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DEPARTEMENT DE GEOGRAPHIE
****

THE UNDEREXPLOITED TIKO SEAPORT AND ITS IMPACT ON THE DEVELOPMENT OF TIKO TOWN, SOUTH WEST REGION, CAMEROON

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By:

TUTUWAN DOBGIMA RALPH

(B.A in Geography)

JURY

POST	NAME	RANK
PRÉSIDENT:	**OJUKU TIAFACK,**	**(PROFESSOR) UY1**
SUPERVISOR:	**TENDE RENZE TCHIAFOGWE**	**(CC) UY1**
EXAMINER:	**ABOSSOLO SAMUEL AIME**	**(MC) UY1**

June 2024

DEDICATION

To

my parents, Johnson Doh Tutuwan and Emilia Navomah Tutuwan who gave me their support tirelessly to see that, I attain this level of education.

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ABSTRACT

The Tiko seaport is supported by port infrastructure and plays a crucial role in enhancing socio-economic development. However, the poor state of the port infrastructure which has been abandoned are in dilapidated state, has adversely affected the port operation. Emerging challenges which range from illicit trade, port congestion, competition and corruption have bog down the operation of the port. These constraints stand as a stumbling block to the efficient performance of the port. It is against this backdrop that this work set out to investigate the under exploitation of the Tiko seaport. Three hypotheses were stated to guide this study. Research methods and techniques adopted and employed led to collection of data, processing and analysis. Secondary data were gotten from published and unpublished documents and from various documentation centers. Primary data were gleaned from field survey where a total 247 respondent provided responses following convenient chosen sample size. Supplementary primary data were obtained from interviews, focus group discussions and field observation. Inferential and descriptive statistics were used, this paved the way discussion of data. This enabled the drawing up of important conclusions at the end of each chapter and then a general conclusion. The outcome of the data collected, processed and interpreted in the three chapters of the findings revealed that the port infrastructure in Tiko sub-division constitute harbour, ships/boats, wharfs, crane, jetties and associated road transport infrastructure as well as soft infrastructure. Base on respondent's perception on the state of port infrastructure, the scores for state of port infrastructure ranges from poor 54.2%, very poor 35.2%, good 8.9%, very good 1.6%. The results on the implications of Tiko port on socio-economic development show that imports and export trade made up 39.6%, tax revenue 30%, job creation to transporter 16.9%, job creation to unskilled labourers 14.1%. Findings on the main goods imported revealed that cars constitute 25%, spear parts 21%, electronics 18%, clothes 15%, drinks 12%, and jewels 9%. While results on exports show that the inhabitants of Tiko export mainly agricultural produce where palm oil stood at 31%, banana 24%, yam 19%, cocoa 16%, egussi 10%. The outcome on the emerging challenges revealed that the challenges ranges from illicit trade 40%, port congestion 25%, competition 19%, insecurity 11% and corruption 5%. The results of the study also show that management strategies have been put in place by the state in order to overcome the challenges affecting operation of the Tiko seaport by fighting against corruption, patrolling Cameroon coastal water by the Cameroon Navy, and enforcing international cooperation to combat maritime in Cameroon territorial water. The study recommends that the port infrastructure of Tiko should be up graded and modernizes in order to attract investors. More investment should be carried out in the port by investing on port infrastructure. Also, intermodal transport should be developed by constructing roads and railways. Illicit trade should be combated by tightening port security and effective control on the coastal water. Corruption in the port should by combated at all levels.

KEY WORDS: Port infrastructure, port operation, socio-economic development, emerging challenges, Tiko.

RESUME

Le port maritime de Tiko est soutenu par l'infrastructure portuaire et joue un rôle crucial dans l'amélioration du développement socio-économique. Cependant, le mauvais état de l'infrastructure portuaire qui a été abandonnée est dans un état délabré, a nui à l'exploitation Portuaire. Les défis émergents, qui vont du commerce illicite, de la congestion portuaire, de la Concurrence et de la corruption, ont entamé l'exploitation du port. Ces contraintes sont une pierre d'achoppement pour la performance efficace du port. C'est dans ce contexte que ce travail a pour but d'enquêter sur la sous-exploitation du port maritime de Tiko. Trois hypothèses ont été énoncées pour guider cette étude. Les méthodes et techniques de recherche adoptées et employées ont conduit à la collecte, au traitement et à l'analyse des données. Des données, secondaires ont été obtenues à partir de documents publiés et non publiés et de divers centres de documentation. Les données primaires ont été extraites d'une enquête sur le terrain où un total de 247 répondants ont fourni des réponses en suivant la taille d'échantillon appropriée choisie. Des données primaires supplémentaires ont été obtenues à partir des interviews, les discussions et les observations sur le terrain. Des statistiques inférentielles et descriptives ont été utilisées, ce qui a ouvert la voie à la discussion des données. Cela a permis l'élaboration des conclusions importantes à la fin de chaque chapitre, puis une conclusion générale\Les résultats des données recueillies, traitées et interprétées dans les trois chapitres des conclusions ont révélé que l'infrastructure portuaire d'arrondissement de Tiko constitue un port, des navires/bateaux, des quais, des grues, des jetées et une infrastructure de transport routier associée ainsi qu'une infrastructure douce Sur la base de la perception du répondant sur l'état de l'infrastructure portuaire, tes scores pour l'état de l'infrastructure portuaire varient de mauvais 54,2 %, très mauvais 35,2 %, bon 8,9 %, très bon 1,6 %. Les résultats sur les implications du port de Tiko sur le développement socio-économique montrent que les importations et le commerce d'exportation se sont élevés 39,6%, les recettes fiscales 30%, la création d'emplois pour les transporteurs 16,9%, a création d'emplois pour les travailleurs non qualifiés 14,1%. Les résultats sur les principaux biens importés ont révélé que les voitures constituent 25 %, deş pièces de lance 21%, l'électronique 18%, les vêtements 15%, les boissons 12%, et les bijoux 9%. Alors que les résultats sur les exportations montrent que les habitants de Tiko exportent principalement des produits agricoles où l'huile de palme se représentait à 31%, la banane 24%, l'igname 19%. Le cacao 16%. egussi 10%. Les résultats sur les défis émergents ont révélé que les défis vont du commerce licite 40%, de la congestion portuaire 25%, de la concurrence 19%, de l'insécurité 11% et de la corruption 5%. Les résultats de l'étude montrent également que des stratégies de gestion ont été mises en place par l'état afin de surmonter les défis qui affectent l'exploitation du port maritime de Tiko en luttant contre la corruption, en patrouillant l'eau côtière du Cameroun par la marine camerounaise et en faisant application de la coopération internationale lutter contre la navigation maritime dans l'eau territoriale du Cameroun. L'étude recommande que l'infrastructure portuaire de Tiko soit améliorée et modernisée afin d'attirer les investisseurs. Plus d'investissements devraient être réalisés dans le port en investissant dans l'infrastructure portuaire. En outre, le transport intermodal devrait être développé par la construction des routes et le chemin de fer. Le commerce illicite devrait être combattue en renforçant la sécurité portuaire et en contrôlant efficacement les eaux côtières. La corruption dans le port devrait être combattue à tous les niveaux.

MOTS CLÉS : Infrastructure portuaire, exploitation portuaire, développement socio-economique, défis émergents, Tiko.

LIST OF ABBREVIATIONS

AICD : Africa Infrastructure Country Diagnostic

ADF : French Development Agency

BSA : Special Amphibious Battalion

BUCREP : Central Bureau of Census and Population Studies

CDC : Cameroon Development Cooperation

CEMAC : Central Africa Economic and Monetary Community

CRTV : Cameroon Radio Television

ECLAC : Economic Commission for Latin America and the Caribbean

ECOWAS : Economic Commission of West African State

FALSS : Faculty of Arts, Letters and Social Sciences

FCFA : Franc Communauté Financière Africaine

GGC Gulf of Guinea Commission

GPS : Global Positioning System

ICTs : Information and Communication Technology

NIC : National Institute of Cartography

OECD : Organisation for Economic Cooperation and Development

PAL : Port Authority of Limbe

SDGs : Sustainable Development Goals

TC : Tiko Council

UNCTAD : United Nations Conference on Trade and Development

WHO : World Health Organisation

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GENERAL INTRODUCTION

0.1 Background to the study

Seaports are interfaces between several modes of transport and thus they are centers for combined transport. Furthermore, they are multifunctional markets and industrial areas where goods are not only in transit; but they are also sorted, manufactured, and distributed. Seaports are also multi-dimensional systems, which must be integrated within logistic chains to fulfill properly their functions. Seaports are such an integral part of international trade that, any mention of ports conjures images of wealth, high–earning jobs and economic development of the regions they are situated. Yet the truth is that; some ports such as those of Rotterdam, Singapore and Hong Kong are more successful in this respect than the ports of Tiko, Mombasa and Dar es Salaam. For a port to be efficient, it requires not only infrastructure and equipment, but also adequate connections to other transport modes, a motivated management and most importantly qualified workers or employees (UNCTAD, 2013).

According to Jean Paul Rodrigue (2014), seaports have a long history going back to the early days of human endeavors. As soon as civilizations emerged across the world, trade networks supported by ports emerged as well. Although maritime technology has evolved substantially, the role and function of ports remain relatively similar. Conventionally, a port is defined as a transit area, a gateway through which goods and people move from and to the sea. It is a place of contact between the land and maritime space, a node where ocean and inland transport systems interact, and a place of convergence for different transportation modes. Since maritime and inland transportation modes have different capacities, the port assumes the role of a point of load break where cargo is consolidated. Ports are very important for the support of economic activities in the hinterland since they act as crucial connections between sea and land transport. Seaports are means of integration into the global economy. Trade carried out at ports and by employing seaway transportation has a direct effect on the macro economy of any country and is one of the factors affecting the country's economic development. Ports can also be defined by different approaches that are geographical, economic and institutional. It is a place of exchange land sea that is a geographical area to receive ships and goods.

It is a complex system composed of material and immaterial elements which involved the transshipment of persons or goods between land and water. Institutionally, a port is a place on the coast designed by components and administrative authority to serve the purpose of

sea–born trade. According to McMahon (2022), a seaport is a facility that can accommodate ships that go out to sea. Seaports are such an integral part of international sea born trade that any mention of ports conjures images of wealth, high–earning jobs and economic development of the regions they are situated. Seaports seem always to have been at an advantage when compared with those regions which are not situated by the sea or on rivers and the former have always been characterized by a relatively high standard of living which has also been reflected in their cultural achievement (Vleugels, 2010). Seaports can be found in natural and artificial harbors along many coastlines in the world, and they have a variety of fixtures including cranes to help ships handle cargo and docks for ships to attach to.

Seaports are of economic and strategic importance to the nations which hold them because they can be used for everything from shipping out a nation's consumer products to loading up troop ships to sail to war. Ports can also be found in inland waters such as lakes and rivers, but they are not known as seaports because they do not have facilities for seagoing ships. In some cases, inland ports have no outlet to the ocean, and in other instances, the waterway may not be navigable by oceangoing ships. Not all seagoing ships can fit in a seaport, either large oil tankers, for example, dock offshore while smaller tenders load and offload their cargo.

This research seeks to know the effects of an unexploited seaport on the development of the town in which it is found. Emphasis will be on the Tiko seaport and how her un-exploitation has affected the development of the town. This will be seen economically, socially and culturally. Cameroon is a pivotal place within Central Africa's economic grouping, providing important access roads to seaports in the Gulf of Guinea for its landlocked neighbors. Cameroon serves as a locomotive, if not almost the only country in the area which exports to all other central African countries, without importing anything from its neighbors. Cameroon is a port state with over 9 ports out of which only a few are operational which are the Douala seaport, the Kribi seaport, the Limbe seaport and the Tiko seaport respectively. Cameroon depends so much on these ports for their physical mobility and the transportation of bulky manufactured goods from Europe that were head loaded to the hinterlands.

The Tiko seaport was constructed by a German plantation company, where several vessels loaded and discharged at the port. It attracted many people from cities to the town of Tiko for employment to improve the lives of their families. Also, this port attracted the

presence of many industries in the area such as the DEN RUBBER COM LTD, and AGRO PALM PLC. This port has kept on giving the locals of the area a feeling of pride and a sense of belonging. The Special Amphibious Battalion (BSA) on her part was anchored at the port during the days of the Bakassi crisis with the Federal Republic of Nigeria in the 80s, as a logistic base for the army to do shipment to and from Bakassi. It should be noted that; the battalion was given the authorization to occupy the space for three years during the Bakassi war by the General Manager of port office of Cameroon, late Tchouta Moussa. In later days, the Battalion Infantry unit of the Rapid Intervention Battalion was created in 1999. The battalion surveys the frontiers of the nation's seashore. The amphibious soldiers carry out spontaneous patrols on the sea to guarantee the security of the population resident around the Tiko port shores. The port's activities declined in the face of increasing competition from Douala, Limbe and Kribi but it remains significant as a distributor and a processing center for products grown on plantations to the north. The town’s principal industries include a rubber factory an iron factory and light railway engineering. Ports continue to play economic, social and political roles in any given nation. However, that of Tiko leaves much to be desired.

0.2 Justification of the study

Maritime transport represents a key to economic globalization which is very imperative given the rapid growth of international trade and the world economies at large. In particular, this mode of transport has become indispensable at the Gulf of Guinea serving both landlocked countries and those having access to the sea particularly in international trade, employment creation, transportation of passengers and cargo across the national borders and other related activities. In fact, it has become a new window for the development of foreign economic relationships and trade. In the Cameroon coastal belt, this mode of transport is very crucial especially to trans-border traders and passengers which enhances both the micro and macro economies of this region.

Seaports exploitation is a cause for concern in most developing countries and there still exists limited knowledge on how these sectors operate and the role it plays in the development of the area. The knowledge gap on the policies guiding the exploitation of seaports are issues still to be rectified and requires an accurate analysis. The knowledge of seaport exploitation is essential to improve the development of the area in which the seaport is found and improve the living standard of the citizens through planning policies for sustainable development, and how it is operating, organized and implemented in the area.

The result of this study that is the unexploited Tiko seaport and its effects on the development of the town in the Tiko subdivision is a research work that will benefit policymakers on matters relating to seaport exploitation within the context of development in the Tiko subdivision and beyond, serve as working manual population. The study equally looks at the stake holders involve in development in achieving a sustainable development.

0.3 Delimitation of the study

This study is delimited into thematic, temporal, and spatial delimitation. This helps to contextualized the study and make the various aspects clear on how they will be exploited in the study.

0.3.1 Thematic delimitation

This study is based on seaport exploitation and how it affects the development of the given locality. The study sees how an unexploited seaport affects the development of a given locality and develops a framework on how unexploited seaports can regain their proper exploitation and act as a main actor in achieving the sustainable development of that locality. The work also intends to discuss the issues and challenges of the sustainable exploitation of seaport in general and also explore the factors or difficulties in seaports exploitation perspectives through its mechanisms such as development plans and planning control. By using a context analysis, the work also reviews aspects and criteria in planning seaports and also recommends a frame work of sustainable development for unexploited seaports.

0.3.2 Temporal delimitation

This study takes into consideration an interval from 1980 to 2024. This is because; this period marks the beginning of an economic crisis in Cameroon which gave way to the displacement of so many people into different regions in Cameroon in search of jobs and other facilities as there was the collapse of the transport organ in Cameroon called Societe des Transport Urbaine du Cameroun (SOTUC) which led to the liberalization of the transport sector in Cameroon and made movement easier as different transport means were introduced and led to the influx of many people from the rural areas, especially from the North West to the Fako Division to work in the CDC plantations. This resulted in a massive increase in the population in that area.

Equally, this study takes into account 1980 to the present because, before 1980, the notion of development was still hidden and until after this period, did awareness and responsibilities of

development and the creation of development institutions and development documents began to sink deep inside the minds of the government for the development of an area by their council.

0.3.3 Spatial delimitation of the study

By delimitation, the study area which is the Tiko Sub-division; falls within the administrative boundaries of the Fako Division in the South West Region of Cameroon. It is a coastal town and among the five Sub−divisions in Fako Division. This was founded in the 18th century by a Bakwerian hunter from Molyko during the barter trade period with Douala traders and it is unique in that, it is at the interface of the three major components of the earth's environment Lithosphere, horology and atmosphere.

Tiko municipality is the main entrance gate into the South West region of Cameroon. It covers 484005km (Tiko council, 2016) and is called the entrance gate because it shares boundaries with the southwest and littoral region and it has an estimated population of 59,099 units inhabitants making up the third biggest city in the Southwest region of Cameroon. It is located between latitude 4°0.0 and 4°10.0 north of the equator and longitudes 9°20.0 and 9°30.0 east of the Green which Meridian (Lambi, 2001). It is situated about 33 meters above level and operator in the West Africa Time Zone. It is bounded Northward by Mongo River, West by Ombe River, Northwest by Buea Council, Northeast by Muyuka Council, East by Dibombari Council and South by Bonaberi Council. These areas share a boundary with the Mongo River and Dibombari. This town is made up of four different zones which have been classified under clusters namely; the Mongo zone with areas like Mongo main land, Moguo, Misaka, and Tiko Douala Road including general hospital layout, the Tiko zone with quarters like street one to seven, down beach, Bomal street and CDC camps. The Likomba zone is made up of different quarters like quarters one to seven, the Chombest quarter and the government residential quarter areas. The Mutengene zone is also made up of different quarters like Buea Road and Limbe road. The town has grown and invaded other residential areas like Tiko Douala Road and the hospital layout recently settled.

Figure 1 below shows the delimitation of the locational map of the South West region in Cameroon showing the Fako division and Tiko sub−division in the South West region and Fako Division in Cameroon.

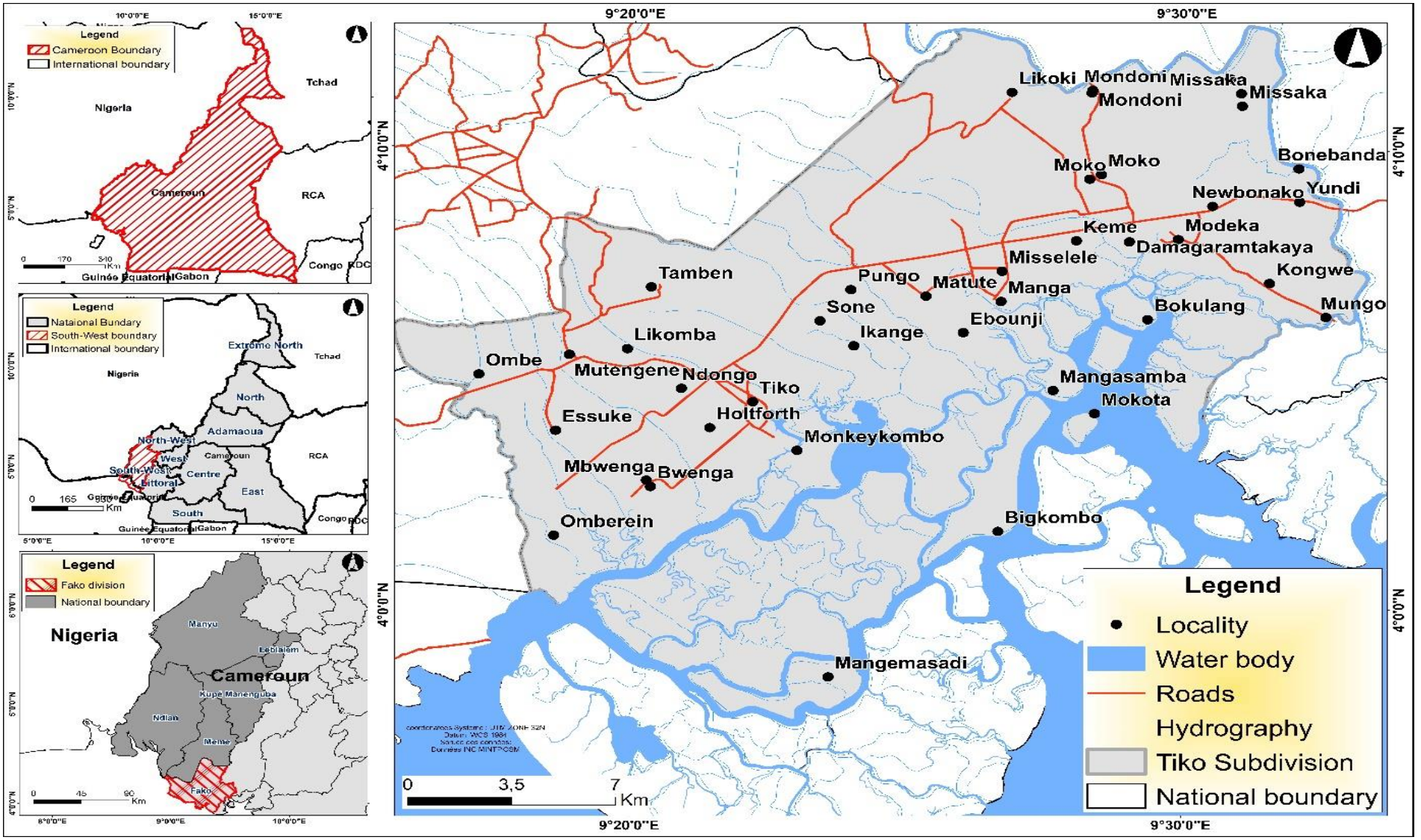


Figure 1: Location of the study area

Source: NIC, 2024

Tiko Sub-division is found in Fako Division, located in the southeast in the South West Region of Cameroon, it is a coastal region and lowland area made up of plains. It is bounded to the north by Meme Division, to the south west by Limbe and to south east by the Littoral Region. The town has one National (National Road Number 2) that run from west of Douala to Tiko passing through Mutengene, leading to some major towns in the South West Region such as Limbe, Buea and Kumba. Many secondary roads run from Tiko linking other north and west of Tiko. Many rivers are found in western part of Tiko with the Atlantic Ocean in the south west of Tiko while in the northeast of Tiko is River Mungo that flows from Wouri in the west to Tiko in the East, the east and southeast is made up of creeks. Most of the settlements in Tiko Sub-division are concentrated in the north and west of Tiko.

0.4 Statement of the research problem

In the current conditions of transformation of the global economic model of world economic relations, the development of an effective logistic infrastructure of seaports is a crucial task for any Country with access to the sea. Most countries that have access to the sea, the economic development of these countries is highly influenced by ports and the efficient functioning of these ports is determined by the state of infrastructure. Rodrigue and notteboom (2020) noted that ports are catalysts for economic development as they enable trade and support supply chain. In developed countries, the exploitation of seaports has been fully exploited though there is still insufficient infrastructure and logistics. These seaports play a big role in the development of their countries. In developing countries, and sub-Sahara Africa in particular seaports are not fully developed to modern standard; to meet the growing volume of trade, it is against this backdrop that developing countries are making relentless effort to improve on their maritime transport infrastructure given the economic importance of seaport.

The Cameroon government has realized the importance of seaports and effort is being made to develop seaports in Cameroon. Camilla (2018) highlighted that Cameroon launched a reform of the maritime sector in 1998, which led to the creation of the Cameroon national port authority which is in charge of defining the strategic policy of the maritime sector and planning the development of port activities in the country. Cameroon has access to the sea and serves as a natural hub in the CEMAC region due to its strategic location with about five ports but only Doula and Kribi seaport have been developed. While other ports such Limbe, Tiko have not been developed and operate mostly as artisanal ports. However, despite the

growing importance of seaports to economic development, Cameroon has not fully exploited her ports potentials as some of the seaport such as Tiko have not be fully exploited and much attention has focused on Doula seaport and recently the Kribi deep seaport. The Tiko Sea seaport was very busy port in the 1960s but after unification in 1972 attention was paid to the Douala seaport. Thus the Tiko Seaport has to decline in its operational and transactional scale. As the port declined, the ports infrastructure was adversely affected because of no maintenance work, this therefore resulted to poor ports infrastructure and circulation of illicit goods due to ineffective functioning of the ports. The under exploitation of Tiko seaport port has led to poor infrastructure, circulation of contraband goods and poor management

In Tiko's seaport, most of the port infrastructure of the Tiko port has been abandoned and left unmaintained and the port depends on the old infrastructure that was implanted during colonial era with little or no maintenance despite the busy nature of the port. As such the port infrastructure is in dilapidating state because most of the port infrastructure and facilities have remain unrepaired and some of the port infrastructures are absent. The port infrastructure and facilities such as warehousing, cargo handling equipment, berthing facilities and vessels are in poor state with cranes almost absent. The port jetty is poor and in deplorable state with stagnant poles of water on the surface. The port also suffers from limited handling equipment such as cranes, reach stackers, forklifts to truck for transportation. Also, accessibility to the port is poor because the port is connected with good road network nor with railway, the maritime transport sector in Tiko seems to be isolated from other modes of transport such as road and rail. The roads linking Tiko seaport are very poor and dilapidated which only one entrance, railway transport is absent. This makes movement into and out of the port by truck difficult. This adversely affect the operational and transaction activities in Tiko, as such, economic activities and development is bien slowed down. The Tiko seaport is also plagued by mismanagement, this explained by custom fraud and movement of illicit goods

The operation of Tiko seaport is being bog down by illicit trade and the circulation of contraband goods. Illicit products such as petroleum products, pharmaceutical products, food items, chemical fertilizers and on the raise. Several illegal goods infiltrate into Cameroon market in unlawful way ways and most often taxes are evaded were traders succeed to infiltrate through illegal corridors. Added to this, corruption by some officials have also enabled the flow and circulation of such goods, this has adversely affected revenue from

custom duties. Illicit trade seaborne trade is rising along the Tiko seaport due to porous borders, inadequate maritime security enforcement and corruption. The illegal maritime trade and circulation of contraband goods gone a long way to promote black economy in Tiko town with huge impacts on custom revenues and lives of the inhabitants. This is because at times the goods traded are expired and dangerous for consumption especially drugs and food items. Illicit seaborne trade and corruption have bog down the operation of Tiko seaport and this has adversely affected economic development in Tiko town.

It is therefore imperative for the above stated problems to be diagnosed and addressed so that the operation and functioning of Tiko seaport can adequately contribute to the socio-economic development of Tiko town which is very vital not only for the local economy of Tiko but the economy of Cameroon as a whole. It is against this background that this research has been designed to provide answers to the following research questions.

0.5 Research questions

0.5.1. General research question

• What has been the extent of the exploitation of the Tiko seaport?

0.5.2 Specific research questions

1) What is the state of Tiko seaport infrastructure?
2) How far has the transactional and functional operations of Tiko seaport contribute to the socio-economic development of Tiko town?
3) What are the challenges affecting transactional and functional operations of the Tiko seaport?

0.6 Research objectives

0.6.1 General research objective

- To investigate the extend to the Tiko seaport has been exploited

0.6.2 Specific research objectives

1) To assess the state of the Tiko seaport infrastructure.
2) To investigate the extent to which the transactional and functional operation of Tiko seaport contributes to socio-economic development.

3) To examine the emerging challenges affecting the transactional and functional operation of Tiko seaport and management strategies

0.7. General research hypothesis

- The Tiko seaport has been unexploited

0.7.1. Specific research hypotheses

1. The Tiko seaport infrastructure is inadequate
2. The operation of the Tiko seaport has influenced on the socio-economic development
3. A series of challenges such as illicit trade, insecurity, port congestion and accident have bog down the performance of the Tiko seaport

0.8 Literature Review

The highest illiteracy in the 21st century is to proceed with a research work without reading to uncover knowledge that has been written and stored by various authors in the related domain of research. It is in this light that, a wide range of texts, journals, conference papers, published and unpublished documents, reports, dissertations and PhD theses were consulted.

In this perspective, it is imperative to draw insight from theoretical and empirical works to build a rich and befitting literature in order to proceed with this study. The diverse literatures from multidisciplinary backgrounds enables the identification and filling of knowledge gaps. It also gives way for the development of appropriate conceptual framework of this study. Though the literature streams from different theoretical and methodological setting, in a wider viewpoint, they are explaining similar phenomenon from various perspectives. This section focused on reviewing previous works on seaports infrastructure, the implications of seaport to socio-economic development, emerging challenges of seaport and port.

Sea port infrastructure and seaport performance

Tufoin and Ojuku (2022), assessing maritime transport infrastructure and facilities highlighted that that Support facilities and connective function of any transport mode are pivotal for the efficient functional and transactional operations without which it becomes stunted and cause delays or malfunction. (Bamidele, 2014 and Onwuegbuchunam, 2019)

cited by Fufoin et Ojuku (2022) highlighted that maritime transport infrastructure and facilities such as ports/anchorage sites, repairs of ships, habours, shipyards, warehousing, freight forwarding services and other related logistics or support services are a prerequisite for maritime transport to be effective and efficient in all its operations. The authors were interesting on the role of port transport infrastructure on efficient operation of seaport. This study differs a bit from the works of the authors mention above by the state of port infrastructure influence the performance of seaport

Baiquing and Kauzen (2023) writing on the impact of port infrastructure and economic growth, underscored that significant investment in port infrastructure will increase the quality of port infrastructure such as contemporary technology, port equipment and cargo handling facilities the host of others. The author further advanced that the spillover benefit of ports are comparable to those of other types of transportation infrastructure such as railways and highways, which have a huge economic impacts on regional economy. The author was more concerned on the influence of port infrastructure on economic growth. This research dwells on how the state of port infrastructure influence the performance of seaport.

Owoputi et Oluwatosin (2019) researching on the impacts of inland waterways transportation on socio-economic development, pointed out that in land waterways play a vital role in the economic development of remote rural area and in the welfare of their inhabitants, who usually among the lowest of low income groups in the community or state, where rivers are absence and other forms of inland waterways transport, many remote underprivileged communities would be inaccessible or too costly to service by other means. The authors were focused on the impacts of inland waterways transport on socio economic and the challenges of waterways transport. This work is interested on the state of port infrastructure and seaport performance.

Perez and Wilson (2012), cited by Munim and Schramm (2018) writing on the impacts of port infrastructure and logistics performance on economic growth pointed out that in developing countries, the quality of port infrastructure positively affects logistics performance, better logistics performance yields higher seaborne trade and higher seaborne yields yield economic growth. Therefore, policy makers in developing countries should consider investing in quality improvement in port infrastructure and logistics performance, compared to larger investment in building new physical infrastructure. The author was

interesting in the impacts of port infrastructure quality to economic growth and logistics performance. This research is concerned port infrastructure and the performance of seaport.

Port operation have impacts on the urban and physical environments in which they are embedded the consequences of this is that port are complex systems with a diverse range of stakeholders affected by their performance. Port act as a connection point or nod within a wider network that facilitate the flow of cargo across land sea. As a node, ports have traditionally attracted the development of adjacent industry giving port a secondary role as an enabler of production. However, since the advent of globalization, improvement in intermodal technology and rapid advancement in information and communication technology has led to an expanded role for ports as focal points for the control of transportation flows in a complex logistic network (O′Connor, 2019). The author in his work was concern with evaluating the dimensions performance of ports and the implications of seaports performance evaluation as well as challenges involved in the evaluation of seaport performance. This study is centred port infrastructure and the performance of seaport.

Seaport and implications on economic development

Seaport activity constitutes an important economic activity in terms of development and integration in the world of economic market. Usually, government proclaims that seaports will constitute not only the support for foreign trade but also as a factor of consolidation of economic growth. Evaluating the impact of a seaport is an important subject both in the political and scientific debate. Political evaluation of economic impacts of seaport is usually done by the government to motivate the request for public funds for developing existing infrastructure or to construct new seaport or to justify its social cost. Scientific evaluation of economic impact of a seaport is done by researchers to access the economic and social impacts of seaport investment or to justify future port investment (Tahar, 2016). The aim of the author was to evaluate the impacts of public investment of seaports on economic growth. This study has as objective to examine the implication of seaport on economic development

The Fako coastal belt of Cameroon host three secondary seaports which have become an important maritime trading hub, the hub handle thousands of tonnages of goods completed at these ports annually. The authors were interesting in maritime trading activities along the coast and emerging challenges. This work diverts from the study of the aforementioned

authors in that, it goes further to examine trade but also the impacts of on economic development. Those other related activities which accompanies seaborne trade such as transportation.

Wei et al, (2022) researching on the contribution of seaport to urban economy highlighted that ports are basic service, leading, and strategic resources of the national economy, and the core carrier as well as powerful engines for economic development of port cities. The authors further argued that the development of port drives prosperity of a city and in in turn, the prosperity of the city promotes the development of the port. The authors were interested in ports contribution to the growth of cities. This research further for access socio-economic growth, that is employment creation which improves on the socio-economic status of individuals

Economic development can be improved by putting in place policies that will ensure the country's port is operated efficiently and effectively. Many developing countries have been inspired to boost the efficiency and productivity of shipping services through the formulation of many development policies, which in the long run helps in the actualization of their economic goals. No nation can achieve economic development in isolation: consequently, there is need for cross border trade transactions. The maritime industry occupies a very vital position in the economies of nations. Of all maritime activities, shipping stands as the greatest to a nation's economic growths and international status. (Benson and Adekemi, 2018). The authors further highlighted that the shipping industry embraces all maritime related business activities; almost all maritime activities revolve around shipping, the oil gas sector for example depends on ports for transportation and distribution. The authors were more concern on the roles of private port operators on economic development. The study does not only look at the role of private port stakeholders but all the stakeholders involving the state in economic development.

Adetose and Oluwatosin (2020) researching on seaport development as an agent for economic growth and international transportation underlined that water transport has the capacity to carry the heaviest load than any mode of transportation, this made it necessary for the construction sea port to be technically structured in a way to meet the demand of international maritime organisation rules and regulations. This is explained by difference in size, weight, high volume of goods are passing the sea port for on-ward freight forwarding and distribution. The further underscored that there are many associated business activities of

economic impact at the seaport and it confirmed that positive relationship exist between global trade, port activities, economic growth and development. The authors were mostly concerned on how sea ports influence economic growth, that is they laid emphasis on economic benefits of seaports such as commercial activities, business, employment, revenue generation and tax increase. This research goes further by examining other social benefit of seaport such as tourism which also contribute to economic growth.

There is need to examine the potentialities and associated benefits of maritime transport sub-sector in the economic development and transformation of the country and to imagine the concomitant negative impacts when serious repositioning and functional approaches are not taken to sustain the benefits identified in the maritime sector (Badejo, 2012, Badejo and Soolaja, 2014). Bamidele (2017) writing on the historical development of seaports, pointed out that seaport has water transportation water transportation system and infrastructural development especially ports and terminals facilities. The author (Bamidele, 2017) in his findings illustrated that seaport have created numerous opportunities ranging from both formal and informal jobs: huge revenue generation and financial outlay for the government through various forms of linses, taxes, rates, tariff, demurrage, fines, renewal and rents; promote huge trade and commercial opportunities, promote international business, encourage reginal economic growth due to terminal development. The author was concerned in examining the evolution of seaports and the role play by seaport in economic development. This study focuses mainly on the contribution of seaport to socio-economic development.

Owoputi (2021) researching on the untapped huge economic opportunities of inland ways highlighted that inland waterways navigation have been used since people sailed up over river estuaries as a means of transporting goods, waterways offer the most economical, efficient, cheaper safety means in area with water transportation. The author further underlined that waterway can add valve to economic, socio- political, international and communication needs of the people among other potential benefits from international investors in export processing zone along coastal waterways due to easy shipment of raw materials and manufacture equipment to the site of industrial location. Owoputi (2017) in the same vein underscored that the potentials of coastal inland waterways as a multi-use tourism, trade, shipment alternative and complementary transport mode as an amenity for their local communities, job creation, revenue generation for both government and operators. The author was more concerned with the contribution of waterways o passengers freight movement, the

impact of waterways to socio-economic development. This work aims at accessing the role of seaport to socio-economic development.

Tende (2018) writing on seaport creation as a catalyst to population mobility and development underscored that port towns have been a major determinant of population mobility and trickle-down development in their backyard in most developing countries as the creation of seaport stimulate in-migration and development. The author further highlighted that the creation of Kribi deep seaport will contribute to increase population of Kribi and development of the town. The steadily high population growth rate is an indicator of attractiveness of the town and available opportunities in the area. The author was interested on how stimulate in-migration and bring development. This study focuses on seaport and development but deviates from the influence of seaports on mobility.

Ojuku et al (2014) researching on development polarisation in Limbe and Douala noted that these towns are being called upon to play important economic role through heavy capital investment in the creation of deep seaports, fishing, mining and energy production industry. The Chad-Cameroon pipeline terminus in Kribi, the cement factory and petroleum refinery in Limbe. The scholars again outlined that these developments are attracting and will continue to pull huge population numbers in these towns for jobs, resulting to urban growth. Consequently, these emerging industrial towns located at the Cameroon coastline might face challenges such as pollution, crime and urban disorder. The author was focused on how coastal towns stimulate development via the creation of ports, industries, fish activities which enhance urban growth and associated urban problems that might occur due stimulating economic activities. This work is concern with ports and socio-economic development as does not examine aspect of urban problems.

Seaport and challenges

Carlos, 2016 writing on increasing African ports capacity and efficiency for economic growth highlighted that climatic vulnerability, maritime insecurity and inadequate access to shared resources are among some of the worrying challenges that can hinder the effective realization of the benefits of the Blue economy, they can also exacerbate conflicts and worsen poverty. Many African ports face serious capacity problem that are accentuated by an ineffective inland transport system. Inefficiency at ports in African countries lead to slow processing times and result in higher charges than those of comparators' countries. Port congestion in regulatory systems and poor management, inadequate equipment has resulted to

trade cost in Africa. The author further stressed that lack of integrate rail and road links within many African countries means that most African ports are poorly equipped to handle containers, certain are parked and unparked in the vicinity of the ports and benefits of fully integrated multimodal transport corridors associated with container adoption are not realized. The author was interesting in financing Africa maritime and tourism infrastructure in order to overcome challenges of port infrastructure. This study further goes beyond to examine other maritime challenges such illicit trade along the coast.

Kent (2004) researching on emerging challenges of in Africa's port sector stressed that African ports are facing the type of congestion in India, United States and much of the Europe has faced, port tema in Ghana for example suffer from low berth productivity because of lack of gantry cranes. Increasing container volume volumes have forced carriers to wait several hours for berths and in turn impose congestion surcharges on shippers. The author further pointed out that limited truck inventory in many African countries, the failure to control truck movements outside the port gate, insufficient intermodal exchanges and the resulting extraordinary dwell times for containers will raise the risk of many other African ports being caught up in this congestion problem. The author was more concerned with congestion concern in African ports. This research does not only look at congestion as a challenge, it goes beyond to examine other challenges such as insecurity, circulation of contraband goods and illicit trade.

United Nations Conference on Trade and Development (2018) report on the the challenges faced by developing countries in competition and regulation in the maritime transport sector highlighted that less efficient ports, inadequate infrastructure, limited economies of scale and less competitive transport market are among the factors determining transportation cost burdens in many developing countries. The report further stressed that continuous increase in vessel size and consolidation in the liner shipping industry have led to an oligopolistic market structure on various trade routes. Concentration is higher in smaller developing countries and small Island developing states, these countries may thus face decrease liner shipping service frequencies and higher freight rate. The use of megaship and global alliances have further increase entry barrier in a market characterized by high fixed capital cost and this has made it impossible for independent carrier to compete on major route. This situation may adversely affect small importers and exporters in developing countries more than large shippers which include multinational retailers. The report was

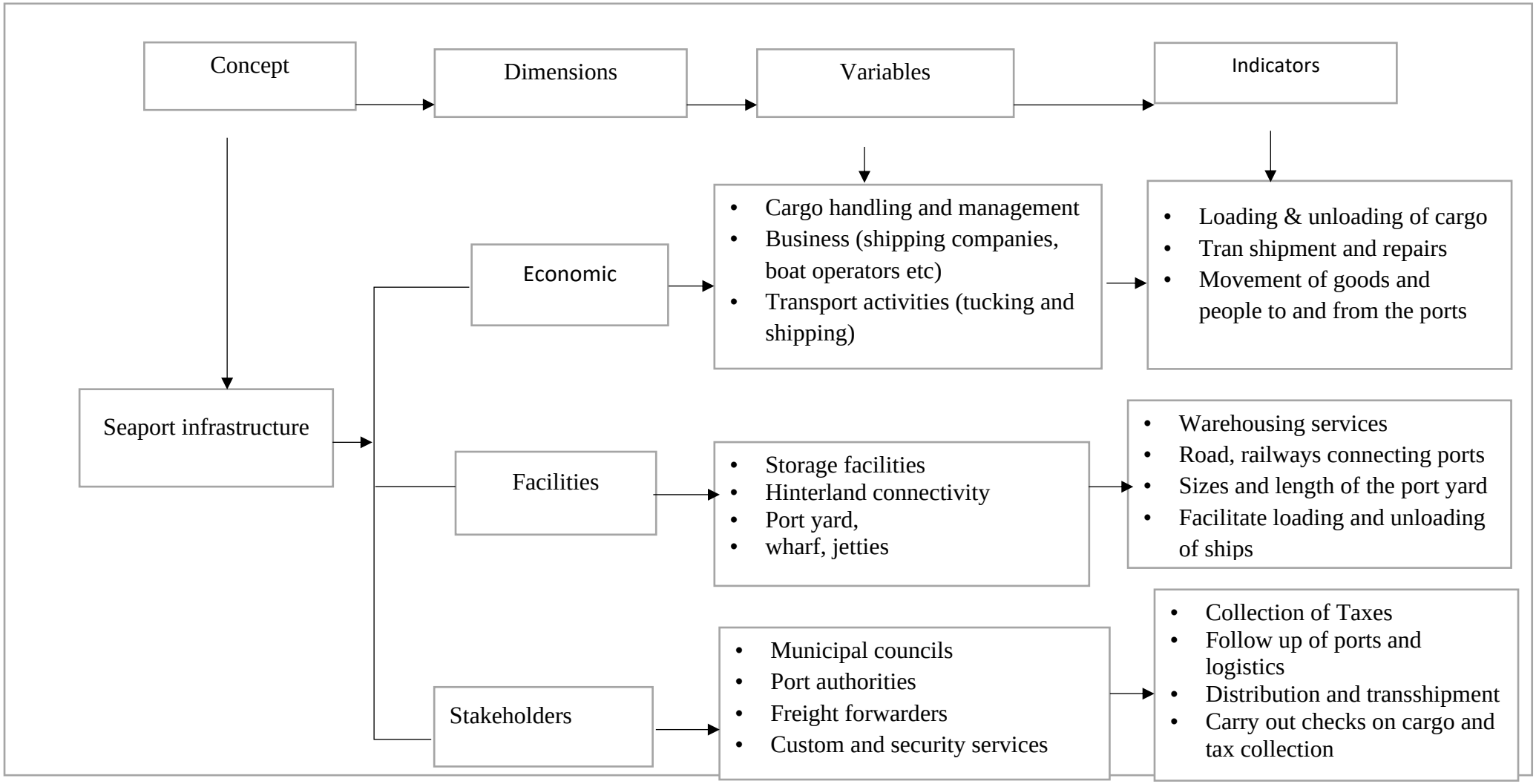
concerned with challenges faced by developing countries to compete a consortium of liner shipping industry. This study examines challenges of maritime transport.

0.9 Theatrical and conceptual framework of the study

This write-up is guided by the link that exists between seaport operation, and their contribution to the socio-economic development in Tiko town. Some concepts were identified and defined to guide the understanding of this research. Concepts such as, ports infrastructure, socio-economic development which are directly linked to the topic have been carefully defined and conceptualised while concept emerging challenges which are not directly linked to the topic of this research have been identified and used to facilitate the understanding of this work. The definitions adopted are conceptual and theoretical. The intention is to articulate these terms around the context and background of the research questions vis -à -vis the perception of the local population of Tiko town so as to give them their meanings and significance through a cumulative development in knowledge.

Port infrastructure

(Bamidele, 2014 and Onwuegbuchunam, 2019)). Seaport infrastructure and facilities include ports/anchorage sites, repairs of ships, habours, shipyards, warehousing, freight forwarding services and other related logistics or support services are a prerequisite for maritime transport to be effective and efficient in all its operations. Seaport infrastructure within the context of this study include harbour, ships, boats wharfs, jetties and cranes as well as road transport and soft infrastructure (figure).

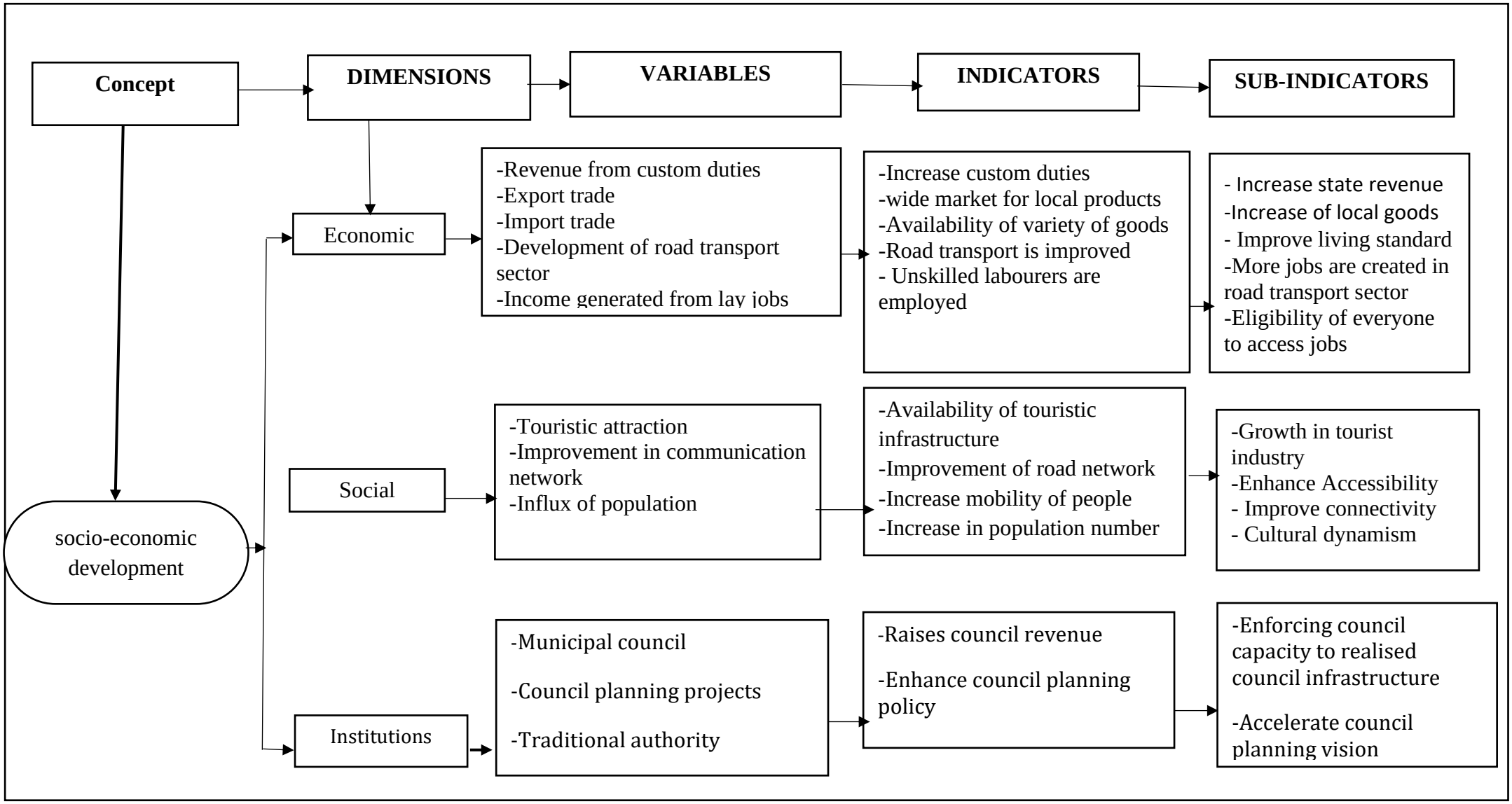


Source: Tutuwan Dobgima, 2023 inspired from Tufoin, 2021

Figure 2: Conceptualisation of seaport infrastructure

Socio-economic development

The Cambridge Advanced Learners sees development as growth, change and more advancement. From the above perspectives, development can be in the political, cultural, economic, social and many other dimensions. In another light, development can be understood as an improvement, growth or a positive change in the society. It involves social, technological and economic transformation focusing on economic prosperity. If a community or people have the capacity to satisfy the basic needs of a larger portion of its people or population, we talk of a developed society. According to Irish Aid (2006), development refers to the actions and activities in which individuals and communities participate. It occurs in the social, economic, political and geographical areas where these individuals and communities exist. The local population of any given geographical area influences the outcome of development of that area. As per Human Development Report, (1996 p.1), economic development is the measurement of life expectancy, adult literacy, access to all levels of education as well as people's average incomes which creates freedom of choice. This study examines socio-economic development as an improvement in the domain of job creation via agricultural improvement, social facilities and mobility services and trade as well as construction of modern buildings (figure 3)

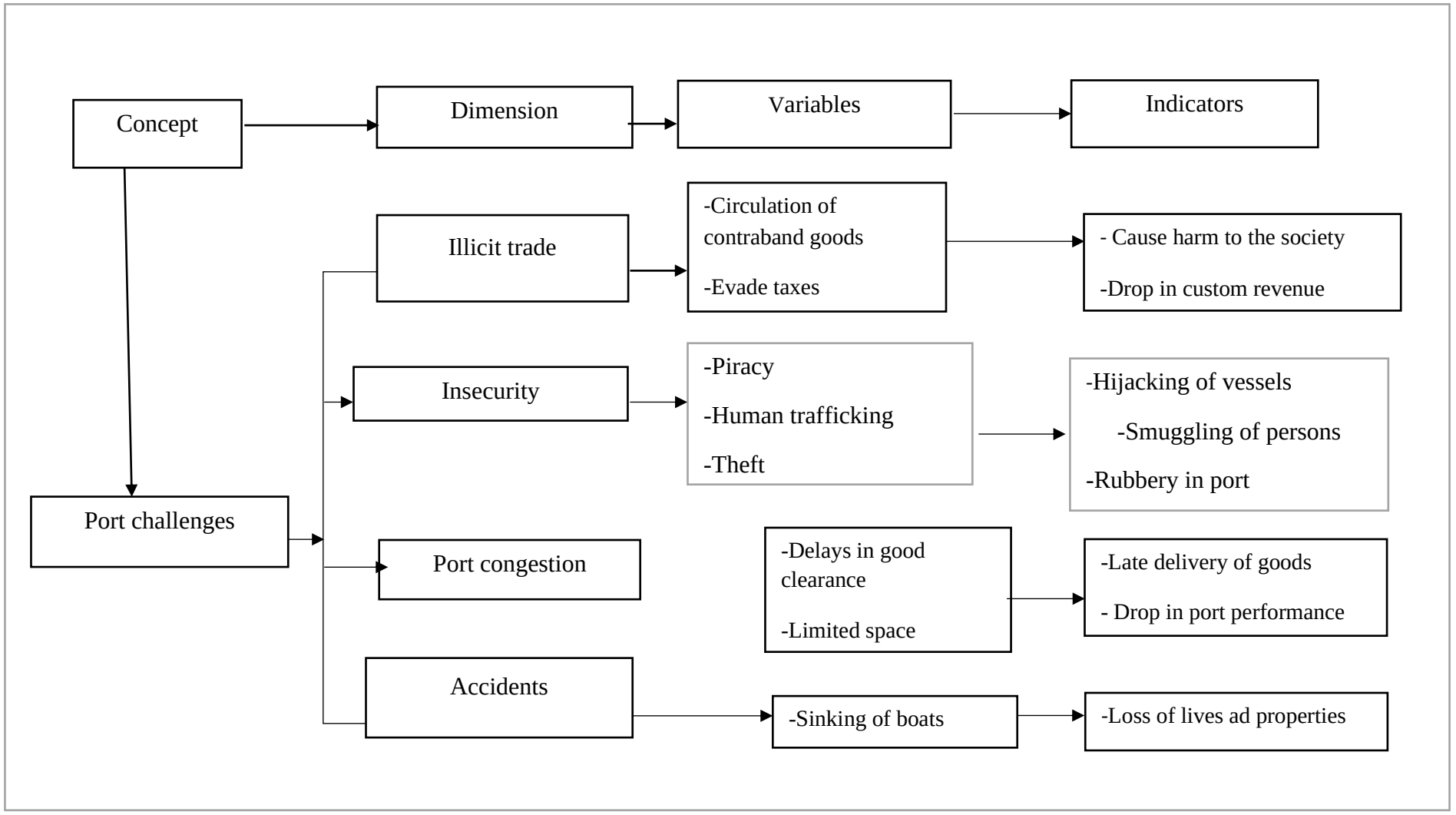


Source: Conceive by the author, inspired by field work, 2023

Figure 3: Conceptualisation of socio-economic development

0.5.3. Seaport challenges

Maritime piracy, arm robbery and other ill activities constitute a serious threat to the maritime domain of Central and West Africa (Damião, 2020).Phnom (2022), highlighted that maritime challenges ranges from; lack of port infrastructure development, insufficient action plans, detailed guidelines and budgets, lack of hinterland connectivity, insufficient port facilities (port congestion or increasing port dwell time), digital divide and technology gap and traffic congestion and air pollution as well as exposure to natural disaster, pandemic and social crimes. Maritime challenges within the content of this study refers difficulties hindering the operation of Tiko seaport such as illicit trade, insecurity, accident and port congestion (figure 4).



Source: Conceived by author inspired by fieldwork, 2022

Figure 4: Conceptualization of Port challenges

0.9.1 Theoretical framework of the study

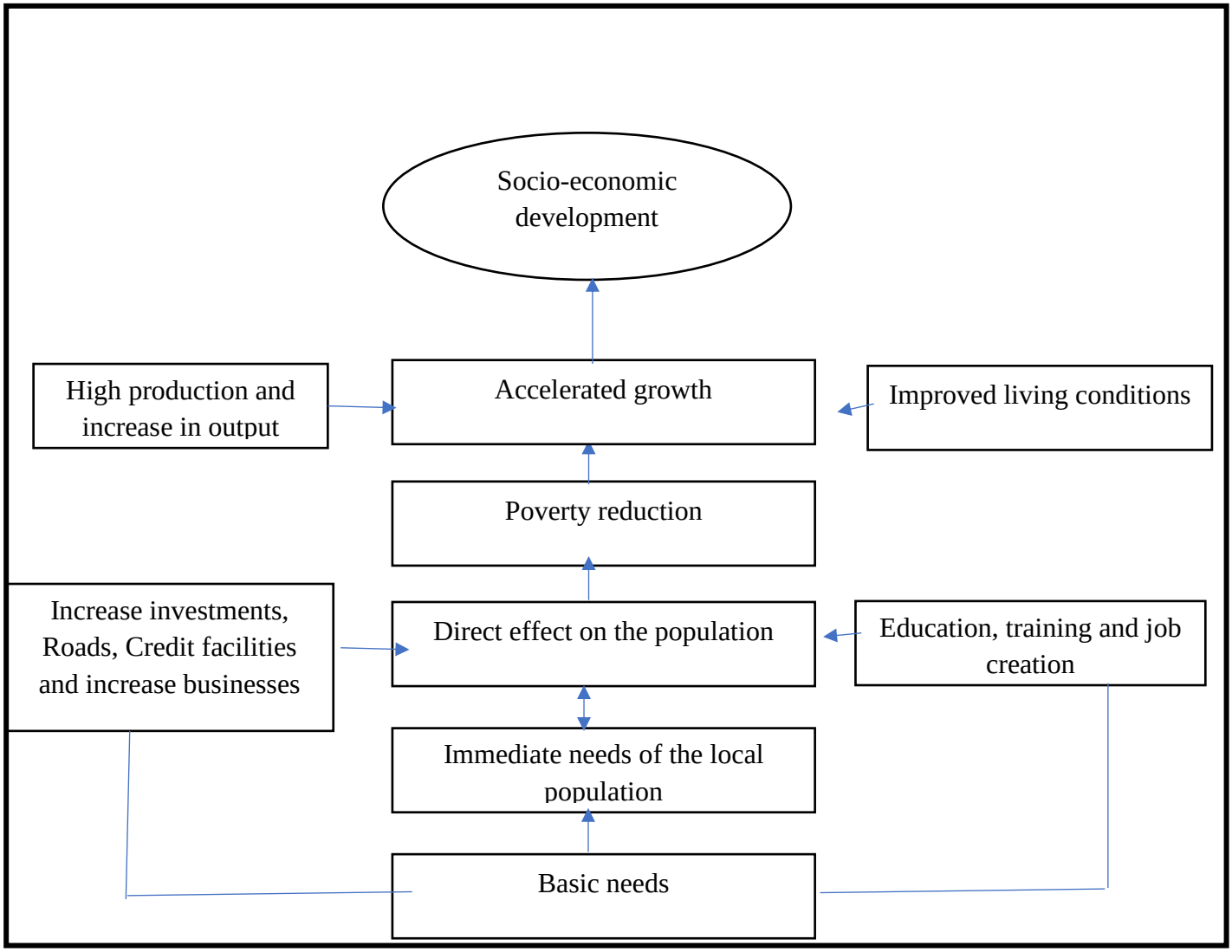
This study is integrated in the problematic in relation to return migrants, remittances and socio-economic development. This study in inscribed in the framework of the theory of spatial diffusion of innovations and some development theories such as the theory of necessity for development and that of collective action. This was in a bit to give the work a scientific base and to use the theories as a point of reference.

Development theories

Development theorists such as W.W. Rostow, saw development as a continuous process. To him, developments most begin from somewhere before it reaches a certain level which he called mass consumption and production. Ports enables town develop from small towns and gradually to cities and megalopolis. We will thus see development in Tiko sub-division as a process of the port operation has induced socio-economic development. According to the social theories on development, emphasis is being laid on job creation through human capital. In this theory, it is seen that the port has influenced socio-economic development by provided avenues for imports and export to place, it gives access of agricultural produce to be sold in external, it makes possible for the local population to have access to goods that are not locally manufactured the port creates jobs. These are all aspects that enhance economic development and progress.

The theory of necessity for development (Balassa, 1962 and Cooper, 1965)

This theory is suggested by economists and integrated for use in improving on the welfare of societies. The theory lays emphasis on long-term growth for a country to possess the capacity to continuously supply diverse products to the population. Regional integration is one of the main trends in development of international economic relations in the last few decades. In this light, seaports facilitate trade between countries through impots and exports. This bring development as there is increase in sales which bring foreign exchange earnings and increases the Gross Domestic Products of a country. This increase capacity is based on advanced technology and institutional ideologies necessary for adjustments (figure 5).



Source: Adapted and modified from Tufoin, Kilian (2022)

Figure 5: The theory of necessity for development

This theory shows that for a community to develop, basic needs of the people must be attained. In the context of this study, for ports to effectively contribute to socio-economic development, the basic needs of the activity must be meet. This includes good roads and intermodal transport to improve connectivity, provision of social facilities, availability quality goods, access to jobs and availability of external market. A proposed strategy here within the context of this study is the occurrence of imports and exports, increase sales of agricultural products, increased tax revenues and job creation. This, in no doubt will lead to socio-economic development which is the aspiration of every society.

The theory of collective action

The Theory of Collective Action by David Barton Bay (2008) seeks to understand how groups of individuals cooperate to overcome social dilemmas, assuming that being a self-interested, short-term maximiser is the default position. The behavioural approach to collective action begins with an evolutionary argument: Human beings have evolved the capacity to learn cooperation norms and social regulations which have enhanced the success of groups. In this view, individual rational action is just one of a suit or a continuum of behaviours from the vary individuals to the very social activities which human beings exhibit, and which can be adaptive in different circumstances. This further suggests that the default position may be cooperative which can then be withdrawn if there is no reciprocity. Whether individual's cooperation or individual actions dominate, depends heavily on the social context.

This theory is therefore applicable in the theoretical framework of this research as it seeks to present how individual actions or groups of people and collectivities which make up a community contribute to the development of their community. It further explains the impacts of these groups or individual actions on development. We will thus be showing how the activities of individuals via trans-border trade has and those who carry out transaction at the port influence socio-economic development in Tiko Sub-division.

0.10 Research methodology

The methodology that was used in this work include a hypothetico-deductive approach with hypotheses as the point of departure which were subjected to verification. This approach was carried out using various research methods and techniques that were largely concern with data collection, treatment or processing and analyses. A good number of libraries were consulted with the intension of collecting secondary information on international migration, remittances and socio-economic development which included; the libraries of the University of Yaounde1, the libraries of the University of Buea and achieves of Tiko council. The BUCREP office, institute of statistics, Ministry of Scientific research and other related offices and institutions were used to gather more secondary information on migration studies and remittances. This gave way for the field work to carefully identify and observe port infrastructure in Tiko town Here, port authority of Tiko and council authorities and resource persons in Tiko were were contacted and the information collected was either

through field observation, administration of questionnaire, focus group discussions or by granting of interviews.

0.11 Data collection

In this research work, data collection came from two main sources which were secondary and primary sources.

Secondary sources

The data that was gotten here was largely qualitative data and was gotten mostly through literature review. This involved the consultation and systematic exploration of textbooks, theses, dissertations, research reports, periodical journals, and conference papers, published and unpublished documents on international migration and remittances and related websites. Internet materials were downloaded in a flash disk and later exploited. These documents were exploited by analysing ideas of existing authors and research works on the topic and making some adjustments and amendments. These consultations were realised from libraries, research institutions and internet exploration. The libraries of the University of Yaounde 1 were used especially those of the Faculty of Arts, Letters and Social Sciences (FALSS). The intension was to find out what has already been done in the domain of the return migrants and remittances in relation to social and economic development to adjust and equally to gather more facts in the domain of the research topic. Tiko Council Development Plan was consulted to get some statistics on the evolution migration in this Sub-division. The BUCREP office was visited to obtain demographic data of the population of the study area that was used to design the sample size of the population. All these were done to get information on the activities of return migrants in Tiko Sub-division vis-à-vis the existing problems confronting the return migrants and the flow of remittances.

Primary sources

This involved data gotten through field work which was largely constituted of quantitative data. This data was gotten through visits to the study area during which council authorities, related offices and resource persons were contacted. From these visits, information was collected by direct field observation, administration of questionnaires and granting of interviews to resource persons. Focus group discussions were used to obtain on port infrastructure, port contributed the socio-economic development and challenges affecting Tiko seaport. In this light, two field trips were organised whereby the first one was for the familiarisation with the field and the commencement of data collection. The second

continued with data collection which took quiet long because of long administrative procedures. This data in no small way played a great role in the attainment of the objectives of the study.

Direct field observations

With regards to field observation, areas of port infrastructure, port operation and Cameroon Navy patrol was selected for observation such as port infrastructure, goods imported and exported, roads linking the Tiko seaport as well as navy patrol. This was carried out in view port infrastructure, destination of flow of goods, activity of the Navy and associated modes of transport linking the port. We equally carried out participant observation with resource persons contacted in the field. During field work, confiscated contrabands goods from illicit trade by the Cameroon Navy was observed.

Interviews

Interviews targeted resource persons and related officials that could give an insight of Tiko port operation. This involved the port authority and some local inhabitants. All these people were contacted to have a wider knowledge on the port infrastructure, operation, how the port contribute to socio-economic development and challenges affecting the port of Tiko

a) Port authorities

These personalities were interviewed to adequately understand how Tiko port operate, statistics on imports and exports, types of goods exported and imported, the main trading countries and emerging challenges that affect Tiko seaport, and how their activities are organised to ensure the proper functioning of the port and security of passengers. Information on the evolution on the evolution of Tiko seaport was equally obtained from these personalities.

b) The Navy

These personalities were interviewed to have an in-depth information on maritime crime such as piracy and circulation of contraband goods. The Navy was interviewed to have full knowledge on the type of illicit goods intercepted, the origin of the contraband goods, that countries where these goods are coming from. This also enabled us to have full know of maritime crime at the coast of Tiko.

Focus group discussions

This process of data collection was used during the second field work and was made up of return migrants. The two focus group discussions had a maximum of 10 persons and a minimum of 5 persons. This helped us to have additional facts and an insight in trading activities at the Tiko seaport, frequency of export, types of goods imported and exported, importance of the port operating activities and the challenges faced, and strategies adopted to overcame the challenges. During the discussion asides, and some gestures exhibited by traders, labourers and drivers of were recorded which were later analysed and interpreted.

Life experience and telephone surveys

This method involved the contact with the port authorities' officer and the port director, the Cameroon Navy officers and other personalities in the Tiko port which help to provide the study with some insight of the port. Telephone surveys were equally used to contact some resource persons that where difficult to be contacted physically because of their job description and the socio-economic crises.

The population of the study area

Population of the study area is composed of 24 quarters and these quarters include; Tiko town, Army camp, C. D. C labour camp, C. D. C. Sonne Camp, Ebanja quarter , Ikange, Keka 1 and 2, Likomba, Motombolombo, Movvange quarter 1 to 6, Ndongo Camp quarter 1-6, Tiko branch, Upper Costain, Long Street. These 25 quarters regroup a total population of 59099 inhabitant and 13640 households (BUCREP, 2010 Population and housing census). These quarters made up the study area and were regroup into four clusters which is; northern, eastern, and western and the southern cluster as seen below in figure 7. These quarters were regroup to reduce the complexity of tables so as to reduce the number of tables to be use in this work.

Figure 6 shows the location map of Tiko the different quarters and villages found in Tiko Sub-division arrange in order of different clusters that have been used to facilitate this study.

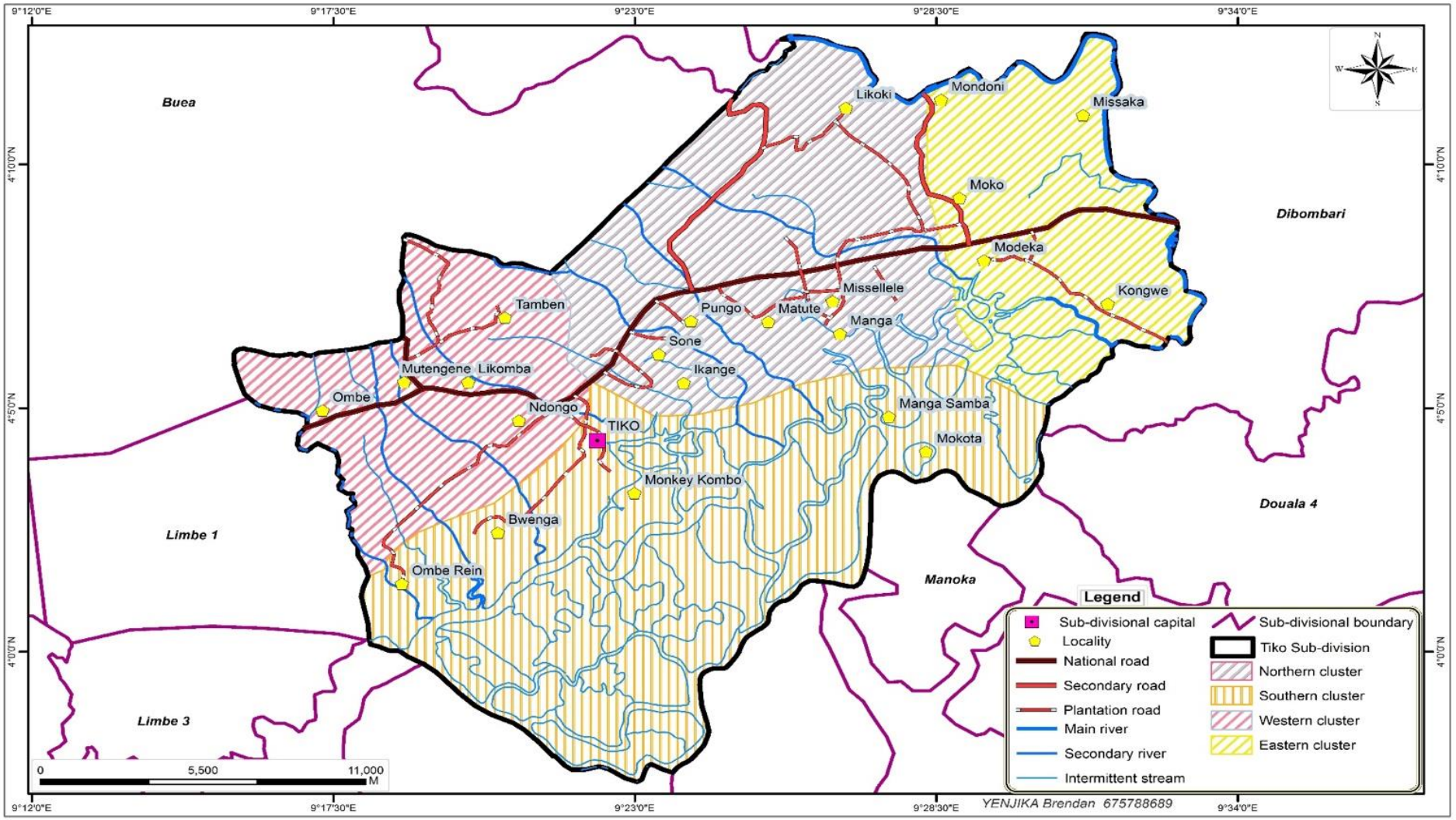
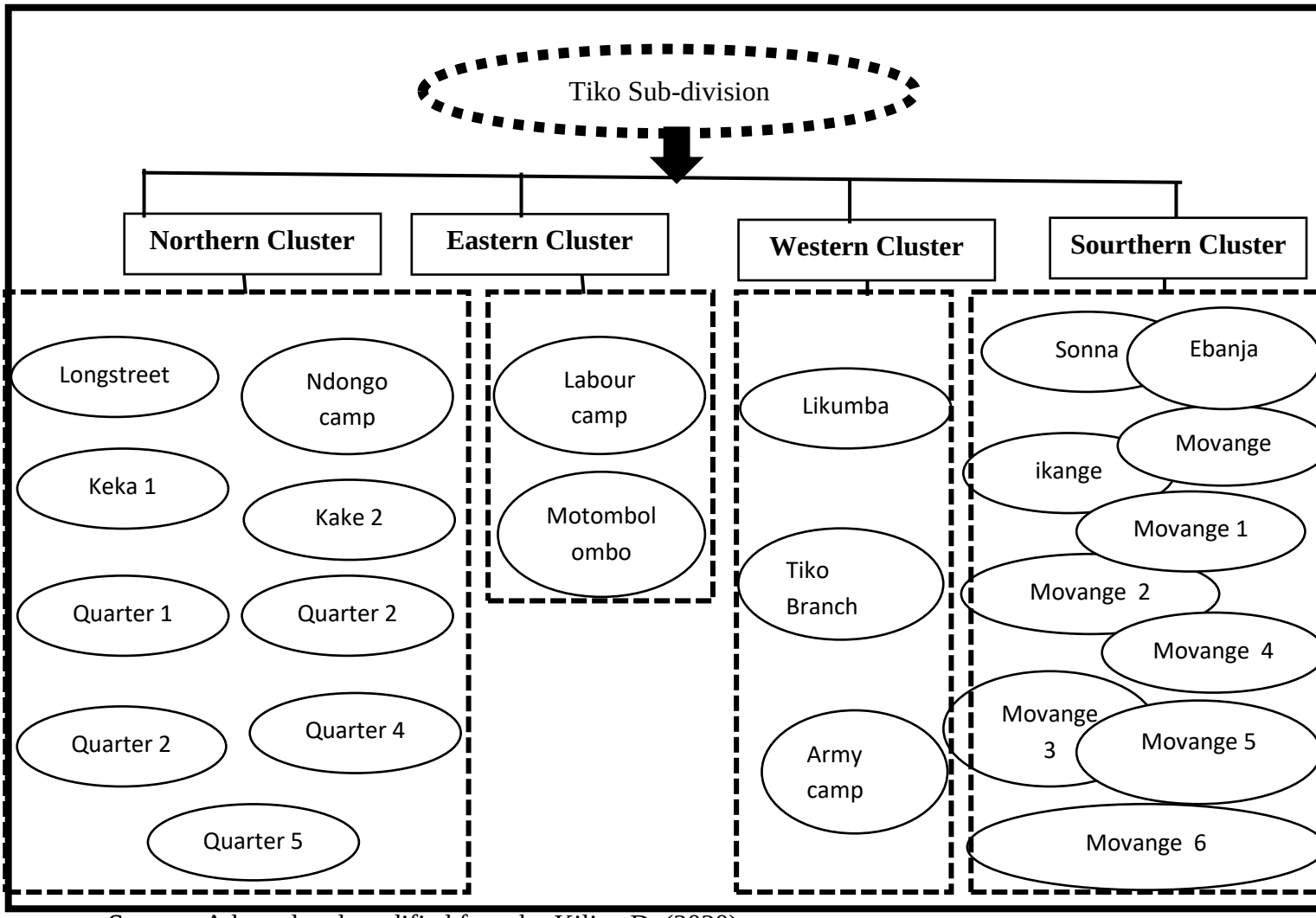


Figure 6: Locational map of the study area

Source: NIC, and field work 2020

Figure 6 present the different quarters and villages found in Tiko Sub-division arrange in order of different clusters that have been used to facilitate this study. The different communities of the four clusters in in Tiko sub-division are illustrated in figure 7 below.



Source: Adapted and modified from by Kilian D, (2020).

Figure 7: The different communities/quarters in the four cluster of Tiko Sub-division

Figure 7 illustrates the different clusters of the study area villages, their cluster names, their population, total number of clusters, number of households, and total number of household cluster.

The table 1 below demonstrates the total population in each cluster and the number of households in each quarter and in each cluster. The total of households in each cluster was calculated so as to draw out the intended sample population for the effective administration of the questionnaires.

Table 1: The population and number of households of the study area

Numbers	Villages	Cluster Names	Village Population	Total Cluster Population	Number of households	Total HH Cluster
1	Longstreet	Northern	654	16033	183	4328
2	Ndongo Camp		64		12	
3	Keka 1		8029		2060	
4	Keka 2		1679		524	
5	Quarter 1		932		248	
6	Quarter 2		988		275	
7	Quarter 3		1640		438	
8	Quarter 4		1404		380	
9	Quarter 5		639		208	
10	Likomba	Western	11909	14854	3141	3893
11	Tiko branch		888		207	
12	Army Camp		2057		545	
13	C.D.C Labour Camp	Eastern	2566	5784	709	1703
14	Motombolombo		3218		787	
15	C.D.C Sonne Camp	Southern	776	22428	144	3943
16	Ebanja		1630		395	
17	Ikange		7884		271	
18	Costain		1258		275	
19	Movange 1		1285		395	
20	Movange 2		2096		323	
21	Movange 3		1158		300	
22	Movange 4		835		256	
23	Movange 5		1205		328	
24	Movange 6		4701		1256	
TOTALS	24	4 cluster	59099	59099	13640	13640

Source: BUCREP (2020)

The sample size of the number of household and population

As such, 2% of the household made up the sample population of this study that produces and in miniature cross section of the population.

The reasons for choosing a 2% size is in accordance with the postulation of Nwana (1982) which stipulate that;

- If the population of the study is in hundreds a 40% or more sample should be used,
- If the population is in many thousands, a 20% will do,
- If the population is in a few thousands, a 10% will do and,

- If the population is in several thousand, or fever samples will do (Nwana, 1982) Furthermore, the 2% chosen was to ease the work because it was not easy to tom access every household as some household were not willing to cooperate.

The 2% sample size for this study was selected from the total number of household in each quarter using the formula: ×*2/100

× = number of households

* = multiplication sign

2 = sample size chosen

From the total number of households, a 2% sample size of household is chosen. This 2% sample size gave 274 number of households to which questionnaires were to be administered. This sample helped the researcher to know the total number of questionnaires to be taken to the field for effective administration.

Table 2. The population of the study area and their response to the questionnaires

N	Villages	Clusters	HH Villages	Total HH Clusters	2% size	Total Sample Size	Eff Resp	Total Eff Resp	% of eff Resp
1	Longstreet	Northern	183	4328	4	85	4	79	100
2	Ndongo Camp		12		1		1		100
3	Keka 1		2060		41		38		92.7
4	Keka 2		524		10		10		100
5	Quarter 1		248		5		5		100
6	Quarter 2		275		5		5		100
7	Quarter 3		438		8		8		100
8	Quarter 4		380		7		5		71.4
9	Quarter 5		208		4		3		75
10	Likomba	Western	3141	3893	62	76	58	71	93.5
11	Tiko .Branch		207		4		4		100
12	Army camp				10		9		90
13	CDC labour camp	Eastern	709	1496	14	29	14	29	100
14	Motombolombo		787		15		13		100
15	CDC Sonne camp	Southern	144	3943	3	75	3	68	100
16	Ebanja		395		7		6		85.7
17	Ikange		271		5		5		100
18	Costain		275		5		5		100
19	Movange 1		395		7		6		85.7
20	Movange 2		323		6		6		100
21	Movange 3		300		6		5		83.3
22	Movange 4		256		5		4		80
23	Movange 5		328		6		5		83.3
24	Movange 6		1256		25		23		92
Total 24	24	4 Cluster	13640	13640	265	265	247	247	93.2

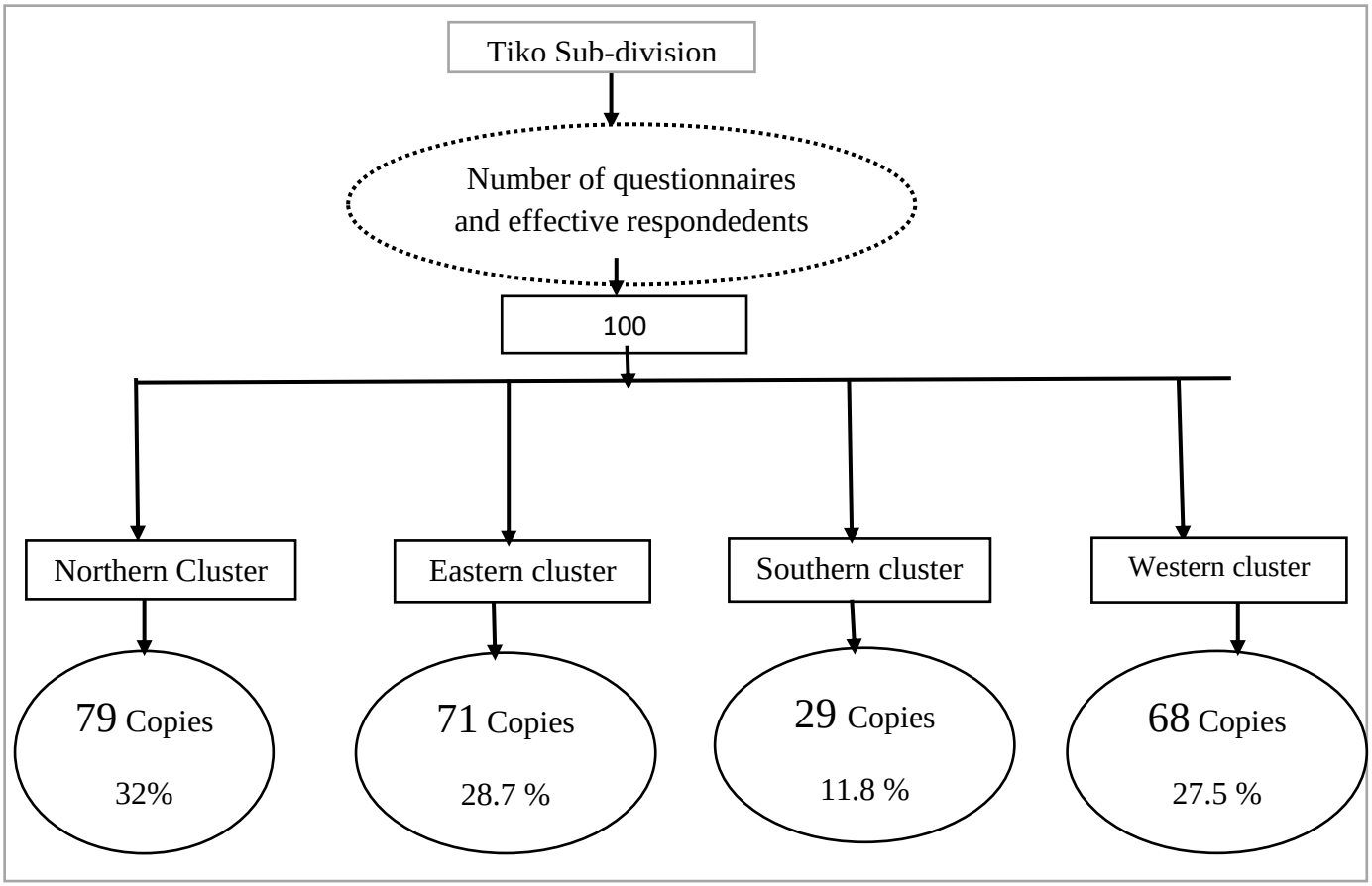
Source: BUCREP, 2010 Population Housing Census.

NB: HH. Household; Eff. Resp-Effective Respondents.

The table 3 illustrate the different villages / quarters communities in Tiko Sub-division, Cluster, Household's total in cluster and quarters, sample totals that were drawn from each

village and cluster, effective respondent in each village and cluster. The total of the effective respondent and percentages of those effective respondent are also found in this table. Table 3 indicate that, out of a total of 274 questionnaires that were administered in the field, 247 were realized and returned home with representing 93.2 %

The spatial distribution of questionnaires is represented in figure 8 with 79 questionnaires attributed to the northern cluster, 71 to the western cluster, 29 to the eastern cluster, and 68 to the southern cluster. This proportionate distribution follows the population size and the household's totals of each cluster



Source: Drawn From table 3

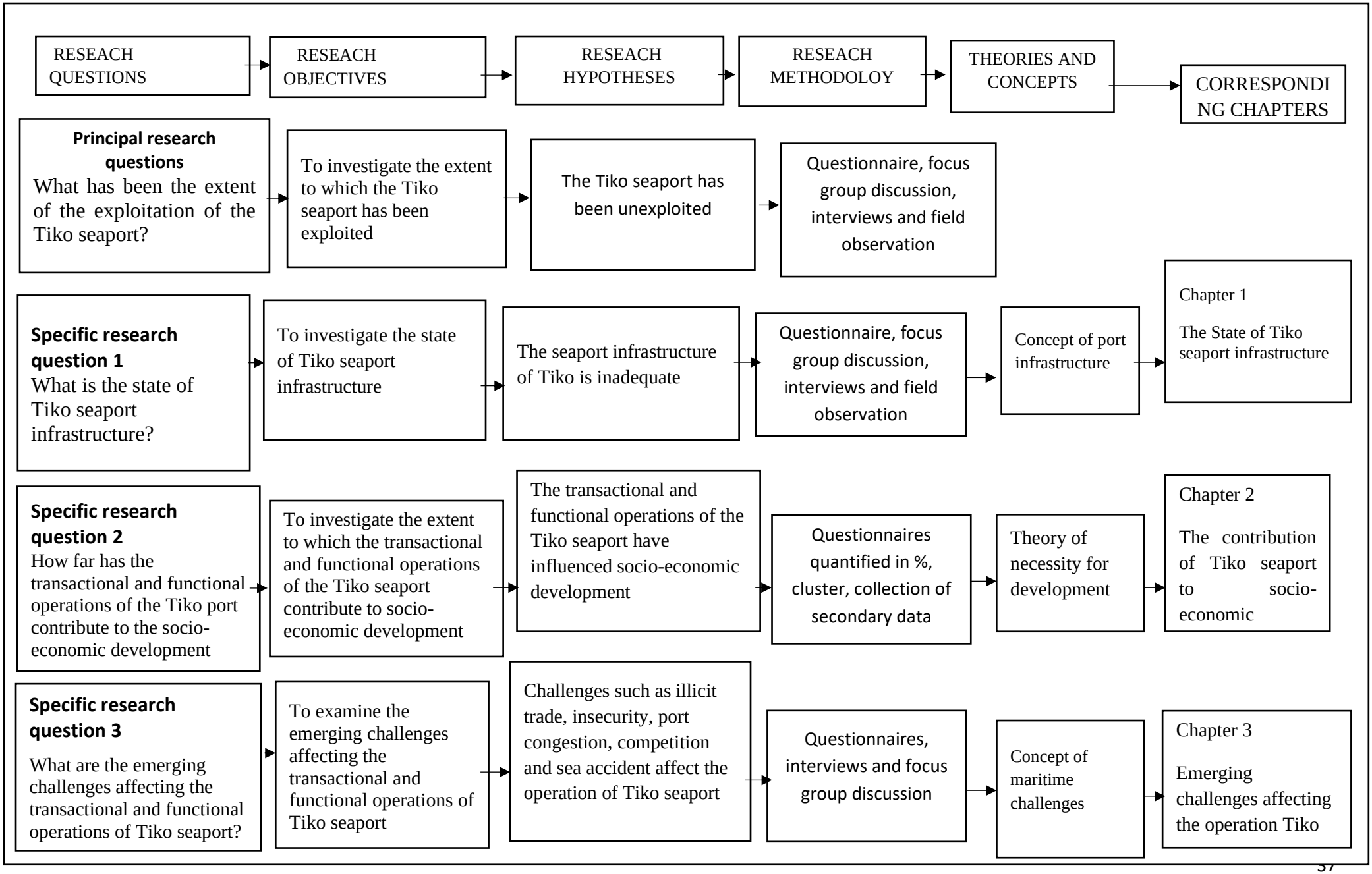
Figure 8: Spatial distribution of effective respondent in the four village Cluster

0.12 Administration of Questionnaires

Questionnaires were administered using a cluster random sampling procedure in which only the household head in the different cluster were sampled whereby, household were selected systematically in each cluster for the administration of questionnaires. This is because, household head will have the legal right in partaking in the activities of the council like participating in the identification of problems in the community, voting during elections, since the council is in charge of planning it community. The questionnaires to be administered will constitute both the close- and open-ended questions with the public opinion and suggestions greatly welcome. The questionnaires is stated in a precise manner for easy understanding by the respondent and the purpose of the questionnaires will be to examine the state of port infrastructure, port trading activities and to know the challenges affecting the Tiko seaport and management strategies and made recommendations to the emerging challenges

In order to realize the objective, 247 questionnaires was administer to the 59099 inhabitant distributed in eight (8) health areas and different quarters of the Tiko municipality. 2010 population estimate of the Tiko health district (T.H.D).The number of questionnaires administered was based on the total population of each quarter. That is, out of every 250 persons living in Tiko, two persons will be represented.

From these research instrument designed to collect data, a synthetic matrix table was conceived to demonstrate the constructive framework in which it was framed. This was designed from the research questions, objectives, hypothesis, methods, concept, and theories used, which were used to derive the various chapters outline in the table of, matrix.



Source: Conceive by the author, inspiration from field work, 2022

THE TABLE SYNTHAX OR MATRIX

0.13 Operationalization of variables

A critical look at the research questions, objectives and hypothesis which shows that we have dependent and in dependent variables which need to be operationalize to help in the building of a questionnaire and equally the different types of data to be collected.

Hypothesis 1: The state of Tiko seaport infrastructure is inadequate

Independent variable: the state of port infrastructure

Dependent variable: Inadequate port infrastructure

Table 3: The operationalization of variable: Hypothesis 1

Independent variable	Indicators	Dependent variable	Indicators
The state of port infrastructure and sub infrastructure	**Port infrastructure** -Ports/anchorage sites -Ships/boats -Harbour - Jetty -Crane **Storage infrastructure** -Warehouse **Associated infrastructure** -Roads **Sub infrastructure** -Documentation -Clearance house -Customs -Police	Inadequate port infrastructure	- Abandoned port infrastructure -Harbour filled with litter -Limited and absence port infrastructure and storage facilities -Dilapidated port facilities and infrastructure -Limited storage facilities - Inadequate roads and absence of railways

Table 3 shows the operationalization of variables for hypothesis 1which state that the state of Tiko seaport infrastructure is inadequate. The table also illustrate the dependable and independent variables with their indicators

Hypothesis 2: The operation of the Tiko seaport has influenced socio-economic development

Dependent variable: Socio-economic development

Independent variable: Seaport operations

Table 4: operationalization of the variable; hypothesis 2

Dependent variable	**Indicators**	**Independent variable**	**Indicators**
Socio-economic development	-Raise custom duties -Job creation -source of revenue to the state and council - Available market - Development of the transport sector - Growth of subsidiary activities	Seaport operations	-Presence of port infrastructure/facilities -Export and import trade -Loading and unloading -Freight vehicles Administrative staff

Table 4 shows the operationalization of variables for hypothesis 2 which state that the transactional and functional operations of the Tiko seaport have influenced socio-economic development. The table also shows the dependable and independent variables with their indicators

Table 5: operationalization of the variables of hypothesis 3

Independent variable	**Indicators**	**Dependent variable**	**Indicator**
Challenges affecting the operation of Tiko of seaport	- Existence of illicit trade -Port congestion -Insecurity -Competition -Accident -Indiscriminate fishing	Management strategies	-Investment in transport infrastructure -reinforcing security measures at maritime frontiers - Reinforcing proper checks on goods by the ports police, clearing customs and the various stakeholders -Fight against corruption among the police, custom and navy operating at Tiko port

Table *5* shows the operationalization of variables for hypothesis 3 which state that Challenges such as illicit trade, insecurity, port congestion, competition and sea accident affect the operation of Tiko seaport. The dependent and independent variables of the challenges have and their challenges are also shown on the table.

Data treatment, presentations and analysis

In this research, several types of data were collected that were accorded different types of treatment before presentation, analysis and interpretation. These types of data principally consisted of qualitative and quantitative data, cartographic data and observation data. As earlier stated, these data were treated differently and presented in the form of graphics figure and tables.

Interview, focus group discussion and observation data, treatment, presentation and analysis.

The treatment of qualitative data began with data coding making use of the Strauss method of open system data coding. In this case, categories of Reponses from different respondent and major themes where identified, assigned, and classified. These categories were manually recorded on a prepared block note as per objectives of the study that enabled the formulation of constructive codes from in vivo code obtained during interviews and focus group discussion. The in vivo code laid emphasis on the participant actual word spoken. This type of data coding method championed because of its usefulness in highlighting the voices of the participant themselves during interview and focus group discussion. The in vivo coding method was also used because it was thought to be very reliant to pass across the message using the direct words of the participant. The code obtained as per objective of the study included.

Objectives 1: To investigate the state of Tiko seaport infrastructure

Objective 2: To investigate the extent to the operation of the Tiko seaport contribute to socio-economic development

Objective 3: To examine the emerging challenges affecting the operation of Tiko seaport

Observed phenomenon was captured using the digital camera. These statistical data were input in a Photoshop software whereby, the photos were enhanced by enlightening and clearing off some impurities found in the photos to make them very clear, large and visible.

A: Cartographic data treatment, Presentation and Analysis

This category of data was gotten with the use of Global positioning System (GPS) in phones to take photos and waypoint areas were traced, track and collected on area

concentrated with new sustainable buildings, highly old and dilapidated structures, and demolished areas, camps, in Tiko sub sub-division. These data were from phones, GPS and superimposed on cartographic shapes file of Tiko Sub-division as they were specialized in space and the information presented on maps, analyzed and the result interpreted for spatial analysis. As concerns road network and relief maps realized, the data was obtained from the National Institute for Cartography (NIC) and uploaded into cartographic shapes file of Tiko Sub- division from which the maps where gotten for spatial analysis.

B: Questionnaires data treatment, Presentation and analysis

The data gotten using this tool/instrument are largely quantitative and requires a succinct method of treatment and presentation. Questions in the survey instrument that required the respondent to choose from a range of option were weighted one point for easy quantification. These statistics were collected for each question in the questionnaires after which, they were input in Microsoft excel meanwhile, the totals of number of population in the villages/ quarters were summed up and the totals of each cluster were also taken and sum up. Statistics, totals and percentages were represented on tables generated. According to the totals and percentages obtained, various graphs such as pie charts and bar chart were generated for analysis. Different tools and instrument were used for the collection of data and statistics which assisted in realizing the work.

Tables 6: Tools/ Instrument and uses

Tools and instrument	Uses
The eyes	Use to observe phenomena
Phone/ GPS	To record and collect waypoint
Microsoft Word and Excel	To treat qualitative data and obtain graphs
Adobe Photoshop	To enhance photos , give a clearer view, and clear off impurities
ArcGIS(shaped files) and Adobe illustrator	To realize maps
A digital camera	To capture phenomena
Questionnaires	To collect quantitative data
Google map and Google	To collect spatial information on space and to verify settlement, roads and relief maps realized

Appendices	for the clarification of assertions made in the study

This work paper began with a plan adapted for the reader to have a vivid rundown of the content of the work from general introduction to general conclusion.

0.14 Plan of Work

The general introduction of this work covers the background of the study, delimitations of the study, the problem statement, research question, objectives and hypothesis of the study. Literature review, concept as well as theories related to the topic are examined in the general introduction. This section of work also carries the research methodology.

Dissertation Chapter layout

This study is circumscribed into four chapters which are further subdivided into sections and subsections. This section includes principally the introduction, discussions of the data presented in the chapter and finally the conclusion drawn which ends the chapter. This conclusion simply brings in every aspect talked about in this work in summary with all the main issues raised and discussed in the various chapters.

Chapter one is focused on Tiko port infrastructure Sub-, her state of seaport infrastructure is examined. This chapter examines the type of port infrastructure of the Tiko seaport and the state of the port infrastructure, and their functions. This chapter also access how adequate is the Tiko port infrastructure. The main goal of this chapter is to validate hypothesis 1 which state that; the state of Tiko seaport infrastructure is inadequate.

Chapter two set out to assess how the Tiko seaport contribute to socio-economic development in Tiko town. The data collected, have been presented, analyzed and interpreted in this chapter which helped in the validation of hypothesis two which state that; the operation of Tiko seaport has contributed to socio-economic development in Tiko town

Chapter three elaborate the emerging challenges affecting the performance Tiko seaport strategies. This chapter equally throws more light on proposed strategies that can be put in place to mitigate the challenges affecting the performance of Tiko seaport.

General conclusion focuses on the verification of hypothesis, summaries of findings, conclusions and suggestions or recommendations and finally references.

CHAPTER 1

THE STATE OF THE TIKO PORT INFRASTRUCTURE

Introduction

Seaport infrastructure is very crucial for the smooth running and the operation of the port. The capacity of a seaport is therefore determined by the state of infrastructure. Efficient seaports ports need modern infrastructure to support its functioning. Given that seaports play vital role not only in economic development of countries and regions, it also interconnects countries by sea and facilitate international trade as well as ensure multimodal transport in the area where they are found. Thus, increase international trade is thank to seaports as most of the bulky goods are being transported by sea over long distances. Port are also actors of globalization because they ensure export and import of bulky goods by sea and significantly create jobs and improve economic growth.

As port infrastructure boost the capacity of seaport, any country that intend to enhance the capacity of their ports should consider investing heavily on seaport infrastructure/facilities. Thus, building resilient and sustainable port infrastructure is in line with goal number 9 of the of 2030 Sustainable Development Goals (SDGs), which seek to build resilient infrastructure, promote sustainable industrialization and foster growth. This explained why developed and developing countries that have highly invested in seaport infrastructure have the most performant seaport, even in Cameroon the most performant seaports such as Douala and Kribi is due investment in these seaports' infrastructures. Thus seaports with low or little investment in infrastructure such as the Tiko seaport is bound to have inadequate seaport infrastructure. The magnitude at which the Tiko seaport operate is in function of the state of infrastructure.

This chapter focuses on the state of port infrastructure, the different functions and operation of the port infrastructure. How the port infrastructure operate. The chapter also look at the inadequate nature of the port infrastructure which stand as stumbling block to the port performance

1.1 The creation and evolution of Tiko seaport

The port of Tiko which was opened by the Germans plantation company in the 1880s become very busy in 1920s during British colonial administration. Despite the fact that the port was under British colonial rules in the 1920s and 1930s, the main trading partner was Germany.

As such there was high volume of trade between from the Tiko port to Germany where significant progress was made in terms of import and export.

Several sea going vessels from Germany, Britain and other European countries loaded and discharge their goods in Tiko seaport. There was a weekly service between the Tiko port and the principal port of Douala. The most important trading partner of this port was Germany (Nkwi, 2017). Table 7 below shows the import trade in the 1930s by the Tiko seaport.

Table 7: Importation of goods at the Tiko seaport in 1930

Types of goods	Quantity in Tones
Ale, beer	7693
Brandy	79
Gin	189
Rum	20
Whisky	88
Wines and gallons	771
Liquors	29
Total	8869

Source: Nkwi, 2017

Table 7 shows goods imported to the Tiko seaport in the 1930 under the German colonial administration. In 7693 tons of ale and beer were imported, 79 tons of brandy were imported, import of gin was 189, rum imports were 20 tons, the import of whisky recorded was 88 tons, import of wines and gallons stood at 771, liquors stood at 29 and the grand total of import in 1930 stood at 8869 tons.

In 1936 vessels of British, German, Dutch and Norwegians nationalities docked at Tiko port. In the same year, Tiko seaport registered a net tonnage of 156,6767. for the exportation of raw materials from agricultural products such as palm oil, rubber, bananas, cocoa pepper, palm kernels and kola nuts. Wood and timber importation of manufactured goods such as; bags, and sacks, cement, cigars and cigarettes, cotton piece goods, fish, kerosene in imperial, motor spirits, rice, bicycles, radios, radios, tilly lamps among others. Tiko as a port town had the trappings of modernity and thus attracted many people for diverse reasons and the population of the port town of Tiko increase significantly between 1924 and 1953, to 1961. The Tiko seaport was more commercial in outlook than Victoria because of the

overwhelming Ibo migrants. People migrated from hinterlands to look for employment. The Tiko seaport encourage the growth of plantation agriculture and attracted many migrants from the Bamenda Provence notably from Kom, Nso, Bafut, Bali, Wum among others. Field investigation from the Port Authority of Limbe, Tiko and Victoria seaports were very busy ports from 1961 in West Cameroon to 1972. From 1972 when Cameroon abolished the federal system of government in favour of the Unitary state, the port of Tiko was abandoned in favour of Douala seaport.

1.1.1 The state of port infrastructure

Ports/anchorage sites, repairs of ships, habours, shipyards, warehousing, freight forwarding services and other related logistics or support services are a prerequisite for the effective operation of a seaport (Bamidele, 2014 ; Onwuegbuchunam, 2019). Land infrastructure designated for the reception of personnel or cargo transported by the sea and that which serves as an authorized port of entrance into or departure from country/place of departure to the point/country of arrival represents one of the most important maritime transport facilities (Owoputi et al., 2018). In fact, ports are the mouths through which countries or continents speak to others or to the rest of the world. The port infrastructure of Tiko ranges from; port infrastructure, storage facilities and sub infrastructure. The port infrastructure include; harbour, ships/boats, berth, terminal and wharf while the storage facilities include warehouse, transit sheds, stockyards and stacking area, the sub port infrastructure include, Documentation, warehouse clearance and associated infrastructure such as roads and railways.

1.1.2 Port infrastructure

As aforementioned above, the port infrastructure includes harbour, ships/boats, berth, terminal and wharf. It should be remark that the port infrastructure operated at the Tiko seaport are remnants infrastructure of the colonial masters. The port infrastructure enables the port to operate, without these port infrastructures, a seaport cannot operate.

1.1.3 Harbour

Harbour provides accommodation for ships and cargo handling facilities. Vessels may find shelter especially one protected from rough water by piers, jetties and other artificial structure. Ships, boats and barges docked in a shelter body of water (harbour). Harbour may be natural or artificial. An artificial harbour is deliberately constructed breakwaters, sea walls, or jetties, they can also be constructed by dredging, requires maintenance by further

periodic dredging. Natural harbour on the other is a landform where section of a water is protected and deep enough to allow anchorage (Balasubramanian, 2021). During field survey, it was observed that Tiko seaport has natural harbour which permit the anchorage of ships and boats (Photo 1)

Photo 1: Natural harbour of Tiko seaport

Source: Tutuwan, 2023

Photo 1 shows natural water body (harbour) where ships or boat can anchor. The Tiko port is blessed with natural harbour for anchoring of vessels. This is a deep water where ships and boats anchor. The harbour also permits the installation of port terminal facilities which transfer cargo between ships and land transportation, the harbour equally provide site for naval repairs

1.2 Shipping vessels

Since ships are operated from various perspective that include security of lives and hull structural safety, prevention of cargo collapse, protection of the machinery and equipment and energy saving operation, is essential to ensure accurate assessment of the actually encountered sea states by ships. Ships constitute one of the components of port infrastructure, whose role is to transport cargo and people by sea from place to another especially across frontiers. The growth of international trade globalisation has led to the evolution of ship technology, the advancement in technology has led to the production of more sophisticated ships to meet growing international trade demand. Ships ranges from small to very large

ships, the main role of ships is to transport goods, we also have tanker ships which transport petrol. During field survey mostly vessels of small sizes were identified at the Tiko seaport (Photo 2).

Photo 2: Ships anchored at the Tiko port

Source: Tutuwan, 2023.

Photo 2 shows ships and a boat docked anchored at the Tiko port. A shows small size ships anchored at the Tiko seaport and note B show a boat anchor at the Tiko port. The ships are Cameroon Having Cameroon flag, indicating that the ships belong to Cameroon. The vessels transport cargo and people to neighbouring countries such as Nigeria, Equatorial Guinea, Gabon, Benin and Togo. Trader from trading countries come into Tiko mostly from Equatorial Guinea, Nigeria and Gabon to buy agricultural produce. Manufactured goods from Nigeria are imported from these vessels.

1.2.1 Jetty

Ports provide jetty facilities for ships to load and unload their cargo. Jetty capacity is costly and therefore limited, causing delays for arriving ships (Eclco et al 2004). Accommodation of vessels, and landing of passengers has been made possible by construction work extending into harbour with deep depth of water. During field observation, it was observed at the Tiko seaport that jetty is an elevated structure linking the land and the sea and it plays a fundamental role in loading uploading of goods in the ship (Photo 3).

Photo 3: Jetty

Source: Tutuwan 2023

The photo shows a jetty at the Tiko seaport where cargo is pending to be loaded to the ship/boat. Goods also unloaded from the sea vessels are being kept in the jetty before transported to the land where they are being loaded into trucks and other light vehicles. Jetties therefore has as function to facilitate the shipment uploaded goods from the ship to land and anchorage where goods from the sea are being unloaded from ships and transported to land. The next seaport infrastructure to be examined is cranes

1.2.2. Crane and lifters

Container's transport over the world plays a major logistics role in the contemporary global economy, seaport and their container terminals represent an important function in the logistics chain. The transhipment speed of containers in the container terminal is a significant factor for participating in the overall transport time. Quay cranes served as one of the essential elements of trans-shipment containers in container terminals (Bartosek, 2013). It was during fieldwork, it was observed bulky goods such as cars were unloaded from ships with the use of cranes. (photo 4)

Photo 4: Crane unloading a car from a boat

Source: Tutuwane

A shows an inbuild crane unloading a car vehicle from a boat to land, note B is a vehicle being transport by a crane

1.2.3. Storage infrastructure

Port storage facilities plays a crucial rule in port operation, storage facilities include harbour, cargo handling, warehouse among others. When goods enter a port, some of the goods are stored in a warehouse before being delivered or exported. Jinxian et al (2007) noted that warehouses are essential components of any supply chain, whose major roles include; buffering the raw material flow along the supply chain to accommodate variability caused by factors such as product seasonality in production and transportation. During field survey, it observed that the Tiko seaport possess a ware where a varietie of goods are being stored (photo 5)

Photo 5: Warehouse structure

Source: Tutuwan 2023

Photo 5 shows warehouse structure at the Tiko seaport, where goods are being stored, to be delivered later or to be later exported.

Seaports function with other complementary infrastructure that ensure the movement goods in and out of the port such as roads and railways, but the Tiko seaport is only interconnected by road.

1.2.4. Associated infrastructure

Ports do not operate in an isolation, they are interconnected to other transport modes such as roads. It is on this not Bamidele (2014) lamented that a reasonable development of the maritime industry requires a simultaneous development of other transport modes which are not alternative but rather interdependent. Maritime transport also functions as a system which mean that sub-component parts most be linked up together to enable it to function properly. These sub-components or systems cannot function alone, they therefore depend on one another to exist and co-exist. Should one sub-system fail, the entire system is affected. Field observation show that the Tiko seaport is only interconnected by road transport, which ensures entry and exist by truck and other vehicles (photo 6).

Photo 6: Earth road linking the Tiko seaport

Source: Tutuwan 2023

Photo 6 shows earth road interconnecting to the Tiko seaport, the port is only interconnected by road transport mode. Heavy and light trucks as well as other smaller vehicles enter and exit the port using this road. Sub infrastructure is also a component of the port infrastructure, as will be examine in the next sub chapter.

1.2.5. Port soft infrastructure

Soft infrastructure is also part of port infrastructure, port soft infrastructure include: documentation clearance agents, customs services, police and the host.

-Police For port to operate, it needs staff to coordinate and manage its activities as well as law enforcement agents. The sub infrastructure embodies the staff of the port, custom, police and the host. Interviews conducted from field work reveal that the port sub infrastructure perform the following tasks;

-The staff, this constitute the port authorities, that is, personnel that manage the port, the port of Tiko is under the management of Port Authority of Limbe (PAL). In PAL, there is port documentation officer who is responsible for effecting and controlling port payments which are reimbursable from the port authority (PA). The shipping clerks handles cargo documentation, invoice and inward shipments, ensuring that they are accurate and comply with the relevant custom and immigration.

-The logistics department is to manage and coordinate various activities related to reception, storage, handling and transporting goods in ports

-Custom checks the entry and going out of goods at the port. The custom collects revenue, protection of revenue, facilitate trade, safeguarding society through border control and gives data on export and import

-Clearing house; it plays a crucial role in the financial market by acting as intermediaries between buys and sellers. They ensure that every trade is well and securely settled, reducing counterparty risk for all parties involved.

-The navy; it is the marine force in charge of checking criminal activities such as circulation of illicit goods, clandestine migration, illegal fishing and piracy. The navy often patrol at the coast, at the Tiko seaport, Limbe and Idenua ports

1.2.5. Inadequate seaport infrastructure

The state of Tiko port infrastructure is not quite modern because attention has not been given to this infrastructure, thus the port infrastructure needs to be upgraded in order to boost its performance and make it more competitive. Tufoin et al (2022) noted that most of the port infrastructure in has been abandoned and left unmaintained. It seems this port still depend on what was implanted during the colonial days with little or no maintenance despite the busy nature of the port and the changing business environment with the ports handling more goods than ever. During field work, respondents were as to rate the state of port infrastructure in and most of the respondents attested that the port infrastructures were poor (table 8).

Table 8: Respondents perception towards the state of Tiko port infrastructure

Cluster Name	Number of respondents	The state of Tiko port infrastructure			
		Good	Very good	Poor	Very poor
Northern	79	8	1	42	28
Western	71	6	3	39	23
Eastern	29	3	00	17	9
southern	68	5	00	36	27
Total	247	22	4	134	87
%	100	8.9	1.6	54.2	35.2

Source : Field work, 2023

Table 8 shows respondent view towards the state of Tiko seaport infrastructure, from table 8 above, it is observed that 54.2% of the respondents attested that the port infrastructure of Tiko is poor. 35.2% of the respondents acknowledged that the state of transport infrastructure in Tiko seaport is very poor, 8.9% of the respondents agreed that the port infrastructure of Tiko is good while only 1.6% ascertained the port infrastructure is very good. Thus, if we sum up 54.2% to 35.2%, this implies that 89.4% of the respondents have negative perception toward the port infrastructure of Tiko seaport. As a matter fact, the Tiko seaport infrastructure is rated as inadequate.

1.3. Inadequate port infrastructure

The transport infrastructure of Tiko seaport is inadequate and thus hinder the performance of this port. This makes the less competitive as compared to the seaports of Douala and Kribi, the port of Tiko operate at the level of artisanal because it lacks modern port infrastructure and facilities and thus cannot harbour large ships. This is confirmed by Lingshan et al., (2018) who highlighted that during the colonial days, for the Europeans to import their trade articles and export raw materials from the west coast of Africa, maritime transport was a *sine qua non* why they extended a number of seaports in the west coast of Africa. Today, most of these seaports still depend on the remnants of the infrastructure of the colonial masters with little or no improvement on them despite increasing trade environment and globalization

Observation from field work shows that the poor port infrastructure ranges from dilapidate abandoned port infrastructure, poor reception facilities, limited warehouses, lack of intermodal transport system and poor road network.

1.3.1. Abandoned and dilapidated port infrastructure

Port infrastructure such as ships, wharfs among other were identified to be poor during field survey. It was observed that some of the port infrastructure in Tiko seaport are outdated and most of the port infrastructure are beyond repair and have been abandoned. This has led to low performance and decline of the port of Tiko (plate 1) shows some the abandoned port infrastructure.

Plate 1: Abandoned and dilapidated infrastructure of the Tiko seaport

Source: **Source:** Tutuwane *2023*

Photo A shows a dilapidated and abandoned wharf which function is anchor ships between water and land

Source: *Tutuwan 2023*

Plate B shows broken-down and abandoned vessels used in the transportation cargos.

Photo A show abandoned wharf that has dilapidated, it was long constructed in the colonial era and no maintenance work has been carried out. The wharf is out of use and cannot perform any function and if maintenance work is to be carried out, it will be very costly. Photo B shows abandoned ships which are beyond repairs. The ships cannot operate again and its debris pollute the sea, thus causing environmental problems to marine organisms. The abandoned port infrastructure show how the port has been under exploited.

1.3.2. Limited reception facilities

Reception facilities play a key role in loading and unloading and unloading of vessels. Reception facilities at the Tiko seaport are generally inadequate and some completed absence. This make makes the handling of cargo very difficult as such, adversely affecting the performance of the port. It was observed during field survey that reception facilities such as jetty was in a poor state and cranes were limited or almost absence as most of the loading and unloading were done manually (plate 2)

Plate 2: inadequate reception facilities

Source: Tutuwane *2023*

Photo A: A dilapidated jetty at the Tiko seaport

Source: Tutuwane *2023*

Photo B shows goods unloading from the truck whose task is performed manually and also to be loaded on the ship manually due to limited cranes

Photo A show jetty which is in dilapidated state and no maintenance work have not been carried out for a very long period. Unloading of goods from the ship to jetty and loading of goods from the jetty on ships often create limited space. A truck with an inbuild crane cannot adequately stand to load and unload due to limited space. Photo B shows most of the unloading of goods to be later loaded into ship/boat later the uploading is done manually due to absence of port handling facilities such as cranes. This makes loading and unloading tedious and time consuming.

13.3. Limited storage facilities

Apart from the port reception facilities, the ports storage facilities are the most constraining factor for many ports around the world.

The competing pressure for land use and competition from other regional and international ports forces port planners to make best use of available land (Chen et al., 2013). As such, the optimization of cargo storage in ports available yards is crucial to its operations and commercial viability. On-the-spot observations in the various ports reveals a poor and limited cargo storage facilities which cannot contain the cargo handled by the port on a daily basis. Interviews with some port users (importers and exporters) in the port of Tiko revealed that at times cargo are piled up at port yards because of insufficient space coupled with the lengthy administrative protocol to clear the goods. This places the cargo at the risk of spoilage

especially the perishables. This was observed in the port of Tiko where the lone warehouse was filled with tones of goods still to be cleared. This can be translated to high cost of cargo handling and spoilage of some perishables (Plate 3).

Plate 3: Limited storage facilities at the Tiko seaport

Source: *Tutuwan 2023*

Photo A: Goods piled up at the port yard at the Tiko port

Source: *Tutuwane 2023*

Photo B: Show cargo stocked outside due to limited warehouses

It was also oberved that at times, when the warehouses are full to capacity, goods are just kept outside and covered at the port yard till clearance. Five traders contacted at the Tiko port during interviews lamented that the insufficient storage facilities in the ports of Tiko is causing lots of setbacks in the operation of the ports and the maritime transport system in general

1.3.4. Inadequate transport network interconnecting port side

A reasonable development of the maritime industry requires a simultaneous development of other transport modes which are not alternative but rather interdependent (Bamidele, 2014). Maritime transport also functions as a system which mean that sub-component parts most be linked up together to enable it to function properly. These sub-components or systems cannot function alone, they therefore depend on one another to exist and co-exist. Should one sub-system fails, the entire system is affected. A country cannot enjoy good transport connectivity if all the modes of transport are not interconnected. It seems the port of Tiko has been isolated from other modes of transports such as rail and roads. In this condition, it becomes very difficult for the transport system as whole to function properly. This study surveyed

transport infrastructure in Tiko linking to the Tiko. It was discovered that the transport infrastructure/network connecting these port towns of Tiko was very weak with only a single lane tarred road running from Tiko to port. The roads leading to the port is very poor and dilapidated despite the substantial volumes of goods handled by trucks inn and exits of these ports daily. Railway lines were identified to be completely absent. The railway that exist during the colonial administration has been abandoned (plate 4)

Plate 4: Poor transport network to port side

Source, *Tutuwane 2023*

Photo A shows poor state of road linking the Tiko seaport. The road is muddy during the rainy seasons with water standing points, this affects the circulation of vehicles especially heavy trucks

Source, *Tutuwane 2023*

Photo B shows dilapidating and abandoned railway line that was used to connect the port of Tiko

The Tiko port of is not interconnected to other modes of transports apart from road that is of poor state and made up of earth road which is muddy in the rainy season and dusty in the dry season. Photo shows old railway that was linking the port in the 1930s to the 170s. As the port was abandoned in the 1970s, the railway line interconnecting the port was as well abandoned and got dilapidated as there no maintenance work was carried out. As of now, only one single earth road links the port and the single road is in poor state and very small in size as well. This makes the circulation of heavy vehicles on this road difficult.

Conclusion

As earlier noted, the Tiko seaport was opened by a German plantation company in the 1880s and become very busy in the 1920s. The port operation was very effective in the 1920s and the 1960s because attention was paid to the port infrastructure, the port infrastructure was regularly maintained. This enabled the port to operate effectively as and port became very attractive to businessmen and investors. The port has good port infrastructure such as; harbour, wharf, ships/boats, cranes, jetties, associated transport infrastructure such as roads and railways as well as and soft transport infrastructure which permitted the port to carry out its transactions. However, the port started declining in the 1970s under the Unitary Government where of Douala was favoured for imports and imports trade in Cameroon. Consequently, the Tiko port was abandoned and its infrastructure become dilapidated as no maintenance work was carry out. Presently, most of the port infrastructure are remnants of colonial infrastructure which are in dilapidated state. This has adversely affected the operational and tractional activities of the port, as such, the port operates at a artisanal level. There is therefore urgent to fully exploit the Tiko seaport by investing heavily on its infrastructure in order to boost its performance so that the port can efficiently contribute to socio-economic development of Tiko sub-division. Irrespective of the poor state and dilapidated infrastructure of Tiko seaport, the operation of the port at a low scale has contributed to the socio-economic development of Tiko sub-division (chapter 2)

CHAPTER 2

THE TIKO SEAPORT ON THE SOCIO-ECONOMIC PROGRESS OF THE SUB-DIVISION

Introduction

Seaports are vital for igniting progress and development on societies where they are found and beyond. This is usually via job creation, import and export activities and other related port operations and transactions. UNCTAD (2017) underpinned that the world's merchandise trade volumes have grown to a modest rate of 2.3 percent in 2014 following the global increase of Gross Domestic Product (GDP) at the rate of 2.5 percent indicating a strong link between international trade and GDP growth of a country. The history of urban development reveals that economic progress is very apparent especially in seaport towns kindled by seaborne trade (Ziaul and Hans-Joachim, 2018; Shan et al., 2014, Ojuku, 2017).

The evidence of seaport towns and economic progress are glaring with Douala (the economic capital), Kribi, Limbe, Tiko being eloquent testimonies. This is further confirmed by Onwuegbuchunam (2019) who noted that maritime transport plays a vital role in the socio-economic development of a country via seaborne trade. Data from field survey revealed that the operation of the Tiko seaport contributes to socio-economic development as income is being generated from import and export trade, port operations, job creation among others. It has also made a variety of goods available to the local population.

This chapter focuses on the socio-economic implications of the Tiko seaport to the development of the Sub-division. The first aspect of the chapter emphasis on how the port operation influences developmental activities and also creates wealth to individuals while upgrading living standards in Tiko. The first section discusses how the port operation influence socio-economic development while the second examines tax revenue raised and used to finance development projects. Furthermore, the creation of jobs to truck drivers due the port operation. The chapter also focuses on jobs creation to skilled and unskilled labourers, and the development of other income generating activities linked to the operation of the port.

2.1. The influence of the Tiko seaport operation on socio-economic development

The operation of the port of Tiko has implications on socio-economic development. This explained by booming trading activities through export and imports of goods, thus the port has acts as window to foreign market and thus the standard of living of the local population

who export agricultural products have risen and also increase in sales of other local some local industries via export. Result from field investigation revealed that the port influences socio-economic development via import and export trade, taxes revenue, generate income to transporters, create jobs to unskilled labourers (table 9)

Table 9: Port and socio-economic development

Cluster Name	Number of respondents	Implications of port on socio-economic development			
		Import/export trade	Tax revenue	Create jobs to transporters	Create jobs to unskilled labourers
Northern	79	32	24	12	11
Western	71	29	21	11	10
Eastern	29	12	10	4	3
southern	68	25	20	13	11
Total	247	98	75	40	35
%	100	39.6	30	16.9	14.1

Source : Field work, 2023

Table 9 shows respondents' perception of the implications of the Tiko seaport on socio-economic development. Base on respondents' views, 39.6% attested that import and export trade has been stimulated by the operation of the Tiko seaport. This is explained by the fact that, the main activity of the port is trade. Agricultural products cultivate locally and local manufactured goods produced in Tiko town and its environs are being exported via the Tiko port to Neighbouring countries such as Nigeria, Equatorial Guinea, Benin and Togo. This implies that the port provides a channel through which local agricultural produce and manufactured goods are sold. Thus, the income of local farmers and local industries which trade in this port has risen, consequently a rise in standard of living. 30% of the respondents attested that the port operation has increase revenue from taxes. Revenue is raised via custom duties, the council also levied taxes on transporters and local taxes paid to the council by subsidiaries activities linked to the port that operate around the port vicinity. This has increased council budget and the council use part the money to finance development project

within Tiko town. 16.9% attested that the port operation has created jobs to transporters, notably truck drivers, and other light vehicles that transport goods people into and out of the port. 14.1% of the respondents acknowledged that the operation of the port has created jobs to unskilled labourer, this is because most of the loading and unloading of cargo is done manually. Thus, this has enabled unskilled labourers to have access to employment. The domain which the Tiko seaport influences socio-economic development such as import and export trade, tax revenue, jobs creation to transporters and unskilled labourers will be succinctly examined discretely.

2.1.2. The development of imports and exports of goods in the Tiko seaport

The operation of the Tiko seaport has enhance trade along the coastal belt of Tiko, more especially imports and exports of goods. This has influenced socio-economic development in that localy produced goods are exported especially agricultural produce and the importation of manufactured goods from other neighbouring countries has made a variety of goods available to the local population. As such, the port has opened gate for foreign markets where local produced goods in Tiko sub-division are sold and this has gone a long way to generate revenue from goods sold to foreign market. Data compared from PAL during field work revealed transaction of import and export from the year 2015 to 2020 and huge tons import of export were recorded (table 10).

Table 10: Import and export statistics in tones from the port of Tiko 2015-2020

Year	Imports	Exports
2015	16,274.98	3,495.89
2016	17,398	4,782.9
2017	17,492.5	6,973
2018	18,872	6,779.8
2019	19,201	7,567.82
2020	20,981	9,458.04

Source: *Compiled from PAL dataset, 2023*

Table 1 reveals that the port of Tiko spanning from 2015-2020 has registered increasing trends of imports and exports, though imports are projecting more than exports. For instance, in 2015 imports were 16,274.98 tons against 3,495.89 tons for exports and in 2016 the imports stood at 17,398 tons against 4,782.9 tons for exports, in 2017 imports stood at 17,492.5 tons while exports were 6,973. In 2018, imports were 18,872 tons against 6,779.8, while in 2019, imports stood at 19,201 tons against export which 7,567.82 tons. The trend seems to be increasing simultaneous though the imports remain higher. The increase tonnage of cargo completed via these ports gives an eloquent testimony that the port of Tiko belt is indeed a veritable maritime trading hub. The goods completed at the ports are mostly trade articles such as cosmetics, textile materials, plastics goods, agricultural produce such Irish potatoes, tomatoes, amongst others. Imports are diversified and range from automobile spare parts, vehicles, textile material, drinks, cotton, robber to cereals amidst others

2.1.3. Stakeholders involved in Tiko seaport operation

For a port to operate, there must set up system to regulate and coordinates the functional and transactional activities of the port. Also, There must be different people that carry out transaction in the port. The stakeholders involved in seaport operation ranges from the port authority, sailors technicians, drivers, traders, custom, police and the navy. The stakeholders involved in Tiko seaport operation and their functions as presented on Figure (10) below below

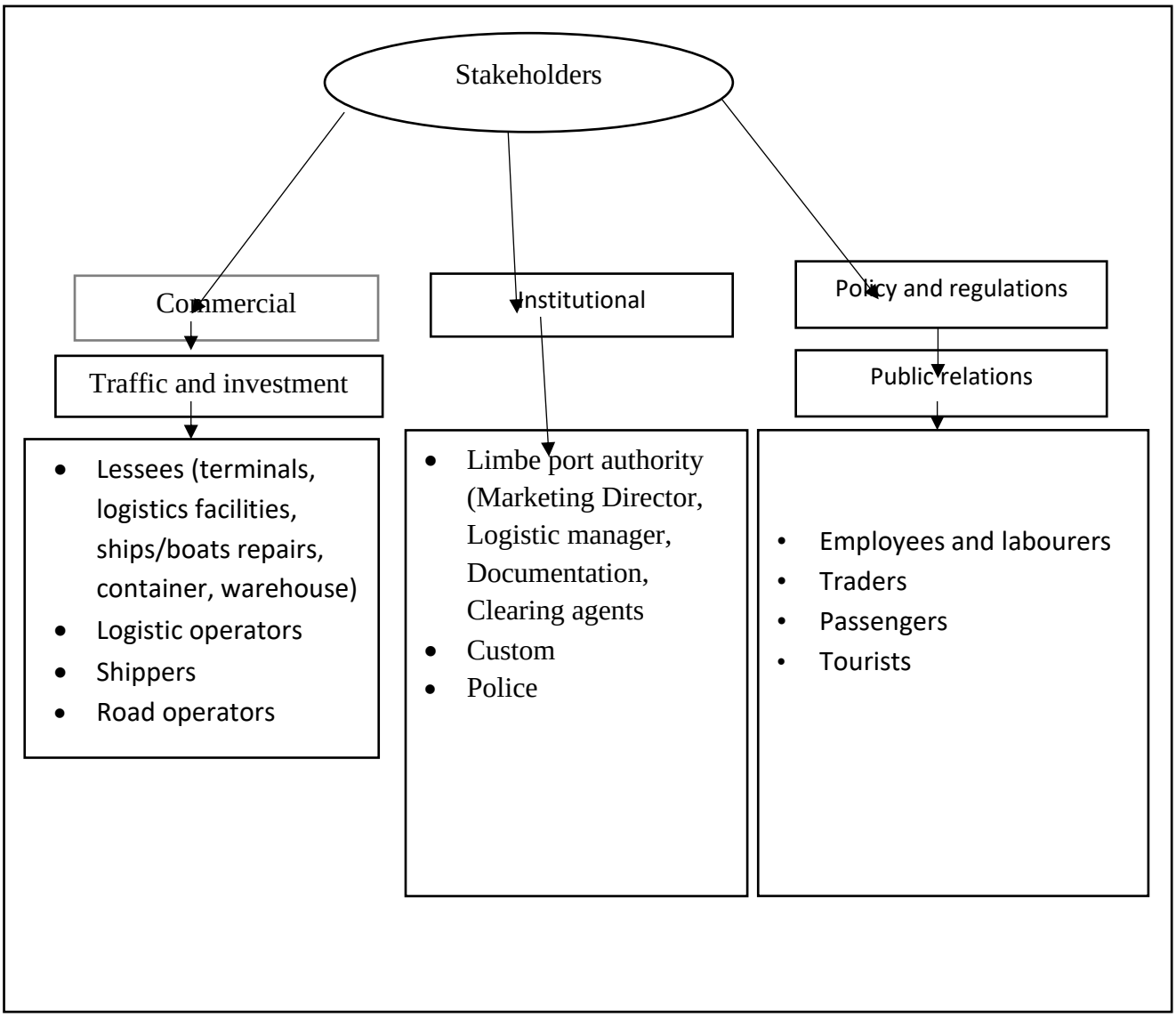


Figure 10: Stakeholders involved in Tiko seaport

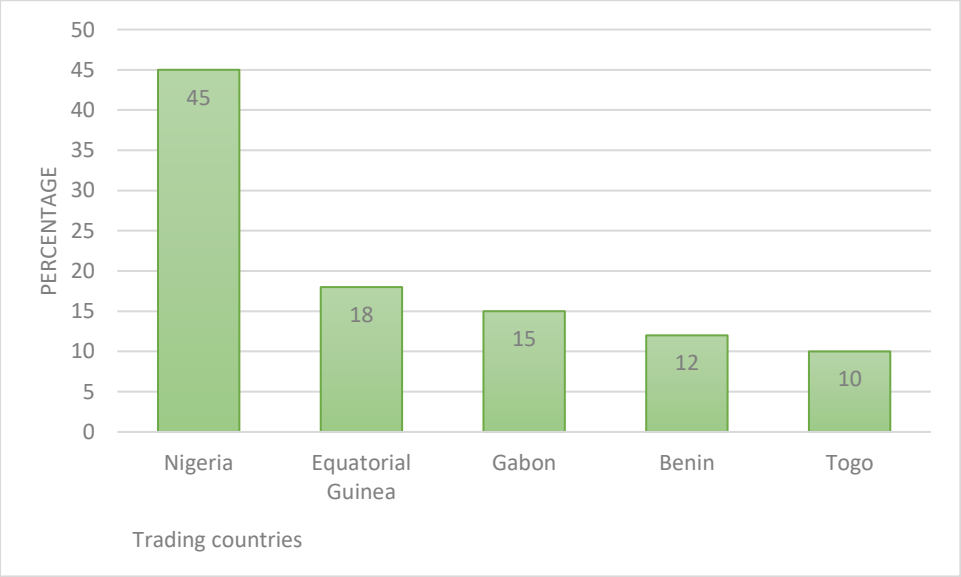
Source: PAL and field interview, 2023

Figure 10 shows stakeholders involved in the operation of the Tiko seaport, from figure 10 above, under traffic and investment we have lessees which embody terminal, logistic, facilities, ships/boats repairs, containers and ware house which are port infrastructure and facilities. Logistic operators are those involved in transportation equipment while shippers and those who drive ships. Road operators are drivers who transport cargo and people by road via trucks and other light vehicles to seaport and out of the port. Under policy and regulation we have the Limbe Port Authority (PAL) which constitutes the Marking Director, logistics Manager, documentation and clearing argents. The marketing department is in charge of marketing and advertisement and the logistic manager is in charge of transport and logistic department of the port. Documentation deals with secretariat duties of the port which handles documentation related port activities. Clearing agents are those who facilitate people to clear

their goods at the port. The custom collect taxes on imported and exported goods and ensure that goods either imported or exported are certified, the police main law and order and ensure security at the port while navy checks criminal activities and the circulation of illicit goods. Tiko port which is under the management of PAL is part of the institutional setting that set policies and regulation concerning port activities. They regulate processes such as the planning and developing ports infrastructure, how decisions are applied and projects funded. Public relation encompasses; employees and labourers, passengers and tourism. The employees who perform administrative duties and those that carry out jobs which require know how, the labourer and those who are permanently employ are performing jobs suck as parking, loading and unloading of cargo. The stakeholders involve in the port transaction enable to port to operate in order for imports and imports to take place in the Tiko port. The main trading partners are countries of Central and West Africa such as Nigeria, Equatorial Guinee, Gabon, Benin and Togo.

2.1.4 Trading countries in the Tiko port

The main trading countries involved in transaction activities in the Tiko seaport are countries of central and west Africa countries such as Nigeria, Equatorial Guinea, Gabon, Togo and Benin. There is high volume of trade in Tiko seaport with the trading countries. Many buyers usually come to Tiko via the port during harvest seasons to buy agricultural produce (Figure 11) shows the main trading partners.



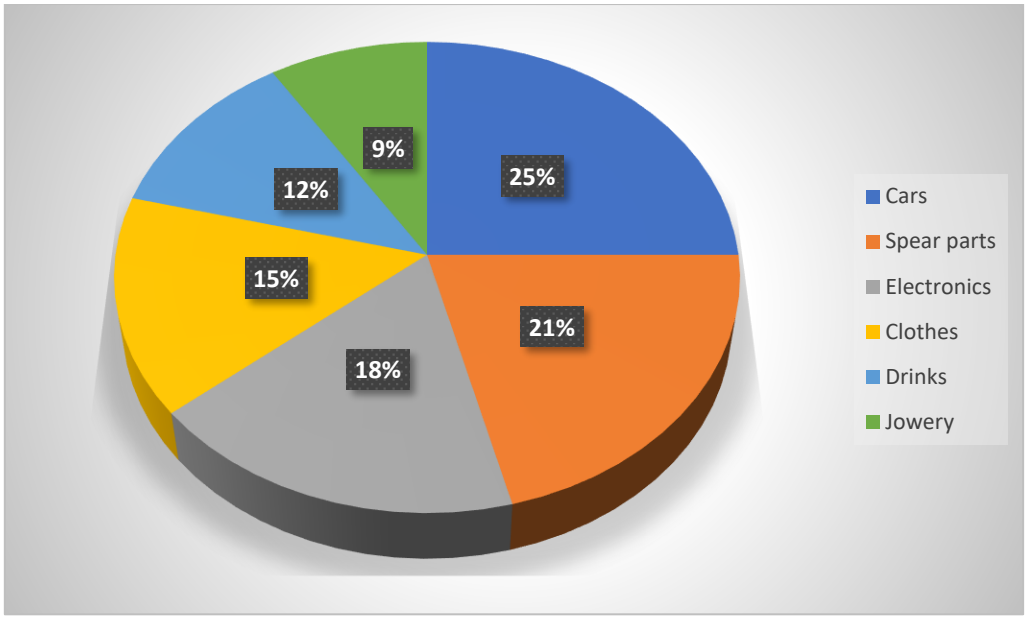
Source: PAL and field interviews, 2023

Figure 11: Main trading partners of the Tiko port

Figure 11 shows the main trading countries at the Tiko seaport, Nigeria represents the 45% of the trading partner countries. This is probably because of Nigeria's proximity to this part of the country and the fact Nigeria has the strongest economy in the whole of ECOWAS and CEMAC Sub-regions and thus has the capacity to produce and export to its neighbouring countries like Cameroon. As a matter of fact, they have more industries and produce a wide variety of goods. Cameroon on its part is happens to be the strongest economy in the CEMAC sub-region and thus also have the capacity to produce more and distribute to her neighbouring countries which partly explains why many trading partners are involved in the scene. Equatorial Guinea represents 18% of the trading partners. This result from the fact Equatorial Guinea highly depend on Cameroon for the supply of agricultural produce because Cameroon is the largest agricultural producers of the CEMAC region and also the proximity between the two countries. Gabon made of 15% of the trading country at the port of Tiko, Gabon highly depend on Cameroon for food supply and thus turns towards Cameroon since they belong to the same trade bloc and also due to close proximity. Benin represents 12% of the trading partners, this is explained by the fact a good number of car dealers ship their cars from the Port of Cotonou to Tiko seaport and agricultural produce such as palm oil is highly exported to Benin. Meanwhile Togo made up 10%.

2.1.5 The main goods imported in Tiko seaport

Imported manufacture goods in the Tiko come from Nigeria, liquor from Equatorial Guinea, jewels from Benin and other imported goods diverted from the port of Doula because Douala is at times congested. Some businessmen prefer to import their good from trading countries via the port of Tiko due to the fact that custom duties are low in this port. It was revealed during field investigation via interviews conducted with 40 importers at the Tiko seaport that the main goods imported through the Tiko seaport were cars, drinks, spear parts, electronics and cloths (Figure 12)



Source: PAL: 2023

Figure 12: Main goods imported through the Tiko seaport

Figure demonstrates the main goods imported in the Tiko seaport. It seen from figure 12 above that the cars importation represents 25% of the goods imported, the cars are being shipped from Benin to the port of Tiko and some cars from the Douala seaport when the Douala seaport is over congested. Spear parks represent 21% of the of the goods imported in the Tiko seaport. These are spear parts of vehicles and motorcycles from Nigeria. Electronics made up 15% of the imported goods, these electronics are Television flat screens, loudspeakers, radios, mostly from Nigeria. Clothes constitutes 15% of the goods imported in the port of Tiko, the clothes are imported from Nigeria and Benin. Drinks (9%) comprises both soft and alcoholic drinks. The alcoholic drinks are mostly imported from Equatorial Guinea such as whiskey while soft drinks are mostly from Nigeria. Jewels made 9% of the goods imported in the Tiko seaport. The Jewelleries is being imported Benin. Thus, presence of variety of goods have made it possible for the local population of Tiko to have access to diverse goods and this has gone a long way to improve on their living standard. (plate) show some imported manufactured goods

Plate 5: Imported manufactured goods at the Tiko seaport

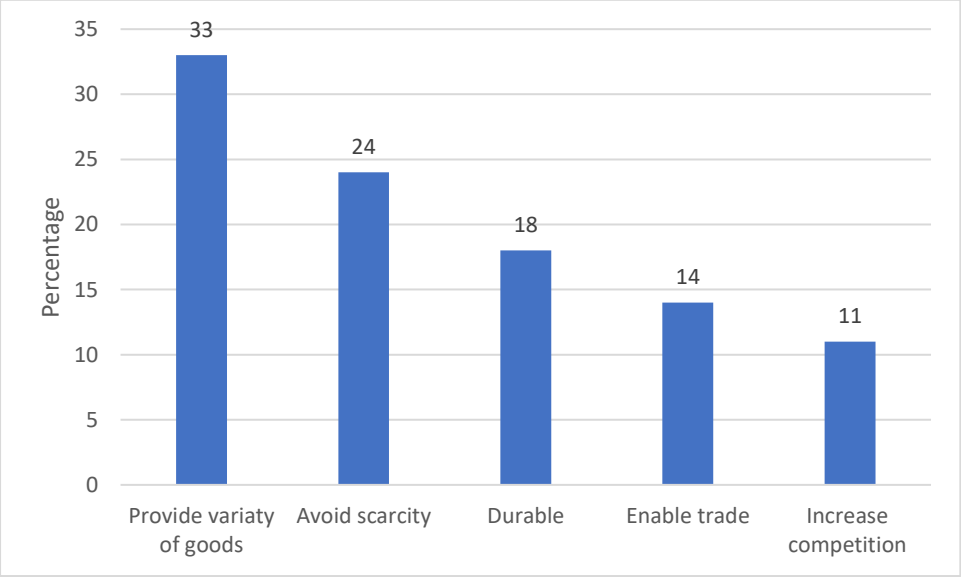
Source, *Tutuwane 2023*

Plate A imported manufactured goods

Source, *Tutuwane 2023*

Plate B imported cars

I t e manufactured goods are spear parts imported from Nigeria via Tiko port. Photo B shows imported cars in Tiko seaport, these are cars shipped from the port of Cotonou and also cars whose destination was the port of Douala but diverted to Tiko port when the Douala port is highly congested. The manufacture goods imported have enable the local population of Tiko to have wide choice of goods. Finding from field work revealed the imported goods has positively impacted consumers in one way or the other (Figure 13)



Source: field work 2023

Figure 13: Benefits of goods imported via Tiko port to the local population

Figure 13 show how beneficial are the goods imported from the Tiko port to the local population. A variety of goods (33%) is made available to consumers, this is because the port act as gate way via which manufactured goods and drinks from trading countries are imported and giving consumers in Tiko access to different goods. Avoiding goods scarcity represent 24% of the benefits of imported goods to local markets, this has made goods to continuously available. Durability represents 18% of the advantages of imported goods in Tiko, this because manufactured goods such as spear parts and electronics coming from Nigeria is of good quality and durable. Trade made up 14% of the advantages offered by imported goods. This explained by the fact that there are business operators in Tiko sub-division which trade with imported goods shipped from Tiko seaport this has also created jobs for them. Increase competition represent11% of the advantages of imported goods in the local market. This made other manufacture goods from the country to be competitive. During field survey, the inhabitants of Tiko were asked to appreciate their satisfactions with the imported from Tiko seaport and most them indicated that they were satisfied with goods (Table 11)

Table 11: Consumers appreciation on the quality of goods imported via Tiko port

Cluster Name	Number of respondents	Appreciation of the quality of goods imported			
		Low	Very low	Good	Very good
Northern	79	13	4	50	12
Western	71	12	3	45	11
Eastern	29	7	1	14	3
southern	68	11	2	44	11
Total	247	43	10	153	37
%	100	17.4	4	61.9	14.9

Source : Field work, 2023

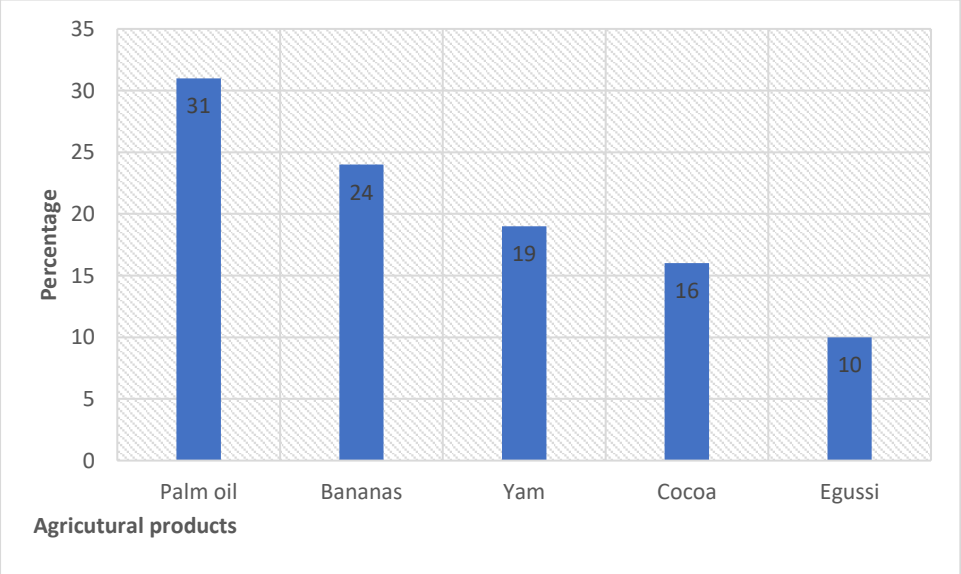
Table 11 indicates appreciation with the quality of goods imported from the Tiko port. 61.9% of the respondents attested that the quality of the goods they import from the port of Tiko are of good quality. Very good quality represents 14.9%. Therefore, we sum 61.9% to 14.9% we

have 76.8%, this implies that 76% is satisfactory with the quality of goods imported from the Tiko port against 4% and 17.4% respectively which give a total 21.4% who do not appreciate the quality of goods imported at the Tiko seaport

Apart from imports and export trade that has emerged in the port town of Tiko due to the operation of the seaport, the port has also enabled the Tiko council to raise revenue from truck entry and exiting the port and also taxes from local business and garage operating around due to the presence of the Tiko port, this forms the next sub chapter.

2.1.6 Expansion of local markets

Seaports are mouths which countries speak to the rest of the world, this is because most of the imports and exports take place along seaports. Thus, ports have provided a gate to external market where a country sell their local products. This a similar case in Tiko where her port operation has provided access to external market for local farmers to sell their agricultural produce which has gone a long way to increase of local farmers, this an evident to show that the operation of the port has increased the standard of living of the farmers. Findings from field investigation revealed that the crops sold to some countries of west and central Africa are; yams, plantains, oil palms cocoyam and tomatoes (Figure 14).



Source: Field data, 2023

Figure 14: Main goods exported at the Tiko seaport

Figure: 12 main agricultural produce exported to trading partners

Table 12 shows the major crops exported to trading countries such as Nigeria, Equatorial Guinea, Gabon, Benin and Togo. From Table 12, it is observed that palm represents 31% of the agricultural products exported to trading partners. Banana constitutes 24% of the crops exported to trading countries. Yam represents 19 % of the agricultural produce sold in external market, cocoa made up 15% of the crops exported while egussi constitute 10% of the agricultural products exported to partner countries. It is thanks to the operation of the Tiko seaport that farmers have had access to external market to sell their agricultural produce. The farmers indicated that the frequency of export of farm produce varies depending on the harvesting season of a given crop

2.2.1. Frequency of export of agricultural produce

As mention above, the frequency to which farmers sell their farm produce to vary from one crop to another, depending on the harvesting season. This implies that when is harvesting season for a given agricultural product, the sale to trading partners will increase. During off season of a particular farm produce, it export will drop, this is because the farm is limited or even absent during off period. Field investigation has shown that the frequency of agricultural products varies depending season (Table 12)

Table 12: Frequency of export of agricultural products to partner countries

Agricultural produce	Peak season	Frequency (%)	Volume of export
Oil palm	Nov- Apr	31	High
Banana	Mar-Dec	24	High
Yam	Nov-Mar	19	Low
Cocoa	August-Dec	16	Low
Egussi	June-Nov	10	Low

Source: sea port statistics 2007

Table 12 shows peak seasons of the various crops cultivated in different months of the year. From November to April, is the peak season of oil palm and output and volume of export to trading countries is high amounting to a percentage. Banana production is also high from

March- December, the outputs of Banana and volume of export is high during this period. The peak season of yam cultivation run from November to March, consequently, its production and volume of sale is low as seen above. The peak season of cocoa ranges from August to November, its production and volume of sales to trading partners during this period abit low compared to other products. The season of egussi production runs from June to November and its production and volume sales to partner countries is at the lowest stage due to the fact that neighboring countries are also involved in its production there by reducing it demand. Producers are forced to sell either at lower prices or go into the interior towns to look for markets. When outputs and volume of trade is high, an increased in sale revenue is generally recorded by the farmers. The high demand of this farm produce is mostly from neighboring countries in the southern part. As per field investigation, farmers and those who sell farm produce to partners countries revealed that the profit margins from the sale of their farm produce was high compared to the previous years. (Table 13)

Table 13: The rate of profit margins from the sales of farm produce to trading partners

Cluster Name	**Number of respondents**	**Profit margins from farm produce export**			
		Low	**Very low**	**High**	**Very high**
Northern	79	11	3	52	13
Western	71	10	3	45	13
Eastern	29	8	1	14	5
southern	68	10	2	44	12
Total	247	39	10	155	44
%	100	15.7	3.6	62.7	17.8

Source: Field work, 2023

Table 13 show the scale of profit margins made by local farmers from the sale of farm produce to trading partners at the Tiko seaport. The respondents who attested that profit margins from the sales of farm produce to trading partners represent 62.7%. The profit margins (17.8%) acknowledged that profit margins from the sales of agricultural products

very high. General, if we add 62.7% to 17.8%, the overall percentage that 80.5 who acknowledged that profit margins from the sale of farm produce is positive against 15.7% and 3.6% that gave negative impression on the profit margins made from the sale of agricultural products to trading partners at the Tiko port. This is an indication to show that farmer income has risen due to the operation of the Tiko port.

Interviews conducted with 20 farmers who sell their produce to the trading counties revealed that when there is high demand from trading countries, the prices of agricultural usually increase.

The farmers through interviews conducted revealed that the prices of agricultural produce when there is less demand from trading countries and the prices when there is high demand from trading partners. (Table 14).

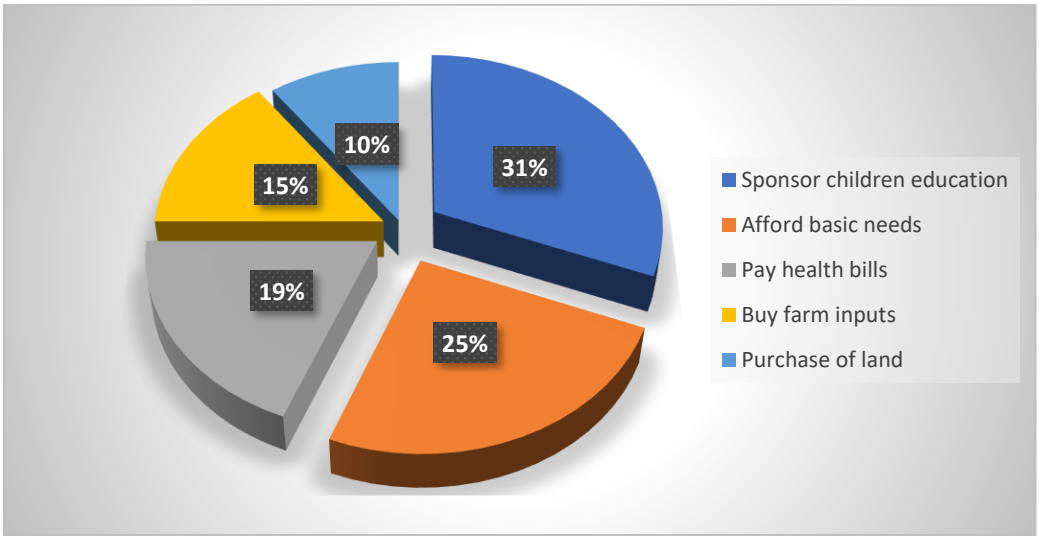
Table 14: Increase in prices of food produce due to high demand from trading partners

Agricultural produce	Units of measurement	Prices when there is low demand from trading countries (FCFA)	Prices when there is high demand from trading countries (FCFA)
Yam	100kg	130,000	170,000
Palm oil	20 litters	18000	20000
Tomatoes	1 basket	7000F	13000
Cocoyam	100kg	25000	30,000
Plantains	100kg	30000	35000

Source: Field interviews, 2023

Table 14 shows the variation in prices of food produce due to the influence of the Tiko seaport. This is because buyers of food stuff from trading partners often come via the Tiko port and buy agricultural produce in Tiko. When traders from trading countries come in massively, they usually buy foodstuff in huge quantities and much of the food produce is sold to foreign buyers at higher prices. Thus, during this period, prices of food produce usually move upward due to presence of foreign buyers who come into Tiko port to buy.

It is observed from table 11 that when demand is low from foreign buyers, 100kg of bag of yam cost 130,000 and when foreign buyers come in number, the 100kg bag of yams increases to 170,000, same goes to palm oil whereby 20 litters is usually sold at 18000 but when many foreign buyers come in, the prices of 20 litters of palm oil increases from 18000 to 22000. The basket of Tomatoes normally cost 7000 but when the is demand from foreign buyers, the prices move up to 13000 per basket. In the same case with cocoyam where 1000kg is usually sold for 25000 but the prices of 100kg bag of cocoyam increases to 30000F when demand is high from buyers of trading countries, same to with the prices of plantains which often witness an increase when demand from buyers of trading partners is high and 100kg of plantains raises from 30,000 to 35000. This clearly show that the operation of the Tiko port has enable local farmers in Tiko town and it environ to increase their sale revenue and this has also gone a long solve the problem of low prices of agricultural produce. The high profit reaped from external market has permeated farmers to afford some of their needs and meet up with objectives. In an interview with 15 farmers who sell their agricultural produce to trading counties, they lamented that the profit made from sales farm produce to these counties enable them to sponsor their children to school, buy basic needs, pay health bills, buy land, and afford farm inputs (Figure15).



Source: Field work, 2023

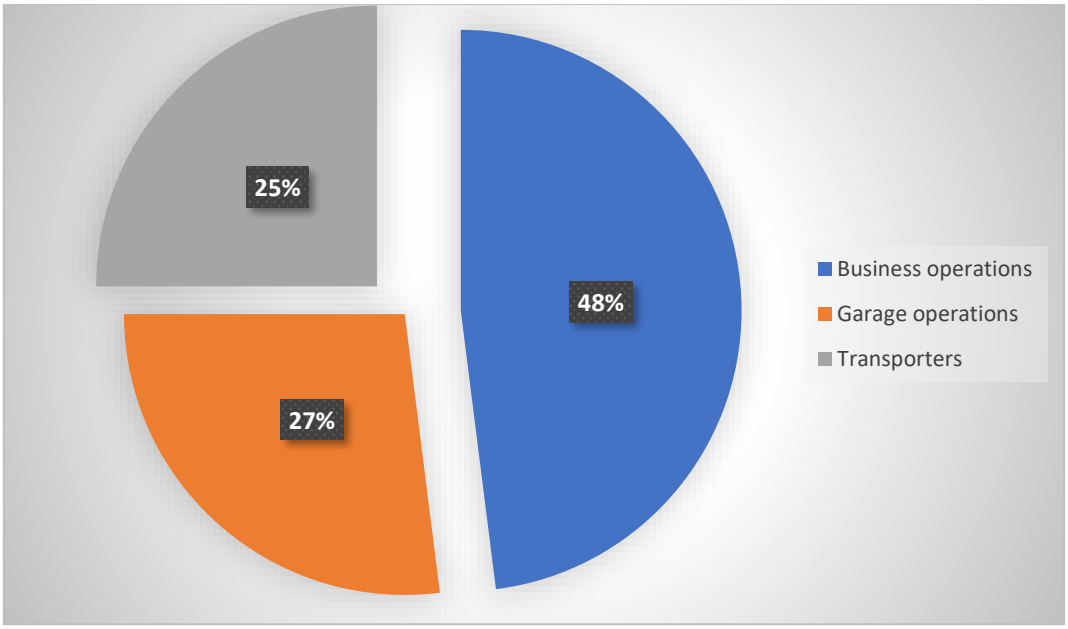
Figure 15: use of profit external market

Figure 15 shows domains where farmers use, they reap from foreign market via the sale of agricultural products. From figure 15, the domain where farmers use the profit gained from foreign market is used to sponsor children education (31%). Farms use 25% of the proceeds

reaped from external sales to afford their basic needs, these basic needs include; shelter, feeding, clothing. Part of the profit made from the sales of agricultural products from trading countries is used to pay health bill when the famers and children as well as family members fall sick. Purchase of farm inputs represent 15% of the domain where the farmers spend the money made vial the sales of farm produce to buy farm inputs in order to boost agricultural production and increase crop yield. The purchase of land made 10% expenditure where farmers use the gains reap from external market to buy land either for cultivation or for construction. Profit from the sales of agricultural produce has permitted the local population to meet afford their basic needs, consequently, improve in the standard of living of the local populace.

2.2 Source of tax revenues to the local council

The operation of the Tiko seaport has enable the collection of revenue by the custom via imports and exports duties and the council as well collect taxes from transports entry and leaving the port as well as car repair (garage) and other business activities which operate there due to the presence of the port. During field work, interview as conducted with the first vice mayor of Tiko on the port related activities where the council levied taxes and it was revealed that the Tiko Council (TC) levied taxes on activities related to the port such as transporters, garage operations and business operating around the port premises (figure 16)



Source: TC and field interviews, 2023

Figure 16: Council Revenue generated by activities which operate as a result of Tiko seaport

Figure 16 shows activities which the Tiko Council levied taxes on, these activities exist due to the operation of the Tiko port and have given avenue for the council to raise revenue. These activities pay council taxes and the revenue collected from these activities increases the council budget which is used to invest on public infrastructure. From Figure 16 above, business operations which exist due to the presence of the port represents 48% of the revenue of the port related activities, transporter (25%) drivers' entring the port and exiting the Tiko port pay taxes to the council while garages represent 27%. The garages that operate there by repairing vehicles and other garages involved in steal works pay taxes to the council. The taxes collected from subsidiary activities which exist due to the operation of the port, have increased the council budget which enables the council to carry out development projects. Another aspect in which the Tiko port influences socio-economic development in Tiko town is the creation of jobs to unskilled labourers.

2.3 Employment opportunities

Seaport activities constitute an important economic activity in terms of development and integration in the world economic market, the seaport is expected to play a key role in strengthening economic growth (Tahar, 2016). Port areas are usually attractive zones because of numerous jobs which accompanied ports. Generally, seaports create diverse jobs which cut across ranges from the industrial sector and commercial activities. This is because ports are commercial areas where imports and export trade take place and where industrial production take place. As such jobs coastal region are usually zones with many jobs opportunities due to operation of seaports. In the coastal town of Tiko which almost operate artisanal scale has created numerous unskilled jobs and skilled. It was observed during field survey that many young men were involved in loading and unloading of cargo in the Tiko seaport (Photo 7).

Source: Tutuwan 2023

Photo 7: unskilled labour created by the operation of Tiko seaport

Photo 1 shows the young men off-loading manufactured goods from the truck to be later loaded in the ship, the loading and off-loading of cargo in Tiko seaport is mostly done manually since most of cargo handling facilities are absent. This has given room for loading and off-loading of goods that are less bulky to be done manually. The manual loading and off-loading of goods have provided job opportunities to unskilled labourers.

Interviews conducted with the PAL Marketing Manager, he highlighted that about 25 staff are being employed and the staff members occupy various functions in their domain of competence such as the Logistic Department, Documentation center, clearance agent and warehousing. It was equally revealed various jobs have been created at the ship repair side in the Tiko seaport.

The operation of the Tiko seaport has also increase the sales of agricultural produce in the foreign market as examined in the next sub-chapter.

Conclusion

The outcome of the operation of Tiko seaport has significantly contributed to socio-economic development through exports and imports trade. Number of stakeholders are involved in the port operations such as commercial agents which include traffic and investment and institutional stakeholders that play the role of policy regulation as well as public relation which consist employers, trade, tourism and passengers. The main trading partners at the

Tiko seaport are countries of central and west Africa such as Nigeria, Equatorial Guinea, Gabon, Benin and Togo. The imported manufactured goods are beneficial to the local population because consumers access to variety of goods is ensured, imported manufacture goods have mitigated the problem of scarcity, the goods have encouraged trade in Tiko, the goods are durable and the imported manufactured goods have increase competition. The Tiko port has extended local market for the sale of local farm produce in foreign market. The local farm produce exported ranges from palm oil, banana, cocoa, yam egussi. The sale of these local agricultural products to trading countries have enable farmers to reap profit which permit them to afford their basic needs. The volume of export of these agricultural products usually vary, depending on season. The output and volume of sales are generally high during peak period. The operation of the port of Tiko has also created jobs of various category of people such as unskilled labourers, jobs to shippers, truck drivers and drivers of other light vehicles, the port operation has also created employment to custom officers, navy and the police. They key role played by the port of Tiko to socio-economic development should not be over emphasised. The operation of the port however faces a lot of emerging challenges which form chapter 3.

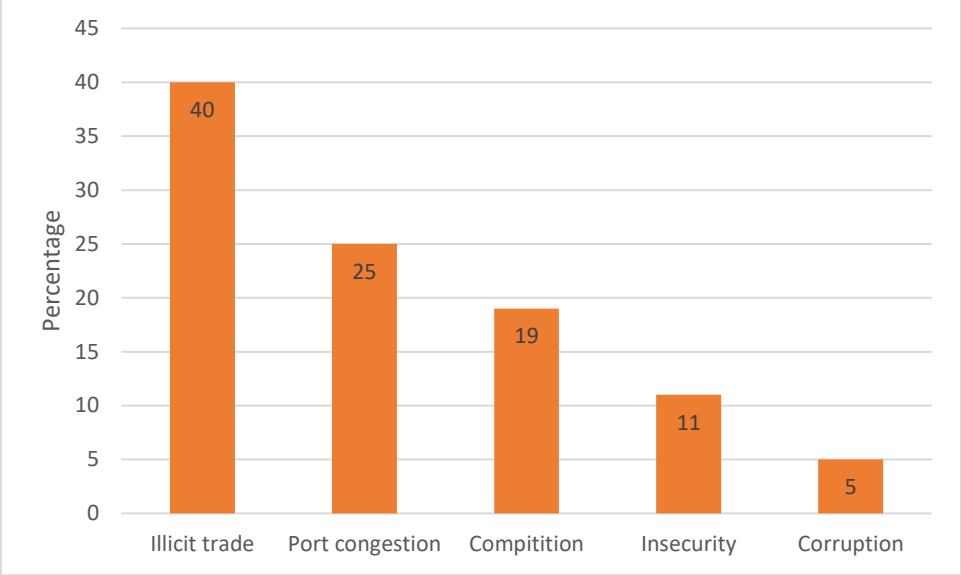
CHAPTER 3

CHALLENGES AFFECTING THE OPERATION OF THE TIKO SEAPORT

Introduction

The role plays by maritime transport in facilitating international trade and stimulating economic development is undisputed, ports are the gateways through which countries access international market. Despite the role played by ports in trade and development, a series a challenge affects the operation of ports such as maritime insecurity, circulation of contraband goods, insecurity, port congestion, port competition and sea accidents which have greatly affect the performance of ports. Kent (2005) noted that Africa is now facing congestion similar to that of India the United State, and Europe, limited truck inventory in many African countries, the failure to control truck movement outside port gates, insufficient intermodal exchange and the resulting extraordinary times for containers will raise the risk of many other African ports being caught up in congestion. Competition between terminal at a port is essential to ensure port efficiency and competitiveness of terminals and ports, and any related concerns may affect the competitiveness of terminals and ports, as well as exporters, and harm global trade (UNCTAD, 2018). Irrespective of the paramount role played by maritime transport on seaborne trade, illicit trade on drugs, arms and other contraband are being perpetrated through major sea routes especially at the Gulf of Guinea (Ifesenachi, 2020).

This chapter is focused on the presentation of data gotten from the field as well as the interpretation. The first aspect of the chapter will dwell on emerging challenges affecting the operation of Tiko seaport, and the second part of this chapter will lay emphasis on strategies to mitigate the emerging challenges. 3.1 on seaborne illicit trade, with emphasis on the circulation of contraband goods, 3.2 focuses on maritime insecurity, which stresses on piracy. 3.3 discusses port congestion, 3.4 dwells on challenges arising from port competition and 3.5 stresses on sea accident. 3.6 examines adopted strategies to mitigate the challenges affecting the operation of the port which constitutes the second part of the chapter. As per field investigation the main emerging challenges at the Tiko seaport were illicit trade, port congestion, competition, insecurity and sea accident (figure 17)



Source: PAL and field interviews, 2023

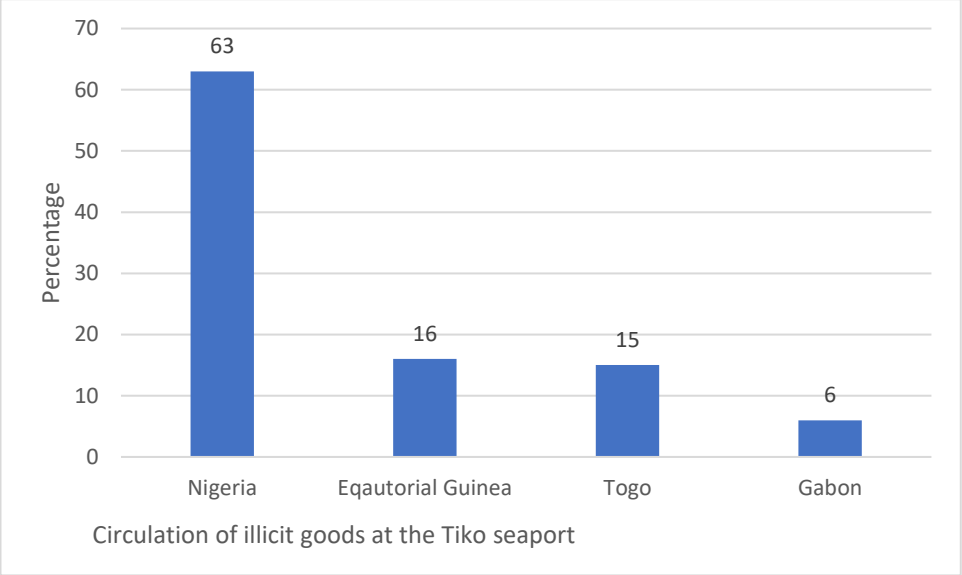
Figure 17: Emerging challenges affecting the operation of Tiko seaport

Figure 17 shows the emerging challenges affecting the performance of Tiko seaport. Data and interviews conducted with PAL reveals that illicit trade represents 40% of the emerging challenge affection the operation of Tiko seaport. This is explained by many contraband goods are intercepted at the port. Port congestion made up 25% of the emerging challenge this is due to limited warehouses and limited or no port handling facilities. Competition is another challenge which represents 19%, competition from other ports such as Limbe, Douala and Kribi that divert trade from Tiko port. Insecurity made up 11%, which results from maritime piracy and theft while sea accidents (5%) is due to the sinking of boats are all challenges affecting the operation of Tiko seaport. To better have an insight about the emerging challenges, each of the challenge has been succinctly examined separately.

3.1 Seaborne illicit trade

Tufoin et al., (2022) noted that maritime transport and transportation is one of the most vulnerable means of transport when it concerns the circulation of illicit goods especially when security and low enforcement are weak. In the Gulf of Guinea in general illicit trade is very common escalating at a very high rate. According to Ifesinachi (2020) Illicit trade ranges from informal cross-border leading to more serious crimes such as trafficking in wildlife, fuel, weapons, and drugs. This illegal trade is very common at the Tiko port where the circulation of contraband products is very active. Some of these products are legal but infiltrated into the country in unlawful ways most at times to invade taxes. Interviews from

the Cameroon Navy revealed that most of these products comes from neighbouring countries like Nigeria but very little leave the country via maritime ways (Figure 18)



Source: Field interview, 2023

Figure 18: Origin of illicit goods at the Tiko port

Figure 14 demonstrate that 63 % of contraband goods circulating at the Tiko seaport are smuggled from Nigeria. Structured interviews from custom officials at the Tiko port explained to the study that it was because of the closeness of the borders with Cameroon which has made it very easily for goods to be infiltrated into Cameroon via waterways. This is followed by 16 % from Equatorial Guinea and Togo 15 %. The least is Gabon with only 5 % probably because Gabonese custom effectively controls her maritime borders. Tiko port has gradually become a hot spot for the proliferation of illicit goods from neighbouring countries especially Nigeria. Custom and naval officers reliably informed the study that most of the goods are intercepted and destroyed but continue to persist. According to the survey instrument, these smuggled goods considered as contraband ranges from pharmaceutical products, petroleum products, food items (rice), to chemical fertilisers among others. Focus group discussion with the Cameroon Navy also disclosed the main country where these contraband goods originate is Nigeria and the major trading illicit goods was petrol (Table 15).

Table 15: Illicit goods circulation at the port of Tiko

Cluster Name	Number of respondents	Illicit goods circulating at the Tiko seaport			
		Petroleum products	Pharmaceutical products	Food items (rice, drinks)	Chemical fertilisers
Northern	79	33	26	11	9
Western	71	29	24	10	8
Eastern	29	12	8	6	3
southern	68	29	23	9	7
Total	247	103	81	36	27
%	100	41.7	32.7	14.5	10.9

Source: Field work, 2023

From table 15, it shows petroleum products (41.7%) are the outstanding illicit goods circulating in Tiko port. Interviews conducted with some custom officials in Tiko port revealed that most of the petroleum products in this area comes from Nigeria and are transported illicitly via the sea to places such as Bakingili and Idenau and other sites where custom services are not very strong. However, it was observed that the Cameroon patrol military elements have join the fight against the fight for illegal petroleum products in this part of the country with so many illegal petroleum products caught infiltrating into the country. Concerning pharmaceutical products, it represents 32.7 % of the goods circulating in Tiko port with several cases identified by the Cameroon custom officials mostly coming from the neighbouring Nigeria. For instance the *Quotidian Echos santé* newspaper on the 9th of August 2021 reported on their front page the illegal and fake drugs flooding the Cameroon markets. *Emergence* newspaper 17th of June 2021 also reported a similar situation where 30.000 medical kits were seized in Idenau and destroyed.

Food item and chemical fertilisers represents 14.5 % and 10.9 % respectively. The case of 2021 was sampled out and illustrated (Table 16).

Table 16: Illicit goods and quantity intercepted towards Tiko port 2023

No. of incidents	2023 / date	Type of goods	Quantity	Destinations
1	17th January	Petroleum products	7,000 litters	Towards Tiko
2	24th January	Petroleum products	25,000 litters	Toward Tiko
3	28th January	Drug	2500kg	Towards Tiko
4	5th February	Illegal fish	---	Towards Tiko
5	20th March	Petroleum products	18,000 litters	Towards Tiko
6	2nd April	Drinks	15 000 litters	Towards Tiko
7	5th April	Petroleum products	10,000 litters	Towards Tiko
8	14th April	Petroleum products	50,000 litters	Towards Tiko
9	16 May	Petroleum products	22,000 litters	Towards Tiko
10	2nd June	Illegal fish	8674 bags (each 25-45 kg)	Towards Tiko

Source: Compiled from Cameroon Navy and Custom in Tiko port, 2023

According to information obtained from the Limbe custom unit, the rate of such illicit trade has increased because of the socio-political upheavals in the Anglophone region of Cameroon. It was noted that marine patrol agents have join efforts with custom officers to check the flow of these goods in this coastal water of South West Region. It should be noted that these were the cases that the uniform officers succeeded to intercept most of them still succeed to infiltrate into the country. Some of the goods transacted illegal are feed for consumption and as they are traded illegally, this lead to a drop in custom revenue. While some of the illicit goods especially drugs are not fit for consumption and harmful to health of citizens. From table 3, it is observed that petroleum products are dominant among the flow of such illegal goods along this coastline (Plate 6).

Plate 6: Circulation illicit goods destined to Tiko seaport

Sources: Photo 1, by Cameroon Navy, sub commander of Limbe naval 2023. Photo 2, by the Tutuwan 2023

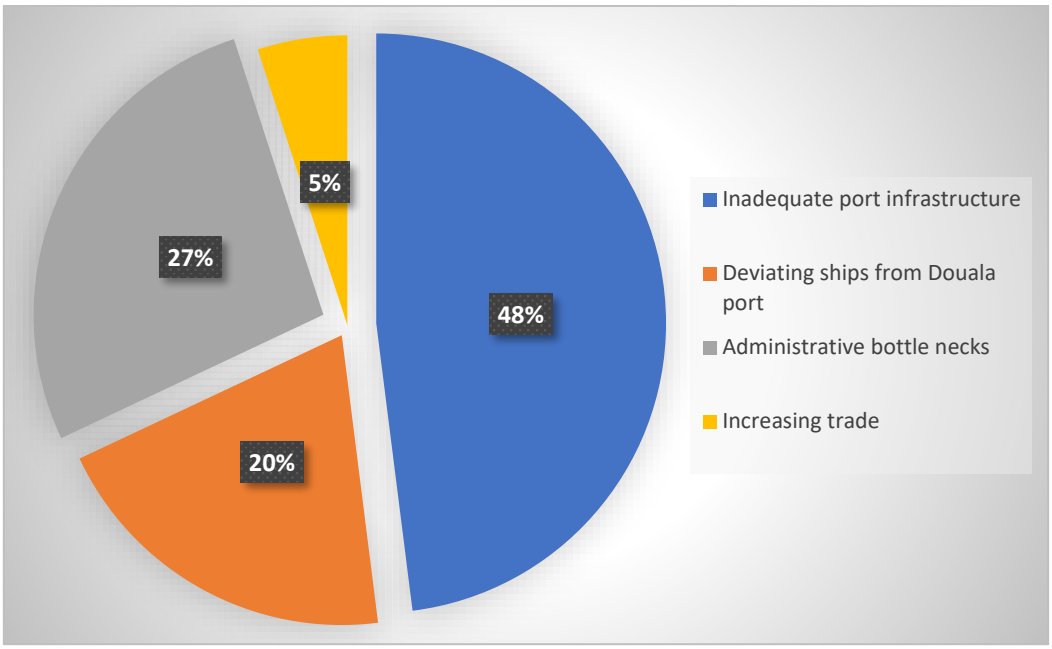
Photo 1 shows ***(A)*** *shows a naval officer who have intercepted a boat with some criminals illegally transporting fuel.* ***(B)*** *shows barrels of illegal fuel commonly called "funge fuel" from Nigeria towards Cameroon. Photo 2 shows illicit drugs in the boat intercepted by navy with (C) naval officer and his colleagues with drugs in the boat.*

It was observed that in some areas, vendors of this petrol hide in bushes and only indicate with the use of an empty vessel on the road to vehicle owners especially clandestine vehicles and bikers. In fact it is a business channels well known and organised among stakeholders involved in carrying out transactions with this type of petrol. That is, from the suppliers across the high seas to transporters to those who buy in bulk and those who retail the fuel. Here, it is commonly called *funge* which is an appellation understood by the dealers. According to the Post newspaper 6th August 2021, the police commissioners blamed the custom officials and naval officers and went ahead to explain why such an activity cannot stop because corruption has eaten deep into the activity and the customs are feeding fat and filling their pockets with corruption money from such goods. One of the dominating illegal good circulating one the sea here was noted to be fuel which mostly comes from neighbouring Nigeria. Apart from illicit trade in Tiko seaport port congestion is another emerging challenge affecting the operation of Tiko seaport.

3.2 Port congestion

Port congestion has become so pronounce with most seaports in developing countries, most especially sub-Saharan African countries where most port are characterized by inadequate

seaport infrastructure handling and storage facilities. As such, the volume of cargo pending for clearance in seaport keep increasing. The port of Tiko couple with its low and dilapidating port infrastructure has not been able to effectively clear cargo at the port and the usually delay, thus creating congestion at the port. During field investigation on the causes of congestion in the Tiko seaport were sought and it was reaved that congestion in the port is caused by limited port handling infrastructure, deviation of cargo from the port of Douala, administrative bottle necks (Figure 19).



Source: field work, 2023

Figure 19: Respondents views on the causes of congestion at the Tiko seaport

Figure 19 illustrates reasons for Tiko seaport congestion. From figure 19 it is observed that inadequate port infrastructure represents 48%. This is due to the fact that the port has limited handling facilities as most of the port infrastructures have been abandoned and most of the loading and unloading is done manually, this usually delays the clearing of goods and leading to congestion in the port. Administrative bottle necks represent 27% of the causes of port congestion, a long protocol is often taken to clear goods at the port because many documents are demanded which require long procedure to obtain the documents. As goods keep pending clearance, this creates congestion due to congestion due limited space because the port has become saturated. Deviating cargo from the port of Douala made 20% causes of congestion in the port of Tiko. This is justified by the fact that whenever the port of Douala is congested, some of the ships whose original destination was the port of Douala are being deviated to the

port of Tiko which end up creating congestion in the Tiko port because the port has not been developed handle many cargos coming into the port. Increasing trade represent the least (5%) of the causes of congestion in the port of Tiko, trade in this port with countries such as Nigeria, Equatorial Guinea, Gabon and Togo has rising and mount pressure on the port facilities. This cause congestion because the port infrastructure cannot withstand the increasing trade. Congestion in Tiko port has implications to traders and those households because congestion in the port slow rate of clearing goods in the port. Findings from field survey revealed that congestion in Tiko port has implications on the local population (Figure 17)

Table 17: Implications of congestion in Tiko seaport on the local population

Cluster Name	Number of respondents	Implications of port congestion			
		Delays in clearing goods	Goods spoilage	Scarcity	Increase prices
Northern	79	31	28	12	8
Western	71	30	24	11	6
Eastern	29	11	9	6	3
southern	68	28	24	9	7
Total	247	100	85	38	24
%	100	40.4	34.4	15.3	9.7

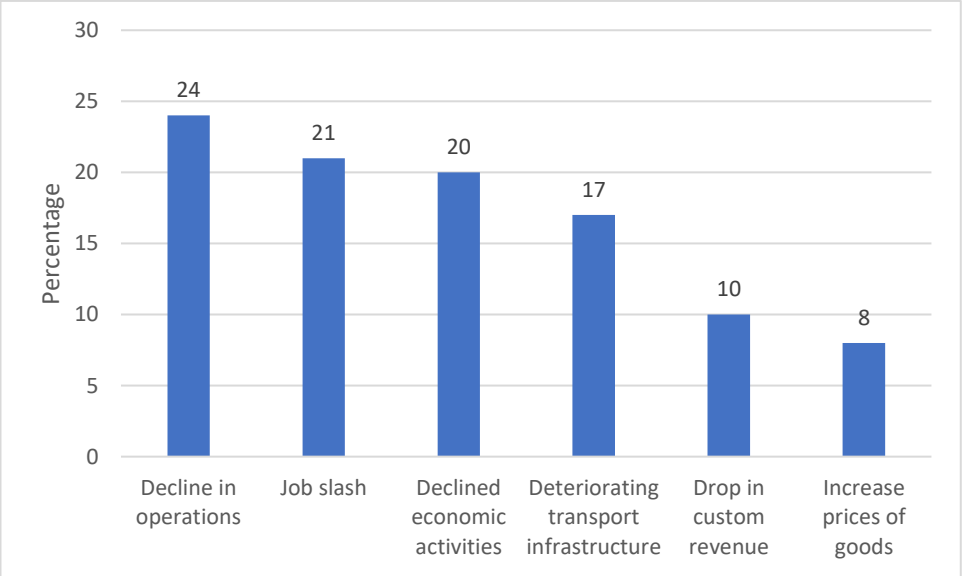
Source: Field work, 2023

Table 17 shows the implications of congestion in Tiko seaport on the local population, delays in goods clearing represent 40.4% of implications congestion on the local population. When goods are delayed in the seaport, consumers expectation may be upset and businessmen who trade with the goods delayed in port lost customers, consequently, a drop in sales which adversely affects their profit margins. Goods spoilage constitute 34.4% of the adverse implication of port congestion. When goods stay long and not well conserved, the goods often got damage and this makes traders to suffer damages. Interviews conducted with 2 traders on the state of goods when delayed in the port, they stressed that goods often stay long in port and not well protected from water, the contact of goods with water cause goods to get damage. Goods scarcity represents 15. 3%. This means that when there is delays of goods in the port of Tiko, the goods become scarce and consumers needs and satisfaction is not meet.

Increase prices (9.7%) is another implication of port congestion. This is due to scarcity when goods are being delay at the port, this cause scarcity which result to increase prices. The port of Tiko also suffer from competition from anther ports in Cameroon, this forms the next sub chapter.

3.3 Competition from other ports in Cameroon.

Competition is one of the emerging challenges affecting the Tiko seaport, this due to the fact that much attention has been focused on other ports in Cameroon such as Limbe, Douala and Kribi and Campo. Less attention has been paid to the port of Tiko the seaport of Douala and Tiko has been developed to international standard and have the capacity to harbour large ship while the Tiko port which has been abandoned and operate at small scale. The Tiko port used tobe a busy port in the 1950s and the 1960s but it was abandoned in the 1960s in favour of port of Douala and recently the port of Kribi constructed between 2013 to 2021. Large ships are diverted to the port of Douala and Kribi and Tiko port that has inadequate and dilapidated infrastructures cannot sustainably compete with these two ports. Findings from field survey revealed that competition from other imports in Cameroon has adverse implication on the port operation (Figure 20)



Source: Field work, 2023

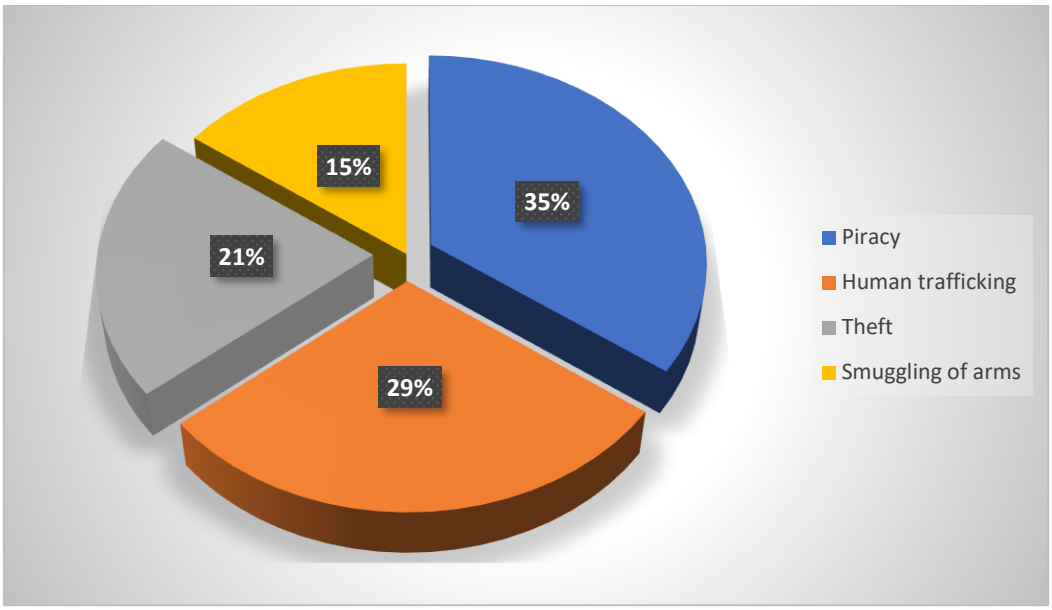
Figure 20: Consequences of competition

Figure 16 demonstrates respondents' opinions on the consequences of competition on the port of Tiko, where 24% of the respondents attested that competition has caused the Tiko port to decline in operation. This is because the operation of the two large main ports in Cameroon

such as the Douala and Kribi at large scale have attracted more customers to these ports and less attention has been paid to the port of Tiko and its port infrastructures have been abandoned with no maintenance work on the port. Most of the port infrastructure are remnants of colonial infrastructure. The existence of the Port of Limbe has also made some of the transactions to be carried out in Limbe deep seaport. Lost in job opportunity constitute 21% of the implications of competition on the port of Tiko. The port operates at low scale and most of the transactions in Tiko seaport are limited to few countries Central and West Africa such as Nigeria, Equatorial Guinea, Gabon and Togo. As the port operate at very low scale, there very limited jobs because the port does not carry out large functions. Declined economic activities made 20% among the consequences of competition on the port of Tiko. The desertion of the Tiko port has cause caused other activities such as industries and business to decline and this has caused a declined in economic activities. Deterioration in transport infrastructure (17%) as the port face competition from other ports in Cameroon, it has declined and transport infrastructure such as road and rail have been abandoned. Drop custom as attested by 10% of the respondents is due to the fact that most of the activities at the Tiko port have been shifted to the port of Douala, Kribi and Limbe. As such a drop in imports and exports in the Tiko port have cause a drop in custom revenues. Increase prices of goods (8%) is a result of competition as most goods are imported via Doula port, traders in Tiko prefer to buy from Douala. This increases the cost of transport and consequently, increase prices of goods in Tiko as they being shipped from Doula. Insecurity is also an emerging challenge affecting the port of Douala (next sub chapter).

3.4 Insecurity

Insecurity has recently gained grounds in Seaports due to growing criminal activities in seaport such as piracy, human trafficking, smuggling and theft. This posed security dilemmas in ports and as port has become a place where criminal activities operate, where the security of people and goods is threatened. All these crimes in seaport have negative implications on port operation as traders and investors become scare in doing business in ports. Kusi (2015) identified port threat such as terrorism, criminal activities and cargo theft, extortion, trafficking, corruption and stowaway. Criminal activities include; smuggling, theft, trade regulation violations and other illegal activities found in maritime or port domain such as robbery, extortion, trafficking of people, drug, stolen goods, weapon or money hijacking of vessels and custom violation. Findings from field survey revealed that insecurity at the port ranges from piracy, human trafficking, theft and smuggling of arms and (Figure 21)



Source: Field work, 2023

Figure 21: The security dilemmas in Tiko seaport

Figure 21 shows security dilemmas in Tiko seaport, based on respondents' opinions on security challenges in Tiko seaport, 35% agreed that piracy is a security concern. This is explained by the fact that ships and boats coming to Tiko ports as well as vessels leaving Tiko to trading countries are at times hijacked, where goods are being seized and people taken hostage. The hijacking of goods causes loses to businessmen and hostage taking scare people by travelling sea which affect operations and transactions in seaports. Human trafficking represents 29% of the dilemma in Tiko seaport. Human trafficking is gaining ground in Tiko port as the port acts as a gateway where people are being traffic from Cameroon to Nigeria, Gabon, Ghana, Middle East among others. Theft made up 21% of the port challenges, this is explained by periodic attacks in the port by arms rubber, where cargos are stolen and people being raped. Arms smuggling (15%) also posed a challenge to the operation of the Tiko port. The arms that enter the port illegally also fall into hands of arm rubbers who intern use the arms to attack the port. The smuggling of arms is fast gaining ground probably due to arm conflict in the North and South West Regions of Cameroon, where there is high demand of arms by militia group. Investigation on the destination of human trafficking from the port disclosed that, people are smuggled via the port of Tiko go countries of West Africa, Central to the western coast of North Africa (Table 18)

Table 18: Destination countries of human trafficking from Tiko seaport

Cluster Name	Number of respondents	Destination countries of human trafficking			
		Nigeria	Gabon	Ghana	Benin
Northern	79	38	18	14	9
Western	71	34	17	13	7
Eastern	29	11	9	6	3
southern	68	32	16	12	8
Total	247	115	60	45	27
%	100	46.5	24.2	18.2	10.9

Source: Field work, 2023

Table 18 demonstrates destination countries of human trafficking from the port of Tiko. The respondents who attested that the Nigeria is the destination countries stood at 46.5%. This explained by fact that this illegal business is very high in Nigeria and Nigeria has close proximity with the port of Tiko. Gabon represents 24.2% of the destination countries of human trafficking. This is due to its proximity with Tiko port and also due to the fact that human trafficking has started gaining ground in Gabon recently. Ghana (18.2%) is another destination country where people are smuggled from the port of Tiko to Ghana because this criminal business is also fast gaining ground in Ghana. Benin represents 10.9% of the destination country, this justified by the fact that those human traffickers who traffic people South West Region to the Sahel region and middle East pass through Benin. Another challenge affecting Tiko seaport is corruption which makes it difficult to effectively combat illicit transaction in the port (next sub-chapter).

3.5 Corruption

Corruption in Tiko seaport involves various actors including custom officials, police and port operators, with different powers and bureaucratic mandates. This makes it difficult to effectively check transactional activities in the port. Corruption in Tiko result to tax evasion as some individual and business pay bribes to avoid paying custom duties, this leads to a drop in Custom revenues in the port. Corruption also allows criminal activities to take place in the port such as illicit trade, human trafficking, and illegal migration. Illicit transaction in the port

permits the circulation of contraband goods, drugs and arms which is detrimental to the security and health of citizens. Finding from field survey shows that corruption in Tiko seaport leads to tax evasion, circulation of counterfeit goods, illegal migration and drug circulation (figure 22).

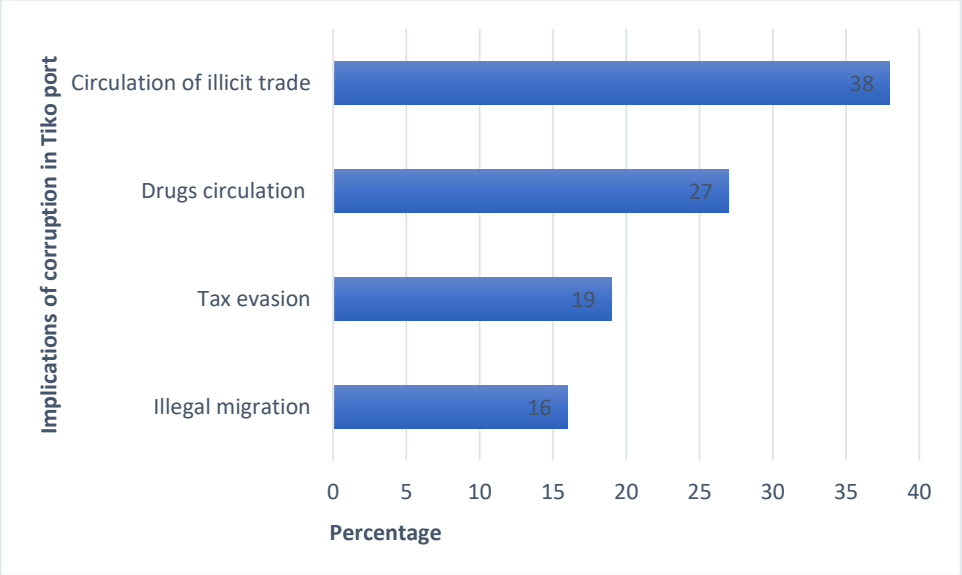


Figure 22: Respondents perceptions of the implications of corruption in Tiko seaport

Source: Field work, 2023

Figure 22 shows respondents' perceptions on the implications of corruption in Tiko seaport. Illicit trade represents 38% of the implications of corruption in Tiko seaport. This is due to contraband goods that are being smuggled in the port due to corruption on the side of custom and port officials. Drugs circulation represent 27% of the implications of corruption. This allows drugs such as pharmaceutical products which are not fit for consumption to pass through the port, the drugs are dangerous to health of citizens. Tax evasion (19%) result from bribery of custom officials and port authority which permits some individual who carry out transaction in the port of Tiko to run escape payment of taxes, thus a drop in custom revenue. Illegal migration represents 15% of corruption implications in the port of Tiko. This is justified by the fact that clandestine migrants use the port to infiltrate into Cameroon and to migrate to other countries without visas, the illegal migrants often succeed to pass via the port due to corruption and bribery. During field survey, cases of clandestine migrants who were moving towards Tiko port were intercepted by Cameroon Navy along the coast observed

Source: Cameroon Navy sub commander, Limbe naval base, 21/11/ 2023

Photo 8: Intercepted clandestine migrants

Photo 8 shows illegal migrants who were intercepted by the Cameroon Navy. The naval base is in Limbe, intercepted illegal migrants along the coastal belt of Fako. The clandestine migrant's destination was towards Tiko port and unfortunately, they were intercepted. They were intercepted because they don't possess travelling documents such as passport and visas which permit them to inter a country, and the fear that they might be criminals such as arm rubbers, drug dealers, human traffickers and among others. When the illegal migrants succeed to reach the Tiko port, they often succeed to pass via the Tiko due to the existence of corruption irrespective of the fact that they don't have legal documents which permit them to travel. The existence of corruption in Tiko seaport and other aforementioned emerging challenges affecting the operation of Tiko seaport have push the state to set up strategies to mitigate the emerging challenges, this forms the next sub-chapter.

3.6 Management strategies of the emerging challenges affecting Tiko seaport.

The state of Cameroon has made effort to ensure good management of her ports by putting in place certain measures which have gone a long way to mitigate the challenges affection the operation of Tiko seaport. The management strategies put in place include: fight against custom fraud, constant patrolling on the Cameron territorial water at the coastal belt of Fako by the Cameroon Navy and cooperation with countries to fight against piracy.

Fight against corruption: The Cameroon government has put place measures to fight against corruption in seaports by fighting against custom fraud, cautioning custom to exercise good ethics and professionalism, enforcing port security system by setting up digital cameras to effectively monitor transaction in the port. Also, by ensuring that any imported product should pay and possess official documents showing the payment of taxes on goods and controlled in numerous check points.

Constant patrol of the navy: The Cameroon Navy constantly patrols the coastal belt of Fako to check criminal activities such as; piracy, theft, circulation of illicit goods, human trafficking, clandestine migration and the circulation of arms and drugs destined to Tiko port. This measure seems to be producing positive results as huge progress is often made by the navy where the circulation of illicit goods at the coast of Fako whose destination is at times toward the port of Tiko are being intercepted by the Cameroon Navy. Findings field survey revealed illicit goods intercepted by the Cameroon Navy (Plate 7)

Plate 7: Cameroon Navy patrol at the Fako coastal belt

Source: Cameroon Navy sub commander, Limbe naval base, 21/11/ 2023

Photo A shows Cameroon Navy patrolling the sea water around the port of Tiko to check criminal activities

Source: *Cameroon Navy sub commander, Limbe naval base, 21/11/ 2023*

Photo B show Cameroon Navy with confiscated illicit goods during patrol exercise, at the Fako costal belt

Plate 7 shows Navy patrol at the coast of Fako round the port of Tiko, checking criminal activities such circulation of illicit goods, drugs, piracy, theft and human trafficking. The navy patrols and survey of the coastal belt of helps to combat crimes and the circulation of illicit goods to be unloaded in seaport along the Fako coast such as the port Tiko is checked. This has mitigated some of the emerging challenges affection the operation of Tiko port. Cameron government has also signed multilateral and bilateral cooperation with partners countries to check criminal activities.

Signing of international cooperation: Cameroon government has signed bilateral cooperation with countries such as the United State of America, Brazil and China as well as well as multilateral cooperation with the Gulf of Guinea Commission (GGC) to combat piracy and other crimes in the Gulf of Guinea. This has checked criminal activities and entry of illicit goods in to the port of Tiko since some the illicit goods and drugs destined to Tiko are being intercepted by navy from cooperation countries and the Cameroon Navy. The cooperation has also enabled foreign countries to train Cameroon Navy on how to combat crimes in sea. Partner countries also give modern naval ships and boats well as other navy equipment which enforce the capacity of the Cameroon Navy to ensure security in Cameroon territorial water.

Conclusion

Emerging challenges such as the circulation of illicit trade, port congestion, competition, insecurity and corruption have adverse implications on the functional and operational transaction in the port of Tiko. Illicit trade has led to the circulation of contraband goods, drug and arms which have a negative impact on the health of citizens. Congestion in the port of Tiko has resulted to goods damage. While the existence of other ports in Cameroon such as Douala, Kribi, Lime have caused the declined of Tiko port because attention has not been given to the port of Tiko. Thus, the Tiko port cannot favourably compete with other ports in Cameroon and as such, the port of Tiko has declined. The security challenges in the port of Tiko has given room for criminal activities such as piracy, human trafficking, circulation of arms and theft, which all have negative implications on the transactional and functional activities of the port. Corruption on its part has resulted to tax evasion which cause a drop in custom revenues, corruption has also encouraged the operation of black market in the port, drug circulation and illegal migration, which all have negative implications on the port operation and on citizens. The emerging challenges have push to state of Cameroon to adopt

management strategies such as fight against custom fraud, enforcing navy patrol and signing international conventions to combat maritime crime. Navy patrols seems to be yielding results as criminal activities and transactions are often intercepted by the Cameroon Navy at the coastal belt of Fako where Tiko seaport is found.

GENERAL CONCLUSION

This study concentrates on how port operation influences socio-economic development. In the course of finding out and identifying the problem stated which is based on abandoned and dilapidated port infrastructure, and no intermodal transport system linking the Tiko seaport. A general objective and three specific objectives were set. The main goal/aim of this objective was to investigate the state of Tiko seaport infrastructure and how the operation of Tiko port influence socio-economic development in Tiko sub-division and equally to assess the challenges affecting the functional and transactional operations of the Tiko seaport. Findings on the state of Tiko seaport infrastructure revealed, the port infrastructure is inadequate, made up of abandoned and dilapidated infrastructure. This ties with the views of Munge (2019) who highlighted that the main ports in Cameroon such as Doula seaport is congested to the brim while secondary ports such as those under the Port Authority of Limbe (PAL) (Limbe, Tiko and Idenau) suffer from poor and dilapidated infrastructure and related port facilities.

The results of chapter two shows that the functional and transactional operations have influence socio-economic development as imports and export trade has risen in Tiko port. This has extended local market where agricultural produce cultivated in Tiko and its environs has risen in sales due assess to external market where these produces are sold to some countries in central and west Africa. The operation of the Tiko seaport has enabled the importation of foreign manufacture goods has enabled the inhabitants of Tiko to have access to variety of goods. These are all aspects which improve on socio-economic development. Also, the port has also created jobs to skilled and unskilled labourer and acts as a source of revenue. This implies that the operation of seaport influence development. This in line with (Bamidele, 2017) underscored that seaport have created numerous opportunities ranging from both formal and informal jobs: huge revenue generation and financial outlay for the government through various forms of lenses, taxes, rates, tariff, demurrage, fines, renewal and rents; promote huge trade and commercial opportunities, promote international business, encourage reginal economic growth due to terminal development.

Findings from chapter three revealed that the emerging challenges such as; illicit trade, port congestion, insecurity and corruption affect the functional and transactional operations of the Tiko port. The illicit trade has facilitated the circulation of contraband goods. It is on this note that Tufoin et al., (2022) noted that maritime transport and

transportation is one of the most vulnerable means of transport when it concerns the circulation of illicit goods especially when security and low enforcement are weak. port congestion has resulted to delays in clearing goods, goods spoilage, scarcity of goods and increase in prices of goods, while competition from other port in Cameroon has cause the port of Tiko to decline. The state of Cameroon has not stand indifferent as effort has been made to mitigate these challenges by fighting against custom fraud, enforcing navy patrol at the port and signing and enforcing international cooperation to combat maritime crimes, which has gone a long to ensure port security.

Recommendations and suggestions

Upgrading and modernizing port infrastructure

The port infrastructure of Tiko should be upgraded by constructure and equipping the port with modern infrastructure to make the port more competitive. By improving in such infrastructure especially port facilities, it will make port operations very efficient and effective. This mean that long delays will be eliminated, and cargo handled efficiently. Surely, this will be translated to economic growth and development. The huge investments required to build highways, railways, and ports must be carefully planned, not only because of their great cost, but also because, once built, the infrastructure can survive for decades before dilapidating. Investments in transport infrastructure have a long horizon, it is a prerequisite that such infrastructure and facilities especially those directly linked to seaport be optimized for proper functioning of the Tiko port especially for the fact that the port of Douala is highly congested as earlier stressed.

It is therefore important to improve on the ports facilities (cargo handling equipment, storage facilities and other support system facilities) especially given the rapid changing trade environment which has increased volumes of goods handled at the ports. Studies conducted by the UNCTAD reveals a continuous increase in the demand of maritime transport services, yet the state of port infrastructure and support facilities in developing countries continue to stand as a stumbling block to equates the increasing demands for these demands. As earlier pinpointed in the findings, the port of Tiko does not operate optimally largely because of poor transport infrastructure and support facilities. Thus, improving such infrastructure will help to make transportation here more efficient and reliable which forms the bases of economic growth and development. This falls vividly in line with Sustainable Development Goal 9

(SDG 9) which states that “build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.”

Accelerate investment:

More investment should be carried out in the port. This can be achieved by creating a conducive environment for industries and business to establish. By encouraging the creation of industries and setting up business, this will create more job opportunities and attract other associated business activities, The local economy will be stimulated, and this this will bring about economic growth and progress. The port will become more attractive to investors and a hub of commercial activities in the area.

Developing intermodal transport:

Creating road and railways linking the port of Tiko will ensure accessibility into the port. This will enable the movements of heavy vehicles and trains into and out the port and thus facilitate the transport of cargos. Constructing a well-coordinated road and a rail way network linking Tiko port can play positively to enhance the supply chain of cargo being transported into or from the various ports along this coastline. As earlier noted, ports as main maritime transport gateways or infrastructure does not function in isolation but most integrate roads and railways for its proper functioning, else, they will be like *ships in a desert*. It is therefore, imperative to compliment the maritime transport with a good rail and road network which at the Tiko seaport is problematic at the moment. In so doing, it will help to reduce traffic jam regularly witnessed at Banaberi-Douala a main gateway to Tiko, used by heavy duty trucks with cargo from/to ports to other regions or countries.

Combating illicit trade:

Security in Cameroon territorial water should be enforced by enforcing the capacity of the navy patrol and fight against corruption. Tufoin et al., (2022) pinpointed that Combating informal maritime trade along the Fako coastal belt of Cameroon requires a myriad of actions and the involvement of several stakeholders. These stakeholders may range from customs officers, port authorities, the police, Cameroon navy to cross-border traders. All these stakeholders most work collectively to eradicate if not limit illicit maritime trade along the Fako coastal belt of Cameroon.

Firstly, reinforcing security measures at maritime frontiers can be a sustainable measure to curb the circulation of contraband goods along this coastline. This this because dealers in contraband exploit weak security measures and porous sea frontiers to attain their objectives of carrying out illegal transactions on illegal goods into the country. Field surveys revealed that there are some illegal anchorage sites exploited by traffickers dealing on contraband goods to carry out their criminal activities. Thus, reinforcing both custom services and Cameroon navy security in such areas and stationing some at the Cameroon territorial waters may go a long way to contain such illicit trade along this coastline. It will also help to deal with all sorts of maritime insecurity such as maritime piracy and armed robbery which is cause for concern along this zone and the Gulf of Guinea in general.

Fight against corruption:

Charging the frontier police, custom officials and the naval officers along this coastal belt, corruption free and responsible can be a promising measure to deal with all sorts of illicit seaborne trade along this coastal belt. Field interviews indicated that corruption and irresponsible attitude of some uniform men were at the origin of this illicit trade perpetrated via the sea along the Fako coast. It is in this light that Transparency International (2019) underscored that porous borders and corruptible officials have enabled fuel smuggling by non-state actors along the Cameroon coast. In February 2019, the Cameroonian police, assisted by the country's elite corps, seized hundreds of fuel containers smuggled from Nigeria by a suspected rebel group that were destined to the Central African Republic via Idenau (Ifesinachi, 2020). This is crystal clear that corruption instigated by uniform officers is largely at the origin of illicit trade along this coastline. Thus, the State should seek measures to sort out all these corrupt officials and dismantle all criminal networks involved in illicit maritime trade.

Secondly, reinforcing proper checks on goods by the ports police, clearing customs and the various stakeholders involved can go an extra mile to attenuate the flow of illicit goods into and out of the country. This suggest why field observations revealed that proper checks were not conducted on goods upon arrival at the port which can give dealers the green light to try their luck. Also, intensifying the use of ICTs at the ports such as survey cameras, detectives, test kits and monitors can also go a long way to deals with such illicit trade operated using maritime ways. Field surveys indicated that the ports along the Fako coastal belt of Cameroon lacks all these necessary facilities to control export and imports of goods in the

ports. All these measures can go a long way to deal with illicit trade along this coastline to safe the economy and people's lives in general.

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APPENDIX

TUTUWAN DOBGIMA RALPH
UNIVERSITY OF YAOUNDE I
DEPARTMENT OF GEOGRAPHY
MASTERS 2
Email: ralphtutuwan221@gmail.com
TEL: 651617067

22nd JUNE 2022

Sir,

A REQUEST FOR AN AUTHORIZATION TO CARRY OUT MY THESIS RESEARCH IN THE TIKO SEA PORT

It is with honour I write to request an authorization to carry out my thesis research in the Tiko Sea Port. I am a masters 2 student in the University of Yaounde I researching on the topic "The un-exploited Tiko sea port and its effects to the development of Tiko town".

Sir, it will be extremely helpful for me if this request is granted. While waiting for a favorable response, I stay,

Yours Sincerely
TUTUWAN DOBGIMA RALPH

N.B. I here by attach to this
- A photocopy of my research attestation

PORT AUTHORITY LIMBE
ARRIVAL
DATE:
MAIL SERVICE
NO:

UNIVERSITE DE YAOUNDE I
UNIVERSITY OF YAOUNDE I

FACULTE DES ARTS, LETTRES ET SCIENCES HUMAINES

DEPARTEMENT DE GEOGRAPHIE
B.P 755 Yaoundé
Tél. 22 22 24 05

FACULTY OF ARTS, LETTERS AND SOCIAL SCIENCES

DEPARTMENT OF GEOGRAPHY
P.O BOX 755 Yaoundé
Tel. 22 22 24 05

ATTESTATION DE RECHERCHE

Je soussigné, **Pr. PAUL TCHAWA**

Chef du Département de Géographie, atteste que

Monsieur : **TUTUWAN DOBGIMA RALPH**

Matricule : **16B563**

Est inscrit(e) au cycle de : **MASTER**
Spécialité : Marginalités, Stratégies de développement et Mondialisation.

Et prépare une thèse sur le sujet : **The un-exploited Tiko sea port and it's effects to the development of Tiko town**

A cet égard, je prie toutes les personnes ressources et tous les organismes sollicités de lui réserver un bon accueil et de lui apporter toute l'aide nécessaire à la réussite de cette recherche dont la contribution à l'appui au développement ne fait pas de doute.

Fait à Yaoundé le...17 JAN 2022.....

LE CHEF DE DEPARTEMENT

Le Chef de Département

Clement Anguh Nkwemoh
Associate Professor (M.C)
University of Yaounde I