient infrastructure practices, monitoring of high-risk projects, and enhancing capacity-building efforts for greater impact.**

The climate change case study identified a need for improved integration of climate-resilient best practices. Incorporating climate resilience into project design is relatively recent, and AfDB projects lacked a consensus on best practices for climate-resilient infrastructure. As DFIs converge on resilient best practices, tools like the Global Center on Adaptation (GCA) handbook[17] could strengthen the AfDB's climate resilience within its project finance framework.

Evaluated projects in the climate change thematic case study revealed that the AfDB's transport projects strongly emphasized resilience by prioritizing adaptive infrastructure, exemplifying the Bank's commitment to sustainable development. For example, the Dodoma City Outer Ring Road project in Tanzania utilized engineering and nature-based solutions to manage rising flood risks, demonstrating the AfDB's proactive approach to climate adaptation. Similarly, the Lomé-Cotonou Road Rehabilitation and Coastal Protection Project, spanning Benin and Togo, bolstered regional integration by improving the Abidjan-Lagos corridor. This enhanced trade and economic growth, while ensuring resilient infrastructure that could withstand climate-related challenges. In Cabo Verde, the rehabilitation of Maio and Palmeira ports incorporated protective measures against marine erosion, further illustrating the Bank's risk management and adaptation strategy.

The climate change thematic case study revealed that the AfDB's climate adaptation projects achieved notable successes, although challenges persisted due to a lack of consensus on best practices for resilient infrastructure and insufficient ongoing monitoring. For example, the Lomé-Cotonou Road Project employed various protective measures, such as groynes, sand replenishment, and breakwaters. However, inconsistent strategies among participating countries and funding sources hindered the standardization of these best practices, leaving gaps in resilience approaches. Additionally,

[17] Climate-Resilient Infrastructure Officer Handbook - Global Center on Adaptation (gca.org)

design challenges in the Trans-Gambia Bridge Project resulted in steep gradients, leading to higher emissions due to reduced vehicle efficiency, particularly affecting older trucks. The climate thematic case study further revealed that many high-risk AfDB projects, including those with climate resilience components, lacked ongoing monitoring, which limited opportunities to refine project outcomes and address emerging challenges proactively.

The AfDB's efforts to integrate climate mitigation strategies in transport projects were found limited, with few initiatives specifically aimed at reducing emissions. Among the 38 evaluated projects, only five included climate-focused outcomes, such as GHG Emissions Targets (e.g., Dar Es Salaam BRT and Abidjan Urban Transport Project each incorporated emissions targets) and tree planting initiatives to offset emissions (e.g., the Tanzania Transport Sector Support Program and the Morocco North-East Road Connectivity Project).

4.7.3. Fragility

Finding 27:	**The evaluation found that the AfDB has made significant progress in addressing fragility as a cross-cutting issue, but has inconsistently mainstreamed fragility in its transport projects. The AfDB's involvement in countries in fragile situations was deemed both impactful and challenging, requiring a nuanced approach to project execution.**

The evaluation found that the AfDB has made significant progress in addressing fragility as a cross-cutting issue but has inconsistently mainstreamed fragility in transport projects, creating challenges for long-term sustainability. For example, ambitious targets remained unmet in fragility- and conflict-affected states, such as those involved in the Support for the Air Transport Sectors of West & Central Africa Project, due to insufficient attention to fragility-related risks and inadequate capacity-building efforts to strengthen local institutions. The cluster evaluation of AfDB Road and Port Projects (2012–2019) highlighted that transport project designs before the Bank's 2014 Fragility Strategy lacked a comprehensive approach to addressing state fragility. However, the assessment of 10 recently approved projects demonstrated improvement in the Bank's integration of fragility considerations into its transport projects. The Bank Group's current Strategy for Addressing Fragility and Building Resilience (2022–2026) emphasizes the importance of embedding fragility considerations across all sectors, including transport, and advocates for targeted infrastructure development to reduce isolation, enhance economic cooperation, and improve access to basic services in fragile areas**.**

The evaluation found that the AfDB's involvement in countries in fragile situations or facing issues with fragility was both impactful and challenging, requiring a nuanced approach to project execution. The Bank's robust financial standing and strong reputation were deemed to have significantly mitigated political risk concerns, enabling it to mobilize capital and coordinate resources in regions where private sector investment is often limited. In these contexts, the AfDB provided a crucial financial advantage, leveraging its experience in financing large-scale, capital-intensive projects and its favorable credit ratings from rating agencies. These ratings, which reflect the Bank's financial health, member support, capital adequacy, and preferred creditor status, effectively mitigated risk perceptions and bolstered confidence among commercial lenders and development partners. For example, in the Mozambique Nacala Rail Corridor and Port Project, the AfDB arranged long-term financing of USD 300 million at competitive rates, leveraging its reputation to reassure development partners and attract additional support with a total project cost amounting to USD 5 billion. In the second phase of the Ketta-Djoum Road Project in the Republic of Congo, the Bank's USD 173 million commitment ensured continuity in project execution despite delays in securing national funding. Similarly, the Dakar-Diamniadio Toll Highway Project in Senegal attracted USD 105 million in private sector investment, with the Bank playing a pivotal role in mitigating political risk through its financial structuring and guarantees and by financing USD 49 million.

Documentary evidence revealed that, despite these successes, countries in fragile situations face unique challenges, including difficulties meeting national funding commitments, limited technical capacity, and weak institutional frameworks. For example, as mentioned above, the Ketta-Djoum Road Project (Phase II) faced sustainability risks due to delays in securing required national contributions. Similarly, the DRC's PPSA Phase I Project highlighted the challenges of limited technical expertise, spare part shortages, and insufficient ongoing training for project execution and maintenance. In the Air Transport Sectors Project in West and Central Africa, fragility-related constraints prevented the certification of 9 out of 20 targeted airports to international standards, underscoring the need for

more robust capacity-building and institutional support in these regions. However, the AfDB's transport projects in countries in fragile situations delivered substantial benefits, including poverty alleviation, employment generation, and regional integration.

The evaluation found mixed results in effectively integrating fragility considerations using tools like fragility lenses or CRFAs in the AfDB-funded transport interventions. The transport projects' design and execution were found to globally integrate fragility considerations, utilizing tools such as "fragility lens" or Country Resilience and Fragility Assessments (CRFAs) to mitigate risks for some countries facing fragility, like the Somalia Road Infrastructure Programme, Liberia Fish Town Harper Road Project, and Cameroon Transport Sector Support Programme Phase IV Reconstruction of the Douala-Ndjamena Economic Corridor Ngaoundere-Garoua Segment. However, this was not always the case for some projects in countries facing fragility and those facing related issues. The cases in point are the AfDB transport projects in Mozambique becoming prone to criminal activity, particularly in Mozambique's conflict areas, and the Cameroon Transport Sector Support Programme. Phase 2, including the Maroua-Bogo-Pouss Road required to develop further the poorest regions of the Far North and East, plagued by Boko Haram incursions and the war in the Central African Republic.

5. CONCLUSIONS, LESSONS, AND RECOMMENDATIONS

5.1. Conclusions

Overall, the Bank's support for the transport sector from 2012 to 2023 has notably enhanced connectivity, contributed to trade facilitation, and propelled economic growth. However, challenges related to efficiency, sustainability, and the integration of cross-cutting issues—such as gender equality and climate resilience—hindered interventions' full potential.

The AfDB's transport projects aligned with international frameworks like the SDGs and AU Agenda 2063, focusing on infrastructure, regional integration, and private sector engagement. Notable projects like the Trans-African Highway Network and the Kazungula Bridge showcased the Bank's commitment to reducing transport costs and promoting trade. The Bank's support demonstrated satisfactory coherence, aligning transport projects with corporate and regional strategies, while fostering collaboration with development partners. Internally, transport initiatives complemented sectors like agriculture and energy, enhancing productivity. Externally, challenges in coordination and synergy optimization persisted. The AfDB projects generally met their objectives, improving transport efficiency through reduced travel times and enhanced accessibility. Initiatives like the Mombasa-Nairobi-Addis Ababa Road Corridor and the Arusha-Holili/Taveta-Voi Road spurred local economic growth. Despite delays, completed projects contributed to driving regional integration, as evidenced by increased economic activity (proxied by increases in nighttime luminosity in project areas) and household incomes. However, unintended negative impacts, including environmental degradation, highlighted the need for robust risk mitigation. Efficiency remained a concern, with significant delays caused by systemic inefficiencies, perceived limited flexibility in implementing procedures, and coordination challenges. While budget management was sound, inflexible implementation of processes strained partnerships and undermined resource efficiency. Sustainability was also found partly unsatisfactory, with inadequate maintenance frameworks reliant on national governments, financial sustainability that varied significantly across regions, and particularly problematic in areas with weak governance and limited resource mobilization. Institutional support was found inconsistent, with some successes but also coordination issues and insufficient technical assistance. Addressing these challenges and integrating cross-cutting topics such as gender equality, climate resilience, and state fragility is essential for maximizing the impact of future transport initiatives.

5.2. Lessons

The following are the key lessons from this evaluation.

- **Integrating well-planned ancillary components into transport infrastructure projects can significantly enhance their impact and sustainability.** Ancillary components were expected to complement main project activities and enhance overall impact. The evaluation found that ancillary components, when successfully completed, often delivered disproportionate benefits relative to their cost, significantly enhancing project outcomes. When effectively implemented, ancillary components like schools, markets, and health facilities greatly amplified the social and economic

benefits of infrastructure projects. The case in point is the Ghana Fufulso-Sawla Road Project, where the ancillary works generated a proportionately greater additional effect on project outcomes, such as a reduction in multidimensional poverty, than their additional cost. However, a significant number of projects showed a mixed performance in terms of delivering ancillary components and capacity-building activities. These were either delayed or not realized, which was mostly due to insufficient funding allocations, weak prioritization, and limited project management capacity. Furthermore, inadequate planning and fragmented funding hindered the timely procurement and delivery of these components.

- **Tailored approaches that account for state fragility, including enhanced capacity-building and risk mitigation, are essential for successful transport sector project implementation in these contexts.** Projects in states facing fragility were expected to be challenging but achievable with the right support. The evaluation found that state fragility significantly hampered project implementation and sustainability. Weak institutional capacity and political instability in states facing fragility often led to delays and compromised outcomes. For example, in the DRC PPSA Phase 1, stakeholders noted serious challenges regarding maintenance protocols, including the limited experience of the main technical staff, an insufficient stock of spare parts, and the absence of local training capable of supporting and maintaining the capacity-building process through ongoing training.

- **Ensuring sustainable maintenance funding and robust governance frameworks for the transport sector is crucial for the long-term success of infrastructure projects.** The evaluation found that the long-term sustainability of AfDB-funded transport sector infrastructure was frequently compromised by inadequate maintenance provisions and insufficient capacity building at the national level. Insufficient maintenance funding and weak governance structures led to the rapid deterioration of transport sector infrastructure. Good examples come from Namibia and Morocco, where reasonable financial stability can be expected through the Namibian government and the National Railway Office in Morocco.

- **Clear guidelines and consensus on climate resilience best practices are essential for effective integration into transport sector infrastructure projects.** Climate resilience was expected to be fully integrated into project designs. The evaluation found that while climate considerations were included, best practices were not consistently applied. The lack of consensus on best practices limited the effectiveness of climate resilience measures. For instance, coastal protection for the Lomé-Cotonou Road Project employs varying methods — groynes, sand replenishment, and breakwaters — differing by country and funder, without a unified best practice strategy, thus creating implementation challenges.

- **Early and thorough consultation with women's groups and targeted gender-focused interventions are key to successful gender integration in projects**. Gender considerations were expected to be fully integrated and effectively implemented. The evaluation found that while gender-related considerations were included during project inception, their implementation faced significant challenges in a number of projects. Such omissions caused projects to not fully account for or address gender-specific needs during the early stages of project design and planning, particularly those of women in local communities, thus limiting the provision of more gender-responsive project outcomes. For example, in the Dakar TER Project, while consultations were held with various municipalities, market traders, and car mechanics, there was no specific mention of consultation with women's groups in the project documentation. This lack of targeted consultation may have limited the project's ability to fully address the specific needs of women in the affected communities, and thus, potentially limited the effectiveness of gender mainstreaming efforts.

- **Proactive and structured coordination with development partners is crucial to maximizing the impact and efficiency of joint interventions**. The AfDB was expected to coordinate effectively with other development partners. The evaluation found that coordination varied, with some projects suffering from poor alignment and communication. Weak coordination led to overlapping efforts and missed opportunities for synergy, since a large proportion of the meetings and conversations held appeared to have been driven by government requests, rather than by pro-active actions from the partners. In contrast, in South Africa, the AfDB chaired quarterly meetings among agencies involved in the transport sector to share experiences and updates, ensuring that projects complemented each other, avoided overlaps, and allowed for scaling up when individual donors lacked sufficient resources.

- **Flexibility in implementation processes, combined with hands-on support and delegated authority to local teams, can enhance efficiency and minimize delays**. While it is essential to adhere to AfDB's predefined implementation procedures—such as procurement rules, safeguard compliance under the ISS, and financial accountability protocols—applying these processes in a context-sensitive and flexible manner can significantly improve project efficiency. This includes providing hands-on support, delegating appropriate decision-making authority to Bank field staff and borrower PIUs, and adapting procurement and safeguard implementation strategies to the realities of each project. Such flexibility helps reduce avoidable delays while maintaining compliance and accountability. For example, in Cameroon and the Republic of Congo, stakeholders reported that the Bank's rigid approach to EES requirements limited its responsiveness. This was particularly evident when compared to the World Bank's ability to maintain high EES standards while adopting a more pragmatic, context-sensitive approach during implementation. The World Bank's flexibility during implementation allowed for quicker adjustments to local conditions, thereby improving overall efficiency. In contrast, the evaluation found that in the Democratic Republic of Congo, the implementation of environmental and social management plans was found to be unsatisfactory. This underscores the importance of adapting implementation to local contexts while maintaining the Bank's high ISS standards and empowering local teams with decision-making authority. By doing so, organizations can better meet ISS requirements and enhance project outcomes.

- **Ensuring high quality of initial project designs can improve efficiency and avoid further changes during the implementation stage**. It was found that the initial design of outputs and outcomes did not always accurately address the needs of the beneficiaries and had to be changed before the implementation stage. Furthermore, although some of the lessons learnt from previous projects were incorporated in the design of feasibility studies, these faced design quality issues, mainly owing to a lack of capacity of executing agencies to assess the quality of these studies. Finally, while most project components focused on lending activities and achieved satisfactory quality in the design, less success appears to have been achieved by non-lending activities, particularly capacity building, which seems to have been a point of focus in countries with high levels of indebtedness.

- **Cooperation between RECs, external partners and executing agencies can encourage the efficient delivery of capacity-building outcomes**. It was noted that the achievement of capacity-building outcomes showed a mixed performance, which has mostly proven difficult due to limited cooperation between actors and institutional capacity constraints. Indeed, the issues faced in the majority of projects with a focus on institutional capacity building were found to be the direct result of delays from executing agencies in disbursing funding. A number of projects also showed a lack of coordination between RECs and external partners in realizing capacity-building components.

5.3. Recommendations

IDEV makes the following recommendations:

1. **Ensure strong alignment with and operationalization of the AfDB's TYS 2024-2033 priorities in its transport sector interventions and approaches at the corporate, regional, and country levels.**

   Key priority actions to consider include:

   - In the Transport Sector Action Plan that Management intends to develop, ensuring a balance of focus between Bank investments in transport infrastructure and support for services solutions.
   - Considering the optimal mix of investment in different modes of transport, responding to countries' and regions' needs, and leveraging the Bank's strong comparative advantage in regional and cross-border interventions.
   - Ensuring systematic integration of the transport sector action plan in Country Strategy Papers and Regional Integration Strategy Papers, cascading through to operations.
   - Promoting the accurate monitoring, tracking and reporting of transport sector results through a clear underlying theory of change and results frameworks aligned with the corporate Results Management Framework.

2. **Improve the efficiency of AfDB transport sector interventions and reduce start-up and implementation delays by addressing key hampering factors.**

Areas that could be considered include:

- Identifying good practices by other development partners and considering their appropriateness for the AfDB.
- Addressing the capacity constraints at local, national and regional levels that impede efficient and effective project implementation.
- Reviewing approval procedures, including sign-off thresholds and delegation of authority to relevant project teams or country offices, to expedite approvals.
- Exploring possibilities for developing or enhancing automated systems to support key approval workflows—such as non-objection notices—aiming to streamline operations, reduce processing times, and improve transparency.

3. **Respond to climate change and strengthen the sustainability of transport interventions by integrating climate-resilient design standards.**

Key priority actions to consider include:

- Building on the Bank's current approach for integrating climate considerations into transport interventions, develop and consistently apply standards for climate resilient infrastructure design, based on climate resilience assessments, processes and tools specific to the transport sector.
- Strengthening capacity-building and knowledge-sharing initiatives on climate adaptation among transport sector actors on the continent.

4. **Together with other development partners, promote a comprehensive approach to transport infrastructure maintenance.**

Key priority actions to consider include:

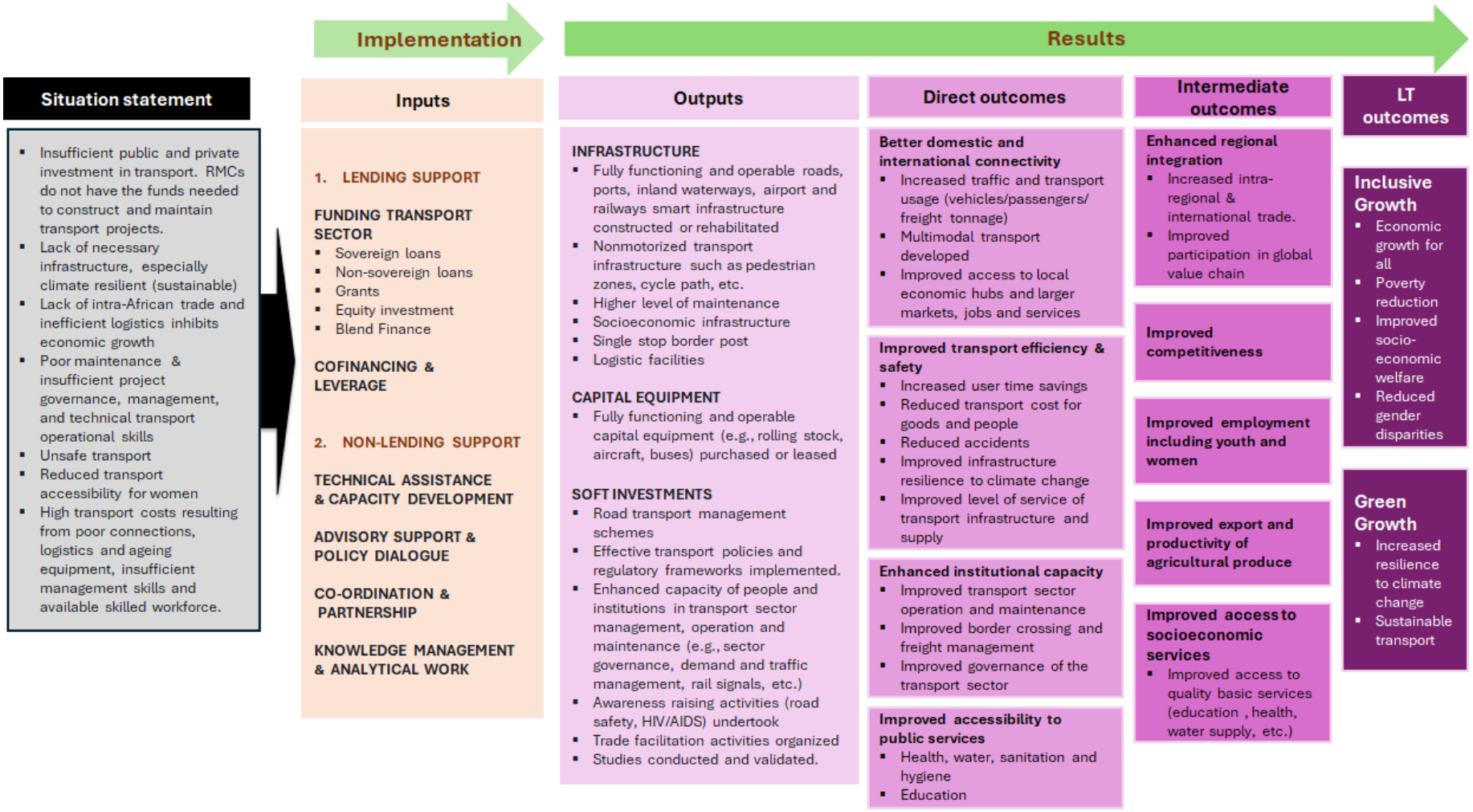
- Strengthening policy dialogue with national governments and regional organizations to shape and implement transport sector infrastructure maintenance priorities.
- Proactively supporting RMCs in developing innovative financial solutions for mobilizing and effectively utilizing resources for transport infrastructure maintenance, drawing on successful experiences from the AfDB and other development partners.
- Enhancing the capacity of national transport agencies and local governments to manage maintenance programs effectively through targeted training and TA support.

5. **Deepen the Bank's development results and maximize impact by enhancing the design and implementation of ancillary components in transport projects.**

Key priority actions to consider include:

- Ensuring the availability of the skillsets needed for the thoughtful design and focused delivery of ancillary components, including by forming strategic partnerships with local authorities and non-governmental organizations to leverage local expertise and resources.
- Integrating metrics for ancillary components into transport sector project KPIs and M&E frameworks to track their impact effectively.

Annex 1 – Reconstructed Results Chain and its Assumptions



Source: Evaluation Team

Assumptions				
For the overall AfDB's Support for Transport Sector	**For Inputs to lead to Outputs**	**For Outputs to lead to Direct Outcomes**	**For Direct Outcomes to lead to Intermediate Outcomes**	**For Intermediate Outcomes to lead to Impacts**
The Transport sector project outcomes align with the objectives of the AfDB	Projects are delivered to budget and on time.	Projects (especially infrastructure) are well maintained after the construction period	Key existing and integrated interventions do not fall into disrepair, are cancelled, or abandoned because of the AfDB project	Projects are additional in encouraging growth and other priorities and does not just replace future RMC or other organization funding
The AfDB has the relationships with RMCs enabling them access to deliver projects within Africa	The scope and purpose of the project are clearly defined at inception and all parties are aware and agree with the end goal	Use of the project is costed at a level which ensures viability and allows local populations access	Better access encourages project use by women and youth	Partnerships contribute to regional connectivity, stability, and economic cooperation.
AfDB is the organization best placed to deliver these projects and has the funding available	Changes made to the project are taken to counteract or take advantage of changes to context or strategy	Enough staff are appropriately trained in using the infrastructure or equipment	Businesses and individuals are aware of the benefits and costs of using the new project and how it can be used alongside other existing interventions	Effective risk management contributes to sustainable project impacts and public trust in infrastructure investments.
Projects consider gender, youth, and marginalized group impacts.	Risks are well managed and mitigated	The demand for the project is as anticipated at the inception stage	Capacity building supports fostering economic resilience.	Improved access to markets, services, and jobs, leads to socioeconomic advances.
AfDB remains flexible and adapts to changes in political, economic, or environmental contexts.	The project is accurately costed with sufficient provision for optimism bias/overspend	Project design was appropriate (and was conscious to safety, time saving, gender, and sanitation issues)	Inclusivity fosters broader social and economic participation, especially for vulnerable groups.	Socially inclusive infrastructure contributes to equitable economic growth and social stability.
Local workers are sufficiently trained to maintain and manage the infrastructure post-project.	The project delivery workers (for infrastructure this would be construction workers) have the skillsets and expertise to deliver	Context-sensitive modifications enhance project resilience and user uptake.	The adaptability of interventions supports long-term resilience and effectiveness.	Resilience to changing contexts strengthens project sustainability and long-term impact.

Source: IDEV and Evaluation Team

The theory of change was drafted by examining the AfDB's strategic and operational documentation, other IFIs' transport evaluation practices and by consulting with Bank staff. It was articulated across the following components:

- **Situation statement** (the most critical constraints in the transport sector in Africa that justify the intervention of the Bank). Key issues captured in this section pertain to:

    - Inadequate public and private investment in transport: Insufficient financial support from both public and private sectors has impeded the development of transport projects, extending beyond just infrastructure. The RMCs face challenges in securing the necessary funds for the construction and maintenance of key transport projects, hindering overall progress.
    - Insufficient Infrastructure, particularly lacking climate resilient aspects: There is a lack of existing infrastructure, particularly those incorporating climate-resilient and sustainable elements. This deficiency reduces the region's ability to withstand environmental challenges and compromises the long-term sustainability of transportation projects.
    - Limited Intra-African trade and inefficient logistics, impacting economic growth: The shortage of intra-African trade, coupled with inefficient logistics systems, acts as a barrier to economic growth and undermines the potential for economic development within the region.
    - Inadequate maintenance and weak project governance, management, and technical transport operational skills: Inadequate maintenance of existing infrastructure, coupled with deficiencies in project governance, management, and technical transport operational skills, combine to result in short lifespans for transport projects that are delivered. Strengthening these aspects is required for the successful execution and sustainability of transportation initiatives.
    - Unsafe transport: The current state of transport safety needs to be addressed. Unsafe transportation poses risks to both passengers and cargo, necessitating comprehensive measures to enhance safety protocols and infrastructure, as well as increasing associated costs (insurance, reduced appetite to travel in the region by passengers and cargo businesses).
    - Limited transport accessibility for women: Women face challenges in accessing transportation facilities, limiting their opportunities. Addressing this gender disparity in transport accessibility is vital for promoting inclusivity and equal participation in economic and social activities.
    - High transport costs due to poor connections, logistics, aging equipment, inadequate management skills, and a scarce skilled workforce: Higher transport costs result from a combination of factors, including poor connections, logistical inefficiencies, aging equipment, insufficient management skills, and a shortage of skilled workforce. Addressing these issues is essential to reduce costs, enhance efficiency, and foster sustainable growth in the transport sector.

- **Inputs** (the financial, human, organizational and institutional resources mobilized by the AfDB to support its transport projects). The inputs can be broken down into two aspects – Lending and Non-Lending Support. These are explained further below.

    - ***Lending Support***

        - Funding the Transport Sector:

            - Sovereign Loans: Financial support provided by the Bank to governments, involving the borrowing country's commitment to repay.
            - Non-sovereign Loans: Financial assistance extended to entities other than governments, such as private businesses or public-private partnerships, for transport projects.
            - Grants: Funds provided by the Bank without the expectation of repayment, supporting transport initiatives without imposing a financial burden.
            - Equity Investment: Ownership interest in a transport project, entitling the investor to a share of profits and losses.
            - Blend Finance: A combination of various financial instruments, including loans, grants, and equity, to support a comprehensive approach to funding transport projects.

        - Co-financing & Leverage:

- Strategies involving collaborative funding efforts with multiple partners to maximize financial resources and leverage external investments for the transport sector.

- ***Non-Lending Support***

  - Technical Assistance & Capacity Development (includes a significant amount of Economic and Sector Work (ESW)) completed by the Bank: diagnostic, analytical, and feasibility studies and reports):
    - Technical Assistance: Providing expertise, knowledge, and skills to enhance the technical aspects of transport projects.
    - Capacity Development: Strengthening the skills and capabilities of individuals and institutions involved in the transport sector to improve project execution and management.
  - Advisory Support & Policy Dialogue:
    - Advisory Support: Offering expert guidance and recommendations to aid decision-making in the development and implementation of transport policies and projects.
    - Policy Dialogue: Engaging in discussions with stakeholders to facilitate the exchange of ideas and perspectives, contributing to informed policymaking in the transport sector.
    - Coordination & Partnership: Promoting effective collaboration and coordination among various stakeholders involved in the transport sector to ensure a streamlined and cohesive approach to project implementation.

- ***Knowledge Management & Analytical Work:***

  - Knowledge Management: Gathering, sharing, and applying knowledge to enhance the understanding and implementation of best practices in the transport sector.
  - Analytical Work: Conducting thorough analysis and research to inform decision-making processes and improve the overall effectiveness of transport initiatives. Transport diagnostics: Include investigative studies from 2012 to 2022 and wider sector dialogue in Tanzania, Zambia, Ghana, Sierra Leone, Mauritius, Ethiopia, Mali and the regions.
  - ESW: Co-led by the AfDB after previously being led by WB. This includes transport sector and mode reforms including: Road Safety audit and analysis, Aviation safety, Port PPP, Railway concessions systems, Road corridor reports, Social impact on road project reports, Urban mobility reports and Telecommunications Industry Association (TIA) standard, The African Development Bank Transport Forum (ATF) 2015 in Abuja, Full membership of The Africa Transport Policy Program (SSATP): Development Plan 2 (DP2) and 3 (DP3), 2010 to 2020.

- **Outputs** (the immediate results expected from the inputs and activity undertaken by the Bank). These immediate outputs are given in detail within the Evaluation Matrix within this document, but are separated into Infrastructure, Capital Equipment, and Soft Investment Categories.
- **Direct outcomes** (the immediate resulting effects of the delivered projects on the local area and region). These direct outcomes resulting from project outputs include Better domestic and international connectivity of goods and people, improved transport efficiency & safety, improved and more efficient logistics systems, enhanced institutional capacity, and improved accessibility to public services. The detailed metrics which will be used to measure these are also listed in the Evaluation Matrix within this document.
- **Intermediate outcomes** (effects on the broader region, sector, economy, and demographics). These are more long-term anticipated effects which result from the direct outcomes described above. They include Greater regional integration, Improved Competitiveness, Improved employment, including youth and women, Improved export and productivity of agricultural produce, and Improved access to socioeconomic services.
- **Long-term outcomes** (broad end objectives of the portfolio of transport projects). These long-term outcomes sit under Inclusive Growth and Green Growth.

In summary, the narrative of the Theory of Change is as follows:

- The ToC outlines how the AfDB Transport Sector strategy aims to address critical constraints in Africa's transport sector, justifying the intervention of the Bank. Key issues include inadequate public and private investment, insufficient infrastructure with a focus on climate resilience, limited intra-African trade, deficient maintenance, unsafe transport conditions, restricted accessibility for women, and high transport costs. These challenges impact economic growth, safety, and inclusivity.
- The Bank's inputs encompass both lending and non-lending support. Lending involves sovereign loans, non-sovereign loans, grants, equity investment, and blend finance, aiming to fund transport projects. Co-financing and leverage strategies enhance financial resources through collaboration. Non-lending support focuses on technical assistance, capacity development, advisory support, policy dialogue, coordination, partnership, knowledge management, and analytical work.
- Outputs, immediate results from inputs and activities, include infrastructure built or rehabilitated, capital equipment delivered, and soft investments in the sector. Direct outcomes involve improved connectivity, transport efficiency, safety, institutional capacity, and accessibility to public services. Intermediate outcomes anticipate greater regional integration, competitiveness, employment, enhanced productivity, and access to socioeconomic services. Long-term outcomes align with inclusive growth and green growth objectives. The document includes an evaluation matrix detailing metrics for measuring success in each category.

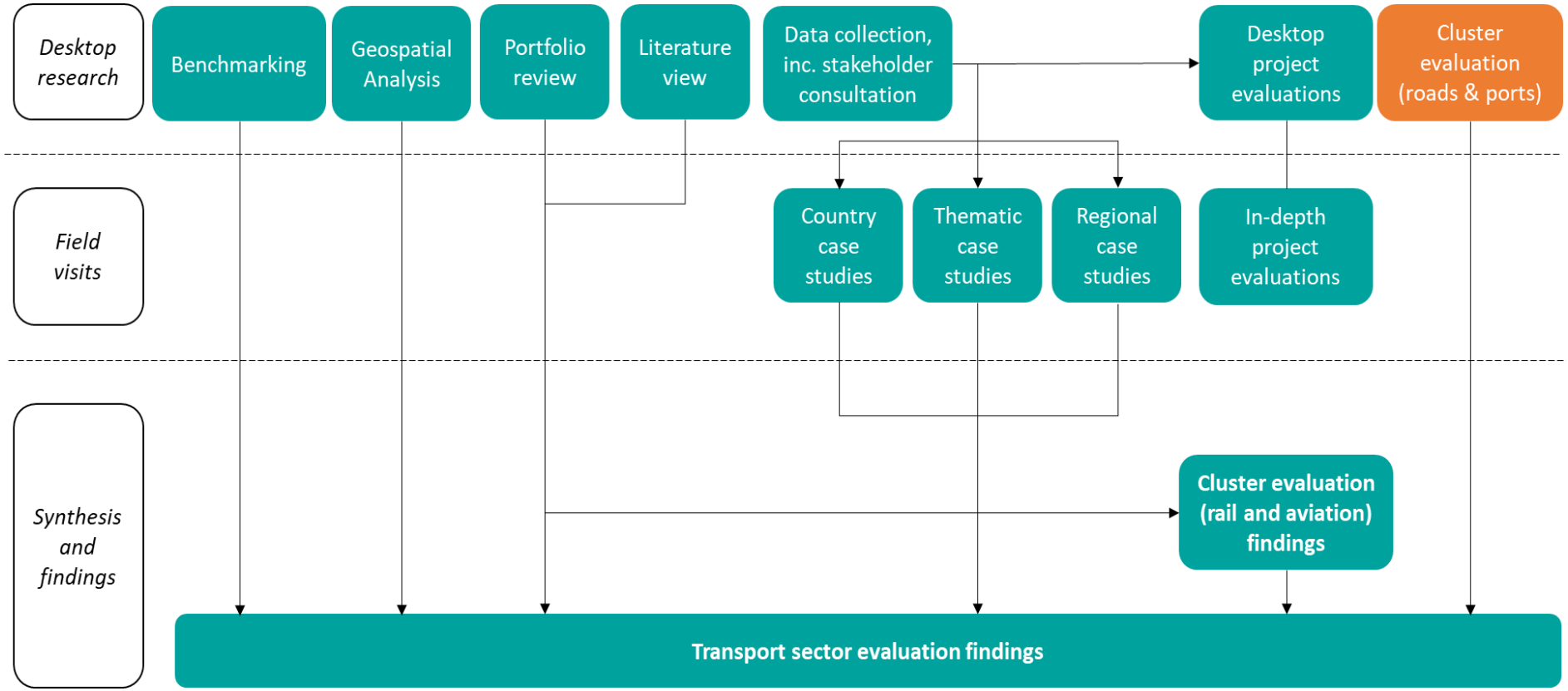
Annex 2 – Evaluation Rating Scale

Rating for individual evaluation criteria

Criteria	Highly Satisfactory - 4	Satisfactory - 3	Partly Unsatisfactory - 2	Unsatisfactory - 1
Relevance	High quality in all aspects of the considered criterion: all dimensions of the criterion are fully met, and this is considered a good practice.	Overall satisfactory quality of the considered criterion: all dimensions of the criterion have been met, but some of them have minor shortcomings.	Overall insufficient quality of the considered criterion: one or more dimensions of the criterion have not been met, and substantial improvements are required to bring the criterion to a satisfactory rating.	Deficient quality in most aspects of the considered criterion: most of the dimensions of the criterion have not been met
Coherence	High quality in all aspects of the considered criterion: all dimensions of the criterion are fully met, and this is considered a good practice.	Overall satisfactory quality of the considered criterion: all dimensions of the criterion have been met, but some of them have minor shortcomings.	Overall insufficient quality of the considered criterion: one or more dimensions of the criterion have not been met, and substantial improvements are required to bring the criterion to a satisfactory rating.	Deficient quality in most aspects of the considered criterion: most of the dimensions of the criterion have not been met
Effectiveness	High quality in all aspects of the considered criterion: all dimensions of the criterion are fully met, and this is considered a good practice.	Overall satisfactory quality of the considered criterion: all dimensions of the criterion have been met, but some of them have minor shortcomings.	Overall insufficient quality of the considered criterion: one or more dimensions of the criterion have not been met, and substantial improvements are required to bring the criterion to a satisfactory rating.	Deficient quality in most aspects of the considered criterion: most of the dimensions of the criterion have not been met
Efficiency	High quality in all aspects of the considered criterion: all dimensions of the criterion are fully met, and this is considered a good practice.	Overall satisfactory quality of the considered criterion: all dimensions of the criterion have been met, but some of them have minor shortcomings.	Overall insufficient quality of the considered criterion: one or more dimensions of the criterion have not been met, and substantial improvements are required to bring the criterion to a satisfactory rating.	Deficient quality in most aspects of the considered criterion: most of the dimensions of the criterion have not been met
Sustainability	High quality in all aspects of the considered criterion: all dimensions of the criterion are fully met, and this is considered a good practice.	Overall satisfactory quality of the considered criterion: all dimensions of the criterion have been met, but some of them have minor shortcomings.	Overall insufficient quality of the considered criterion: one or more dimensions of the criterion have not been met, and substantial improvements are required to bring the criterion to a satisfactory rating.	Deficient quality in most aspects of the considered criterion: most of the dimensions of the criterion have not been met

Source: IDEV Evaluation Manual, July 2023 Updated version

Annex 3 – Overview of the Evaluation Design



Source: Evaluation Team

Annex 4 – Evaluation Matrix

The table describes the transport sector evaluation framework, including the sector evaluation criteria and questions, the themes covered, key indicators and judgement criteria used, as well as the data collection method employed and the evaluation lines of evidence.

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
Relevance																
To what extent do the AfDB's interventions, objectives and design respond to beneficiaries' global, country, and partner/institution needs, policies, and priorities and continue to do so if circumstances change?	**Strategic**															
	Corporate Strategic	How adequate is the AfDB's strategic focus on transport, does it assist the RMCs in achieving the SDGs and the African Union Agenda 63?	Extent to which the AfDB's strategic focus in transport takes into consideration the underlying objectives of SDGs, and the African Union Agenda 63?	JC1.1 Relevant projects contribute to the achievements of the Bank's TYS, SDGs, RMC strategies, and the African Union Agenda 63	x	x			x	x		x	x			
	Corporate Strategic	To what extent is the AfDB's strategic focus on transport coherent with key transport development challenges in the RMC?	Extent to which the AfDB's strategic focus on transport coherent with key transport development challenges in the RMC?	JC1.2 Relevant projects contribute to the achievements of the Bank's sector strategies and alleviate key challenges (regional integration, private sector development, agriculture)	x	x			x	x		x	x			

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
	Regional and Country Strategic	To what extent do Regional Integration Strategy Papers (RISPs) and Country Strategy Papers (CSPs) take into consideration the underlying objectives and indicators related to the SDGs, the and the African Union Agenda 63?	Extent to which RISPs and CSPs take into consideration the underlying objectives and indicators related to the SDGs, the and the African Union Agenda 63?	JC1.3 Relevant project objectives (per relevant projects PAR) were and remained in line with the High 5s, African Union Agenda 63, SDGs, and sector strategies	x	x			x				x	x		
	Regional and Country Strategic	To what extent are RISPs and CSPs relevant to the key Regional Economic (RE) development challenges in Regional Organizations (ROs) and Regional Member Countries (RMCs)?	Extent to which RISPs and CSPs take into consideration the underlying key Regional Economic (RE) development challenges in Regional Organizations (ROs) and Regional Member Countries (RMCs)?	JC1.4 Successful implementation of RISPs and CSPs demonstrates a thorough consideration and alignment with the key Regional Economic (RE) development challenges prevalent in Regional Organizations (ROs) and Regional Member Countries (RMCs).	x	x			x				x	x		
	Alignment															

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
		To what extent do RISPs and CSPs provide an assessment of drivers / obstacles for transport development, and how is it used for adapting the transport overall strategy of the Bank?	The intensity of consideration of RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector-specific policies; (iii) AfDB country assistance strategy (pillars, results framework & indicators, non-lending activities).	JC1.5 RISPs/CSPs reflect RE challenges, aiding RMCs' economic growth.	x				x		x		x	x		
			Screening of keywords in all CSPs & RISPs approved by the Bank for the period 2012–2022		x											
	Interventions Alignment	To what extent are transport interventions aligned with RMCs strategies: (i) AfDB corporate, sectoral, RISPs, and CSPs; (ii) National development, sectoral strategies); and with beneficiaries' specific needs (appropriate solutions provided to identified problems and	Extent to which transport development interventions are aligned with applicable: • AfDB corporate • AfDB sectoral strategies • RISPs and CSPs • National general development strategies (and respective contribution to specific national development objective(s), usually time-bound and quantified) • National transport sectors • Beneficiaries' specific needs.	JC1.6 Transport objectives align with RMCs' strategic priorities, AfDB corporate and sectoral strategies, RISPs, CSPs and national development sectoral strategies.	x				x		x		x	x		
	Evolution and adaptation															
	Evolution and adaptation	To what extent were the AfDB intervention objectives adapted over time to take into account RMCs' changing needs?	Changes to RMCs strategies and/or needs reflected in relevant projects initiation, delivery, or launch. Evolution of portfolio structure (lending, non-lending) at regional and country level evolve over time.	JC1.7 Intervention objectives adapt to evolving RMCs' needs	x				x		x		x	x		
			Alignment between project outputs and RMC objectives		x	x			x		x					

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
		To what extent are lessons learned in the field of RE development from country / regional experiences considered in RISPs, CSPs, and at interventions-level?	Extent to which lessons are learned in the field of RE development from country / regional experiences considered in RISPs and CSPs?	JC1.8 Learnings from RE experiences integrated into RISPs, CSPs, enhancing effectiveness	x				x		x		x	x		
			Rating from the appraisal (PAR) reports.		x											
	Quality of Design															
How suitable was relevant projects design, and to what degree was implementation feasible?	Quality of interventions design	To what extent do the quality of transport development interventions design ensured (objectives clearly stated and result oriented; results are realistic with regard to the current circumstances), for achieving the defined objectives?	Extent to which AfDB transport interventions include: (i) project's objectives clearly stated and focused on outcomes as opposed to outputs; (ii) realistic intended outcomes in the country's current circumstances; and to Bank's role, capacity, and lending & non-lending capabilities for achieving the defined objectives; (iii) appropriate solutions to the identified problems (PRA, section 1.2 Relevance of intervention design to achieve defined objectives)	JC1.9 Relevant project designs are appropriate (discounting unpredictable external stimuli), ensuring effective outputs/outcomes and alignment with objectives	x	x	x		x		x	x	x	x		
		Does transport development intervention design integrate explicit consideration of DG, and African Union Agenda 2063?	Explicit reference in transport development interventions to SDGs and African Union Agenda 63 objectives/indicators	JC1.10 Transport development design integrates DG and African Union Agenda 2063 considerations, aligning interventions with overarching regional development frameworks effectively	x				x				x	x		
					x											

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
	Progress towards AfDB objectives	Were any design alterations necessary before delivery, and if so, what were they?	Changes in technical specifications/planned outputs	J.C.1.11 The design of relevant projects altered over time in response to changing and unpredictable external stimuli	x	x			x		x	x				
			Number of project addendums		x				x							
	Causal chain	Can a reasonable connection be established between the proposed project and the intended outcomes?	Targeted outcomes and their connection to project activities	JC1.12 Relevant projects establish reasonable connections with intended outcomes	x						x	x				
			Climate resilient aspects incorporated into relevant projects		x		x				x	x			x	x
			Fragile state provisions incorporated into relevant projects design and implementation plan		x	x			x				x			
	Risks & Mitigations	Were project risks considered and mitigatory steps outlined for corresponding issues?	Number of projects rejected due to unfeasible risks in delivering the outputs required	JC1.13 Risks considered and mitigatory steps outlined, ensuring project success	x											
			Presence of a detailed risk register		x							x				
			Number and type of issues materialising and were they reflected in the risk register		x	x						x				
			Number of mitigatory actions taken		x	x					x	x				
Coherence																
	Internal Coherence															

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
To what extent do other Bank interventions (particularly policies) support or undermine the AfDB's interventions in the transport sector and vice versa?	Interventions/Policies linkages	To what extent do other AfDB interventions (particularly policies) support or undermine the AfDB's interventions in the transport sector and vice versa?	The linkages and disparities between interventions/policies the AfDB is supporting (financially or otherwise) which are close to the RMCs and/or closely related projects in other RMCs	JC2.1 Other AfDB interventions and relevant transport sector projects are mutually beneficial	x	x			x				x			
			Assessments undertaken analysing the impact the proposed project on existing transport projects		x		x		x		x			x		
			Number of projects not launched because of confounding impacts with existing projects		x	x			x					x		
To what extent were synergies and interlinkages between the AfDB's interventions in the transport sector and other Bank interventions optimized (integrated solutions)?	Integrated solutions	To what extent were synergies and interlinkages between the AfDB's interventions in the transport sector and other AfDB interventions optimized (integrated solutions)?	Examination of the consideration taken for existing AfDB interventions when this project was proposed	J.C.2.2 Relevant projects tried to establish synergies with other Bank's or other donors' interventions in the country/region	x	x								x		
			Selection criteria of projects which relate to linkages/synergies of existing projects		x	x			x				x			
			Consideration of synergies and linkages across the transport sector with existing projects throughout delivery and after project closure		x	x			x					x		
	External Coherence															
To what extent are the Bank's interventions in the transport sector complementary, harmonized and coordinated with other development partners' support	Synergies and trade-offs	To what extent were the AfDB's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions?	Number of other (non-AfDB) interventions examined and analysed when this project was proposed	J.C.2.3 AfDB interventions complement, harmonise, and coordinate with other development partners, adding value	x	x			x	x			x	x		
			Amount of RMC involvement in project initiation, identification, selection, and approval		x	x		x		x			x			

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
to RMCs, adding value while avoiding duplication of effort?																
Effectiveness																
	Outputs Achievement															
To what extent has the AfDB been effective in achieving its objectives and results with regard to transport development across different groups of beneficiaries including women and youth?	Outputs achievement	To what extent were the expected outputs resulting from the AfDB intervention delivered?	Project delivered the key functioning (motorised) infrastructure intended	JC3.1 Expected outputs delivered in a timely manner, meeting project goals	x			x			x	x				
			Project delivered the functioning non-motorised infrastructure intended		x			x			x					
			Volume/number of roads/bridges/quays/paths/cycle paths/group travel lanes/rail track/stations/runways/taxiways/apron/airport terminals constructed or rehabilitated		x			x		x	x	x				
			No. of accessibility related infrastructure installed (e.g., ramps, lifts…)		x						x	x				
			No. of gender conscious related infrastructure installed (e.g., better access to sanitation facilities, greater security at bus stops, train stations, etc.,)		x						x	x			x	
			No. of logistics related intermodal terminals, inland ports, distribution centres, transportation hubs, freight villages, logistics parks, cross-docking facilities, integrated transport terminals		x					x	x	x	x	x		
			No. of Functioning capital equipment funded at least in part by AfDB project funding (e.g., rolling stock, aircraft, buses)		x					x	x	x	x	x		

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
			No. of transport management schemes implemented (especially road)		x				x		x	x				
			No. of transport regulatory/governance reforms implemented		x								x	x		
			No. of climate resilient related infrastructure installed (e.g., strengthened bridges, upgraded road drainage systems, elevated roadways in flood-prone areas, permeable pavements, etc.,)		x			x		x	x				x	x
			No. of transport awareness campaigns delivered (proportion targeting women and/or young people)		x						x	x			x	
			No. of studies/manuals undertaken and used by clients		x				x		x	x				
	Outcomes Achievement															
	Outcomes achievement	To what extent were the expected outcomes resulting from the AfDB intervention delivered?	Transport usage amounts (etc., number of vehicles using infrastructure/route before and after project, number of passengers moved, tonnage of freight transported)	J.C.3.2 Evidence shows that relevant projects has increased movement of people and goods, improved multimodality and access to markets	x					x	x	x	x	x		
			Increased capacity in custom		x						x		x	x		
			Change in the modal share for freight and passengers		x						x	x	x	x		
			Average travel time to markets		x						x	x	x			
			Volume of exports/imports		x								x			
			Movement speed of agricultural produce to nearest major market		x						x	x	x			
			Traffic measures (etc., transport capacity percentages)		x						x	x	x	x		
			No. of single stop border posts implemented		x						x		x	x		

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
			Improved border crossing and freight management	J.C.3.3 Evidence suggests that project has contributed to increase capacity to manage sustainably transport infrastructure	x						x		x	x		
			Customer satisfaction survey scores		x						x					
			Transparency Index score for financial reporting		x					x	x					
			Average cost to passengers/travellers of the journey before and after relevant projects	J.C.3.4 Evidence suggests that travel time and transport costs have been reduced	x						x	x	x			
			Average cost to transport 1 tonne of goods over the same distances		x						x	x	x			
			Average daily delays to passengers and goods		x						x	x	x			
			Average distance/time to the nearest healthcare centre, water fountain, school	J.C.3.5 Evidence suggests that relevant projects has improved access to basic services (healthcare, water, education) and contributed to create job opportunities for all (including women and youth)	x						x		x			
			Revised air traffic and safety regulations	J.C.3.6 Evidence suggests that relevant projects have contributed to improve transport safety	x						x	x	x			
			Average number of accident/fatalities before and after relevant projects		x						x	x	x			
			Enforcements of safety standards		x						x	x	x			
			Implementation of freight load limits		x						x	x	x			

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
			Revised traffic and safety regulations		x						x		x	x		
			Revenue generated by relevant projects improved competitiveness	J.C.3.7 Evidence suggests that relevant projects has contributed to increase capacity to manage sustainably transport infrastructure	x								x	x		
			Conditions improve for local people and climate; any adverse effects were mitigated	J.C.3.8 Evidence suggests that relevant projects have not generated unintended negative effects on the local populations (increased pollution, deforestation, HIV/AIDS transmission, security issues) and on climate and that when these effects occurred, they were successfully mitigated	x	x			x	x			x	x		
			No. of temporary and long-term jobs generated by relevant projects locally	J.C.3.9 Evidence show that relevant projects had a positive impact on	x						x	x	x			

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
				regional integration												
	Non-Lending Operations															
How effectively did the AfDB engage in productive partnerships in the transport sector?	Partnerships-building	To what extent has the AfDB effectively engaged with key stakeholders, including governments, private sector entities, civil society organizations, and international development partners, to foster collaborative partnerships and leverage resources for sustainable development initiatives within the transport sector?	Level of stakeholders' engagement	JC3.10 AfDB engages stakeholders within collaborative partnerships, leveraging resources for sustainable transport development effectively	x	x			x		x		x	x		
			Collaborative initiatives		x	x										
			Long-term partnerships		x	x										
How well did the AfDB fulfill its role as an advisor and convener?	Policy Dialogue and Advisory	To what extent has the AfDB effectively facilitated policy dialogue and provided advisory services to governments and stakeholders in the transport sector, resulting in the adoption of evidence-based policy reforms, strengthened institutional capacity, and improved coordination for sustainable development?	No. of stakeholders engaged in policy dialogue sessions or advisory consultations.	JC3.11 AfDB facilitates policy dialogue, advising stakeholders for evidence-based reforms and strengthened institutional capacity in transport sector	x	x			x		x		x	x		
			Frequency and quality of engagement with stakeholders to gather inputs and feedback on transport sector policies.		x	x										
			No. of transport sector policy reforms or legislative changes implemented following AfDB's advisory services or recommendations		x	x										

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					Desk Review	Interviews/Online	Focus Group	Portfolio Review	Policy & literature	Benchmarking	Project Results	Cluster Evaluations	Country Case Study	Regional Case St.	Thematic Case St.	QCA
How well did the AfDB fulfill its role as a knowledge broker?	Knowledge Sharing and Dissemination	To what extent has the AfDB effectively facilitated knowledge sharing and dissemination activities in the transport sector, promoting the exchange of best practices, lessons learned, and innovative solutions among stakeholders to enhance project implementation, policy development, and capacity building?	Dissemination of policy research reports, best practices, and lessons learned from advisory services within the transport sector.	JC3.12 AfDB promotes knowledge sharing, disseminating best practices, and innovative solutions for enhanced project implementation and capacity building	x	x			x		x		x	x		
			Use of knowledge-sharing platforms, such as conferences, seminars, or online portals, to facilitate exchange of ideas and experiences among stakeholders.		x	x										
			Engagement with regional and international partners to share insights and promote dialogue on transport sector policy issues.		x	x										
How well has the AfDB leveraged resources?	Leverage	To what extent has the AfDB effectively leveraged its resources and partnerships to attract additional funding, expertise, and support for transport sector projects, thereby maximizing the impact and sustainability of its interventions?	Proportion of total project financing provided by external partners compared to AfDB's own funding.	JC3.13 AfDB leverages resources and partnerships, attracting additional funding and expertise, maximizing impact and sustainability of transport interventions	x	x		x	x		x		x	x		
			Total amount of additional financial resources secured through partnerships, grants, loans, or co-financing arrangements.		x	x										
			Extent of private sector involvement in funding or implementing transport sector projects, measured by the value of private investments secured.		x	x										
			No. and value of projects in the pipeline that have secured co-financing or partnership agreements		x	x										
Efficiency																
To what extent are the AfDB's interventions in the transport sector efficient	Delivery of results	Were delays present during the delivery of the project?	Time to project start	J.C.4.1 Evidence proves that projects did not suffer delays in	x				x		x	x				
			Timely allocation of funding (AfDB and partner)		x					x	x	x				
			Timely and transparent selection of construction companies		x						x	x				

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(time and resource utilization) from both program and institutional perspectives?			Timely and fair management of resettlements and compensation schemes	the implementation	x	x				x	x	x		x		
			No. of months projects took to get to approval from identification/inception		x						x	x				
			No. of months relevant projects took to begin delivery activities (training sessions/construction) from approval		x						x	x				
			Time allocated to project supervision		x						x	x				
			Time for delivering non-objection		x						x	x				
			Completeness and timely delivery of project reports		x						x	x				
		Were there cost overruns and proportionate to the construction?	Timely fulfilment of contract covenants	J.C.4.2 Evidence proves that there were no cost overruns and that resources were used efficiently	x						x	x				
			Disbursement rate		x				x		x	x				
			Timely availability of the local counterpart funds		x						x	x				
			Timely compensation and resettlements		x	x	x				x	x	x			
			Comparison of expected and actual costs		x			x	x		x	x				
	CBA	How does the evidence demonstrate that relevant projects were implemented as planned?	Variations in ex-ante ERR/NPV forecasts and updated ERR/NPV forecasts in relevant projects PCR	J.C.4.3 Evidence shows that relevant projects was implemented as planned	x				x	x	x	x	x			
			Benefits cost ratios of the projects (by type i.e., broken down by capacity building/infrastructure constraints)													
		To what extent were the costs of the intervention funded by the AfDB commensurate to their planned benefits?	Variations in ex-ante ERR/NPV forecasts and updated ERR/NPV forecasts in relevant projects PCR	J.C.4.4 Evidence proves that project costs were commensurate to benefits												
			No. of collaborative arrangements		x			x				x				

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	Organizational Capacity of the AfDB to Deliver	To what extent have the AfDB project design and governance been appropriate/adequate?	Responsiveness to AfDB or executing agency demands	J.C.4.5 Project design and governance meet appropriate standards, fostering success and sustainability		x						x	x			
			No. of issues successfully tackled by the AfDB		x				x		x					
			No. of lessons learnt integrated in project design and implementation		x				x		x	x				
			No. of supervision missions		x						x	x				
			Adequacy of AfDB transport department staffing		x	x										
			Time for reaching formal approval and dealing with local concerns			x	x		x		x	x				
			Completeness and timely delivery of project reports		x				x		x	x				
Sustainability																
To what extent are the net benefits of the AfDB's support for the transport sector sustainable?	Economic and Financial sustainability	Are the relevant projects financially sustainable?	Credible and funded maintenance programme in place	J.C.5.1 Evidence suggests that relevant projects is financially sustainable	x	x					x	x	x			
			O&M plan in place and working		x	x					x	x				
			Vehicle/System operating costs before and after relevant projects		x				x		x	x				
			Monitoring system in place and operating well		x	x				x	x	x				
			No. of transport operating staff (jobs)		x						x	x	x			
			No. of people trained		x						x	x	x			
			No. of annual maintenance tasks		x						x	x	x			
			Cost of annual maintenance tasks		x						x	x	x			
			Budgets used on revenue collection mechanisms		x						x	x	x			
			Timely budgetary allocations and disbursements of O&M expenditures		x											

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
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			Comparison of actual costs to financial year budgets (% difference)		x			x					x			
			No. of permanent staff employed to operate the infrastructure		x	x						x				
			No. of qualified staff employed to operate the infrastructure		x	x						x				
			Cost recovery ratio (user fees)		x	x			x		x	x				
			Premature deterioration of relevant projects assets due to inappropriate use or lack of regular maintenance		x	x			x			x				x
		Are the relevant projects technically sound and do they build in any resilience to climate change?	Evidence of long-term technical sustainability of assets	J.C.5.2 Evidence suggests that relevant projects is technically sound and resilient to climate change	x		x	x		x	x	x				x
			Evidence of technical measures to ensure climate resilience and adaptation		x	x							x			x
		Have relevant projects fostered and enabled sustainable partnerships to forge and encouraged ownership of project results with beneficiaries?	No. of local committees and/or partnerships related to the new infrastructure	J.C.5.3 Evidence suggests that relevant projects has forged sustainable partnership and ownership of project results with beneficiaries	x	x			x			x				
		To what extent has the AfDB assisted RMCs to appropriately assess and implement environmental/climate/social mitigation/enhancement measures?	Assessment of poaching activities	J.C.5.4 Evidence shows that relevant projects results are environmentally and socially sustainable (only		x						x		x		
			Preserved biodiversity			x						x		x		x
			Amounts and adequacy of funds set aside to ensure environmental and social sustainability		x	x						x	x			x
			Changes in pollution index (water, soil, and air)		x	x			x			x	x			

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			Increased deforestation	apply to Environmental Category I and II projects)	x	x			x			x	x			
			Increase in HIV/AIDS and other sexually transmitted diseases		x	x			x			x	x			
			Change in GHG emissions after relevant projects		x	x			x			x	x			
			No. of social infrastructure/socio-economic actions delivered		x		x				x	x				
			What proportion of temporary and long-term jobs were occupied by women and/or young people		x		x				x	x			x	
			The proportion of women and young people among all those trained		x		x				x	x			x	
			Rural accessibility index		x			x			x		x	x		
			No. of users accessing the route for education, i.e., travelling to school or university		x							x				
			No. of months relevant projects took to begin delivery activities (training sessions/construction) from approval		x					x	x	x	x			
		What are the benefits/disbenefits resulting from the programme?	Positive impact on economic growth	JC6.3 Programme benefits outweigh disbenefits, contributing positively to RMCs' development	x	x	x		x	x			x	x		
			Enhanced local, intra-regional and international travel		x	x			x	x			x	x		
			Positive impact on poverty reduction		x	x			x	x			x	x		
			Reduced gender inequalities		x	x	x		x	x			x		x	
			Reduced environmental impact, including emissions		x	x			x	x			x		x	x
			Increased resilience to climate change		x	x			x	x			x		x	x

Sector Evaluation Criteria & Questions	Theme	Specific Questions	Key Indicators	Judgement Criteria	Data Collection Method			Evaluation Lines of Evidence								
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Which factors have enabled or hampered success?	**Enabling and hindering factors**	What factors have affected progress towards the objectives and how are they linked to the AfDB intervention?	Enabling and hindering factors	J.C.6.4 Factors affecting progress identified and addressed, optimising project outcomes	x	x	x		x			x	x	x		

Source: Evaluation Team

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