Portfolio 4: Strategy on Physical Connectivity

2024-2030

TradeMark Africa

CONTENTS

Abbreviations

Abbreviation	Full Term
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
BEEEP	Business Environment and Export Enhancement Programme
CO2	Carbon Dioxide
DFI	Development Finance Institution
EAC	East African Community
EPZ	Export Processing Zone
ERRA	East Africa Economic Recovery and Reform Activity
ETS	Emissions Trading Scheme
GDP	Gross Domestic Product
GVCs	Global Value Chains
IBM	Integrated Border Management
LLDCs	Landlocked Developing Countries
NTBs	Non-Tariff Barriers
OSBP	One-Stop Border Post
PIDA	Programme for Infrastructure Development in Africa
PPP	Public-Private Partnership
PSO	Private Sector Organization
RECs	Regional Economic Communities
TCA	Trade Catalyst Africa
TMA	TradeMark Africa
USAID	United States Agency for International Development

Executive Summary

The Physical Connectivity Strategy 2024-2030 is aimed at addressing the critical infrastructure needs in Africa, with a focus on enhancing the region's trade competitiveness through improved transport networks. The strategy builds on TradeMark Africa's (TMA) mission to increase sustainable and inclusive intra-African trade and exports to the rest of the world by addressing the bottlenecks in physical connectivity that have long constrained economic growth in the region.

Context and Challenges

The strategy is set against a backdrop of significant challenges, including a substantial and growing demand for infrastructure investment in Africa. The African Development Bank estimates a need for USD 130-170 billion annually, with a financing gap of USD 68-108 billion. The Programme for Infrastructure Development in Africa (PIDA) further projects that USD 360 billion will be required by 2040 to support the continent's developmental goals, particularly in trade and transport. Despite these needs, available funding has been steadily decreasing due to fiscal pressures exacerbated by the COVID-19 pandemic, the Russia-Ukraine conflict, and other regional crises. This reduction in traditional budgetary support from governments and donors necessitates exploring new models to access commercial and semi-commercial capital.

Another significant challenge is the lack of a pipeline of shovel-ready projects. Transport infrastructure development in Africa is inherently complex, involving numerous stakeholders with diverse interests. The lengthy process of planning, developing, and implementing these projects often encounters obstacles at various stages, making it difficult to deliver critical infrastructure efficiently.

The strategy also acknowledges the urgent need to address climate change, which is expected to accelerate with far-reaching impacts on all aspects of economic life. Transport planners must anticipate these impacts and ensure that facilities and systems are robust enough to withstand them while integrating mitigation and adaptation measures to reduce the carbon footprint of transportation usage.

Finally, the expansion of the Physical Connectivity Strategy into West Africa introduces unique challenges and opportunities compared to our work in East and Horn of Africa. West Africa’s diverse trade corridors, linking major ports to landlocked countries as well as linking port countries, require tailored approaches to enhance trade and economic growth. The overlapping nature of these corridors, influenced by security and geopolitical factors, demands a flexible strategy. Additionally, the expansion will require reallocating resources and expertise, including bilingual (English and French) personnel, to effectively manage new stakeholders and service providers in West Africa.

Approach and Role

TMA’s approach to transport infrastructure development is designed to maximize the impact of interventions by leveraging TMA's strengths, including its substantial footprint in East, Horn, and West Africa, its thematic focus on reducing trade costs and time, and its institutional agility. Despite the

strengths and substantial investments in trade infrastructure, TMA's contributions represent only a fraction of the total investment required in the region.

To address these challenges, TMA will continue to focus on the most significant constraints to trade flows while expanding its efforts to enhance the export and job creation potential of specific value chains. The following approaches will be adopted:

1. Commercial Development Model: Through its commercial entity, Trade Catalyst Africa (TCA), TMA will develop infrastructure projects that are bankable, leveraging DFI and other financial institution funding through well-structured investment propositions.
2. Grant-Based Model: For projects that are not commercially viable but are essential for regional integration and trade for peace, TMA will continue to use its grant-based funding model.
3. Hybrid Model: For projects that are marginally viable TMA will provide viability grant funding in a manner that the project parameters can then become sufficiently attractive to leverage funding from other sources.

This approach ensures that TMA can deliver projects efficiently, even in the face of funding reductions, by adopting a commercial principle where possible while maintaining a focus on inclusive and sustainable trade infrastructure.

Strategic Focus and Implementation

Strategic Focus and Implementation

The strategy will focus on delivering on all the countries of TMA operations. However as a start the strategy will focus on the development and enhancement of a focussed set of transport corridors including the Northern Corridor, Central Corridor, Lapsett Corridor, Horn of Africa Corridor and several corridors in West Africa with a priority on the Abidjan Lagos corridor. The focus on corridor development is aimed at improving the efficiency of these major trade routes, which are crucial for connecting landlocked countries to ports and facilitating regional and international trade.

A critical component of the strategy is intermodal integration—seamlessly linking maritime, road, rail, and air transport systems to optimize the movement of goods across the continent. By enhancing intermodal connectivity, the strategy seeks to reduce reliance on single modes of transport, thereby lowering costs, improving reliability and reducing transit times. Specific interventions include the development of intermodal hubs, expansion of One-Stop Border Posts (OSBPs) and the implementation of Integrated Border Management (IBM) systems to streamline cross-border trade.

In addition, the strategy places a strong emphasis on sustainable infrastructure development. Recognizing the impacts of climate change, TMA will prioritize projects that incorporate green technologies and practices. For example, the strategy includes investments in temperature-controlled storage facilities and infrastructure to support the shift from air to sea freight for perishable goods, thereby reducing carbon emissions. The development of green corridors, where low-carbon transport options are promoted, is also a key focus area.

TMA's projects will be developed based on an ethical approach that emphasizes relevance, additionality, impact, sustainability, predictability, value for money, and safeguards.

Results

The Physical Connectivity Strategy is designed to achieve measurable outcomes that contribute to TMA's overarching goals. These include:

- Increased Exports: Contributing to TMA's target of a 33% increase in Africa's exports to the rest of the world.
- Leveraged Investments: Mobilising USD 120 million in investments, including green investments.
- Job Creation: Contributing to the creation or sustenance of 7,000 jobs.
- Reduction in Trade Costs: Achieving a 15% reduction in border crossing times and sea freight costs for key exports.
- Environmental Impact: Reducing greenhouse gas emissions by 320,000 metric tons of CO2 equivalent.

Risks

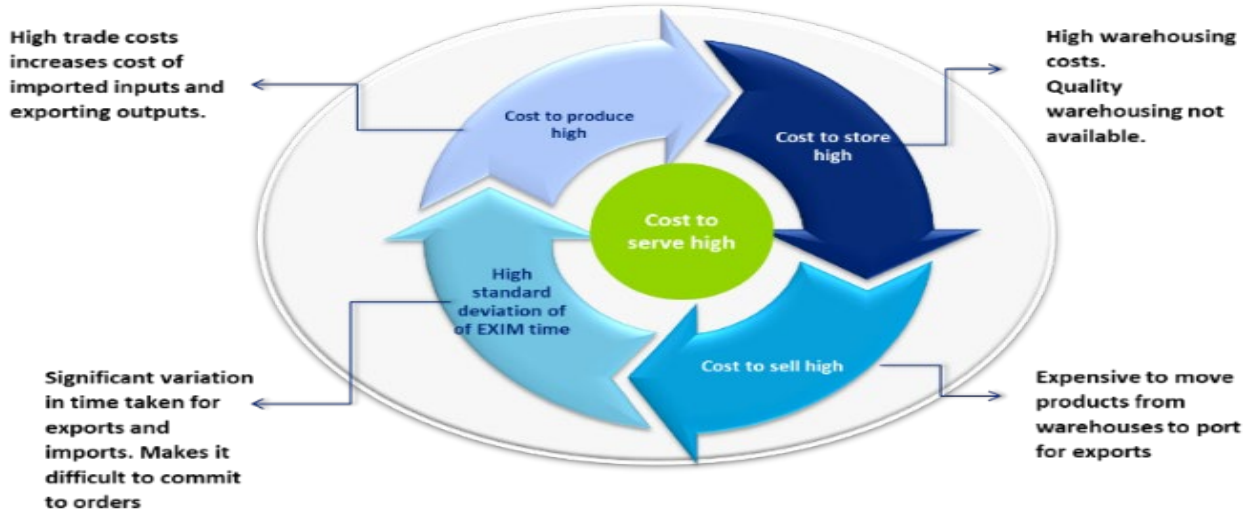
The successful implementation of the strategy is contingent upon managing several significant risks, including budget uncertainties, co-funding challenges, inflation in input prices, and working in fragile countries. TMA has developed mitigation strategies for these risks, ensuring that the potential impact of these challenges is minimized.

In conclusion, the Physical Connectivity Strategy 2024-2030 provides a robust framework for addressing the critical infrastructure needs in Africa. By leveraging TMA's strengths and adopting a dual approach to project development, the strategy aims to enhance the region's trade competitiveness, promote sustainable economic growth, and build resilient infrastructure that supports long-term development goals.

Introduction

Physical connectivity plays a pivotal role in driving trade and economic growth, particularly in regions where access to markets is often constrained by inadequate or inefficient transportation networks. In sub-Saharan Africa, the development and enhancement of transport infrastructure is not just a logistical necessity but a fundamental economic imperative. This has a knock-on effect on the region's share of global trade which has remained low due to underperformance in participation in the Global Value Chains (GVCs)[1]. As indicated in Diagram 1 below, the region's trade competitiveness is impacted by several constraints. Exporters bear high logistics costs and significant and unpredictable variations in import and export times. This uncertainty in trade chains increases direct, inventory and opportunity costs for businesses. This reduces the competitiveness of products, in turn limiting trade and business growth, and the creation of jobs and higher incomes.

Diagram 1: Challenges to Trade Competitiveness in sub Saharan Africa



TMA's mission, as highlighted for Strategy 3, is to increase sustainable and inclusive intra-African trade and exports to the rest of the world. One critical building block for this strategy is physical connectivity or the physical access of traders to markets. Without the physical linkage between seller and buyer, there can be no trade. And the more efficient this linkage is, the more competitive and beneficial that trade can be. Recognizing this, TMA has adopted a strategic approach aimed at increasing the capacity and efficiency of the transport networks through transport infrastructure development in the corridors where we work, thereby enabling a greater volume of trade to flow through the region without the crippling effects of congestion.

[1] Michele Mancini & Aaditya Mattoo & Daria Taglioni & Deborah Winkler, 2023. "Sub-Saharan Africa's participation in global value chains: 1995–2021," The World Economy, Wiley Blackwell, vol. 46(11), pages 3192-3207, November and The Extent of GVC Engagement in Sub-Saharan Africa, World Bank.

Context

TMA's experience, as corroborated by external reviews, is that physical connectivity is a crucial driver of economic growth. An independent evaluation of TMA's interventions in physical connectivity during the Strategy 1 period revealed that TMA projects resulted in annual cost savings of $110 million for East African Community (EAC) countries. In 2017 alone, TMA's interventions led to an increase of $549 million in exports and $145 million in imports over baseline levels, primarily due to cost savings. Additionally, time savings from these interventions resulted in an extra $102 million in exports and $32 million in imports over the 2010 baseline.

A significant portion of these gains was achieved through TMA's investment in both hard[2] and digital infrastructure. Analysis shows that nearly 54% of TMA's Strategy 1 budget of over USD 500 million was allocated to infrastructure development, with 17% directed towards ports, 23% towards border posts, and 14% towards digital infrastructure.

While these results clearly underscore the importance of infrastructure in enhancing trade efficiency, reducing costs and driving economic growth there are the following challenges in delivering infrastructure.

Challenges with availability of investment capital

The investment needs across Africa for infrastructure are substantial and growing. The African Development Bank (AfDB) estimates[3] a substantial infrastructure investment need of USD 130-170 billion annually, with a financing gap of USD 68-108 billion. Moreover, the Programme for Infrastructure Development in Africa (PIDA) has projected a requirement of $360 billion in infrastructure investments by 2040 to support the continent's developmental goals[4]. This demand is

[2] TMA has a significant track record of developing infrastructure across Africa. Projects implemented by TMA include:

i) Yard 5 at port of Mombasa repaved, adding 293 new ground slots
ii) Gate 18 expanded, adding additional two lanes including security equipment
iii) Gate 10 access road expanded, adding additional lane each direction
iv) G-Section rehabilitated, adding 737 new ground slots
v) Feasibility and detailed design for upgrading of Berths 11-14 and Berths 1-10 completed
vi) Port Reitz Road and Moi Airport Road expanded to [eight] lanes, providing landside access to new container terminal at Kipevu West
vii) Installation of shore-to-ship power equipment for KPA vessels; upgrade of KPA electric equipment; installation of eco-friendly bulk handling equipment and institutional reforms to elevate environmental management in KPA
viii) Berbera corridor being developed as an alternative freight corridor to Ethiopia
ix) 15 One Stop Border Posts constructed with additional projects being implemented
x) Several Lake Ports being constructed in Rwanda and DRC
xi) Several Logistics facilities under construction or delivered in Rwanda, Uganda, Malawi and Ethiopia

[3] African Development Bank (AfDB). 2023. https://www.afdb.org/en/news-and-events/public-private-partnerships-needed-bridge-africas-infrastructure-development-gap-65936

[4] Programme for Infrastructure Development in Africa (PIDA): First 10-Year Implementation Report. 2023. African Union Development Agency – NEPAD.

particularly pronounced in the trade and transport sector, where infrastructure is essential to facilitate the movement of goods and services across borders and regions.

An IFC report cites that the Sub-Saharan Africa region needs to invest approximately 7.1 percent of GDP each year in infrastructure if it is to meet its Sustainable Development Goals[5]. Out of this transport investment typically requires up to 3% of GDP for developing countries, with a rather higher share for LLDCs[6]. As trade volumes continue to increase, the existing infrastructure will be strained, and without substantial investment, the region risks stifling economic growth and regional integration.

While the need for infrastructure development is clear, the available funding to meet these needs has been steadily decreasing. Donor financing, once a reliable source of infrastructure investment, has seen a significant decline in recent years. Additionally, the fiscal pressures exacerbated by the COVID-19 pandemic, Russia-Ukraine conflict and regional and national conflicts in Africa have left many African governments with diminished capacity to finance infrastructure projects through traditional budgetary support. Before the pandemic, African governments were responsible for financing approximately 60% of transport infrastructure projects while bilateral and multilateral development partners were responsible for around 38% with the rest coming from the private sector[7]. However, with many countries now facing severe debt distress[8], it is highly likely that spending on transport infrastructure will be significantly reduced in the coming years. This reduction in government and donor funding necessitates the exploration of new models to access commercial and semi-commercial capital.

Lack of a shelf of Shovel Ready Projects

The development of transport infrastructure in Africa is inherently complex, involving numerous stakeholders, each with their own interests and priorities. The process of planning, developing, and implementing transport projects is lengthy and fraught with obstacles at various stages. Coordinating the diverse interests of public officials, developers, lenders, operators, end-users, and affected communities requires a strategic and delicate approach.

Moreover, transport infrastructure projects must align with broader regional and national planning frameworks, which adds additional layers of complexity and potential delays. The need for a well-prepared and readily available pipeline of projects is critical, yet difficult to achieve in such a challenging environment. This complexity underscores the importance of developing new, sustainable models that can streamline the process and ensure that critical infrastructure projects are delivered efficiently and effectively.

[5] Infrastructure in Africa- How Institutional Reforms Can Attract More Private Investment. Zivanemoyo Chinzara, Sebastien Dessus and Stephan Dreyhaupt. 2023. International Finance Corporation

[6] Developing Bankable Transport Infrastructure Projects: Case Studies, Experiences and Learning Materials for LLDCs and Transit Countries, United Nations. https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/module_2.pdf

[7] https://www.icafrica.org/en/topics-programmes/transport/transport-financing-trends/

[8] World Bank highlights (https://www.worldbank.org/en/region/afr/overview) that Sub Saharan Africa continues to grapple with high debt distress risks, with 21 countries identified as either at high risk of external debt distress or already ensnared in it as of June 2023.

Climate Change related issues

In addition to the above challenges is the urgent need to address climate change. Climate change is already occurring and is expected to accelerate, with far-reaching impacts on virtually every aspect of economic life. It is imperative that transport planning anticipates these impacts and ensures that facilities and systems are designed to be robust enough to withstand them and flexible enough to accommodate changes in usage and demand. At the same time urgent mitigation and adaptation measures are required to reduce the carbon footprint of transportation usage. Building resilience into the transport infrastructure is thus not just an option but a necessity, to protect the long-term viability of trade routes and the economic stability of the region.

Change in Context due to New Programming

The West Africa programming under the Physical Connectivity Strategy needs to meet the unique challenges and opportunities present in this region for the goal of enhancing trade competitiveness and fostering economic growth. The context of West Africa differs significantly from that of East Africa and Horn of Africa where the TMA teams have primarily been working. West Africa has several trade corridors, linking major ports like Dakar, Abidjan, Tema, Lomé, Cotonou and Douala to landlocked countries such as Mali, Burkina Faso, and Niger. These corridors, which range from approximately 990 km to 2,000 km in length, facilitate diverse trade flows, including EXIM trade, transit trade to and from landlocked regions, regional trade between corridor countries and domestic trade within each corridor country. Significantly, these corridors occasionally overlap and can be either competitive or supplementary, depending on traffic demands and geopolitical situations. For instance, issues with security on one corridor can lead to shifting of transit traffic to alternative corridors. Also, each corridor serves specific regional needs. For example, the Abidjan-Lagos corridor predominantly supports regional trade along the coast, connecting Côte d'Ivoire, Ghana, Togo, Benin, and Nigeria. In contrast, corridors like Abidjan-Ouagadougou and Dakar-Bamako primarily cater to the import and export demands of landlocked countries like Burkina Faso and Mali. The physical connectivity team will have to look at priorities over a significantly enhanced landscape and while doing so deal with new counterparts and new service providers. With increased programming the nature of the physical connectivity resources would also have to be relooked at given a more significant need for both English and French speaking resources.

The Physical Connectivity Strategy 2024-2030 builds on TMA's proven successes in infrastructure development while adapting to the evolving challenges and opportunities across different regions in Africa. By addressing the distinct needs of West Africa, along with the broader continent, this strategy not only continues TMA's commitment to enhancing trade competitiveness and fostering economic growth but also ensures that the necessary adaptations are made to effectively tackle issues such as climate change, investment shortages and complex project environments. With a renewed focus on sustainable models, strategic partnerships and regional integration, the strategy positions TMA to drive impactful and resilient infrastructure development across Africa, paving the way for long-term economic stability and prosperity.

Approach and Role

TMA's approach to transport infrastructure development is designed to maximise the impact of our interventions in the face of significant challenges and opportunities. This approach is grounded in a realistic assessment of TMA's strengths and limitations compared to other, more established players in the African infrastructure space. Some of the significant competitive advantages that TMA has can include:

- Substantial Footprint: TMA has an extensive presence in East, Horn and West Africa, with more people in more local offices than most other infrastructure players. This allows TMA to develop in-depth technical relationships with implementing agencies and provide timely, strategic advice that can accelerate project progress.
- Thematic Focus: TMA has a clear and predominant objective for transport projects: reducing the time and costs associated with trade in Africa. This focused approach enables TMA to remain neutral to other factors that might constrain other development partners, such as whether a project is public or private, national or regional.
- Speed and Flexibility: TMA is institutionally agile, with the ability to efficiently allocate information, expertise and funds across programmes, offices and budgets. Our relatively flat structure streamlines decision-making, allowing TMA to move quickly and effectively, offering a broader range of assistance to its partners.

Despite these strengths and substantial investments in trade infrastructure our investments represent only a small fraction of the total investment required in the region. Also, FCDO funding has been responsible for support the bulk of TMA infrastructure projects and a decline in this funding during the COVID-19 period created substantial risks for the infrastructure portfolio of TMA. However promisingly there are signs that some of the infrastructure funding that was reduced is coming back.

These strengths and weaknesses inform TMA's strategic approach to addressing the transport challenges in Africa. Going forward TMA will continue to concentrate time and resources on the points identified as the most significant constraints to current or projected trade flows. However in addition to corridor level interventions TMA will focus on infrastructure that substantially enhances the export and job creation potential of specific value chains.

As TMA expands work across geographies, we are also looking to develop infrastructure across a number of fragile countries. Learning from our experience TMA will also pay special attention to implementing projects in such countries.

Importantly to ensure that we continue to deliver projects in a situation of reduction in infrastructure funding TMA will use its commercial entity Trade Catalyst Africa[9] (TCA) to develop those hard and digital infrastructure projects where five broad criteria are satisfied: (i) there is a strong potential impact to increase exports and reduce barriers to trade in line with TMA objectives; (ii) the projects have strong demonstration effects; (iii) there is strong revenue generating potential to ensure commercial viability; (iv) TMA has prior expertise in developing the projects; and (v) the project catalyses substantial levels of further finance from DFIs or other lenders. In doing the above TMA will ensure good project preparation through a separate fund within TCA to enable TMA to be an originator of well structured high impact infrastructure projects in the region.

[9] Trade Catalyst Africa (TCA) was established as a wholly owned subsidiary of TMA to address critical financing gaps in trade infrastructure and SME financing, leveraging innovative financial solutions to drive regional economic growth. Operating as a commercial entity with a strong developmental focus, TCA harnesses TMA's expertise in trade facilitation, stakeholder engagement, and project development to create sustainable and impactful trade finance solutions.

TCA's Core Role: Finance Sourcing and Deal Creation

For the duration of Strategy 3 of TMA, TCA will strictly focus on finance sourcing and deal creation, avoiding direct involvement in project implementation. This ensures that TCA remains a specialised financing vehicle, mobilising and structuring funding while leveraging external partners for execution.

TCA's distinct approach:

- **Balances financing and implementation** to ensure projects generate measurable economic and social benefits.
- **Develops structured trade-related projects** while securing co-financing from **both public and private investors**.
- **Invests in Special Purpose Vehicles (SPVs)** in collaboration with TMA to manage and deliver projects effectively—without assuming direct operational roles.

Alignment with TMA

TCA enhances the credibility of trade infrastructure projects by aligning its financing with TMA's technical expertise and deep stakeholder relationships. This synergistic model ensures that projects are not only well-funded but also well-executed, reinforcing TCA's role as a trusted partner for national governments and regional economic bodies—without TCA engaging in direct implementation.

Geographic Focus and Project Scope

TCA currently operates **primarily in East Africa**, due to the restrictions related to its USAID funding but can work in other countries with separate investment capital. Its focus remains exclusively on:

- **Trade Infrastructure:** Financing critical transport infrastructure projects as well as digital infrastructure projects to enhance regional connectivity.
- **Trade Finance:** Unlocking capital for SMEs to enable their participation in cross-border trade.

TCA **will not engage in direct project implementation**, ensuring that its efforts remain **squarely on financing, structuring, and enabling sustainable trade solutions**.

Defined Roles and Strategic Focus

TCA's strategy is built around finance sourcing and deal creation, ensuring that every project aligns with its developmental mission. Its core roles include:

1. Project Developer: Identifying and structuring trade-related projects for financing.
2. Co-Financier: Mobilising additional capital from public and private partners.
3. Investor in SPVs: Collaborating with TMA to establish and support Special Purpose Vehicles (SPVs) for project execution—without assuming implementation responsibilities.

By maintaining a strict focus on financing and leveraging partnerships, TCA ensures efficient resource allocation, long-term sustainability, and measurable impact on trade facilitation across the region—while fully avoiding direct implementation activities under Strategy 3 of TMA.

While doing so TMA will ensure that work with all agencies that play a significant role in the project life cycle, from subnational implementing agencies to regional coordination bodies. These would include parastatals such as Port Authorities or the National Roads Authorities, which operate under central government guidance but are typically managed independently on a commercial basis. Additionally, TMA will interface with government entities at both the national level (particularly ministries) and the regional level (such as the REC Secretariats and the Corridor Authorities), which have overlapping responsibilities for policy, planning, and, in some cases, implementation. TMA will also engage extensively with private sector organizations (PSOs) to ensure that the infrastructure developed meets the needs of its users.

Through the physical connectivity portfolio TMA will assist its partners with a variety of activities. Depending on the nature of the project and the needs of the beneficiary agency, most TMA-supported activities will fall into one of the following categories:

1. Technical Assistance and Expertise Provision
2. Preparation of Infrastructure Projects to the Investment-Ready Stage (Investment Structuring)
3. Preparing bankability and raising investments
4. Direct Investment in Infrastructure Works
5. Enhancing the Investment Environment (particularly for private investment in infrastructure projects)
6. Knowledge Generation

In addition to the above TMA will also mainstream gender and climate change considerations in its transport practice and in every transport activity. Gender equality is critical to the success and sustainability of transport projects. Well-designed, appropriately located and affordably priced infrastructure can be a powerful tool in promoting gender equality. TMA will ensure that its transport projects at EAC ports, border posts, and roads incorporate gender-sensitive planning and implementation, in close collaboration with the inclusive trade team. On climate change TMA will not only look at designing projects that can adapt to climate change but will also on mitigation. For mitigation we will to explore projects that promote multi-modality as well as look to investigate ways in which green hydrogen and electric mobility can become a greater part of the cargo transport landscape of the region.

Learnings from Infrastructure Development in Strategy 2

The strategy is also based on the significant learnings that the Physical Connectivity team developed based on past challenges particularly with working in fragile and conflict-affected countries. The experiences gained from these challenges offer valuable lessons that can inform and improve future infrastructure development efforts.

One of the most pervasive challenges encountered in infrastructure projects has been budget uncertainties and reductions. Infrastructure projects, by their nature, require substantial and often long-term financial commitments. However, unexpected fluctuations in budgets due to challenges faced by our donors have posed significant risks. Slower infrastructure spending due to various challenges with contractor health has further exacerbated these risks.

Co-funding challenges have also been a significant obstacle. Many of TMA's projects rely on co-funding arrangements with governments. However, the fiscal limitations faced by many African governments, particularly in the wake of economic downturns, have impeded their ability to meet these commitments. This shortfall in funding has had a direct impact on critical project tasks, such as compensation for land acquisition and the procurement of essential materials.

Inflation in input prices has emerged as another critical issue, particularly in the context of global supply chain disruptions. The rising costs of construction materials, driven by both global economic factors and regional supply chain challenges, have put pressure on project budgets. This situation is particularly challenging for fixed-price contracts, where the costs of materials can far exceed initial estimates, leading to financial strain for both contractors and TMA.

The financial health of construction firms has also had a significant impact on project execution. As some firms face financial difficulties, their ability to deliver on contractual obligations has diminished, resulting in project delays and a decline in the quality of work. This has led to increased complaints and, in some cases, the need to renegotiate contracts or find alternative contractors mid-project.

Supply chain issues have compounded these challenges, with slowdowns and increased costs further disrupting project timelines and budgets. The interconnectedness of global supply chains means that delays or disruptions in one part of the world can have cascading effects on projects in Africa.

Working in fragile countries presents its own unique set of challenges, which TMA has navigated with varying degrees of success. Project cycle management in these contexts is particularly complex, requiring adaptations to local needs and constraints, as well as securing qualified contractors capable of operating in challenging environments. The process of conducting due diligence on local partners and navigating intricate government approvals can lead to significant delays, especially when unexpected requirements emerge from stakeholders. These issues are further complicated by differing project implementation structures and limited technical engagement from government agencies, necessitating adaptive contract management and a focus on long-term sustainability, including capacity building for maintenance and addressing issues such as vandalism.

Understanding the local context and bureaucracy in fragile states is crucial. Cultural nuances and unique governing structures can create power imbalances between local and federal agencies, leading to interference in contract management and the politicisation of projects. Bureaucratic hurdles, such as reliance on traditional communication methods and limited empowerment of local authorities, can further impede progress. The high transaction costs associated with navigating these government protocols strain project budgets and timelines, underscoring the need for a deep understanding of the local context and a tailored approach to project management.

External factors, such as global events, have disproportionately affected fragile states, further complicating project implementation. The COVID-19 pandemic and the Ukraine-Russia conflict, for example, have led to significant supply chain disruptions and financial constraints, making it difficult to secure construction materials. Land acquisition in time and counterpart funding have been other challenges.

Safeguarding and security have also been critical concerns in fragile contexts. Issues such as non-payment of workers, visa complications and security threats have required continuous attention and proactive management. In some cases, project sites have been disrupted by shootings or the resurgence of conflict, underscoring the need for strong safeguarding measures and security protocols.

The strategy recognises these challenges and a modified way of working for the physical connectivity team is highlighted later in the document to incorporate the lessons from implementation of infrastructure projects.

Strategy for Physical Connectivity

TMA will look to follow a three-pronged strategy for Physical Connectivity. For projects that have the potential to leverage funding from other sources on account of their bankability TMA will look to use its commercial entity, Trade Catalyst Africa (TCA), to develop those projects. For projects that are not bankable on account of traffic but are required for other reasons including enhancing regional integration and trade for peace TMA will continue to use its grant-based funding model. A hybrid approach will also be explored where TMA will provide viability grant funding in a manner that the project parameters can then become sufficiently attractive to leverage funding from other sources.
The physical connectivity team will assess each potential project to identify if a commercially based model can be utilised for its development. If the assessment suggests that is possible then the projects will be developed through this modality on a project-finance basis, thereby reducing burden on strained Government and donor finances. To develop the projects, TCA will syndicate finance from Development Finance Institution (DFIs) and other financial institutions through well-developed commercially viable investment propositions.

TCA's investment **approach ensures developmental impact, financial** sustainability**, and transparency. While TCA may adopt commercial principles in project development, its approach remains distinct, prioritising** long-term value and equitable stakeholder engagement. This is done through:

1. Focus on Developmental Outcomes

TCA-funded projects will prioritise cost recovery and sustainable development rather than shareholder profits. Investments will be assessed based on their impact on development outcomes including poverty reduction and environmental sustainability.

2. No Sovereign Liabilities

TCA's financing model ensures predictability and stability without creating government liabilities or recourse risks. Governments will not be required to assume financial obligations tied to TCA-supported projects.

3. Value for Money

Projects will deliver efficient, affordable, and high-impact solutions that generate long-term benefits for stakeholders. Investments will undergo rigorous financial and economic evaluations to ensure a strong benefit-cost ratio.

4. No Changes in Ownership

Governments and public sector entities will retain full ownership of projects throughout their lifecycle. TCA will support operations only until project financing is recovered, after which its involvement will end.

5. Transparently Co-Created Projects

All projects will be developed through collaborative, transparent processes involving governments, the private sector, development partners, and local communities. Project parameters will be clearly defined and openly available for audit, ensuring stakeholder confidence and accountability.

This **transparent, and results-driven** approach ensures that TCA's investments **support long-term economic and social progress while maintaining financial integrity and public trust**.

The key reason for this approach is that even in Asia, which has had significantly more success in attracting private capital into infrastructure development, the key challenges hindering the broader application of Public Private Partnerships includes the lack of trust among stakeholders, the reluctance of developing countries to bear critical risks like demand risk and the limited capacity of these countries to create bankable PPP projects[10]. TCA will aim to become a trusted partner of the government and private sector in structuring such projects such that they are able to be developed and provide their development impact even in the face of limited investment capital available.

In addition to those investments TMA will continue to support the development of projects on lower traffic corridors using the grant modality. These currently include the development of the Tog Wajale border post into an OSBP, supporting intermodal connectivity through developing lake ports and facilities that reduces the cost and time required by borderland communities to trade. Future interventions in this area will continue to focus on infrastructure investments that enhance connectivity, support cross-border trade and promote economic development in underserved areas. Through following this dual track TMA hopes to ensure that its infrastructure investments have a lasting

[10] Asian Development Bank Institute. (2023). *Public-Private Partnerships in Developing Asian Countries: Practical Suggestions for Future Development Assistance*. Asian Development Bank Institute.

impact on regional trade and economic development through the creation of a more integrated, efficient and resilient transport network that supports sustainable economic growth across Africa.

Box 1- Alignment of Physical Connectivity Strategy with AfCFTA

The alignment with the African Continental Free Trade Area (AfCFTA) within the Physical Connectivity Strategy emphasises the critical role of infrastructure development, particularly through the enhancement of physical connectivity and corridor development, in realizing the goals of AfCFTA. The strategy acknowledges that for AfCFTA to succeed in significantly increasing intra-African trade, there must be substantial investments in transport infrastructure that facilitate the movement of goods and services across the continent.

Physical Connectivity as a Driver of Trade Integration: The strategy highlights that inadequate physical connectivity has been a major bottleneck to trade within Africa, which AfCFTA aims to overcome. By focusing on the development of key transport corridors the strategy directly supports the creation of a more integrated and efficient African trade network. These corridors are not just conduits for goods; they are vital links that connect various African economies, enabling smoother, faster, and more cost-effective trade flows.

Corridor Development and AfCFTA Objectives: Corridor development is central to achieving AfCFTA's objectives of reducing trade barriers and enhancing regional integration. The strategy outlines the importance of upgrading infrastructure along these corridors, including roads, ports and One-Stop Border Posts (OSBPs), to reduce transit times and costs. These improvements are essential for making the trade routes competitive and reliable, which in turn makes African goods more competitive on the global market.

Leveraging Private-Sector Investment: The strategy also stresses the need to attract private-sector investment into infrastructure projects as a way to bridge the significant funding gap. By developing bankable projects that are aligned with AfCFTA's trade facilitation goals, the strategy seeks to leverage commercial capital alongside public funding. This approach ensures that the infrastructure developed not only meets the immediate needs of enhancing physical connectivity but also aligns with the broader vision of sustainable and inclusive growth across Africa under AfCFTA.

Nature of projects to be developed

Strategic Focus on Corridors: While the Physical Connectivity strategy will look to support TMA programming in all our countries of operation in the next few years the strategy will focus on key transport corridors, including the Northern Corridor, Central Corridor, Lapsett Corridor, Horn of Africa corridors, the Dar corridor and West Africa corridors (starting with the Abidjan Lagos Corridor).

TMA has historically focused its programmatic efforts on improving trade through key transport corridors in Eastern Africa. These corridors—the Northern, Central, Horn of Africa and Southern—are

critical as they handle the majority of Eastern Africa's external trade. For Strategy 3 we would also look to work on the West African Corridors.

The success of TMA's infrastructure work was evident in the substantial gains made in the efficiency of these corridors, which were supported by significant investments. We will continue with the corridor approach but with an emphasis on projects that offer the greatest aggregate net benefits. This will involve the application of rigorous appraisal metrics such as cost-benefit analysis and value for money to ensure optimal resource allocation. To do this TMA will carry out continuous consultation with infrastructure agencies and stakeholders to monitor the development of priority projects, identify obstacles, and analyse their potential impact on trade costs and efficiency. By doing this TMA will look to play an important role in supporting and implementing the improvement of these corridors through direct assistance, multi-agency coordination and regular reporting to regional bodies.

Corridor Expansion and Intermodal Integration: The overarching goal for TMA's interventions on Corridors is to increase its capacity and efficiency as both a trade artery and a development corridor. Key themes around this will include expanding physical transport infrastructure, improving intermodal integration (particularly between maritime, road, and rail), enhancing logistical performance at strategic nodes and upgrading operational and regulatory governance. In doing this the Ports, that usually form the starting and ending points of corridors will be analysed to assess their needs for infrastructure upgrades, environmental mainstreaming and productivity improvements. The re-development of railways in many corridors, for example the Standard Gauge Railway (SGR) from Mombasa to Nairobi, Djibouti to Modjo and on Central corridor will be pivotal projects, with TMA looking to support these developments through creation of infrastructure aimed at shifting freight from road to rail to reduce congestion through creation of specialised logistics facilities. These projects will also significantly link to the results expected under our work on greening trade as the increased use of intermodal transports supports a significant reduction in emissions along the trade corridors.

Border Crossings and Integration: Efficient border crossings are essential for implementation of the AfCFTA, yet they often pose significant delays due to capacity constraints and inefficient processes. TMEA has committed substantial resources to the development of One-Stop Border Posts (OSBPs) and the implementation of Integrated Border Management (IBM) at key locations across Eastern Africa resulting in the development and operationalisation of 15 OSBPs. The next step of this work would be to extend these gains by supporting construction of facilities where required and to create a new generation of ''no stop'' border posts. While developing these TMA will seek opportunities where user fees can be charged (for example on border posts with high and medium traffic). For these OSBPs a new commercial model can be implemented that charges user fees to pay for any debt contracted for developing the border post. Only those projects would be developed using this modality where the user fees are likely to be significantly lower than the benefits to transporters and shippers in terms of reduced waiting times at borders. This will ensure strong and positive impact for OSBP users in terms of reduced costs and improved efficiency. For other border posts that are important to be developed to enhance regional integration and trading for peace the grant based infrastructure development model will still be used.

Value chain related infrastructure: In Strategy 3, TMA will also focus on developing value chain oriented infrastructure that support actors in a particular value chain to be able to consolidate better and add value to the produce thereby reducing the cost and time to export. Infrastructure investments, including access roads, utility links and industrial/processing facilities, will be a significant part of these projects. The proposed infrastructure will be closely aligned with ongoing or proposed transport-specific projects to ensure that transport infrastructure supports broader economic development goals. TMA has already funded project development studies for such facilities in Kenya, Uganda and Rwanda and is exploring additional investment cases through its multiple value chain programmes. The first facility to support the garment sector is already underway at Athi River in Kenya while additional facilities are being explored including export supply hubs for horticulture in the Northern Corridor, as well as a market for maize exports in Busia.

Box 2- Supporting Development of Export Supply Hubs to facilitate private investments in value chains

For the development of value chain related infrastructure one the approaches that would be followed is the development of the Export Supply Hubs. This focuses on establishing centralized Export Supply Hubs in key agricultural areas of our countries of operation. These hubs are designed to streamline the collection, processing, and distribution of export commodities which in the case of horticulture would be avocados, mangoes, vegetables and flowers. By leveraging public-private partnerships (PPPs), these hubs will integrate advanced infrastructure with private-sector investment, thereby enhancing the value chain through improved logistics, temperature-controlled storage and compliance with international standards. The involvement of the private sector in these hubs not only facilitates efficient operations but also drives investment into the local value chains, supporting smallholder farmers and ensuring a steady supply of high-quality produce for export. This approach is expected to boost export volumes, reduce post-harvest losses, and promote sustainable practices, such as increased use of rail over air freight, which contributes to lower carbon emissions and greater competitiveness in global markets.

Gender inclusive Infrastructure: Given the significant informal trade happening at most borders of the corridors, specialized facilities for women and youth traders will be established at selected border posts to promote economic empowerment and gender equality. These facilities will include:

- Market places: Development of formal market places to help organise trade.
- Secure Rest Areas: Providing safe and comfortable resting spaces for traders.
- Childcare Centers: Addressing the needs of traders with children.
- Separate Washrooms: Ensuring privacy and hygiene.

These facilities for women and youth will help in addressing barriers and promoting inclusive trade practices.

Box 3 below provides a sample of some of the new Physical Connectivity projects already under development in Strategy 3.

Box 3- Pipeline of New Infrastructure Projects Already Under Development in Strategy 3

Project 1- Euro 200 Million One Stop Border Post and Ports Fund

Introduction: The Euro 200 million One Stop Border Post (OSBP) and Ports Fund aims to address the significant bottlenecks in intra-regional and international trade caused by inefficient border crossings and port operations across Africa. The OSBP ecosystem integrates improved infrastructure with streamlined border management procedures, significantly reducing the time and costs associated with border crossings, thereby enhancing trade competitiveness in the region.

Purpose and Structure: The fund will be deployed in two tranches, with the first tranche of Euro 100 million focusing on critical infrastructure upgrades at key border posts and ports. The fund will finance the construction, provision of equipment, and installation of ICT systems at these locations. Projects will be selected based on their commercial viability and the potential for strong political support. The goal is to develop sustainable infrastructure projects that can attract commercial and semi-commercial capital, mitigating the decline in traditional donor and government financing.

Project Implementation: TCA will take on the role of project developer, preparing and presenting investment cases to European Development Finance Institutions (DFIs) for debt financing. TCA will also provide equity in the form of sub-debt to cover 30% of project costs, with DFIs providing the remaining 70% as project debt. Upon securing financial closure, TCA will oversee the construction and maintenance of the infrastructure for at least 10 years, with user fees collected by government authorities to repay the debt.

Expected Outcomes:

- Reduction in Trade Costs: The development of OSBPs and port facilities will significantly reduce the time and cost of trade across Africa.
- Sustainable Financing: The fund will create a sustainable financing model for infrastructure development, leveraging commercial capital in a semi-commercial framework.
- Improved Regional Integration: Enhanced border and port operations will facilitate greater economic integration within the region.

Conclusion: The OSBP and Ports Fund represents a vital step towards addressing Africa's trade infrastructure challenges, with a focus on sustainable development and improved trade efficiency.

Project 2- Strategic Development of Kenya's Horticulture Export Infrastructure: Transitioning to Sea Freight

Introduction: Kenya's horticulture sector, generating approximately $1.2 billion annually, is a cornerstone of the nation's economy. However, the sector faces significant challenges due to rising air freight costs and a global shift towards environmentally sustainable logistics. In response, TMA

has initiated the Air-to-Sea Freight Masterplan to transition 50% of horticultural exports from air to sea freight by 2030.

The Challenge: The reliance on air freight has become increasingly unsustainable due to escalating costs, driven by disruptions in global supply chains and the impending phase-out of EU ETS free allowances. Additionally, major retailers are now discouraging the procurement of air-freighted produce, aligning with consumer preferences for environmentally responsible products. The limited air freight routes from Kenya further constrain market access, necessitating a strategic shift towards sea freight.

The Opportunity: Sea freight offers a cost-effective and environmentally friendly alternative. The Air-to-Sea Freight Masterplan, developed by TMA, envisions a comprehensive approach to infrastructure optimization, capacity building, policy advocacy and market expansion. The masterplan involves reconfiguring the logistics chain to support the consolidation of horticultural produce in Naivasha, followed by transportation by rail to Mombasa for shipping to international markets.

Specific Challenges:

- Infrastructure Gaps: The current cold chain infrastructure, designed for air freight, is inadequate for sea freight, particularly in maintaining consistent temperature control.
- Cost Challenges: The high costs of controlled atmosphere containers and the logistical complexities of using sea freight pose significant challenges.
- Quality Control: Maintaining the quality of perishable goods during the longer transit times associated with sea freight requires improved packing materials and techniques.

Role of TCA: TCA will play a critical role in funding the project, with an estimated cost of $40 million. TCA will leverage TMA grant resources to attract additional funding from the private sector and Development Finance Institutions (DFIs), facilitating the development of a purpose-built logistics chain for sea freight.

Expected Outcomes:

- Cost Reduction: Significant reduction in logistics expenses for Kenya’s horticultural exports.
- Environmental Impact: Decreased carbon footprint by reducing reliance on air freight.
- Economic Growth: Enhanced global competitiveness and market access for Kenyan horticultural products.

Conclusion: The proposed infrastructure is a strategic initiative that addresses the logistical and environmental challenges facing Kenya’s horticulture sector, ensuring its sustainability and growth in a competitive global market. A regional horticulture project on similar lines is also under development to extend the gains of utilisation of sea fright to other hinterland countries.

Project 3- Rapid Industrial Shed Development with Container Technology Limited

Introduction: Trade Catalyst Africa (TCA), in partnership with Container Technology Limited (CONTECH), is investing in the rapid development of a 5,000-square-meter industrial shed at the Athi River Export Processing Zone (EPZ) in Kenya. This project is already underway and is aimed at addressing the urgent demand for industrial spaces tailored to the Ready-Made Garment (RMG) sector, a significant contributor to Kenya's exports and employment.

Investment Opportunity: The RMG sector in Kenya holds substantial potential for expansion, driven by duty-free access to the US market under AGOA, a large workforce, and the rising cost of production in competitor countries like China. However, the sector's growth is hampered by a lack of readily available industrial facilities. TCA's investment will bridge this gap, providing the necessary infrastructure to attract and retain investors in the sector.

Project Overview:

- Location: Athi River EPZ, LR No. 18474/206
- Project Value: USD 1.9 million
- Developer: Modular Real Estate EPZ Limited (MODULAR), a subsidiary of CONTECH
- Construction Timeline: Commencement in Q4 2023, with space available for lease by mid-2024
- Financing Structure: 68% of the project cost will be financed through TCA debt funding at a variable interest rate of 7.5%, with the remaining cost covered by equity and grant financing. An additional grant has been provided by TMA for greening the facility through the ERRA programme.

Key Benefits:

- Economic Impact: The project will support the growth of the RMG sector, creating jobs and boosting exports.
- Sustainability: The facility will incorporate green technologies, such as solar power and water recycling, aligning with global trends towards sustainable manufacturing.

Conclusion: The rapid industrial shed development at Athi River EPZ is a strategically important project that will support the provision of industrial space in Kenya's RMG sector, supporting the country's economic development and enhancing its position as a global garment manufacturing hub.

Results

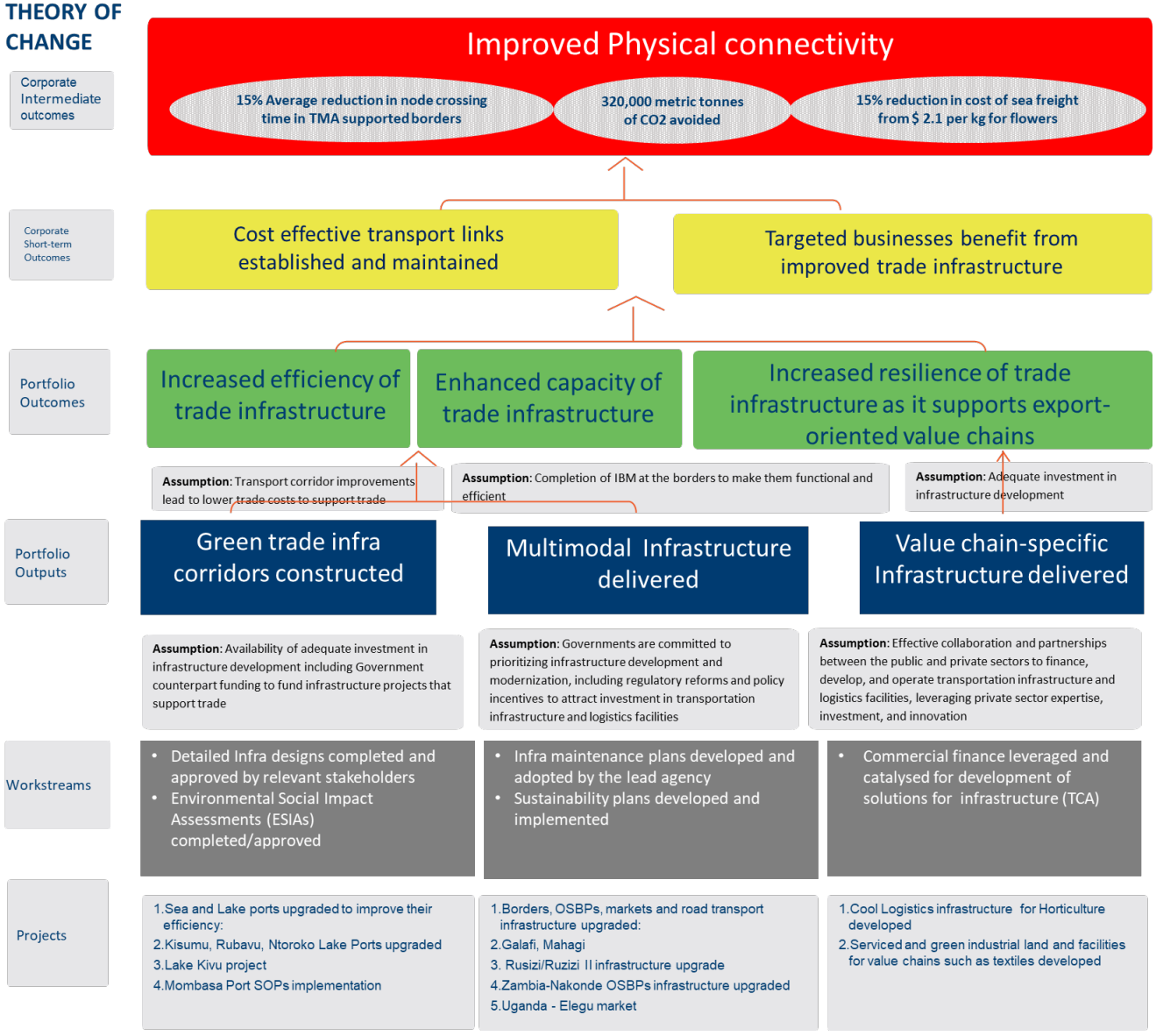
TMA's overarching goal is to build on effective approaches that have been proven to deliver more inclusive and sustainable trade in Africa. Physical Connectivity is one of the six portfolio areas that will

deliver on this through two primary pathways: increasing the efficiency and capacity of physical trade infrastructure and constructing resilient trade infrastructure that meet the needs of export oriented value chains across the region. TMA's transport activities are designed to reduce barriers to trade by improving physical connectivity, thereby lowering the cost and time associated with the movement of goods across borders.

TMA's approach to achieving these outcomes is structured around a theory of change that emphasizes the need for adequate investment in infrastructure development, government commitment to prioritizing and modernizing infrastructure, and effective collaboration between the public and private sectors. This approach is informed by several key assumptions, including the availability of investment, the commitment of governments to infrastructure modernization, and the effective partnership between public and private stakeholders.

The construction and upgrade of trade infrastructure, including ports, borders, markets and road transport systems, form the core of TMA's physical connectivity interventions. These infrastructure projects are expected to result in significant improvements in trade efficiency, as evidenced by a projected 15% average reduction in border crossing time at TMA-supported borders and a 15% reduction in the cost of sea freight for key exports, such as flowers. A schematic representation of the TOC for the Physical Connectivity portfolio is provided below:

PORTFOLIO 4 : THEORY OF CHANGE



These activities are expected to lead to the construction of trade infrastructure that increases the overall capacity and efficiency of Africa's trade network. This, in turn, will contribute to reducing trade costs, improving physical connectivity, and enhancing the economic resilience of the region.

In terms of specific results Portfolio 4, focused on improving physical connectivity, is designed to achieve specific, measurable outcomes that contribute to TMA's overall corporate targets. The following are the anticipated results that Portfolio 4 will deliver:

1. Increase in Africa's Exports to the Rest of the World:
    - While the primary corporate goal is to increase Africa's exports to the rest of the world by 33% (from $500 billion to $650 billion), Portfolio 4's contribution will focus on enhancing the infrastructure that facilitates these exports. This includes improving

ports, border posts, and transport corridors, which are crucial for reducing the time and costs associated with export logistics.

2. Value of Investments Leveraged, Including Green Investments:
    - Portfolio 4 aims to mobilize significant investments in export-oriented value chains, with a target of US$120 million. These investments are expected to stimulate further economic activity and enhance the capacity of the region's trade infrastructure. TCA-supported initiatives will play a crucial role in achieving this target.
3. Job Creation and Sustenance:
    - The portfolio is expected to contribute to the creation or sustenance of 40,000 jobs through the creation of value addition facilities. This is part of a broader goal to create or sustain 400,000 jobs across TMA's activities. The job creation will stem from infrastructure projects that focus on specific value chains and enhance their export potential.
4. Reduction in Time to Move Goods Across Select Corridors:
    - One of the key performance indicators for Portfolio 4 is the average reduction in border and port crossing times. The portfolio targets a 15% reduction in these times, which will be achieved through infrastructure upgrades at key locations including Nakonde, Kisumu, Rubavu, Rusizi, Ntoroko and the Mombasa Port Gate. Additionally, Integrated Border Management (IBM) systems will be implemented to further streamline processes at borders such as Galafi, Mahagi, and Nakonde OSBPs.
5. Reduction in Indirect Costs to Move Goods Across Select Corridors:
    - The portfolio also aims to reduce the indirect costs associated with moving goods across select corridors by 15%. This includes a specific target of reducing the cost of sea freight for horticultural commodities by 15%, bringing the cost down from $2.1 per kg. Infrastructure improvements at ports and borders, as well as enhanced logistics support, will contribute to these cost reductions.
6. Increase in Export Value of TMA Supported Value Chains:
    - Portfolio 4 is expected to increase the export value of commodities transported by sea freight, particularly horticultural products, by 20%. This will be facilitated by the improved logistics infrastructure and the reduced costs and time associated with moving goods through the upgraded ports and corridors.
7. Reduction in CO2 Emissions:
    - As part of TMA's commitment to sustainability, TMA aims to reduce 1 million metric tonnes of CO2 by 2030. Portfolio 4 aims to reduce greenhouse gas emissions by 320,000 metric tons of CO2 equivalent. This will be achieved through clean energy activities, supporting transition to sea freight for exports and the implementation of green logistics

solutions across the supported infrastructure projects. These results will be captured under portfolio 5 results, under green trade.

TMA's physical connectivity interventions are expected to yield a high return on investment, reflecting the organisation's strategic focus on building resilient, efficient, and inclusive trade infrastructure that supports long-term economic growth in Africa.

Risks

The successful implementation of the Physical Connectivity Strategy is contingent upon the management and mitigation of several significant risks. The overall risks of increasingly following a commercial approach to development of physical connectivity infrastructure are high, commensurate with the high potential impact of the proposed activities. Below are the key risks identified for the strategy, along with their probabilities, impacts, and proposed mitigation actions.

	Inherent Risk				Residual Risk		
Risk	**Impact (1-4)**	**Likelihood (1-4)**	**Overall Score**	**Mitigation**	**Impact (1-4)**	**Likelihood (1-4)**	**Overall Score**
Budget Uncertainties and Reductions	Major (4)	Possible (3)	High (12)	- Incorporate larger contingency buffers up to 15% of project budget. - Maintain open communication with funding partners.	Significant (3)	Possible (3)	Medium (9)
Co-funding Challenges	Major (4)	Likely (4)	High (16)	- Engage in early and transparent discussions with government partners. - Look to reduce projects where TMA is a minority funder. - Allow governments to spend in equal proportion from the start. - Develop contingency plans to address potential delays or shortfalls.	Significant (3)	Possible (3)	Medium (9)
Inflation in Input Prices	Major (4)	Possible (3)	High (12)	- Utilize flexible contract models.	Significant (3)	Possible (3)	Medium (9)

Risk	Inherent Risk			Mitigation	Residual Risk		
	Impact (1-4)	Likelihood (1-4)	Overall Score		Impact (1-4)	Likelihood (1-4)	Overall Score
				- Include price adjustment mechanisms. - Secure price agreements with suppliers. - Do not negotiate down contractors' prices in an open process; adjust scope if necessary. - Analyze offering performance-based incentives.			
Financial Health of Construction Firms	Major (4)	Possible (3)	High (12)	- Conduct rigorous due diligence on potential contractors. - Enforce performance bonds. - Set up escrow accounts and co-sign on payments if firms show financial distress. - Offer performance-based incentives from contingency funds.	Significant (3)	Possible (3)	Medium (9)
Supply Chain Issues	Significant (3)	Likely (4)	High (12)	- Work with contractors to develop contingency plans for supply chain disruptions. - Identify alternative suppliers or materials during contract negotiations.	Significant (3)	Possible (3)	Medium (9)
Force Majeure and Litigation Risks	Significant (3)	Possible (3)	Medium (9)	- Incorporate flexible force majeure clauses. - Establish a standing dispute resolution board.	Minor (2)	Possible (3)	Medium (6)

Risk	Inherent Risk			Mitigation	Residual Risk		
	Impact (1-4)	Likelihood (1-4)	Overall Score		Impact (1-4)	Likelihood (1-4)	Overall Score
				- Maintain open communication with contractors to prevent disputes.			
Working in Fragile Countries	Major (4)	Likely (4)	High (16)	- Conduct thorough feasibility studies and risk assessments. - Build relationships with local stakeholders. - Invest in understanding the local context. - Develop robust risk mitigation strategies for external shocks. - Implement proactive checks for safeguarding concerns and security.	Significant (3)	Possible (3)	Medium (9)
Local Context and Bureaucracy	Significant (3)	Likely (4)	High (12)	- Tailor project implementation strategies to local practices. - Build capacity within local institutions. - Foster open communication and transparency with government officials.	Minor (2)	Possible (3)	Medium (6)
External Factors and Financing	Major (4)	Likely (4)	High (16)	- Develop robust risk mitigation strategies for economic and political instability. - Secure adequate contingency reserves.	Significant (3)	Possible (3)	Medium (9)
Safeguarding and Security	Major (4)	Likely (4)	High (16)	- Conduct thorough security assessments. - Implement appropriate security measures. - Ensure proactive checks on labour rights and environmental impacts.	Significant (3)	Possible (3)	Medium (9)

Risk	Inherent Risk			Mitigation	Residual Risk		
	Impact (1-4)	Likelihood (1-4)	Overall Score		Impact (1-4)	Likelihood (1-4)	Overall Score
				- Station a TMA engineer on-site to monitor project progress.			

Budget

The budget for the Physical Connectivity Strategy (2024-2030) highlights the priority projects identified by the Physical Connectivity team across our countries of work. The budget highlighted below of USD 280 million only outlines the grant funding being sought for developing key transport corridors, upgrading port facilities, improving intermodal connectivity and establishing value chain-related infrastructure. Where possible, through using the commercial model, we would look to leverage additional funding with a target of raising another USD 120 million largely for OSBP and Value Chain related infrastructure. Key initiatives include significant investments in port productivity improvements at Mombasa, Dar es Salaam, and Lamu, alongside targeted enhancements to lake ports such as Mwanza and Kisumu. The allocation also includes substantial funding for the establishment of Export Supply Hubs aimed at consolidating agricultural produce for export, which is critical to reducing post-harvest losses and improving export competitiveness. Furthermore, the budget emphasizes gender-inclusive infrastructure, dedicating resources to create secure marketplaces, rest areas, and childcare facilities at key border posts to support women and youth traders.

Of the resources required the physical connectivity portfolio has already raised USD 42.5 million for new projects in Strategy 3 and is in advanced talks to raise another USD 25 million. Of these resources USD 25 million has come from USAID and another USD 2.5 million from EU to develop infrastructure with a commercial model. In addition another USD 15 million has been raised as grant capital for developing an OSBP at Nakonde, investing in the transition from air freight to sea freight for horticulture produce as well as small works on border posts at different corridors. We are also currently under advanced discussions with the EU for raising another USD 25 million as grant for developing border posts and that funding would be used to leverage in projects worth USD 100 million through also brining in DFI capital.

Table: Budget for Strategy 3 for Physical Connectivity

Intermodal Projects
Port Projects

Project Name	Grant funding Requirement in USD Million	Nature of proposed interventions
Mombasa Port	20	Productivity Improvement, Greening Port, Marshalling yard
Dar Port	10	Productivity Improvement
Lamu Port	10	Handling equipment, Logistics Facilities
Djibouti	10	Horticulture export facility, Marshalling Yard
Nacala	5	Logistics facilities for export oriented value chains
Beira	20	Access roads
Lake Ports		
Project Name	**Grant funding Requirement in USD Million**	**Nature of proposed interventions**
Mwanza South Port	8	Paving port area, Levelling of quay, Navigation aids etc.
Port Bell and Jinja	12	Dredging, access road and rail facilities upgrade
Kisumu Port	5	Completion of remaining works
Lake Victoria Cross cutting	5	Navigational Safety, Macrophyte management, Support to women and youth traders, green port policy
Kalemie Port	5	Dredging and upgrade
Mpulungu Port	7	Quay expansion, equipment and repair works
Moba landing site	1.5	Infrastructure upgrade
Kasanga Port	1.5	Infrastructure upgrade
Kigoma Port	1	Port Equipment
Port productivity study	1	
Ntoroko Port	5	Cargo and passenger jetty, access road, bridge upgrade
Kasenyi Port	9	Jetty, wharf, port and immigration buildings
Bukavu Port	10	Quay expansion, equipment and warehousing
Railway		

Project Name	Grant funding Requirement in USD Million	Nature of proposed interventions
Nairobi and Naivasha ICD	10	ICD infrastructure, handling equipment, industrial sheds
Isaka dry port	10	ICD infrastructure, handling equipment
Lilongwe ICD	4	Development on PPP basis
Jijiga ICD	10	ICD infrastructure, handling equipment
Kaliti Terminal	10	ICD infrastructure, handling equipment
OSBP		
Project Name	**Grant funding Requirement in USD Million**	**Nature of proposed interventions**
OSBP implementation at Nakonde, Skania, Kasumbalesa, EAC borders OSBP upgrade, Galafi, Tog Wajale, JBPs in West Africa	40	OSBP infrastructure upgrade, equipment, greening, IBM
Value chain related infrastructure		
Project Name	**Grant funding Requirement in USD Million**	**Nature of proposed interventions**
Export supply hubs	20	Export oriented consolidation centres for agriculture produce in different countries
Industrial sheds	20	Industrial space for export-oriented industries
Gender inclusive Infrastructure	10	Market places, Secure rest areas, childcare centers, separate washrooms at existing OSBPs
Total	**280**	