REPUBLIC OF ZAMBIA

MINISTRY OF COMMERCE, TRADE AND INDUSTRY
AND
MINISTRY OF TRANSPORT AND LOGISTICS

DRAFT NATIONAL TRADE LOGISTICS STRATEGY

2021-2030

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FOREWORD

The National Trade Logistics Strategy covering the period 2021 to 2030 is aligned with the Vision 2030 and various government policies and plans such as the 7th National Development Plan, National Trade Policy, National Transport Master Plan and National Transport Policy among others. The Strategy has been developed to actualise the critical need of developing an efficient logistics system in the Country with a view of enhancing Zambia's diversification performance and attaining the desired vision of Zambia being **a Regional Logistics Services Hub.** The promotion of logistics in the Country is key to stimulating economic performance. It should be noted that Zambia has been inundated with poor logistics that has affected the economic performance of the country which in turn has affected the well-being of its citizens. It is, therefore, necessary to establish a modern logistics system in the country.

For a long time, logistics management and the logistics system in the Country has not received its due attention and yet, this is the underlying stimuli for economic activity. Globally, logistics has fuelled globalisation, owing to rapid technological advancements in the logistics industry. In this globalising and changing world, Zambia cannot be left behind. The need for specific logistics interventions to stimulate the development and growth of Zambia's economy, notably the agri-business sector, which is a backbone of the country's rural economy, prompted the development of the NTLS. With improved logistics, the farmers, producers, and those involved in the processing industry can move their products efficiently from production areas to consumption points and in the process, efficiently access the market. Access to the market is vital for any business and efficient logistics seamlessly facilitates this.

It is an established fact that Zambia is in haste to diversify its economy which is currently dominated by a few mineral-based products. Approximately 70 per cent of Zambia's export earnings are drawn from the export of raw copper and cobalt. With efficient logistics in place, value addition to many of our agricultural products can be enhanced. Therefore, trade logistics is an integral part of the overall economic and trade development of a country or a region and plays a key role in the performance and competitiveness of its industries and businesses which Zambia seeks to tap into, with the development of this National Trade Logistics Strategy. Zambia is richly endowed with resources that provide vast opportunities for value addition and product diversification for both the traditional and non-traditional sectors. The current situation of over-dependency on the export of commodities in their raw form is not sustainable in the long run and the country risks remaining at the bottom end of development. Value addition is the way to go and Zambia being cognisant of the importance of logistics has moved forward with the development of the NTLS to stimulate value addition and diversify the economy.

As a contribution to the national agenda of diversifying the Zambian economy and creating incomes and jobs to achieve sustainable development, the NTLS seeks to address logistics challenges in both the primary and secondary sectors in a coordinated and systematic manner. To achieve this, the NTLS identifies areas of strategic focus and spells out interventions to tackle bottlenecks related to market failures, trade facilitation challenges, regulatory and human resource challenges and access to finance, a major binding constraint, especially in rural areas. The objective is to enhance the competitiveness of Zambia's products and services at regional and global levels while creating opportunities for the expansion of the productive base. The NTLS emphasises on the active participation of the private sector, both domestic and international, in this regard, as the Strategy is formulated on the basis of equal opportunity for all, ensuring that Zambia recognises a state of fairness in which individuals are treated equally, free of artificial barriers, prejudices, or preferences.

It must be stated that the successful implementation of the NTLS is dependent on buy-in from stakeholders and having in place the necessary frameworks for collaboration to facilitate implementation, monitoring and evaluation of set measures. Therefore, coordination, monitoring and evaluation are key components of this Strategy. Specific institutions have been identified to take lead in the implementation of specific interventions while the Ministries of Commerce, Trade and Industry, and Transport and Communications shall have oversight responsibility for the monitoring and evaluation of this Strategy. The two Ministries therefore appeal to the private sector and other government institutions to partner with the two ministries for the successful implementation of the Strategy to ensure a better future for the Country in the generations to come.

Ministry of Commerce, Trade and Industry Ministry of Transport and Logistics

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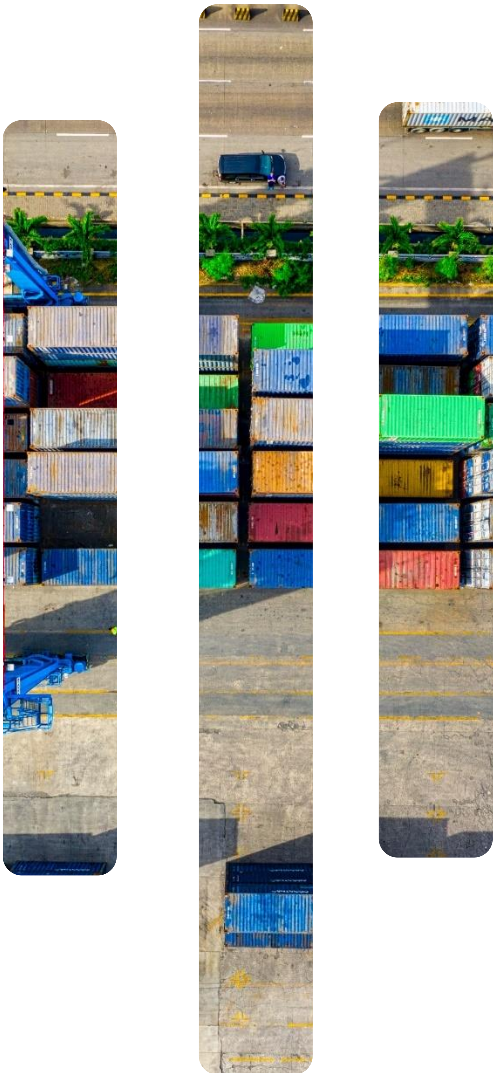


WORKING DEFINITIONS

Aggregation Facility: This refers to a facility established to collect, process (and package) crops grown from various parts of a production area such as a ward, district or province. Aggregation facility allows small-scale growers to process and prepare foods for markets with high-level equipment, as well as act as a point of contact for the growers and food distribution businesses.

Bulking Centre: The bulking centre refers to a facility where the produce, once harvested, is taken to the marketplace where the buyers and sellers meet and transact easily, and it reduces business costs between the producers and buyers.

Grain Storage Facility: The purpose of any grain storage facility is to provide safe storage conditions for the grain in order to prevent grain loss caused by adverse weather, moisture, rodents, birds, insects and microorganisms like fungi.

Industrialisation: The acts of transforming or value addition, on a commercial scale, of raw materials into finished or semi-finished products including the assembling of inputs into finished or semi-finished products.

Industry: The goods-producing segment of the economy. In this respect, it includes agriculture and mining which collectively constitutes the primary sector. It also includes manufacturing and construction activities which constitutes the secondary sector. Additionally, the term 'industry' denotes services that constitute the tertiary segment.

Intellectual Property: This refers to creations of the mind such as musical, literary, and artistic works; inventions; and symbols, names, images, and designs used in commerce, including copyrights, trademarks, patents, and related rights.

Investment: Contribution of capital, in cash or in-kind, by an investor to a new business enterprise, to the expansion or rehabilitation of an existing business enterprise or the purchase of an existing business enterprise from the state.

Investor: Any person, natural or juristic, whether a citizen of Zambia or not, investing in Zambia in accordance with the Zambia Development Agency (ZDA) Act.

Less than Container Load (LCL): LCL is a shipment that is not large enough to fill a standard cargo container. It can also be defined as a consignment of cargo that is inefficient to fill a shipping container and is grouped with other consignments for the same destination in a container at a container freight station.

Service Delivery Network: The service delivery network that allows for a more efficient and creative approach to the sharing of expertise, information and documents, and expands the capacity of front-line workers to address the complex needs of families and individuals who are dependent upon public services.

Trade Facilitation: The simplification and harmonisation of international trade procedures, with trade procedures being the activities, practices and formalities involved in collecting, presenting, communications and processing data required for the movement of goods in international trade.

Transport Chain Interoperability: Interoperability is a process where at least two different operating transport systems work together effectively. Interoperability allows parties in the transportation industry to provide harmonised interfaces and hence, easy access to operators for the provision of intermodal services.

Value Addition: Any step in the production process that improves the product or service for the customer and results in a higher net worth.

Value Chain Cluster: The full range of businesses or economic activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), and commercialisation, delivery to final customers and final product disposal after use.

World Trade Organisation: This is an international organisation that deals with discussions, negotiations and resolution of trade issues covering goods, services and intellectual property. Its essential functions are administering and implementing the multilateral trade agreements that constitute it, acting as a forum for multilateral trade negotiation, seeking to resolve disputes, overseeing national trade policies and cooperating with other international institutions involved in global economic policy-making.

Non-Traditional Exports: This is a product cluster that consists of exports other than copper and base metals such as cobalt.

Regional Trade: This is trade within a geographical region. It could be in the form of a regional trade arrangement such as a Free-Trade Agreement, Customs Union or Common Market. Zambia's regional trade arrangements are within the framework of COMESA and SADC.

3PL: Third-Party Logistics Service Providers.

4PL: Fourth-Party Logistics Service Providers.

5PL: Fifth-Party Logistics Service Providers.

ABBREVIATIONS AND ACRONYMS

Assignment	Consultancy Service Subject of this Project
ASYCUDA	Automated System for Customs Data
AfCTA	African Continental Free Trade Area
CBD	Central Business District
CFS	Container Freight Station
CIF	Cost Insurance Freight
COMESA	Common Market for Eastern and Southern Africa
COVID-19	Corona Virus Disease of 2019
CPs	Cooperating Partners
CRN	Core Road Network
DFC	Dedicated Freight Corridors
DRC	Democratic Republic of Congo
EBITDA	Earnings before Interest, Tax, Depreciation and Amortisation
EDI	Electronic Data Interchange
FCFASA	Federation of Clearing and Forwarding Association of Southern Africa
FoB	Free on Board
FTA	Free Trade Agreement
FTZ	Free Trade Zones
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GCS	General Cargo Services
GRZ	Government of the Republic of Zambia
GVA	Global Value Chain
GWAN	Government Wide Area Network
ICD	Inland Container Depot
ICT	Information and Communication Technology
IDA	International Development Association
INCOTERMS	International Commercial Terms
IT	Information Technologies
KPI	Key Performance Indicators
LCL	Less than Container Load
LPI	Logistics Performance Index
LSCI	Liner Shipping Connectivity Index
LSPs	Logistics Service Provider(s)
LTL	Less than Truck Load
MoA	Ministry of Agriculture
MCTI	Ministry of Commerce, Trade and Industry
MFL	Ministry of Fisheries and Livestock
MoF	Ministry of Finance
MTL	Ministry of Transport and Logistics
NGO	Non-Governmental Organisation
NTLS	National Trade Logistics Strategy

O/D	Origin/Destination
OBOR	One-Belt One-Road
OECD	Organisation of Economic Cooperation and Development
OSBP	One-Stop Border Post
PIU	Project Implementation Unit
PPP	Public-Private Partnership
PSO	Project Strategy Objective
PSP	Private Sector Participation
QPI	Quality of Port Infrastructure
RAI	Road Access Index
RDA	Road Development Agency
RoO	Rule(s) of Origin
RVCA	Rapid Value Chain Assessment
SADC	Southern African Development Community
SEZ	Special Economic Zones
SME	Small and Medium Enterprises
SOE	State-Owned Enterprise
SPS	Sanitary and Phytosanitary (Regulations or Measures)
SWOT	Strengths, Weaknesses, Opportunities and Threats
TAZ	Truckers Association of Zambia
TBT	Technical Barriers to Trade
TEU	Twenty-foot Equivalent Unit
TFA	Trade Facilitation Agreement
TIR	Transports Internationaux Routiers (International Road Transport)
TMD	Trunk, Main and District Road Network
TTFA	Trade and Transport Facilitation Assessment
UNCTAD	United Nations Conference on Trade and Development
USAID	United States Agency for International Development
VAL	Value-Added Logistics
VC	Value Chain
WB	World Bank
WCO	World Customs Organisation
WEF	World Economic Forum
WGI	World Bank Governance Indicator
WRS	Warehouse Receipts System
WTO	World Trade Organisation
ZACCI	Zambia Association of Chamber of Commerce and Industry
ZAM	Zambia Association of Manufacturers
ZDA	Zambia Development Agency
ZCF	Zambia Cooperative Federation
ZCFAA	Zambia Customs and Forwarding Agents Association
ZLL	Zambia Cargo and Logistics Limited
ZNFU	Zambia National Farmers Union
ZRA	Zambia Revenue Authority

ZRL	Zambia Railways Limited

EXECUTIVE SUMMARY

The Government of the Republic of Zambia with assistance from the World Bank has developed this **National Trade Logistics Strategy** which provides a framework for the development and management of trade logistics in Zambia over a time horizon of 2021-2030.

The process of preparing NTLS involved **an understanding of the context and in-depth situation assessment** to identify the challenges and opportunities of Zambia's transport and communications infrastructure and services as it relates to trade, customs and border management, and logistics management, services and infrastructure.

While drafting the NTLS, a **highly participatory approach was adopted**, and a diverse set of stakeholders were consulted.

NTLS presented here includes **an assessment of the current situation, understanding of the future outlook of the Zambian economy, the vision guiding the strategy, proposed strategies and measures, implementation and investment plans.**

Living with the global context: The **global context** from the perspective of strategizing the trade logistics for Zambia revolves around three interrelated aspects, i.e., (a) current volume and direction of Zambia's international trade and the contours of economic policies emphasising enhanced value-added international trade as one of the key pillars to achieve the targets of Zambia Vision 2030; (b) global economic outlook, and (c) the trends in the logistics business.

The **Zambia Vision 2030** stipulates to diversify the Zambian economy while the **National Trade Policy 2018** aims to make Zambia a net exporter of value-added goods and services through competitiveness at the domestic, regional and global level.

However, as a result of the COVID-19 epidemic, worldwide economic growth dropped to 4.4 per cent in 2020, and Zambia is no exception. In 2020, the Zambian economy fell into a deep recession due to the adverse impact of the COVID-19 pandemic. The **global economy is expected to recover** in 2021, growing at 5.2 per cent, before slowing to 3.5 per cent in the medium term. The economy of Zambia is projected to grow by 1.0 per cent in 2021 and 2.0 per cent in 2022, underpinned by a recovery in the mining, tourism, and manufacturing sectors. The recovery in international demand and copper prices are positive developments, while a reduction in COVID-19 cases will boost activities both in manufacturing and tourism.

Some of the key aspects defining the logistics landscape worldwide will be **automation, customer centricity, data-driven transformation, and sustainability**.

Leveraging upon the regional context: **Regional context** is defined by Zambia being a natural transportation hub in the region, with good transportation networks connecting it to all of its neighbours, giving it the potential to be a significant exporter of agricultural and industrial goods to its neighbours. Zambia can benefit from the membership of two regional economic communities (RECs) - the Common Market for Eastern and Southern Africa and the Southern African Development Community by strengthening the trade logistics in the country and developing itself as a **regional trade logistics services hub**.

Trade barriers reduced but logistics needs more: Although the country has made strides in the reduction of formal barriers to trade through SADC, COMESA, AU and WTO, a number of bottlenecks still remain in the provision of logistics infrastructure and services. In line with the Vision 2030 and 7th National Development Plan, Zambia must design strategies, implement programmes and policies, structure incentives that augment diversification, create employment to assist sectors facing barriers to growth. With this perspective, implementation of objective strategic interventions to improve trade and logistics is an essential pre-requisite for ensuring an efficient transport system, operational logistics mechanism for economically beneficial movement of goods and services which plays a pivotal role in the economic development of the country.

Decoding the LPI ranking: Zambia is not faring very well in the logistics management function. According to the World Bank **LPI Survey** conducted in 2018, **Zambia's LPI ranking was 111th out of the 167 countries surveyed**. In view of LPI dimensions, there are opportunities for improvements related to following:

- **Tracking** - Enhancing the security, transparency and control over import/export processes through greater use of electronic system;
- **Infrastructure** - Enhancing infrastructure quality through coordinated, long term planning;
- **Timeliness** - Reducing the variability in time required to import and export goods;
- **Logistics competence** - Reforming the regulations and governance, and liberalizing and opening up the logistics market to attract best-class private sector logistics operators;
- **International shipments** - Reducing freight rates by enhancing dry port connectivity and efficiency, and increasing the efficiency of road transport; and
- **Customs** - Simplifying, streamlining and automation of the customs clearance process.

Dissecting the Zambian Logistics Sector: The existing transport and logistics facilities are relatively young and lag behind international standards. The lack of a dedicated policy on logistics sector and poor long-term investment conditions so far have only yielded an inadequate and poor quality infrastructure system. Whatever logistics facilities are available have not been modernised for a long time. There are severe capacity shortages and absence of dedicated freight corridors which have resulted in sluggish movement of goods while inadequate storage facilities, low ICT adoption and unfriendly investor policies have stagnated supply chain efficiencies and constrained growth in agriculture and processed goods' sector.

Zambian rural communities are left behind in some of the progress made in road sector, they rely on poor road systems, often on unclassified foot-paths and motor-tracks are the only connectivity to large rural population.

In the new reforms, **the Zambian government has prioritised transport and logistics** sector as the key focus areas, wherein government ensures interventions to facilitate trade and logistics support to businesses. The government intends to leapfrog Zambian logistics and supply chains using the recent ICT and other technological advancements, to develop value addition and processed goods' industries and diversify the economy, however, Zambia lacks the necessary human resources trained in ICT operations and supply chain management, and the required skilling and training institutions.

Policy and Regulations - Policy and regulation is another key focus area for Zambian government. It has been **enacting various new policies and regulatory reforms in favour of economic diversification, infrastructure development, development of trade and logistics network with neighbouring countries**.

However, **Zambia's poor state and institutional capacity to actually implement an enacted policy on the ground has been a cause of poor performance**, primarily due to unmotivated bureaucracies, trade protectionism and various institutional hindrances, which have resulted in deteriorating business environment.

Institutional framework - Zambian institutions are stable and sufficiently robust in enacting and partially enforcing polices. Its institutions also rank better on corruption index compared to its contemporaries in the region. However, these **institutions are also riddled with inefficiency, lack of self-regulatory measures and poor co-operation with its central and local administrative bodies** often leading to ineffective top-down policy implementation.

Customs and Cross Border - Zambia is progressing on customs and cross border regulations, it has **adopted ASYCUDA**. In addition, Zambia is implementing a single window system, which will enhance trade movement across its borders.

The **current customs procedure is still riddled with severe custom official interventions, lengthy clearing procedures, physical inspections, and licencing and permit related bottlenecks** which hinder the cross-border movement and ease of movement of goods.

Poor and un-timely enforcement of custom agreements with neighbouring states, poor technology adoption, lack of warehousing facilities and other services at border points and lack of skilled custom agents continue to be the major custom and cross border challenges.

ICT facilitation - Zambia is seen to be **making significant progress on the information and communication technology** end, it already has an established fibre network connecting all districts, enhanced voice and data communication, low-cost internet accessibility has penetrated deep with 90 per cent mobile phones usage, these achievements are emboldening government to further carry out new ICT reforms.

Though **internet connectivity among public has grown rapidly, same is yet to reflect in trade and logistics sector**, while ICT is becoming the predominant medium of business.

Credit and Financial Facilities - Zambia has seen a significant growth in short-term credit despite high interest rates from banks, as high as 25 per cent in commercial banks, and the long-term institutional lending to finance public infrastructure projects have yielded better results. Meanwhile, Zambia railways, green energy, banking and mining sectors have successfully attracted foreign lenders. Banks have been hesitant to lend to sectors such as freight, logistics and warehousing among many, dis-incentivising private investment and risk-taking entrepreneurship in above mentioned sectors.

Future outlook - Despite the negative impact from the COVID-19 pandemic in 2020, Zambia's GDP is expected to rebound in 2022, 2023 and possibly, after 2023. The political and regulatory environment is expected to be stable while the economic and cultural factors will continue to be favourable in this decade (2021-2030). **Geographically strategic location of Zambia** in the SADC region seems to bring economic development potential by generating new business opportunities based on the increased volume of international cargo via Zambia. Furthermore, **SADC countries are steadily progressing towards market integration** by realising seamless movement of "people," "goods" and "investment" in the region. Under this circumstance, global goods movements would be generated more with the horizontal division of labour in the manufacturing sector as well as formulation of the regional and global network of agricultural production and supply system in the SADC region. All these factors clearly indicate a large possibility of expansion of goods transport in the region and thus **several business opportunities in logistics in the region**. This opportunity is being catalysed by improved network and market accessibility due to **developing major economic corridors in the SADC region** as well as several market integration initiatives such as AfCTA.

Envisioning Zambia as a regional logistics services hub: The development of NTLS for the country is an **ambitious path to become a leading logistics service hub in the SADC region** and its environs. One of the most important stalwarts of this strategy is to transform Zambia into the preferred logistics service hub in the region, capable of handling trade paths through effective connectivity between three regions that include East Africa, Central Africa, and Southern Africa.

The effort is needed to make imports and exports **processes more streamlined, restructure the regulations and structure the logistics sector** as well as enable opening the way for market liberalisation and private sector participation in the logistics sector.

The strategic vision - Zambia Vision 2030 aims to develop a diversified, balanced and strong industrial sector, a modern agricultural sector and an efficient and productive services sector. With this in mind, the **NTLS vision** can, therefore, be described as:

Zambia Becoming a Regional Logistics Services Hub to Catalyse the Diversification of the National Economy in Line with Zambia Vision 2030.

The rationale for envisioning Zambia becoming a logistics services hub in the SADC region emanates from four intertwined aspects, i.e., the contemporary global and regional context offering opportunities for Zambia to boost trade, central geographical location of Zambia in the SADC region, the vision to diversify the Zambian economy as per Zambia Vision 2030 using strengthened logistics infrastructure in the country and boost to trade, as well as the pressing need to improve the poor logistics performance of the country which constrains trade and growth of all sectors in the economy.

Contemporary global and regional contexts offer opportunities for trade growth for both exports and imports. There is an indication of global economic recovery that is likely to strengthen demand for Zambian exports particularly copper as Zambia is a major exporter of copper. Global prices of the metal also have been recovering lending to the idea that improving logistics in the country would in turn help exports to global markets increase further.

Regionally, increasing regional integration in the SADC, COMESA and African markets is providing higher opportunities in terms of a bigger market for Zambian products. Improving logistics would therefore contribute to higher trade (both exports and imports) in the region and for Zambia.

By 2045, it is projected that the total volume of Zambian exports and imports is expected to grow drastically, increasing by 1160.6 percent for exports and 918.2 percent for imports. This kind of increase in total trade needs a logistics system that is seamless and efficient.

The geographical location of Zambia places it at the centre of the region making the country well connected to international markets by several trade corridors of varying degrees of efficiency. The North South Corridor remains the most preferred for Zambian exports and imports. This corridor also leads to the lucrative export market of Katanga in the Democratic Republic of Congo and East Africa via Mpulungu Harbour. Making this transport corridor as a strategic one and improving its services provision would greatly stimulate trade with South Africa, Botswana, Zimbabwe, DRC and East Africa.

Objectives: National Trade Logistics Strategy provides a framework for the development and management of trade logistics in Zambia for developing the country as a regional trade logistics services hub to achieve the diversification of the national economy as per Vision 2030. This is to be achieved by leveraging on the strengths and opportunities and removing weaknesses and managing threats identified in the situation assessment.

The specific objectives will focus on creating an enabling environment for logistics businesses to grow and flourish, providing requisite infrastructure to support viable logistics services, and creating an environment to enhance regional trade. Strategically the interventions will be guided by the objectives such as -

i. Pursuing the **structural reforms** in the logistics industry which essentially means adopting the measures that change the fabric of the logistics industry, the institutional and regulatory framework in which logistics businesses operate.

ii. **Business stimulation** involving capacity building for implementing the structural reforms as well as within the logistics industry to benefit maximally from the structural reforms.

iii. Developing and strengthening **transport and logistics infrastructure** through planned investment in projects identified in the National Transport Master Plan as well as other projects identified in this NTLS.

iv. **Market expansion** encompassing the strengthened compliance with regional trade and transport-related treaties and cooperation with regional countries.

Achieving the above objectives should lead the logistics sector towards efficient and sustainable cargo flow that is strategically combined/integrated to generate "economies of scale" for Zambia.

Strategizing the logistics landscape in the country - The NTLS is built around four core strategic interventions and supporting strategic activities, all of which are motivated by the specific objectives mentioned above.

Strategy 1 - Structural Reforms: The situation assessment of the trade logistics landscape in the country points towards disjointed regulation in the logistics industry which results in market structure failures and poor coordination among different agencies and resulting in discouraging the private sector from providing competitive and efficient services, and thus hinder the integration of the logistics supply chain at lower costs. Harmonising the regulatory interests of all stakeholders by minimising the procedural and operational complexities through greater cooperation is a stepping-stone towards achieving a more consistent and efficient logistics sector in Zambia. The objective is to tackle the challenges such as delivering integrated logistics services through a coherent regulatory framework, updating entry and operational restriction regulations and providing better access to infrastructure. Accordingly, this Strategy will break down into the following actions:

- Integration of logistics services
  - Formulation of a logistics policy
  - Promulgation of a Logistics Law
  - Strengthening of Logistics Administration
- Regulating the access and use of infrastructure to provide services

Strategy 2 - Business Stimulation: Zambia has few small logistics companies located in Lusaka, Ndola and Kitwe mainly in domestic transport activities. It is hard for Zambian companies to accumulate capital and technical ability to compete against foreign logistics companies. In cognisance of the above, the strategy of "Business Stimulation" aims to stimulate logistics businesses in Zambia to serve an increased volume of land transport as well as to serve the expanded market in SADC through following three actions:

- Attracting foreign logistics business through objective foreign investment and partnership promotion and logistics business deregulation programmes;
- Strengthening of domestic logistics businesses through leading company cultivation, new business incubation, business matching and ICT, cargo liability development and capacity development programmes;

Strategy 3 - Developing and Strengthening Transport and Logistics Infrastructure: This strategy will comprise actions such as -

- Improvement in following Transport/Logistics Infrastructure -
  - The primary feeder road network
  - Provincial Transport Improvement
  - Improvement of Major Transport Corridors
  - Interventions in Rail and Water Transport
  - Improvement of Air Cargo Market
- Improvement of Transport Efficiency
- Integration of ICTs in the improvement of transport logistics
- Transport chain interoperability for multimodal transport to improve the interoperability of the transport system in Zambia
- Improvement at the Port of Mpulungu
- Improvement of Customs Efficiency- Construction of Inland Cargo Examination Centres
- Development of Agriculture Hubs/Bulking Centres
- Development of Logistics Hubs

Strategy 4: Market Expansion: The logistics business in Zambia mainly targets import, export and transit cargo confined to the Zambia logistics market. Despite the increase in logistics volume from current levels, the logistics market in Zambia is limited in size due to the country's small population and economic size, it shows little promise of a major expansion in the future compared to neighbouring nations. However, instead of the logistics market being limited to Zambia, there is a **promising large market in SADC**. Zambia is a top runner in leading seamless cross-border transport among SADC countries with bi-lateral transport agreements with all surrounding countries. The country can use ZCL as a special purpose vehicle for market expansion.

Utilising this advantageous position in cross-border transport, Zambia should basically formulate two policies, one is to realise more seamless cross-border transport, and the other to pursue further opening of the logistics market to tap the potential of generating business from SADC countries. Zambia shall continue to lead more barrier-free cross-border transport targeting all inter-city transport in the SADC. At the same time, Zambia should open up its own logistics market to trigger the opening up of the SADC market. Accordingly, this strategy should break down into two actions, i.e., facilitation of SADC protocols on trade and transport, and more improvement in cross-border procedures. Global logistics services aimed at SADC and Africa as a whole are projected to be realised as a result of this plan, and Zambian logistics companies will be able to participate.

Making things happen: **The thrust of this Strategy is to create an efficient logistics system** that caters to stimulate value addition in the Zambian economy to contribute effectively to economic diversification and growth. This Strategy, in conjunction with other government policy pronouncements such as Transport Master Plan, will provide for inter-linkages among the four modes (rail, road, air and water) of transport and ultimately transform Zambia into a regional logistics services hub in SADC region. The Strategy will further introduce institutional and regulatory policy reforms in the logistics sector for improved implementation capacity and greater coordination at all implementation levels.

The framework for the implementation of NTLS includes principle strategies, sub-strategies, strategic measures or actions, monitoring indicators, responsible institutions and cost estimates. The baseline of indicators for NTLS should be set up and annual targets should be monitored.

A **Critical Path Analysis** reveals that, besides few quick wins to start with, the **urgent need for structural interventions** in the logistics and commerce sector needs to be addressed upfront given the industry's disjointed regulation, the need for an efficient institutional framework for effective coordination between government actors and other stakeholders, and the sector's fragmented policy landscape. Such structural changes are required to be a priority intervention which will encompass regulatory reviews, drafting and enacting revamped regulatory regimes, and policy reforms to achieve the integration of logistics services, streamlining the entry and operational restrictions and regulating the access and use of infrastructure to provide services. A timeframe of 1-2 years is reasonable to achieve the intended structural reforms.

Simultaneously, the work on fourth strategic **intervention to expand the regional market** by creating business opportunities and competition through SADC Protocols needs to be taken up. Strengthening and Implementation Monitoring Programme, Cross-Border Customs (Checkpoints) Standardisation Programme and Customs Facilitation Programme will start early and should be achieved over the duration of NTLS.

Third strategic intervention on **developing and strengthening transport and logistics infrastructure** is also a long-drawn process starting from the conceptualisation and pre-feasibility level analysis to feasibility, detailed designing, arranging the financing and implementation/construction stages. Initial three years of NTLS will be required to prepare the key identified transport and logistics infrastructure projects ready for implementation/construction and the remaining seven years to construct such infrastructure. Given the limited resources available to spend on these projects, it will be necessary to prioritise each project in terms of its relevance to accomplishing NTLS' strategic goals. Furthermore, in light of the national economy's setbacks as a result of the COVID-19 pandemic, investment in some hard trade logistics infrastructure may be considered an immediate priority and undertaken for quick implementation/construction in order to script the economic recovery, as such investments will generate income and jobs in the short to medium term through the multiplier effect.

Second strategic focus area, namely, **business stimulation**, should begin after structural reforms and continue for the time period specified in the NTLS. It will encompass the creation of an enabling environment for attracting foreign logistics business (through a Foreign Investment and Partnership Promotion Programme and Logistics Business Deregulation Programme), strengthening of domestic logistics business (through Leading Company Cultivation Programme, New Business Incubation Programme, Business Matching and ICT Programmes, Cargo Liability Development Programme, and Capacity Development Programme) and strengthening of logistics administration. All these programmatic interventions will require conceptualisation, defining the scope and programme design before the implementation. The conceptualisation, scoping and designing of programmes should be done in the third year while the implementation should be achieved in the remaining seven years.

Who will be responsible for implementation - The responsible agencies for implementing various strategic interventions will be MCTI, MTL, and ZRA. The Service Delivery and Strategy Support Network, which are made up of public and private sector organisations as well as non-governmental organisations, will be involved in the coordination and management of the Strategy. To provide oversight on the implementation of the Strategy and other logistics system implementation features, a high-level permanent Trade Logistics Committee comprised of government institutions and the private sector should be established. The Ministry of Commerce, Trade and Industry, which is in charge of trade policy formulation and monitoring, and the Ministry of Transport and Logistics, which is a leader in one of the key drivers of logistics performance, will lead the Strategy Support Network in coordination, with the strengthened High-Level Logistics Committee taking the lead. It is proposed that the Ministry of Commerce, Trade and Industry establishes a Logistics Section under Foreign Trade Department to liaise on a day-to-day basis with the High-Level Logistics Committee and to serve as the Secretariat of the High-Level Committee. The High-Level Logistics Committee will then report to the Inter-Ministerial Coordination Committee constituted by the two ministries and co-chaired by MCTI and MTL. The lead agency on trade issues will be MCTI, while the lead agency on logistics issues will be MTL.

Monitoring the implementation - The implementation of the National Trade Logistics Strategy will need a monitoring and evaluation framework wherein respective Project Implementation Units (PIUs) for proposed interventions will be responsible for the M&E system, including data collection for monitoring purposes. The PIUs will provide progress reports to the Subcommittees and High-Level Logistics Committee every quarter, documenting progress toward achievement of the objectives of the proposed interventions using the indicators and strategic actions outlined in the implementation plan. The indicators include the key outputs and outcomes documenting the expected results with regard to improved efficiency, capacity, and range of available services of the trade logistics system in Zambia.

How much needs to be invested - The NTLS assumes an open investment climate environment where the private sector will be encouraged to participate in Zambia's national logistics services provision. Various policy pronouncements and incentives shall be given to the private sector in order to stimulate participation as well as strengthen the capacities of domestic private sector players in the logistics subsector in order to make Zambia a logistics services hub in the region. Besides this, proposed interventions are aimed at structural reforms and a number of advisory services will be required for this purpose.

The **estimated investment** to implement the proposed strategic interventions for creating the enabling environment for the trade logistics businesses to grow comes to be **USD 163 Million** which may be financed by loan or grant funding by the development partners such as the World Bank while counterpart funding coming from the budget allocations by the Government of Zambia. Further, the enabling business environment created by the implementation of strategic interventions incentivise private sector to invest more in the logistics sector.

1. INTRODUCTION

The Government of the Republic of Zambia with assistance from the World Bank has developed this National Trade Logistics Strategy which provides a framework for the development and management of trade logistics in Zambia over a time horizon of 2021-2030.

Logistics can be defined as the process of managing both, the movement and storage of goods and materials from the source of production to the point of consumption and all associated information flow. Logistics is a relatively new management approach in Zambia, although, it is widely practised in the developed economies. The importance of logistics stems from the globalisation of trade as well as the need to gain a competitive edge among producers, traders and national states.

Logistics comprises a wide range of activities, the widely known being:

- Transportation of raw materials and finished goods to the customer and finally, the consumer, the customer can be local, regional or international;
- Storage of raw materials and finished goods;
- Material handling of raw materials and finished goods;
- Packaging of raw materials and finished goods;
- Warehousing of raw materials and finished goods; and
- Inventory control of raw materials and finished goods.

The logistics function aims to deliver the outlined services at minimum cost to gain a comparative advantage over competitors, locally, regionally or internationally.

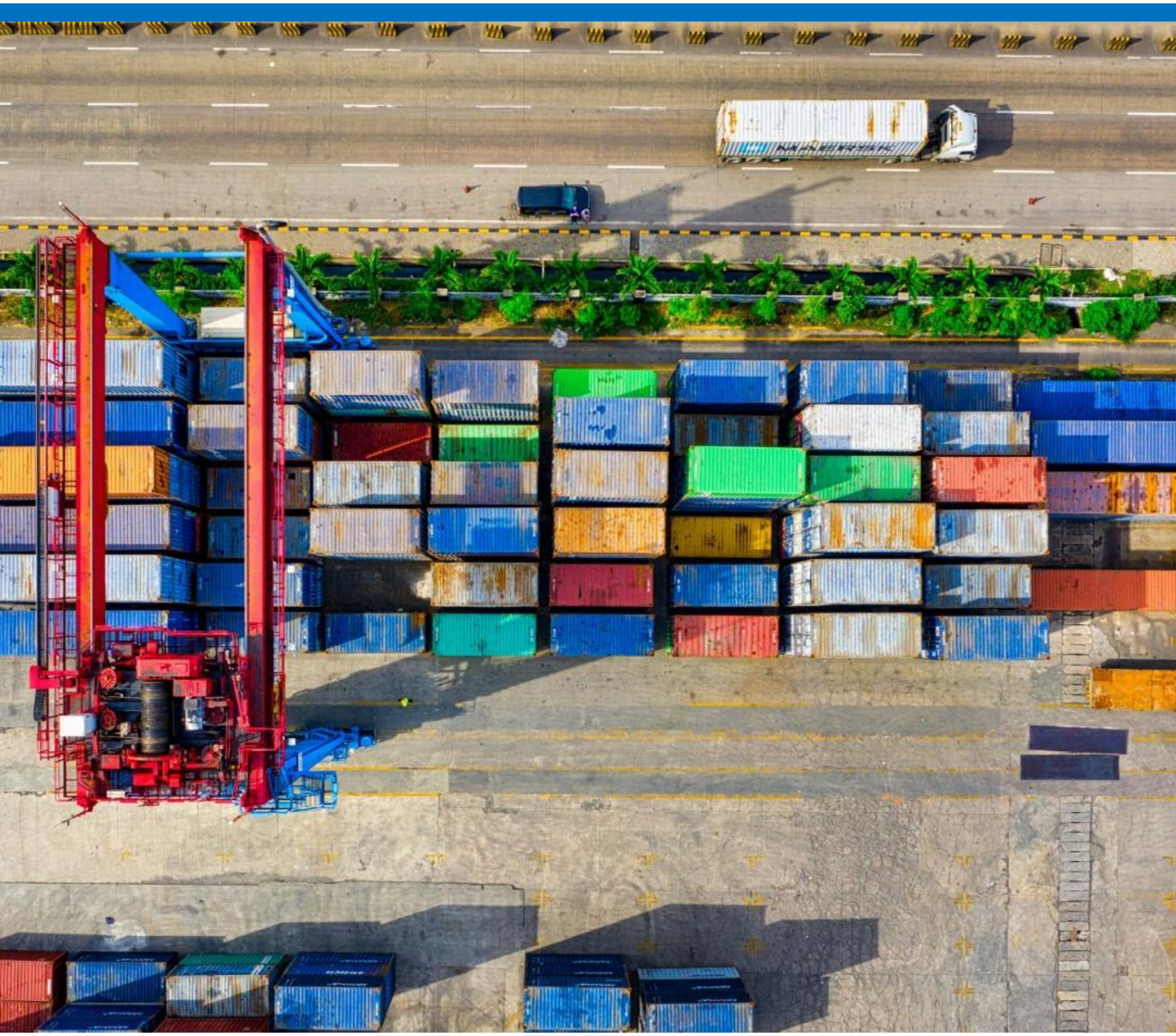
The process of preparing NTLS involved an understanding of the context and in-depth situation assessment to identify the challenges and opportunities of Zambia's transport and communications infrastructure as well as services as it relates to trade; customs and border management; and logistics management, services and infrastructure. The analysis also included a review of the policy and regulatory environment for logistics, a comparative analysis of transportation costs and pricing in Zambia with similar economies in the region in relation to trade, the competitiveness of trade corridors in Zambia, Zambia's ports, viability and options for investment, and trade facilitation. The situation assessment covered the detailed study of various priority product supply chains such as grains, livestock, cotton-textile, processed and refined foods, and leather and leather products in the country which guided the formulation of NTLS. While drafting the NTLS, a highly participatory approach was adopted, and a diverse set of stakeholders were consulted.

NTLS presented here includes an understanding of the future outlook of the Zambian economy, the vision guiding the strategy, proposed strategies and measures, implementation and investment plans.

The content of this NTLS is composed of the following sections:

- Section 1 is the introduction;

- Section 2 sets up the global and regional context in which the NTLS will be implemented;
- Section 3 sets up the national context in terms of the current situation of trade logistics in the country;
- Section 4 tries to forecast the future during which the strategic play of NTLS will take place;
- Section 5 gives the vision, its rationale and objectives of the NTLS;
- Section 6 articulates the strategies and strategic measures;
- Section 7 spells out the implementation strategy for NTLS;
- Section 8 puts forward a coordination and monitoring framework; and
- Section 9 gives an Investment Plan to implement the NTLS.



2. Global and Regional Context

2.1 LIVING WITH THE GLOBAL CONTEXT

The global context from the perspective of strategizing the trade logistics for Zambia revolves around three interrelated aspects, i.e., (a) Current volume and direction of Zambia's international trade and contours of economic policies emphasising enhanced value-added international trade as one of the key pillars to achieve the targets of Zambia Vision 2030; (b) Global economic outlook, and (c) Trends in the logistics business.

The balance of trade has been positive for the country from 2005 to 2013 mainly on account of raw copper exports. However, starting from 2014, the balance of trade turned negative except in the year 2017. The top exports of Zambia are raw copper, refined copper, gold, precious stones, and sulphuric acid while the country imports oil and mineral fuels, industrial machinery, motor vehicles and parts, electrical machinery, fertilisers, plastics, iron and steel articles, chemical products, and pharmaceuticals. The key non-regional export markets for Zambia are Switzerland, China, the United Kingdom, the United Arab Emirates, India, Hong Kong while the country imports from non-regional countries such as China, India, Kuwait, the United States and the United Kingdom.

The Zambia Vision 2030 stipulates to diversify the Zambian economy while the National Trade Policy 2018 aims to make Zambia a net exporter of value-added goods and services through competitiveness at the domestic, regional and global levels. This would be done by diversifying markets and products in order to enhance the export sector's contribution to Zambia's socio-economic development, streamlining legal, regulatory and administrative procedures required to support the establishment and operations of businesses; and promoting the use of e-commerce in business to enhance competitiveness in trade. Availability of efficient logistics services is crucial to catalyse the trade performance.

The COVID-19 pandemic has disrupted global economic activity at an unprecedented scale. Many businesses across the world struggled to continue operations and those providing essential goods and services remained at the forefront of the crisis. With over one-third of the global population in lockdown last year, businesses found it hard to reach the last-mile customer due to the supply chain disruptions.

As a result of the COVID-19 pandemic, worldwide economic growth dropped to 4.4 per cent in 2020, and Zambia is no exception. In 2020, the Zambian economy fell into a deep recession due to the adverse impact of the COVID-19 pandemic. Real GDP contracted by an estimated 4.9 per cent in 2020, after growing by 4.0 per cent in 2018 and 1.9 per cent in 2019. The output contraction is the result of an unprecedented deterioration in all the key sectors of the economy. Inflation surged to 17.4 per cent in 2020 after the outbreak of COVID-19 and is expected to remain over the target range of 6-8 per cent in 2021.

The global economy is expected to recover this year, growing at 5.2 per cent, before slowing to 3.5 per cent in the medium term, much less than the estimated rise from 2020 to 2025. The economy of Zambia is projected to grow by 1.0 per cent in 2021 and 2.0 per cent in 2022, underpinned by a recovery in the mining, tourism, and manufacturing sectors. The recovery in international demand and copper prices are positive developments, while a reduction in COVID-19 cases will boost activities both in the manufacturing and tourism sector.

Despite the signals of global economic recovery, the long-term impact of the pandemic on the supply chains has been disruptive and the emerging trends in post-COVID-19 years need to be kept in consideration while formulating the trade logistics strategy for the country, more so in view of achieving much needed economic recovery in the country as well as achieving the objectives of Zambia Vision 2030 and National Trade Policy 2018.

The disruption caused by the pandemic has catalysed the pace of the evolution of logistics business towards technology and agility. Some of the key aspects defining the logistics landscape worldwide will be as follows:

i. Automation: There are many highly repetitive, labour-intensive tasks in the logistics industry, so it is of little surprise that the industry is looking towards modern technology to increase productivity and efficiency. The warehouse's pace and accuracy necessitates robotics. The first wave of robots entered the logistics industry just a few years ago, and as the technology matures and becomes more affordable, the use of robotics will broaden and develop faster in the industry.

   In order to realise the tremendous potential, a logistics company needs to establish a system that can collect data, analyse it on its own and suggest adjustments to the processes, perhaps even implement these changes on its own. It requires a system built with Artificial Intelligence (AI). AI has quickly moved from niche to mainstream in the private market as programmers have found applications for this technology in a series of smartphone apps. Slowly but steadily, the business world is catching up, keen to capitalise on the lucrative promise of allowing computers to think and behave for themselves.

ii. Customer Centricity: One of the primary drivers of digital transformation in the industry is to increase the ability to respond to customer expectations. Understanding customer expectations is a prerequisite for delivering superior service. A customer-centric business model seeks to make details about shipments available and increase flexibility in the supply chain. The customer-centric approach also provides the logistics company with valuable insight into the customers' needs. The ambition to meet customer's expectations will continue to drive the digital transformation forward.

iii. Data-driven Transformation: Access to the internet and data connectivity will expand further in the coming years. Areas without access to the internet and general connectivity issues will soon be a thing of the past. With increased and more reliant connectivity, the Internet of Things (IoT) is expected to be adopted widely in the field of logistics.

iv. Sustainability: Around the world, governments are working on regulatory frameworks to deal with the sustainability aspect in logistics. For instance, some governments are restricting the production and sale of diesel and petrol vehicles in the coming years, forcing the logistics sector to rethink their business models and assets. Sustainability is not a new trend in the logistics sector, but in the coming years, the need for more sustainable solutions will increase, and how logistics companies choose to apply these solutions will have an impact on the industry's future.

2.2 LEVERAGING UPON THE REGIONAL CONTEXT

Zambia is a natural transportation hub in the region, with good transportation networks connecting it to all of its neighbours, giving it the potential to be a significant exporter of agricultural and industrial goods to its neighbours. Currently, South Africa and the DRC are the major importers of Zambian agricultural products while there is a deeper market for agricultural products in the region.

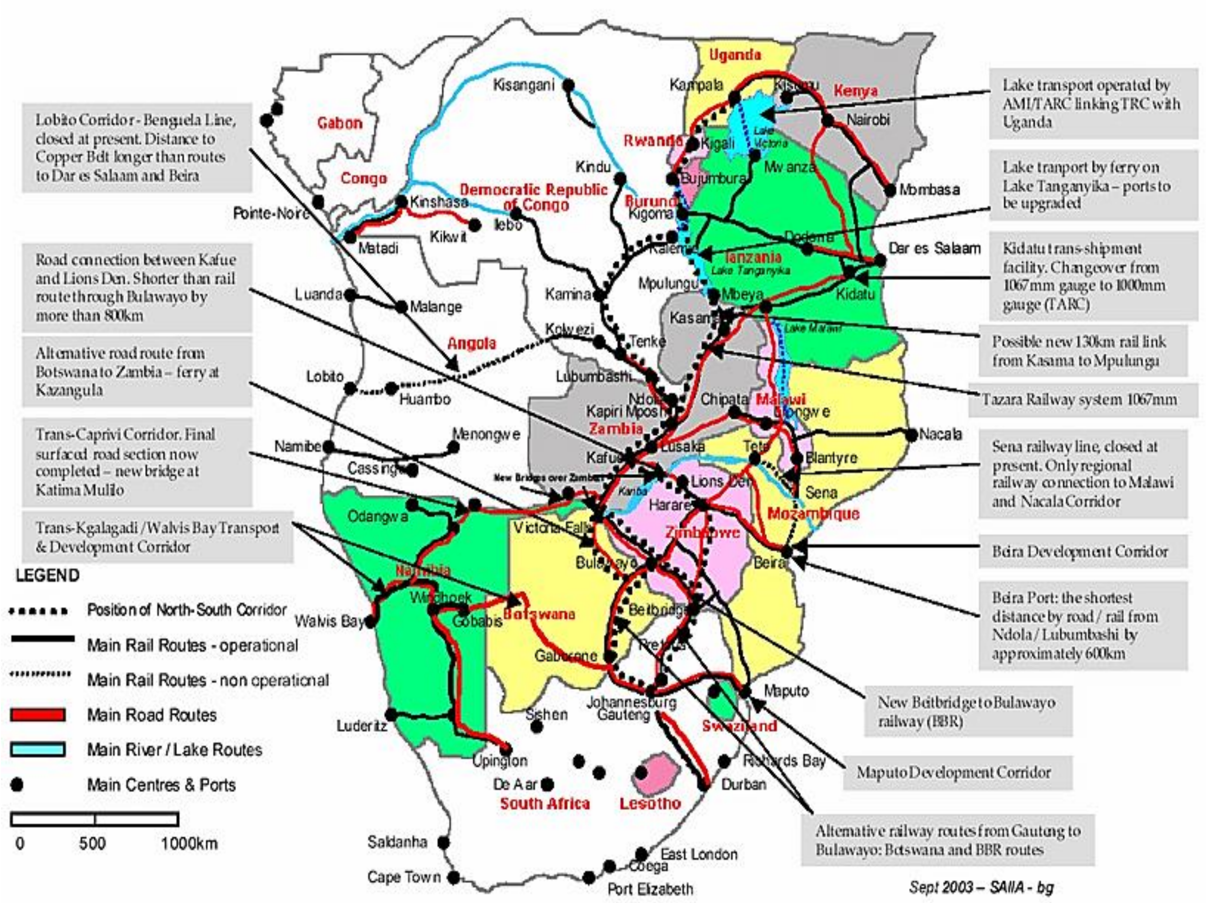


Figure 2-1: SADC Regional Transport Corridors and Ports

Zambia is a member of two Regional Economic Communities (RECs) - the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC).

COMESA has 21 member states, 16 of which are part of the COMESA Free Trade Area. Zambia's export to COMESA in 2019 was USD 1.2 billion with total imports of USD 0.7 billion, indicating a trade surplus balance of USD 0.5 billion. Zambia's trade with COMESA from 2010, indicates a deficit trade balance up to 2018 and only recorded a trade surplus in the free trade area in 2019. This observation prompts an enhanced focus on trade facilitation with the region and other trade areas where Zambia is a member.

Trade between Zambia and SADC from 2010 to 2019 has continued with a trade balance deficit. This again requires a focus on various trade reforms, as well as developing strategies to grow the manufacturing sector to enhance trade at local, regional, and international levels through competitive approaches and improved logistics infrastructure and services. SADC has 16 Member-States-all five SACU countries (Botswana, Lesotho, Namibia, Eswatini and South Africa) along with Zimbabwe, Zambia, Madagascar, Mozambique and Malawi. 13 SADC Member States are in a Free Trade Arrangement (FTA); Comoros, Angola and DRC are yet to join. In the SADC region, Zambia's five major trading partners include South Africa, Tanzania, Botswana, Mozambique and Namibia. In the SADC/COMESA region, the five major trading partners include the Democratic Republic of Congo, Zimbabwe, Malawi, Eswatini and Mauritius. The 2019 exports to SADC indicates USD 1.59 billion with total imports of USD 3.2 billion giving a trade deficit balance of USD 1.61 billion.

There are new avenues of demand from Asia, similar to Malawi oilseed products such as pigeon pea to India, and a rise in demand for goat meat, feed, and hides in the Middle East. These offer SADC not only new possibilities but also a new set of challenges as these markets have developed barriers such as quotas or differing standards frameworks that are not as well developed in SADC as in more mature markets.

Servicing both emerging and established commodity markets are large buyers, often with global sourcing requirements but with buying offices in each country. This is, in effect, a parallel international trading structure that can translate global demand into the SADC region. Cotton, soybean, pigeon peas are all subject to this system, the full effects of which can be overlooked at a country level.

Regionally, even the old value chains are being transformed as South Africa and the Democratic Republic of Congo continue to drive demand for products, and in doing so, deepen its degree of integration with other SADC countries. Supermarket networks (particularly South African ones) are two-way streets, creating highways for high-quality goods (in spite of trade obstacles) while creating a market structure that is evolving into a regional platform with large buying power. These developments offer opportunities for the development of Zambian value chains.

Regional integration is a part of the development agenda for SADC and the regional industrialisation process through the development of regional value chains. On the other hand, it is also true that for regional value chains to function well there is a need for enhanced regional integration.

In the Action Plan for SADC Industrialisation Strategy and Roadmap (SADC, 2017), several sectors and countries are noted for potential VC enhancement. SADC considered the following value chains: (i) VCs already in existence with the potential to upscale; and (ii) New VCs with potential to develop or those VCs with links to regional and global VCs. The report also identified the VCs such as soya, sugar (and related products), cassava, food and beverages, fisheries (fresh water and marine), forestry, dairy, leather and leather products, meat and meat products, fruit and vegetables. Zambia appears in all the priority value chains identified by SADC as areas of potential industrialisation. There is a need to ensure real take-off in these value chains by providing efficient logistics.

3. CURRENT SITUATION

3.1 TRADE BARRIERS REDUCED BUT LOGISTICS NEEDS MORE

Although the country has made strides in the reduction of formal barriers to trade through SADC, COMESA, AU and WTO, a number of bottlenecks still remain in the provision of logistics infrastructure and services. In line with the Vision 2030 and 7th National Development Plan, Zambia must design strategies, implement programmes and policies, structure incentives that augment diversification, create employment to assist sectors facing barriers to growth. With this perspective, implementation of objective strategic interventions to improve trade and logistics is an essential pre-requisite for ensuring an efficient transport system, operational logistics mechanism for economically beneficial movement of goods and services which plays a pivotal role in the economic development of the country.

Logistical advantages help to promote poorly performing sectors and create an integration of all economic activities leading to improved output and employment. Intervention in trade and logistics space is formidably an umbrella term for describing numerous policies, programmes, schemes, measures, initiatives initiated for augmenting trade through improved logistics systems. Strategic interventions need to complement the vision and aim of the economic, industrial, business employment policy designed and implemented in the country. Zambia is at a crossroads for rapid development if policy and regulatory outcomes are favourable, and needs a comprehensive trade and logistics strategy momentum that will help the country expand and flourish.

The GRZ has made progress towards improving institutional policy and legislative frameworks in Zambia with the dual end goal of improving the country's trade and economic growth, and enabling trade facilitation reforms. A major step forward has been the enactment of the Coordinated Border Management and Trade Facilitation Act 12 of 2018, which replaced the One-Stop Border Control Act of 2009. The Act aims at ensuring coordinated border management, improving efficiency in logistics through the clearing of goods, rolling out of OSBPs, and development and maintenance of border infrastructure. It designates the ZRA as the overarching coordinator of all trade facilitation activities in Zambia. The Act also aims to clarify the roles and responsibilities of the various government agencies involved in trade facilitation reforms to improve inter-governmental coordination. The GRZ through its policies has seen it fit to further enhance logistics support through well-coordinated and improved logistics to work for trade in local, regional and global perspectives. However, a lot remains to be done.

3.2 DECODING THE LPI RANK

Zambia is not faring very well in the logistics management function. According to the World Bank LPI Survey[1] conducted in 2018, Zambia's LPI ranking was 111th out of the 167 countries surveyed. Figure 3-1 shows Zambia's position on the Logistics Performance Index (LPI). Understanding

[1] The LPI issued by the World Bank is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance.

and decomposing the dimensions of the LPI is fundamental to improving the efficiency of the trade logistics systems and prioritising investments in the logistics sector. Need is to have a basis for comparing national performance across time and against regional and international peers. Such information is key to inform the future outlook of the NTLS and would include the main drivers of the LPI, as well as indicators to measure the impact of strategic interventions in the sector on economic development.

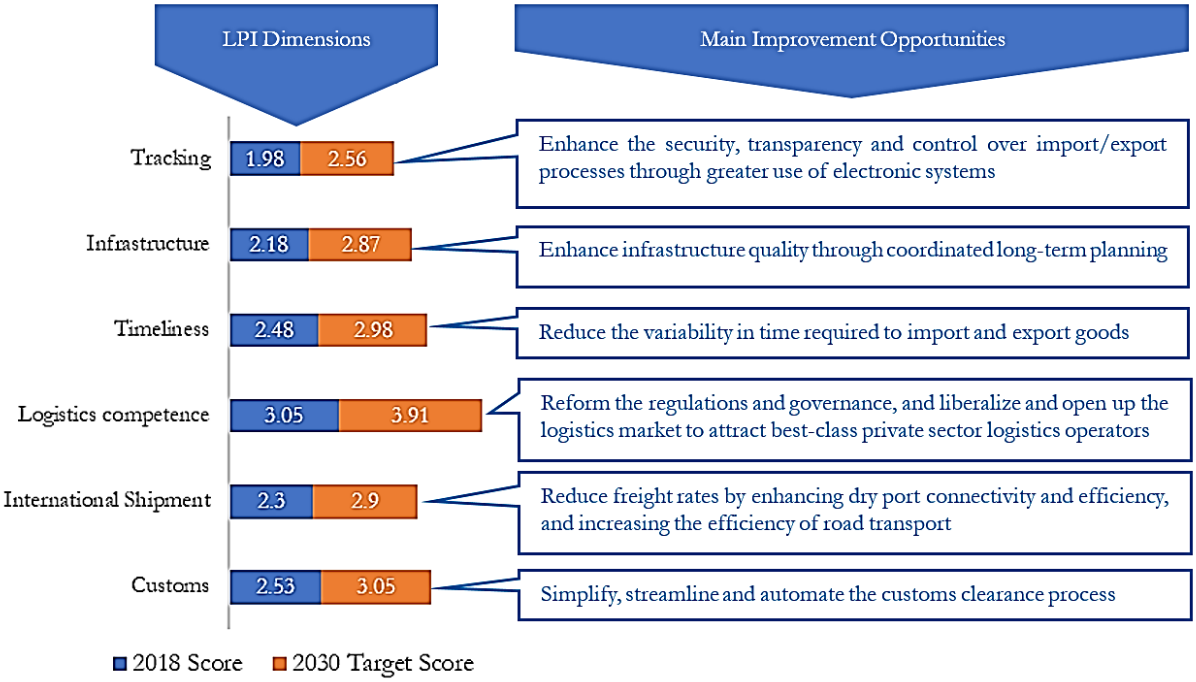


Figure 3-1: Zambia's Position on LPI and Improvement Opportunities

Table 3-1 summarises the application of the LPI dimension deciphered into sector aspiration translated into future perspective targets.

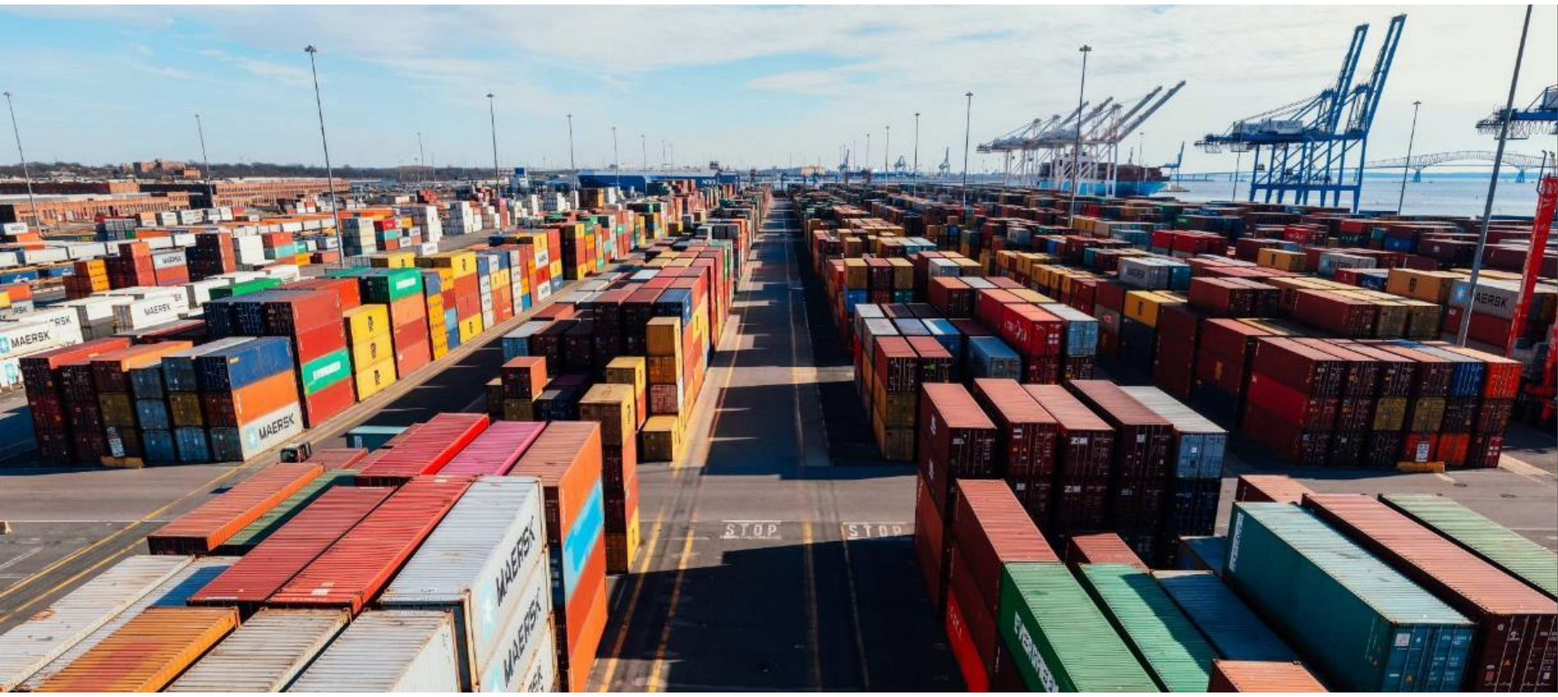


Table 3-1: Application of LPI Dimension

Dimensions	Assumptions	Enablers/Drivers	Sector Aspiration	Future Perspective
Process Re-engineering	• Cultural and Market Behaviour Change; and • Development of the National Single Window (NSW) will remain largely in progress.	Electronic System Adoption.	Enhance the security, transparency and control over import/export processes through greater use of electronic systems.	• More talented and educated youth over the years in the logistics and trade sector; • Consolidation of Human resources in Zambia; • Growth in e-commerce and e-procurement, changes in public behaviours towards digitisation, and adaptation of ICT; • Increase in global and regional sales; and • Administrative procedures are expected to gradually smoothen in Zambia in order to facilitate the logistics and trade sector.
	• Movement from stagnant to a dynamic and prosperous economy and regional trade; and • Trade volume in the SADC region will gradually increase in accordance with the maturity of regional economic cooperation and integration based on the advancement of the division of labour and share of the market.	Import/Export Process Streamlining.	Reduce the time, cost and variability of importing/exporting goods, through process reengineering and automation.	Safety and security regulations are expected to facilitate the policy objectives of the government of Zambia.
Infrastructure Enhancement	Advancements in vehicle and transport technologies.	National Transport Master Plan.	Enhance the quality, safety, and efficiency of transport infrastructure through implementation of National Transport Master Plan	It is expected that even during the slack economic activity in Zambia, its regional credibility in terms of connectivity, trade facilitation, agro-production will help the logistics and trade sector going forward.
	Globalised trade	Air Cargo Capacity Enhancement.	Resolve current infrastructure bottlenecks by expanding air cargo capacity in all 6 airports in Zambia.	• Benefit to the multimodal transport network; • Increase use in ICT, more demand for talent and trained youth; and • Catalysing the export of horticulture products.
Regulatory and Sector Reform	• Zambian political conditions are expected to be stable, and	Logistics Regulations Improvement.	Facilitate increased competition and private sector participation by	Quicker and effective implementation of strategies and measures over the period in consideration.

Dimensions	Assumptions	Enablers/Drivers	Sector Aspiration	Future Perspective
	policymaking is expected to be robust and forward-looking; and • Safety and security regulations.		updating current regulations to international standards.	
	Increased FDI and policymaking is expected to be robust and forward-looking.	Railway Sector Transformation.	Enhance rail mode efficiency and service quality, through governance reform and railway restructuring and private sector participation.	Robust railway operations catalysing the logistics efficiency in the country and region.
		Dry Ports Sector Reform.	Enhance dry ports mode efficiency and service quality, though increased port specialisation and reformed governance and concession frameworks.	Logistics related strategic interventions are expected to facilitate the policy objectives of the Government of Zambia.
		Air Cargo Liberalisation.	Enhance the efficiency and service of quality of air cargo transport, through increased liberalisation and private sector participation.	Air cargo transport catalysing the logistics efficiency in the country for perishable goods and other services in the country and region.

3.3 DISSECTING THE ZAMBIAN LOGISTICS SECTOR

For an ore and metal export-oriented economy like Zambia, logistics is very crucial. However, the existing transport and logistics facilities are relatively young and lag behind international standards. The lack of a dedicated policy on the logistics sector and poor long-term investment conditions so far has only yielded an inadequate and poor-quality infrastructure system.

Whatever logistics facilities are available have not been modernised for a long time. There are severe capacity shortages and absence of dedicated freight corridors which have resulted in the sluggish movement of goods while inadequate storage facilities, low ICT adoption and unfriendly investor policies have stagnated supply chain efficiencies and constrained growth in the agriculture and processed goods' sector.

Zambian rural communities are left behind in some of the progress made in the road sector, they rely on poor road systems, often on unclassified foot-paths and motor tracks are the only connectivity to the large rural population. Official indices suggest that only 17 per cent of the rural population have access to all-weather roads.

In the new reforms, the Zambian government has prioritised the transport and logistics sector as the key focus areas, wherein government ensures interventions to facilitate trade and logistics support to businesses. For the long term, the government is aiming to have a multi-faceted logistics system. The enhancement of logistics will serve as a new feature to the Zambian economy, and further influence local enterprises and jobs in construction, freight, warehousing and related industries.

The government intends to leapfrog Zambian logistics and supply chains using the recent ICT and other technological advancements, to develop value addition and processed goods' industries and diversify the economy. However, Zambia lacks the necessary human resources trained in ICT operations and supply chain management, and the required skilling and training institutions.

3.3.1 Infrastructure

Road Transportation: Zambia has a total road network of 67, 671 kilometres out of which 40,454 kilometres is classified as Core Road Network (CRN) which should be kept in maintainable condition all the time to keep the wheels of the economy running. According to the 2015 Road Conditions Survey, 87 per cent of the paved Trunk, Main and District (TMD) road network in Zambia is in good condition, while 8 per cent is in fair condition and 5 per cent in poor condition. The primary feeder road network, which makes up about a third of the CRN and gives access to most agricultural areas, is in poor condition and in desperate need of rehabilitation and maintenance.

The government has recognised the need to have an economically viable road network through a number of planning, programmatic and policy interventions. These include the Seventh National Development Plan, Link Zambia 8000, Road SIP III (2015-2024), and IRCP (2018-2025), National Transport Policy (2019-2028) and the National Transport Master Plan (2018-2037)[2].

With the anticipated growth of local and regional trade in agricultural and manufactured goods, these programmes are sufficient to provide the necessary transport access to the majority of the population to markets, locally and within the region. No further intervention is required than what is already being implemented by the GRZ.

The road network leading to sea ports in the south, west and east coasts are in good condition and do not cause a major hindrance to the movement of cargo. The biggest challenge is the rural road network. Most of the roads in rural areas are in poor condition and far from the farming communities where most of the agricultural activities take place. Agricultural marketing by smallholder farmers in Zambia remains a major barrier due to the country's poor road network and rural communities' distance. Conventional transport cannot reach closer to some farming communities and only rudimental means of transport such as ox-carts, head loading, and bicycles are used. These means of transport are slow and have limited capacity. This discourages some farming communities from engaging in agricultural activities beyond the subsistence level.

Transport Corridors: Zambia is well connected to international markets by several trade corridors of varying degrees of efficiency. Zambia has routes connecting it to the ports on both the eastern and western seaboards of Africa. Several corridors radiate from the country to all her immediate neighbours, and beyond.

Below are major trade corridors for Zambia:

- North-South Corridor: The North-South Corridor connects South Africa with Zimbabwe, Zambia, Malawi, Central and Northern Mozambique, the DRC, Tanzania, and the Great Lakes Region through Chirundu or Kazungula. This is the busiest corridor for regional trade. Transit time on the route ranges from 7 to 21 days. The route is served by road which is in good condition. Congestion is experienced on the route at Beit Bridge and Chirundu at peak periods, due to capacity limitations at Beit Bridge and Chirundu. According to the 2020 PIDA Study forecasts, the North-South Corridor is expected to remain strong, remaining second in terms of volume for both landlocked imports and exports behind the Northern Corridor.
- Dar es Salaam Corridor: The Dar es Salaam Corridor is Zambia's traditional transport corridor for exporting and importing cargo. The corridor is served by road and the Tanzania Zambia Railway Authority. The road and rail infrastructure is in good condition. TAZARA is currently operating far below its design capacity. Nakonde border is now a one-stop-border post that will facilitate the speedy clearance of cross-border traffic and reduce congestion.
- Beira Corridor: The Beira Corridor stretches from DRC through Zambia to Beira in Mozambique. This is the shortest route to the sea for both, Zambia, and DRC. The Beira

[2] For more details, please see the National Transport Masterplan 2018-2037.

Corridor is not widely used because of a low draft and few direct vessel calls and the condition of the road from Chanida in Zambia is not in good condition while security concerns are rife.

- Walvis Bay Corridor: The Walvis Route is the western gateway to Zambia and the SADC region for trade, to and from the West. The Walvis Bay port is an efficient port, connected to Zambia by road which is in fairly good condition. Transit time between the Copperbelt Province in Zambia and the port ranges between 4 to 5 days. There is no congestion experienced at Katima Mulilo, the crossing point in and out of Namibia.
- Nacala Corridor: The Nacala Corridor links Nacala Port in Mozambique via Malawi to Zambia by road and rail up to Chipata Railhead. The Chipata/Mchinji rail spur was commissioned in 2010 and connects to Nacala Port through the Malawi Railway System. Nacala is a deep seaport and provides another shorter route for Zambia to the east coast. Currently, not much cargo is transported through the corridors.

Rail Transportation: Zambia has a total railway network of 2,217 km comprising the Zambia Railways System and Tanzania-Zambia Railway Authority system. TAZARA is a bi-national railway, jointly owned by the Government of the Republic of Zambia and the United Republic of Tanzania. Zambia Railways System is linked to many ports in Southern Africa and East Africa. TAZARA originates from Dar es Salaam in Tanzania, East Africa and is linked to the Zambia Railways system at Kapiri Mposhi and Southern African ports through the Zambia Railways network. Zambia Railways branch lines are linked to the industrial area in Lusaka enabling rail wagons to be shunted to these railway sidings for loading and offloading of cargo.

Railway transport was the dominant mode in the 1970/80s for the movement of Zambia's international traffic to the east and southern sea ports. All copper exports and fertiliser imports moved by rail. The inter-mine railway network on the Copperbelt Province links Kitwe, Ndola, Mufulira and Chililabombwe at the border with the Democratic Republic of Congo and connects to the DRC railway system. The network provides good and easy access for the transportation of mining equipment, materials and copper products.

Currently, the railway has lost its competitive advantage to road transport for the movement of heavy and bulky cargo over long distances due to poor performance. In the case of Zambia Railways, transit time on the network is long due to the poor state of the railway track and low wagon and locomotive availability, preventing shippers from using the network. In the case of TAZARA, the railway system is operating at less than 5 per cent of its design capacity due to inadequate availability of locomotive power and poor reliability.

A large portion of railway infrastructure in Zambia is dilapidated and requires modernisation. Currently, speed limits are imposed on the goods trains leading to delays of cargo. There is a need to migrate from the current narrow (Cape Gauge) to the standard gauge, to enable carriage of bigger volumes of cargo and achieve higher speeds. Zambia Railways and TAZARA provide storage and loading facilities for their major customers at major stations along the mainline, although most of these facilities are in poor condition and some dilapidated conditions due to low utilisation.

The government plans to revamp the railway network by doing the maintenance, rehabilitation and modernisation of the existing railway infrastructure. This will be implemented in line with the National Transport Policy and National Transport Master Plan.

The revamping of the railway sector and expansion of the railway network will provide enough cargo capacity locally and regionally, and induce efficiency which shall attract utilisation of the system and divert some traffic away from the road. Railway transport has an inherent advantage over road transport because it is cheaper and can carry large volumes of cargo.

As an example, the challenges and opportunities for TAZARA are similar to ZRL, but even at a higher scale. TAZARA is facing similar problems, namely:

- Poor state of the rail track – Due to current condition of the rail track, freight and passenger trains move at low operational speeds resulting in long transit time, and to the overall inefficiency of the train service;

- Lack of reliable and adequate rolling stock – The current rolling stock (wagons and locomotives) are also in a deplorable state and, therefore, cannot fully support the transportation of both freight and passengers in a sustainable manner;

- Problems in contiguous rail administrations – Being a land locked country, TAZARA is linked to neighbouring railway administrations and, therefore, the performance of these rail entities have a great impact on TAZARA as over-border traffic must be hauled through other countries to different ports, such as, Durban and Dar-es-Salaam.

- Diminishing TAZARA's market share to almost zero – The TAZARA management reported that it is estimated that out of the cargo through the Dar-es-Salaam Port destined to places where the railway serves, only about one percent is currently moved by the railway. While the Dar-es-Salaam Port handles increased freight volumes per annum, the volumes transported by TAZARA is diminishing.

TAZARA's break-even point is haulage of 600,000 tonnes per annum but currently hauls less than the break-even point and the following challenges make smooth operations untenable:

- Non-existent signalling and telecommunication system;
- Un-serviced debt;
- No maintenance of locomotives; and
- Weak balance sheet resulting in company failing to borrow.

In view of these challenges, it is estimated that TAZARA requires about US$600 million to fund a turnaround plan.

Air Transportation: Air transport is most suitable for high-value products and small quantities of cargo requiring frequent deliveries. It is also a preferred mode for the transportation of perishable commodities, such as vegetables and flowers. Zambia has four international airports which are being modernised and expanded. There are also a handful of provincial and district aerodromes that can accommodate small to medium-size aircraft for perishable agricultural commodity airfreight. Air transport in Zambia is used for the transportation of horticulture products and fresh vegetables to the regional and international markets. High-value items such as money, precious minerals and some IT components are air freighted to Zambia.

The majority of Zambia's international passenger and cargo traffic is carried by non-Zambian airlines including Kenya Airways, Ethiopian Airways, Rwanda Air, Emirates, South African Airways, Fastjet and SA Airlink. Proflight, a privately owned Zambian-registered airline provides international services to Lilongwe and Durban, with domestic services between Lusaka and Livingstone, Ndola, Mfuwe, Kasama and Solwezi. Most outbound air cargo (predominately fruit and flowers) is carried as 'bellyhold' on passenger aircraft and is flown to the major cargo hubs at Johannesburg, Nairobi and Dubai.

Air transport has a huge potential to overcome the constraints that current infrastructure imposes on the import and export of national products to nearby countries. The air market is one of the fastest growing markets worldwide, and it is strongly linked to countries' GDP and air cargo growth. Despite the recent global crisis having a strong impact on air cargo demand it is suggested that as the pandemic subsides and GDP rebounds in the coming years, most of the air routes will steadily expand markets and show growth. Zambia will have to take advantage of this growth to provide air cargo services for the region.

Zambia has not performed very well in terms of total volume of cargo airlifted into and out of the country. According to World Bank, in 2019, Zambia was ranked at 60th position out of 131 countries for which statistics are available on the world ranking of "Air transport cargo volume statistics",

Compared to the giants of cargo transportation of USA, China and Japan, Zambia pales into insignificance as shown in Figure 3-2.

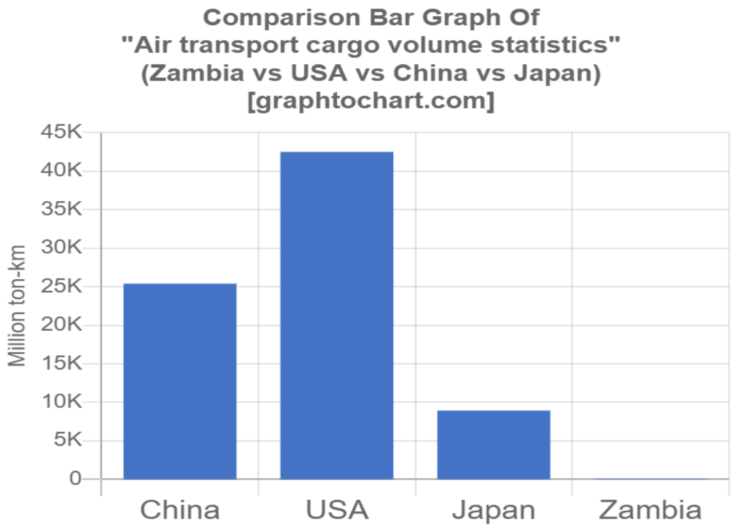


Figure 3-2: Comparison of Air Transport Cargo Volume Statistics (Zambia vs USA vs China vs Japan)
Source: The World Bank

It is also important to point out that a number of district aerodromes require rehabilitation, to make them usable because of the overgrowing grass and shrubs on the runways. The measures being undertaken by the government through the National Transport Policy and National Master Plan are adequate to make Zambia a regional air transport hub. The expansion taking place at KKIA, and the other three international airports will provide the necessary capacity for handling the anticipated growth in air cargo. Provincial and district aerodromes shall provide the necessary feeder services for the fast movement of horticulture products for export.

Pipeline Transportation: Pipeline transport is the long-distance transportation of a liquid or gas through a system of pipes - a pipeline-typically to a market area for consumption. In Zambia, the pipeline was installed to cheaply transport crude oil or its petroleum products from the port of Dar es Salaam into landlocked Zambia. TAZAMA owns, operates and maintains a crude oil pipeline from the port of Dar-es-Salaam to Indeni Refinery in Ndola covering a total distance of 1,710 km. The transportation of crude oil is achieved through seven pump stations (five in Tanzania and two in Zambia). There is no gas pipeline in the country and the condition of the TAZAMA pipeline needs continuous maintenance. However, in April 2021, Zambia and Angola signed an agreement aimed at constructing another pipeline for the transportation of finished petroleum products between the two countries. The USD 5 billion agreement will pave way for the construction of a pipeline from the oil-rich Angola to Zambia to be developed by the private sector. Once completed, the pipeline will transport petrol, diesel, kerosene and gas. There is no pipeline transporting liquids or gas from Zambia to regional or international markets.

Maritime and Inland Waterways Transport Network: There are areas in Zambia that can only be accessed by water transport. Most of the waterways are natural but the country also has a network of canals that require constant dredging to make them navigable. Apart from the dredging of canals, most of the harbours and Mpulungu Port require rehabilitation. The harbours require jetties, landing bays and platforms which, at present, do not exist.

Currently, water transport plays a marginal role in cargo transport in Zambia. However, exports of sugar and cement to the Great Lakes Region are transported by water. Water transport is poised to play a bigger role in the movement of cargo in Zambia than before. This is a cheaper mode for the movement of goods and will benefit agribusiness in areas, such as the Luapula, Northern and Western Provinces.

The government has acknowledged the urgent need to rehabilitate the harbours and Mpulungu Port for efficient transportation of cargo by water. It is also the desire of the government to connect the Mpulungu Port to rail transport to expand usage of the port.

Sea Ports: Zambia is a landlocked country and does not have any seaport at its international border. However, in Zambia's southern region, there are a few ports that provide international seaports for commerce.

- Durban Port: Durban is the largest and most developed port in Sub-Saharan Africa and has long functioned as the gateway port to Southern Africa through the North-South corridor. For traffic to/from landlocked countries, it is the largest export port and the second-largest import port. As such, it is not surprising to observe that it handles the largest volumes of total imports and exports of all corridors.
- Dar-es-Salaam Port: The Dar-es-Salaam Corridor is the second most important outlet to the sea for Zambia's exports and imports. The Dar-es-Salaam Port suffers from limited capacity and can only handle 12.4 million tons of cargo per annum. This port also serves the Central corridor. Over 50 per cent of imports and exports through the Dar es Salaam port is to and from the Tanzanian domestic market.
- Walvis Bay: Walvis Bay is Namibia's largest commercial port, strategically located halfway down the coast of Namibia, with direct access to principal shipping routes. Walvis Bay is a natural gateway for international trade. This port has the capacity to receive approximately 3,000 vessel calls each year and is handling about three million tonnes of cargo. The port is growing in importance for Zambian containerised exports and imports.
- Nacala Port: Nacala Port is the deepest port in Southern Africa and is situated in Northern Mozambique. Nacala has no restrictions on ship movement or size due to its natural deep water and sheltered location. Zambian goods have the shortest path to the sea through Nacala Port. At present, its use is limited due to the poor condition of the railway and road network in Malawi and Mozambique.
- Lobito Port: Lobito Port is an Angolan port located in the City of Lobito and Lobito Bay, which is separated from the Atlantic Ocean by the Lobito Peninsula. Lobito Port was a major export route for Zambian cargo before the disruption of the route during the liberation and Civil War in Angola.
- Beira Port: Beira Port is the nearest port to Zimbabwe, Zambia, the DRC and Malawi, much nearer than the Durban and Dar es Salaam ports. Beira Port has the same catchment area as Durban Port through the Beira Corridor. However, it does not handle as much traffic due to historic reasons (Civil War), limited capacity and the need for timely dredging at the port. All these factors have been constraints on the development of this corridor.
- Mtwara Port: Mtwara port was built during the British colonial times in the city of Mtwara in southern Tanzania. The port was functional but underutilised for many years due to poor transport infrastructure. ZCCM used to transport some of its copper exports through Mtwara Port. The conglomerate even built large storage transit shades for the storage of copper.

Ports and trade corridors are part of the enabling environment for international trade. Once they are established, competitive ports and trade corridors facilitate significant economic activities and are essential to regional integration in general and to Zambia in particular.

Transport Chain Interoperability: In Zambia, transport chain interoperability is almost non-existent except for the two railway systems. Interoperability is a process where at least two different operating transport systems work together effectively. Within the transport sector, interoperability allows the transport systems to offer harmonised interfaces and thus, an easy access to operators for the provision of intermodal services. Intermodality is aimed at achieving the integration between different modes in order to provide a seamless transport system from point of origin to the final destination. The economic basis for intermodality is that transport modes can be integrated into a door-to-door transport chain in order to improve the overall efficiency of the transport system. Interoperability in Zambia has not been actively encouraged. Since road and railway transport are more dominant in Zambia, it is necessary to have interoperability between road and railway transport in the country. This has been acknowledged by GRZ and some towns such as Chingola, Ndola, Kapiri Mposhi, Lusaka and Livingstone have been identified in the National Transport Master Plan for development as intermodal hubs. Furthermore, because Zambia has a port, interoperability between road, rail, and water transport at Mpulungu Harbour is required to improve efficiency.

The transport sector in Zambia, despite having strengths such as good connectivity with trade corridors in the region, strategic location-placed between Angola and Tanzania beneficial for port connectivity, and scope for utilising inland waterways, is weak in terms of the complex network of institutions and agencies, no uniformity in administrative and enforcement mechanism, and heavy dependence on the road network. There are opportunities for public and private investment in infrastructure to increase aggregate demand in the economy, but the scarcity of logistics hubs and institutional and administrative hurdles pose threats to have an efficient transport system in the country. The strategic interventions, besides the ongoing programmes, are required to harmonise the management of the transport sector to minimise institutional overlap of mandates and strengthening the railways and cost-effective water transport system.

Warehousing Facilities: Most of the warehouse infrastructure is owned by transport operators, such as trucking companies, railways, ports authorities, airport authorities, airlines, shipping companies and private individuals. The function of warehouses includes cross-docking, consolidation of goods or grouping goods in small units for the forward transportation to customers or consumers. These facilities are not available throughout the country; their concentration is in towns and cities. There is a need to provide such IT enabled facilities at the district level.

Storage Facilities: Storage facilities are available for the maize grains and FRA dominates this market. Since the deregulation of grain trade, private sector players have invested in the provision of grain storage. Among them are Grain Storage Systems, Afgri, Zdenakie Commodities, CHC Commodities, Gourock, Export Trading Group, Superior Milling, Novatek, Agrivision Zambia, Mpongwe Milling, National Milling and Cargill. The CIDP in the Western Province has also constructed five (5) storage sheds for cashew nuts, to be shared by ten (10) districts engaged in cashew nut farming. There is a need to construct storage facilities for other identified value chain commodities. Appropriate automated equipment should be provided at these sites to facilitate loading and offloading. At present, most of the existing storage facilities for maize are not mechanised but manual, for loading and offloading operations, which slows down the process and affects the turnaround time of vehicles. Storage facilities and warehouses should be mechanised, along with this, ICT solutions should be applied in their day-to-day operations.

Cold Supply Chain: The state of the cold supply chain in Zambia is far from satisfactory as there is absolutely no uninterrupted cold supply chain in the country. Even some of Zambia's border crossing points lack cold storage facilities for such products that need refrigeration in case clearance is delayed.

Bulking Centres: Bulking facilities are essential infrastructure for bulking grains to leverage price on quantity and the collective bargaining power. The bulking centres should be located at manageable distances to encourage farmers to bring their produce to the bulking centres. Bulking centres should possibly be in closer vicinity to the farmers' area. The low levels of production by the numerous and isolated small-scale producers in the rural areas result in traders and processors incurring high transaction costs to establish their purchasing, bulking and storage arrangements. This, coupled with the high transport costs due to the poor rural road infrastructure only encourages opportunistic informal trade and increases the final cost of the product.

Some of these facilities in Zambia have not been in use for a long time and are in dilapidated condition. The satellite depots are also far from the communities in rural areas making access difficult. The other challenge at these warehouses relates to operational efficiency. Not all the facilities have mechanised loading and offloading of agricultural produce such as maize, making the operation long and inefficient. The turn-round of vehicles are affected hence, the reduction in vehicle productivity. Bulking facilities were also identified as a major constraint in the marketing of crops and livestock. Some areas do not have bulking facilities, warehouses and sheds at appropriate distances (and bulking systems) to leverage huge quantities of produce collected at one place. Where they are existent, they are far from farming areas, therefore, farmers ignore them due to cost implications. There are no abattoirs for the slaughter and trade of cattle in certain places, and none for small animals like goats, pigs, and sheep.

Standard Abattoirs and Cooling Systems: Abattoir facilities are also essential for the red meat value chain (cattle and small ruminants). In some parts of Zambia, these facilities are non-existent, forcing cattle owners to walk many kilometres on foot to the market to sell their animals. In some provinces like Southern Province, goat owners are forced to transport their goats to either, Lusaka or Kasumbalesa, in precarious vehicles to look for a market. It is anticipated that the market for cattle and small ruminants will grow with potential for export to Europe and the Middle East for goats.

Truck Parking Areas: Truck-inns are facilities where trucks can park overnight for safety and security. There are a few examples of sector truck-inns in Zambia. ZAMESCO in Nakonde, Guras in Lusaka's Heavy Industrial Area and Oasis, PAED Ward and Whitestone along the Chirundu-Lusaka Road, are examples of such facilities. The need for these facilities cannot be over emphasised. At present, the truckers park in the open along the highways without any social facilities such as toilets, rest rooms and food outlets. The safety and security of cargo is compromised. Truck parking facilities should be provided at, at least every 500 kilometres along the major trade corridor routes.

Livestock Quarantine Areas/Pens: Livestock quarantine areas or pens are essential for the movement of livestock to markets. The purpose and scope of setting up Quarantine Stations is to prevent the ingress and egress of dangerous exotic diseases into and out of the country through imported livestock and livestock products. These stations are not available and where they are, they are in pathetic conditions.

ICT Infrastructure: Zambia is seen to be making significant progress on the information and communication technology front as it already has an established fibre network connecting all districts. Enhanced voice and data communication, low-cost internet accessibility has penetrated deep. These achievements are emboldening government to further carry out new ICT reforms.

Though internet connectivity among the public has grown rapidly, the same is yet to reflect in the trade and logistics sector, while ICT is becoming the predominant medium of business. The growing consumer market and young urban population in Zambia poses an opportunity to e-commerce and like sectors, but the government has not done sufficiently to incentivise businesses to adopt new technologies and e-payment methods and informal business has been reluctant to adopt new technologies as well.

The ICT sector is the most attractive sector to private investors and young entrepreneurs. With conducive policy-making and technology adoption in public sectors, public procurement and incentivising businesses to adopt newer technologies, the Zambian Government can effectively promote e-commerce and the digital economy.

Expansion of the telecommunications infrastructure/network and upgrading of mobile wireless connectivity is being undertaken by service providers and ZICTA, through the Universal Access Fund. The measures being undertaken will enhance connectivity and reduce the cost of doing business.

The major challenge faced by most Internet Service Providers (ISPs) and Mobile Services Providers (MSPs) is old technology and equipment for the internet, in most parts of rural Zambia and outlying areas of the main cities and towns. There is a need to acquire new technologies and modern equipment and to upgrade telecommunications networks with 3G or 4G mobile wireless connectivity to ensure high-speed connectivity.

Access to ICT based information portals is low across most sectors. Deliberate efforts need to be put in place by the government as well as private players to encourage the provision of market information through the use of ICT based information portals which are integrated into both regional and international markets. Players in all sectors should also be encouraged to increase uptake of modern technology-based financial systems such as mobile money and online banking.

It was also observed that although the customs declarations are done electronically as Zambia implements the ASYCUDA World, the system still faces challenges related to poor network connectivity and integration due to the weak ICT infrastructure nationwide. It is generally accepted by practitioners that the application of ICT as a means to paperwork reduction, customs clearance, border crossing, and tracking of shipments in transit plays a major role in reducing delays in border and transit procedures and formalities, reducing trade transaction costs, and promoting international trade further. The current implementation of the Single Window by various stakeholders will also facilitate efficient customs clearance.

Adequate ICT infrastructure will be critical to facilitate trade through planned automation (e.g., through the NSW), because it enables various ICT-enabled customs technologies, such as risk management and real-time information sharing with relevant agencies within and across national borders, to fundamentally change the concept of the customs service.

The lack of adequate ICT infrastructure in Zambia, if not addressed, will impede trade as there will be limited access to systems, to support the application of these modern customs processes or to allow data sharing between countries at key border crossing points.

3.3.2 LOGISTICS BUSINESSES

Currently, Zambia lacks fully effective 3PL delivery systems due to various factors such as undeveloped markets, unorganised market system, small players at last-mile delivery systems, absence of large players and private investments, lack of adequate processing plants for agri-output, lack of financing options for new entrants, high costs of operations and poor rural road network. Most of the agri-produce is sold off in local markets - mostly not requiring any transport system, this is due to the fact that local markets/day-type market serves the needs of most of the people and secondly, there is lack of "organised markets" in Zambia (to a large extent). The development of a 4PL or 5PL Logistics System requires the overall development of various fragments of the logistics chain. Recent research shows that the international cost to the last mile for any manufacturer is estimated to be around 28 per cent but in Africa as a whole, it is estimated to be around 35-55 per cent. Ensuring quick deliveries needs efficient food-processing plants, wider internet penetration, private and public investment and regulatory reforms.

3.3.3 FREIGHT FORWARDERS

GRZ has a fully government owned freight forwarder in the name of Zambia Cargo and Logistics Limited (ZCL) trading as MOFED Tanzania. ZCL is an important player in the regional freight logistics industry whose continuous existence and performance impacts various stakeholders such as Government and private institutions in the SADC and COMESA regions. Furthermore, the Zambian Government expects ZCL to provide efficient logistics services for Zambian cargo passing through the port of Dar-e-Salaam.

The strategic aim of ZCL for the period 2016-21 was to increase its market share by 12 percent through its objectives of -

- Increasing the market share by 2 percent per annum;
- Enhance operational efficiency by 15 percent per annum;
- Improve a return on capital employed by 6 percent per annum; and
- Expand target markets by 1 percent per annum.

These targets were expected to be achieved with the assumptions that ZCL had adequate resources. GRZ expects ZCL to offer services to facilitate cargo flows to and from Zambia including the Democratic Republic of Congo, Malawi, Zimbabwe and other countries in the region. ZCL offers services at its ICD for all related importation of cargo into Tanzania and other parts of the East African Community and transit cargo to Zambia and other hinterland countries.

In its 2016 -2021 Strategic plan, ZCL had plans to expand its operations to Walvis Bay in Namibia, Lobito in Angola and Beira in Mozambique. To date, they only have a liaison Office in Ndola and Tunduma on the Zambia-Tanzania border.

3.3.4 Customs and Cross Border Aspects

Zambia is also progressing rapidly on customs and cross border regulations, it has adopted ASYCUDA, a complete online customs portal for quick document procedures and automatic scanning equipment have been installed to ease cross border procedures. In addition, Zambia is implementing a single-window system, which will enhance trade movement across its borders.

The current customs procedure is still riddled with severe custom official interventions, lengthy clearing procedures, physical inspections, and licencing and permit-related bottlenecks which hinder the cross-border movement and ease of movement of goods.

Poor and untimely enforcement of custom agreements with neighbouring states, poor technology adoption, lack of warehousing facilities and other services at border points and lack of skilled custom agents continue to be the major custom and cross border challenges.

Customs clearance procedures in Zambia are based on specific facilitation instruments such as the Automated System for Customs Data (ASYCUDA) which is now moving to the Customs Management System, the World Customs Organisation (WCO) Harmonised System Code and WTO Customs Valuation Agreement. An assessment of the border posts in Zambia indicates that generally, there are delays in goods clearance at borders. In this regard, trend analysis of logistics pillars performance indicates that the customs pillar has not performed well since 2014 on the World Bank Logistics Performance Indicator. Taking cognisance of this, Zambia has undertaken some trade facilitation initiatives such as the implementation of the National Single Window (still ongoing) and the launch of the Electronic Trade Information Portal and modernisation of clearance processes. Despite this, Zambia is still far from best practices and more needs to be done to increase customs efficiency which is very important in trade facilitation and supply chains.

In late 2019 and early 2020, Zambia conducted two Time Release Studies at Chirundu, Livingstone, Kazungula, Victoria and Kenneth Kaunda International Airport measuring how long it takes to release goods at Zambia's borders. The following results and regional comparison with Malawi were indicative of how big the problem of delays is.

Table 3-2: Time Release Study Findings (median import times, arrival to release)

Zambia		Malawi	
Border Post	Time Taken	Border Post	Time Taken
Chirundu	7 days, 1 hour and 36 minutes	Mwanza	10 hours 5 minutes
Livingstone/Victoria	16 hours and 39 minutes (*28% pre-registered)	Dedza	1 day 42 minutes
Kazungula	1 days, 4 hours and 27 minutes (*43% pre-registered)	Mchinji	10 hours 18 minutes
KKIA	3 days, 2 hours and 14 minutes (*26% pre-registered)		

Source: Coordinated Border Management Future Model Workshop for Agency Breakout Session, World Bank Group; September, 2021.

When compared with other countries in the SADC region in 2018, it was observed that Zambia's release times were generally higher than most countries in the region as indicated in figure 3-2 below with waiting times ranging from 25-48 hours at Nakonde-Tunduma border and 49-98 hours at Chirundu leading to massive delays especially at Chirundu.

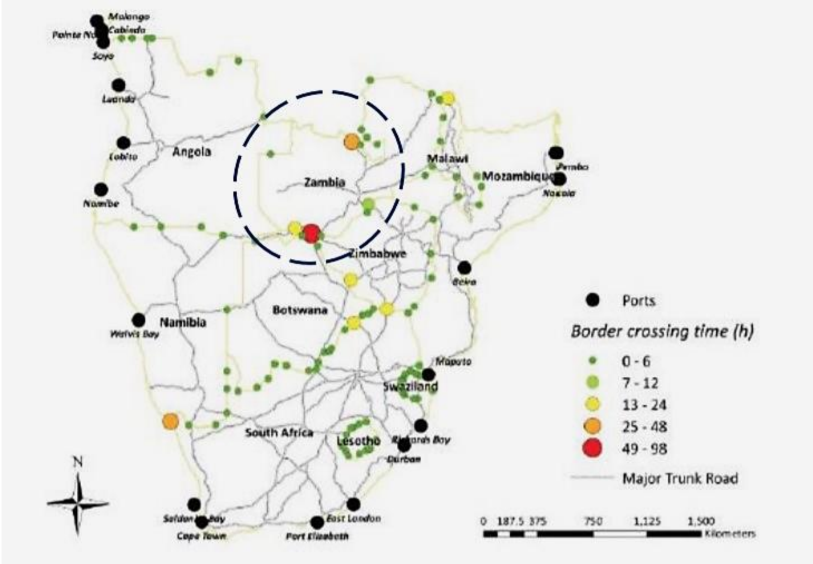


Figure 3-3: Median Waiting Times at Borders in SADC Region (1Q/2018) *Source: World Bank Analysis and Map based on Crickmay and*

3.3.5 Policy and Regulatory Hurdles

Policy and regulation is another key focus area for the Zambian government. It has been enacting various new policies and regulatory reforms in favour of economic diversification, infrastructure development, development of trade and logistics networks with neighbouring countries. This comes in along with assured political will from the government end to coordinate actions from relevant ministries to see through better enforcement and implementation as well as promising new investments in the trade and logistics sector.

However, Zambia's poor state and institutional capacity to implement an enacted policy on the ground has been poor performance, primarily due to unmotivated bureaucracies, trade protectionism and various institutional hindrances, which have resulted in a deteriorating business environment.

3.3.6 Institutional Constraints

Zambian institutions are stable and sufficiently robust in enacting and partially enforcing policies. Its institutions also rank better on the Corruption Index compared to its contemporaries in the region. However, these institutions are also riddled with inefficiency, lack of self-regulatory measures and poor cooperation with its central and local administrative bodies often leading to ineffective top-down policy implementation.

Zambia ranks critically poor in judicial aspects such as contracts enforcements and arbitrary settlements, which are very detrimental to private investors and concessionaires' confidence, and the currently overwhelmed courts give negligible importance to commercial cases.

Zambian institutions are open to new legal reforms and the recent enactment of 'national coordination protocol' which intends to conduct better strategic coordination among various ministries and institutions, especially in the departments of trade and logistics.

3.4 INVESTMENT CLIMATE

Investment climate refers to the economic, financial, and socio-political conditions in a country that impacts whether individuals, banks, and institutions are willing to lend and invest in that country. The investment climate is affected by many indirect factors, including poverty, crime, infrastructure, workforce participation, national security, political instability, regime uncertainty, taxes, and rule of law, property rights, government regulations, government transparency, and government accountability.

Regulation: From the political reforms undertaken in the early 1990s to the ambitious privatisation process and the Vision 2030 to make Zambia a middle-income country, the government has taken several steps to develop the country's private sector. The wide set of reforms that have been launched, in particular under the umbrella of the Private Sector Development Reform Programme (PSDRP) I and II, has resulted in improved global perceptions of Zambia as an investment destination. In 2004, Zambia introduced the PSDRP with its first phase (PSDRP I, 2006-2009) aiming to improve the investment climate to boost the private sector's contribution to economic growth. Despite this significant improvement, a number of obstacles remain in the way of fully realising the country's investment potential.

Political Situation: Zambia is a multi-party state and conducts tripartite democratic elections every five years. The country has remained largely peaceful and stable since its independence in 1964. With this political scenario, Zambia has the potential to attract investors.

Ease of Doing Business: According to the World Bank Doing Business Report of 2020, starting a business in Zambia takes about 8.5 days compared to the best regulatory performance of 0.5 days in New Zealand. This indicates that Zambia needs to reduce the number of days to start a business to further improve the investment climate.

Monitory Policies: Zambia is a liberalised economy, and the exchange rate is not controlled or managed. It is a market-determined and floating exchange rate regime. Monetary policies implemented by the Bank of Zambia largely support the floating exchange regime. This regime is most welcome to the investors.

Availability of Skills: Widespread poverty (serious in rural areas) and systemic youth unemployment remains as Zambia's major economic challenge. Three-quarters of the poor live in rural areas according to the World Bank. However, the untapped agricultural potential could quickly create jobs and catapult the majority out of poverty. Unemployment in the country is caused by low education and skills, low levels of entrepreneurship coupled with limited access to appropriate finance, technology and markets. This has resulted in a mismatch between the skills mix imparted by the education system and the labour market needs. Many educated Zambians find difficulty in getting decent jobs because they have inadequate skills for such jobs.

3.5 FINANCIAL LOGISTICS

The biggest and common constraint identified across the country during the field visits was the lack of access to finance and/or capital to produce and establish businesses in the agribusiness supply chain. It is, therefore, imperative that access to finance is well addressed to encourage the establishment of logistics businesses to stimulate the agribusiness sector.

In general, Zambia's logistics system has hampered the take-off and expansion of the value chains, hence the country must focus on developing an enabling logistics system that would allow the value chains to thrive. The logistics system must perform smoothly to assist Zambia in its diversification plan of focusing on a non-mining economy and becoming a regional centre for logistics services.

Zambia has seen significant growth in short-term credit despite high-interest rates from banks, as high as 25 per cent in commercial banks, and the long-term institutional lending to finance public infrastructure projects have yielded better results. Meanwhile, Zambia Railways, Green Energy, Banking and Mining Sectors have successfully attracted foreign lenders.

Zambia is also witnessing soaring debts from private lenders. In addition, the current credit system of short-term loans and very high-interest rates are not conducive for conducting business. Moreover, banks have also been hesitant to lend to important sectors such as freight, logistics and warehousing among many, demotivating private investment and risk-taking entrepreneurship in the above-mentioned sectors.

4. FUTURE OUTLOOK

Despite the negative impact from the COVID-19 pandemic in 2020, Zambia's GDP is expected to rebound in 2022, 2023 and possibly, after 2023. Crop production over the period 2015 to 2019 has generally been increasing and is expected to rebound in years to come. The livestock population peaked in 2017 and then started declining in 2018 and 2019, possibly because of adverse weather conditions in those years and farmers selling their livestock to withstand the impact of the adverse weather. But in line with the GDP projections, growth in livestock population is also expected to rebound as many people take up livestock farming. Over the period 2015 to 2019, the food balance also continued to grow and is expected to continue to grow to open more opportunities in the agro-sector. The country has also recorded growth in FDI not only in the agriculture sector but also in its allied subsectors that is an investment in non-transport infrastructure such as storage, cooling, packing, processing facilities, irrigation (reservoirs, canals, irrigation equipment). Based on the situation analysis, it is clear that the political and regulatory environment is expected to be stable while the economic and cultural factors will continue to be favourable in this decade (2021-2030).

Zambia occupies a strategic location in the SADC region, being centrally located geographically as indicated in the map above. Major land transport routes in the region such as Lobito Corridor, North-South Corridor, Trans-Caprivi Corridor and the Nacala pass through Zambia. It seems to bring economic development potential by generating new business opportunities based on the increased volume of international cargo via Zambia.

Accordingly, the government has made a great effort to improve cross-border transport by concluding agreements on cross-border transport with surrounding countries. Furthermore, SADC countries are steadily progressing towards market integration by realising seamless movement of "people," "goods" and "investment" in the region. Under this circumstance, global goods movements would be generated more with the horizontal division of labour in the manufacturing sector as well as formulation of the regional and global network of agricultural production and supply system in the SADC region. The expansion of the goods movement will be aided by population and economic growth in the region. All these factors clearly indicate a large possibility of expansion of goods transport in the region. This may also lead to several business opportunities in logistics in the region. Furthermore, network and market accessibility have drastically improved in both physical and institutional aspects by developing major economic corridors in the SADC region as well as several market integration initiatives such as AfCTA. However, land transport among SADC countries, in particular, transit cargo, hasn't increased significantly compared to the expectations prior to the development of economic corridors.

The development of NTLS for the country is an ambitious path to become a leading logistics service hub in the SADC region and its environs. One of the most important stalwarts of this strategy is to transform Zambia into the preferred logistics service hub in the region, capable of handling trade paths through effective connectivity between three regions that include East Africa, Central Africa, and Southern Africa. The effort is needed to make imports and exports processes more streamlined, restructure the regulations and structure the logistics sector as well as enable opening the way for market liberalisation and private sector participation in the logistics sector. Public-private partnerships which are formed to finance infrastructure and attract the skills from the experts become key. Thus, by 2030, Zambia is expected to be the leading logistics service hub in the SADC region.

Zambia's stance to become a leading logistics service hub in the SADC region is based on its particular geographical location. The central location of Zambia makes it perfect for delivery to the SADC area. Zambia intends to capitalise on this strategic asset by pursuing the best and most cost-effective distribution option to the SADC area, while also raising the quality of logistic services, infrastructure, and tracking services to global standards.

The logistics business is adopting Information and Communication Technology (ICT) to boost production and efficiency around the world. The global and regional future outlook posits that the trend in logistics of the selected supply chains will continue to increase over the strategy period.

With these drivers and assumptions in mind, the general future economic outlook for Zambia appears to be bright. This Future Outlook, therefore, is a solid basis for the Government of the Republic of Zambia to make strategic interventions in the logistics sector to stimulate the diversification of the economy and catalyse the growth of trade during this decade. Given the importance of trade logistics in stimulating value addition in the economy, it is imperative that GRZ develops efficient logistics to facilitate the growth and competitiveness of the Zambian economy. It has been observed and emphasised in several policy documents that Zambia is in a hurry to diversify the economy, away from total dependence on mining to agriculture. However, this has proved to be a difficult target to achieve because it has been argued that logistics performance in Zambia is inefficient. To diversify the Zambian economy, there is a need to enhance value addition and therefore, Zambia requires reducing the cost of trade services by improving the quality and efficiency of the logistics system, to make the supply chain efficient and therefore, making the agricultural products competitive.

Based on this scenario, given current trends and global logistics trends, the Future Outlook affirms the fact that the GRZ should undertake strategic actions in the logistics sector, in order to achieve the diversification of the economy of Zambia. These strategic actions range from encouraging all government ministries to fully implement their policy or strategic pronouncements related to logistics performance, development of an ICT enabled logistics sector for providing incentives to the private sector, encouraging them to participate in the development of the logistics sector to enable the quick take-off of the agribusiness sector, in particular.

5. Vision, Rationale and Objectives

5.1 VISION

The current conditions relevant to logistics in Zambia have drastically changed due to the focus on major economic corridors, globalisation in trade and transport, regional economic cooperation and integration. Zambia is focusing on using both external and internal favourable changes to address logistics challenges. The trade logistics industry can help position Zambia into a regional logistics service hub in terms of cargo flows and logistics services. Zambia has also been pursuing a national policy of transitioning from a landlocked to a land-linked country, with the goal of becoming a regional logistics services hub. Further, the Zambia Vision 2030 aims to develop a diversified, balanced and strong industrial sector, a modern agricultural sector and an efficient and productive services sector. With this in mind, the NTLS vision can, therefore, be described as:

Zambia Becoming a Regional Logistics Services Hub to Catalyse the Diversification of the National Economy in Line with Zambia Vision 2030.

The vision of Zambia becoming the Regional Logistics Services Hub is the desire of GRZ and the capabilities, reforms and strategies required to transform Zambia into a regional logistics hub have been assessed while spelling out the Strategy[3]. While this is recognised, this strategy lays the foundation to realise the vision stated above.

Regional logistics services hub in Zambia with its focus areas can catalyse the integration of Zambian businesses in to global economy, improve trade support institutions and improve international competitiveness of Zambia economy which ultimately lead to more investment due to diversified economy, creation of more jobs, improved socioeconomic sustainability and empowerment of women and vulnerable segments of Zambian society. It can act as a support business to other economic activities such as manufacturing, agriculture and commerce by improving accessibility to markets and production networks in SADC with lower costs. Logistics development can, therefore, lead to the diversified economic growth of the country (envisioned in Zambia Vision 2030) as it stimulates other sectors through increased regional integration. This is depicted in Figure 5-1 below.

[3] The terms of reference for the consultant specifies such an assessment for establishing the potential of Zambia being a regional trade logistics hub.

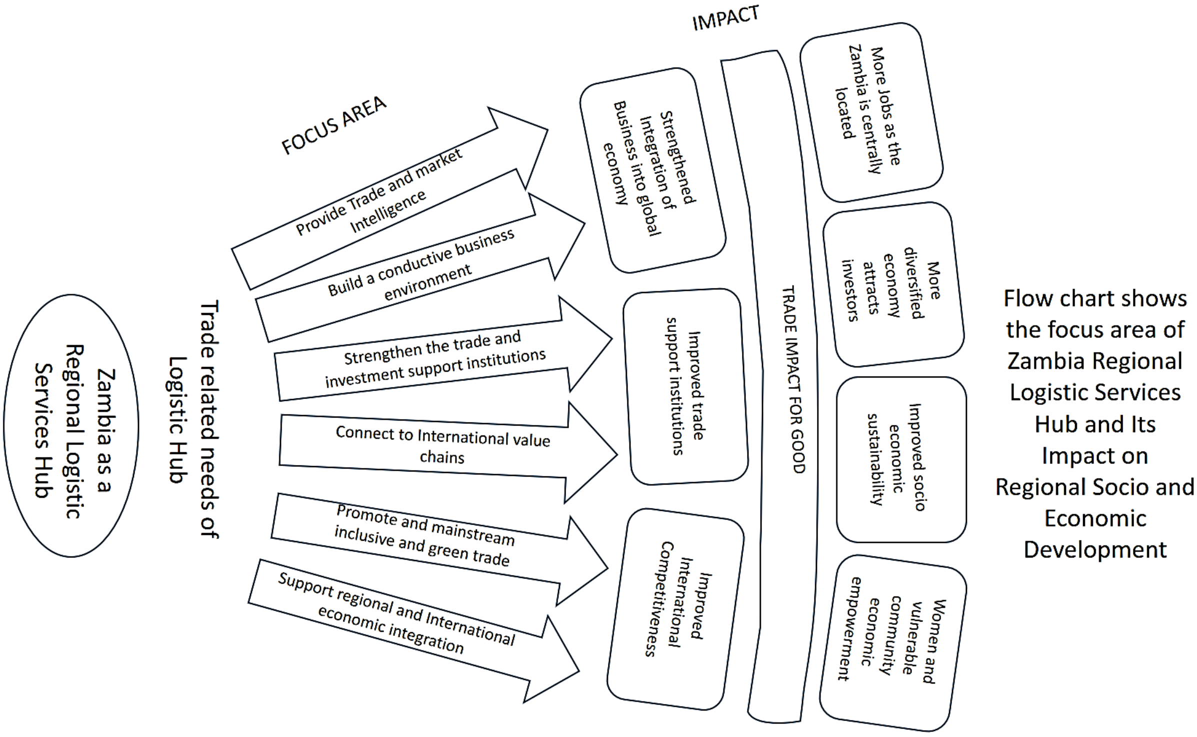


Figure 5-1: Role of Logistics in the Socio-Economic Development Process

5.2 RATIONALE

The rationale for envisioning Zambia becoming a logistics services hub in the SADC region emanates from four intertwined aspects, i.e., the contemporary global and regional context offering opportunities for Zambia to boost trade, central geographical location of Zambia in the SADC region, the vision to diversify the Zambian economy as per Zambia Vision 2030 using strengthened logistics infrastructure in the country and boost to trade, as well as the pressing need to improve the poor logistics performance of the country which constrains trade and growth of all sectors in the economy.

Contemporary global and regional contexts offer opportunities for trade growth for both exports and imports. There is an indication of global economic recovery that is likely to strengthen demand for Zambian exports particularly copper as Zambia is a major exporter of copper. Global prices of the metal also have been recovering lending to the idea that improving logistics in the country would in turn help exports to global markets increase further.

Regionally, increasing regional integration in the SADC, COMESA and African markets is providing higher opportunities in terms of a bigger market for Zambian products. Improving logistics would therefore contribute to higher trade (both exports and imports) in the region and for Zambia.

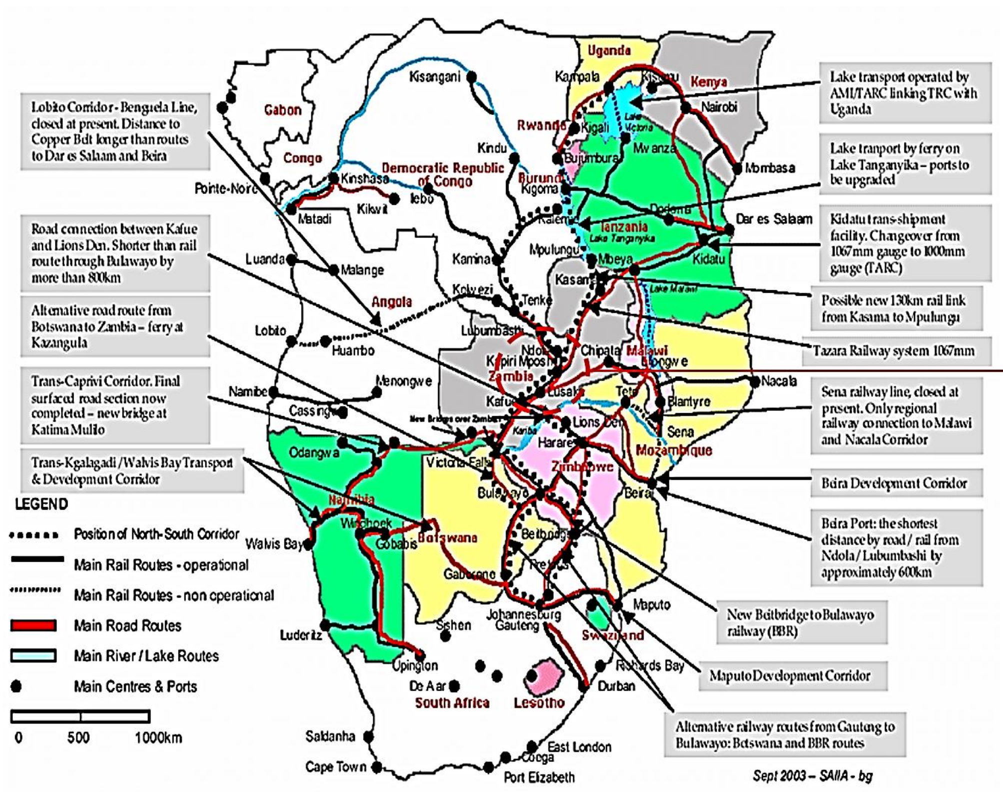
As can be seen in table 5-1 below, by 2045, it is projected that the total volume of Zambian exports and imports is expected to grow drastically, increasing by 1160.6 percent for exports and 918.2 percent for imports. This kind of increase in total trade needs a logistics system that is seamless and efficient.

Table 5-1: Future trade volume of SADC countries (Unit: million tons). f means forecast

Country	Exports					Imports				Percentage Growth
	2013	2015 f	2025 f	2045 f	Percentage Growth	2013	2015 f	2025 f	2045 f	
Angola	96.7	104.1	163.9	367.6	380.1	11	11.9	19.3	45.3	411.8
Botswana	1.3	1.4	2.1	4.6	353.8	5	5.9	13.1	71.3	1426.0
DRC	5.1	6.4	19	73.3	1437.3	3.5	4.3	11.6	40	1142.9
Lesotho	0.2	0.2	0.3	0.5	250.0	0.7	0.8	1.2	2.4	342.9
Malawi	1.2	1.4	3.1	11.6	966.7	2.2	2.5	5.1	17.5	795.5
Mozambique	3.7	4.2	8.1	31.6	854.1	10	12.7	42.8	102.6	1026.0
Namibia	3.3	3.7	6.6	21.3	645.5	5.5	6.3	13.1	56.3	1023.6
South Africa	176	188	263.4	500	284.1	57.9	61.2	81.5	140.5	242.7
Swaziland	4.2	4.3	4.7	5.6	133.3	2.8	2.8	2.9	3.2	114.3
Tanzania	2.7	3.5	11.5	33.9	1255.6	10.8	13.5	40.6	119.9	1110.2
Zambia	3.3	4	9.9	38.3	1160.6	5.5	6.6	14.8	50.5	918.2
Zimbabwe	1.7	1.9	3.7	13.7	805.9	5.6	5.8	7.6	12.6	225.0

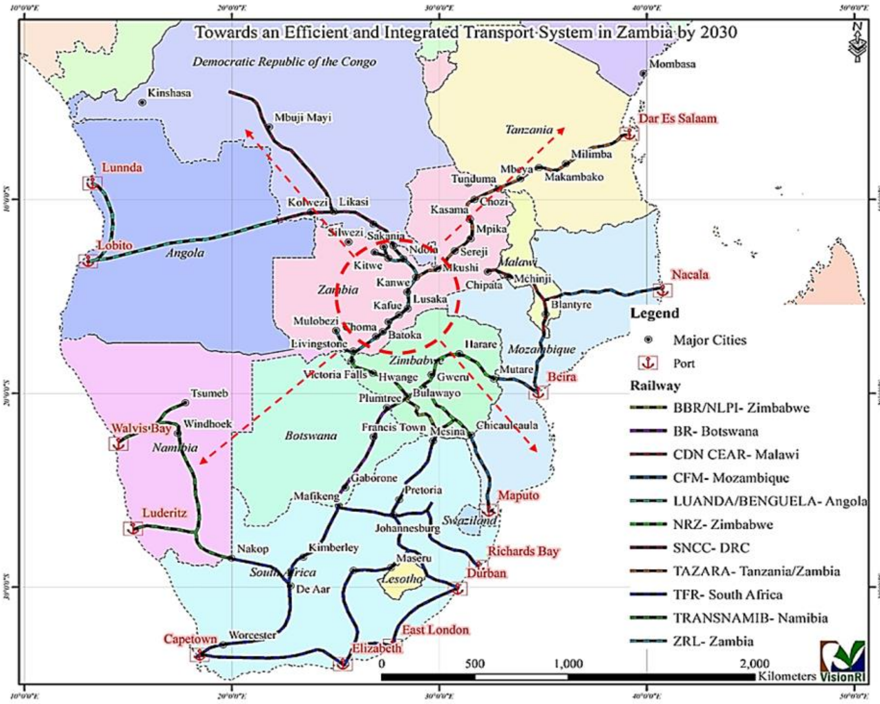
Source: SADC Regional Infrastructure Development Master Plan, 2012.

The geographical location of Zambia places it at the centre of the region making the country well connected to international markets by several trade corridors of varying degrees of efficiency. The North South Corridor remains the most preferred for Zambian exports and imports. This corridor also leads to the lucrative export market of Katanga in the Democratic Republic of Congo and East Africa via Mpulungu Harbour. Figure 5-2 shows the map depicting SADC Regional Transport Corridors and Ports. Making this transport corridor as a strategic one and improving its services provision would greatly stimulate trade with South Africa, Botswana, Zimbabwe, DRC and East Africa.



Zambia is located on the North-South Corridor

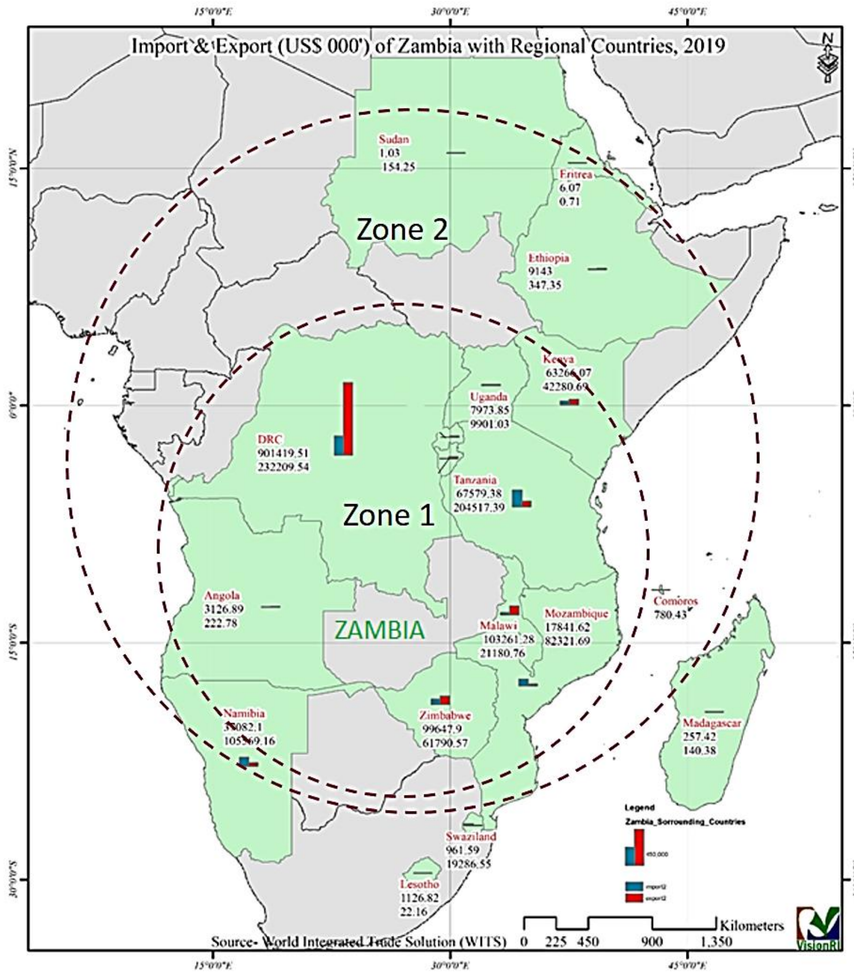
Figure 5-2: Strategic Location of Zambia at North-South Corridor



Zambia's Regional Connectivity

- According to the map, all of the railway lines mentioned (in the legend) meet in Zambia.
- In the whole region except Zambia none of the country is centrally and well connected with other trade centers.
- In the new reforms, **the Zambian government has prioritised transport and logistics** sector as the key focus areas

Figure 5-3: Zambia Regional Rail Connectivity



Zone 1 has higher import and export activities in comparison to Zone 2

Figure 5-4: Zambian Trade in the Region

Also, the regional rail connectivity (Figure 5-3) as well as the volume of Zambian trade with neighbouring countries (Figure 5-4) make a case for envisioning Zambia as a regional logistics services hub.

On the World Bank's Logistics Performance Index, Zambia is ranked number 118 out of 167 countries. Such a poor ranking at LPI is also exacerbated by gaps in trade logistics as well as the need to develop initiatives for redesigning the trade regimes and monitoring trade logistics through corridor performances. To stimulate additional economic activities, there is need to improve the efficiency of economic corridors, reducing trade barriers, promoting cross-border management and investment, and capitalising on the benefits of being land-linked.

5.3 OBJECTIVES

5.3.1 General Objective

National Trade Logistics Strategy provides a framework for the development and management of trade logistics in Zambia for developing the country as a regional trade logistics services hub to achieve the diversification of the national economy as per Vision 2030. This is to be achieved by leveraging on the strengths and opportunities and removing weaknesses and managing threats identified in the situation assessment.

5.3.2 Specific Objectives

The specific objectives will focus on creating an enabling environment for logistics businesses to grow and flourish, providing requisite infrastructure to support viable logistics services, and creating an environment to enhance regional trade. Strategically the interventions will be guided by the objectives such as -

v. Pursuing the **structural reforms** in the logistics industry which essentially means adopting the measures that change the fabric of the logistics industry, the institutional and regulatory framework in which logistics businesses operate.

vi. **Business stimulation** involving capacity building for implementing the structural reforms as well as within the logistics industry to benefit maximally from the structural reforms.

vii. Developing and strengthening **transport and logistics infrastructure** through planned investment in projects identified in the National Transport Master Plan as well as other projects identified in this NTLS.

viii. **Market expansion** encompassing the strengthened compliance with regional trade and transport-related treaties and cooperation with regional countries.

Achieving the above objectives should lead the logistics sector towards efficient and sustainable cargo flow that is strategically combined/integrated to generate "economies of scale" for Zambia.

The above vision, rationale and objectives are a basis for strategies and strategic measures proposed in NTLS as enumerated in chapter 6.

6. Strategies and Strategic Measures

The NTLS is built around four core strategic interventions and supporting strategic activities, all of which are motivated by the specific objectives mentioned previously. The goal of logistics development in Zambia is to effectively generate business possibilities in logistics by initiating a multi-sectoral strategy through structural interventions, improving enabling policy and regulatory environment, enhancing the operational efficiency through developing and strengthening the transport and trade logistics infrastructure and capacity building interventions for the implementation of structural reforms and getting benefits from such reforms.

6.1 Framework for the National Trade Logistics Strategy

The overall lesson drawn from the situation assessment is that Zambia's economic development agenda in general, and the export drive in particular, require a logistics response as the identified formidable logistical constraints have adverse effects on growth of the economy in general and export trade in particular. The economic development agenda is enshrined in the Vision 2030 document that expects Zambia to be a prosperous middle-income nation. The document sets out the goals and targets to be achieved in the various spheres of social-economic life by 2030. The export drive is outlined in the National Trade Policy and Export Strategy. The main objective of the Policy is to turn Zambia into a net exporter and improve competitiveness. The Policy covers trade in goods and services, propose various interventions and is aligned to the Seventh National Development Plan which aims to achieve sustainable development.

Thus, the proposed NTLS is aligned with the goals and targets enshrined in the three documents mentioned above.

6.2 Four Pillars of National Trade Logistics Strategy

Based on the objectives identified above, NTLS has been formulated with four major pillars or lines of action that are presented as:

I. Structural Reforms encompassing the Institutional, Regulatory and Policy Frameworks;
II. Business Stimulation;
III. Developing and Strengthening Logistics Infrastructure, and
IV. Market Expansion

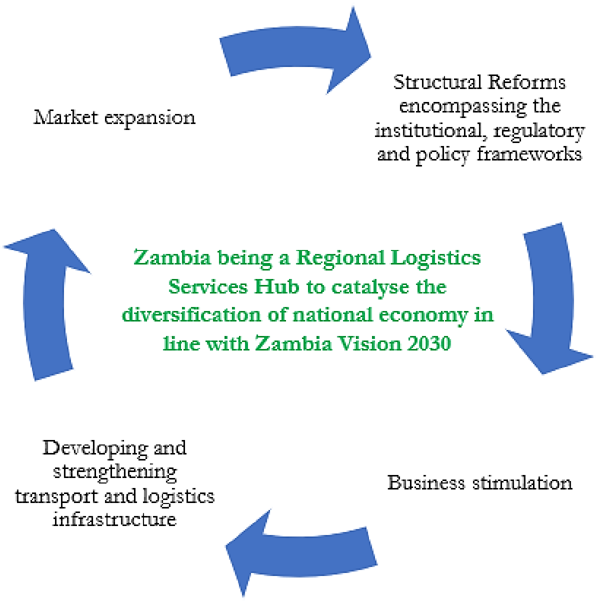


Figure 6-1: Identified Strategies

Besides four strategic lines of interventions to be implemented over the duration of next ten years, some quick wins need to be implemented immediately. Such quick wins are:

a) Removing the restrictions on the export of agriculture produce and products to allow free flow and expansion of trade in agriculture in line with the diversification policy;

b) Aggressively promoting the utilization of the Zambia trade information portal to exploit both local and international markets by providing relevant supply chain marketing information on the portal and update it on monthly basis (including connection to Zambian Foreign Missions); and

c) Establishing a Trade Logistics Section at the Ministry of Commerce, Trade and Industry to be responsible for implementing the NTLS.

STRATEGY 1 - STRUCTURAL REFORMS ENCOMPASSING THE INSTITUTIONAL, REGULATORY AND POLICY FRAMEWORKS

The situation assessment of the trade logistics landscape in the country points towards disjointed regulation in the logistics industry which results in market structure failures and poor coordination among different agencies and resulting in discouraging the private sector from providing competitive and efficient services, and thus hinder the integration of the logistics supply chain at lower costs.

Harmonising the regulatory interests of all stakeholders by minimising the procedural and operational complexities through greater cooperation is a stepping-stone towards achieving a more consistent and efficient logistics sector in Zambia.

The objective is to tackle the challenges such as delivering integrated logistics services through a coherent regulatory framework, updating entry and operational restriction regulations and providing better access to infrastructure.

By establishing an efficient institutional framework through effective coordination between government actors and interests, and public-private dialogue, disjointed regulations in the logistics supply chain can be eased out. Further, discriminatory regulations against competitive logistics services discourage foreign investment in the industry. A critical rethinking of the institutional framework governing entry and operational restrictions should guide specific policies. Furthermore, boosting infrastructure accessibility through proper legislative reforms is critical for making the supply chain more competitive and cost-effective, as well as eliminating market failures that protect vested interests' status quo.

Zambia's policy landscape in the logistics and commerce sector is fragmented, and urgently requires the integration and coordination of numerous institutions and organisations to achieve a clear goal and common objectives. Coherent policy reforms in the logistics and trade domain will give growth impetus and momentum in the sector. Zambia needs the coordination of regulatory actions and policy interventions with appropriate timeframes to improve business confidence, investment opportunities, a conducive legal environment, and efficient administration and enforcement mechanism. It is of prime significance to streamline administrative procedures in line with policy reforms in order to expedite the process of effective implementation.

Accordingly, this Strategy will break down into the following action:

- Integration of Logistics Services: In Zambia, need is to strengthen the monitoring mechanisms in most government institutions and agencies. Intellectual and physical cooperation between institutions is a major factor for achieving the procedural and operational efficiencies. Disjointed programmes and policies as well as the failure of full enforcement of laws and regulations breed inefficiency in the logistics sector and therefore, needs to be addressed. Further, the absence of a dedicated body for overseeing and improving the logistics sector at the ministerial level is another key constraint. The following strategic interventions are required:

  (a) Formulation of a logistics policy - The progressive integration of logistics services in the country to diversify and enhance the range and nature of services is urgently needed. This is necessitated by the greater interdependence of logistics businesses and global businesses demanding increasing efficiency from logistics service providers. Integration of logistics services will also demand a change in the logistics policy for providing the enabling environment to logistics businesses. At present, there is no logistics policy in Zambia. The development of logistics systems in Zambia is currently supported by the SADC Protocols which encourages Member States to cooperate in promoting the development of logistics systems to support effective intermodal transport operations through, among others, the following:

- Intermodal synergy
- Intermodal cooperation between services providers
- Optimal use of unutilised loading units such as containers
- Clearance and pre-clearance of goods at borders, ports and dry ports

(b) Promulgation of a Logistics Law - Currently, there is only the ZCILT Act which provides for the regulation of professionalism in the logistics sector. There is need to promulgate logistics laws that will provide a robust regulatory and institutional framework for the logistics sector in Zambia. The logistics law should provide for the following:

i. Further, the new law should provide for the establishment of a logistics agency or authority to provide oversight in the development of the logistics sector and ensure the implementation of the proposed measures made in the NTLS in close reference to the NTMP. The Logistics Authority or Agency would be responsible for the progressive integration of logistics services in the country to diversify and enhance the range and nature of services provided.

ii. Revamping/refining the framework for coordination among agencies, relevant institutions, line ministries and agencies in Zambia to ensure the coherence in implementation and integration of policy. The latter aims at improving administrative actions for better enforcement on the ground level. The mandates of different government agencies are often not coordinated in the interests of maintaining efficient supply chains in the country while the regulations have been drawn up to meet the regulatory needs of a particular sector, often leading to conflicting regulations and discouraging integration of services. Such conflicts in regulations of different segments of the chain affect the provision of integrated logistics services, as well as the simultaneity and synchronicity that an efficient logistics chain requires.

iii. Enhanced adoption and use of ICTs in the logistics business in line with the Vision 2030. In Zambia, the vast majority of the local transport and logistics companies are still relying on paper-based and/or manual systems. Just by their nature, this is open to inefficiencies. Three or four disconnected systems with different people using different spreadsheets leads to things falling through the cracks. This has the knock-on effect of a loss of trust by clients and potential financial losses.

iv. Formulating and enacting the Logistics Hub Centre Act in order to give a legal foundation to the Logistics Hub Centre and formulating and/or revising water transport policies in the country.

(c) Strengthening of Logistics Administration - At present the portfolio of logistics is fragmented and overlapping among several ministries. For example, the Ministry of Transport and Logistics has established a National Transport Committee to facilitate cross border transport movements and the Ministry of Commerce, Trade and Industry has a National Trade Facilitation Committee with similar roles with the National Transport Committee. In the area of inland depots and warehouses, the Ministry of Transport and Logistics, MCTI and Ministry of Finance each has a role to play.

- Remove restriction on entry and discontinue ban on exports - The Ministry of Transport and Logistics should remove any restrictions on entry to the logistics and trucking sector while the Ministry of Agriculture should eliminate Agricultural export bans on agricultural produce.

This will encompass the following:

(a) Streamlining the regulation on entry for logistics businesses through registration or licensing, and barriers to entry that affect investment. Enabling regulation needs to be adopted on setting up a company/trucking company and relevant to Multimodal Transport Operators (MTOs), registration as a freight forwarder, controlling factory activities, setting up and managing warehouse and registration as a customs broker. There is a need to have clear policy guidance, legislation and schemes for inviting private capital in the logistics and transportation sector.

(b) Streamlining the regulation and operational aspects of logistics sector such as having clear policy guidance on freight operations, fleet management, transportation, storage and handling of dangerous goods, edible and other perishable products.

(c) Streamlining the compliance to regional trade protocols such as African Continental Free Trade Area (AfCFTA) and SADC Protocols on Trade and Transport is needed. AfCFTA is expected to make free movement of goods, services, capital and persons travelling to any member state. The SADC Protocol on Trade (1996), as amended in 2010, is one of the most important legal instruments guiding SADC's work on trade. It is an agreement between the SADC Member States to reduce customs duties and other barriers to trade on imported products amongst the SADC Member States. The protocol aims to facilitate cross-border trade procedures and reduce barriers to trade within SADC countries. The SADC Protocol on Transport, Communications and Meteorology advises the SADC Member States to promote an integrated, multimodal transport system throughout Southern Africa that remains efficient, reliable, economically viable, and environmentally responsible. This system is best realised through a harmonised regional policy on transport, with coherent frameworks for institutions and strategies for implementation. Therefore, Member States agree to cooperate on a transport network aimed at ensuring the free movement of people and goods through the region, particularly from the landlocked Member States to seaports located in coastal Member States' territory and vice-versa.

(d) Streamlining the restrictive export policies on some agricultural products as these restrictions inhibit economic and logistics growth in those sub-sectors.

(e) Simplifying policies to facilitate the export of high-value-added products, even in politically sensitive areas.

- Regulating the Access and Use of Infrastructure to Provide Services: This will encompass ensuring the access to transport infrastructure-related services, for example, at ports, airports, rail or road terminals, on reasonable and non-discriminatory terms. In some cases, conflict of interests or lack of competition restricts the operations of logistics providers, as facility owners may also provide logistics services. A related issue is that many segments of logistics services remain under state monopoly. Although maintained for various policy considerations (such as national strategy, public security and social benefits), a monopoly hampers efficiency, distorts markets and usually promotes vested interests. In particular, railway container transport, which is critical to multimodal transport, is operated under a monopoly. Rail freight transport rates and capacity allocation are not subject to market competition, but are, to a great extent, under government control. The inefficiency of rail freight transport may pause be a major concern in logistics performance. It is estimated that a modest increase in rail performance will significantly increase logistics performance and lower costs.

STRATEGY 2 - BUSINESS STIMULATION

Zambia has few logistics companies. These are located in Lusaka, Ndola and Kitwe mainly in domestic transport activities. As for import/export and transit cargo, most of it is under foreign logistics companies (forwarders). The size of the local logistics companies is small compared to the foreign logistics companies. Accordingly, it is hard for Zambian companies to accumulate capital and technical ability to compete against foreign logistics companies.

On the other hand, the other logistics companies are very small truck companies or individual owner-drivers. There is limited transport demand targeting local consignees and vendors in the local logistics market except for Lusaka. With those many small companies and individual owner-drivers, the market has an over-supply of logistics companies relative to the existing demand. The over-competition without roles results in lower profits and lower quality of transport services in domestic transport in Zambia.

Under such circumstances, it is difficult for the local logistics companies to obtain necessary funds for capital and equipment investment (such as buying new trucks, constructing truck facilities, introducing IT, etc.) from banks. As a result, the local logistics companies are not properly equipped to respond to requirements from clients. This situation is not only exacerbated by the fact that local companies would not be able to respond to increased logistics demand arising out of economic development, urbanisation and population growth in the near future, but also by industrial and agricultural development opportunities without proper transport modes in Zambia to harness them. In particular, it is a problem to provide appropriate logistics companies to offer the services along the main trade corridors. It is accordingly essential for Zambia to emphasise the stimulation of the logistics business in Zambia.

In cognisance of the above, the strategy of "Business Stimulation" aims to stimulate logistics businesses in Zambia to serve an increased volume of land transport as well as to serve the expanded market in SADC. An important problem pertaining to the Zambian logistics businesses is, therefore, "how to provide sufficient logistics services." In this regard, it is of great importance for Zambia to uphold the principle that the market should be liberalised as much as possible without intervention. It means the creation of free and competitive market circumstances in logistics for both foreign and domestic logistics businesses in Zambia. The competitive logistics market in Zambia shall be opened up to both local and foreign logistics providers; hence, GRZ is required to maintain the open market principle for participation by both foreign and local investors in the logistics market.

For this purpose, the promotion of foreign logistics business is important to lift the quality of logistics services available in Zambia while the strengthening of local logistics providers is essential from the point of view of Industrial Development Policy, 2018.

This strategy will break down into the following three actions:

- Attracting Foreign Logistics Business: Attracting the foreign logistics businesses into Zambia will provide sufficient logistics services in Zambia as well as make local providers upgrade their capacity through competition and collaboration among the businesses. Influence on promoting the logistics industry is not only limited to the logistics industry itself but includes both demand and supply through forward and backward integration. Customers (demand side) and suppliers can receive large benefits from the availability of qualified and lower-cost services, which will be an incentive for business expansion towards the region and global market. The interventions to attract foreign businesses to the country should include the following:
    - Foreign Investment and Partnership Promotion Programme: This program will aim at attracting foreign direct investment from international transport companies. Active foreign business entry shall be profitable for users in Zambia and SADC as well as for further logistics development along the proposed strategy. However, some negative impacts may be anticipated in local logistics businesses. Partnerships

and other forms of cooperation are useful methods for local providers to upgrade their business quality. The following incentives should be considered:

- Tax incentives;
- Investment incentives; and
- Incentives for vehicle registration.

- Strengthening of Domestic Logistics Business: This action will aim to foster local logistics businesses' competitiveness against foreign logistics businesses. The basic policy can be divided into the following activities:

  - Leading Company Cultivation Programme: This programme shall aim at cultivating leading logistics companies in Zambia to participate in the international logistics business in SADC. Logistics companies in Zambia are small businesses with limited capacity in management, marketing capacity and capital, accordingly, suffering the loss in business opportunities. To avoid leakage of benefits of logistics development in Zambia, it is of great importance to cultivate larger logistics companies in Zambia which can provide competitive services against foreign logistics companies. To this end, it is essential that specialised logistics companies serve specific logistics market segments with the following projects, such as:

    - Grading of local logistics companies size and type of services;
    - Revision of qualification of registration of logistics companies; and
    - Subsidy and incentive system by the grade mentioned above.

  - New Business Incubation Programme: This programme will aim at incubating new logistics-related businesses at logistics parks. In accordance with the increase in logistics volume of transit, import and export cargo, new services in newly developed international and provincial logistics parks should be taken into account. In this regard, the program consists of the following projects:

    - Support to participate in inventory management business for import and export products at all the logistics parks to be established in Zambia; and
    - Support to exploit integration of inventory service and transport service in domestic logistics market at provincial logistics parks.

  - Business Matching and ICT Programmes: Local logistics businesses in Zambia are unable to improve business management exercises due to not only financial weakness but also a shortage of ICT facilities/infrastructure, management skills, business network and capability of staff. This programme will aim at assisting private logistics businesses by providing the following business information service:

    - Business (cargo transport) inquiry information;
    - Coordination of joint works such as transport, vacant space, truck repair garage, purchase of parts, oil etc. among local logistic companies; and
    - Regular dialogue between private and public sectors in logistics.

  - Cargo Liability Development Programme: A poor insurance system for transport has been pointed out for a long time as one of the problems facing local logistics businesses in Zambia. A majority of general operators are small scale or owner-drivers, such that they are unlikely to be familiar with cargo liability systems, which is a critical disadvantage in the light of the global standard of logistics businesses. Currently, the situation is gradually changing with a couple of local and foreign-affiliated insurance companies established in Zambia. Taking this opportunity, it is of great importance to improve both cargo liability insurance systems for cargo security. Basic policies of cargo liability insurance are:

- Development of standard cargo liability system;
- Adoption for compulsory participation into cargo liability system; and
- Adoption for qualified trucks (which is effective for reducing cargo damage).

- Capacity Development Programme: During the last decade, Zambia has received significant inflows of technical cooperation, much of which aimed at supporting institutional development and building the legal framework. While these changes have been made, there are still issues that cause the programme to fall behind schedule. The majority of the issues noted in the scenario assessment are due to a lack of capability, which includes a lack of human and financial resources, accountability, and law enforcement. An important problem pertaining to the Zambia logistics business is the shortage of capital, knowledge and competency of own business. Logistics-related issues were raised in the interviews with the private sector and much of them were directed towards the capacity of the local forwarding companies, in terms of reliability and efficiency of freight service.

  The logistics sector in Zambia is characterised by high costs and poor-quality services due to a variety of factors, including poor infrastructure, inconsistent institutional frameworks that do not foster investment, insufficient human and financial resources, and a lack of law enforcement.

  The deteriorated state of the logistics sector coupled with unsatisfactory operational performance signifies fundamental characteristics of this sector which include:

  - Lack of (or non-existence of) coherent policy guidance from those concerned with the planning and development of the logistics infrastructure;
  - Inadequate coordination and consultation among stakeholders;
  - Shortage of trained and experienced personnel in the logistics industry; and
  - Lack of regulatory regimes equipped to enhance competition and fair operational practices.

  Accordingly, capacity development, which covers a broad concept from human resource development to institutional development, should be a focal issue discussed to address the institutional and individual deficiencies in the logistics sector.

STRATEGY 3 - DEVELOPING AND STRENGTHENING TRANSPORT AND LOGISTICS INFRASTRUCTURE

This strategy will comprise the following actions:

- Improvement of Transport/Logistics Infrastructure: Following interventions are proposed –
  - *The primary feeder road network*, which makes up about a third of the CRN and gives access to most agricultural areas, is in poor condition and in desperate need of repair and maintenance. The biggest challenge, therefore, is the rural road network. Most of the roads in rural areas are in poor condition and far from the farming communities where most of the agricultural activities take place. Agricultural marketing by smallholder farmers in Zambia remains a major barrier due to the country's poor road network and poor accessibility by the rural communities. Government is currently implementing a $200 million Zambia Improved Rural Connectivity Project funded by the World Bank loan whose objective is to improve rural accessibility for communities in selected areas in Zambia and to strengthen institutional capacity for sustainable management of rural roads. The World Bank recognized that much of the feeder rural network was poorly maintained and connectivity was hampered by unreliability of transport services, slow vehicle operating speeds, high vehicle maintenance costs, poor road safety, and reduced travel comfort. More

specifically, the beneficiaries of this project are to be rural farmers who were expected to have improved access to inputs and markets. The rural communities in general were also expected to have better access to health, education and other services. Employment in road construction activities and the expected rural development were expected to have the potential to generate new opportunities for the rural communities. Transport service providers whose vehicle operating cost were expected to be reduced and travel speeds increased thereby improving logistical services to rural communities. With all such economic benefits, the economic rate of return is quite good from the investment in rural road network (EIRR are estimated at 7.4 percent to 13.2 percent, the NPVs for the investments at a discount rate of 6 percent are all positive and estimated to vary from US$0.12 million to US$0.52 million)[4]

National Transport Policy and National Transport Master Plan have identified the critical need to address the problem of poor condition of rural feeder roads and accessibility and have provided a robust plan to improve transport or logistics infrastructure in the Country.

- *Provincial Transport Improvement Project:* This programme aims at providing better provincial road networks in order to connect towns in the provinces. It may contribute to an increased potential for cargo flow to be integrated into the North-South corridor route by promoting more movements of people and goods in provinces. Focus is given basically to feeder roads in provinces. The road improvement in various provinces shall be spread over a long period as all feeder roads in provinces need improvement. This project is already under implementation in Zambia through the Link Zambia 8,000 Programme.

- *Improvement of Major Transport Corridors*: Although the national road network has improved since the last decade in Zambia, a number of the national and provincial roads still need improvements. With this in mind, it is important and necessary to improve major roads used as key logistics routes to integrate more cargo flows. The basic policies of further improvement of the road network are in response to the requirements arising from the shortening of transport time enlargement of trucks, and flexibility of transport. A Trade Corridor Improvement Project is proposed and it will have high returns in terms of economic benefits and will catalyse the increase in trade for Zambia. This programme will aim at improving international logistics routes to speed up travel time of bigger vehicles such as trucks and trailers at the first stage, improving the road structure to withstand heavier truck loading at the second stage, and finally improving road facilities to enable night driving.

  Trade corridors are growing in importance as they enable other sectors to maximise their productivity. Infrastructural bottlenecks along these corridors such as poor roads and bridges, confusing border logistics, and complex customs procedures often hamper operations of other industries. Hence transport corridors require special attention. In accordance with the SADC Protocol on Transport, Communications and Meteorology, it is proposed that Zambia creates Corridor Planning Committees to focus on specific strategies for development along the country's key or priority corridors. Corridor Planning Committees are cross-border entities comprising both public and private stakeholders from transport and infrastructure authorities, customs authorities, trade and industry bodies, and users of the transport corridors. These Committees are charged with the responsibility of determining specific requirements of their respective corridors and overseeing plans for their development. In this regard, focus should be given to the North-South and Dar es Salaam Corridors routes which shall be strategic logistics routes to integrate cargo flow in Zambia. According to SADC, the North-South Corridor and the Dar-es-Salaam Corridor, offer the greatest potential for growth as key regional logistics services hubs for development and Zambia should prioritise them. The projects involve the improvement to international standards the Mpika-Nakonde section on the Dar es Salaam route, Mpika-

[4] Zambia: Improved Rural Connectivity Project – SUF, Project Appraisal Document, The World Bank (2017)

Mpulungu route to increase accessibility to the Mpulungu Port, Mazabuka to Livingstone route to facilitate quicker movement of cargo on the North-South Corridor.

- The NTMP has also identifies the need for *interventions in rail and water transport* to improve the infrastructure.
- *Improvement of Air Cargo Market:* At present air cargo constitutes less than 1% of total export and import traffic. There is potential to grow this sector with the current investment taking place at the East Lusaka Multi-Facility Economic Zone and the new air cargo terminal which was constructed at KKIA. Lusaka for a long time might be the only place in Zambia which can be expected to carry significant air cargo traffic. It is not expected in the distance future that other airports and district aerodromes will be relevant for air cargo.

- Improvement of Transport Efficiency: Transport efficiency is one of the significant factors affecting logistics costs. It is a factor that can be potentially affected by certain government interventions. Transport efficiency can be improved by increasing transport volume per trip by the truck as well as by minimising transport costs by using different transport modes, i.e., multi-modal transport and ensuring that trucks have backhauls cargo unlike at present when empty return runs are prevalent. It is important to take necessary actions in the following areas:
  - Truck Replacement and Enlargement Programme: At present, most truck companies use old trucks, which are recognised as one of the constraints to their participation in the logistics market in the SADC region; hence, it is important to accelerate the replacement of old trucks with new larger trucks.
    - Reduction of vehicle tax on importation of new large trucks;
    - Soft loan with long tenure for logistics companies; and
    - Introduction of guarantee associations to provide loans to the logistics companies.
  - Consolidation Promotion Programme: Consolidation is one way of improving the loading rate of trucks in general. Logistics parks and transport alliances shall be key in promoting consolidation. The logistics parks have the function of gathering cargo as a transport hub and are presented with the opportunity to combine cargo. On the other hand, transport alliance is a key aspect in facilitating joint works among transport companies in the logistics park including LCL services. Transport alliances will share information on cargo as well as transport works such as combining cargo among the alliance companies. It would also be necessary to keep the same service level among the alliance companies. This can be supported with the following actions:
    - Assistance to prepare standard contract format;
    - Establishment of cargo liability insurance;
    - Human resource development; and
    - Logistics park development and facilitation of the use of the logistics park.
  - Attraction of Distributive Processing: Distributive processing is one of the key functions to integrate cargo along the North-South Corridor route by providing attractive value addition on the route. Logistics parks, in particular, Choma and Chibombo Logistics Parks are the candidate sites to gather distributive processing activities based on the cargo terminal function along the North-South Corridor route. Some incentives will also be very helpful for the two logistics parks to gather more cargo for distributive processing.
- Integration of ICTs in the improvement of transport logistics: It will enable enhanced communication both in terms of operations and the processing of financial transactions. ICT should play a major role in improving transport efficiency.
- Transport chain interoperability for multimodal transport to improve the interoperability of the transport system in Zambia: In terms of multimodal transport needs to improve the interoperability of transport system in Zambia. GRZ has acknowledged the need for transport interoperability and

towns such as Chingola, Ndola, Kapiri Mposhi, Lusaka and Livingstone have been identified in the National Transport Master Plan for development as intermodal hubs. Furthermore, because Zambia has a port at Mpulungu, interoperability between road, rail and water transport is necessary. Improvement at the Port of Mpulungu is necessary given its geographic position as a gateway for exports and transit to the DRC and Great Lakes Region.

- Improvement of Customs Efficiency- Construction of Inland Cargo Examination Centres
  GRZ appreciates the importance of reducing waiting times at borders as this reduces the cost of doing business. The current trade facilitation reform programme proposed the establishment of Inland Cargo Examination centres at Lusaka, Kapiri Mposhi and Kitwe to avoid congestion and delays at borders, but this has not been implemented. This NTLS proposes that Inland Cargo Examination Centres be established starting with Lusaka and Kitwe. These centres should be accompanied with security measures such as electronic monitoring devices to monitor trucks from the border to the respective Centres and should be equipped with relevant technology requirements to speed up processes.

- Development of Agriculture Hubs/Bulking Centres: This strategic action entails the development of agriculture hubs and/or bulking Centres in identified areas following an economic feasibility study. An agriculture hub is an architecture innovation that will serve as the central facility that is dedicated to rural revitalization and economic inclusiveness within the locality. The agriculture hub will also help in consolidation of agriculture produce for price negotiations and reinforcing the national agro-export market. Secondly the agricultural hubs will improve logistics services destined to national production. An agricultural hub is usually led by government but brings together private players in food production, technology, farmers as well as financiers.

- Development of Logistics Hubs: This strategic action entails providing the enabling environment for attracting the developments of regional trade logistics services hubs. The main factors for the development of competitive logistics services hubs are identified as logistics service support and infrastructure, business environment, economic determinants, political support, and access to regional and international markets.

  Determinants of successful development of a logistics hub are (a) speed and efficiency through provision of better and more sophisticated integrated transport, information and communication services for different type of cargo as well as service to different distribution centres, and (b) integrated transport not only for the movement of imports and exports but also for handling the transhipment cargo.

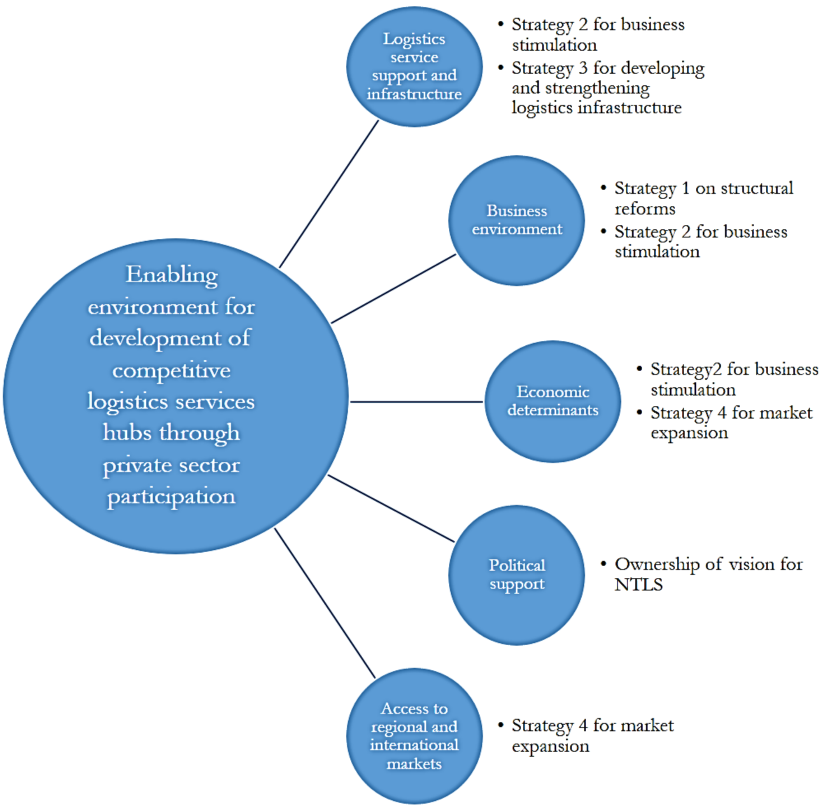


Figure 6-2: Enabling Environment for setting up Logistics Services Hubs emanating from Strategic Interventions

All strategic interventions proposed above will lead to creating the enabling environment for the private sector to invest for developing the trade logistics services hubs in the country (Figure 6-2).

There will be opportunities for developing the logistics services hubs for the private sector catalysed by the enabling environment to be created over the implementation duration of NTLS. The international logistics services hubs will be suitably located along the main corridors namely; North-South, Dar es Salaam and Beira routes so as to integrate cargo flow of transit cargo and import/export cargo. The idea is to develop regional and international interface facilities in logistics in Zambia through private sector participation. The facility, namely; 'Logistics Park' is to act as a sort of one-stop service integrating necessary services which have benefits of reduced transport time and logistics costs for the integration of cargo flow and people.

Provincial logistics services hub will act as transport nodes to carry out mainly trans-shipment of domestic cargo between trunk and area transport. The domestic routes especially along the main transport corridors are used as both routes for international transit and routes for domestic truck routes, such that international/regional hubs shall support the integration of more cargo flow along the routes by adding domestic cargo onto the transit cargo. On the other hand, some provincial hubs may have unique potential by having multi-modal transport.

In accordance with population and economic growth in Zambia and neighbouring countries, in particular border areas, goods distribution volume may gradually increase due to the country's geo-location. This development requires logistics with lower costs and more stable systems to serve the border areas. Low labour, land and construction cost advantages in Zambia will enhance the potential to attract inventory and storage function to Zambia to serve the border areas at a lower cost.

STRATEGY 4: MARKET EXPANSION

Market accessibility is a key issue in creating business opportunities and competition that can lead to good services provided to customers. Liberalising market accessibility can boost business participation. This strategy will aim at expanding the logistics market to be served by logistics businesses in Zambia.

The logistics business in Zambia mainly targets import, export and transit cargo confined to the Zambia logistics market. Despite the increase in logistics volume from current levels, the logistics market in Zambia is limited in size due to the country's small population and economic size; it shows little promise of a major expansion in the future compared to neighbouring countries.

Instead of the logistics market being limited to Zambia, there is a promising large market in SADC. Zambia is a top runner in leading seamless cross-border transport among SADC countries with bi-lateral transport agreements with all surrounding countries.

Utilising this advantageous position in cross-border transport, Zambia should basically implement the following strategic actions;

- Use ZCL as a special purpose vehicle for market expansion - ZCL had plans to establish offices in Namibia, Mozambique and Angola in its 2016-2021 Strategic Plan. However, this had not been achieved so far. This plan should be rolled out to enable the company to progressively open offices at Walvis Bay in Namibia, Beira in Mozambique and Lobito in Angola respectively. This action should be complemented with attendant infrastructure development or improvement on the Katima Mulilo - Walvis Bay route, Katete –Chanida - Beira route and the Chavuma – Jimbe – Angola route.

  Currently, ZCL handles transportation of cargo from Dar-es-Salaam Port by road and rail to inland countries of Zambia, DRC and Malawi. With the establishment of its presence in Namibia, Mozambique and Angola, this will spur increase in trade between Zambia and the three countries and the number of alternative outlets to the sea for Zambian exports and imports. Conversely, exporters and importers in those countries are likely to use ZCL to provide the logistics services hence enhancing Zambia's profile as a logistics service provider in the SADC region.

- Domestication of the provisions of the SADC Protocols on trade and transport - Zambia is a member of the SADC and has assented to the SADC protocols on trade and transport, as well as multilateral and bilateral agreements on cross-border transportation with its neighbours. It is necessary to domesticate these protocols, to facilitate implementation. The SADC Protocol on trade is an agreement between SADC Member States to reduce customs duties and other non-tariff barriers to trade on imported products from each other. It is therefore important that Zambia domesticates the Protocol and adheres to its Provisions. For instance, SADC Member States have agreed to eliminate all NTBs and not impose any new ones. This means that Zambia should religiously adhere to this Protocol and not introduce new NTBs. The Protocol on Transport, Communications and Meteorology encourages Member States to promote an integrated, multimodal transport system throughout the region that remains efficient, reliable, economically viable, and environmentally responsible. This requires harmonisation of regional policy on transport, with coherent frameworks for institutions and strategies for implementation. The Protocols also provide for Member States to cooperate on the development of a transport network aimed at ensuring the free movement of people and goods through the region, particularly from landlocked Member States to seaports located in coastal Member States. Funding for transport infrastructure will initially be provided by Governments in the region but this will eventually be financially self-sustaining through private sector investment and user-pays principles.

  It is necessary to develop cross-border capacity in terms of facilities and human resources as well as to monitor the current status of the agreements to identify the reasons why they aren't actively implemented for strengthening and monitoring of the SADC protocols implementation, and implementing a Cross-Border (Customs) Checkpoints Standardisation Programme.

  - SADC Protocols Strengthening and Implementation Monitoring Programme: This programme aims to advance the implementation of the agreements by clarifying concrete actions to be taken so as to activate the agreements based on clarification of constraints to implementation of the agreements. The Zambian Government should take initiative to set up consultation meetings among SADC countries to jointly review the current status of the agreements and refine the road map towards the implementation of the agreements among SADC countries. Accordingly, actions aimed at the following should be pursued:

    - Consultation Meeting on SADC protocols and bi-lateral/multilateral agreements among SADC countries; and
    - Development of revised milestones.

  - Cross-Border Customs (Checkpoints) Standardisation Programme: It is unfortunately pointed out that current cross-border procedures largely reflect local conditions at any border point, such that it seems they are not standardised in Zambia. It is of great importance that Zambia offers more standardised cross-border operations to ensure service reliability at border crossings. In this regard, the programme should focus on the following aspects:

    - Standardisation of customs opening time;
    - Standardisation and harmonisation of procedures;
    - Standardisation and upgrading of border facilities;
    - Improving the pre-notice system for overtime customs operation; and
    - Cross-Border Points Development Project.

    This programme aims to increase cross-border points to further facilitate land transport. The programme is mainly to upgrade and improve existing local cross-border points into international cross-border points for transit transport in SADC. The focus will be given to the points which can contribute to cargo flow integration, i.e., those that can contribute to increased transport volume along the North-South and the Dar es Salaam routes. The candidate cross-border points are:

- Kipushi border in North Western Province with the DRC; and
- Lusintu border in Eastern Province with Malawi.

- Customs Facilitation Programme: This programme aims to promote external trade by facilitating the customs of Zambia in the short term. For this purpose, it is important to provide quicker customs procedures with a more simplified and transparent procedure by measures, such as:

  - Standardisation of customs services;
  - Decentralisation of task responsibility to site office;
  - Introduction of green channel system with more use of risk assessment;
  - Quality control of customs broker by introducing license system; and
  - Capacity development of customs staff.

  The implementation of Zambia's Electronic Single Window by the Zambia Revenue Authority has come to a halt. This effort to promote the National Single Window in Zambia needs to be accelerated in order to create easier, faster, more stable, and transparent cross-border and trade procedures. For this purpose, it is important to take the following measures:

  - Complete the connection of Agencies to the Single Window;
  - Quickly roll out the new Customs Management System; and
  - Digitisation of other cross-border documentation.

  In the near future, it is also necessary that SADC countries integrate cross-border information national systems into a SADC wide system to enable SADC countries to quickly exchange necessary information. This would foster quicker and more stable and transparent cross-border inspections in SADC countries.

In conclusion, the thrust of this Strategy is to create an efficient logistics system that caters to stimulate value addition in the Zambian economy to contribute effectively to economic diversification and growth. This Strategy, in conjunction with other government policy pronouncements such as the National Transport Master Plan, will provide for inter-linkages among the four modes (rail, road, air and water) of transport and ultimately transform Zambia into a regional logistics services hub in SADC region. The Strategy will further introduce institutional and regulatory policy reforms in the logistics sector for improved implementation capacity and greater coordination at all implementation levels. The successful implementation of this strategy will largely depend on robust resource mobilisation and commitment from sector players.

7. Implementation of Strategy

NTLS has a ten-year implementation period from 2021-2030. The framework for the implementation of the strategy includes principle strategies, sub-strategies, strategic measures or actions, monitoring indicators, responsible institutions and cost estimates. The baseline of indicators for NTLS should be set up and annual targets should be monitored. The annual targets will be derived after baseline studies have been conducted during the first year of implementation of this strategy. Given the dynamic and ever-changing nature of the logistics industry, the implementation plan will be reviewed regularly to ensure that it remains current with the changing landscape.

A Critical Path Analysis reveals that, besides few quick wins to start with, the urgent need for structural interventions in the logistics and commerce sector needs to be addressed upfront given the industry's disjointed regulation, the need for an efficient institutional framework for effective coordination between government actors and other stakeholders, and the sector's fragmented policy landscape. Such structural changes are required to be a priority intervention which will encompass regulatory reviews, drafting and enacting revamped regulatory regimes, and policy reforms to achieve the integration of logistics services, streamlining the entry and operational restrictions and regulating the access and use of infrastructure to provide services. A timeframe of 1-2 years is reasonable to achieve the intended structural reforms.

Simultaneously, the work on fourth strategic intervention to expand the regional market by creating business opportunities and competition through SADC Protocols needs to be taken up. Strengthening and Implementation Monitoring Programme, Cross-Border Customs (Checkpoints) Standardisation Programme and Customs Facilitation Programme will start early and should be achieved over the duration of NTLS.

Third strategic intervention on developing and strengthening transport and logistics infrastructure is also a long-drawn process starting from the conceptualisation and pre-feasibility level analysis to feasibility, detailed designing, arranging the financing and implementation/construction stages. Initial three years of NTLS will be required to prepare the key identified transport and logistics infrastructure projects ready for implementation/construction and the remaining seven years to construct such infrastructure. Given the limited resources available to spend on these projects, it will be necessary to prioritise each project in terms of its relevance to accomplishing NTLS' strategic goals. Furthermore, in light of the national economy's setbacks as a result of the COVID-19 pandemic, investment in some hard trade logistics infrastructure may be considered an immediate priority and undertaken for quick implementation/construction in order to script the economic recovery, as such investments will generate income and jobs in the short to medium term through the multiplier effect.

Second strategic focus area, namely, business stimulation, should begin after structural reforms and continue for the time period specified in the NTLS. It will encompass the creation of an enabling environment for attracting foreign logistics business (through a Foreign Investment and Partnership Promotion Programme and Logistics Business Deregulation Programme), strengthening of domestic logistics business (through Leading Company Cultivation Programme, New Business Incubation Programme, Business Matching and ICT Programmes, Cargo Liability Development Programme, and Capacity Development Programme) and strengthening of logistics administration. All these programmatic interventions will require conceptualisation, defining the scope and programme design before the implementation. The conceptualisation, scoping and designing of programmes should be done in the third year while the implementation should be achieved in the remaining seven years.

All in all, the initial two years of the implementation of NTLS will be used for structural reforms followed by other interventions as depicted in the Critical Path Analysis (Figure 7-1).

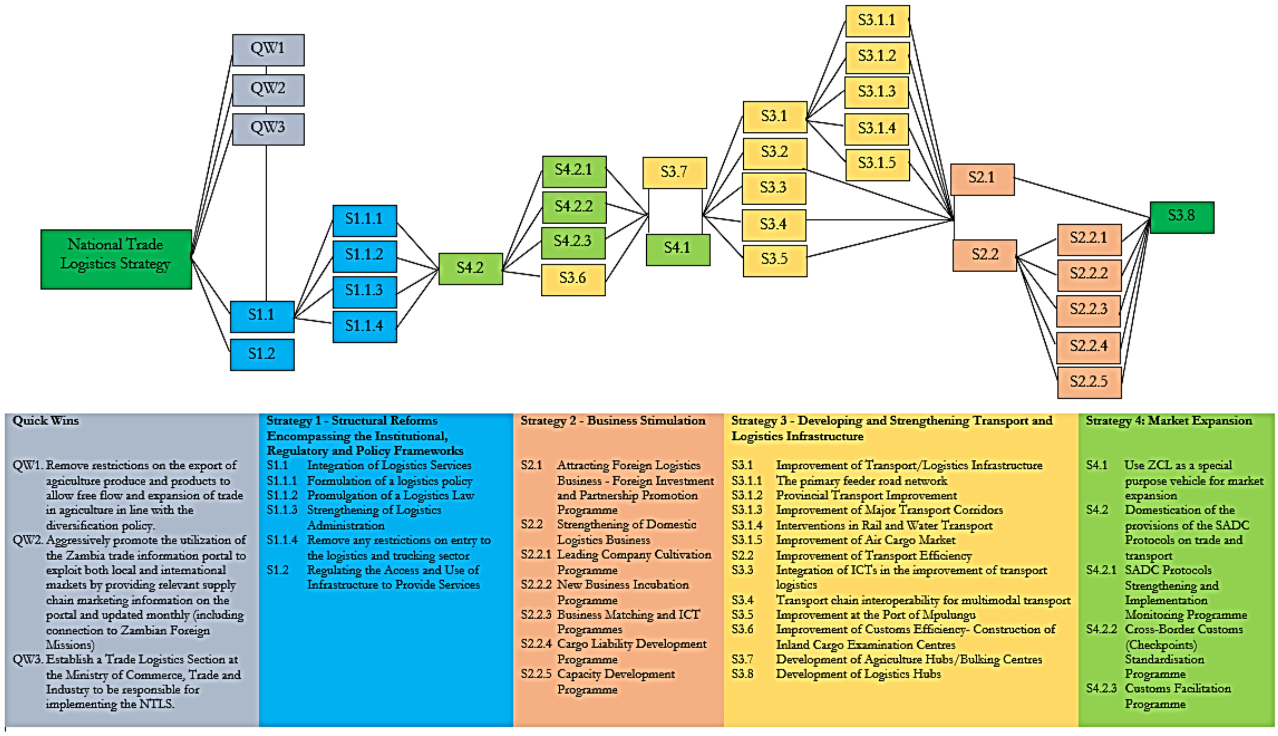


Figure 7-1: Critical Path Analysis

The performance of the Strategy will be measured through monitoring and evaluation activities to be undertaken periodically by respective sector actors.

Table 7-1: Implementation Plan

Strategy	Recommended Measures	Years									
		1	2	3	4	5	6	7	8	9	10
Quick Wins	QW1. Remove restrictions on the export of agriculture produce and products to allow free flow and expansion of trade in agriculture in line with the diversification policy.										
	QW2. Aggressively promote the utilization of the Zambia trade information portal to exploit both local and international markets by providing relevant supply chain marketing information on the portal and updated monthly (including connection to Zambian Foreign Missions)										
	QW3. Establish a Trade Logistics Section at the Ministry of Commerce, Trade and Industry to be responsible for implementing the NTLS										

Strategy	Recommended Measures	Years									
		1	2	3	4	5	6	7	8	9	10
Strategy 1: Structural Reforms	S1.1 Integration of Logistics Services S1.1.1 Formulation of a logistics policy S1.1.2 Promulgation of a Logistics Law S1.1.3 Strengthening of Logistics Administration S1.1.4 Remove any restrictions on entry to the logistics and trucking sector										
	S1.2 Regulating the Access and Use of Infrastructure to Provide Services										

Strategy	Recommended Measures	Years									
		1	2	3	4	5	6	7	8	9	10
Strategy 2: Business Stimulation	S2.1 Attracting Foreign Logistics Business - Foreign Investment and Partnership Promotion Programme										
	S2.2 Strengthening of Domestic Logistics Business S2.2.1 Leading Company Cultivation Programme S2.2.2 New Business Incubation Programme S2.2.3 Business Matching and ICT Programmes S2.2.4 Cargo Liability Development Programme S2.2.5 Capacity Development Programme										

Strategy	Recommended Measures	Years									
		1	2	3	4	5	6	7	8	9	10
Strategy 3 - Developing and Strengthening Transport and Logistics Infrastructure	S3.1 Improvement of Transport/Logistics Infrastructure S3.1.1 The primary feeder road network S3.1.2 Provincial Transport Improvement S3.1.3 Improvement of Major Transport Corridors S3.1.4 Interventions in Rail and Water Transport S3.1.5 Improvement of Air Cargo Market										
	S3.2 Improvement of Transport Efficiency										
	S3.3 Integration of ICTs in the improvement of transport logistics										
	S3.4 Transport chain interoperability for multimodal transport to improve the interoperability of the transport system in Zambia										
	S3.5 Improvement at the Port of Mpulungu										
	S3.6 Improvement of Customs Efficiency- Construction of Inland Cargo Examination Centres										
	S3.7 Development of Agriculture Hubs/Bulking Centres										
	S3.8 Development of Logistics Hubs										
	S4.1 Use ZCL as a special purpose vehicle for market expansion										

Strategy	Recommended Measures	Years									
		1	2	3	4	5	6	7	8	9	10
Strategy 4: Market Expansion	S4.2 Domestication of the provisions of the SADC Protocols on trade and transport S4.2.1 SADC Protocols Strengthening and Implementation Monitoring Programme S4.2.2 Cross-Border Customs (Checkpoints) Standardisation Programme S4.2.3 Customs Facilitation Programme										

8. Coordination and Monitoring Framework

The NTLS is the culmination of a process involving consultations with various stakeholders, both public and private. The Strategy's vision, as well as its contribution to the country's development framework and Vision 2030, are dependent on its effective implementation. The NTLS, therefore, includes institutional and operational arrangements for implementation, communication and consultation.

8.1 INSTITUTIONAL FRAMEWORK AND COORDINATION

The Service Delivery and Strategy Support Network, which are made up of public and private sector organisations as well as non-governmental organisations, will be involved in the coordination and management of the Strategy. To provide oversight on the implementation of the Strategy and other logistics system implementation features, a high-level permanent Trade Logistics Committee comprised of government institutions and the private sector should be established. It is recommended that the High-Level Committee should meet at least quarterly.

The Sub-Committees should be established which are programme focused such as Transport and Logistics Committee (GRZ, transport operators, warehouses, terminals, freight forwarding agents; ICTs and Finance (GRZ, Banks, ICT Service Providers); Trade Corridor Facilitation (GRZ, Customs, OSBP).

The Sub-Committees should meet at least once a month to address any impediments experienced during the implementation of the Strategy.

8.2 STRATEGY SUPPORT NETWORK

The Strategy Support Network includes relevant government ministries, statutory bodies and agencies, private sector, associations and other cooperating partners as identified below:

- Government Ministries (MCTI, MTL, MoA, MFL, MoF);
- Statutory Bodies and Agencies (ZRA, ZDA, RTSA, RDA, etc.);
- Associations (ZACCI, ZNFU, ZAM, NGOs);
- Shippers Council, Clearing and Forwarding Association, Transporters (road, rail, air, water) Farmers' Organisations, Chamber of Commerce and Industry; CPs, NGOs; and
- Zambia Airports Corporation.

8.3 OVERALL COORDINATION OF THE STRATEGY

The Ministry of Commerce, Trade and Industry, which is in charge of trade policy formulation and monitoring, and the Ministry of Transport and Logistics, which is a leader in one of the key drivers of logistics performance, will lead the Strategy Support Network in coordination, with the strengthened High-Level Logistics Committee taking the lead. The Committee will, from time to time, consult with the two ministries.

It is proposed that the Ministry of Commerce, Trade and Industry establishes a Logistics Section under Foreign Trade Department to liaise on a day-to-day basis with the High-Level Logistics Committee and to serve as the Secretariat of the High-Level Committee. The High-Level Logistics Committee will then report to the Inter-Ministerial Coordination Committee constituted by the two ministries and co-chaired by MCTI and MTL. The lead agency on trade issues will be MCTI, while the lead agency on logistics issues will be MTL.

8.4 MONITORING AND EVALUATION

The implementation of the National Trade Logistics Strategy will need a monitoring and evaluation framework to guarantee the following:

i. Its regular implementation by the high-level permanent committee of all stakeholders.
ii. Achievement of planned objectives.
iii. Correcting any deviations from the plan.

Respective Project Implementation Units (PIUs) for proposed interventions will be responsible for the M&E system, including data collection for monitoring purposes. The PIUs will provide progress reports to the Subcommittees and High-Level Logistics Committee every quarter, documenting progress toward achievement of the objectives of the proposed interventions using the indicators and strategic actions outlined in the implementation plan. The indicators include the key outputs and outcomes documenting the expected results with regard to improved efficiency, capacity, and range of available services of the trade logistics system in Zambia. In addition, a number of intermediate indicators will be utilised to track progress toward the objectives, and baseline data will be obtained for the success of plan implementation if it is not already available.

8.5 PROGRESS MONITORING INDICATORS

Table 8-1 below describes the framework to monitor the implementation of NTLS. More fine-tuned programmes/interventions specific monitoring indicators will be designed at the stage of detailed planning and designing of such programmes/interventions.

Table 8-1: Monitoring Implementation of NTLS in Terms of Outputs and Outcomes

Strategy	Recommended Measures	Output Indicators	Outcome Indicators
Strategy 1: Structural Reforms encompassing the institutional, regulatory and policy frameworks	Integration of logistics services	• Logistics policy in place • Logistics law enacted • Revamped/refined the administrative framework for coordination among institutions and agencies;	• Growth in logistics industry; • Improved business confidence; • Investment in logistics industry; • Improved efficiency of logistics industry in terms of reduced cost of logistics and cargo time; • Unbiased access and use of infrastructure to service providers • Increase in trade; • Improved LPI ranking; and • Diversification in economy.
	Regulating the access and use of infrastructure to provide services	• Enabling regulation on access and use of infrastructure to provide logistics services is in place.	
Strategy 2: Business Stimulation	Attracting Foreign Logistics Business *Foreign Investment and Partnership Promotion Programme*	Design and delivery of targeted programme achieved.	Number of foreign firms entered the logistics market and the quantum of investment increased.
	Strengthening of Domestic Logistics Business.	Design and delivery of targeted programmes achieved.	• Number of domestic logistics businesses in the country;

Strategy	Recommended Measures	Output Indicators	Outcome Indicators
	Leading Company Cultivation Programme *New Business Incubation Programme* *Business Matching and ICT Programmes* *Cargo Liability Development Programme* *Capacity Development Programme*	Level of IT penetration in domestic firms	• Share of domestic firms in logistics business in terms of annual turnover and the quantity cum value of cargo handled; and • Capacity of domestic firms in terms of capital invested, IT enabled operations and employment generated.
Strategy 3: Developing and Strengthening Transport and Logistics Infrastructure	m	Identified transport/logistics infrastructure/facilities getting planned, designed and constructed.	• Growth in logistics industry; • Investment in logistics industry • Improved efficiency of logistics industry in terms of reduced cost of logistics and cargo time • Increase in trade • Improved LPI ranking
	Improvement of Transport Efficiency.	Design and delivery of targeted interventions achieved.	Transport volume per trip by trucks and reduction in transport/logistics costs
	Integration of ICTs in the improvement of transport logistics	Level of IT penetration in domestic firms	Capacity of domestic firms in terms of IT enabled operations and efficiency achieved
	Transport chain interoperability for multimodal transport	Multimodal transport system established	• Improved efficiency of logistics industry in terms of reduced cost of logistics and cargo time • Increase in trade • Improved LPI ranking
	Improvement at the Port of Mpulungu	Improvements at the post executed	• Improved efficiency of logistics industry in terms of reduced cost of logistics and cargo time • Increase in trade • Improved LPI ranking
	Construction of Inland Cargo Examination Centres	Inland Cargo Examination Centres constructed	Improvement in Customs Efficiency
	Development of Agriculture Hubs/Bulking Centres	Agriculture Hubs/Bulking Centres constructed	• Increase in agro-trade • Improved income of farmers
	Development of Logistics Services Hubs	Logistics hubs getting planned, designed and constructed.	• Growth in logistics industry; • Investment in logistics industry; • Improved efficiency of logistics industry in terms

Strategy	Recommended Measures	Output Indicators	Outcome Indicators
			of reduced cost of logistics and cargo time; • Increase in trade; • Improved LPI ranking; and • Diversification in economy.
Strategy 4: Market Expansion	Use ZCL as a special purpose vehicle for market expansion	Re-oriented business model of ZCL	• Growth in logistics industry; • Size of Zambian logistics industry in the region; • Increase in trade; • Improved LPI ranking; and • Diversification in economy.
	Facilitation of SADC Protocols and Customs		
	SADC Protocols Strengthening and Implementation Monitoring Programme	Design and delivery of targeted programmes and interventions achieved.	• Growth in logistics industry; • Size of Zambian logistics industry in the region; and • Increase in trade
	Cross-Border Customs (Checkpoints) Standardisation Programme		
	Customs Facilitation Programme		

9. Investment Plan

The NTLS assumes an open investment climate environment where the private sector will be encouraged to participate in Zambia's national logistics services provision. Various policy pronouncements and incentives shall be given to the private sector in order to stimulate participation as well as strengthen the capacities of domestic private sector players in the logistics subsector in order to make Zambia a logistics services hub in the region. Besides this, proposed interventions are aimed at structural reforms and a number of advisory services will be required for this purpose. Except for the proposed logistics hubs in the NTLS, which are new proposal, most of the transportation infrastructure that needs to be strengthened/developed has been planned in the National Transport Plan.

Cost estimates in Table 9-1 below have been made on the basis of experience from other Zambian policy documents, other documents from international financial institutions and the experience of the consultant. Likely sources of funding are also indicated in the table.

Table 9-1: Investment Plan and Funding Options

Strategy	Recommended Measures	Scope	Million (USD)				Likely Source of Funding
			(1-2 years)	(3-6 years)	(6-10 year)	Total	
Strategy 1: Structural Reforms encompassing the institutional, regulatory and policy frameworks	Integration of logistics services	Advisory services for structural reforms over two year period	10.00	0.00	0.00	10.00	Development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia
	Regulating the access and use of infrastructure to provide services						
Strategy 2: Business Stimulation	Attracting Foreign Logistics Businesses						
	Foreign Investment and Partnership Promotion Program	Designing the promotion program and its implementation (Advisory services will be required)		10.00	10.00	20.00	Development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia
	Strengthening of Domestic Logistics Businesses						
	Leading Company Cultivation Program	Programs designs and implemetation (Advisory services will be required). Besides that financial assistance needs to be earmarked for strengtheing the domestic logistics businesses in coordination with financial institutions in the country		12.00	13.00	25.00	Development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia as well as involving the financial institutions in the country to make funds available for domestic logistics businesses
	New Business Incubation Program			12.00	13.00	25.00	
	Business Matching and ICT Programs			5.00	5.00	10.00	
	Cargo Liability Development Program			3.00		3.00	
	Capacity Development Program			5.00	5.00	10.00	

Strategy	Recommended Measures	Scope	(1-2 years)	(3-6 years)	(6-10 year)	Total	Likely Source of Funding
Strategy 3: Developing and Strengthening Transport and Logistics Infrastructure	Improvement of Transport/Logistics Infrastructure	Planning and designing and construction of Transport/Logistics Infrastructure	15.00	Construction costs to be estimated based on feasibility studies			Development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia
	Improvement of Transport Efficiency.	Planning, designing and construction of identified Transport/Logistics Infrastructure	5	10	10	25.00	
	Integration of ICTs in the improvement of transport logistics	Advisory services plus information sharing apparutus	2.00	4.00	3.00	9.00	
	Transport chain interoperability for multimodal transport	Planning and designing and construction	2.00	Construction costs to be estimated based on feasibility studies			
	Improvement at the Port of Mpulungu		2.00				
	Construction of Inland Cargo Examination Centres		2.00				
	Development of Agriculture Hubs/Bulking Centres		2.00				
	Development of Logistics Services Hubs		3.00	Only feasibilitie studies by the overnment. Prvate sector to invest			
Strategy 4: Market Expansion	Use ZCL as a special purpose vehicle for market expansion		3.00	4.00	3.00	10.00	Development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia
	Facilitation of SADC Protocols and Customs						
	SADC Protocols Strengthening and Implementation	Programs designs and implemetation (Advisory services will be required)	3.00	4.00	3.00	10.00	
	Cross-Border Customs (Checkpoints)		3.00			3.00	
	Customs Facilitation		3.00			3.00	
					Grand Total (Million USD)	**163.00**	

Resource mobilization for the implementation of NTLS is to come from development partners such as the World Bank with counterpart funding through budgetary allocations by the Government of Zambia as well as investments by the private sector.